

# Salesforce Winter '16 Release Notes

Salesforce, Winter '16

Get ready for a new kind of customer success





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# SALESFORCE WINTER '16 RELEASE NOTES

In the Winter '16 release, Salesforce delivers powerful new business intelligence capabilities, more ways to collaborate on deals and projects, and even greater control over your data.

#### IN THIS SECTION:

#### How to Use the Release Notes

The release notes give you brief, high-level descriptions of new Salesforce features and enhancements to existing features. You also get setup information, implementation tips to help you get started, and best practices to ensure your continued success.

#### How and When Do Features Become Available?

Some features in Winter '16 affect all users immediately after the release goes live. You may want to communicate these changes to your users beforehand so they are prepared. Other features require direct action by an administrator before users can benefit from the new functionality.

#### **Supported Browsers**

Supported browsers for Salesforce vary depending on whether you use Salesforce Classic or Lightning Experience.

#### Lightning Experience: A New, Modern, Intelligent User Experience

It's here ... the new Salesforce user experience! Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Learn about the benefits of this intuitive, efficient interface. Then decide when it's time to make the switch—the power is in your hands. (Lightning Experience is available within 24 hours after the Winter '16 release.)

#### Sales: Opportunities, Leads, and More

Help sales reps manage and close more deals faster with a streamlined user interface, workspaces for opportunities and leads, integrated email, and lots of other new features for sales pros.

#### Wave Analytics: Lightning and Communities Support, Custom Menus, API Access to Dashboards

Now you can share Wave visualizations in Communities and Lightning, clone lenses, and create open-ended date filters. Custom menus and more detailed lists give you quicker access to your Wave assets. On the back end, our new replication service lets your dataflow run faster; you'll enjoy powerful new SAQL options; and you can control Wave dashboards via the REST API.

#### Reports and Dashboards: Let Data Drive Your Actions

Make informed decisions using Reports and Dashboards. Lightning Experience brings a heap of enhancements. Animated, interactive charts illustrate data. A robust new report run page is easier to read and filter. And a new dashboard editor supports more than three columns and features components that span multiple columns and rows.

#### Service: Enhanced Design for Agents, More Automation for Administrators

Help your support team deliver incredible service faster. A redesigned service console lets your team spot customer data in a flash. Agents can also attach files more quickly to cases and better monitor times on service agreements. Agents using web chat can raise a virtual flag to get help from supervisors, and administrators can block sensitive data from chats in real time. Administrators can also approve social media posts before they go public and suspend a data sync connection between Salesforce organizations while deploying changes.

#### Mobile: Do More On the Go

Things keep getting better for sales reps on the go. The Salesforce1 mobile app gets a bit of a facelift, with an easier-to-read font, labels in the action bar to identify what each action is, and infinite scrolling on feeds and record pages. And new Notes and Files related lists make it a snap to stay up on business-critical resources. For the Service Cloud, empower your agents to provide personalized service to mobile customers with the SOS video chat and screen-sharing solution, now available for Android and iOS apps.

#### Communities: Lightning Upgrade, Extensible Templates, Insights, Moderation Rules, and Much More

Winter '16 is packed with changes that make templates more customizable. You can show more Salesforce data, create and use custom Lightning components, and support multiple languages. Plus, you can now create moderation criteria and act on community reports directly from Community Management. These features are available in Salesforce Classic only. Communities is not supported in Lightning Experience.

#### Chatter: Rich Text Posts, More Relevant Mentions, Mute Posts

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, and mute feed posts. There are also several improvements to files, user profiles, and groups.

#### Search: Find Information

Salesforce search gives you the power to find information faster. You control which custom objects are stored in the search index. We also made several improvements to how we handle punctuation in your searches. You get more relevant results with less guessing with nickname search results. In addition, search in Lightning Experience offers users enhanced instant results and a redesigned search results page.

#### Data.com: Company Hierarchies, New SIC8 and Firmographic Data, and More

Data.com accounts now come loaded with even more valuable financial and industry details, so your sales team can get a complete picture of potential customers. There are new visual representations of company hierarchies that help your sales reps identify new prospects for cross-sell opportunities. In addition, we've beefed up the Data.com API. Data.com is available in Salesforce Classic only.

#### Work.com: Enhanced Feedback and Performance Summaries, Manager Groups for Coaching and Goals

Help your sales managers and teams learn faster and perform better with a suite of sales-management and service-management tools that boost performance. We're bringing Enhanced Feedback and Enhanced Performance Summaries to everyone, and you can now enable manager groups for goals and coaching spaces so you can automatically share related records up the management hierarchy. Work.com is available in Salesforce Classic only.

#### Customization: Easier Setup, Object Management and Flows, and Much More

Lightning Experience simplifies setup and gives you better ways to manage your data. Your processes and flows are less likely to hit SOQL limits. It's easier to build flow choice fields and processes that update records, and the email you get when flows fail now has a lot more detail.

#### Security and Identity

Protect your Salesforce organization and your users with a new, more intuitive login experience and more secure login handling. In Lightning Experience, get to Salesforce apps, custom apps, and connected apps from one App Launcher view. Transaction Security policies let you respond quickly to specified security situations. You can encrypt more fields, and you can store larger OAuth tokens and password fields.

#### Deployment

You now have new ways to deploy changes to your organization. Deployment changes include test options for change sets. Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

#### Development: Create Your Own Salesforce App

Force.com helps you develop new applications and integrations to help your organization or for resale to other organizations.

#### Marketing

Marketing Cloud is the premier platform for delighting customers with 1:1 customer journeys. It enables you to build a single view of your customer-leveraging data from any source, and plan and optimize unique customer journeys based on your business objectives. Deliver personalized content across every channel and device at precisely the right time, and measure the impact of each interaction on your business so you can optimize your approach in real time and deliver better results.

#### Salesforce Overall: Set Audit Fields, Improved Accessibility, and More

Winter '16 improves your overall Salesforce experience with the ability to set audit fields when you create records through the API, improved accessibility for Lightning Experience, and more!

#### Critical Updates

This release includes updates that improve the performance, logic, and usability of Salesforce but might affect your existing customizations.

#### Help and Training

We implemented a new content strategy and added walkthroughs and Trailhead modules, and added and updated instructional videos. We also updated some of our trust and compliance documents.

Other Salesforce Products

## How to Use the Release Notes

The release notes give you brief, high-level descriptions of new Salesforce features and enhancements to existing features. You also get setup information, implementation tips to help you get started, and best practices to ensure your continued success.

You can choose from PDF and HTML versions.



**Note:** Until the new Salesforce release is available in your production organization, links from release notes to the Salesforce Help, implementation guides, developer guides, and other documentation won't work or will point to materials for the previous Salesforce release. Some developer guides have preview versions available several weeks before the Salesforce release. To access the preview versions of developer guides on Salesforce Developers, select Preview from the Documentation Version drop-down list.

These release notes are about new and modified features, not known issues. For information about known issues, check out the Salesforce Known Issues Site.

# Easily Understand What's in Salesforce Lightning Experience and What's in Salesforce Classic

Everybody's excited about Salesforce Lightning Experience and everything it offers. But we also understand that lots of organizations will continue to use Salesforce Classic—either exclusively for a few releases or in tandem with Lightning as that experience evolves.

One key to success during this time of transition is understanding what's available in one, both, or all of the Salesforce experiences. To guide you, we've added experience information to these release notes at the highest level where that information applies: for entire clouds or for individual features within clouds. Let's look at three examples.

- Communities and *all* its features are currently available in Salesforce Classic *only*, so we tell you that in the Communities "Editions" table. It says "Available in: Salesforce Classic."
- Case Feed, a Service Cloud feature, is available in *both desktop experiences*—Lightning and Classic—so its description says "This feature is available in both Lightning Experience and Salesforce Classic."
- Opportunity Workspace, a new Sales Cloud feature, is available in Lightning Experience *only*, so its description says "This feature is available in Lightning Experience only."

If a *key* feature is also available in Salesforce1, our mobile app, we mention that in the feature description. But you can also check the Mobile section for a complete list of what's new in Salesforce1.

## **Updates Via Twitter**

When you follow @salesforcedocs on Twitter, you receive notices whenever we publish new documentation or make significant updates to existing documentation.

## Your Feedback Matters

We know how important our documentation is to your company's success. We want to know what works for you and what doesn't.

- **Feedback forms:** As you're working with our documentation—whether it's in the Salesforce Help, release notes, or developer guides at Salesforce Developers—look for the feedback form and vote up or down. Add comments if you have them.
- **Twitter:** Tweet us at @salesforcedocs.

#### IN THIS SECTION:

#### You Asked for It!

We delivered the features you asked for on IdeaExchange.

#### Other Resources

In addition to these release notes, we provide other resources to get you up to speed quickly.

#### Release Notes Changes

Read about changes to the release notes, with the most recent changes first.

## You Asked for It!

We delivered the features you asked for on IdeaExchange.

Idea delivered
Email: Send and Manage Email and Templates Directly from Records in Lightning Experience
Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience
Task List: Power Through Tasks in Lightning Experience
Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience
Notes: Add Important Information to Records (Generally Available)
Sync Outlook Home Addresses to Your Salesforce Contacts from Lightning Experience

IdeaExchange	Idea delivered
Expand SIC Codes to 8 Digits in Data.com	New SIC8 and Firmographics Data to Help Identify and Assign Prospects
Reports and Dashboards	
Allow More than Three Columns in Dashboards	Create Beautiful Dashboards Using a New, Feature-Rich Editor (Lightning Experience)
Service	
Enter New Contacts on the Fly When Opening a New Case	Make It Easier for Agents to Update Case Info with Global Quick Actions and Custom Quick Actions in the Console Sidebar
Increase Number of Characters in Subject Field: Case Emails	Long Email Subject Lines Are No Longer Truncated, Making Them Easier to Read
Social Post Approval	Approve Social Posts Before they are Public
Report on Knowledge Users	Reports and Lists of Knowledge Users
Solution Helpfulness Rating	Thumbs Up or Down Ratings Count in Your Vote reports on page 236
Mobile	
Notes and Attachments on Salesforce Mobile	Increase Productivity by Adding Notes to Records (Generally Available) (Partially Delivered)
Chatter	
Have GIF Files Play in Chatter Without Having to Download Them	Enjoy Fast, Beautiful File Previews!
Search	
Turning off Global Search in Winter Release Should Not Turn off	Coming in Lightning Experience!
Chatter Global Search Without Enabling Chatter	Find out about enhancements this release under Search: Find Information. For general information about searching, check out
New Button on Lookup	the newly improved, streamlined documentation in the Salesforce
Sidebar on Search Results Page to Easily Create New Records	Help under Find and Organize Information.
Related Lookup Filter Showing Only Recently Viewed Items	
Populate Lookup's Search Field When Multiple Items are Found	
Auto-Complete	
Force.com Customization	
Make it Easier to Select Fields when Updating Records	Update Records with an Improved UI
Bulkify Process Builder	Reduced Chances of Hitting SOQL Limits in Processes
Dynamic Choices For Picklist Values in Flow	Replicate a Picklist Field in a Flow Screen
Flow Post to Chatter Element to work Communities	Post to a Community Feed from a Flow
More Roll-Up Summary Fields per Object Please	Create More Roll-Up Summary Fields per Object

IdeaExchange	Idea delivered
Limit Imported Records to Existing Picklist Values	Eliminate Picklist Clutter with Restricted Picklists (Pilot)
Universal Picklists	Share Picklists Across Objects and Fields with Global Picklists (Pilot)
Allow For More Than 150 Values In a Picklist	Use More Values with Multi-Select Picklists
Development: Apex Code	
Lock and Unlock a Record in Apex Code	Set Approval Process Locks and Unlocks with Apex Code
Unhandled Exception Email Notifications	Set Recipients of Email Notifications for Unhandled Apex Exceptions
Allow getContent() Method in Apex Batch	Make Calls to PageReference.getContent() in Asynchronous Apex
isClone() Within Trigger	New and Changed Apex Classes
Development: Debugging	
Retain 20 Latest Debug Logs and Debug Logs Should Not Cost a Log When Filters Are Changed	Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags
Development: API	
Make Audit SetupTrail History Available via the API	New API Object: SetupAuditTrail
General Enhancements	
Allow Salesforce Administrators to Update Records Owned by Inactive/Terminated Users	Set Audit Fields and Update Records with Inactive Owners

## Other Resources

In addition to these release notes, we provide other resources to get you up to speed quickly.

- Release Readiness & Feature Adoption community. Join a community of Salesforce experts.
- Release demos. Get quick video overviews of what's coming this release.
- Winter '16 Training. Take online training to check out Winter '16 features and enhancements and to prepare for certification release exams.

# **Release Notes Changes**

Read about changes to the release notes, with the most recent changes first.

## December 18, 2015

#### **Enhanced Help & Training Site**

Added a description of enhancements to the redesigned Help & Training site, including the ability to access the site's features on any mobile device.

## December 16, 2015

#### Sales Wave Enhanced With Two New Dashboards

Two new dashboards added to Sales Wave app—Productivity and Player Stats.

#### **Sales Wave Enhanced With Two New Dashboards**

Added a note to clarify that managing external file permissions is supported only for Google Drive.

#### **Boolean Data Types Treat null as Different from false**

Added a note to clarify that null checks no longer return records whose checkbox fields are set to false.

## December 9, 2015

#### What's New in the Latest Salesforce1 Downloadable Apps

Announcing the release of the Salesforce1 downloadable app for Android, version 8.0. Starting the week of December 7, 2015, the 8.0 app will be gradually rolled out over a couple of weeks. When it's available for your org, users can download the new version from Google Play.

The release of Salesforce1 for iOS, version 8.0 is delayed. See Salesforce1 for iOS, Version 8.0 Delayed for more information.

#### File Previews in ConnectApi (Chatter in Apex)

Removed all information related to file previews because they're not available in Chatter in Apex.

#### **New and Changed Chatter REST API Resources**

Added a note to clarify that managing external file permissions is supported only for Google Drive.

### December 2, 2015

#### Waterfall, Stacked Waterfall Chart Types Expand Wave Data Exploration Capabilities

Added two new chart types for use in Wave dashboards.

#### **Metadata API and SOAP API**

Added a new field on the RunTestsResult metadata type and result object: apexLogId.

#### Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

Added a note to clarify that email templates created in Lightning Experience can't be used in Salesforce Classic.

#### **Changed Objects**

Updated the example in the EmailTemplate object entry. The example illustrating the EntityType field implied incorrectly that a template can be used with both the Account object and the Lead object together.

#### **Retirement of Endpoint Routing for API Logins**

Announced the January 1, 2016 retirement of API login endpoint routing.

#### **Modify External Data with Writable External Objects**

Clarified the topic to apply only to the new ability to create, edit, and delete external object records from within Salesforce.

## November 18, 2015

#### **Legacy Flow Limitations**

Clarified restrictions for API access to legacy flows created with the Desktop Flow Designer.

#### LiveChatAgentConfig

Added a new field, enableAssistanceFlag, which indicates whether agents can raise an assistance flag to notify a supervisor that they need help.

#### Simplified Usage of Lightning Components in Visualforce pages

Added a new standard Visualforce component, <apex:includeLightning>, to simplify adding Lightning components to Visualforce pages.

#### **Manage App Licenses in Lightning Experience**

Announced that the License Management App (LMA) is now available in Lightning Experience.

#### Run Asynchronous SOQL Queries (Pilot)

Renamed AsyncSOQL to Async SOQL, and added a link to Async SOQL Guide.

#### **Other Resources**

Added a link to release training.

## November 11, 2015

#### Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags

Noted that changes to trace flags make the 20-log limit for user-based logging obsolete.

#### **Productivity Features: Lightning Experience Limitations**

Noted that Automatic BCC, which lets users automatically receive copies of sent emails, is not available in Lightning Experience.

#### Other Changes in Work.com

Added a section about coaching spaces supporting the enhanced note-taking tool, and the limitations associated with the feature.

#### **New Operator for Security Predicates**

Added a note about the new 'in' comparison operator for Wave security predicates.

## November 4, 2015

#### Simplify Development of Web Service Callouts by Using Named Credentials

Announced that you can specify named credentials as web service callout endpoints.

#### Sandbox Copy for Wave Analytics Now Supports Sandstorm

Announced that sandbox copy for Wave Analytics supports new Sandstorm algorithm.

#### Simplify the Setup of OData External Data Sources by Using Named Credentials

Announced that you can specify a named credential as an external data source endpoint.

#### **Run Asynchronous SOQL Queries (Pilot)**

Renamed AsyncQuery to AsyncSOQL.

#### SOS Video Chat and Screen-Sharing Now on Android

Removed the Two-Way Camera for SOS section, as it's not generally available.

Added a screen shot for SOS video chat and screen-sharing.

#### Upgrade to Enhanced Feedback and Performance Summaries (Generally Available)

Announced that users must limit their feedback to 1,333 characters when offering others one-time feedback.

#### **Changed Objects**

Announced that the default logo for new AppMenuItem apps now uses the initials of the Label value.

#### Removed Customize the Look and Feel of Flow Interviews (Pilot)

Removed the release note announcing that you can use REST API resources to customize how flow interviews run. This feature is not available.

#### **REST API**

Removed information about pilot REST API resources for flows and interviews. These resources are not available.

## October 28, 2015

#### Considerations for the Activity Composer and the Activity Timeline in Lightning Experience

Added information on layout and other changes needed when activity composer tabs (Log a Call, New Task, New Event, or Email) are missing from opportunity, lead, account, or contact pages.

#### **Single-User Wave Analytics Platform Licenses Introduced**

Announced new single-user Wave Platform license.

#### **Enhanced Help & Training Site**

Announced improvements to the redesigned Help & Training site.

#### End of Support for Salesforce 1 Mobile Browser App on BlackBerry Devices in Winter '17

Pre-announcing end of support for the Salesforce 1 mobile browser app on BlackBerry devices. For a smooth transition, we recommend that BlackBerry users switch to the Connect to Salesforce app from BlackBerry before Winter '17.

#### **New Objects**

Announced the addition of the BackgroundOperation object.

#### **Changed Objects**

Announced that the isWritable field was added to the ExternalDataSource object.

#### **Edit Link Removed**

Noted that editing a sandbox to change its name or description is no longer available.

#### **REQUIRESCRIPT No Longer Executes JavaScript on Page Load**

Added information about the new way to return a button when using REQUIRESCRIPT.

#### Salesforce App for Outlook: Get Salesforce Content in Outlook Email Applications (Generally Available)

Added details for how event organizers can see relevant Salesforce records in Microsoft® email applications.

#### **Receive More Consistent, Clear Results for Tests Containing Callouts**

Announced that test methods that contain callouts now fail instead of being skipped.

## October 21, 2015

#### Salesforce for Outlook v2.9.2 Supports Microsoft® Outlook® 2016

Announced release of Salesforce for Outlook v2.9.2, which supports Microsoft Outlook 2016.

#### **Set Audit Fields and Update Records with Inactive Owners**

Removed the following objects from the list of objects that support the "Set Audit Fields upon Record Creation" permission: Article, EmailMessage, FeedComment, FeedItem, and Holiday.

#### **Changed Objects**

Announced that fields were added to the NamedCredential object.

#### Canvas Apps Wrapped in Two <iframe> Tags

Explained that Canvas apps are embedded in Salesforce using an additional iframe.

#### Make Calls to PageReference.getContent() in Asynchronous Apex

Noted that creating Savepoints prevents calling getContent().

#### Productivity Features: Lightning Experience Limitations on page 92

Added information on displaying tabs in the activity composer in Salesforce orgs with custom record types.

#### **Learn Wave Analytics with Trailhead**

Added information about the new tutorials for Wave Analytics and the special Wave-enabled Developer Edition org.

## October 14, 2015

#### Customize the Headers and Bodies of Apex Callouts That Use Named Credentials

Announced that Apex code can customize the construction of headers and bodies in callouts that specify named credentials as endpoints.

#### Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

Added information about restrictions on attaching files from Salesforce Files Connect.

#### **View Lightning Experience Reports and Dashboards**

Clarified that charts in Salesforce1 display as legacy Salesforce Classic charts instead of the new Lightning Experience charts. Also added a note to say that Lightning Experience dashboards with more than three columns display in a three-column layout on phones and tablets.

#### **Sales Features: Lightning Experience Limitations**

Added limitation about creating schedules automatically when you add a product to an opportunity in Lightning Experience and Salesforce 1.

#### Navigation and Actions: Lightning Experience Limitations on page 102

Lightning Experience now supports right-click and Windows or Mac keyboard shortcuts to open most links in new browser windows or tabs. But there are some areas of the app where these options aren't supported.

#### Post to a Community Feed from a Flow

Announced that you can now create Chatter posts in communities from a flow.

#### **New Login Look and Feel**

Announced that the temporary password was removed from the password reset email notification.

#### **Run Asynchronous SOQL Queries (Pilot)**

Added a release note on AsyncQuery pilot.

#### **Run Selected Tests in the Developer Console**

In response to customer feedback, we've modified the new test-running interface in the Developer Console.

#### Removed Is\_ReadOnly Parameter in OAuth 2.0 Responses

Removed the release note announcing that you can use a new parameter in OAuth 2.0 responses to determine if your organization is in read-only mode. This feature is not available.

#### Moved writeable list views in Lightning Experience to "pilot" status.

This feature is available only for Trial orgs. The functionality in pilot includes creation, editing, deletion, and filtering of list views. Reading list views and creation and editing of list view charts are generally available in Lightning Experience.

## October 7, 2015

#### You Asked for It!

Noted that we've responded to your requests for views of activities: In Lightning Experience, we've delivered both the activity timeline on opportunities and leads, and the task list to help sales reps manage all their tasks.

#### What's New in the Latest Salesforce1 Downloadable Apps

The new Salesforce1 downloadable apps for Android and iOS will be released in the upcoming weeks. Get a preview of the enhancements in the version 8.0 apps.

#### **Changed Objects**

Added UserPreferencesLightningExperiencePreferred property to the User object.

#### **New Objects**

Added a new object, LiveChatSensitiveDataRule.

#### **Help and Training**

Added a section with our new content strategy and walkthroughs and Trailhead modules. This section also includes new and updated instructional videos and our updated trust and compliance documents.

#### **Live Agent REST API**

Added one new resource, and updated two existing resources, for the new Customer Time-Out feature.

#### Monitor and Troubleshoot OData Callouts for User Access to External Data

Announced that debug logs now include OData callout requests and responses that occur when users access Lightning Connect external objects.

#### **Mute Posts**

Clarified that the Mute feature is available in all new orgs and some existing orgs. If the feature isn't available in your org, contact Salesforce and we enable the feature for you.

#### Leads

Added limitation details about automatic field population for creating accounts during lead conversion.

#### **Make Your Lightning Components Available For Communities**

Added a note on access control for Lightning Components in the Lightning App Builder and Community Builder.

#### Salesforce Connector: Sync with Salesforce Faster Than Ever

Added a release note about updates to Pardot's Salesforce Connector.

#### **Variable Tags: Personalize Emails to Target Prospects**

Clarified that the variable tags are available in all Pardot Editions (Standard, Pro, and Ultimate) with Salesforce Engage.

#### Why You Must Get the Winter '16 Templates with Lightning Components

Added information to clarify the relationship between the Winter '16 upgrade for community templates with Lightning components and Lightning Experience.

#### Upgrade to Enhanced Feedback and Performance Summaries (Generally Available)

Added a note that admins can't add #first\_name in feedback question text to display the first names of performance summary subjects.

#### **Get More Relevant Search Results**

Clarified the search term and results added examples for a1b1.

#### Access Salesforce During Planned Maintenance With Read-Only Mode (Generally Available)

Announced that users now have read-only access to Salesforce during splits, instance migrations, instance switches, and certain other maintenance events.

#### **New Dynamic Size for Login Flow Page**

Announced that the login flow content area now resizes automatically to up to 50% of the page size, depending on your screen size.

#### **Tooling API**

Noted that if the flow is part of a managed package the Metadata field will be Null. Metadata isn't returned for flows in managed packages.

## **September 30, 2015**

#### **Find Your Way Around Lightning Experience**

Added several new topics that show where common Salesforce features are located in Lightning Experience.

#### What's Not Available in Lightning Experience

Added new limitations related to formula fields, related lists, Chatter feeds, and Lightning Pages.

Added information that clarifies limitations for list views, the Opportunity Board, and the objects that are searchable in Lightning Experience.

Removed information that custom fiscal years isn't supported in Lightning Experience. This feature is supported in the new interface in Winter '16.

#### Salesforce 1 No Longer Supported on Android 4.2 and 4.3

Clarified that, starting with Winter '16, Android 4.4 or later is required for the Salesforce1 mobile browser app and for the upcoming version 8.0 of the Salesforce1 for Android downloadable app.

#### **Changes to Member-Initiated Password Resets**

Clarified that emails sent for community password reset failures can't be suppressed or customized.

#### Ad Tracking Template: Support for Changes to Google AdWords URLs

Added release note about Pardot's new ad tracking templates. If you use Pardot Google AdWords Connector, take action to ensure that your ads are properly tracked.

#### Prospects: Automatically Create Prospects from Newly Added Email Addresses in Salesforce Leads and Contacts

Added release note about a new feature in Pardot.

#### **Variable Tags: Personalize Emails to Target Prospects**

Added release note about a new feature in Pardot.

#### **Email Editor: Create High-Quality Marketing Emails**

Added release note about a new feature in Pardot.

#### **Engage Email: Log Emails Separately in Salesforce**

Added release note about a new feature in Pardot.

#### **Introducing the Lightning Service Console**

Clarified that the accessibility features introduced in the Lighting Experience aren't available in the Lightning Service Console.

#### **Find Matching Records for Nicknames**

Removed information about expanded forms of search terms. Users continue to see matches for expanded forms of search terms when using Article and File.

#### **Search: Lightning Experience Limitations**

Added information about which objects are searchable in Lightning Experience.

## September 23, 2015

#### Supported Editions and User Licenses for Lightning Experience and Sales Features: Lightning Experience Limitations

Revised the date when Lightning Experience is available for sandbox environments that have person accounts enabled. The option to enable Lightning Experience in these sandbox environments will now be automatically available beginning October 24, 2015. Person accounts aren't supported in Lightning Experience. If your Salesforce implementation uses person accounts, you can't enable Lightning Experience for your production organization.

#### Sales Wave App Now Generally Available

We're pleased to announce general availability of the Sales Wave app, the first Wave Analytics prebuilt app.

#### **Enable My Domain To Use Lightning Components**

Expanded the details of this mandatory change. If you're using Lightning components now, review this release note to avoid disabling of your Lightning components-based customizations when Winter '16 is released.

#### Configure Lightning Experience Record Home Pages Using the Lightning App Builder (Pilot)

Added information on how you can customize Lightning Experience record home pages in a Developer Edition organization using Lightning App Builder.

#### **Live Agent Visualforce Changes**

Added a New liveAgent:clientChatLogAlertMessage Component, and added three New Attributes for liveAgent:clientChatLog.

#### "Serve Static Resources from the Visualforce Domain" Critical Update Postponed

Added a release note explaining that this critical update's auto-activation date has been postponed.

#### Different Behavior When Adding one/one.app to the Community URL

Added a release note explaining that users are redirected to the Active Site Home page when you add one/one.app to the community URL.

#### **Field Audit Trail Supports Additional Objects**

Added a release note listing the additional objects supported.

#### **Set Audit Fields and Update Records with Inactive Owners**

Added supported objects for the "Set Audit Fields upon Record Creation" and "Update Records with Inactive Owners" permissions.

#### **New and Changed Apex Classes**

Listed the Apex interface used for Transaction Security.

Corrected the descriptions of Lightning Connect classes, methods, and properties in the DataSource namespace and the System. Database class.

#### **Make Your Lightning Components Available For Communities**

Added information on how you can make custom Lightning components available for drag and drop in Community Builder.

#### Push Work to Qualified, Available Support Agents with Omni-Channel (Generally Available)

Omni-Channel has become generally available.

#### **Separately Load Related Lists of External Objects**

Announced the option to load related lists of external objects separately from primary record details and related lists of standard and custom objects.

#### **Format Posts with Rich Text**

Updated the release note to clarify that the rich-text editor is only available in communities that were created using Salesforce Tabs + Visualforce.

## September 9, 2015

#### Wave Analytics for iOS: New in Version 2.0

Version 2.0 is here, with a full iPad App and many enhancements to the iPhone App. Support for iOS 7 has been removed, and iOS 8 is required.

#### **Limit File Visibility by Community**

Added clarification that new settings for limiting file visibility by community membership applies only to files posted in feeds on user profile pages.

#### New SIC8 and Firmographics Data to Help Identify and Assign Prospects

Clarified information about SIC8 fields and which customers have access to them.

#### **Scheduled Actions Are Always Based on Current Data**

Added information about the Process Builder's scheduled actions, which now always execute using the latest data from a record.

#### **UserInfo Endpoint Supported in Communities**

Announced that the UserInfo endpoint is supported in OAuth authentication for a community.

#### **Use More Values with Multi-Select Picklists**

Added the increased limit on the number of values in a custom multiselect picklist.

#### **Time Zone Names Have Changed**

Announced that some time zone names have changed in the Salesforce user interface.

#### Use an OData 4.0 Adapter with Lightning Connect

Added that OData 4.0 is now supported with Lightning Connect, in addition to OData 2.0.

#### **Tooling API**

Added two fields on the TraceFlag object: LogType and StartDate.

#### **Changed Objects**

Added an entry for the new IsAccessible field on the AppMenuItem object.

#### **Multiple Language Support for Napili Communities**

Updated the screenshot.

#### **New Login Look and Feel**

Clarified that the password strength indicator bar was replaced with clearer feedback about whether the password meets minimum complexity requirements.

#### Make Calls to PageReference.getContent() in Asynchronous Apex

Clarified requirements for calling getContent() from scheduled Apex.

## September 2, 2015

#### You Asked for It!

We delivered the features you asked for on IdeaExchange.

#### **REQUIRESCRIPT No Longer Executes JavaScript on Page Load**

Added information about a change in the way custom JavaScript buttons and links execute when they use REQUIRESCRIPT.

#### Why You Must Get the Winter '16 Templates with Lightning Components

Clarified that some community colors can be reset to the default value when you update to the Winter '16 version of community templates.

#### Switch to Lightning Experience from the Global Header

If your organization enables Lightning Experience, users who have the Communities global header turned on and who have permission to access Lightning Experience can easily change between Salesforce Classic and the new interface using the Switcher. The Switcher is available from the global header. Look for the Switch to Lightning Experience link in the Your Name menu.

#### **Introducing the Lightning Service Console**

Clarified that the console is available from the App Launcher on Lightning Experience.

#### What's the Fate of Existing Salesforce Customizations?

Clarified availability of the Salesforce Lightning Design System (SLDS) and included a URL for accessing the beta version that's now available.

#### What's Not Available in Lightning Experience

Added Lightning Experience limitations for Chatter and Search.

#### User Profile Header Detail Component on the Koa and Kokua Templates

Added information about User Profile Header Detail, a new Koa and Kokua template component.

#### **Changes to Member-Initiated Password Resets**

Added information about user-initiated password resets in communities that use single sign-on.

#### **Make Unlimited Concurrent Callouts to Internal Salesforce URLs**

Previously, this release note didn't mention that per-transaction callout limits apply even for internal endpoints.

#### **Use More Values with Multi-Select Picklists**

Added the newly increased limit on the number of values in a custom multi-select picklist.

#### **Time Zone Names Have Changed**

Announced that some time zone names have changed in the Salesforce user interface.

#### Use an OData 4.0 Adapter with Lightning Connect

Added that OData 4.0 is now supported with Lightning Connect, in addition to OData 2.0.

## How and When Do Features Become Available?

Some features in Winter '16 affect all users immediately after the release goes live. You may want to communicate these changes to your users beforehand so they are prepared. Other features require direct action by an administrator before users can benefit from the new functionality.

When will you start seeing Winter'16 changes on your instance? The best way to find out is to check the Major Release Schedule section of the Salesforce trust site at trust.salesforce.com/trust/maintenance/.

This series of tables summarizes the Winter '16 features and their impact on users. Review the feature details for the applicable Salesforce editions.

#### IN THIS SECTION:

#### How and When Lightning Experience Becomes Available

It's here ... the new Salesforce user experience! Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Learn about the benefits of this intuitive, efficient interface. Then decide when it's time to make the switch—the power is in your hands.

#### How and When Sales Features Become Available

Help sales reps manage and close more deals faster with a streamlined user interface, workspaces for opportunities and leads, integrated email, and lots of other new features for sales pros.

#### How and When Wave Analytics Features Become Available

Now you can share Wave visualizations in Communities and Lightning, clone lenses, and create open-ended date filters. Custom menus and more detailed lists give you quicker access to your Wave assets. On the back end, our new replication service lets your dataflow run faster; you'll enjoy powerful new SAQL options; and you can control Wave dashboards via the REST API.

#### How and When Reports and Dashboards Features Become Available

Make informed decisions using Reports and Dashboards. Lightning Experience brings a heap of enhancements. Animated, interactive charts illustrate data. A robust new report run page is easier to read and filter. And a new dashboard editor supports more than three columns and features components that span multiple columns and rows.

#### How and When Service Features Become Available

Help your support team deliver incredible service faster. A redesigned service console lets your team spot customer data in a flash. Agents can also attach files more quickly to cases and better monitor times on service agreements. Agents using web chat can raise a virtual flag to get help from supervisors, and administrators can block sensitive data from chats in real time. Administrators can also approve social media posts before they go public and suspend a data sync connection between Salesforce organizations while deploying changes.

#### How and When Mobile Features Become Available

Things keep getting better for sales reps on the go. The Salesforce1 mobile app gets a bit of a facelift, with an easier-to-read font, labels in the action bar to identify what each action is, and infinite scrolling on feeds and record pages. And new Notes and Files related lists make it a snap to stay up on business-critical resources. For the Service Cloud, empower your agents to provide personalized service to mobile customers with the SOS video chat and screen-sharing solution, now available for Android and iOS apps.

#### How and When Communities Features Become Available

Upgrade to use Lightning components in communities and take your template-driven communities to the next level. Improvements in this release include the ability to create new pages and share more Salesforce data, actionable reports, and several community manager features.

#### How and When Chatter Features Become Available

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, and mute feed posts. There are also several improvements to files, user profiles, and groups.

#### How and When Search Features Become Available

Salesforce search gives you the power to find information faster. You control which custom objects are stored in the search index. We also made several improvements to how we handle punctuation in your searches. You get more relevant results with less guessing with expanded search term and nickname search results. In addition, search in Lightning Experience offers users enhanced instant results and a redesigned search results page.

#### How and When Data.com Features Become Available

Data.com accounts now come loaded with even more valuable financial and industry details, so your sales team can get a complete picture of potential customers. There are new visual representations of company hierarchies that help your sales reps identify new prospects for cross-sell opportunities. In addition, we've beefed up the Data.com API. Data.com is available in Salesforce Classic only.

#### How and When Work.com Features Become Available

Help your sales managers and teams learn faster and perform better with a suite of sales-management and service-management tools that boost performance. We're bringing Enhanced Feedback and Enhanced Performance Summaries to everyone, and you can now enable manager groups for goals and coaching spaces so you can automatically share related records up the management hierarchy. Work.com is available in Salesforce Classic only.

#### How and When Customization Features Become Available

Lightning Experience simplifies setup and gives you better ways to manage your data. Your processes and flows are less likely to hit SOQL limits. It's easier to build flow choice fields and processes that update records, and the email you get when flows fail now has a lot more detail.

#### How and When Security and Identity Features Become Available

Protect your Salesforce organization and your users with a new, more intuitive login experience and more secure login handling. In Lightning Experience, get to Salesforce apps, custom apps, and connected apps from one App Launcher view. Transaction Security policies let you respond quickly to specified security situations. You can encrypt more fields, and you can store larger OAuth tokens and password fields.

#### How and When Deployment Features Become Available

You now have new ways to deploy changes to your organization. Deployment changes include test options for change sets. Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

#### How and When Development Features Become Available

Force.com helps you develop new applications and integrations to help your organization or for resale to other organizations.

#### How and When General Enhancements Become Available

Winter '16 improves your overall Salesforce experience with the ability to set audit fields when you create records through the API, improved accessibility for Lightning Experience, and more!

#### How and When Critical Updates Become Available

This release includes updates that improve the performance, logic, and usability of Salesforce but might affect your existing customizations.

# How and When Lightning Experience Becomes Available

It's here ... the new Salesforce user experience! Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Learn about the benefits of this intuitive, efficient interface. Then decide when it's time to make the switch—the power is in your hands.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Experience: A New, Modern, Intelligent User Experience (available within 24 hours after the Winter '16 release)			<b>~</b>	

## How and When Sales Features Become Available

Help sales reps manage and close more deals faster with a streamlined user interface, workspaces for opportunities and leads, integrated email, and lots of other new features for sales pros.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Sales Path for Opportunities and Leads				
Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience			<b>~</b>	
Opportunities				
Opportunity Workspace: Boost Sales Productivity with Lightning Experience	✓.			
Opportunity Board: Get the Big Picture on Opportunities with Lightning Experience	~			
Accounts				
Account Details: Help Reps Keep Tabs on Accounts by Using Lightning Experience		~		
Account Insights: Provide Easy Access to News Articles in Lightning Experience			~	
Contacts				
Contact Details: Help Reps Keep Tabs on Contacts by Using Lightning Experience		~		
Leads				
Lead Workspace: Work Leads Efficiently Using Lightning Experience	✓.			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Products and Price Books		•	•	
Products and Price Books: Make It Super Easy to Manage Products in Lightning Experience			~	
Social Media Integration				
Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience			<u>~</u>	
LinkedIn Integration Removed from Social Accounts, Contacts, and Leads Feature	~			
Home				
Home: Help Reps Manage Their Days in Lightning Experience				~
Visualize List View Data with Charts in Lightning Experience			~	
Salesforce Email				
Email: Send and Manage Email and Templates Directly from Records in Lightning Experience	<u>~</u>			
Activity Timeline				
Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience	~			
Tasks				
Task List: Power Through Tasks in Lightning Experience	<u>~</u>			
Notes				
Notes: Add Important Information to Records (Generally Available)			~	
Calendar and Events				
Calendar and Events: Reps Can View and Create Meetings in Lightning Experience	~			
Notifications				
Notifications: See Notifications in One Place in Lightning Experience	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Email Connect				
Salesforce App for Outlook: Get Salesforce Content in Outlook Email Applications (Generally Available)			~	
Salesforce for Outlook				
Salesforce for Outlook v2.9.2 Supports Microsoft® Outlook® 2016	~	~		
Salesforce for Outlook Supports Microsoft® Windows® 10	<u>~</u>	~		
Sync Outlook Home Addresses to Your Salesforce Contacts from Lightning Experience	~	<u>~</u>	~	
View Salesforce Records Related to Recurring Events From Outlook	<u>~</u>	~		
Salesforce App for Outlook Disconnects the Salesforce Side Panel Automatically	~	~		
Pardot				
Ad Tracking Template: Support for Changes to Google AdWords URLs			~	
Prospects: Automatically Create Prospects from Newly Added Email Addresses in Salesforce Leads and Contacts			~	
Variable Tags: Personalize Emails to Target Prospects	<u>~</u>			
Email Editor: Create High-Quality Marketing Emails	<u>~</u>			
Engage Email: Log Emails Separately in Salesforce			~	
Salesforce Connector: Sync with Salesforce Faster Than Ever on page 153				~
Other Changes				
Alert Users to Possible Duplicate Records Quicker Than Ever (available within 24 hours after Winter '16 release)	~			
Oldies But Goodies Available in Lightning Experience			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Link Custom Lookup Fields from Activities to Other Records	<b>▽</b>			

Labels Streamlined in Setup

# How and When Wave Analytics Features Become Available

Now you can share Wave visualizations in Communities and Lightning, clone lenses, and create open-ended date filters. Custom menus and more detailed lists give you quicker access to your Wave assets. On the back end, our new replication service lets your dataflow run faster; you'll enjoy powerful new SAQL options; and you can control Wave dashboards via the REST API.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Setup and Sandbox				
Single-User Wave Analytics Platform Licenses Introduced				~
Sandbox Copy for Wave Analytics Now Supports Sandstorm		~		
Integrate Data				
Run Your Dataflow Faster with Replication (Pilot)				~
New Multi-Value List Filter Operator in Security Predicate		~		
Wave Apps				
Sales Wave App Now Generally Available				~
Wave Mobile				
Wave Analytics for iOS: New in Version 2.0	~			
Integrate Wave Analytics in Communiti	es and Lightning Exp	erience and with Cu	stom Action Menus	
Custom Actions Menus Now Support Additional Actions			<b>✓</b>	
Securely Share Wave Analytics Apps with Community Partners and Customers (Pilot)				~
Embed Wave Dashboards in Lightning Pages (Pilot)				~

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Explore Data with More Flexible Date F	ilters, Interface Enhar	ncements, and More		
Create Open-Ended Date Filters with Absolute Date Ranges	~			
Exploring Year-Weeks Just Got Easier	<u>~</u>			
Create Visualizations More Easily with Clone and Save Options	~			
Download and Share Screenshots of Wave Dashboards and Lenses	~			
Find Your Wave Analytics Assets with Ease	~			
Additional Changes to the User Interface	~			
Build Powerful Queries Using SAQL				
SAQL case Statement		~		
Order a Cogrouped Stream Before a foreach Statement		~		
SAQL Math Functions		~		
Wave REST API				
Access More Data with the Wave REST API (Pilot)				~

Wave Analytics: Lightning and Communities Support, Custom Menus, API Access to Dashboards

# How and When Reports and Dashboards Features Become Available

Make informed decisions using Reports and Dashboards. Lightning Experience brings a heap of enhancements. Animated, interactive charts illustrate data. A robust new report run page is easier to read and filter. And a new dashboard editor supports more than three columns and features components that span multiple columns and rows.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Redesigned Reports and Dashboards Home Pages (Lightning Experience)	~			
Create Beautiful Dashboards Using a New, Feature-Rich Editor (Lightning Experience)	<b>✓</b>			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Present and Share Information in Interactive Dashboards (Lightning Experience)	~			
Get More Information from Interactive Charts and Filters on the New Report Run Page (Lightning Experience)	~			
Reports and Dashboards: Compatibility Between Lightning Experience and Salesforce Classic	~			
Exclude the Confidential Information Disclaimer from Reports (Salesforce Classic)		~		
New Names for Reporting Products and Features	~			
New Reports and Dashboards REST API Methods		~		
Changed Reports and Dashboards REST API Request and Response Bodies		~		
New Reports and Dashboards API via Apex Methods		~		

Labels Streamlined in Setup

## How and When Service Features Become Available

Help your support team deliver incredible service faster. A redesigned service console lets your team spot customer data in a flash. Agents can also attach files more quickly to cases and better monitor times on service agreements. Agents using web chat can raise a virtual flag to get help from supervisors, and administrators can block sensitive data from chats in real time. Administrators can also approve social media posts before they go public and suspend a data sync connection between Salesforce organizations while deploying changes.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Salesforce Console				
Introducing the Lightning Service Console	~			
New Methods for the Console Integration Toolkit		~		
Zoom on Lists	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Responsive Lists	~			
Live Agent				
Block Sensitive Data in Chats			~	
Let Agents Raise a Flag for Help			~	
Empower Your Supervisors to Assign Skills to Agents			~	
Extreme Makeover II: Live Agent Edition	~			
Time Customers Out After a Period of Inactivity			~	
See IDs of Attached Records in Your Post-Chat Data		~		
Cases				
Cases: Support Customers Faster in Lightning Experience		~		
Case Feed				
Make It Easier for Agents to Update Case Info with Global Quick Actions and Custom Quick Actions in the Console Sidebar			<b>~</b>	
Cut the Clutter with Custom Feed Filters			~	
Apply Feed Filters in Case Feed with Just One Click			~	
Improved File Widget Lets Agents Quickly Find and Attach Files in Case Feed	~			
Long Email Subject Lines Are No Longer Truncated, Making Them Easier to Read	~			
SOS				
SOS Video Chat and Screen-Sharing Now on Android			~	
Service Communities				
Hide or Expose Case Emails in the Community Case Feed	<b>✓</b>			
Social Customer Service				
Approve Social Posts Before they are Public			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Default Response Handle			~	
More Social Networks to Provide Customer Care (Pilot)				~
Social Customer Service Experience Enhancements	<b>▽</b>	~		
<b>Entitlement Management</b>				
Better Metrics for Tracking Milestone Completion			~	
Organization Sync				
Suspend Your Organization Sync Connection	<b>~</b>			
Improvements to Sync Retries	~			
More Flexibility in Field Publishing	~			
Options to Sync Users and Metadata Go Their Separate Ways	<b>✓</b>			
Assets				
Enable Feed-Based Page Layouts for Assets			~	
Use Quick Actions on Assets			~	
Knowledge				
Reports and Lists of Knowledge Users	~			
Article URLs for Communities in the Case Feed	<b>~</b>			
External Sources on Knowledge One		~		
Other Changes for Salesforce Knowledge	<b>✓</b>			
Email-to-Case				
Improvements to How Email-to-Case Works with Multiple Salesforce Instances	<b>~</b>			
Macros				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
MacroInstruction API Lets You Easily Migrate Macros			~	

Labels Streamlined in Setup

# How and When Mobile Features Become Available

Things keep getting better for sales reps on the go. The Salesforce1 mobile app gets a bit of a facelift, with an easier-to-read font, labels in the action bar to identify what each action is, and infinite scrolling on feeds and record pages. And new Notes and Files related lists make it a snap to stay up on business-critical resources. For the Service Cloud, empower your agents to provide personalized service to mobile customers with the SOS video chat and screen-sharing solution, now available for Android and iOS apps.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Salesforce1	chapted for users	developers	serop	enable
Salesforce1 No Longer Supported on Android 4.2 and 4.3	<b>✓</b>			
Microsoft Surface Tablets Run Lightning Experience instead of Salesforce1	<b>~</b>			
End of Support for Salesforce1 Mobile Browser App on BlackBerry Devices in Winter '17	~			
Test Salesforce1 with Mobile Devices or Device Emulators (Instead of Desktop Browsers)		<u>~</u>		
Identify Action Icons Via Helpful Labels	~			
See More Data Just By Scrolling	~			
Enjoy Spiffier Charts in List Views (Tablets Only)	<b>✓</b>			
Get More Relevant Results When Searching in Lookups	~			
Warn Mobile Users About Duplicate Records As Fields Are Completed			~	
Account News Now Called Account Insights			~	
Some Twitter Button Labels Have Changed			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Increase Productivity by Adding Notes to Records (Generally Available)			~	
Access Salesforce Knowledge Articles in Salesforce1 (Generally Available)	~			
View Lightning Experience Reports and Dashboards	<b>~</b>			
See More Details on the Dashboard Home Page (Tablets Only)	<b>~</b>			
See More Report Rows on iPhone 6 Plus Phones	<b>~</b>			
See In-App Alerts When Dashboards Finish Refreshing	~			
Delete Chatter Groups and Manage Membership Requests	~			
View and Upload Profile Photos Without Chatter	~			
Profile Related List Changes			~	
View Related Files From Records			~	
Access External Files in Communities Using Salesforce1			~	
Receive Notifications for Posts to Groups in Communities	<b>✓</b>			
The Notifications List Just Got Better	~			
See More Detailed Approval Notifications	~			
Edit Chatter Group Email and In-App Notification Settings	<b>~</b>			
Get Enhanced Security for Salesforce1 Downloadable Apps with Mobile Device Management (MDM)		✓		
Improved Access to Encrypted Data in Salesforce1				~
Visual Styling of Salesforce1 Updated	~			
Additional Salesforce1 Information				
Access the Salesforce1 App	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Salesforce 1 Differences from the Full Salesforce Site	<b>✓</b>			
SalesforceA				
SalesforceA for iOS Version 3.0	~			
SOS for Service				
SOS Video Chat and Screen-Sharing			~	

Labels Streamlined in Setup

# How and When Communities Features Become Available

Upgrade to use Lightning components in communities and take your template-driven communities to the next level. Improvements in this release include the ability to create new pages and share more Salesforce data, actionable reports, and several community manager features.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Why You Must Get the Winter'16 Templates with Lightning Components			~	
Check Your Community's Template Version	~			
Template Extensibility				
Extend Your Napili Community to Show More Salesforce Data			~	
Create Record List Views in Napili			~	
View and Create Record Detail Pages in Napili			~	
Create Custom Pages with Community Builder			~	
Drag to Add Components to Pages in Community Builder			~	
Add Custom Components to Your Community			~	
Hide or Customize the Default Napili Header			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Customize Your Community Navigation Beyond Topics			~	
Manage Active Template Pages with Community Builder			~	
Delete Template Pages from Your Community			~	
Add Custom CSS to Templates Directly in Community Builder	~			
Other Community Builder and Templat	e Improvements			
Multiple Language Support for Napili Communities			~	
New Case Detail Page Options for Community Templates	~			
Let Community Users Vote on Knowledge Articles			~	
See User Expertise on Profiles			~	
User Profile Body Component on the Napili Template			~	
User Profile Header Detail Component on the Koa and Kokua Templates			~	
Show or Hide Record Activity in Users' Feeds			✓	
Community Management				
Your Community Management Home Page Now Maps to a Dashboard			~	
New Administration Page for Your Community Settings	~			
Easy Navigation Menu for Community Managers in the Global Header	<u>~</u>			
Moderate Inappropriate User-Generated Content In Your Community			~	
Spammers Beware! Report Spam in Chatter Messages			~	
Insights for Community Managers			~	
Quickly Add Topics to Articles	<b>✓</b>			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Structure Community Content with Subtopics			~	
Translate Reputation Levels		~		
Search Improvements				
Display Similar Questions and Articles in Napili Search (Generally Available) (available within 24 hours after the Winter '16 release)	(For Similar Questions)		(For Similar Articles)	
Improved Napili Search Publisher Component	~			
Search Removed from Koa and Kokua Article Detail Header	~			
Files in Communities				
Access External Files in Communities			~	
Limit File Visibility by Community				~
Sharing Files in a Community Now Sends Private Chatter Messages	<b>~</b>			
Other Communities Enhancements				
New Community Login Look and Feel (available on a rolling basis during the Winter '16 release)	~			
UserInfo Endpoint Supported in Communities		<b>~</b>		
Switch to Lightning Experience from the Global Header			~	
Compose and Edit Posts with Rich Text in Communities	<u>~</u>			
Changes to Member-Initiated Password Resets		~		
Share Wave Analytics with Your Community (Pilot)				~
Partner Users in Your Community Can Import Accounts, Contacts, and Leads			~	
Partner Users in Your Community Can Mass Update Leads			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Customer Community Plus Users Can Assign a Queue as the Case Owner	~			
Usage-Based Entitlements Display Customer Community Plus Login Licenses Correctly		~		
My Cases Heading Change for Mobile Devices	~			
Different Behavior When Adding one/one.app to the Community URL	~			
Google Maps Not Shown by Default on a User's Profile	~			
Orange Corner Removed from External Users' Photos in Salesforce1	~			

Labels Streamlined in Setup

# How and When Chatter Features Become Available

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, and mute feed posts. There are also several improvements to files, user profiles, and groups.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Files				
Enjoy Fast, Beautiful File Previews!	~			
Freeze Sharing of a File			~	
Enable or Disable Selecting Files from Salesforce			~	
Sync 2 GB Files	~			
Add the Files Related List to Page Layouts			<b>✓</b>	
Set History Tracking on Content Version Fields			~	
Ensure Access to On-Premises Data Sources for Files Connect			~	
Profiles				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Renamed Contact Information Visibility Label	~			
Groups				
Groups in Lightning Experience			~	
Broadcast Groups—Pilot			~	
Group @Mentions on Records Create Group-Record Relationship	<b>▽</b>			
Apex Trigger Support for Chatter Group Records		~		
Feeds				
Format Posts with Rich Text	~			
Mute Posts (available within 24 hours after the Winter '16 release)	~			
See More Relevant Information in Your Chatter Feed	~			
See the Most Relevant Suggestions When Mentioning People or Groups	~			
Display Similar Questions and Articles in Chatter Questions (Generally Available) (available within 24 hours after the Winter '16 release)	(For Similar Questions)		(For Similar Articles)	
Other Chatter Changes				
Report on Records Assigned to Topics	~			
Automatically Remove Signatures from Email Reply Comments and Group Posts	<b>✓</b>			
Redesigned Email Notifications	<b>✓</b>			
More Preview Links Added	~			
API Enhancements				
ConnectApi (Chatter in Apex)		~		
Chatter REST API		~		

Labels Streamlined in Setup

## How and When Search Features Become Available

Salesforce search gives you the power to find information faster. You control which custom objects are stored in the search index. We also made several improvements to how we handle punctuation in your searches. You get more relevant results with less guessing with expanded search term and nickname search results. In addition, search in Lightning Experience offers users enhanced instant results and a redesigned search results page.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Search Faster by Disabling Search for Some Custom Objects			~	
Get More Relevant Search Results	~			
Get More Relevant Search Results in Japanese	~			
Find Matching Records for Nicknames	~			
Find What You Need with Lightning Experience Search	~			

# How and When Data.com Features Become Available

Data.com accounts now come loaded with even more valuable financial and industry details, so your sales team can get a complete picture of potential customers. There are new visual representations of company hierarchies that help your sales reps identify new prospects for cross-sell opportunities. In addition, we've beefed up the Data.com API. Data.com is available in Salesforce Classic only.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Retirement of Data.com Social Key			~	
New SIC8 Data	~		~	
New Firmographics Data	~		~	
Data.com Company Hierarchy	~		~	
Data.com Coverage Expanded and Prospecting Insights Supported on Sales Console	✓			

SEE ALSO:

Labels Streamlined in Setup

# How and When Work.com Features Become Available

Help your sales managers and teams learn faster and perform better with a suite of sales-management and service-management tools that boost performance. We're bringing Enhanced Feedback and Enhanced Performance Summaries to everyone, and you can now enable manager groups for goals and coaching spaces so you can automatically share related records up the management hierarchy. Work.com is available in Salesforce Classic only.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Upgrade to Enhanced Feedback and Performance Summaries (Generally Available)	~			
Customize More Features for Feedback and Performance Summaries		~		
See More Coaching and Goal Details with Manager Groups Access			~	
Link Thanks Badges to the Related Chatter Post	~			
Other Changes in Work.com				
Use Work.com Objects in the Sales Console		~		
Display Badge Access for Relevant Users Only	~			
Use the Updated Goal Templates Package			~	
Use More Options for Goals and Metrics	~			
Use New Notes with Coaching Spaces			~	

SEE ALSO:

Labels Streamlined in Setup

# How and When Customization Features Become Available

Lightning Experience simplifies setup and gives you better ways to manage your data. Your processes and flows are less likely to hit SOQL limits. It's easier to build flow choice fields and processes that update records, and the email you get when flows fail now has a lot more detail.

IN THIS SECTION:

General Administration

Lightning Experience Setup

Data Customization

Lightning Connect

Process Builder

Visual Workflow

Sharing

Globalization

# **General Administration**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Configure Lightning Experience Record Home Pages Using the Lightning App Builder (Pilot)			<b>✓</b>	
Access More Recent Items from the Setup and Force.com Home Pages (Beta)		~		
Pinpoint the Accuracy of Geolocation Data		~		
Auto-Completion for Standard Address Fields	~			
Create More Roll-Up Summary Fields per Object		~		
REQUIRESCRIPT No Longer Executes JavaScript on Page Load		~		
Enjoy a More Intuitive Picklist Replace Process		~		
Eliminate Picklist Clutter with Restricted Picklists (Pilot)				~
Share Picklists Across Objects and Fields with Global Picklists (Pilot)				<b>✓</b>
Labels Streamlined in Setup		~		

# Lightning Experience Setup

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Improved Setup User Interface in Lightning Experience		<b>~</b>		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Manage Standard and Custom Objects from One Location		<b>~</b>		
Easily Access Personal Settings in Lightning Experience	~			

# **Data Customization**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Salesforce Analytics Cloud Support in Data Pipelines (Pilot)				~
Data Import Wizard: Email Notification Enhancements	~			
Legacy Data Import Tools	~			

# Lightning Connect

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Modify External Data with Writable External Objects			~	
Easily Manage External System Authentication with User Interface Improvements		~		
Use an OData 4.0 Adapter with Lightning Connect			~	
Monitor and Troubleshoot OData Callouts for User Access to External Data			~	
Separately Load Related Lists of External Objects			~	
Simplify the Setup of OData External Data Sources by Using Named Credentials			~	

# Process Builder

Feature	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Schedule Multiple Groups of Actions	~		
Reduced Chances of Hitting SOQL Limits in Processes	~		
Update Records with an Improved UI	~		
Admins Notified When Processes Fail to Resume Due to Inactive Owner	~		
Scheduled Actions Are Always Based on Current Data	~		

# Visual Workflow

Feature	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Reduced Chances of Hitting SOQL Limits with Bulkified Flows	<b>▽</b>		
Replicate a Picklist Field in a Flow Screen	~		
Debug Flows with Better Fault Emails (Beta)	~		
Dynamic Choice Renamed to "Dynamic Record Choice"	<b>~</b>		
Post to a Community Feed from a Flow	~		
Admins Notified When Interviews Fail to Resume Due to Inactive Owner	~		
Unsupported Operator Removed	~		
Boolean Data Types Treat null as Different from false	~		

# Sharing

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Faster Organization-Wide Default Updates		~		
Object-Specific Share Locks (Pilot)				<b>✓</b>

# Globalization

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Time Zone Names Have Changed	~			

# How and When Security and Identity Features Become Available

Protect your Salesforce organization and your users with a new, more intuitive login experience and more secure login handling. In Lightning Experience, get to Salesforce apps, custom apps, and connected apps from one App Launcher view. Transaction Security policies let you respond quickly to specified security situations. You can encrypt more fields, and you can store larger OAuth tokens and password fields.

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Encryption Updates				
Encrypt Selected Case and Case Comment Fields			~	
Authentication				
New Login Look and Feel (available on a rolling basis during the Winter '16 release)	✓			
Improved Security When Logged In as Another User		~		
Improved Security for Unwanted Login Attempts	<b>✓</b>			
Track Geographic Location of User Logins in Personal Settings and User Details	~	<b>✓</b>		
Twitter Auth. Provider No Longer Prompts User for Access on Repeated Logins	<b>✓</b>			
Display and Customize Error Messages for Single Sign-On Using an Auth. Provider		<b>✓</b>		
Time-Based Token Setting Name Changed in the User's Personal Settings	~			
Store Larger OAuth Tokens and Longer Passwords		<b>✓</b>		
New Dynamic Size for Login Flow Page	~	~		
Identity				

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
All Users Get the App Launcher in Lightning Experience		<b>✓</b>		
Reorder Apps Easier		<b>✓</b>		
Customize Connected App Behavior with Apex		~		
Transaction Security				
Learn About Possible Security Issues Quickly with Transaction Security Policies			~	
My Domain				
Restrictions Added to My Domain Names		~		
Platform Encryption				
Encrypt Person Account Fields			~	~
Encrypt Selected Case and Case Comment Fields			~	~
Group Data in Reports			~	~
Named Credentials				
Customize the Headers and Bodies of Apex Callouts That Use Named Credentials			~	
Simplify Development of Web Service Callouts by Using Named Credentials			~	

SEE ALSO:

Security and Identity

# How and When Deployment Features Become Available

You now have new ways to deploy changes to your organization. Deployment changes include test options for change sets. Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
New Change Set Components		~		
Choose Test Options for Change Sets		~		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Improved Deployment Experience During Service Upgrades		<u>~</u>		
Auto-Activate a Refreshed Sandbox		~		
Let Users Manage Sandboxes with Improved Data Security		~		
Improved Sandbox Copy Engine for Developer and Developer Pro Sandboxes (Generally Available)		<b>~</b>		
Edit Link Removed		~		

SEE ALSO:

Deployment

# How and When Development Features Become Available

Force.com helps you develop new applications and integrations to help your organization or for resale to other organizations.

## IN THIS SECTION:

Force.com Canvas

Debugging

**Developer Console** 

Visualforce

Apex Code

Custom Metadata Feature Impact

**Lightning Components** 

API

**ISVForce** 

AppExchange

# Force.com Canvas

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Canvas Apps Wrapped in Two <iframe> Tags</iframe>	✓			

# Debugging

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Debug Apex Code in Eclipse (Generally Available)				<b>✓</b>
Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags		~		
Customize Trace Flags and Debug Levels in Setup		~		
Receive Less Granular Logs at the Debug Level for Apex Code		~		

# **Developer Console**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Customize Your Trace Flags and Debug Levels in the Developer Console		~		
Run Selected Tests in the Developer Console		~		

# Visualforce

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Visualforce Development				
Visualforce for Lightning Experience (Beta)			~	
Other Changes in Visualforce				
"PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed			~	
"Serve Static Resources from the Visualforce Domain" Critical Update Postponed			~	
Updated Label Text for Mobile Page Setting		~		
New Attributes for liveAgent:clientChatLog		~		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
New liveAgent:clientChatLogAlertMessage Component		~		

SEE ALSO:

Labels Streamlined in Setup

# Apex Code

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Set Approval Process Locks and Unlocks with Apex Code			~	
Set Recipients of Email Notifications for Unhandled Apex Exceptions		~		
Improve Performance and Reliability with Platform Cache		~		
Reorder Your Batch Jobs in the Flex Queue Programmatically		~		
Make Unlimited Concurrent Callouts to Internal Salesforce URLs		~		
Make Calls to PageReference.getContent() in Asynchronous Apex		~		
Receive More Consistent, Clear Results for Tests Containing Callouts		~		
View Apex Hammer Execution Status (Generally Available)		~		
Catch Exceptions for Excess Enqueued Batch Jobs		~		
Serialize and Deserialize JSON Objects Reliably		~		
Sort Long and Short IDs Together in Apex Lists		~		
split() Methods Return Extra List Items in Old API Versions		~		
New and Changed Apex Classes		~		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
ConnectApi (Chatter in Apex)		~		

# Custom Metadata Feature Impact

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Declaratively Create and Update Custom Metadata Types and Records		~		
Protect Custom Metadata Records		~		
Choose Who Can Update Custom Metadata Field Values		~		

# **Lightning Components**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Components Development				
Lightning Components		~		
Lightning Events		~		
Other Changes in Lightning Compone	ents			
Enable My Domain To Use Lightning Components			~	
Slimmed Down the JavaScript API Doc		~		
Component Event Bubbling		~		
Improved Responsiveness with Multiple Requests		~		
Improved Default Value Initialization for Array, List, and Set Attributes		~		
Simplified Input Component Error Handlin	g	~		
Call Component Methods with <aura:method></aura:method>		~		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Browser Console Warnings for Access Check Violations		~		
Use \$A.getCallback() instead of \$A.run()		~		
Set Default Values on Attributes in Design Files		~		
Add an App Launcher Component in Lightning App Builder		~		
Add a Wave Dashboard Component in Lightning App Builder (Pilot)				~
Make Your Lightning Components Available For Lightning Experience		~		
Make Your Lightning Components Available For Communities		~		
Assign Versions to Your Components		~		
Add Lightning Components to Visualforce Pages		~		

# API

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
New Objects		<u>✓</u>	•	
Changed Objects		<b>✓</b>		
SOSL		~		
APIs				
REST API		~		
SOAP API		<b>✓</b>		
Chatter REST API		~		
Reports and Dashboards REST API		~		
Live Agent REST API		~		
Tooling API		~		
Metadata API		~		

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Salesforce Console API (Integration Toolkit)		~		
Other API Changes		~		

SEE ALSO:

API

# **ISVForce**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Add Topics to Hub Member Organizations in the Environment Hub			~	
View and Filter Organizations by Member Type in the Environment Hub	~			
View My Domain Status for Hub Member Organizations in the Environment Hub	~			
Create Organizations for Development, Testing, and Demos Using the SignupRequest API		<u>~</u>		
Choose the Language of Trial Organizations Created with the SignupRequest API		~		
Connect New Trial Organizations Created with the SignupRequest API to the Environment Hub		~		
Use the Signup Request Object in Visual Workflow and Lightning Process Builder to Automate ISV Business Processes	~			
Manage App Licenses in Lightning Experience		~		

# **AppExchange**

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Build Apps Faster with the AppExchange for Components Store		~		
Distribute Lightning Components on the AppExchange		~		
Create and Manage Listings in the New AppExchange Publishing Experience			~	

# How and When General Enhancements Become Available

Winter '16 improves your overall Salesforce experience with the ability to set audit fields when you create records through the API, improved accessibility for Lightning Experience, and more!

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Access Salesforce During Planned Maintenance With Read-Only Mode (Generally Available)	<b>✓</b>			
Run Asynchronous SOQL Queries (Pilot)				~
Field Audit Trail Supports Additional Objects		~		
Set Audit Fields and Update Records with Inactive Owners (available within 24 hours after the Winter '16 release)			~	

SEE ALSO:

Salesforce Overall: Set Audit Fields, Improved Accessibility, and More

# How and When Critical Updates Become Available

This release includes updates that improve the performance, logic, and usability of Salesforce but might affect your existing customizations.

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Enable My Domain to Use Lightning Components			~	

Feature	Visible to users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
"PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed			<b>~</b>	
"Serve Static Resources from the Visualforce Domain" Critical Update Postponed			~	

# **Supported Browsers**

Supported browsers for Salesforce vary depending on whether you use Salesforce Classic or Lightning Experience.

#### IN THIS SECTION:

### Supported Browsers for Lightning Experience

Lightning Experience is supported with Microsoft® Internet Explorer® version 11, Apple® Safari® version 8.x on Mac OS X. The most recent stable versions of Mozilla® Firefox® and Google Chrome™ are also supported. If you're using Microsoft® Internet Explorer® versions 7–10, you're redirected to Salesforce Classic. The following limitations apply.

#### Supported Browsers for Salesforce Classic

Salesforce Classic is supported with Microsoft® Internet Explorer® versions 9, 10, and 11 and Apple® Safari® versions 5.x, 6.x and 7.x on Mac OS X. The most recent stable versions of Mozilla® Firefox® and Google Chrome™ are also supported. The following limitations apply.

# Supported Browsers for Lightning Experience

Lightning Experience is supported with Microsoft® Internet Explorer® version 11, Apple® Safari® version 8.x on Mac OS X. The most recent stable versions of Mozilla® Firefox® and Google Chrome™ are also supported. If you're using Microsoft® Internet Explorer® versions 7–10, you're redirected to Salesforce Classic. The following limitations apply.

You can't access Lightning Experience in a mobile browser. Instead, we recommend using the Salesforce1 app when you're working on a mobile device. For a list of supported mobile browsers on Salesforce1, see "Requirements for the Salesforce1 Mobile App" in the Salesforce Help.

# EDITIONS

Lightning Experience available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

### Microsoft Internet Explorer version 11

Note these restrictions.

- The full Salesforce site is not supported in Internet Explorer on touch-enabled devices for Windows. Use the Salesforce1 mobile browser app instead.
- The HTML solution editor in Internet Explorer 11 is not supported in Salesforce Knowledge.
- The Compatibility View feature in Internet Explorer isn't supported.
- Changing the compatibility parsing mode of the browser, for example, by using the X-UA-Compatibility header, isn't supported.
- Internet Explorer 11 isn't supported for the Developer Console.

For configuration recommendations, see "Configuring Internet Explorer" in the Salesforce Help.

### Mozilla® Firefox®, most recent stable version

Salesforce makes every effort to test and support the most recent version of Firefox. For configuration recommendations, see "Configuring Firefox" in the Salesforce Help.

## Google Chrome<sup>™</sup>, most recent stable version

Chrome applies updates automatically. Salesforce makes every effort to test and support the most recent version. There are no configuration recommendations for Chrome.



**Note**: The latest stable version of Google Chromium<sup>™</sup> is supported.

### Apple<sup>®</sup> Safari<sup>®</sup> version 8.x on Mac OS X

There are no configuration recommendations for Safari.

Safari isn't supported for:

- Salesforce CRM Call Center built with CTI Toolkit versions earlier than 4.0
- Salesforce Wave Analytics

# **Wave Analytics Supported Browsers**

Browser support is available for Microsoft Internet Explorer version 11 and the most recent stable versions of Mozilla Firefox and Google Chrome.

# Recommendations and Requirements for All Browsers

- For all browsers, enable JavaScript, cookies, and TLS 1.2. If TLS 1.2 isn't available, enable TLS 1.1. Browsers that don't support TLS 1.1 or TLS 1.2 won't be able to access Salesforce after we deactivate TLS 1.0. Deactivation is scheduled, but not guaranteed, for the first and second guarters of 2016.
- The minimum screen resolution required to support all Salesforce features is 1024 x 768. Lower screen resolutions don't always properly display Salesforce features such as Report Builder and Page Layout Editor.
- For Mac OS users on Apple Safari or Google Chrome, make sure that the system setting Show scroll bars is set to Always.
- Some third-party Web browser plug-ins and extensions can interfere with the functionality of Chatter. If you experience malfunctions or inconsistent behavior with Chatter, disable the Web browser's plug-ins and extensions and try again.

# **Supported Browsers for Salesforce Classic**

Salesforce Classic is supported with Microsoft® Internet Explorer® versions 9, 10, and 11 and Apple® Safari® versions 5.x, 6.x and 7.x on Mac OS X. The most recent stable versions of Mozilla® Firefox® and Google Chrome™ are also supported. The following limitations apply.





**Note:** Salesforce Classic support for Microsoft® Internet Explorer® versions 7 and 8 is discontinued as of Summer '15.

Salesforce Classic available in: **All** Editions

Using Salesforce Classic in a mobile browser isn't supported. Instead, we recommend using the Salesforce1 app when you're working on a mobile device. To see the mobile browsers that are supported for Salesforce1, check out "Requirements for the Salesforce1 Mobile App" in the Salesforce Help.

### Microsoft Internet Explorer versions 9, 10, and 11

If you use Internet Explorer, we recommend using the latest version that Salesforce supports. Apply all Microsoft software updates. Note these restrictions.

- The full Salesforce site is not supported in Internet Explorer on touch-enabled devices for Windows. Use the Salesforce1 mobile browser app instead.
- The HTML solution editor in Internet Explorer 11 is not supported in Salesforce Knowledge.
- The Compatibility View feature in Internet Explorer isn't supported.
- Changing the compatibility parsing mode of the browser, for example, by using the X-UA-Compatibility header, isn't supported.
- The Metro version of Internet Explorer 10 isn't supported.
- Internet Explorer 11 isn't supported for the Developer Console.
- Internet Explorer 11 isn't supported for Salesforce CRM Call Center built with CTI Toolkit version 4.0 or higher.
- Community Templates for Self-Service supports Internet Explorer 9 and above for desktop users and Internet Explorer 11 and above for mobile users.
- Internet Explorer 9 isn't supported for Salesforce Wave Analytics.
- Internet Explorer 9 and 10 aren't supported for the Lightning App Builder.

For configuration recommendations, see "Configuring Internet Explorer" in the Salesforce Help.

#### Mozilla Firefox, most recent stable version

Salesforce makes every effort to test and support the most recent version of Firefox.

Mozilla Firefox is supported for desktop users only for Community Templates for Self-Service.

For configuration recommendations, see "Configuring Firefox" in the Salesforce Help.

### Google Chrome, most recent stable version

Chrome applies updates automatically. Salesforce makes every effort to test and support the most recent version. There are no configuration recommendations for Chrome.

Chrome isn't supported for:

• The Console tab (The Salesforce console is supported.)

#### Apple Safari versions 5.x, 6.x and 7.x on Mac OS X

There are no configuration recommendations for Safari. Apple Safari on iOS isn't supported for the full Salesforce site.

Safari isn't supported for:

- The Salesforce console
- Salesforce CRM Call Center built with CTI Toolkit versions below 4.0
- Salesforce Wave Analytics

# **Wave Analytics Supported Browsers**

Browser support is available for Microsoft Internet Explorer versions 10 and 11 and the most recent stable versions of Mozilla Firefox and Google Chrome.

# Recommendations and Requirements for All Browsers

- For all browsers, enable JavaScript, cookies, and TLS 1.2. If TLS 1.2 isn't available, enable TLS 1.1. Browsers that don't support TLS 1.1 or TLS 1.2 won't be able to access Salesforce after we deactivate TLS 1.0. Deactivation is scheduled, but not guaranteed, for the first and second guarters of 2016.
- The minimum screen resolution required to support all Salesforce features is 1024 x 768. Lower screen resolutions don't always properly display Salesforce features such as Report Builder and Page Layout Editor.

- For Mac OS users on Apple Safari or Chrome, make sure the system setting Show scroll bars is set to Always.
- Some third-party Web browser plug-ins and extensions can interfere with the functionality of Chatter. If you experience malfunctions or inconsistent behavior with Chatter, disable the Web browser's plug-ins and extensions and try again.

Some features in Salesforce—and some desktop clients, toolkits, and adapters—have their own browser requirements. For example:

- Internet Explorer is the only supported browser for:
  - Standard mail merge
  - Installing Salesforce Classic Mobile on a Windows Mobile device
  - Connect Offline
- For the best experience with the enhanced page layout editor, use Firefox.
- For the best experience on machines with 8 GB of RAM in the Salesforce console, use Chrome.
- Browser requirements also apply for uploading multiple files on Chatter.

# Lightning Experience: A New, Modern, Intelligent User Experience

It's here ... the new Salesforce user experience! Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Learn about the benefits of this intuitive, efficient interface. Then decide when it's time to make the switch—the power is in your hands. (Lightning Experience is available within 24 hours after the Winter '16 release.)

### IN THIS SECTION:

## What Makes Lightning Experience So Special

With a sales-centric mindset, our initial release focuses on reinventing the desktop environment

# Welcome to Lightning Experience, the new, fast, beautiful user experience from Salesforce.

to better support your sales process. The result is an intuitive, intelligent interface that helps sales reps work more naturally and close more deals faster. Let's take a peek at some of the key features of the new interface, so you can decide if Lightning Experience is right for some or all of your users.

### Lightning Experience Features in This Release

Here's the complete list of the powerful features and enhancements that make Lightning Experience the go-to interface for selling smarter and faster. Use this list to quickly access the details about each feature.

#### Is Lightning Experience Right for Your Salesforce Org?

So you're intrigued and excited about Lightning Experience! The new interface clearly offers numerous benefits for sales teams. But Salesforce is a deep well and we can't rebuild everything at once. This initial release doesn't have complete parity with Salesforce Classic, the full-featured Salesforce predecessor. Let's look at some use cases and see how Lightning Experience compares to Salesforce Classic to help you decide if now is the right time to switch.

#### Transition to Lightning Experience: Let's Do This!

Great! You've decided you're ready to switch to Lightning Experience. First, we recommend that you develop a strategy to guide your rollout. Then, when the time is right, here's how to enable the new user interface.

### Find Your Way Around Lightning Experience

Feeling a little discombobulated by all the Lightning Experience newness? Perfectly understandable. Diving in to a redesigned app can be disorienting—especially when you're able to work in the original interface with your eyes closed. To hone your Lightning Experience chops, let's look at where some of the most common Salesforce features landed in the new interface.

# **EDITIONS**

#### Available in:

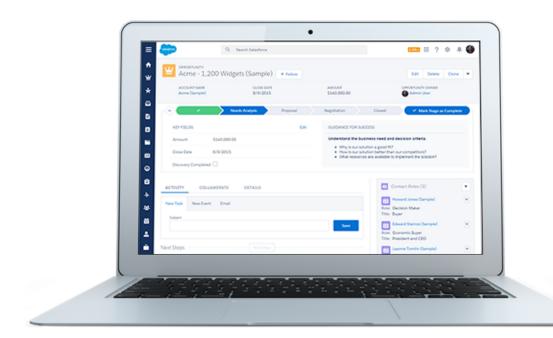
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

## Lightning Experience Considerations

This release of Lightning Experience doesn't include everything that's available in Salesforce Classic. Review these topics to see if any functionality that's critical to your business is limited or unavailable in this release. This information can also help you train users about what to expect when you do switch to Lightning Experience.

# What Makes Lightning Experience So Special

Welcome to Lightning Experience, the new, fast, beautiful user experience from Salesforce. With a sales-centric mindset, our initial release focuses on reinventing the desktop environment to better support your sales process. The result is an intuitive, intelligent interface that helps sales reps work more naturally and close more deals faster. Let's take a peek at some of the key features of the new interface, so you can decide if Lightning Experience is right for some or all of your users.



Feature	Why It's Cool
Home	Start the day on the new, intelligent home page. Monitor performance to goal, and get insights on key accounts. And stay on track by seeing exactly what needs doing in the Assistant.
Opportunity Workspace	Drive the right behaviors at every stage of your sales process from this action-optimized workspace. You can customize coaching scripts for each step. And reps can work their deals more efficiently using the handy composer to quickly log calls, create tasks, send emails, and more.
Opportunity Board	Visually review the status of deals, organized by each stage in the pipeline. Users can drag deals from one stage to another, and get alerts when an action is needed on a key deal.
Accounts and Contacts	Find information and gather insights at a glance from the new layout. Get the latest news about customers with integrated Twitter and Account Insights for customers, review upcoming and completed activities, and keep data clean with field-level duplicate matching.

Feature	Why It's Cool
Activity Timeline and Task List	See open tasks, planned meetings, and accomplishments in the activity timeline on each opportunity, lead, account, and contact.
	Or use the task list to see the details of specific tasks alongside the full list of open tasks, tasks due today, and closed tasks. Managers can use the Delegated view to see tasks assigned to people below them in the role hierarchy.
Enhanced Notes	Take better notes with auto-save, rich text capabilities, and the ability to relate a note to multiple records.
File Preview Player	Enjoy a richer file preview experience that doesn't require Adobe Flash Player. Vector-based preview images render in higher quality and don't degrade on hi-resolution screens, plus they load faster. New controls allow scrolling through multi-page documents, previewing animated GIFs, giving full-screen presentations, and accessing file actions.
Reports and Dashboards	Get more from your data. The new report run page is easier to read and filter. Animated, interactive charts bring your organization's data to life. And a new dashboard editor supports flexible layouts and components that span columns and rows.
List Views	See data faster with more intuitive list views. Visualize data with handy list view charts.
Search	Find records faster with improved search, which includes recent records and top results.
Setup Tree and Object Manager	Navigate setup pages with a simplified organization and a cleaner look and feel. Use the new Object Manager, which combines all standard and custom objects into a single list that is more easily searchable.

## SEE ALSO:

Trailhead: Admin Trail - Migrating to Lightning Experience

Trailhead: Developer Trail - Lightning Experience

# Lightning Experience Features in This Release

Here's the complete list of the powerful features and enhancements that make Lightning Experience the go-to interface for selling smarter and faster. Use this list to quickly access the details about each feature.

# **General Enhancements**

## **Supported Browsers for Lightning Experience**

If you're using Microsoft® Internet Explorer® versions 7–10, you're redirected to Salesforce Classic

## **New Login Look and Feel**

We've redesigned and improved the usability of the login experience to make it more intuitive for users. In addition to the main login page, the updated design appears when your users forget their password, verify their identity, give apps access to their data, and other login-related tasks.

#### All Users Get the App Launcher in Lightning Experience

All users of Lightning Experience have access to the App Launcher to navigate to Salesforce apps, custom apps, and connected apps from one view.

# **Core Sales**

### Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience

Get your reps to adopt and adhere to your company's sales processes by using Sales Path. Previously available for opportunities for Salesforce1 users, Sales Path is now available for opportunities and leads for desktop users.

### **Opportunity Workspace: Boost Sales Productivity with Lightning Experience**

Qualifying and converting leads just got easier. We've included a lead workspace—command central for sales reps working their leads.

## Opportunity Board: Get the Big Picture on Opportunities with Lightning Experience

Seeing is believing. When sales reps can see all their opportunities in one place, sales managers can effectively monitor the pipeline and sales reps can keep deals moving forward.

#### Account Details: Help Reps Keep Tabs on Accounts by Using Lightning Experience

Reorganized account details put the account information that matters most to your sales reps front and center.

### Account Insights: Provide Easy Access to News Articles in Lightning Experience

Give your users instant access to relevant, timely news articles about customers, partners, and competitors with Account Insights. This feature is available in both Salesforce1 and Salesforce Lightning Experience.

#### Contact Details: Help Reps Keep Tabs on Contacts by Using Lightning Experience

Reorganized contact details put the information that matters most to your sales reps front and center. Your reps can quickly get up-to-date on their contacts and spot changes on the horizon.

#### Lead Workspace: Work Leads Efficiently Using Lightning Experience

Qualifying and converting leads just got easier. We've included a lead workspace—command central for sales reps working their leads.

#### Products and Price Books: Make It Super Easy to Manage Products in Lightning Experience

Give your reps a simpler, easier-to-read view of your company's products and price books. The new layout for products and price books prioritizes the information your reps need most, so they can quickly find and update a product or any of its price book entries.

### Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

Integrate Twitter with Salesforce to give sales reps access to updates for accounts, contacts, and leads at a glance. This feature is available in both Salesforce1 and Lightning Experience.

# Sales Productivity

## Home: Help Reps Manage Their Days in Lightning Experience

Get your reps to manage their days using Home, where reps can see their quarterly performance summary and get important updates on critical tasks and opportunities. Your reps can also easily access news about their accounts, recent records, and top deals.

### See More Records on Object Home Pages in Lightning Experience

Your sales reps can see more records and their data on redesigned object home pages, which give more room for list views. The layout is similar to object home pages in Salesforce1 on tablets.

## List Views: Get Data Faster in Lightning Experience (Pilot)

Your sales reps can use redesigned list views to see records that meet their filter criteria, and display list view data graphically in charts.

### Visualize List View Data with Charts in Lightning Experience

We've added list view charts to the desktop application in Lightning Experience. Your reps can view and create charts to visualize information about the records that they refer to most often. Three types of charts are available: vertical bar, horizontal bar, and donut.

## Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

It's quick and easy to email contacts, leads, and your own colleagues directly from account, contact, lead, and opportunity records you have access to. Or send to any valid email address. Attach files. Automate with merge fields. Use a template if you want to: either choose from the samples we offer or create and share your own. Task records are created for sent emails. Find a link to sent email in the Activity feed of the record it was sent from or on related records.

### Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience

Help sales reps know exactly what's on their plate and what they've accomplished for each opportunity, lead, account, and contact. They see key details for each task, meeting, call, and email right on the page with other details on an opportunity or a lead. On accounts and contacts, the activity timeline appears in the right column. Reps can use the composer to keep the timeline current.

# Task List: Power Through Tasks in Lightning Experience

Now there's a better way for sales reps to track and prioritize their work in Salesforce. The task list gives reps a full picture of what's on their plates, for all their deals and customer relationships.

## Notes: Add Important Information to Records (Generally Available)

Our enhanced note-taking tool helps sales team players stay organized by taking better notes faster—and now for events, tasks, and cases.

### Calendar and Events: Reps Can View and Create Meetings in Lightning Experience

Sales reps enjoy a streamlined calendar look and feel when they view, create, and edit events in Salesforce. The calendar displays all events owned by a user, including events outside the user's business hours, in a day or week view.

### Notifications: See Notifications in One Place in Lightning Experience

Notifications alert your users when key events occur in Salesforce that they should know about or that require their attention—such as when they receive approval requests or are mentioned in Chatter posts. Lightning Experience includes a list of notifications that users can quickly access from any page.

# Microsoft® Integration

### Email Connect: Manage Exchange Sync and the Salesforce App for Outlook

Set up your sales reps to sync their Microsoft-based email contacts and events, and integrate their Outlook email from either Lightning Experience or Salesforce Classic.

#### Salesforce for Outlook: Sync Outlook Home Addresses to Your Salesforce Contacts

Now your users can maintain their contacts' home addresses in both Outlook and Salesforce by updating addresses in just one system. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

# Reports and Dashboards

#### Redesigned Reports and Dashboards Home Pages (Lightning Experience)

We've redesigned the Reports and Dashboards home pages in Lightning Experience so that it's easier to find and create reports and dashboards.

### Create Beautiful Dashboards Using a New, Feature-Rich Editor (Lightning Experience)

Lightning Experience introduces a new dashboard editor that'll usher in a whole new generation of dashboards.

#### Present and Share Information in Interactive Dashboards (Lightning Experience)

Interactive dashboard components give viewers more information and link to data-supplying reports. This feature is available in Lightning Experience only.

#### Get More Information from Interactive Charts and Filters on the New Report Run Page (Lightning Experience)

In Lightning Experience, new features on the report run page ensure that reports answer even your toughest questions.

## Service

### **Cases: Support Customers Faster in Lightning Experience**

Answering your customers' questions is easier than ever in Lightning Experience. The reorganized case layout puts the information you need most up front and center and helps you spot comments and history in a flash.

# Chatter

## Enjoy Fast, Beautiful File Previews in Lightning Experience

Get ready to gaze upon the beautiful, feature-filled SVG file preview player in Lightning Experience! You are in for some *oohs* and *ahhs* as your file preview loads faster, lets you scroll continuously through multi-page documents, renders clearly on high-res displays, and gives you quick access to actions directly from the preview window.

### Add the Files Related List to Page Layouts

The Files related list is an optional related list that you can now add to any of your page layouts for opportunities, accounts, cases, leads, custom objects, and many other objects. Organizations created after Winter '16 have the Files related list on page layouts for many objects by default.

### **Groups in Lightning Experience**

Check out the snazzy new groups user interface in Lightning Experience.

### **Feeds in Lightning Experience**

Wondering what's up with Chatter in Lightning Experience? We moved the Chatter tab and added a Collaborate tab on record pages. And we made everything look spiffier too!

# Search

#### **Find a Record Faster in Search Results**

The redesigned search experience to help you find the record you're looking for faster. Search results feature Top Results, which display the most relevant records for the objects you use the most.

#### **Get Enhanced Instant Results**

Instant results are auto-suggested records displayed after you select the search box or start typing. The records are chosen based on various factors, including record activity, search terms, and which object is searched. Instant results now return results for stopwords, such as *how* and *to*, so names spelled the same as stopwords aren't removed from results. And, as you type in search terms, the results are expanded to include records that match the search terms entered, even if they aren't in the same order as you entered them.

## General Administration

### Configure Lightning Experience Record Home Pages Using the Lightning App Builder (Pilot)

In Developer Edition orgs, you can use the Lightning App Builder to configure Lightning Experience record home pages.

# Setup

### Improved Setup User Interface in Lightning Experience

The Setup tree in Lightning Experience makes it easier than ever to view and manage administrative setup tasks.

#### Manage Standard and Custom Objects from One Location

We've added an Object Manager to improve your Setup experience! The Object Manager is a one-stop shop for managing all objects in your organization. Now you can access all objects and their related functions—fields, validation rules, page layouts, and so on—from a single entry point.

## **Easily Access Personal Settings in Lightning Experience**

We've made it easier than ever before to access your personal settings.

# Development

## **Visualforce for Lightning Experience (Beta)**

This release contains a beta version of Visualforce for Lightning Experience that is production quality but has known limitations.

### Make Your Lightning Components Available For Lightning Experience

Include your components in the App Launcher for Lightning Experience users.

### Manage App Licenses in Lightning Experience

The License Management App (LMA) is now available in Lightning Experience. View connected packages, modify license records, and support subscribers in an intuitive, efficient user interface.

# Is Lightning Experience Right for Your Salesforce Org?

So you're intrigued and excited about Lightning Experience! The new interface clearly offers numerous benefits for sales teams. But Salesforce is a deep well and we can't rebuild everything at once. This initial release doesn't have complete parity with Salesforce Classic, the full-featured Salesforce predecessor. Let's look at some use cases and see how Lightning Experience compares to Salesforce Classic to help you decide if now is the right time to switch.

Lightning Experience is currently geared toward sales teams, so most features from other Clouds aren't available yet. And some Sales features aren't available either. Although Lightning Experience will expand to include more features over upcoming releases, you should evaluate how important these upcoming features are to your business needs right now.

Keep in mind that you can enable Lightning Experience for a subset of your users. This flexibility

means you can move your Sales team to the new interface now, but have your Service organization continue using Salesforce Classic. Or you can opt to run a Lightning Experience pilot with a small group of users without disrupting everyone else until you know that the new experience provides what you need.

## IN THIS SECTION:

# Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic

Salesforce Classic is still here, and we've made it easy for Lightning Experience users to move between the old and the new. So even if Lightning Experience isn't a perfect fit yet, you and your users can try it on for size without losing out.

#### Supported Editions and User Licenses for Lightning Experience

Take a look at the supported editions and user licenses to see if your organization can enable and use Lightning Experience.

#### Best Use Cases for Lightning Experience

Let's look at the types of organizations that are a good fit for this release of Lightning Experience. And also some uses cases that might not be suitable just yet.

## Compare Lightning Experience and Salesforce Classic

Understanding what you get—and don't get—in the new interface is a big part of the decision to switch to Lightning Experience. Here are some highlights of how Lightning Experience compares to what you're used to in Salesforce Classic.

# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

## What's the Fate of Existing Salesforce Customizations?

We've worked hard to respect your existing configurations and customizations in Lightning Experience. Many of your point-and-click and programmatic implementations also work seamlessly in the new interface. However, some customizations don't apply in the new interface or may need to be updated to take advantage of all that Lightning Experience has to offer. Here are some issues to consider.

#### SEE ALSO:

Supported Editions and User Licenses for Lightning Experience Supported Browsers for Lightning Experience Lightning Experience Considerations

# Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic

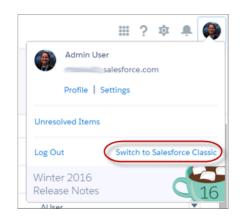
Salesforce Classic is still here, and we've made it easy for Lightning Experience users to move between the old and the new. So even if Lightning Experience isn't a perfect fit yet, you and your users can try it on for size without losing out.

When users are first enabled for Lightning Experience, the new interface is their default, preferred experience. Ideally, your Lightning Experience users find that the new interface meets all of their needs. But if there's an important feature or tool back in the classic interface, they can switch to Salesforce Classic at any time, without assistance from you.

To head back to Salesforce Classic, use the Switcher. In the Lightning Experience header, click the profile picture and select Switch to Salesforce Classic.



- Professional
- Enterprise
- Performance
- Unlimited
- Developer



The Switcher changes the default preference to Salesforce Classic. The user remains in the classic interface until using the Switcher to return to Lightning Experience. And then the new interface becomes the default preference. You get the idea.

To find the Switcher in Salesforce Classic, click the name in the upper right corner, then select **Switch to Lightning Experience**.



The fact that your users have the power to move themselves between interfaces will probably shape your decision about when to start using Lightning Experience. If Lightning Experience is missing only a few features that your team uses occasionally, asking users to switch between interfaces can be an acceptable trade-off given the benefits of the new experience. But it could be best to keep users who need daily access to unsupported sales features, or who work regularly with service features, in Salesforce Classic—at least for now.

#### SEE ALSO:

Gotchas If Users Switch Between Lightning Experience and Salesforce Classic Switch to Lightning Experience from the Global Header Set Up Users for Lightning Experience What's Not Available in Lightning Experience

# Supported Editions and User Licenses for Lightning Experience

Take a look at the supported editions and user licenses to see if your organization can enable and use Lightning Experience.



**Note:** Person accounts aren't supported in Lightning Experience. If your Salesforce implementation uses person accounts, you can't enable Lightning Experience for your production organization, regardless of your edition. But to give you an opportunity to try out the new interface, you can enable Lightning Experience in your sandbox environments. This option will be available beginning October 24, 2015. And rest assured, adding person account support in the future is a top priority.

## **Editions**

# Supported Editions

- Group Edition
- Professional Edition
- Enterprise Edition
- Performance Edition
- Unlimited Edition
- Developer Edition

### **Unsupported Editions**

- Personal Edition
- Contact Manager Edition
- Database.com Edition
- Chatter.com Edition

#### **User Licenses**

## **Supported Licenses**

- Salesforce
- All Salesforce Platform and Force.com (excluding Force.com Free)
- Identity User

### **Unsupported Licenses**

- Chatter Free, Chatter External, and Chatter Plus (also known as Chatter Only)
- Company Communities
- All Portal licenses
- Force.com Free
- Data.com
- Work.com
- Database.com
- Content Only
- Ideas Only
- Knowledge Only
- Site.com Only

# Best Use Cases for Lightning Experience

Let's look at the types of organizations that are a good fit for this release of Lightning Experience. And also some uses cases that might not be suitable just yet.

Consider using Lightning Experience for some or all of your organization if:

- Your sales team does business-to-business sales using accounts, contacts, leads, opportunities, custom objects, and the other sales features supported in the new user interface.
- You want to pilot the new user interface with a group of sales reps.
- You're looking to reboot your Salesforce implementation. This is a great opportunity to introduce new features because you're doing change management anyway.

Consider sticking with Salesforce Classic if:

# **EDITIONS**

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer
- Your sales team makes regular use of features that aren't yet available in Lightning Experience, such as campaigns, quotes, forecasting, or territory management.
- You're using person accounts.
- You primarily use customer service tools or other non-sales features.
- You want a single experience for your sales and service teams.

# Compare Lightning Experience and Salesforce Classic

Understanding what you get—and don't get—in the new interface is a big part of the decision to switch to Lightning Experience. Here are some highlights of how Lightning Experience compares to what you're used to in Salesforce Classic.



**Note:** These lists aren't a complete view of what's not available in Lightning Experience. You should also read Lightning Experience Considerations to help make your decision.

# Salesforce Data

Feature	<b>Lightning Experience</b>	Salesforce Classic	
Accounts, Contacts, Leads,	✓	✓	
Opportunities, Price books, Products			
Calendar, Events, Tasks	✓	✓	
Cases (basic support)	✓	✓	
Custom objects	✓	✓	
Chatter feeds, groups, and people	✓	✓	
Salesforce Files	✓	✓	
Other Sales and Service objects		<b>✓</b>	

# Home

Feature	<b>Lightning Experience</b>	Salesforce Classic
Performance chart	✓	
Assistant	✓	
Account Insights	✓	
Top deals	✓	
Tasks	✓	✓
Calendar and events*		✓
Feed and publisher		✓
Items to approve		✓
Customizable dashboards		✓
Customizable home page components		✓

<sup>\*</sup> The Salesforce calendar and events aren't displayed on the Home page in Lightning Experience but are available directly from the Lightning Experience navigation menu.

# **Accounts and Contacts**

Feature	Lightning Experience	Salesforce Classic
Account Insights	✓	
Activity Timeline	✓	

Feature	Lightning Experience	Salesforce Classic	
Enhanced Notes	✓		
Integrated email and templates	✓	✓	
Twitter highlights	✓	✓	
Account teams		✓	
Account and contact hierarchy		✓	
Person accounts		✓	

# Leads

Feature	<b>Lightning Experience</b>	Salesforce Classic
Workspace page layout	✓	
Activity Timeline	✓	
Sales Path	✓	
Enhanced Notes	✓	
Integrated email and templates	✓	✓
Lead conversion customization via the API	✓	✓
Find and merge duplicate leads		✓
Change lead owner to a queue		<b>✓</b>

# Opportunities

Feature	Lightning Experience	Salesforce Classic	
Workspace page layout	✓		
Activity Timeline	✓		
Sales Path	✓		
Enhanced Notes	✓		
Visual pipeline board view	✓		
Integrated email and templates	✓	✓	
Opportunity splits		✓	
Opportunity teams		✓	
Similar opportunities		✓	

# Reports

Feature	<b>Lightning Experience</b>	Salesforce Classic	
Enhanced report charts	✓		
Hide totals and subgroups from report view	✓		
Create interactive filters when viewing reports	✓		
Report Builder	✓	✓	
Bucket fields	✓	✓	
Custom summary formulas	✓	✓	
Joined reports		✓	
See details of matrix reports		✓	
Tables, Funnel, Scatter chart types		✓	
Schedule report refreshes		✓	

# Dashboards

Feature	<b>Lightning Experience</b>	Salesforce Classic
Display more than 3 columns	✓	
Dashboard Builder	✓	✓
Filtered dashboards		✓
Dynamic dashboards		✓
Schedule dashboard refreshes		✓
Post dashboard components to feeds		✓

# List Views

Feature	<b>Lightning Experience</b>	Salesforce Classic	
Charts	✓		
Create filters on the fly	✓		
Sortable columns	✓	✓	
Resizable columns		✓	
Advanced filter logic		✓	

## Other Features and Products

Feature	<b>Lightning Experience</b>	Salesforce Classic	
Create and edit records	✓	✓	
Inline editing of fields (lists, records)		✓	
Forecasting		✓	
Territory Management		✓	
Salesforce Communities		✓	
Partner Portals		✓	
Service Cloud		✓	
Data.com		✓	
Work.com		✓	

# What's the Fate of Existing Salesforce Customizations?

We've worked hard to respect your existing configurations and customizations in Lightning Experience. Many of your point-and-click and programmatic implementations also work seamlessly in the new interface. However, some customizations don't apply in the new interface or may need to be updated to take advantage of all that Lightning Experience has to offer. Here are some issues to consider.

# Navigation Menu

Lightning Experience replaces the Salesforce Classic tab bar with a collapsible navigation menu along the left side of the page. In this release, customizations made to the tab bar in the classic interface aren't reflected in the navigation menu. Neither administrators nor users can modify the contents or arrangement of the navigation menu. But rest assured, we know this isn't ideal and making the navigation menu customizable in the future is a top priority for us.

Use the navigation menu to access the standard Salesforce objects that are available in Lightning Experience, as well as Home, Chatter items (the main feed, people, and groups), files, dashboards, reports, and the user's task list and calendar. Custom objects and apps are also available in Lightning Experience but access them from the App Launcher by clicking in the header.

# Page Layouts and Compact Layouts

Record page customizations made in Salesforce Classic—for custom and standard objects—also affect record pages in Lightning Experience. However, some page elements display differently in Lightning Experience, and some aren't supported.

Compact layouts play the same role in Lightning Experience that they do for the Salesforce1 mobile app: displaying a record's key fields in the highlights panel on a record page. In Lightning Experience, the highlights panel shows the first five fields from your current compact layouts.

### **Actions and Buttons**

If you've already created and used actions in Salesforce Classic, you know that they appear in the Chatter publisher, while standard and custom buttons appear above the details on a record page. And if you use Salesforce 1, you know that all action types and buttons are

co-mingled on the Salesforce1 action bar. In Lightning Experience, we continue to blur the line between actions and buttons. But instead of displaying in a single place, actions and buttons are grouped by type in several different areas on the record page.

By default, Lightning Experience includes the actions and buttons defined in the global publisher layout. Or you can customize what's available using the Salesforce1 and Lightning Experience Actions section on object page layouts. Here's the logic that determines where on the record page an action or button appears:

- Most quick actions, productivity actions, standard buttons, and supported custom buttons are added to the page-level action menu
- Activities-related actions, such as Log a Call, New Event, New Task, and Email, display in the composer on the Activity tab.
- Standard Chatter actions appear in the composer on the Collaborate tab.

The order of actions in each of these areas is based on the order in which they've been added to the global publisher or object page layout.

### **Custom Buttons**

Custom buttons that use a URL or JavaScript content source aren't supported in Lightning Experience. You can replace some of the functions covered by these buttons by using point-and-click tools like Process Builder, Visual Workflow, or code-driven approaches.

## Visualforce

Yes, Lightning Experience is an all new user interface, but that doesn't mean your Visualforce pages stop working. This release includes beta support for Visualforce in Lightning Experience. Your existing Visualforce pages work in Lightning Experience, many without needing any revisions. Because things have moved around in the new interface, there are some chores you'll want to complete to make sure your Visualforce pages work the way you expect. And at this point, there are a few Visualforce features that don't work yet in Lightning Experience.

Here are a few basic details to consider.

- If your Visualforce pages use JavaScript, there are things you need to check. Visualforce doesn't "own" the whole page when shown in Lightning Experience, and because of that your JavaScript code needs to play by some new rules.
- If your Visualforce pages use the built-in standard components, their look-and-feel matches Salesforce Classic, whether users access them in the new or old interface. There's some work to do if you want your pages to match the Lightning Experience styling.
  - To help with this effort, we're publishing the Salesforce Lightning Design System (SLDS), a collection of design patterns, components, and guidelines for creating interfaces that fit in with Lightning Experience. The SLDS is available today as a public beta at www.lightningdesignsystem.com.

For the complete skinny on what works and doesn't work, see the "Visualforce & Lightning Experience" module in the Developer Trail - Lightning Experience Trailhead trail.

What about new UI customization? The Lightning Component framework is our new UI framework for developing dynamic web apps for both desktop and mobile devices. You can use it or Visualforce in your new projects. To learn more about UI development, see "User Interface Development Considerations" in the Lightning Experience Development Trailhead module. To learn more about Lightning Components, see the "Lightning Components" module in the Developer Trail - Lightning Experience Trailhead trail.

#### Force.com Canvas

Force.com Canvas allows you to easily integrate third-party applications in Salesforce. Canvas functionality in Lightning Experience is the same as in Salesforce Classic. You can still embed Canvas apps in Visualforce pages and everywhere else they're supported—with the added bonus that you can expose Canvas apps in Lightning Components.

# Salesforce APIs and Apex

Most of the programmatic tools and processes you've used to are largely unaffected by Lightning Experience. We've kept our promise that our new releases won't ever break your dependencies on Salesforce APIs. Tools like Workbench haven't changed. Your development environment is the same as ever.

While your Apex classes and API calls work fine, there are some features that aren't yet supported in Lightning Experience. If a user is in the new interface and executes some Apex code that interacts with an unsupported feature, the user can't complete the task. To address this scenario, we've added capabilities to determine a user's interface preference from both the API and Apex. You can use this functionality to add logic to your existing code so that your users don't encounter errors. See "Understanding Changes to Other Development Tools" in the Lightning Experience Development Trailhead module for full details.

# AppExchange Apps

Many apps from the AppExchange feature customizations, including custom objects, custom buttons, Visualforce pages, and more. In preparation for the Lightning Experience release, Salesforce partners are testing their apps and applying for *Lightning Ready* certification. Apps that are Lightning Ready will work in Lightning Experience and offer a more consistent experience with other Lightning Pages. If an app is supported in Lightning Experience, a "Lightning Ready" sash appears on its AppExchange listing. If an app isn't supported in Lightning Experience, use it in Salesforce Classic instead.



**Note:** Apps without Lightning Ready certification can be used in Lightning Experience, but some features may not be available or work as expected. These apps may also appear visually inconsistent with Lightning Experience because they use Salesforce Classic styling. For the best experience, use Salesforce Classic for apps that aren't certified as Lightning Ready.

### SEE ALSO:

Navigation and Actions: Lightning Experience Limitations
Point-and-Click Customization: Lightning Experience Limitations
Programmatic Customization: Lightning Experience Limitations

# Transition to Lightning Experience: Let's Do This!

Great! You've decided you're ready to switch to Lightning Experience. First, we recommend that you develop a strategy to guide your rollout. Then, when the time is right, here's how to enable the new user interface.

#### IN THIS SECTION:

### Develop Your Rollout Strategy for Lightning Experience

One of the best investments you can make in your Lightning Experience rollout is to have a clear plan. A plan helps you do things in the right order, identify key resources, communicate with everyone, and have a clear end date in mind.

## **Enable Lightning Experience**

Turning on Lightning Experience is a very simple task—just flip the switch! But we recommend that you set up a few other features first so your users get the full power of the new interface when you enable Lightning Experience. Then you need to set up the appropriate users to access Lightning Experience. You can choose to start slow and roll out the new interface to a small pilot group of users, or jump in and turn it on for everyone in your organization.

# EDITIONS

### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# Develop Your Rollout Strategy for Lightning Experience

One of the best investments you can make in your Lightning Experience rollout is to have a clear plan. A plan helps you do things in the right order, identify key resources, communicate with everyone, and have a clear end date in mind.

Depending on the size of your organization, you could be working with a Change Management department or have a project manager assigned to the rollout. Or perhaps you're the one charged with organizing and executing the rollout from start to finish. However the work gets divvied up, use the Lightning Experience Rollout module in the *Admin Trail - Migrating to Lightning Experience* Trailhead trail to help with this process.

Your rollout will likely fall into these phases.

#### Learn

- Learn about Lightning Experience
- Identify stakeholders and an executive sponsor
- Educate your company with presentations and demos
- Review Compare Lightning Experience and Salesforce Classic and Lightning Experience Considerations
- Conduct a gap analysis to confirm you're getting what you need

#### Launch

- Identify users for a pilot of Lightning Experience
- Identify and activate super users
- Create the project schedule
- Define measures for success
- Create and execute your marketing and training strategies
- Customize and test, ideally in a sandbox environment
- Go live!

#### Iterate

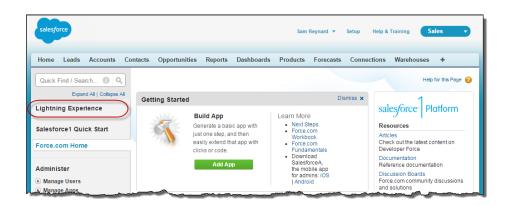
- Evaluate how things are working to see if you're hitting your success metrics
- Survey your users for satisfaction and pain points
- Use reports and dashboards to track metrics and feedback
- Deliver an executive summary

To jump-start your planning, download the Lightning Experience Customer Enablement Pack that's part of the Lightning Experience Rollout Trailhead module. The Enablement Pack is chock-full of valuable resources, like a presentation deck, a risk severity matrix, a project schedule template, a sample email drip campaign, and a rollout checklist to keep you focused and on track.

# **Enable Lightning Experience**

Turning on Lightning Experience is a very simple task—just flip the switch! But we recommend that you set up a few other features first so your users get the full power of the new interface when you enable Lightning Experience. Then you need to set up the appropriate users to access Lightning Experience. You can choose to start slow and roll out the new interface to a small pilot group of users, or jump in and turn it on for everyone in your organization.

Use the Lightning Experience setup page as your control center for tackling these steps. From Setup in Salesforce Classic, click **Lightning Experience** in the Setup menu.



# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

### IN THIS SECTION:

## Recommended Features for Lightning Experience

If you haven't already, consider enabling and setting up several "supporting" features before turning on Lightning Experience. These features ensure that the new user interface is fully optimized to help your sales reps sell faster and smarter.

#### Set Up Users for Lightning Experience

Next up, make sure that the desired users get access to Lightning Experience. By default, the "Lightning Experience User" permission is automatically enabled for all users with a standard Salesforce profile. But you can fine-tune access to Lightning Experience with custom profiles or permission sets. Meaning you can do a limited rollout to a pilot group or enable a specific team of users who can benefit from the new interface or go for it and set your entire organization loose. The power is yours.

## Turn on Lightning Experience

Are you ready? It's easy to turn on Lightning Experience using the Lightning Experience setup page.

#### SEE ALSO:

Supported Editions and User Licenses for Lightning Experience

# Recommended Features for Lightning Experience

If you haven't already, consider enabling and setting up several "supporting" features before turning on Lightning Experience. These features ensure that the new user interface is fully optimized to help your sales reps sell faster and smarter.

## **Related Files**

Leverage the rich features and flexibility of Salesforce Files from standard Salesforce objects and your custom objects. Add the new Files related list to page layouts, so users can upload files to records, see files associated with records, and quickly page through files in the modern, visually rich preview player.

# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

#### Notes

Helps your users stay organized with our enhanced note-taking tool. It's a breeze to create rich-text notes and quickly relate them to specific records. When you turn on Notes, remember to add the new Notes related list to page layouts so your users can create and read notes directly from their records.

## **Sales Path**

Make it easy for sales reps to follow your organization's sales process and get deals to closed. Customize your opportunity stages and lead statuses, and the order you want them to appear in the Sales Path on opportunity and lead workspaces. Then take it up another notch and add your own coaching steps for each stage or status in the Sales Path.

## **Duplicate Management**

Create duplicate rules so users are alerted if they're about to create a duplicate record. Craft your duplicate rules to control whether and when users can create duplicate records in Salesforce.

#### **Lead Conversion**

Keep your sales process moving by allowing your sales reps to convert qualified leads to contacts, accounts, or opportunities. Add the **Convert** button to the Lead page layout.

### **Account Insights**

Give your reps instant access to relevant, timely news articles about their accounts. This feature is available in English only, so if your organization uses a different primary language, you may not want this option. (For information about privacy issue with this feature, see Account Insights information in the Salesforce Help.)

#### Social Accounts, Contacts, and Leads

Keep the team up to date by letting reps link their accounts, contacts, and leads to matching Twitter profiles. Users can see Twitter user profiles and people in common in Salesforce and quickly access tweets.

### **Shared Activities**

Represent activity relationships more accurately by letting your sales reps relate multiple contacts to individual events and tasks. Shared Activities are forever. After they're enabled, they can't be disabled.

#### SEE ALSO:

Add the Files Related List to Page Layouts

Notes: Add Important Information to Records (Generally Available)

Set Up Sales Path

Alert Users to Possible Duplicate Records Quicker Than Ever

Account Insights: Provide Easy Access to News Articles in Lightning Experience

Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

# Set Up Users for Lightning Experience

Next up, make sure that the desired users get access to Lightning Experience. By default, the "Lightning Experience User" permission is automatically enabled for all users with a standard Salesforce profile. But you can fine-tune access to Lightning Experience with custom profiles or permission sets. Meaning you can do a limited rollout to a pilot group or enable a specific team of users who can benefit from the new interface or go for it and set your entire organization loose. The power is yours.



Note: You don't have to worry about this step if you use Group Edition or Professional Edition. All of your users are automatically switched to the new interface when you turn on Lightning Experience. Users who prefer to remain in Salesforce Classic can switch themselves back via the Switcher.

It's a different story of you have Professional Edition with Profiles enabled—read on.

First things first, do you have users with standard profiles who shouldn't get Lightning Experience yet? Move these users to custom profiles that don't include the "Lightning Experience User" permission.

For users with custom profiles, decide who you want to move over to Lightning Experience. Consider these options.

# **EDITIONS**

Profiles and Permission Sets available in: both Salesforce Classic and Lightning Experience

Profiles available in: Enterprise, Performance, Unlimited, and Developer

**Editions** 

Permission Sets available in: Group, Professional, **Enterprise**, Performance, Unlimited, and Developer **Editions** 

Want to test Lightning Experience with a small group of users? Create a permission set that includes the Lightning Experience user permission. Then apply the permission set to each of your pilot users. When you turn on Lightning Experience, only these custom profile users see the new interface.

Are you new to permission sets? Check out this walkthrough! Walk Through It: create, edit, and assign a permission set



Interested in rolling out Lightning Experience to specific custom profiles? Or ready to enable all your custom profile users? Adding the "Lightning Experience User" permission to profiles is the fastest way to mass-enable the new user interface.

If you're dealing with many profiles, you can tackle them at the same time with the Data Loader. But remember, with great power comes great responsibility. Take care you don't inadvertently enable or disable other features.

If you're going to limit Lightning Experience to a subset of your users, we recommend that you keep all members of a functional team on the same experience. If you have team members who often share links and work closely together, include them all in your pilot. See Gotchas If Users Switch Between Lightning Experience and Salesforce Classic for more details.

### SEE ALSO:

Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic

# Turn on Lightning Experience

Are you ready? It's easy to turn on Lightning Experience using the Lightning Experience setup page.

To access the Lightning Experience setup page in Salesforce Classic, click **Lightning Experience** in the Setup menu.



On the Lightning Experience setup page, click the **Lightning Experience** button to set it to **Enable**.

# **EDITIONS**

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

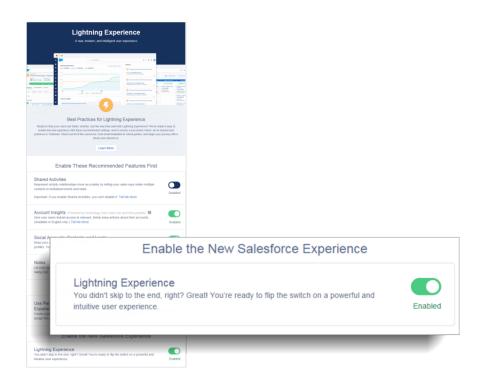
## USER PERMISSIONS

To view the Lightning Experience page:

"View Setup and Configuration"

To edit the Lightning Experience page:

"Customize Application"



That's it! The next time the users you've enabled log in, they automatically start enjoying Lightning Experience.

# Find Your Way Around Lightning Experience

Feeling a little discombobulated by all the Lightning Experience newness? Perfectly understandable. Diving in to a redesigned app can be disorienting—especially when you're able to work in the original interface with your eyes closed. To hone your Lightning Experience chops, let's look at where some of the most common Salesforce features landed in the new interface.

#### IN THIS SECTION:

### Find Profile and Personal Settings in Lightning Experience

In Salesforce Classic, your profile and personal settings are located in the menu with your name. It's not too different in Lightning Experience. Find links to both of these options by clicking your profile picture. Want to switch between Lightning Experience and Salesforce Classic? Find links for that, too.

# EDITIONS

# Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

#### Find Your Stuff in Lightning Experience

In Salesforce Classic, you use tabs to access objects, like accounts or leads. Tabs also serve up other features, such as your Home page or Chatter. Lightning Experience replaces the tab bar with a collapsible navigation menu that houses standard objects and other goodies. Looking for custom objects or connected apps? In Lightning Experience, those items are in the App Launcher.

### Find Your Way Around Records in Lightning Experience

In Salesforce Classic, record details, related lists, and the record feed display on the same page. This layout can make for a lot of scrolling, especially in records with a lot of data. In Lightning Experience, find record details, related information, and the record feed in dedicated tabs that are easy to switch between.

#### Find Actions and Buttons in Lightning Experience

While Salesforce Classic displays actions in the Chatter publisher, and buttons with a record's details, Lightning Experience blurs the distinction between these elements. The new interface intermingles actions and buttons, locating them in different areas on the record home page, based on function.

### Find Related Lists in Lightning Experience

Records in Salesforce include details and links to other, related records. Salesforce Classic displays related records in lists that appear near the bottom of the page. In Lightning Experience, related information appears in related list cards. For leads and opportunities—the objects that include a workspace—access related list cards from the Related tab. For reference objects like accounts and contacts, and on groups and people, related list cards display on the right side of the page.

### Find Chatter Features in Lightning Experience

With Lightning Experience, you can connect with people and groups and share business information securely and in real time, just like you're used to in Salesforce Classic. The way you access Chatter feeds, groups, and profiles is a bit different in the new interface. But with this quick overview, you'll feel right at home.

#### Find Help in Lightning Experience

Help is here! And it's better than ever in Lightning Experience, where the contextual Help menu serves up targeted content like videos, walkthroughs, help topics, and trails. Bonanza!

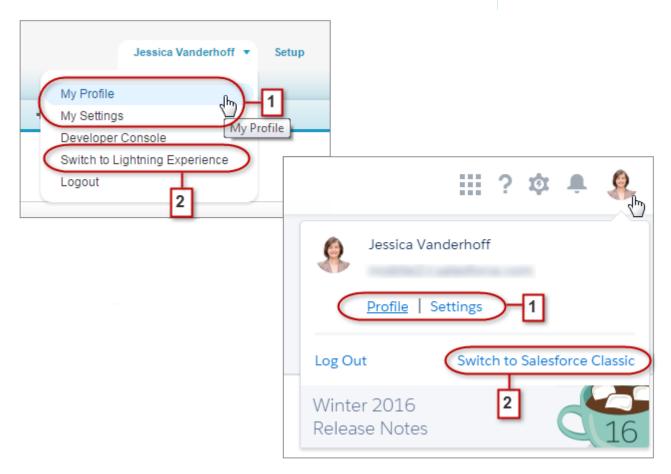
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# EDITIONS

### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



In Lightning Experience, click your profile picture to find links to your profile and personal settings (1). By the way, before you add a

photo, you look like this: . That's probably not a great likeness, so click **Profile** to add a photo and become human! If you find you need to head back to Salesforce Classic, use the Switcher (2). We remember your choice and set it as the default. Want to switch back to Lightning Experience? Just click your name in the header, then click the Switcher (2).

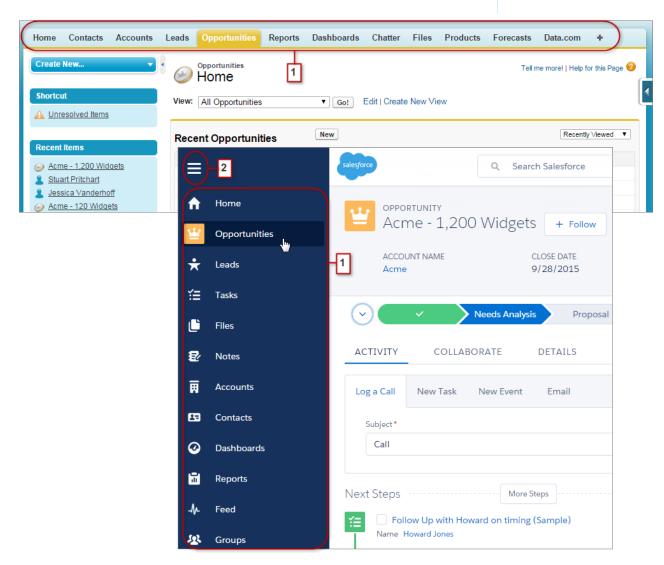
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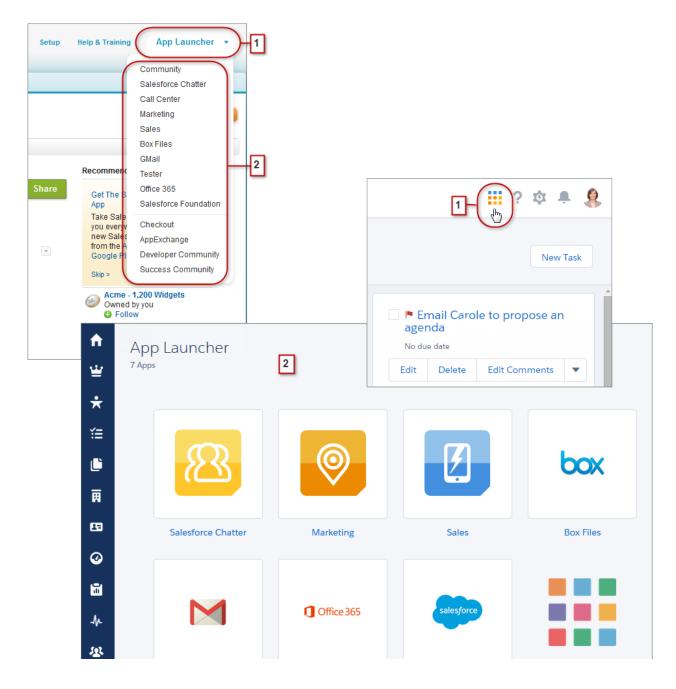
# EDITIONS

## Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



In Lightning Experience, use the navigation menu to access your home page, standard Salesforce objects, the Chatter feed, groups, and people, dashboards and reports, and other productivity tools. Simply click the icon for the item you want (1). Scroll down to see everything in the menu. Click the navigation menu icon (2) to expand the menu and show item names. Collapse it once you're familiar with the items' icons.



You use the App Launcher Force.com menu (1) in Salesforce Classic to access available apps. In Lightning Experience, hover over the App Launcher icon (1), watch it go all *rainbow*, then click to find your apps on the App Launcher page (2).

Looking for a feature that's not yet supported in Lightning Experience? Click the tile for the feature's cloud, then scroll down for links to that feature and others. Clicking a link opens the feature in Salesforce Classic in a separate browser tab. For example, if you want to use Collaborative Forecasts, click **Sales**, then scroll down for the **Forecasts** link. Click it to show the Forecasts tab in a separate browser tab Salesforce Classic.

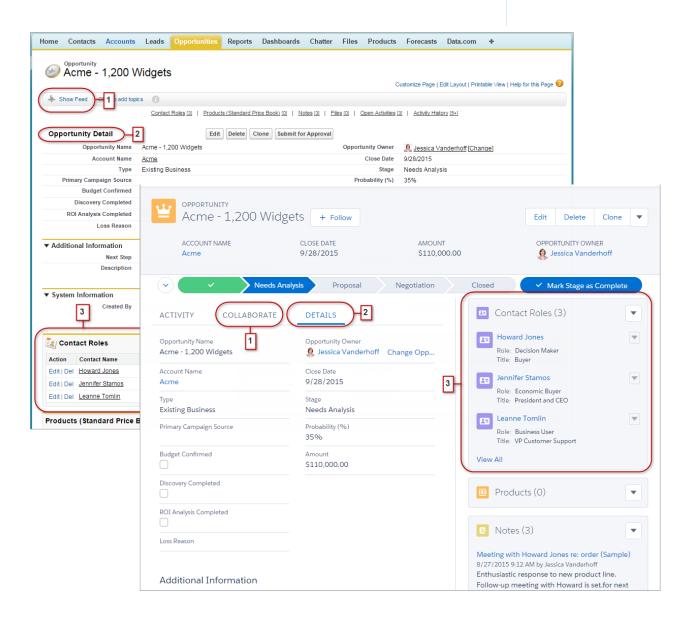
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# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



• In Salesforce Classic, **Show Feed** (1) controls whether a record's Chatter feed is visible. In Lightning Experience, the record's feed and the feed composer are always available on the Collaborate tab.

- See all record details on the Details tab (2).
- In Salesforce Classic, records include related lists (3), while Lightning Experience displays related information in related list cards. See Find Related Lists in Lightning Experience for a deeper examination of how related information is handled in the new and classic interfaces.

SEE ALSO:

Find Actions and Buttons in Lightning Experience

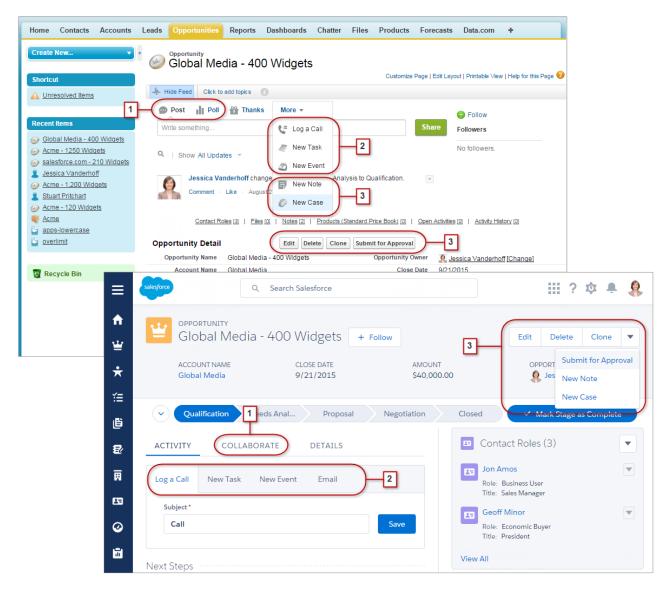
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While Salesforce Classic displays actions in the Chatter publisher, and buttons with a record's details, Lightning Experience blurs the distinction between these elements. The new interface intermingles actions and buttons, locating them in different areas on the record home page, based on function.

# EDITIONS

### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



- The Post and Poll standard Chatter actions (1) appear in the composer on the Collaborate tab in Lightning Experience. Other standard actions like Thanks and Links, however, aren't available in the new interface this release.
- The Log a Call, New Task, and New Event actions (2) appear in the composer on the Activity tab. And if the Send an Email button is included on an object's page layout, it shows up on this tab too.
- Standard and supported custom buttons (3) on the page layout—including the Edit button—appear in the action menu. And any other global and object-specific actions, including Visualforce and Force.com Canvas actions, appear in the menu as well.
- As in Salesforce Classic, custom links are included with the record's details. Click the Details tab to find them.

#### SEE ALSO:

Find Your Way Around Records in Lightning Experience Navigation and Actions: Lightning Experience Limitations

# Find Related Lists in Lightning Experience

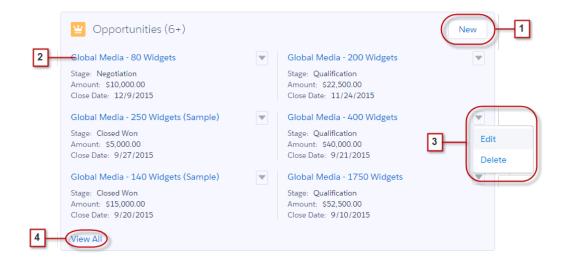
Records in Salesforce include details and links to other, related records. Salesforce Classic displays related records in lists that appear near the bottom of the page. In Lightning Experience, related information appears in related list cards. For leads and opportunities—the objects that include a workspace—access related list cards from the Related tab. For reference objects like accounts and contacts, and on groups and people, related list cards display on the right side of the page.

# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer





- Related list buttons (1) are located in the upper-right corner of each related list card. If there are multiple buttons, use the pull-down menu to access them.
- Each item in a related list card includes a link (2) that opens the related record.
- Record-specific actions (3) are located in the pull-down menus next to each related record.
- When related list cards are displayed on the right side of the page, each card shows up to three records. On reference objects, related list cards show up to six records. In both cases, drill in (4) to see the full list of related records.



**Note:** In Lightning Experience, the first eight related list cards on a record appear as discussed here. For any additional related lists, only the name of the object is displayed in the card. Clicking the name opens the full related list, which includes related list buttons and record-specific actions.

# Find Chatter Features in Lightning Experience

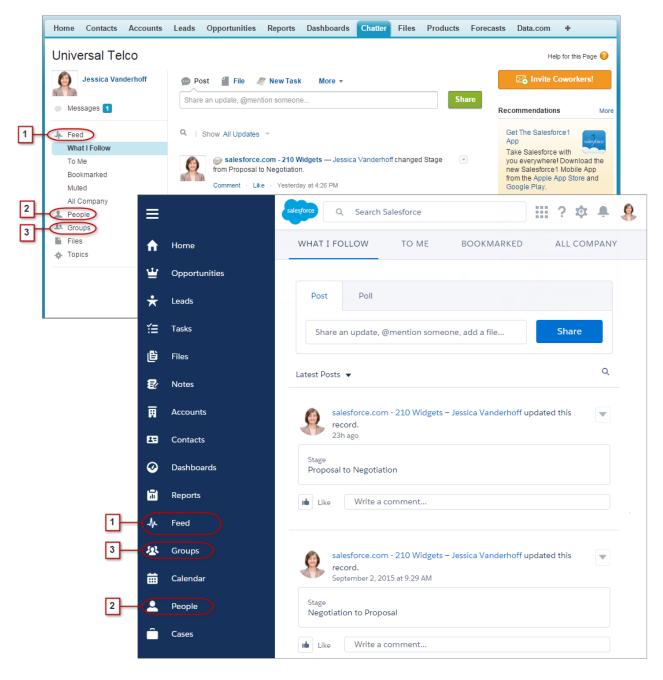
With Lightning Experience, you can connect with people and groups and share business information securely and in real time, just like you're used to in Salesforce Classic. The way you access Chatter feeds, groups, and profiles is a bit different in the new interface. But with this quick overview, you'll feel right at home.

In Salesforce Classic, you typically access Chatter features from the sidebar on the Chatter tab. In Lightning Experience, access the main feed (1), colleagues' profiles (2) and groups (3) directly from the navigation menu.

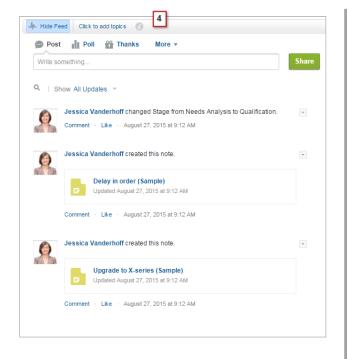
# **EDITIONS**

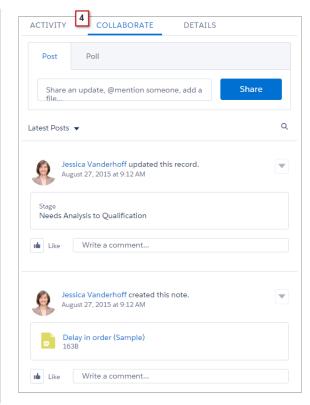
#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



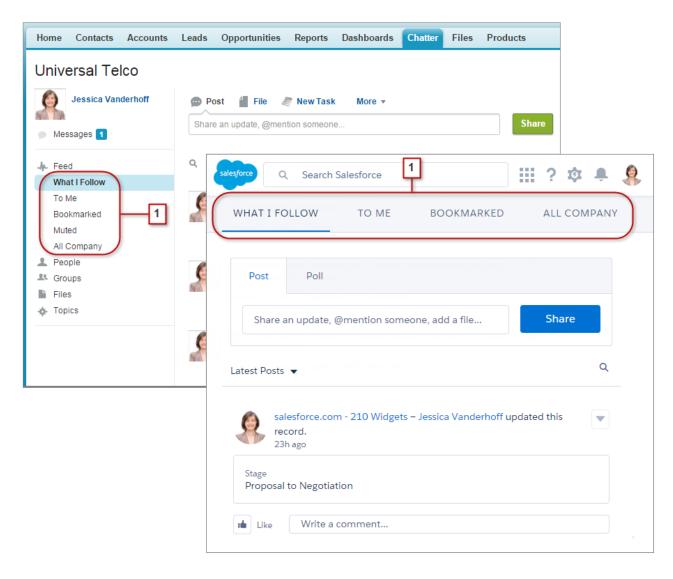
To collaborate on records (4), look for the Collaborate tab in Lightning Experience. You can post updates, create polls, and share files, just like in Salesforce Classic. But now there's no more fussing with the **Hide Feed** and **Show Feed** links.



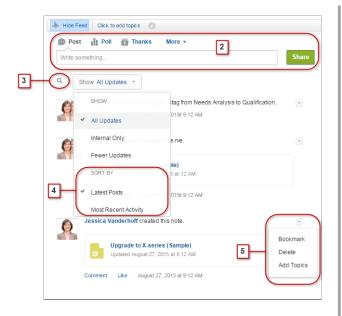


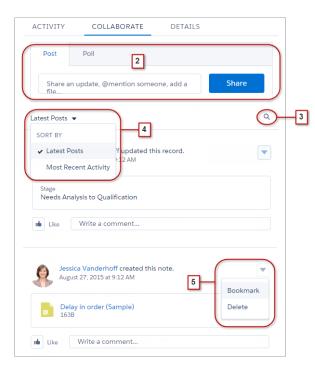
## Work with Feeds

You can change the main Chatter feed to show a particular subset of posts (1). In Lightning Experience, use the tabs at the top of the page. The What I Follow feed continues to be the default feed.



Feeds in Lightning Experience include many of the options that are available in Salesforce Classic.





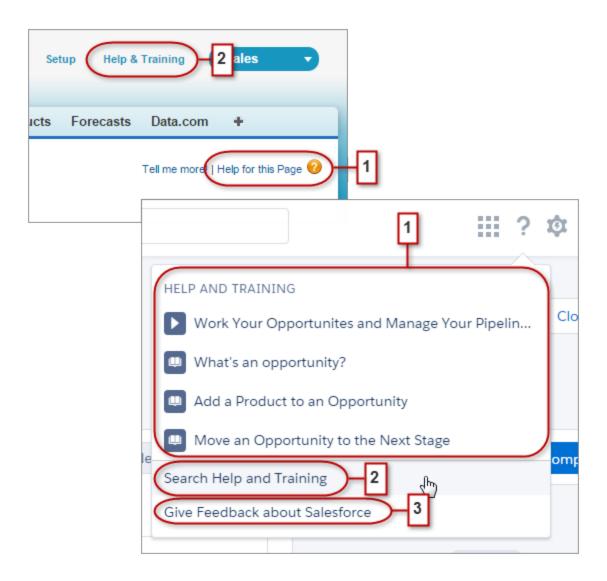
- The Post and Poll action are available in the composer (2) on the Collaborate tab. Click the composer to access buttons for uploading a file or mentioning people. Other standard Chatter actions that appear in the publisher in Salesforce Classic, including Thanks and Links, aren't available in Lightning Experience.
- Locate information in a specific feed with feed search (3).
- Sort the feed (4) by most recent posts or comments. Options to filter a feed aren't available in Lightning Experience.
- Acting on a post (5) is the same in both interfaces. But topics aren't available in Lightning Experience.

# Find Help in Lightning Experience

Help is here! And it's better than ever in Lightning Experience, where the contextual Help menu serves up targeted content like videos, walkthroughs, help topics, and trails. Bonanza!

# **EDITIONS** Available in: Group Professional

- **Enterprise**
- Performance
- Unlimited
- Developer



In Salesforce Classic, most pages and related lists link to a single contextual help topic. With the Lightning Experience Help menu (1), we provide lots more options, with links to videos, walkthroughs, help topics, and trails—whatever is most relevant to what you're working on.

Both interfaces include links to the main Help & Training portal (2). But the link in Lightning Experience saves time, taking you right to the search page so you can quickly find the help you need.

We need your feedback! Just click the **Give Feedback** link (3) to share your comments about Lightning Experience or anything else Salesforce. Thanks!

# **Lightning Experience Considerations**

This release of Lightning Experience doesn't include everything that's available in Salesforce Classic. Review these topics to see if any functionality that's critical to your business is limited or unavailable in this release. This information can also help you train users about what to expect when you do switch to Lightning Experience.

#### IN THIS SECTION:

## Gotchas If Users Switch Between Lightning Experience and Salesforce Classic

Switching between Lightning Experience and Salesforce Classic is fast and easy. But switching between interfaces affects the underlying URL routing logic and can lead to some unexpected results when links are resolved. Be aware of the impact on bookmarks and links in emails or

Chatter posts, especially if your organization has a subset of users authorized for Lightning Experience while others are still using Salesforce Classic.

### What's Not Available in Lightning Experience

Learn about Salesforce features that aren't available in the new interface or that have gaps from what you're used to in Salesforce Classic. Keep in mind that features not supported yet in the new interface are still available to your users. They can easily switch to Salesforce Classic and keep working.

### What to Expect in Lightning Experience When Chatter Is Turned Off

If your organization doesn't use Chatter, several useful aspects of the Lightning Experience interface aren't available. Learn how Lightning Experience changes, and see if you're losing functionality that you'd rather not live without.

# Gotchas If Users Switch Between Lightning Experience and Salesforce Classic

Switching between Lightning Experience and Salesforce Classic is fast and easy. But switching between interfaces affects the underlying URL routing logic and can lead to some unexpected results when links are resolved. Be aware of the impact on bookmarks and links in emails or Chatter posts, especially if your organization has a subset of users authorized for Lightning Experience while others are still using Salesforce Classic.

When users are first enabled for Lightning Experience, the new interface is their default, *preferred* experience. Every time a user switches interfaces via the Switcher, the user's default preference resets to the current environment. With this behavior in mind, here are the typical link routing interactions your users can encounter.

Jser Has the "Lightning Experience" Permission?	User's Default Experience	Where Links Open
Yes	Lightning Experience	For pages supported in Lightning Experience, links open in the new interface (even for links generated in Salesforce Classic).
		Links to unsupported pages are directed to Salesforce Classic, which opens in a new tab. This temporary redirection doesn't change the user's default preference to Salesforce Classic. The next time the user selects a link that is

# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# EDITIONS

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

User Has the "Lightning Experience" Permission?	User's Default Experience	Where Links Open
		supported in the new interface, the Salesforce Classic tab is reloaded to open the link in Lightning Experience.
Yes	Salesforce Classic	Links generally open in Salesforce Classic.
		If a link was generated in Lightning Experience (meaning it includes /one/one.app in the URL), the link opens in Lightning Experience. The user's default preference isn't changed to Lightning Experience.
No	Salesforce Classic	Links open in Salesforce Classic only.
		If a link was generated in Lightning Experience (meaning it includes /one/one.app in the URL), the link doesn't open, because the user can't access Lightning Experience.

Given these routing behaviors, you can see the potential for confusion if users share Lightning Experience links, typically via Chatter posts or email, with Salesforce Classic users. To avoid this problem, we recommend enabling the new interface for all users who work closely together.

We also recommend training your Lightning Experience users to understand how links and bookmarks work across the two experiences.

#### SEE ALSO:

Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic

# What's Not Available in Lightning Experience

Learn about Salesforce features that aren't available in the new interface or that have gaps from what you're used to in Salesforce Classic. Keep in mind that features not supported yet in the new interface are still available to your users. They can easily switch to Salesforce Classic and keep working.

#### IN THIS SECTION:

Data Access and Views: Lightning Experience Limitations

Sales Features: Lightning Experience Limitations

Productivity Features: Lightning Experience Limitations

Customer Service Features: Lightning Experience Limitations

Reports and Dashboards: Lightning Experience Limitations

Files and Content: Lightning Experience Limitations

Chatter: Lightning Experience Limitations

Other Salesforce Products: Lightning Experience Limitations

Navigation and Actions: Lightning Experience Limitations

Search: Lightning Experience Limitations

# **EDITIONS**

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Salesforce Setup: Lightning Experience Limitations

Data Import and Management: Lightning Experience Limitations

Process Automation: Lightning Experience Limitations

Security: Lightning Experience Limitations

Point-and-Click Customization: Lightning Experience Limitations

Programmatic Customization: Lightning Experience Limitations

Apps and Packaging: Lightning Experience Limitations

#### SEE ALSO:

Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic

## Data Access and Views: Lightning Experience Limitations

Learn about the issues to expect when accessing data in Lightning Experience. Some Salesforce data and features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

## Objects

These Salesforce objects are available in Lightning Experience. None of the other standard objects are supported in this release.

- Accounts
- Cases
- Contacts
- Dashboards
- Events
- Files
- Leads
- Notes
- Opportunities
- Price books
- Products
- Reports
- Tasks
- Custom objects

## **Fields**

- Fields for unsupported objects display in Lightning Experience, but they are read-only and don't include links to associated records.
- Formula fields with hyperlinks aren't supported.
- Formula fields with images aren't supported in list views, related lists, or search results. The field name displays but the field itself is empty.
- Field-level help isn't widely available in this release. You can't define custom help text or add field-level help for fields in custom objects.

### **Related Lists**

- Related lists for supported standard objects and your custom objects are available in Lightning Experience.
   Related lists for objects that aren't supported in Lightning Experience don't appear anywhere in the interface, even if they're included on an object's page layout.
- In Lightning Experience, related lists appear in related list cards on record home pages. The first eight related lists show related list buttons, the first several records from the list, and a link to open the full list of records. For any additional related lists, only the list name appears in the card. Users can still work with these related lists—simply click the related list name to access the full list. Here, users can see records in the list and use related list buttons (such as **New**) or row-level record actions.
- Lightning Experience includes new Files and Notes related lists, as well as the classic Notes & Attachments related list. If you're using Salesforce Files or the enhanced Notes feature, you'll want to include all of these related lists on your object page layouts.
  - Files and attachments are two different types of objects, and always have been. Files uploaded via the Notes & Attachments related list are simply files in Lightning Experience, but are attachments in Salesforce Classic. For existing organizations, this means that the Notes & Attachments list can contain a mix of attachments that were uploaded in Salesforce Classic and files added in Lightning Experience. Files added in Lightning Experience have the functionality of Salesforce Files, while attachments are associated only with the particular record and can't be shared further.
    - In the API, any existing integrations that retrieve attachments from the Notes & Attachments list don't include any files uploaded to the list in Lightning Experience. A new API call is necessary to retrieve files as well as attachments.
  - Notes created with the old note-taking tool in Salesforce Classic are available from the Notes & Attachments related list only.
     Any notes created with the enhanced version of Notes appear in the Notes related list only.
- For Group Edition users, the Contacts related list doesn't display on accounts.
- Product details include a single Price Books related list, unlike Salesforce Classic, which includes related lists for Standard Prices and Price Books.
- On the detail page for objects that support activities, Salesforce doesn't display Open Activities or Activity History along with other
  related lists. It displays the activity timeline instead. Objects that support activities include opportunities, leads, accounts, contacts,
  and any custom objects on which you enable activities.
  - If you delete either activity related list from page layouts, Salesforce doesn't display the corresponding timeline sections—Next Steps or Past Activity—on those pages.

### Object Home

These features aren't available on object home pages in Lightning Experience.

- Quick Create tool
- Access to object-specific reports
- Any of the tools in the Tools section
- Summary report tool

### List Views

These list view features aren't available in Lightning Experience.

- Inline editing of fields
- Following records directly from a list
- Sharing list views with groups
- Clone list views

- Mass actions, custom actions, or custom buttons
- Advanced filter logic
- Drag-and-drop scheduling for account, contact, and lead list views
- Feeds
- The 

  icon to create a printable view of a list

Creation and editing of list views in Lightning Experience is currently in pilot and available only in Trial orgs. Contact Salesforce to get a Trial org, where you can try out writeable list views with integrated filtering capability. We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.

List views display and behave differently in Lightning Experience.

- Navigation through list views has changed. Because list views have infinite scrolling, you can't specify the number of records to show per page. Also, you can't navigate through pages with arrow buttons, and you can't jump to a specific page of results. Jumping to records with names that start with a particular letter isn't available.
- The drop-down menu shows up to 200 views. Recently viewed lists are displayed first, followed by other list views in alphabetical order. Although only 200 views are displayed in the menu, you can search up to 2,000. If you have more than 2,000 list views, some views aren't returned in the search results. You can switch back to Salesforce Classic to find all your list views.
- You can't change the width of a column by dragging the right side of the column heading. To adjust the column widths, switch to Salesforce Classic. The new widths are then reflected in Lightning Experience.
- You can't change the order of columns by dragging the column heading to a new position in the table. Instead, you change the
  columns that appear and their order by choosing Select Fields to Display from the List View Controls drop-down menu. If you add
  or remove a column in Lightning Experience, all custom column widths are deleted. You can switch back to Salesforce Classic to
  adjust column widths.
- Limited row-level actions are available. For most objects, available actions are Edit and Delete. For leads, two more actions are available: Convert and Clone. For files, available actions are Edit, Delete, and Download.
- The name of the recent records list that displays on the home page for every standard and custom object is different in Lightning Experience. It's called Recently Viewed. This view isn't deletable, filterable, or editable. Salesforce admins can use the Object Manager in Setup to select and order columns for this view. Your users can sort items in the view by clicking inside a column header. An arrow in the column header shows if the list items are sorted in ascending or descending order.
- Another list view is available for most standard objects via the drop-down list with a name similar to Recently Viewed. The name of
  this view includes the name of the object. For example, this list view for accounts is called Recently Viewed Accounts. These two list
  views, Recently Viewed and Recently Viewed Objects, show the same records. The Recently Viewed Objects list view isn't deletable,
  filterable, or editable. Your users can sort the records and chart this list view's data. They can switch to Salesforce Classic to reorder
  the columns displayed in the list view. The columns appear in the new order when the user switches back to Lightning Experience.
- Formula fields with images aren't supported in list views in Lightning Experience. The field name displays but the field itself is empty.

## Working with Data

These features aren't available in Lightning Experience.

- Inline editing on lists or records
- Editing multi-line layouts
- Printing a page
- Generating a PDF file

The Salesforce sidebar that appears on the left side of most pages in Salesforce Classic isn't replicated in Lightning Experience. Items from the sidebar aren't included either, including:

- The Tags link and Recent Tags drop-down list
- The Create New drop-down list; use the **New** button on object home pages
- The Calendar shortcut; access the Calendar from the navigation menu
- The Recent Items list; see recent items on the Home page or on object home pages
- Messages and Alerts
- Custom Links

The Recycle Bin isn't available. Records deleted in Lightning Experience still go to the Recycle Bin, but users have to switch to Salesforce Classic to view or restore recently deleted records.

#### Accessibility

- Accessibility mode isn't provided because it's not needed in Lightning Experience. The interface is designed according to the latest accessibility standards, so screen readers are supported natively.
- The color-blind palette isn't needed either. If it's enabled for your organization, it affects only the report builder.

#### SEE ALSO:

Productivity Features: Lightning Experience Limitations Files and Content: Lightning Experience Limitations

## Sales Features: Lightning Experience Limitations

Learn about the issues to that your Sales team can encounter in Lightning Experience. Some Salesforce data and features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### Sales Features

#### Opportunities, Leads, Accounts, and Contacts

- Twitter is the only social network available in Lightning Experience.
- Twitter is styled as its own card, visible directly on the record home page.

#### Sales Path for Opportunities and Leads

- You can include a maximum of five fields and 1,000 characters of rich text in each sales stage.
- You cannot require fields in any particular stage. You can, however, set up a validation rule based on the stage and then include the fields in the sales path.
- Dependent fields are ignored when moving an opportunity stage using the Sales Path.
- If you set fields to the Read-Only or Required permissions in page layouts, Sales Path doesn't enforce those permissions.
- Fields included in sales paths, but not in page layouts, appear as read-only fields.
- Although not a limitation, keep in mind that deleting a record type that has a corresponding sales path also deletes the sales path.
- Validation rules appear as page-level messages, even if you configure the rules to appear near the fields.
- For lead sales paths, we recommend you place Unqualified statuses at the beginning of the sales paths.

### Features Not Available in Lightning Experience

- Assets
- Campaigns and Campaign Members
- Contracts
- Forecasts (including Collaborative Forecasts and Customizable Forecasts)
- Orders
- Quotes
- Person Accounts
- Divisions
- Mass Division Transfer

#### Accounts

## Organizations Using Person Accounts Can't Enable Lightning Experience

Person accounts aren't supported in Lightning Experience.

If your Salesforce implementation uses person accounts, you can't enable Lightning Experience for your production organization, regardless of your edition. But to give you an opportunity to try out the new interface, you can enable Lightning Experience in your sandbox environments. This option will be available beginning October 24, 2015. And rest assured, adding person account support in the future is a top priority.

When testing Lightning Experience in a sandbox, be aware of these known issues. These issues will be resolved when person accounts are supported in a future release.

- Editing person accounts on the contact detail view in Lightning Experience can introduce errors. This is because person accounts don't appear as accounts, like they do in Salesforce Classic. Instead, person accounts appear as both accounts and contacts.
- Person accounts aren't accessible from Setup.
- For contacts, the Account Name field lookup results include both business and person accounts. The results incorrectly include person accounts.
- The contact page layout appears for person accounts from the contact list view, search results, and lookups.
- On person account details, the page title incorrectly appears as Account instead of Person Account.

#### **Contacts Related List on Accounts**

- When a contact is created from the Contacts related list on an account, the contact's mailing address isn't populated with the account's billing address.
- For Group Edition users, the Contacts related list doesn't display on accounts.

- Account Hierarchy
- Account History
- Account Merge
- Account Partners
- Account Teams
- Account Territories
- Contact Roles on Accounts

#### Contacts

### **Opportunities Related List on Contacts**

• When you click **New** on the Opportunity related list on a contact, Salesforce adds the contact to the contact field for a new or existing opportunity.

## Features Not Available in Lightning Experience

- Contact Hierarchy
- Contact Merge
- Contact Roles on Accounts
- Contact Roles on Cases
- Stay-in-Touch fields

#### Leads

## **Features Not Available in Lightning Experience**

- Lead campaign history
- Assign leads to campaigns
- Assignment rules when manually creating leads
- Change lead owners to queues
- Identify and merge duplicate records from the lead workspace (but you can set up Duplicate Management to prevent the creation
  of duplicate leads)
- Automatic field population for accounts created during lead conversion

### Opportunities

Sales reps can add only:

- One product to an opportunity or a price book at a time
- One contact role to an opportunity at a time

When you add a product to an opportunity in Lightning Experience or Salesforce1, and the product has default schedules, Salesforce doesn't create the schedules.

#### **Opportunity Board**

- The Board is not available from the Recently Viewed list view. Users need to select another list view before they can switch to the Board.
- The Board shows the opportunities for only one sales path at a time. If your organization uses multiple sales paths, create a separate list view for each and filter it by record type. Make the new list views public so your users can access them.
- The Board doesn't let users specify a reason when they change an opportunity's stage to Closed Lost. If your organization requires users to include a reason, they can still move opportunities to Closed Lost from the Board; however, when they switch back to Salesforce Classic, they'll be prompted for a reason.
- Users receive alerts on opportunities with overdue tasks, no open activities, or no activity in the last 30 days. The alert isn't customizable in Winter '16.
- Validation rules still apply when changing the stage of an opportunity using the Board view, but users need to navigate to the opportunity workspace to address any validation rules.
- Dependent fields are ignored when using the Board view. Users need to navigate to the opportunity workspace to address any dependent fields.

### Features Not Available in Lightning Experience

- Big deal alerts
- Opportunity Splits
- Opportunity Teams
- Similar Opportunities
- Multi-line layout editing

You can't edit the Probability or Forecast Category fields. However, field values are automatically populated, based on the value of the Stage Opportunities field, when you save the record. You can manually edit the values for these fields in Salesforce Classic.

### **Products and Price Books**

#### **Products and Price Books**

- Product details include a single Price Books related list, unlike Salesforce Classic, which includes related lists for Standard Prices and Price Books.
- For organizations already activated, the Add to Price Book page doesn't include the Use Standard Price option by default. To make Use Standard Price available, add it to your Price Book Entry page layouts.
- For organizations already activated, the Price Books home page doesn't include an All Price Books list view by default.

#### Features Not Available in Lightning Experience

- Archiving products and price books

**Note**: As an alternative, deactivating products and price books preserves all the records related to them.

Product revenue and quantity schedules

#### Territory Management and Enterprise Territory Management

#### **Territory Management**

Original Territory Management appears in the Lightning Experience Setup tree. From there, you can enable, configure, and maintain the feature. Territory information, assignments, and reports are available and viewable in Salesforce Classic only.

#### **Enterprise Territory Management**

Enterprise Territory Management is available in Salesforce Classic only.

## **Productivity Features: Lightning Experience Limitations**

Learn about the issues to expect when using Salesforce productivity tools in Lightning Experience. Some Salesforce features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### Home

The Salesforce home page is reimagined in Lightning Experience. Home now focuses on top sales user priorities, including the sales reps' quarterly sales performance and notifications about tasks, leads, and opportunities.

- Alert banners
- Chatter feed and publisher

- Recommendations
- Custom components, such as dashboard snapshots
- Calendar

### **Customization Not Supported**

Lightning Experience doesn't support:

- Adding any standard or custom components
- Removing components already on the page
- Creating custom buttons or links
- Changing the page layout

It's a top priority to make the home page customizable, and we're working on this functionality for a future release.

#### **Activities**

#### Differences in Lightning Experience Compared to Salesforce Classic

## **Activity Timeline and Activities Related Lists**

On the detail page for objects that support activities, Lightning Experience doesn't display Open Activities or Activity History along with other related lists. It displays the activity timeline instead. Objects that support activities include opportunities, leads, accounts, contacts, and any custom objects on which you enable activities.

If you delete either activity related list from page layouts, Salesforce doesn't display the corresponding timeline sections—Next Steps or Past Activity—on those pages.

To represent all activities from future to past, the activity timeline displays open activities in the opposite order from the Open Activities related list. Under Next Steps, the timeline displays open activities in chronological order from top to bottom. Undated tasks appear at the top and overdue tasks appear last.

#### Configuration of Tabs in Activity Composer

Settings in some Salesforce orgs prevent the activity composer on opportunities or other objects from displaying activity tabs. To adjust your settings, see Configure the Call, Task, and Event Tabs in the Activity Composer in Lightning Experience and Configure the Email Tab in the Activity Composer in Lightning Experience.

#### Customization of Display and Order of Fields in Activity Timeline

In the activity timeline, you can customize the display and order of fields for events, tasks, and logged calls using event and task compact layouts. However, even if you remove certain fields from a layout, they remain in the timeline because they contain critical activity information. For example, suppose that you remove the due date, the date and time, or the task status fields from the compact layouts. The event start date and time, the task checkbox, the task due date, and the call logging date still appear on activities in the timeline. The description field on events and the comments field on tasks also always appear in the timeline, although they aren't available in the compact layout. The remaining fields visible in the timeline reflect the fields you include in the compact layout.

## Customization of Display and Order of Fields in Task List

In the task list, you can customize the display and order of fields for individual tasks using task compact layouts. However, even if you remove certain fields from a layout, they remain in the task list because they contain critical task information. For example, suppose that you remove the status and due date fields from a compact layout. The task checkbox and the due date still appear on tasks in the list. The remaining fields visible in the list reflect the fields you include in the compact layout.

## **No Customization Support for Activity Timeline Icons**

You can't customize the icons for activity types (events, tasks, calls, and email) in the timeline.

### **Overdue Tasks**

Lightning Experience doesn't display any overdue tasks when a user has more than 1,000 tasks that are overdue. A user can switch to Salesforce Classic to view overdue tasks and close them, postpone them, or delete their due dates.

#### **Task Assignment Notifications**

Lightning Experience displays no option to send an email when a user assigns a task. It also displays no personal setting to receive an email when someone assigns a task. However, suppose that a user switches from Lightning Experience to Salesforce Classic. In that case, users can receive emails for tasks that they assign to themselves or tasks created with a status of Completed. These options depend on how you set up your Salesforce org.

#### **Access to Records Related to Activities**

Suppose that a user is looking at an event or a task related to a contact, Janita Smith. If the user doesn't have access to the contact Janita Smith in particular or to contacts in general, Salesforce displays the field as follows.

- In Salesforce Classic, the field is empty (as if there were no data).
- In Salesforce 1, the field displays the record name. A user can delete the record or add others, subject to normal validation.
- In Lightning Experience, the field displays "No access" in place of the record name. A user can delete the record or add others, subject to normal validation.

### **Follow-Up Activities**

Lightning Experience doesn't display the **Create Follow-Up Event** or **Create Follow-Up Task** buttons for creating an event or a task on a record. Instead, the composer on a record for an opportunity, a lead, an account, or a contact prefills the Name and Related To fields on events and tasks.

#### **Calendar Views**

The calendar displays only a day view or a week view. It has no month view or activity list view. You can't hide weekends.

#### **Calendar Shortcut**

Lightning Experience doesn't offer the option to add a calendar shortcut to the sidebar. Instead, the navigation menu includes a **Calendar** link by default.

- Event invitations aren't supported. Users can't invite others to events, update invitations to events, accept or decline invitations, or view a related list of invitees to an event.
- Users can't create recurring events or tasks, and they can't edit a recurring event or task that was created in Salesforce Classic. However, they can view and edit individual occurrences of a recurring event created in Salesforce Classic.
- Users can't create a Microsoft® Outlook® appointment from a Salesforce event.
- Users can't assign copies of a task (group tasks) to coworkers.
- Users can't spell-check the Description field on events or the Comments field on tasks.
- Users can't set or view activity reminders (reminders of upcoming events or tasks due).
- You can't create public calendars or resource calendars. Users can't view public calendars or resource calendars created in Salesforce Classic.
- Lightning Experience has no **My Team's Activities** list view, and users can't edit tasks owned by people below them in the role hierarchy. Users can view events and tasks owned by people below them in the role hierarchy in reports. They can also view tasks that they've reassigned to people below them in the role hierarchy by choosing the Delegated view in the task list.
- Users can't share their calendars, and Lightning Experience can't display multiple people's calendars.
- Lightning Experience doesn't display a task list alongside the calendar.
- Lightning Experience doesn't display a mini calendar on the event detail page for an account or an opportunity.
- Users can't add an event in the calendar by double-clicking a time slot or clicking ...
- Users can't create events in a list view by dragging a lead or other record from the list to the calendar below the list.
- Lightning Experience doesn't support Cloud Scheduler meeting requests.
- Lightning Experience has no print view for the calendar.

### Notes

Notes created with the old note-taking tool in Salesforce Classic are available from the Notes & Attachments related list only. Any notes created with the enhanced version of Notes appear in the Notes related list only.

## Integrated Email

### **Supported Objects**

Integrated Email is supported for accounts, contacts, leads, and opportunities only, and not for cases, campaigns, custom objects, or person accounts. Email can be sent to contacts, leads, and users. Fields available for templates are based on the object from which the template is created, plus User fields. For example, if you have an opportunity record open and create a template, you can only add Opportunity fields and User fields to your template. Similarly, email templates created for one object are not available for use from other objects. For example, templates created for use with leads are not available for emails sent from opportunities.

#### **Mass Email**

Mass Email is not supported.

#### Mass Mail Merge

Mass Mail Merge is not supported. However, you can use merge fields on individual emails and add merge fields to templates.

## Hyperlink Fields in Mail Merge

Hyperlink formula fields are not supported.

### **Email Activity**

After you send an email, a task record is created. If you sent the email to a contact or lead, the task link is added to the Recent Activity feed for that record. If you sent the email to another email address (not a contact or lead), a link to the email is added to the Recent Activity feed of the record that was open when you sent the email. The task record doesn't include a link to access attachments sent with the email.

#### **Email Templates**

Email templates are available for administrators and users. Templates created in Salesforce Classic can't be used in Lightning Experience and vice versa.

Email templates in Lightning Experience use custom HTML. The other types (text, HTML with letterhead, and Visualforce) aren't supported.

All templates created in Lightning Experience are public. Any attachment in an email becomes public when that email is sent. Users no longer have to share the templates they create.

#### **Email Attachments**

If you don't have access to a file, you can't attach that file to an email or a template. If you select a template that has attached files, you need access to those files to send them. A file attached to an email is publicly available via a hyperlink when the email is sent.

#### **Unresolved Items**

The Unresolved Items link isn't available in Lightning Experience. After users add items to Salesforce using Email Connect, Salesforce for Outlook, or Email to Salesforce, items that can't be automatically assigned to Salesforce records are still sent to Unresolved Items. However, to assign those items to records or delete them, users must be prompted with a link by Salesforce for Outlook in Microsoft® Windows®, or switch to Salesforce Classic.

#### **Automatic BCC**

Automatic BCC, which lets users automatically receive copies of sent emails, is not available in Lightning Experience. Compliance BCC, which lets your organization automatically receive copies of sent email for compliance purposes, *is* available in Lightning Experience.

### Work.com

Work.com sales-management and service-management tools aren't available in Lightning Experience. But Lightning Experience users can see thanks badges and skills endorsements that they've received in the feed.

SEE ALSO:

Data Access and Views: Lightning Experience Limitations

## Customer Service Features: Lightning Experience Limitations

Learn about the issues to expect if your organization uses customer service tools. In general, Service Cloud data and features aren't supported in this release of Lightning Experience. Cases are supported but don't have full parity with what's available in Salesforce Classic.

#### Cases

#### **Case Layout**

Cases look a little bit different than other records. Cases display a feed first rather than record details or related information, because support agents mainly collaborate and work with activities in a feed. Details appear next to the feed. You don't see the Activity or Collaboration tabs because this information displays directly in the feed.

If you turn off Case Feed, cases look like other records. Activities and collaboration appear, but the feed-first design disappears and adds more clicks and context-switching to cases. You can use collaboration (Chatter) instead of feed, but collaboration doesn't include useful case feed publishers, such as email, log a call, or change status.

#### **Case Comments**

Now you add comments to the feed instead of the Case Comments related list. You can't add comments to the related list in Lightning Experience. The comments that appear there are from Salesforce Classic users.

#### **Case Related Lists**

These related lists aren't available on cases: Case History, Case Milestones, Case Team, Contact Roles, External Sharing, Content Deliveries, Live Chat Transcripts, Related Content, and SOS Sessions.

#### **Case Setup**

To fully benefit from the new feed-first design on cases, re-create the standard case feed publishers. The standard publishers aren't available, but you can quickly re-create them as quick actions on the Case object. One benefit of re-creating the publishers as quick actions is that they appear on mobile devices, whereas standard case feed publishers don't.

#### **Features Not Available in Lightning Experience**

- Salesforce Call Center
- Knowledge Articles
- Omni-Channel
- Entitlements
- Milestones
- Macros

### **Unsupported Service Cloud Features**

Except for basic Cases, Lightning Experience doesn't support any Service Cloud features, including the Salesforce Console.

For existing Salesforce to Salesforce customers, records shared by connections are available in the new user interface as long as their object type is supported in Lightning Experience.

# Reports and Dashboards: Lightning Experience Limitations

Learn about the issues to expect when using reports and dashboards in Lightning Experience. Some Salesforce data and features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

## Reports

## **Features Not Available in Lightning Experience**

Feature	Notes about Lightning Experience Availability
Joined Reports	
Schedule Report Refreshes	Users can't schedule report refreshes in Lightning Experience, but scheduled report refreshes from Salesforce Classic continue to work in Lightning Experience.
Print Reports	Lightning Experience doesn't offer a print option, but users can still print reports using their browser's <b>print</b> function.
Export Reports	
Row-Level Actions (Edit and Delete)	Although row-level actions aren't available in Lightning Experience, users can edit or delete a report when viewing it.
Subscribe to Reports	
Chatter Feed on Reports	
Show Details in Matrix Reports	
Add to Campaign	
Accessibility Mode for the Report Builder	Users with Accessibility Mode turned on must switch to Salesforce Classic to create and edit reports.

## Features Available with Limitations in Lightning Experience

Feature	Notes about Lightning Experience Availability
Historical Trend Reporting	Historical trend reporting with charts is supported in Lightning Experience, but tabular views of historical trend reports aren't available.
Filters	These filters are available when building or editing a report, but are not shown in the filter panel when viewing a report. Even though the filters are not shown, they still filter the report.
	• Top N filters
	<ul> <li>Cross filters</li> </ul>
	<ul> <li>Historical field filters</li> </ul>
	<ul> <li>Standard filters (except for scope and date filters)</li> </ul>

## Other Notes about Using Reports in Lightning Experience

In the Lightning Experience Report Builder, save your report before running it or risk losing some changes. Specifically, be sure to save after adding:

- Formula fields
- Bucket fields
- Top N filters
- Cross filters

## Dashboards

## **Features Not Available in Lightning Experience**

Feature	Notes about Lightning Experience Availability
Create Filtered Dashboards	Users can view filtered dashboards, but they aren't filtered.
Create Dynamic Dashboards	Users can view dynamic dashboards, but must switch to Salesforce Classic to edit them.
Change a Dashboard's Running User	
Schedule Dashboard Refreshes	Users can't schedule dashboard refreshes in Lightning Experience, but scheduled dashboard refreshes from Salesforce Classic continue to work in Lightning Experience.
Row-Level Actions in List Views (Edit and Delete)	Although row-level actions aren't available in Lightning Experience, users can edit or delete a dashboard when viewing it.
Chatter Feed on Dashboards	
Post a Dashboard Component to Chatter	
Visualforce Components on Dashboards	
Accessibility Mode for the Dashboard Editor	Users with accessibility mode turned on can still create and edit Lightning Experience dashboards, but for a fully accessible experience they must switch to Salesforce Classic.

## Other Notes about Using Dashboards in Lightning Experience

• After saving a dashboard in Lightning Experience, you can't edit it in Salesforce Classic. Instead of editing a Salesforce Classic dashboard in Lightning Experience, consider cloning the dashboard and editing the clone. That way, you can still edit the original dashboard in Salesforce Classic.

## **Folders**

	Feature	Notes about Lightning Experience Availability
Standard Folders		

Feature	Notes about Lightning Experience Availability
Move Reports and Dashboards between Folders	
Create and Delete Report and Dashboard Folders	Folders created in Salesforce Classic and their contents are available in Lightning Experience. Users can save inside these folders when creating or cloning a report or dashboard.
Share Report and Dashboard Folders	Sharing permissions set on folders in Salesforce Classic are obeyed in Lightning Experience, but sharing permissions can't be set nor changed.
Search for Report and Dashboard Folders	Users can't search for report and dashboard folders in Lightning Experience. Global search results include reports and dashboards, but not report and dashboard folders.

# Charts

Notes about Lightning Experience Availability
Funnel charts from Salesforce Classic display as Bar Charts in Lightning Experience.
Scatter charts from Salesforce Classic display as Bar Charts in Lightning Experience.
Table charts from Salesforce Classic display as Bar Charts in Lightning Experience.
Multimetric charts from Salesforce Classic show only one metric when viewed in Lightning Experience. For example, line bar charts (a type of multimetric chart) display as bar charts.
Pie charts from Salesforce Classic display as donut charts in Lightning Experience.
Breakpoints in gauge charts only accept whole numbers. For example, $5$ is a valid breakpoint, but $5.1$ isn't.
Cumulative line charts from Salesforce Classic display as Line Charts which aren't cumulative in Lightning Experience.
In the chart editor, users can't:
<ul> <li>Limit the set of report data drawn on the chart</li> </ul>
<ul> <li>Change sorting direction</li> </ul>
<ul> <li>Change measurement units (for example, from meters to centimeters)</li> </ul>
<ul> <li>Add more than two aggregates</li> </ul>
<ul> <li>Use charts from source reports</li> </ul>

### Other Notes about Using Charts in Lightning Experience

Feature	Notes about Lightning Experience Availability
Charts with More than 100 Dimensions	In Lightning Experience, if there are more than 100 dimensions, then:
	<ul> <li>Only the first 100 dimensions are drawn on the chart</li> </ul>
	<ul> <li>Custom sorting set in Salesforce Classic is lost</li> </ul>
	To avoid these limitations, consider setting report filters that return 100 or fewer dimensions.
Chart Colors	The standard Lightning Experience color palette replaces custom colors that users set in Salesforce Classic.

## Files and Content: Lightning Experience Limitations

Learn about the issues to expect when using Salesforce Files and other content features in Lightning Experience. Some data and features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### Salesforce Files

- Sharing Settings, Share with People, and Share with Groups aren't available in Lightning Experience. However, users can share files with people and groups by posting in feeds and @mentioning them. They can also view sharing settings for a file in the Shared With card in File Details.
- Sharing files with libraries isn't possible in Lightning Experience, but files in libraries are listed in Files home in Lightning Experience and when selecting a Salesforce file to attach to a feed post.
- Files and attachments are two different types of objects, and always have been. Files uploaded via the Notes & Attachments related list are simply files in Lightning Experience, but are attachments in Salesforce Classic. For existing organizations, this means that the Notes & Attachments list can contain a mix of attachments that were uploaded in Salesforce Classic and files added in Lightning Experience. Files added in Lightning Experience have the functionality of Salesforce Files, while attachments are associated only with the particular record and can't be shared further.
  - In the API, any existing integrations that retrieve attachments from the Notes & Attachments list don't include any files uploaded to the list in Lightning Experience. A new API call is necessary to retrieve files as well as attachments.
- In Lightning Experience, the new Files related list allows users to upload files directly to the record; this isn't an option when
  accessing the Files related list in Salesforce Classic. Salesforce Classic users can see files in the related list that were uploaded
  from the list in Lightning Experience.
- Row-level actions (such as Edit or Delete) aren't available for the Files related list, Notes & Attachments related list, and Shared
  With related list in Lightning Experience. To manage files, use the row-level actions on Files home, or the quick actions on a file's
  detail page.

## **Files Connect**

Users can't browse content in external data sources in Lightning Experience, but they can access external file references that were created in Salesforce Classic.

- Documents
- Salesforce CRM Content, including creating and managing libraries, content deliveries, and sharing files with libraries
- File sharing with people and groups (except by posting to feeds)

- File syncing
- Freeze sharing (a new feature available only in Salesforce Classic in the Winter '16 release)

### SEE ALSO:

Data Access and Views: Lightning Experience Limitations

## Chatter: Lightning Experience Limitations

Learn about the issues to expect when your users collaborate in Lightning Experience. Some Chatter features aren't supported. And some features don't have full parity with what's available in Salesforce Classic.

### **Feeds**

#### **Chatter Publisher**

Users can compose these post types in Lightning Experience:

- Text posts, with or without a file attachment
- Polls
- Announcement posts in group feeds

Other post types, like Links and Thanks, aren't currently supported.

#### **Sharing Posts**

Users can't share posts with groups or followers.

#### **Post and Comment Editing**

Users can't edit posts or comments.

### **Rich Text Editor**

The rich text editor isn't available in Lightning Experience. However, posts that users compose or edit with the rich text editor in Salesforce Classic display as formatted posts and comments in Lightning Experience.

### **Chatter Topics**

Chatter Topics aren't available.

#### **Chatter Questions**

The Question action isn't available in Chatter, but existing questions do appear in the feed when viewed in Lightning Experience. Users still see best answers on a question and can select a best answer or post an answer.

#### **Emoticons**

Emoticons aren't available.

## **Highlighted Search Results**

When a user runs a search on a feed, the keywords aren't highlighted in the search results.

#### **Global Search Result Filters**

Users can't filter global search results by feed.

#### **Chatter Messages**

Chatter Messages aren't available.

#### **Chatter Settings in Setup**

Salesforce admins using Lightning Experience have access to all settings on the Chatter Settings page in Setup. However, not all Chatter features are available in Lightning Experience. Changes to features that aren't available in Lightning Experience take effect only for users in Salesforce Classic.

### People and Profiles

Unlike in Salesforce Classic, user profile pages display a banner photo at the top of the page. The photo is not currently editable.

These features aren't available when using people and profiles in Lightning Experience.

- All User list
- Chatter Influence
- Restrict visibility of Contact and About fields to employees, external users, or public (guest) users
- Add or reorder tabs on user profiles
- Moderator badge on profile photos
- Administrators can't add new actions to User Profile pages. Only Edit and User Detail options appear.

#### Groups

These features aren't available when using groups in Lightning Experience.

- View group recommendations on the group list view pages.
- Add records to groups using the Add Record action in customer groups, even if you or another administrator included the action in the group publisher.
- Create groups that allow customers (external users without licenses).
- Add customers to existing customer groups that were created in Salesforce Classic.
- View the group email address or the Post by email link.

Users can still email the group to post to the group via email if they know or have saved the group email address from Salesforce Classic.

- Access Chatter-wide notification settings from the group notification settings.
- Remove files from the group files list.

## Other Salesforce Products: Lightning Experience Limitations

These Salesforce products aren't available in this release of Lightning Experience.

- Salesforce Communities (however, communities use the Lightning Experience login experience)
- Community Builder
- Pardot
- RelatelQ

## Navigation and Actions: Lightning Experience Limitations

Learn about the issues to expect when navigating and using actions in Lightning Experience. Some Salesforce features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

## **Navigation**

## Navigation Menu Replaces the Tab Bar

The concept of *tabs* to represent objects doesn't exist in Lightning Experience. The new interface updates the old Salesforce Classic tab bar with a collapsible navigation menu that's located along the left side of the page. Use the navigation menu to access the standard Salesforce objects that are available in Lightning Experience, as well as Home, Chatter items (the main feed, people, and groups), files, dashboards, reports, and the user's task list and calendar.

### Apps and Custom Objects Available from the App Launcher Only

Apps (sometimes called *tabset apps*) and custom objects are available in Lightning Experience, but they aren't included in the navigation menu for this release. Instead, use the App Launcher by clicking in the header. Custom objects appear in the list of **Other Items**.

Even though Lightning Experience doesn't use the Salesforce Classic tab paradigm, you still need to create custom object tabs to ensure that your custom objects are available in the new interface.

#### **Open Links in New Browser Windows or Tabs**

In general, Lightning Experience supports right-click and Windows or Mac keyboard shortcuts to open links in new browser windows or tabs. But there are some areas of the app where these options aren't supported, including:

- Links in the Top Deals and Recent Records cards on Home
- Action icons, buttons, and menu items on records
- Links to Notes
- View Report links on dashboards
- Links on the Lightning Experience Setup page

#### Actions and Buttons

These actions and buttons aren't available in Lightning Experience.

- Deep Clone
- Mass Delete
- Mass actions on object home pages and list views
- Data import tools on object home pages
- Sharing buttons
- Custom buttons that define the content source as URL or OnClick JavaScript
- Custom links with parameters for filling in form fields

### SEE ALSO:

Find Actions and Buttons in Lightning Experience
What's the Fate of Existing Salesforce Customizations?
Point-and-Click Customization: Lightning Experience Limitations

## Search: Lightning Experience Limitations

Learn about the issues to expect when searching in Lightning Experience. Some search-related features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### Searchable Objects

Only the following objects can be found in search results: Account, Attachment, Case, Chatter Feed, Chatter Groups, Contact, Custom Objects, Dashboard, Document, File, Lead, Note, Opportunity, People, Price Book, Product, and Report. Task and Event items aren't searchable.

#### Search Results Can't Be Filtered or Sorted

The "exact phrase" and "limit to items I own" filter options aren't available on search results pages. In addition, you can't sort or filter search results. If a text field in the search results is too long for the column width, you can't see the full text in the search results. You can't expand the column widths.

For lookups, user-defined lookup filter fields and admin-defined dependent lookup filters aren't supported.

#### Top Results Instead of Search All

There isn't a **Search All** option in search results. Top Results displays the most relevant records grouped by your most frequently used objects. If an object isn't visible on the Top Results page, use the More drop-down menu, which alphabetically lists all available objects.

#### No Sidebar or Advanced Search

To search, use the global search bar in the header in Lightning Experience.

### No Pinning on the Search Scope Bar

You can't pin or change the order of the objects listed on the search scope bar beneath the global search box. The search scope bar automatically lists your most frequently used objects. Objects pinned in Salesforce Classic affect the search scope bar in Lightning Experience.

#### **Lookup Dialog Search Requires 2 Characters**

To perform a full search, enter a minimum of 2 characters.

#### **External Object Search Results Limited to 25 Items**

When you perform a search for an external object, search only displays the top 25 results.

#### **Applications Doesn't Support Wildcard Searches**

You can't use wildcards to perform a partially matching search for Applications, or when searching from the App Launcher.

#### Search Results Used for Global and Lookup Dialog Search Layouts

To change the fields shown as columns in the global search and lookup dialog search results, use the **Search Results** search layout on an object detail page within the Object Manager. The other search layouts (Lookup Dialogs, Lookup Phone Dialogs, Tab, List Views, and Search Filter Fields) aren't applicable in Lightning Experience.

### New Button in Lookup Dialog Search Doesn't Support All Objects

In Lightning Experience, you can create these objects from lookup dialog search windows: accounts, cases, contacts, events, leads, notes, opportunities, tasks, price books, and products. For other objects, including custom objects, create the desired object or record before using the lookup dialog search to associate records.

## Salesforce Setup: Lightning Experience Limitations

Lightning Experience doesn't support a few aspects of your basic Salesforce setup. And the Setup tree in Lightning Experience doesn't include all of the setup pages that are available in Salesforce Classic.

- Information about an org's Salesforce edition isn't visible in Lightning Experience.
- Advanced currency management, or dated exchange rates, isn't supported in general. But opportunities display the correct amount
  if the Close Date field is on a page layout for opportunities. Because page layouts control who sees what on object records,
  only users who have this page layout assigned to them see the correct amount.
- Languages that are read right to left, including Arabic and Hebrew, aren't supported. All other Salesforce-supported locales and languages are supported.

### Setup Tree

The Setup tree in Lightning Experience is limited to:

- Pages that support Lightning Experience features
- Administration pages that apply across your organization, such as company settings, security, user management, and mobile app setup

To access other setup pages, such as those for Service Cloud features, use the Setup tree in Salesforce Classic.

Advanced setup search isn't available in Lightning Experience.

#### SEE ALSO:

Point-and-Click Customization: Lightning Experience Limitations Programmatic Customization: Lightning Experience Limitations

#### Data Import and Management: Lightning Experience Limitations

Learn about the issues to expect when importing and managing data in Lightning Experience. Some Salesforce features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### Data Import

These legacy data import tools aren't available in Lightning Experience:

- Accounts & Contacts
- Leads
- Solutions
- Custom Objects

Use the Data Import Wizard if you're importing fewer than 50,000 records. Use the Data Loader if you're importing more than 50,000 records

#### Data Management

- With the exception of Duplicate Management, Data.com features aren't supported in Lightning Experience.
- Field Audit Trail isn't supported.

#### **Process Automation: Lightning Experience Limitations**

Learn about the issues to expect when using process automation features in Lightning Experience. Process Builder and Workflow are fully supported. Visual Workflow and Approvals are also supported but have some limitations.

#### **Pending Approval Requests**

Users can see approval requests from either their notifications or through the Approval History related list on the record that needs to be approved.

To see the complete list of requests that are waiting for a user's approval, the user must switch to Salesforce Classic (or use the Salesforce mobile app).

#### Paused Flow Interviews

To resume paused flow interviews, your users must switch to Salesforce Classic or use Salesforce 1.

#### Flow Distribution

How you distribute flows to your users depends on whether the relevant feature is available in Lightning Experience. For example, URL-based custom buttons aren't supported, but Visualforce pages are.

#### Security: Lightning Experience Limitations

Learn about the issues to expect for Salesforce security features in Lightning Experience. Some features aren't available in the new user interface. And some features don't have full parity with what's available in Salesforce Classic.

#### **Sharing Settings**

Lightning Experience respects your organization's sharing rules. The Sharing Settings page is available in Setup in Lightning Experience, but some options don't apply in Lightning Experience.

#### **Community User Visibility**

This checkbox enables community users to be visible to other users in the community or only to those users above them in the role hierarchy. Communities are available in Salesforce Classic only.

#### **Manager Groups**

This checkbox enables or disables record sharing with managers and manager subordinates groups which is available via sharing rules, manual sharing, and Apex managed sharing. Manual sharing via the **Sharing** button is available in Salesforce Classic only.

#### **Manual User Record Sharing**

This checkbox enables or disables manual sharing on user records via the **Sharing** button. This button is available in Salesforce Classic only.

#### **Portal User Visibility**

This checkbox enables portal users to be visible to other portal users in the same account or only to those users above them in the role hierarchy. Portals are available in Salesforce Classic only.

#### Session Security Levels

If your org sets a policy that requires a high-assurance session to access reports and dashboards, users with a standard assurance session are blocked from reports and dashboards in Lightning Experience. Also, the Reports and Dashboards items don't appear in the navigation menu. In Lightning Experience, you can't raise the session level to high assurance by redirecting the user to complete two-factor authentication.

As a workaround, users with a standard assurance session can log out and log in again using an authentication method that is defined as high assurance by your organization. They then have access to reports and dashboards. Alternatively, they can switch to Salesforce Classic, where they are prompted to raise the session level when they attempt to access reports and dashboards.

#### Session Privilege Levels

Sessions obtained in a Lightning Experience context, by using \$Api.Session\_ID or GETSESSIONID(), have similar privileges to the Lightning session. As with the Lightning session, you can't use these session IDs to make API calls.

SEE ALSO:

Security and Identity

#### Point-and-Click Customization: Lightning Experience Limitations

Many of your point-and-click customizations work seamlessly in Lightning Experience. But some customizations don't apply or aren't supported in the new interface.

- The Force.com Quick Access menu, with shortcuts to various app and object customization features, isn't available.
- You can't apply custom branding, including custom logos or colors, to the new interface.

- You can't add items to or delete items from the navigation menu, or rearrange the default set of items. The Lightning Experience navigation menu isn't controlled or affected by any customizations that you make to the Salesforce1 mobile app's navigation menu.
- Custom buttons that use a URL or JavaScript content source aren't supported in Lightning Experience. You can replace some of the functions covered by these buttons by using point-and-click tools like Process Builder, Visual Workflow, or code-driven approaches.
- Custom links with parameters for filling in form fields aren't supported.
- You can't define custom field-level help text or add field-level help for fields in custom objects.
- You can't customize items in the help menus on Lightning Experience pages. However, if you created custom help for "Help for this
  Page" links in Salesforce Classic, these links continue to display your help when classic pages are embedded in the new user interface,
  such as in the Setup tree.

#### **Object-Specific Customizations**

An object-specific customization is something that you create for a given object. Examples include fields, page layouts, record types, and Apex triggers. Most object-specific customizations are available in the Object Manager instead of directly from the Setup tree. From Setup, enter Object Manager in the Quick Find box, then select **Object Manager**.



**Note**: Objects don't appear in the Object Manager—or anywhere in Setup—if they're related to features that aren't supported in Lightning Experience, such as case milestones.

#### **Standard Fields**

To edit standard fields, click the field name, and then click **Edit**. Unlike in Salesforce Classic, you can't edit standard fields directly from the object detail page.

#### **Page Layouts**

Record page customizations made in Salesforce Classic—for custom and standard objects—also affect record pages in Lightning Experience. However, some page elements display differently in Lightning Experience, and some aren't supported.

You can't access page layouts for user profiles from Lightning Experience.

Cases have a special related list dedicated to case close page layouts.

These page layout elements aren't supported in Lightning Experience:

- Blank spaces
- Expanded lookups
- Mobile cards
- S-controls
- Sections
- Tags

You can't use the enhanced page layout editor to customize the layout of record pages when viewed in Lightning Experience. All Lightning Experience users see the same record layout, regardless of profile or record type.

#### **Triggers**

Triggers appear in the Object Manager only if you have the "Author Apex" user permission.

Triggers for some standard objects don't appear in the Object Manager. Access those triggers directly from the Setup Quick Find box.

#### **Field Sets**

Field sets aren't available in Lightning Experience. If you or someone in your organization created a field set while using Salesforce Classic, you see the global variable for field sets in places such as formula fields and Visualforce pages, but you can't manage them in Lightning Experience.

#### **Apex Sharing Rules**

Not available in Lightning Experience.

#### **Apex Sharing Recalculations**

Not available in Lightning Experience.

#### SEE ALSO:

Navigation and Actions: Lightning Experience Limitations

Salesforce Setup: Lightning Experience Limitations

Object Customizations That Aren't in the Object Manager

What's the Fate of Existing Salesforce Customizations?

Object Customizations That Aren't in the Object Manager

#### Object Customizations That Aren't in the Object Manager

The Object Manager doesn't include some object customizations for standard objects, such as triggers for case comments. Access these object customizations via the Quick Find box. For example, from Setup, enter Case Comment in the Quick Find box, then select Case Comment Triggers.

- Case Comment Triggers
- Email Message Triggers
- FeedComment Triggers
- FeedItem Triggers
- Feed Item Layouts
- Group Layouts
- Group Triggers
- Group Member Triggers
- Group Record Triggers
- Publisher Layouts
- Topic Triggers
- TopicAssignment Triggers

#### SEE ALSO:

Point-and-Click Customization: Lightning Experience Limitations Point-and-Click Customization: Lightning Experience Limitations

#### Programmatic Customization: Lightning Experience Limitations

Many of your programmatic customizations work in Lightning Experience. But the new interface affects the way some features, such as Lightning Pages and Visualforce, behave.

#### Lightning Pages

Lightning Page tabs and custom Lightning Pages are currently available for the Salesforce1 mobile app only, and aren't available in Lightning Experience.

#### Visualforce

This release contains a beta version of Visualforce for Lightning Experience that is production quality but has known limitations. Here are some of the most important considerations for organizations that have customized Salesforce with Visualforce. For complete details, score yourself a new developer badge by completing Visualforce & Lightning Experience in Trailhead.

#### Visualforce Is Wrapped in an iframe in Lightning Experience

In Salesforce Classic, Visualforce owns the entire page. In Lightning Experience, it's wrapped in an embedded iframe instead. This wrapper has a number of effects, and it's the main reason why a whole Trailhead module is devoted to covering the details.

#### sforce.one No Longer Used Just for Salesforce1

The sforce.one JavaScript utility object used to be available only on Visualforce pages when running in Salesforce1. If your organization enables Lightning Experience, it's also added to pages when running in Lightning Experience. If you've written code that makes assumptions about what the presence of sforce.one means, you might need to update it.

#### You Can't Set window.location

A common technique in JavaScript to navigate to a new page is to manipulate the window.location value. This technique isn't possible in Lightning Experience. Use the sforce.one navigation methods instead.

#### Object List Action Override Isn't Accessible

The object list action, one of the six standard actions you can override with a Visualforce page, isn't accessible in Lightning Experience. You can still override it, but your users can't access it.

#### Lightning Experience App User Interface Is Always Visible

When running in Lightning Experience, Visualforce pages ignore the <apex:page> showHeader and showSidebar attributes. You can't suppress the Lightning Experience header and sidebar.

#### Page Title Can't Be Set

The <apex:page> title attribute has no effect.

#### Home Doesn't Support Visualforce

The new Home in Lightning Experience can't be customized, so you can't add Visualforce elements to it.

#### Navigation Menu Doesn't Support Visualforce

Your can't customize the navigation menu, so you can't add Visualforce items to it. Use the App Launcher instead.

#### Session Privilege Levels

Sessions obtained in a Lightning Experience context, by using \$Api.Session\_ID or GETSESSIONID(), have similar privileges to the Lightning session. As with the Lightning session, you can't use these session IDs to make API calls.

SEE ALSO:

Salesforce Setup: Lightning Experience Limitations What's the Fate of Existing Salesforce Customizations?

#### Apps and Packaging: Lightning Experience Limitations

Apps on the AppExchange that are certified as Lightning Ready are supported in Lightning Experience. You can install and manage packages in Lightning Experience, but other packaging features aren't supported. ISVforce apps aren't supported either.

#### **AppExchange**

Some apps on the AppExchange are supported in Lightning Experience. If an app is supported, a *Lightning Ready* sash appears on its AppExchange listing. If an app isn't supported, use it in Salesforce Classic instead.

Apps without Lightning Ready certification can be used in Lightning Experience, but some features may not be available or work as expected. These apps may also appear visually inconsistent with Lightning Experience because they use Salesforce Classic styling. For the best experience, use Salesforce Classic for apps that aren't certified as Lightning Ready.

#### **Packaging**

You can install packages in Lightning Experience. But for packages that are already installed, you can't assign licenses to users from Lightning Experience. If you need to assign a license, switch to Salesforce Classic.

These packaging features aren't supported in Lightning Experience.

- Create a package
- Upload a package
- Upgrade a package
- Deprecate a package version
- Create branch or patch organizations

#### **ISVforce Apps**

#### **Unsupported Features for ISV force**

These ISV force features aren't supported in Lightning Experience.

- Channel Order App
- Environment Hub
- Trialforce
- Usage Metrics Visualization App

# What to Expect in Lightning Experience When Chatter Is Turned Off

If your organization doesn't use Chatter, several useful aspects of the Lightning Experience interface aren't available. Learn how Lightning Experience changes, and see if you're losing functionality that you'd rather not live without.

If you turn off Chatter for your entire organization or for a subset of users via permission sets:

- Feeds and groups aren't available.
- User profiles are still available, but feeds, groups, and files aren't available on profiles.
- The Collaboration tab isn't available on records.
- Users can't follow records or other users.
- Users can't add attachments in the email composer, from Salesforce Files or a local drive.
- The enhanced Notes tool, including the Notes related list, isn't available. However, notes created with the old note-taking tool in Salesforce Classic are available for viewing in Lightning Experience from the Notes & Attachments related list.
- Salesforce Files (including the Files related list) isn't available.

This means users can't upload files in Lightning Experience, including from the Notes & Attachments related list. However, this related list still displays files that were uploaded as attachments from Salesforce Classic.

Salesforce Files Connect and related external data sources aren't available.



Chatter available in Lightning Experience in: Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

# Sales: Opportunities, Leads, and More

Help sales reps manage and close more deals faster with a streamlined user interface, workspaces for opportunities and leads, integrated email, and lots of other new features for sales pros.

#### IN THIS SECTION:

#### Core Sales Features: Help Reps Sell Using Lightning Experience

Give your sales reps access to better tools for selling.

#### Productivity Features: Help Sales Reps Do More with Lightning Experience

Get your reps to spend time wisely on the things that help them keep their deals moving along. Integrated email, an activity timeline, and a better experience with calendars and events help reps stay focused on the important things for closing deals fast.

#### Microsoft® Integration: Sync and Work Between Microsoft Systems and Salesforce

Get users syncing contacts, events, and tasks between Microsoft email systems and Salesforce, as well as working with Salesforce records directly in Outlook® and other Microsoft email apps.

#### Pardot: Make Marketing Automation and Sales Conversions Easier Than Ever

We've added several productivity features making it quicker and easier for marketing folks to create beautiful emails and for salespeople to personalize emails to prospects. We also added support for Google's changes to AdWords, so that you can ensure that your ads are tracked properly. You and your marketing and sales reps can use these features in Salesforce Classic.

#### Other Changes in the Sales Cloud

Learn about other changes we've made to improve usability.

#### SEE ALSO:

How and When Sales Features Become Available Labels Streamlined in Setup

# Core Sales Features: Help Reps Sell Using Lightning Experience

Give your sales reps access to better tools for selling.

#### IN THIS SECTION:

#### Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience

Get your reps to adopt and adhere to your company's sales processes by using Sales Path. Previously available for opportunities for Salesforce1 users, Sales Path is now available for opportunities *and* leads for desktop users. This feature is available in Lightning Experience only.

#### Opportunity Workspace: Boost Sales Productivity with Lightning Experience

Moving deals through the sales process is easier than ever with the opportunity workspace—a one-stop shop for sales reps trying to close deals fast. This feature is available in Lightning Experience only.

#### Opportunity Board: Get the Big Picture on Opportunities with Lightning Experience

Seeing is believing. When sales reps can see all their opportunities in one place, sales managers can effectively monitor the pipeline and sales reps can keep deals moving forward. This feature is available in Lightning Experience only.

# EDITIONS

Available in Lightning Experience in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

#### Account Details: Help Reps Keep Tabs on Accounts by Using Lightning Experience

Reorganized account details put the account information that matters most to your sales reps front and center. This feature is available in Lightning Experience only.

#### Account Insights: Provide Easy Access to News Articles in Lightning Experience

Give your users instant access to relevant, timely news articles about customers, partners, and competitors with Account Insights. This feature is available in both Salesforce1 and Salesforce Lightning Experience.

#### Contact Details: Help Reps Keep Tabs on Contacts by Using Lightning Experience

Reorganized contact details put the information that matters most to your sales reps front and center. Your reps can quickly get up-to-date on their contacts and spot changes on the horizon. This feature is available in Lightning Experience only.

#### Lead Workspace: Work Leads Efficiently Using Lightning Experience

Qualifying and converting leads just got easier. We've included a lead workspace—command central for sales reps working their leads. This feature is available in Lightning Experience only.

#### Products and Price Books: Make It Super Easy to Manage Products in Lightning Experience

Give your reps a simpler, easier-to-read view of your company's products and price books. The new layout for products and price books prioritizes the information your reps need most, so they can quickly find and update a product or any of its price book entries. This feature is available in both Lightning Experience and Salesforce Classic.

#### Social Media Integration

Let social media provide more details for your sales reps' accounts, contacts, and leads.

# Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience

Get your reps to adopt and adhere to your company's sales processes by using Sales Path. Previously available for opportunities for Salesforce1 users, Sales Path is now available for opportunities *and* leads for desktop users. This feature is available in Lightning Experience only.

With your sales operations manager, determine and customize the stages that appear for your reps. Add fields that matter to your company and include guidance for success. In your guidance, include details about company policies, tips for establishing positive selling relationships, and even links to relevant feeds.

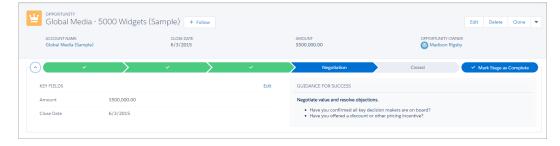
When your reps work in the opportunity workspace and the lead workspace, the sales path appears with the stages and guidance you set up. Reps mark stages complete when they're ready to move to the next one. The beauty is that reps focus on only the fields that matter most to your sales managers, so reps qualify leads and close opportunities faster.



Available in: Lightning Experience

#### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer



#### SEE ALSO:

You Asked for It!

#### Set Up Sales Path

Sales Path guides reps through each stage required to qualify leads and close opportunities. With your sales operations manager, determine and customize the stages that appear for your reps, and create guidance to ensure your reps are successful. This feature is available in Lightning Experience only.

- 1. Make sure Sales Path is enabled. From Setup, enter *Sales Path Settings* in the Quick Find box, then select **Sales Path Settings**.
- 2. Depending on when your Salesforce org was created, you might have default sales paths already created—one for opportunities and one for leads. You can either create a new sales path or modify one of the default sales paths.

# USER PERMISSIONS

To enable Sales Path

"Customize Application""

To set up a sales path

- "View Setup" and "Modify All Data
- **3.** If you're creating a new sales path and your organization uses more than one record type, select which record type the sales path will be for. Each record type can have only one sales path.
- **4.** Specify the fields that reps need to complete for each stage of the sales process.
- 5. Add guidance for success, like tips for effective communication, your company's policies, even potential gotchas.
- **6.** Save your work and decide when to publish the sales path.

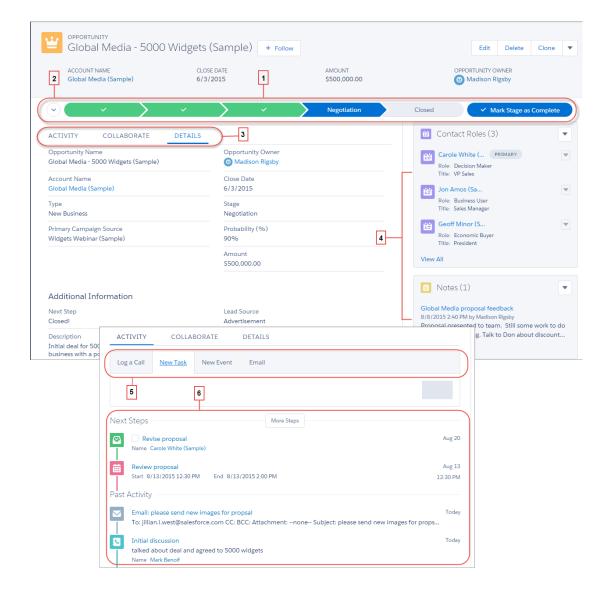
#### SEE ALSO:

Recommended Features for Lightning Experience
Sales Path: Help Reps Follow Your Company's Sales Processes in Lightning Experience

# Opportunity Workspace: Boost Sales Productivity with Lightning Experience

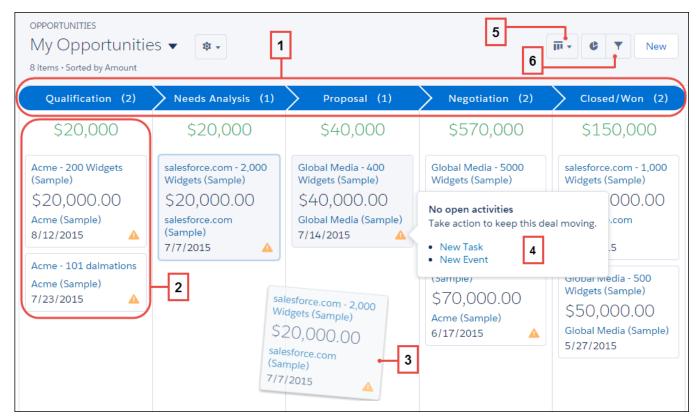
Moving deals through the sales process is easier than ever with the opportunity workspace—a one-stop shop for sales reps trying to close deals fast. This feature is available in Lightning Experience only.

Use Sales Path (1) to help your sales reps follow your company's sales processes. You and your sales operations manager determine and customize the stages that appear for your reps. Reps can expand the sales path (2) to see key fields and guidance for each stage, which helps them onboard quickly. While in the workspace, sales reps see all the details about a single opportunity in one place (3). Related information (4), such as contacts, products, and notes, is quickly accessible. The composer (5) is where reps log calls, create tasks and events, and send emails. And reps never have to guess what's left to be done—their scheduled activities appear under Next Steps (6). Logged calls, completed tasks, past events, and sent emails appear under Past Activity.



# Opportunity Board: Get the Big Picture on Opportunities with Lightning Experience

Seeing is believing. When sales reps can see all their opportunities in one place, sales managers can effectively monitor the pipeline and sales reps can keep deals moving forward. This feature is available in Lightning Experience only.

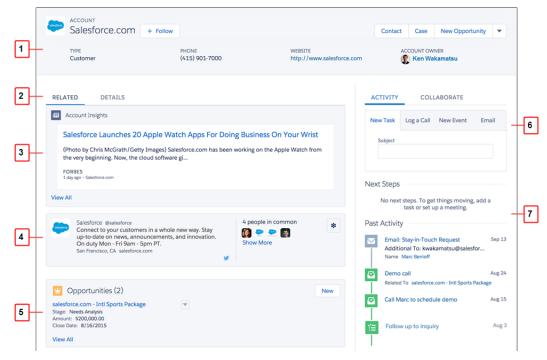


The Board is a visual summary of all the opportunities for a particular sales path (1). Opportunities are sorted by stage and include the sum of the all opportunities for that stage (2). Sales reps easily move an opportunity by dragging the card to the next stage (3). Alerts tell sales reps what to do to keep a deal on track. For example, create a new task or event on an opportunity that doesn't have any open activities (4). Reps can then create a new activity without navigating away from this view. Easily toggle between board view and grid view (5) and quickly filter the view (6) to see a specific set of opportunities.

It's a good idea to learn about considerations for using the Board in Lightning Experience.

# Account Details: Help Reps Keep Tabs on Accounts by Using Lightning Experience

Reorganized account details put the account information that matters most to your sales reps front and center. This feature is available in Lightning Experience only.



Your reps can find the most critical details about each account in the highlights panel (1), and then drill down into related lists or account details (2) for more information. The new Account Insights feature (3) gives sales reps instant access to as many as 20 news articles related to each account, the account's industry, and its executives. Twitter integration (4) lets sales reps check in on their accounts' latest activities quickly.

Related lists (5) are designed to help your reps find the most recent record updates easily. Your reps can log activities (6) and review past and upcoming activities (7) right on the contact screen.



**Note:** If your Salesforce implementation uses person accounts, you can't enable Lightning Experience for your production organization, regardless of your edition. But to give you an opportunity to try out the new interface, you can enable Lightning Experience in your sandbox environments. This option will be available beginning October 24, 2015. And rest assured, adding person account support in the future is a top priority.

#### SEE ALSO:

Account Insights: Provide Easy Access to News Articles in Lightning Experience

Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

# Account Insights: Provide Easy Access to News Articles in Lightning Experience

Give your users instant access to relevant, timely news articles about customers, partners, and competitors with Account Insights. This feature is available in both Salesforce1 and Salesforce Lightning Experience.

Account Insights provides up to 20 news articles selected to help your reps stay up to date with their accounts, industries they work with, and more. Salesforce pre-processes all news articles to ensure relevance and to filter out spam and inappropriate content. You can't add or change news sources.

Account Insights is available in English only.

Accounts Insights provides different articles depending on where you access it.

• On Home, articles relate to recently viewed accounts and opportunities and to tasks and events for those accounts.

Salesforce.com + Follow New Opportunity PHONE (415) 901-7000 http://www.salesforce.com Men Wakamatsu RELATED DETAILS ACTIVITY COLLABORATE Account Insights 1 Salesforce Launches 20 Apple Watch Apps For Doing Business On Your Wrist (Photo by Chris McGrath/Getty Images) Salesforce.com has been working on the Apple Watch from the very beginning. Now, the cloud software gi... Next Steps Account Insights 2 paresforce @salesforce
Connect to your customers in a whole new way. Stay
up-to-date on news, announcements, and innovation.
On duty Mon - Fri 9am - 5pm PT.
San Francisco, CA salesforce.com > ACCOUNT NEWS (11) Opportunities (2) salesforce.com - Intl Sports Package Stage: Needs Analysis Amount: \$200,000.00 Close Date: 8/16/2015

• On account record detail pages, articles relate to the account, its industry, and its executives.

In the Account Insights area (1), users click View All to see more news articles (2). News articles are organized into categories.

Account Insights is curated using technology provided by Data.com and third parties. You don't have to be a Data.com customer to use Account Insights.

Enable Account Insights on the Lightning Experience setup page before enabling Lightning Experience. Or, from Setup, enter Account Settings in the Quick Find box, then select the **Account Settings** page.



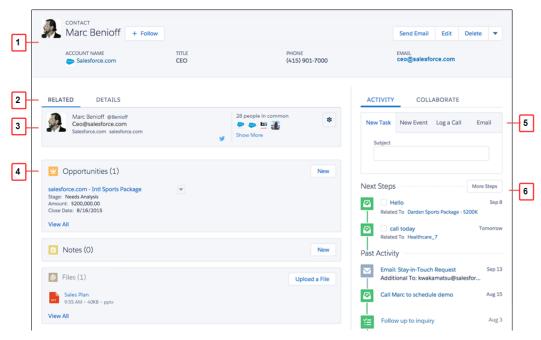
**Note:** When enabled, Account Insights uses third parties and other Salesforce technologies, which offer different levels of privacy and security protection. These services can save or process some of your organization's data, such as the account name and website. Salesforce is not responsible for the privacy and security of data that is shared with third parties when you use this feature.

#### SEE ALSO:

Recommended Features for Lightning Experience

# Contact Details: Help Reps Keep Tabs on Contacts by Using Lightning Experience

Reorganized contact details put the information that matters most to your sales reps front and center. Your reps can quickly get up-to-date on their contacts and spot changes on the horizon. This feature is available in Lightning Experience only.



Your sales reps use the contacts detail page to gather information about a contact. The highlight panel (1) puts important contact details front and center. Reps can find more information by switching from related lists to contact details (2). Twitter integration (3) helps reps find out what their contacts are up to on social media. Related lists (4) are designed to help your reps find the most recent record updates easily. Your reps can log activities (5) and review past and upcoming activities (6) right on the contact screen.

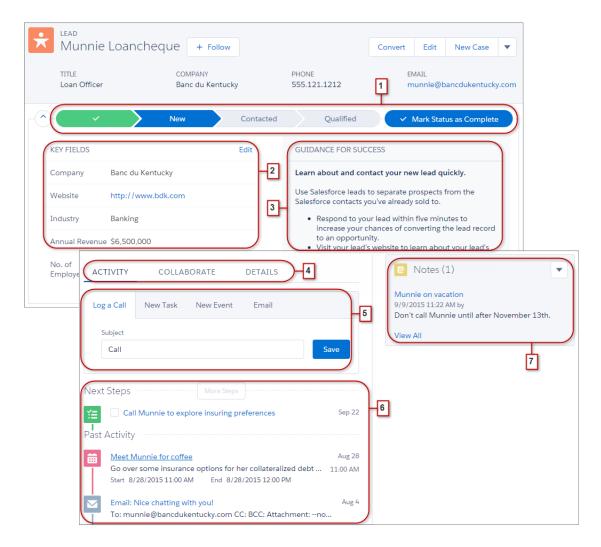
SEE ALSO:

Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

# Lead Workspace: Work Leads Efficiently Using Lightning Experience

Qualifying and converting leads just got easier. We've included a lead workspace—command central for sales reps working their leads. This feature is available in Lightning Experience only.

Your sales reps use the lead workspace to work individual leads. Get your sales reps to adopt your company's sales processes with Sales Path (1). You and your sales operations manager determine and customize the stages that appear for your reps. Each stage includes key fields that are important for prospecting (2). Provide guidance for success (3), like tips for effective communication, your company's policies, even potential gotchas. Only after your reps complete the stages can they convert the lead, and (fingers crossed) create a promising opportunity.



Reps log calls and create activities, collaborate with colleagues and managers, and see all the details about their lead in one place (4). The composer (5) helps keep your reps focused on the lead of the moment. Log calls, create tasks and events, and send emails—all without navigating away from the lead. Your reps' scheduled activities appear under Next Steps (6). Logged calls, completed tasks, past events, and sent emails appear under Past Activity. Quickly access related information (7), such as contacts, products, and notes.

# Products and Price Books: Make It Super Easy to Manage Products in Lightning Experience

Give your reps a simpler, easier-to-read view of your company's products and price books. The new layout for products and price books prioritizes the information your reps need most, so they can quickly find and update a product or any of its price book entries. This feature is available in both Lightning Experience and Salesforce Classic.

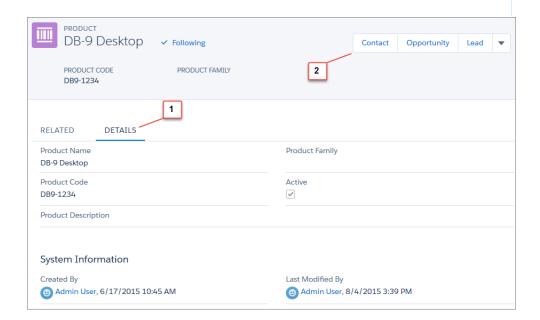
Sales operations staff can review product details and prices quickly and update that information efficiently. The streamlined Product and Price Book home and detail pages make finding the information they need faster and easier.

Product details are clearer and easier to read. The product details (1) appear when the page first loads. Users can easily associate a contact, a new opportunity, or a new lead with the product (2).

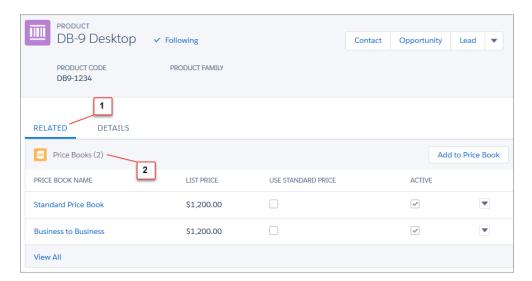
# EDITIONS

Available in Lightning Experience in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

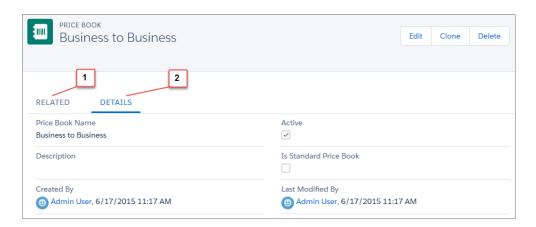
Available in Salesforce Classic in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



Users view a product's related lists, such as Price Books, by clicking **Related** (1), simplifying the layout and allowing them to focus on the information they need. A product's standard and custom price book entries are now merged into a single Price Books related list (2).



Price Book detail pages are also clearer and easier to read, with related lists (1) and details (2) separated.



Keep in mind that to add products or price books, users need the "Create" permission on Products and Price Books, respectively.

# Social Media Integration

Let social media provide more details for your sales reps' accounts, contacts, and leads.

#### IN THIS SECTION:

#### Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

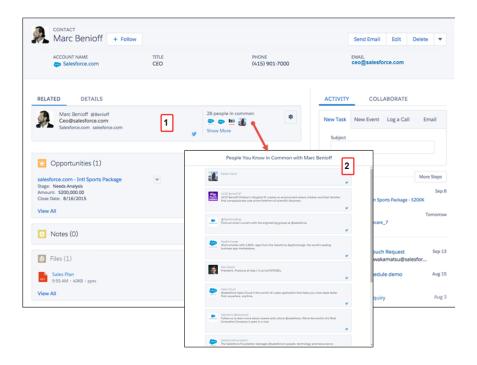
Integrate Twitter with Salesforce to give sales reps access to updates for accounts, contacts, and leads at a glance. This feature is available in both Salesforce1 and Lightning Experience.

#### LinkedIn Integration Removed from Social Accounts, Contacts, and Leads Feature

Starting immediately in Winter '16, your users can no longer log in to LinkedIn or view LinkedIn profile information or images in Salesforce. All data related to LinkedIn, including LinkedIn user profiles and profile images, is removed from Salesforce. If contact or lead records use the LinkedIn profile image as the record profile image in Salesforce, your users can select a Twitter or Facebook profile image to use instead.

# Twitter for Accounts, Contacts, and Leads: Give Reps Access to at-a-Glance Updates in Lightning Experience

Integrate Twitter with Salesforce to give sales reps access to updates for accounts, contacts, and leads at a glance. This feature is available in both Salesforce1 and Lightning Experience.



After any user links an account, contact, or lead to a Twitter profile, reps see Twitter profile information and people in common right in Salesforce (1). Your reps can see who they know in common with one quick click (2) or load recent tweets.

If your organization already uses the Social Accounts, Contacts, and Leads feature with Twitter access enabled, this feature is automatically enabled in Lightning Experience. To enable this feature, see Enable Social Accounts, Contacts, and Leads.

SEE ALSO:

Recommended Features for Lightning Experience

## LinkedIn Integration Removed from Social Accounts, Contacts, and Leads Feature

Starting immediately in Winter '16, your users can no longer log in to LinkedIn or view LinkedIn profile information or images in Salesforce. All data related to LinkedIn, including LinkedIn user profiles and profile images, is removed from Salesforce. If contact or lead records use the LinkedIn profile image as the record profile image in Salesforce, your users can select a Twitter or Facebook profile image to use instead.

If you'd like your users to continue accessing LinkedIn through Salesforce, review the LinkedIn integration apps available in the AppExchange.

# Productivity Features: Help Sales Reps Do More with Lightning Experience

Get your reps to spend time wisely on the things that help them keep their deals moving along. Integrated email, an activity timeline, and a better experience with calendars and events help reps stay focused on the important things for closing deals fast.

# EDITIONS

Available in Lightning Experience in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

#### IN THIS SECTION:

#### Home: Help Reps Manage Their Days in Lightning Experience

Get your reps to manage their days using Home, where reps can see their quarterly performance summary and get important updates on critical tasks and opportunities. Your reps can also easily access news about their accounts, recent records, and top deals. This feature is available in Lightning Experience only.

#### List Views: Visualize List Data with Charts in Lightning Experience

Your sales reps can use redesigned list views to see records that meet their filter criteria, and display list view data graphically in charts.

#### Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

Email is all new this release, and more flexible than ever. Users can send email to contacts, leads, and their own colleagues directly from account, contact, lead, and opportunity records they have access to—or to any valid email address. They can attach files, automate with merge fields, and use a template if they want to: either one of the samples we offer or one created in-house. Administrators can do all those things too, though most frequently you'll probably use Email to create templates for sales reps to use. For every email sent, Salesforce creates a task record. Find a link to the task in the activity feed of the record it was sent from or on related records. This feature is available in Lightning Experience only.

#### Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience

Help sales reps know exactly what's on their plate and what they've accomplished for each opportunity, lead, account, and contact. They see key details for each task, meeting, call, and email right on the page with other details on an opportunity or a lead. On accounts and contacts, the activity timeline appears in the right column. Reps can use the composer to keep the timeline current. The activity timeline is available in Lightning Experience.

#### Task List: Power Through Tasks in Lightning Experience

Now there's a better way for sales reps to track and prioritize their work in Salesforce. The task list gives reps a full picture of what's on their plates, for all their deals and customer relationships. This feature is available in Lightning Experience only.

#### Notes: Add Important Information to Records (Generally Available)

Our enhanced note-taking tool helps sales team players stay organized by taking better notes faster—and now for events, tasks, and cases. This feature is available in both Lightning Experience and Salesforce Classic.

#### Calendar and Events: Reps Can View and Create Meetings in Lightning Experience

Sales reps enjoy a streamlined calendar look and feel when they view, create, and edit events in Salesforce. The calendar displays all events owned by a user, including events outside the user's business hours, in a day or week view. The new calendar look and feel is available in Lightning Experience only.

#### Notifications: See Notifications in One Place in Lightning Experience

Notifications alert your users when key events occur in Salesforce that they should know about or that require their attention—such as when they receive approval requests or are mentioned in Chatter posts. Lightning Experience includes a list of notifications that users can quickly access from any page. This feature is available in Lightning Experience only.

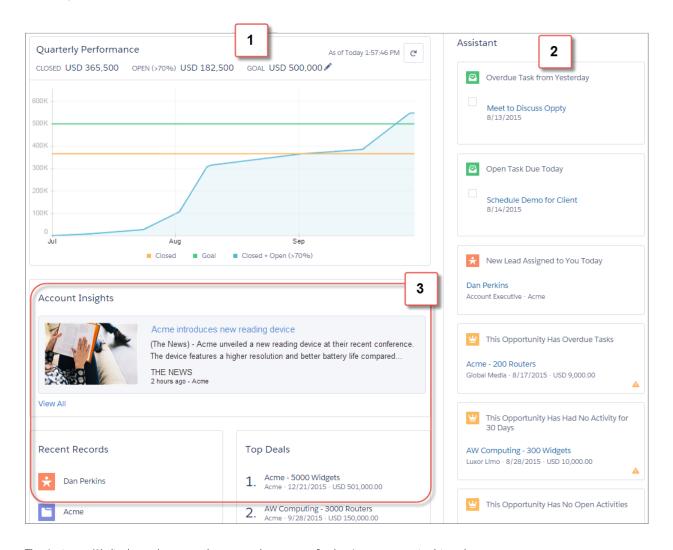
# Home: Help Reps Manage Their Days in Lightning Experience

Get your reps to manage their days using Home, where reps can see their quarterly performance summary and get important updates on critical tasks and opportunities. Your reps can also easily access news about their accounts, recent records, and top deals. This feature is available in Lightning Experience only.

The performance chart (1) displays a user's sales performance or the performance of their sales team against a customizable sales goal.

- Closed—The sum of a user's closed opportunities.
- Open (>70%)—The sum of a user's open opportunities with a probability over 70%.
- Goal—A user's sales goal for the quarter. This field is specific to the performance chart and has no impact on forecast quotas or any other type of goal. Click to set the goal.

The chart displays the opportunities of a user's sales team if they have an associated team. Otherwise, the chart displays opportunities owned by the user.



The Assistant (2) displays relevant updates over the course of a day. Items appear in this order.

- Tasks that are overdue
- Tasks due today
- Leads assigned to you today

- Opportunities with overdue tasks
- Opportunities with no activity in 30 days
- Opportunities with no open activity

Easily access news about accounts, recent records, and top deals (3).

- Account Insights provides timely news articles related to recently viewed accounts and opportunities, and to upcoming tasks and
  events.
- Top Deals displays the biggest open opportunities of a user's sales team if they have an associated team. Otherwise, it shows the biggest open opportunities owned by the user.

Home isn't currently customizable. For more information about setting up the page, see "Lightning Experience Home Permissions and Settings" in the Salesforce Help.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience What's Not Available in Lightning Experience

# List Views: Visualize List Data with Charts in Lightning Experience

Your sales reps can use redesigned list views to see records that meet their filter criteria, and display list view data graphically in charts.

#### IN THIS SECTION:

#### See More Records on Object Home Pages in Lightning Experience

Your sales reps can see more records and their data on redesigned object home pages, which give more room for list views. The layout is similar to object home pages in Salesforce1 on tablets.

#### List Views: Get Data Faster in Lightning Experience (Pilot)

List views now have a more intuitive layout and convenient navigation. In Trial orgs, seamless list creation and editing also help your sales reps rapidly find helpful data.

#### Visualize List View Data with Charts in Lightning Experience

We've added list view charts to the desktop application in Lightning Experience. Your reps can view and create charts to visualize information about the records that they refer to most often. Three types of charts are available: vertical bar, horizontal bar, and donut.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience What's Not Available in Lightning Experience

#### See More Records on Object Home Pages in Lightning Experience

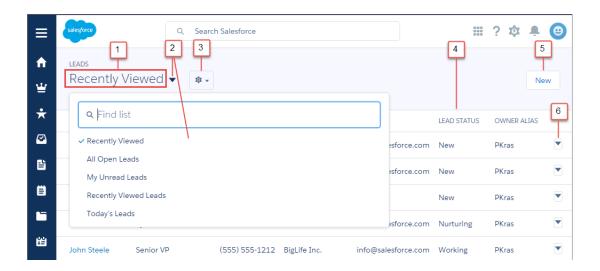
Your sales reps can see more records and their data on redesigned object home pages, which give more room for list views. The layout is similar to object home pages in Salesforce1 on tablets.

From the navigation bar, selecting an item like opportunities, contacts, or leads opens the home page. From there, your reps can see a quick list of recent records (1). They can also access standard and custom list views, and search for a particular list (2). Most list views can be displayed graphically as charts.

In Trial orgs participating in a pilot program, your users can create a list view and edit list views they've created (3). In any org with Lightning Experience enabled, your reps can sort records by field in ascending or descending order (4). For example, a sales rep can sort

recent opportunities by stage to see all opportunities that need to be analyzed together. Users can also create a record (5) and take row-level actions on records (6).

Important: Creation, editing, and deletion of list views in Lightning Experience are currently available only in Trial orgs. We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.



#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

What's Not Available in Lightning Experience

List Views: Get Data Faster in Lightning Experience (Pilot)

Visualize List View Data with Charts in Lightning Experience

#### List Views: Get Data Faster in Lightning Experience (Pilot)

List views now have a more intuitive layout and convenient navigation. In Trial orgs, seamless list creation and editing also help your sales reps rapidly find helpful data.

Important: Some list view features in Lightning Experience are currently available only in Trial orgs. Creating, editing, and deleting list views are pilot features. We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.

Take a look at some of the things your reps can do with list views. Pilot features are marked "(Pilot)."

#### Search for a List View

When users have many list views, it can be hard to locate the one they're looking for. We've made it easier by adding a search box in the drop-down menu.



Type the first few letters of the list view name and matches appear.



#### **Scroll Without Disruption**

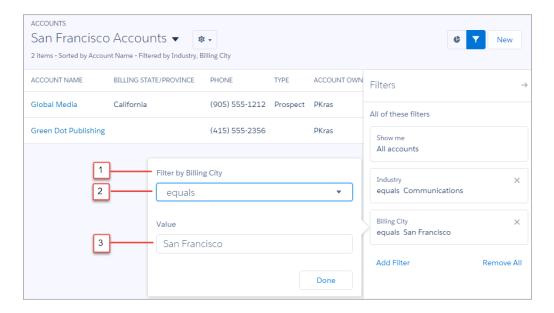
Your reps aren't limited to a set number of records per screen in Lightning Experience. They can scroll through the entire list view without having to jump from one page to another.

#### Create and Edit List Views from the Same Page (Pilot)

Reps don't have to go to a new page to create a list view or to edit an existing view's filters. They do everything from the current page.

Choose **New** from List View Controls, and then name the list and set sharing options.

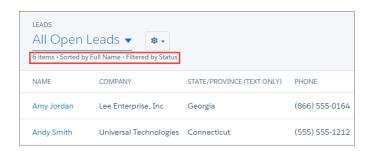
The Filters panel pops out when your reps create a list view, select **Edit Filters** from List View Controls, or click **Y**. Filters let your reps display records based on criteria they set. They have different options depending on the object type. When they add a filter, they specify a field (1) and an operator (2), then select or enter a value (3). For example, if some of your reps are planning a trip to San Francisco, they can create a list of accounts to visit by setting a filter where **Billing City equals** San Francisco. They can further refine the list by filtering by industry type, or by other fields.



When the Filters panel slides out, reps can see filters and the resulting list data side by side.

#### See a Snapshot of List View Details

Your reps can tell at a glance how many records a list view contains, and how they're sorted and filtered.



List views in Lightning Experience also offer charts that graphically represent list view records and their data.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

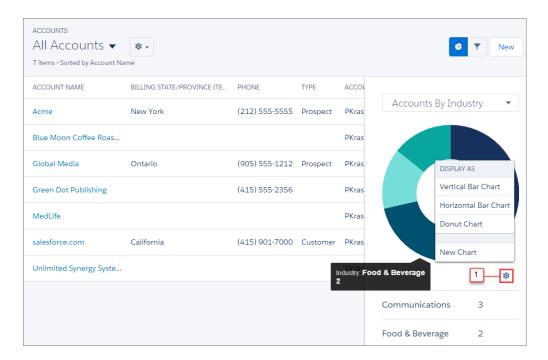
What's Not Available in Lightning Experience

Visualize List View Data with Charts in Lightning Experience

#### Visualize List View Data with Charts in Lightning Experience

We've added list view charts to the desktop application in Lightning Experience. Your reps can view and create charts to visualize information about the records that they refer to most often. Three types of charts are available: vertical bar, horizontal bar, and donut.

Reps can access list view charts by clicking 🕑 on the right side of the page when viewing a list.



Out-of-the-box charts are provided for standard objects. To create or edit custom charts, your reps click in the Charts panel (1). In the New Chart dialog box, they select the type of chart. The aggregate type lets reps specify how field data is calculated: by sum, count, or average. The aggregate field specifies the type of data to calculate. And the grouping field labels the chart segments.



**Example:** Your sales team wants to compare accounts by number of employees to focus prospecting efforts on large corporations. One of the reps creates a horizontal bar chart by selecting **Sum** as the aggregate type, **Employees** as the aggregate field, and **Account Name** as the grouping field. The chart shows the number of employees at each account by account name.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience What's Not Available in Lightning Experience List Views: Get Data Faster in Lightning Experience (Pilot)

# Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

Email is all new this release, and more flexible than ever. Users can send email to contacts, leads, and their own colleagues directly from account, contact, lead, and opportunity records they have access to—or to any valid email address. They can attach files, automate with merge fields, and use a template if they want to: either one of the samples we offer or one created in-house. Administrators can do all those things too, though most frequently you'll probably use Email to create templates for sales reps to use. For every email sent, Salesforce creates a task record. Find a link to the task in the activity feed of the record it was sent from or on related records. This feature is available in Lightning Experience only.

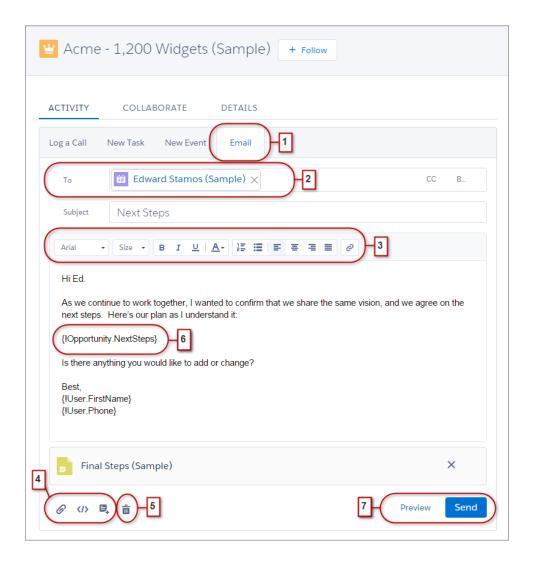
Best of all, there's no setup required and you don't have to create templates from Microsoft® Word®.

# EDITIONS

#### Available in:

- Developer
- Enterprise
- Group
- Performance
- Professional
- Unlimited

Email and templates are so easy in Lightning Experience. From an account, contact, lead, or opportunity record, you and your users can click the Email tab (1) to get started on a single email or a template. If a record has a contact or lead, it's automatically added to the To field (2). Rich text options jazz things up, and links can be added, as well (3).



Attach files, add merge fields, and create or select a template (4). Or clear it all out to start again (5). Merge fields (6) are available for emails and templates. Preview your email or template to make sure that it reads the way you want it to. Read to send? Go for it! (7).

Email also brings new fields to the EmailTemplate object. Read about them in New and Changed Objects on page 438. The SOAP API also includes one new and one changed call. Find more information in SOAP API on page 450.

#### Implementation Considerations

So your organization can take full advantage of attachments in Email, we recommend that you enable Chatter and Content Deliveries for your organization.

Make sure that Shared Activities is enabled for optimal email task creation. If Shared Activities is enabled and a user sends email to multiple contacts, Salesforce creates a single closed task for that email and each contact record links to that task. If Shared Activities is not enabled and a user sends email to multiple contacts, Salesforce creates duplicate closed tasks: one for *each* of those contacts. For more information, see "Considerations for Enabling Shared Activities (Multiple Contacts on an Activity)" in the Salesforce Help.

Make sure that you understand access and sharing for Email merge fields, templates, and attachments, as explained in these release notes.

Is your company conducting a trial of Salesforce? Make sure to let your users know that they need to verify their identity with Salesforce before they can send email. But we prompt them, as well.

Email templates can be deleted only by Salesforce administrators or via the API.

If you're currently using Email in Salesforce Classic, you should know that while we're working toward feature parity for Email in Lightning Experience, the Lightning version doesn't yet include all functionality. Here's a list of differences. Make sure that you communicate this information to your users so they know what to expect.

- Mass Email is not available.
- Mass Email Merge is not available.
- Email templates created in Salesforce Classic can't be used in Lightning Experience, and vice versa.
- Email is not available for cases, campaigns, person accounts, or custom objects.
- Text, HTML with letterhead, and Visualforce templates are not available. Templates in Lightning Experience are custom HTML.
- You can't attach files from Salesforce Files Connect, such as Google Drive files or Microsoft SharePoint® files, to emails in Lightning Experience.
- Automatic BCC, which lets users automatically receive copies of sent emails, is not available in Lightning Experience.

#### IN THIS SECTION:

#### Access and Sharing for Email Merge Fields, Templates, and Attachments

Using integrated email in Lightning Experience? It's important to understand how access and sharing work for merge fields, templates, and attachments.

#### Create a Template to Standardize Common Emails

Create email templates to save time and standardize email sent by you or others in your organization. Use merge fields if you need them. Your page layout and field-level security settings determine which fields are available for merging. Templates you create are automatically public: they're available for use by others in your organization.

#### Use a Template to Standardize Email You Send

Use a template to save time and standardize email you send. You can create your own or use templates created by others in your organization. If you select a template that has attached files, you need file access to include them in emails you send from that template. If you need file access, we'll let you know.

#### SEE ALSO:

What's Not Available in Lightning Experience

#### Access and Sharing for Email Merge Fields, Templates, and Attachments

Using integrated email in Lightning Experience? It's important to understand how access and sharing work for merge fields, templates, and attachments.

#### Merge Fields

Merge fields are available from the Account, Contact, Opportunity, Lead, and User objects. From those objects, most commonly-used standard fields (and some custom fields) are available as merge fields. From that set of fields, some fields may not be available to individual users because of field-level security settings.

## **EDITIONS**

Available in: Salesforce Lightning Experience

Developer, Enterprise, Group, Professional, Performance, and Unlimited editions

#### **Templates**

- Templates created in Salesforce Classic can't be used in Lightning Experience, and vice versa.
- Templates created from one object are available for that object only. For example, a template created for leads isn't available for selection from an opportunity record.
- Templates you create are automatically public: they're available for use by others in your organization.

#### **Attachments**

- Chatter must be enabled before you can attach files to emails or templates.
- Content Deliveries must be enabled before you can select and attach files from Salesforce Files.
- Any attachment larger than 3 MB is sent as a content delivery link, not as a file. For emails with multiple attachments, if any one attachment exceeds 3 MB, then *all* attachments are sent as content delivery links.
- If you don't have access to a file, you can't attach it to an email or a template. We let you know if you need access, so you can ask the file's owner.
- Access becomes public, via the link, for files attached to emails from Salesforce Files. Public access allows anyone with the link to view, share, and download the file.

#### Create a Template to Standardize Common Emails

Create email templates to save time and standardize email sent by you or others in your organization. Use merge fields if you need them. Your page layout and field-level security settings determine which fields are available for merging. Templates you create are automatically public: they're available for use by others in your organization.

Templates created from one object are available for that object only. For example, a template created for leads isn't available for use from an opportunity record.

- ? Tip: Found a great template that would work for you with a few modifications? Select that template, then edit away. Save it as a new template.
- 1. Open a record, such as an opportunity or account, that offers integrated email.
- 2. Click the Activity tab, then click the Email tab.
- **3.** Compose the email to use as your template. Templates can include all the features of other email: rich text, merge fields, and attachments. Go nuts!
- **4.** Click the Templates icon and then save the template as new.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

#### **EDITIONS**

Available in: Salesforce Lightning Experience

Developer, Enterprise, Group, Professional, Performance, and Unlimited editions

#### **USER PERMISSIONS**

To create email templates:

"Send Email"

#### Use a Template to Standardize Email You Send

Use a template to save time and standardize email you send. You can create your own or use templates created by others in your organization. If you select a template that has attached files, you need file access to include them in emails you send from that template. If you need file access, we'll let you know.

- 1. Open the record from which you want to send email.
- 2. Click the Activity tab, then click the Email tab.
- **3.** To insert a template, click the Templates icon. Select the template you want and its contents appear. Edit as needed, then preview and send!

SEE ALSO:

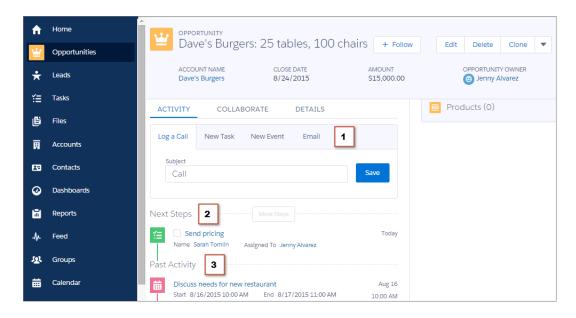
Lightning Experience: A New, Modern, Intelligent User Experience

# Available in: Salesforce Lightning Experience Developer, Enterprise, Group, Professional, Performance, and Unlimited editions USER PERMISSIONS To send email: "Send Email"

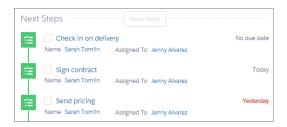
# Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience

Help sales reps know exactly what's on their plate and what they've accomplished for each opportunity, lead, account, and contact. They see key details for each task, meeting, call, and email right on the page with other details on an opportunity or a lead. On accounts and contacts, the activity timeline appears in the right column. Reps can use the composer to keep the timeline current. The activity timeline is available in Lightning Experience.

Reps use the composer (1) to add tasks and meetings to the list of next steps (2). Under Past Activity (3), reps can find calls that they log, emails that they send, completed tasks, and past meetings.



Initially, the timeline shows up to two next steps. More steps appear as reps add them.



Clicking **More Steps** or **More Past Activity** shows eight more items at a time. Next steps appear in this order from the top: tasks without a due date, future tasks and meetings in chronological order to today, and overdue tasks.

Closing a task takes one click.



There's no need to open the record, edit, and save to check a task off the list. Clicking the subject of any activity opens the details for viewing or editing.

#### SEE ALSO:

Email: Send and Manage Email and Templates Directly from Records in Lightning Experience Productivity Features: Lightning Experience Limitations

#### Considerations for the Activity Composer and the Activity Timeline in Lightning Experience

Note these considerations for using the activity composer and the activity timeline for opportunities and other objects that support activities. In some orgs, page layouts or record types need adjustments to prevent tabs from disappearing from the activity composer. If you customize the display and order of fields in the activity timeline, be aware of the behavior of certain fields.

#### Configuration of Page Layouts and Record Types Affects Tabs in Activity Composer

Settings in some Salesforce orgs prevent the activity composer on opportunities or other objects from displaying activity tabs. To adjust your settings, see Configure the Call, Task, and Event Tabs in the Activity Composer in Lightning Experience and Configure the Email Tab in the Activity Composer in Lightning Experience.

#### **Activity Timeline and Activities Related Lists**

On the detail page for objects that support activities, Salesforce doesn't display Open Activities or Activity History along with other related lists. It displays the activity timeline instead. Objects that support activities include opportunities, leads, accounts, contacts, and any custom objects on which you enable activities.

If you delete either activity related list from page layouts, Salesforce doesn't display the corresponding timeline sections—Next Steps or Past Activity—on those pages.

To represent all activities in a continuum from future to past, the activity timeline displays open activities in the opposite order from the Open Activities related list. From top to bottom under Next Steps, the timeline displays activities in chronological order to today, with undated tasks at the top and overdue tasks at the bottom.

#### What Happens When You Customize the Display and Order of Fields in the Activity Timeline

In the activity timeline, you can customize the display and order of fields for events, tasks, and logged calls using event and task compact layouts. However, even if you remove certain fields from a layout, they remain in the timeline because they contain critical activity information. For example, suppose that you remove the due date, the date and time, or the task status fields from the compact layouts. The event start date and time, the task checkbox, the task due date, and the call logging date still appear on activities in the

timeline. The description field on events and the comments field on tasks also always appear in the timeline, although they aren't available in the compact layout. The remaining fields visible in the timeline reflect the fields you include in the compact layout.

#### **No Customization Support for Activity Timeline Icons**

You can't customize the icons for activity types (events, tasks, calls, and email) in the timeline.

#### Conditions for Closing or Reopening a Task

If you've created a validation rule for closing a task (for example, requiring users to enter a comment), users must edit the task details before they can close the task. If you've set up more than one Closed or Open status for tasks, users must choose a status when they reopen or close a task.

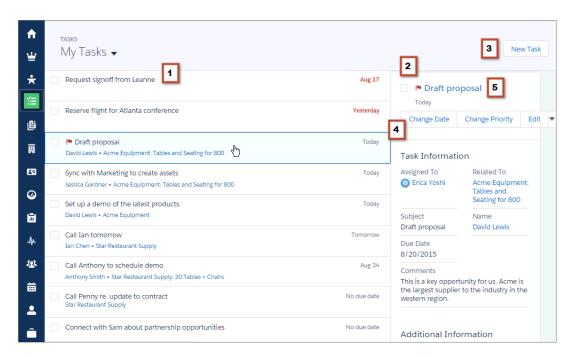
#### SEE ALSO:

Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience Productivity Features: Lightning Experience Limitations

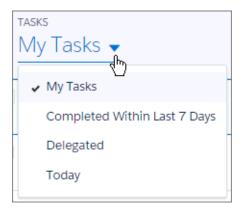
## Task List: Power Through Tasks in Lightning Experience

Now there's a better way for sales reps to track and prioritize their work in Salesforce. The task list gives reps a full picture of what's on their plates, for all their deals and customer relationships. This feature is available in Lightning Experience only.

Sales reps can view a list of all their open tasks (1), showing the opportunities, accounts, and other records the tasks are related to. Details (2) are right there on the same page. Reps can create a task (3) or use the actions in the right column (4) to update a task. Clicking the subject (5) opens full task details.



Reps can switch to views of tasks due today and recently completed tasks. Sales managers can view tasks they've delegated.



It's easy to close or reopen a task.



The list keeps overdue tasks out of the way by collapsing them when overdue tasks total 10 or more.



#### SEE ALSO:

Opportunity Board: Get the Big Picture on Opportunities with Lightning Experience Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience Productivity Features: Lightning Experience Limitations

#### Considerations for the Task List in Lightning Experience

Here are considerations for using the task list and customizing task fields and actions.

#### **Fields in Task List Items**

In the task list, you can customize the display and order of fields for individual tasks using task compact layouts. However, even if you remove certain fields from a layout, they remain in the task list because they contain critical task information. For example, suppose that you remove the status and due date fields from a compact layout. The task checkbox and the due date still appear on tasks in the list. The remaining fields visible in the list reflect the fields you include in the compact layout.

#### **Actions on Tasks**

To customize the action bar next to the task list, use the Salesforce 1 and Lightning Experience Actions section of the task page layout.

#### **Conditions for Closing or Reopening a Task**

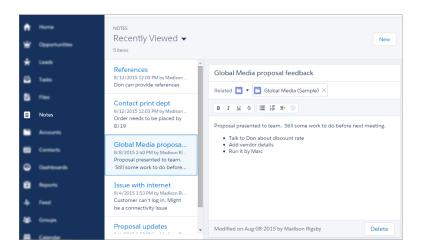
If you've created a validation rule for closing a task (for example, requiring users to enter a comment), users must edit the task details before they can close the task. If you've set up more than one Closed or Open status for tasks, users must choose a status when they reopen or close a task.

# Notes: Add Important Information to Records (Generally Available)

Our enhanced note-taking tool helps sales team players stay organized by taking better notes faster—and now for events, tasks, and cases. This feature is available in both Lightning Experience and Salesforce Classic.

Important: If your organization used the beta version of Notes or you've been using Salesforce prior to Winter '16 and want to start using Notes, you need to first Configure Page Layouts for Notes.

Lightning users manage their notes from the Notes icon in the navigation bar, and can relate a single note to multiple records.

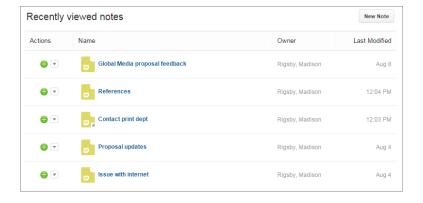


#### **EDITIONS**

Available in Lightning Experience in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Available in Salesforce Classic in: **Contact Manager**, **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Salesforce Classic users continue to manage notes from the Files tab.



#### IN THIS SECTION:

#### Configure Page Layouts for Notes

If you've been using Salesforce prior to Winter '16, you need to make a few adjustments to your page layouts so that users can view their notes.

#### Set Up Notes

To let your users take rich text notes, set up Notes, our enhanced note-taking tool.

#### SEE ALSO:

Recommended Features for Lightning Experience Labels Streamlined in Setup You Asked for It!

#### Configure Page Layouts for Notes

If you've been using Salesforce prior to Winter '16, you need to make a few adjustments to your page layouts so that users can view their notes.

- **1.** Make sure you're familiar with how to edit page layouts.
- 2. Select the object, and then the layout your users use.
- 3. From the list of page element categories, select **Related Lists**.
- **4.** Drag the Notes related list on to the page where you want it to appear. If your users have been using the old note-taking tool, keep the Notes & Attachments related list so that they can access old notes. Notes taken with the enhanced version of Notes appear in the Notes related list.
- **5.** Save the layout, and confirm that you want to overwrite users' related list customizations.
- **6.** Repeat these steps for other objects you use Notes with.

# **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

#### **USER PERMISSIONS**

To customize page layouts:

"Customize Application"

To view page layouts:

"View Setup"

#### Set Up Notes

To let your users take rich text notes, set up Notes, our enhanced note-taking tool.

Consider these items before setting up Notes.

- After Notes is enabled for your organization, new notes are created using Notes. Notes created with the old note-taking tool open in the old note-taking tool.
- If you disable Notes, users won't be able to access notes that were created with Notes.
- Notes is not available for users with a Partner Portal or Customer Portal license.
- If you plan to use Notes with custom objects, you must have feed tracking enabled for the custom objects.



#### Walk Through It

- 1. Make sure that the Notes related list is included on your page layouts.
- 2. Make sure that Chatter is enabled. From Setup, enter *Chatter Settings* in the Quick Find box, then select **Chatter Settings**. Under Chatter Settings, select Enable.
- **3.** Make sure that Notes is enabled. From Setup, enter *Notes Settings* in the Quick Find box, then select **Notes Settings**. Then, make sure Enable Notes is selected.
- **4.** To let users take notes from the Chatter publisher and the Salesforce1 action bar, add the **New Note** quick action to Quick Actions in the Salesforce Classic Publisher and Salesforce1 and Lightning Experience Actions sections on the global publisher layout.
- **5.** If you've overridden the global publisher layout on any of your object page layouts, add the **New Note** quick action to your custom layouts, too.
- **6.** To let your users easily take notes in Salesforce1:
  - a. Make sure your users can create tasks from notes in Salesforce1. From Setup, enter Activity Settings in the Quick Find box, then select Activity Settings. Select Allow Creation of Tasks from Notes.
  - **b.** Make sure that **Notes** appears in your organization's Salesforce1 navigation menu. From Setup, enter *Navigation* in the Quick Find box, select **Salesforce1 Navigation**, and then move **Notes** from the Available list to the Selected list. We recommend putting it above **Smart Search Items**.

# Calendar and Events: Reps Can View and Create Meetings in Lightning Experience

Sales reps enjoy a streamlined calendar look and feel when they view, create, and edit events in Salesforce. The calendar displays all events owned by a user, including events outside the user's business hours, in a day or week view. The new calendar look and feel is available in Lightning Experience only.

Users can switch (1) between week and day views.

## **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

#### **USER PERMISSIONS**

To view page layouts:

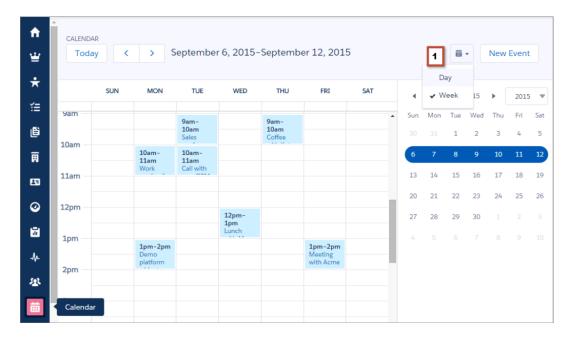
"View Setup"

To edit page layouts:

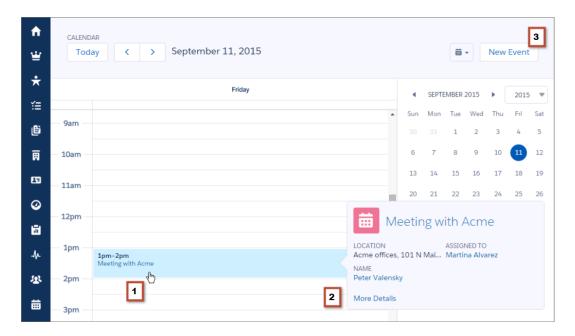
"Customize Application"

To customize action layouts and page layouts:

"Customize Application"



Clicking outside an event's subject (1) displays key event details. By clicking **More Details** (2), users can view full event details or edit the event. Users can also add events (3).



#### SEE ALSO:

Activity Timeline: Keep a Finger on the Pulse of Deals in Lightning Experience Productivity Features: Lightning Experience Limitations

### Considerations for Using the Calendar in Lightning Experience

Be aware of these considerations for using the calendar in Lightning Experience. You can't set or view event reminders; create or edit recurring events; or create, edit, accept, or decline meeting invites. However, suppose that a Salesforce Classic user creates a series of recurring events. Lightning Experience users see the individual events on their calendars. Similarly, Lightning Experience users can see individual events that they've been invited to by Salesforce Classic users.

### Notifications: See Notifications in One Place in Lightning Experience

Notifications alert your users when key events occur in Salesforce that they should know about or that require their attention—such as when they receive approval requests or are mentioned in Chatter posts. Lightning Experience includes a list of notifications that users can quickly access from any page. This feature is available in Lightning Experience only.

- To open the notifications list, click . in the header. A number displays on the notifications icon to show how many notifications the user hasn't yet seen and resets to zero when the user opens the list.
- To read a notification's details, click it. Unread notifications in the list display with a darker background, to help distinguish them from those that have been read already.
- To mark all notifications as read, click Mark all as Read.

# Microsoft® Integration: Sync and Work Between Microsoft Systems and Salesforce

Get users syncing contacts, events, and tasks between Microsoft email systems and Salesforce, as well as working with Salesforce records directly in Outlook® and other Microsoft email apps.

### IN THIS SECTION:

### Salesforce App for Outlook: Get Salesforce Content in Outlook Email Applications (Generally Available)

Help your sales teams stay on top of important sales opportunities. Team members working in Microsoft® Outlook® Web App (OWA), Outlook 2013, or Outlook 2016 along with Microsoft Office 365™ can now manage sales more efficiently. With Salesforce App for Outlook, teammates add emails and attachments to Salesforce records. They can also create contacts and view other sales-related records, like leads, opportunities, and cases—all directly in their Microsoft email application.

### Salesforce for Outlook: Integrate Your Salesforce Experience With Outlook

We've broadened our support to include Microsoft® Windows® 10 and added features that give your sales reps even more ways to get their Salesforce work done quickly and easily from within Microsoft Outlook®. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

### Connect for Outlook: Now Retired

To provide the best email integration experience for you and your sales reps, we've retired Connect for Outlook to focus our efforts on developing new features for Salesforce for Outlook and Email Connect.

# Salesforce App for Outlook: Get Salesforce Content in Outlook Email Applications (Generally Available)

Help your sales teams stay on top of important sales opportunities. Team members working in Microsoft® Outlook® Web App (OWA), Outlook 2013, or Outlook 2016 along with Microsoft Office 365™ can now manage sales more efficiently. With Salesforce App for Outlook, teammates add emails and attachments to Salesforce records. They can also create contacts and view other sales-related records, like leads, opportunities, and cases—all directly in their Microsoft email application.

Our new product area, Email Connect, includes our two latest email integration features.

The Thing Your Sales Reps Need to Do	The Feature That Helps Your Reps Do It
Sync contacts and events between Exchange-based email systems and Salesforce.	Exchange Sync, available as a beta feature
See Salesforce content that's relevant to emails and events directly in their Microsoft® mail application.	Salesforce App for Outlook, now generally available

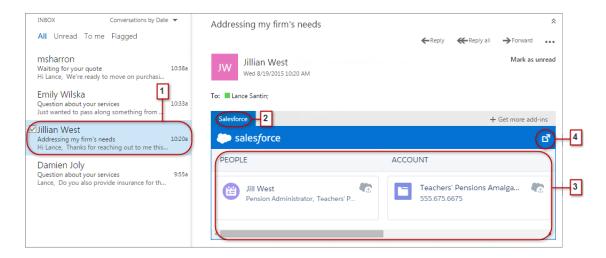
### EDITIONS

Available in Lightning
Experience in: Enterprise,
Performance, Unlimited,
and Developer Editions
Available in Salesforce
Classic in: Enterprise,
Performance, Unlimited,
and Developer Editions

But for this release, we've focused on expanding functions for Salesforce App for Outlook. Let's see how.

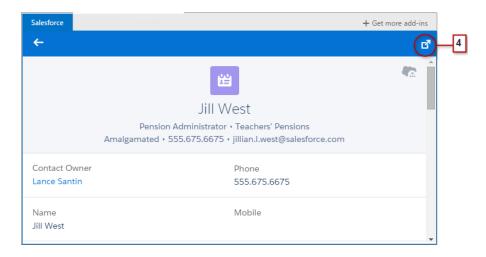
### Add Outlook Emails and Attachments to Relevant Salesforce Records for Microsoft Office 365

When sales reps select an email in their Microsoft email application (1) and then select Salesforce (2), they see relevant sales-related records (3).



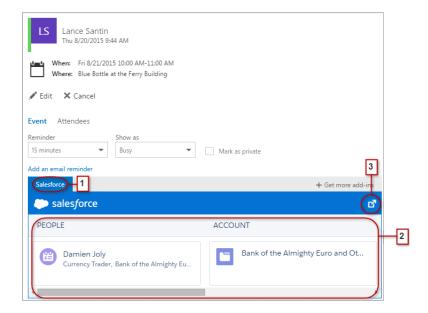
For the records that appear, your reps can add the email to multiple contacts—provided you have Shared Activities enabled. Also, reps can add the email to one other record that accepts tasks, like an opportunity, a lead, or a case. Adding the email to records creates a Salesforce task that includes the email's content. Your reps choose whether to include the email's attachments. To give your teams the option to add attachments, make sure that you've enabled Chatter, which stores Outlook email attachments using Salesforce Files.

Reps can also select a record to see more details in their mail application. Or, reps can get complete details about the record or the email added to it directly in Salesforce (4).



### Get Access to Relevant Salesforce Content from Microsoft Calendar Appointments

As attendees to events in Microsoft calendars, sales reps now see relevant Salesforce records. Reps first open an event in their Microsoft email application and then select Salesforce (1).



Relevant Salesforce records appear (2). And like when your reps work with emails, reps can select a record to see more details in their email application. Or, they can get complete details about the record directly in Salesforce (3).

Event organizers can see a different view of relevant Salesforce records. After organizers open an event, they select **Add-ins** > **Salesforce**. Relevant records appear in the right pane.

### See Relevant Salesforce Records in Outlook for Exchange 2013 On-Premises Environments

Our initial effort for on-premises environments lets sales teams see relevant sales-related records from Salesforce. Teammates select an email or an event in their Outlook mail application, and Salesforce App for Outlook appears.

### Support for Using Salesforce App for Outlook with Outlook 2016

Your sales teams can now use Salesforce App for Outlook with Outlook 2016.

### Turn On Salesforce App for Outlook

Help your sales teams get more productive by giving them access to Salesforce content directly in Outlook Web App (OWA), Outlook 2013, and Outlook 2016.

1. In Salesforce Setup, search for **Salesforce App for Outlook Settings**.



**2.** Enable Salesforce App for Outlook, and save your changes.



🚺 Tip: Help your sales teams help themselves! From the Microsoft Office Store, make Salesforce App for Outlook available for your sales teams to install. That way, you spend less time installing the app for fewer teammates.

### Salesforce for Outlook: Integrate Your Salesforce Experience With Outlook

We've broadened our support to include Microsoft® Windows® 10 and added features that give your sales reps even more ways to get their Salesforce work done quickly and easily from within Microsoft Outlook®. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

### Salesforce for Outlook v2.9.2 Supports Microsoft® Outlook® 2016

If your company upgraded to Microsoft Outlook 2016, get your Salesforce for Outlook users back in the game by making sure they upgrade to Salesforce for Outlook v2.9.2, which supports Outlook 2016.

# **EDITIONS**

Available in Lightning Experience in: Group, Professional, Enterprise, Performance, Unlimited, and **Developer** Editions

Available in Salesforce Classic in: All Editions

### Sync Outlook Home Addresses to Your Salesforce Contacts from Lightning Experience

Now your users can maintain their contacts' home addresses in both Outlook and Salesforce by updating addresses in just one system. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

#### View Salesforce Records Related to Recurring Events From Outlook

Experience more of Salesforce right from Outlook. Sales reps can now view Salesforce records related to recurring events from the side panel. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

### Salesforce App for Outlook Disconnects the Salesforce Side Panel Automatically

Sales reps don't need to juggle multiple Outlook integration products at one time. When reps connect to our latest email integration product, Salesforce App for Outlook, it automatically disconnects the side panel, so your reps encounter one streamlined experience between Salesforce and Outlook. You and your sales reps can manage these features from both Lightning Experience and Salesforce Classic.

### Salesforce for Outlook Supports Microsoft® Windows® 10

Now sales reps running Windows 10 can take advantage of Salesforce for Outlook—our most advanced email integration feature. Make sure that your reps' computing environments meet all Salesforce for Outlook system requirements before getting started. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

### Salesforce for Outlook v2.9.2 Supports Microsoft® Outlook® 2016

If your company upgraded to Microsoft Outlook 2016, get your Salesforce for Outlook users back in the game by making sure they upgrade to Salesforce for Outlook v2.9.2, which supports Outlook 2016.

Before your sales reps upgrade to v2.9.2, make sure their systems meet Salesforce for Outlook System Requirements.

SEE ALSO:

Salesforce for Outlook v2.9.2

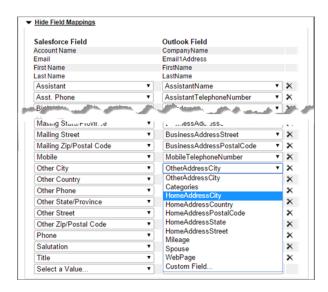
### Sync Outlook Home Addresses to Your Salesforce Contacts from Lightning Experience

Now your users can maintain their contacts' home addresses in both Outlook and Salesforce by updating addresses in just one system. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

Salesforce for Outlook syncs these Outlook contact home address fields with Salesforce:

- Street
- City
- State
- Postal Code
- Country

To begin syncing, you or your reps choose which Salesforce contact field to map to each Outlook contact home address field. If you're choosing the fields for your reps, you can define contact field mappings in Outlook configurations in Setup.



If you've indicated that your reps can modify their own field mappings in Outlook configurations, they can define or edit the contact home address field mappings from their Salesforce for Outlook configurations in Personal Settings.

Whether set by you or your reps, home address field mappings begin syncing the next time reps update those contact records in either system.

#### SEE ALSO:

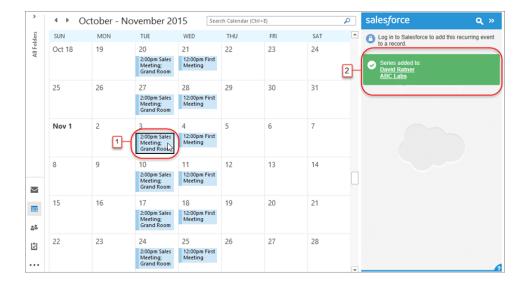
Map Fields for Salesforce for Outlook
Edit Your Salesforce for Outlook Field Mappings

### View Salesforce Records Related to Recurring Events From Outlook

Experience more of Salesforce right from Outlook. Sales reps can now view Salesforce records related to recurring events from the side panel. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

After reps relate records to a recurring event series in Salesforce, they can see those related records from the side panel.

To see the related records, select an event from the series in Outlook (1). If that event is syncing with Salesforce, the side panel shows all Salesforce records related to that event (2).



### Salesforce App for Outlook Disconnects the Salesforce Side Panel Automatically

Sales reps don't need to juggle multiple Outlook integration products at one time. When reps connect to our latest email integration product, Salesforce App for Outlook, it automatically disconnects the side panel, so your reps encounter one streamlined experience between Salesforce and Outlook. You and your sales reps can manage these features from both Lightning Experience and Salesforce Classic.

If your reps connect to Salesforce App for Outlook, they can still download and install Salesforce for Outlook, but only Salesforce App for Outlook can run in Outlook. Reps can, however, take advantage of the Salesforce for Outlook sync feature while still using Salesforce App for Outlook.

Your reps can access the side panel again when you first disconnect the Salesforce App for Outlook for those users in Setup and then enable the side panel for those users in Outlook configurations.

You can keep Salesforce App for Outlook enabled for other users at your organization, even if some users prefer to work with the side panel.

### Salesforce for Outlook Supports Microsoft® Windows® 10

Now sales reps running Windows 10 can take advantage of Salesforce for Outlook—our most advanced email integration feature. Make sure that your reps' computing environments meet all Salesforce for Outlook system requirements before getting started. You and your sales reps can manage this feature from both Lightning Experience and Salesforce Classic.

SEE ALSO:

Salesforce for Outlook System Requirements

### Connect for Outlook: Now Retired

To provide the best email integration experience for you and your sales reps, we've retired Connect for Outlook to focus our efforts on developing new features for Salesforce for Outlook and Email Connect.

This means that Salesforce no longer supports Connect for Outlook. Also, Connect for Outlook no longer syncs your reps' contacts, events, and tasks between Outlook and Salesforce.

But don't worry. Salesforce is here to help! Your Connect for Outlook users can be even more productive when they migrate to one of our latest email integration features: Salesforce for Outlook or Email Connect (Beta). We provide resources to help you and your reps migrate to the product that best fits your needs.

#### SEE ALSO:

How Do I Uninstall Connect for Outlook?

Connect for Outlook End of Life Frequently Asked Questions

Which Microsoft Email Integration Feature is Right for My Company?

## Pardot: Make Marketing Automation and Sales Conversions Easier Than Ever

We've added several productivity features making it quicker and easier for marketing folks to create beautiful emails and for salespeople to personalize emails to prospects. We also added support for Google's changes to AdWords, so that you can ensure that your ads are tracked properly. You and your marketing and sales reps can use these features in Salesforce Classic.

### IN THIS SECTION:

### Ad Tracking Template: Support for Changes to Google AdWords URLs

We've updated the Pardot Google AdWords Connector to support the changes to AdWords that Google rolled out in July 2015. If you use Pardot Google AdWords Connector, take action to ensure that your ads are properly tracked. This feature is available in Salesforce Classic only.

### Prospects: Automatically Create Prospects from Newly Added Email Addresses in Salesforce Leads and Contacts

Save your reps time and get them to stop manually entering prospect data. Instead, get the Pardot Salesforce connector to create prospects whenever email addresses are added to Salesforce leads and contacts. This feature is available in Salesforce Classic only.

### Variable Tags: Personalize Emails to Target Prospects

Let your salespeople customize Salesforce Engage Campaign emails, so they can personalize messages to target prospects. Sales reps can insert both standard and custom Pardot tags. This feature is available in Salesforce Classic only.

#### Email Editor: Create High-Quality Marketing Emails

Create better marketing emails by maximizing the Email Editor to full screen. The editor gives you more real estate to work with. Also, you can easily resize the sidebar, so you can control how much—or little—of the sidebar you see. This feature is available in Salesforce Classic only.

### Engage Email: Log Emails Separately in Salesforce

Log your Salesforce Engage emails to Salesforce separately from your Pardot marketing emails. This feature is available in Salesforce Classic only.

### Salesforce Connector: Sync with Salesforce Faster Than Ever

We've been working hard to make the Salesforce connector sync even faster, so your sales and marketing teams can rely on their systems being up to date. Previously, Pardot checked for changes between Pardot and Salesforce every 10 minutes. Now, Pardot checks for and syncs changes up to every two minutes.

### EDITIONS

### Available in: Salesforce Classic

#### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

### Ad Tracking Template: Support for Changes to Google AdWords URLs

We've updated the Pardot Google AdWords Connector to support the changes to AdWords that Google rolled out in July 2015. If you use Pardot Google AdWords Connector, take action to ensure that your ads are properly tracked. This feature is available in Salesforce Classic only.

Previously, Google AdWords used destination URLs that contained landing page URLs and tracking parameters. The Pardot connector appended these tracking parameters to your ads to let you track and report on the ads in Pardot. In July 2015, Google AdWords upgraded the URLs to split the landing page URL and the tracking parameters into two fields: the final landing page URL and the tracking template.

To continue tracking ads in Pardot, switch to Google AdWords' new URL system and insert new tracking template into your ads.

After you've completed these actions, the updated Pardot connector automatically begins tracking your ads.

Pardot continues to track ads that use destination URLs.



**Note:** New ads cannot be tracked in Pardot if Google migrates your account to the new URL system before you've added the tracking template. To track new ads, insert the tracking template into the ads.

### SEE ALSO:

Important Updates to Pardot's Google AdWords Connector Google AdWords Connector with Final URLs External Link to Google Documentation: Using Upgraded URLs

### EDITIONS

Available in: Salesforce Classic

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Available in: Pardot Pro and Pardot Ultimate Editions

### **USER PERMISSIONS**

To configure the Google AdWords Connector and to access the tracking template:

 Pardot Admin or a role that includes the "Connectors View and Create/Edit permissions"

# Prospects: Automatically Create Prospects from Newly Added Email Addresses in Salesforce Leads and Contacts

Save your reps time and get them to stop manually entering prospect data. Instead, get the Pardot Salesforce connector to create prospects whenever email addresses are added to Salesforce leads and contacts. This feature is available in Salesforce Classic only.

This setting applies only to emails that are added to contacts or leads after the setting is enabled.

- 1. Log in to Pardot.
- 2. Navigate to Admin > Connectors.
- 3. Click the gear icon next to the Salesforce connector and then click Edit.
- **4.** Select Automatically create prospects in Pardot if they are created as a Lead or Contact in salesforce.com.

### SEE ALSO:

Create Prospects When Email is Added in Salesforce How email changes in Salesforce sync down to Pardot

### Variable Tags: Personalize Emails to Target Prospects

Let your salespeople customize Salesforce Engage Campaign emails, so they can personalize messages to target prospects. Sales reps can insert both standard and custom Pardot tags. This feature is available in Salesforce Classic only.

### **EDITIONS**

Available in: Salesforce Classic

#### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Available in: All Pardot Editions (Standard, Pro, and Ultimate)

### **USER PERMISSIONS**

To configure the Pardot Salesforce Connector:

 Pardot Admin or a role that includes the "Connectors View and Create/Edit permissions"

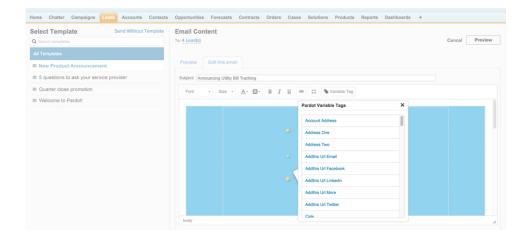
### **EDITIONS**

Available in: Salesforce Classic

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Available in: All Pardot Editions (Standard, Pro, and Ultimate) with Salesforce Engage



### SEE ALSO:

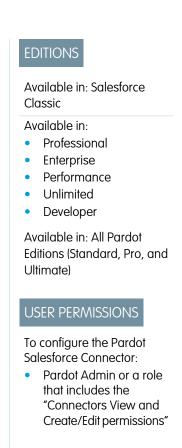
Variable Tags for Salesforce Engage Campaigns Now Available

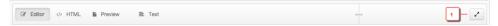
Variable Tags

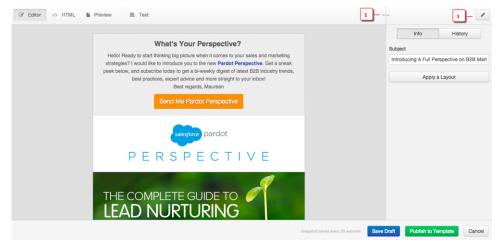
Sending Engage Emails

### Email Editor: Create High-Quality Marketing Emails

Create better marketing emails by maximizing the Email Editor to full screen. The editor gives you more real estate to work with. Also, you can easily resize the sidebar, so you can control how much—or little—of the sidebar you see. This feature is available in Salesforce Classic only.







- 1. To expand the Email Editor, click the maximize button.
- 2. To change the size of the sidebar, drag the arrows left or right.
- 3. To collapse the Email Editor, click the minimize button.

#### SEE ALSO:

New Full Screen Email Editing Mode Email Flow WYSIWYG Icon Glossary

### Engage Email: Log Emails Separately in Salesforce

Log your Salesforce Engage emails to Salesforce separately from your Pardot marketing emails. This feature is available in Salesforce Classic only.

By default, this setting is enabled for all Salesforce Engage users.

- 1. Log in to Pardot.
- 2. Navigate to Admin > Connectors.
- 3. Click the gear icon next to the Salesforce connector and then click Edit.
- 4. Select Sync Engage emails with the CRM.

### SEE ALSO:

New Sync Salesforce Engage Emails Connector Setting Setting up the Salesforce Connector

### **EDITIONS**

Available in: Salesforce Classic

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Available in: All Pardot Editions (Standard, Pro, and Ultimate) with Salesforce Engage

### **USER PERMISSIONS**

To configure the Pardot Salesforce Connector:

 Pardot Admin or a role that includes the "Connectors View and Create/Edit permissions"

### Salesforce Connector: Sync with Salesforce Faster Than Ever

We've been working hard to make the Salesforce connector sync even faster, so your sales and marketing teams can rely on their systems being up to date. Previously, Pardot checked for changes between Pardot and Salesforce every 10 minutes. Now, Pardot checks for and syncs changes up to every two minutes.

To enable this feature, contact the Pardot support team.

#### SEE ALSO:

How can I reach Pardot Support?

When are leads synced with the CRM?

How Prospect Syncing Works between Pardot and Your CRM

### EDITIONS

Available in: Salesforce Classic

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

Available in: All Pardot Editions (Standard, Pro, and Ultimate)

## Other Changes in the Sales Cloud

Learn about other changes we've made to improve usability.

### IN THIS SECTION:

### Alert Users to Possible Duplicate Records Quicker Than Ever

When you used Data.com Duplicate Management in the past, your duplicate rules ran only when users tried to save a record. Now, they run as users complete fields on a record, so users don't have to continue entering data for a record that's already in Salesforce. This feature is available in Lightning Experience only.

#### Oldies But Goodies Available in Lightning Experience

Even some of our older productivity features your sales reps have grown to count on are available in Lightning Experience.

#### Link Custom Lookup Fields from Activities to Other Records

We've enabled the Lookup Relationship field for activities. You no longer need to choose which type of record is most important to activities. Now you can link custom lookup fields from activities to other records. This feature is available in both Lightning Experience and Salesforce Classic.

#### Salesforce Console for Sales

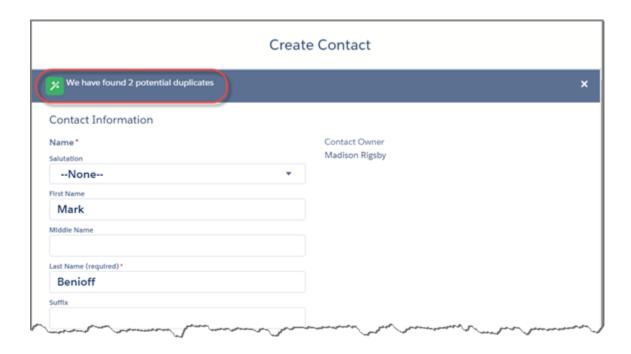
Give sales reps quick access to sales intelligence to close deals faster with fewer clicks. We redesigned Salesforce Console for Sales so that sales reps can more easily spot the information they need to keep the sales process moving along. This feature is available in Salesforce Classic only.

## Alert Users to Possible Duplicate Records Quicker Than Ever

When you used Data.com Duplicate Management in the past, your duplicate rules ran only when users tried to save a record. Now, they run as users complete fields on a record, so users don't have to continue entering data for a record that's already in Salesforce. This feature is available in Lightning Experience only.

### EDITIONS

Available in Lightning Experience in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



For more information about Duplicate Management, including how to set up duplicate rules, see Duplicate Management in the Salesforce Help.

### SEE ALSO:

Recommended Features for Lightning Experience

### Oldies But Goodies Available in Lightning Experience

Even some of our older productivity features your sales reps have grown to count on are available in Lightning Experience.

- Exchange Sync
- Connect Offline
- Email to Salesforce

### EDITIONS

Available in Lightning
Experience in: Enterprise,
Performance, Unlimited,
and Developer Editions
Email to Salesforce also
available in: Personal,
Group, and Professional
Editions

### Link Custom Lookup Fields from Activities to Other Records

We've enabled the Lookup Relationship field for activities. You no longer need to choose which type of record is most important to activities. Now you can link custom lookup fields from activities to other records. This feature is available in both Lightning Experience and Salesforce Classic

Keep these limitations in mind when using the Lookup Relationship field for activities.

 Custom lookups don't control activity sharing. Linking to another record using an activity custom lookup doesn't affect users' access to the activity—the lookup is simply a reference to another record.

### **EDITIONS**

Available in Lightning Experience in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

- Each custom lookup field can reference one type of record, one record at a time. No two fields can link to the same type of record. To reference records of different types, create multiple custom lookup fields.
- Custom lookup fields combine open and closed activities in the same related list, with each custom lookup corresponding to a new
  related list. The lists don't show activities related to other records using the Name and Related To fields, as with Open Activities
  and Activity History lists.
- The list of related activities from a custom lookup sorts in descending order by ActivityDate and LastModifiedDate. You can't modify the sort.
- You must enable new custom fields before the fields appear on reports. To enable a new custom field, modify the report type and add the new custom field to the list of available fields for the report.
- Custom report types that use activity custom lookup field relationships are available if Shared Activities is enabled.

### Salesforce Console for Sales

Give sales reps quick access to sales intelligence to close deals faster with fewer clicks. We redesigned Salesforce Console for Sales so that sales reps can more easily spot the information they need to keep the sales process moving along. This feature is available in Salesforce Classic only.

The consoles for sales and service share new features, which you can learn about in Salesforce Console for Service.

### **EDITIONS**

Available in Salesforce Classic in: **Performance** and **Developer** Editions for an extra cost

# Wave Analytics: Lightning and Communities Support, Custom Menus, API Access to Dashboards

Now you can share Wave visualizations in Communities and Lightning, clone lenses, and create open-ended date filters. Custom menus and more detailed lists give you quicker access to your Wave assets. On the back end, our new replication service lets your dataflow run faster; you'll enjoy powerful new SAQL options; and you can control Wave dashboards via the REST API.

### EDITIONS

Available in: **Developer** Edition

Available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions



Wave Analytics enables everyone in your organization to get immediate access to powerful data insights through its intuitive point-and-click visual interface. Whether you're on a desktop browser or an iOS mobile device—even the new Apple Watch™—you can get the answers you need from your Salesforce or external data to run your business.

### IN THIS SECTION:

### Single-User Wave Analytics Platform Licenses Introduced

The new single-user Analytics Cloud - Wave Analytics Platform license, which includes a license to use the Sales Wave Analytics app, is now available. Existing Wave customers can continue to use previous licenses but are encouraged to migrate to the new licensing model.

### Sandbox Copy for Wave Analytics Now Supports Sandstorm

When you use the Sandbox to test Wave Analytics functionality, sandbox copy now uses the new Sandstorm algorithm.

### Wave Analytics for iOS: New in Version 2.0

Version 2.0 is here, with a full iPad App and many enhancements to the iPhone App. iOS 7 support is removed, and iOS 8 is required.

### The Sales Wave App Brings the Power of Wave to Sales Cloud Data (Generally Available)

The first Salesforce Wave app—Sales Wave Analytics—gets you started fast with Analytics Cloud and provides a ready-built path through your Sales Cloud data on any device. You get everything you need in one place to uncover key insights to help you grow your business.

### Integrate Data

Speed up your data integration. Let the replication service extract Salesforce data for you so that your dataflow runs faster. Take advantage of a new security predicate operator.

### Integrate Wave Analytics in Communities and Lightning Experience and with Custom Action Menus

The great Wave Analytics visualizations you've already built just got more powerful. You can now share them across your Salesforce experience by integrating them into Communities (pilot) and Lightning Experience (pilot). And you can provide access to common Salesforce actions from custom menus within Wave lenses and dashboards.

### Explore Data with More Flexible Date Filters, Interface Enhancements, and More

Explore and visualize your data more easily by cloning lenses, creating open-ended date filters, and viewing your Wave assets in lists with descriptions. The enhancements include more tooltips and a new way to share via downloading screenshots. Theses features are available in both Lightning Experience and Salesforce Classic.

### **Build Powerful Queries Using SAQL**

Use the Salesforce Analytics Query Language (SAQL) to return exactly the Wave Analytics data that you're looking for.

### Access More Data with the Wave REST API (Pilot)

You can now access Wave Analytics dashboards by using the Wave REST API. This release also includes other enhancements to the Wave REST API.

#### Learn Wave Analytics with Trailhead

Trailhead is the fun and free way to learn Salesforce. Now you can get acquainted with Wave Analytics through Trailhead, using a special Wave-enabled Developer Edition org.

#### SEE ALSO:

How and When Wave Analytics Features Become Available

Wave Analytics Library

## Single-User Wave Analytics Platform Licenses Introduced

The new single-user Analytics Cloud - Wave Analytics Platform license, which includes a license to use the Sales Wave Analytics app, is now available. Existing Wave customers can continue to use previous licenses but are encouraged to migrate to the new licensing model.

The Wave Analytics platform is now available through the new Analytics Cloud - Wave Analytics Platform single-user license, which includes a license to use the Sales Wave app. Sales Wave—the first Salesforce Wave prebuilt app—gets you started fast with Analytics Cloud and provides a ready-built path through your Sales Cloud data on any device.

Previous multi-user Wave platform license may still be used under existing contracts. If you have either the existing Wave Analytics Builder or Explorer licenses, you can continue to use Wave just as before without any interruption in service.

The table shows data storage limits for Analytics Cloud - Wave Analytics Platform and Analytics Cloud - Sales Wave Analytics App single-user licenses. If you require more data, you can purchase Analytics Cloud - Additional Data Rows, which entitles you to an additional 100 million rows.

License	Limit
Analytics Cloud - Wave Analytics Platform	100 million rows
Analytics Cloud - Sales Wave Analytics App	25 million rows when used without Analytics Cloud - Wave Analytics Platform license. Use of Sales Wave app license does not increase data limit for platform license
Analytics Cloud - Additional Data Rows	100 million rows

**①** 

**Important:** Wave Analytics license data storage limits are contractual, not technical. Licensee agrees to strictly monitor its total number of data rows.

The new single-user license is available to both new and existing Wave customers. If you use a previous Wave platform license and you migrate to the new license, you may need to set up user in your org again using the new license.

For complete information about the new Wave Analytics license, including detailed setup instructions, see the "Wave Platform Setup Guide" in the Salesforce Help.

### Sandbox Copy for Wave Analytics Now Supports Sandstorm

When you use the Sandbox to test Wave Analytics functionality, sandbox copy now uses the new Sandstorm algorithm.

You no longer have to take any special action when using copy to sandbox functionality to test Wave Analytics assets in the sandbox. The new Sandstorm copy algorhithm works with Wave Analytics. Previously, Wave Analytics sandbox copy supported an older algorhithm, which required you to uncheck a box in the Sandbox Information screen.

To learn how to use the sandbox, follow the step-by-step instructions in Create or Refresh a Sandbox.

## Wave Analytics for iOS: New in Version 2.0

Version 2.0 is here, with a full iPad App and many enhancements to the iPhone App. iOS 7 support is removed, and iOS 8 is required.

### **Download Wave Analytics**

For the latest enhancements, download Wave Analytics from the App Store. Wave Analytics is available for Apple iPhone 4 and later models running iOS 8 and later.

### **USER PERMISSIONS**

To log in to Salesforce from Wave Analytics:

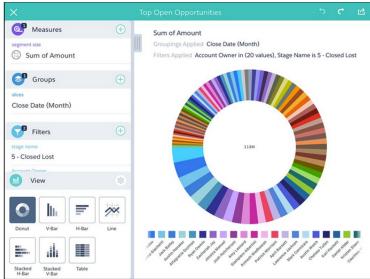
"Use Wave Analytics"



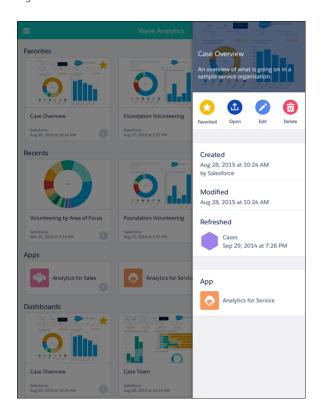
### New in Wave Analytics for iOS v2.0:

• Full iPad App with redesigned home page and data exploration





- Mobile layout auto-formatting to ensure no more overcrowded layouts
- Metadata views to see what's changed and when



- Full Compare Table support (view only)
- Data import from a URL without leaving the App
- Mark as "Favorite" for dashboards and lenses



- Multi-page dashboard creation in the Dashboard Designer
- Double-tap to edit existing widgets in the Dashboard Designer
- Raw data table columns can be added and removed
- New section for recently used items so you can find them quickly
- Easy access to advanced chart options
- Grouping by fiscal dates
- MDM certificate based browser authentication
- Home screen search improvements and hints to help you find what you're looking for
- New Developer Mode to help you debug your dashboards



# The Sales Wave App Brings the Power of Wave to Sales Cloud Data (Generally Available)

The first Salesforce Wave app—Sales Wave Analytics—gets you started fast with Analytics Cloud and provides a ready-built path through your Sales Cloud data on any device. You get everything you need in one place to uncover key insights to help you grow your business.

### IN THIS SECTION:

### Sales Wave App Now Generally Available

The Sales Wave application—previously available only through a pilot program—is now available to all customers through a separate single-user license. The app is also included with the Wave Analytics Platform single-user license.

### Sales Wave Enhanced With Two New Dashboards

Sales Wave now includes two new visualizations to enrich your exploration of Salesforce data through the app.

### Sales Wave App Supports Limited Use of Custom Objects

Sales Wave now supports up to ten custom objects in each org that implements the app.

### Sales Wave App Now Generally Available

The Sales Wave application—previously available only through a pilot program—is now available to all customers through a separate single-user license. The app is also included with the Wave Analytics Platform single-user license.

### **USER PERMISSIONS**

### To use Wave apps:

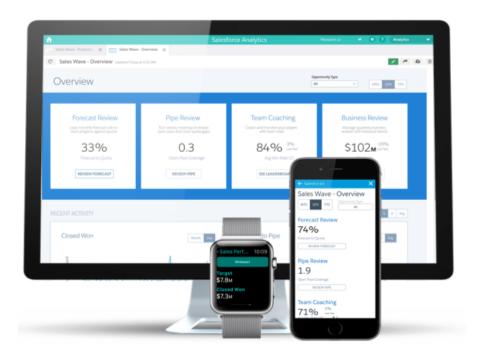
 "Use Analytics Cloud Templated Apps"

### To use Sales Wave app:

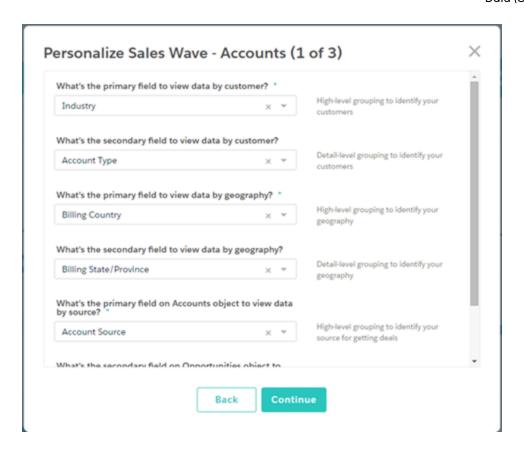
 "Access Sales Cloud Analytics Templates and Apps"

# To create and manage Wave apps:

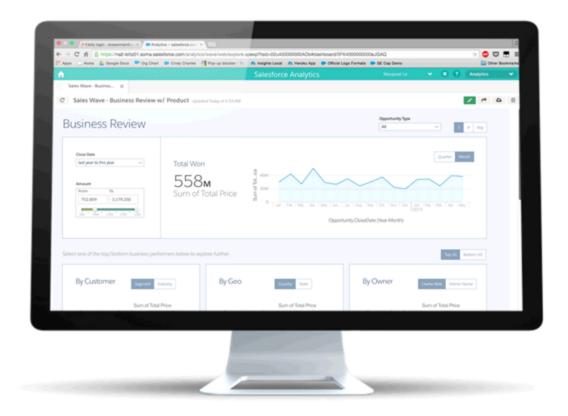
- "Manage Analytics Cloud Templated Apps"
- "Edit Analytics Cloud Dataflows"



With the Sales Wave Analytics app, you don't need to be a business intelligence guru to get what you need out of your sales data. Through an easy-to-use configurator, just answer a few questions about how your company prefers to view data. Wave takes care of the rest, building a self-service sales analytics app your whole team can use right away. Learn how to create the app by watching our videos: Create the Sales Wave App, Part 1: Using the Configuration Wizard shows you how to use the configuration wizard and share an app. Create the Sales Wave App, Part 2: Upload the Quota CSV File and Schedule a Dataflow shows you how to update the app's Quotas dataset by uploading a CSV file and how to keep app data up-to-date by scheduling a daily data flow.



Best-practice dashboards lead you through your sales data so you can identify new opportunities and trends quickly. Directly from Sales Wave, you can create a task, log a ticket, change a close date, share insights, or collaborate on any device. And you can do it all without hunting through disconnected spreadsheets or navigating fragmented analytics tools.

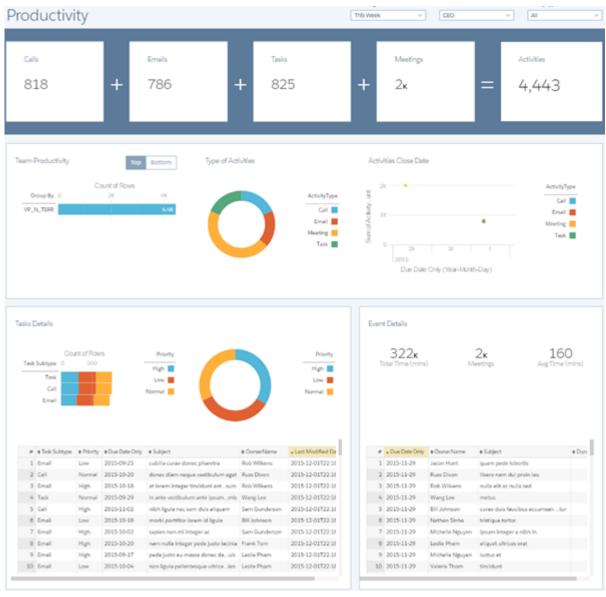


### Sales Wave Enhanced With Two New Dashboards

Sales Wave now includes two new visualizations to enrich your exploration of Salesforce data through the app.

In our ongoing efforts to add to Sales Wave app capabilities, we've added the following prebuilt dashboards to the app:

- Productivity (see below), which you can use to monitor tasks and events completed by each person on your team.
- Player Stats, which provides details for every person on the team.



Note that if you're already using Sales Wave, re-create the app to use the new dashboards. For instructions, see Create and Share the Sales Wave App.

## Sales Wave App Supports Limited Use of Custom Objects

Sales Wave now supports up to ten custom objects in each org that implements the app.

You can use up to ten custom objects in each org that implements Sales Wave. Note that this is a contractual, not a technical, limitation. The app also supports the following objects:

- Accounts
- Users
- Roles
- Opportunities
- Products (Opportunities line item)

- Tasks
- Events

# Integrate Data

Speed up your data integration. Let the replication service extract Salesforce data for you so that your dataflow runs faster. Take advantage of a new security predicate operator.

### IN THIS SECTION:

### Run Your Dataflow Faster with Replication (Pilot)

To make it faster to bring Salesforce data into Wave Analytics, we're introducing the replication service. When enabled, it extracts Salesforce data in advance, enabling your dataflow to run faster. This feature is available in both Lightning Experience and Salesforce Classic.

### New Multi-Value List Filter Operator in Security Predicate

A new security predicate operator makes it easy to filter by multiple items in a picklist.

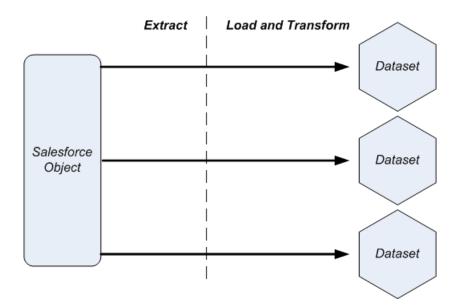
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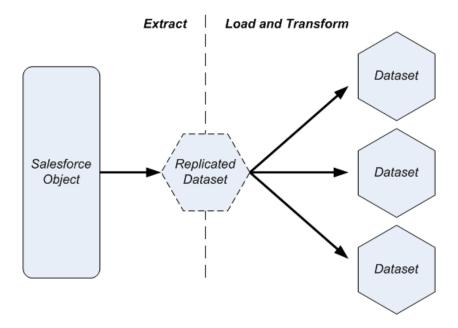


Note: This feature is currently available to select customers through a pilot program. To be nominated to join this pilot program, contact salesforce.com. Additional terms and conditions may apply to participate in the pilot program. Please note that pilot programs are subject to change, and as such, we cannot guarantee acceptance into this pilot program or a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based upon features that are currently available.

Without replication, the dataflow performs a separate extract each time it needs data from a Salesforce object.



With replication enabled, the extraction happens ahead of time and behind the scenes. Your dataflow runs faster because it no longer has to extract the data—just load and transform.



When you sign up for replication, you get two dataflows:

- The replication dataflow extracts Salesforce data to build intermediate, locally cached datasets called replicated datasets.
- The user dataflow transforms data in the replicated datasets and loads it into registered datasets.

To create replicated datasets, configure the replication dataflow with up to 20 Salesforce objects and set the replication schedule. Wave Analytics will create a replicated dataset for each Salesforce object that you choose.



Note: If you switch to using replication, you don't have to modify your existing user dataflow, except in the following cases:

- Remove any filters in the sfdcDigest transformation of the user dataflow and copy them to the replication dataflow. If you don't remove them, the user dataflow fails.
- The user dataflow can't extract data from objects that aren't replicated.

If you're a Wave Analytics customer and you like what you've heard so far, contact your Salesforce representative and ask to join the replication pilot today!

### New Multi-Value List Filter Operator in Security Predicate

A new security predicate operator makes it easy to filter by multiple items in a picklist.

The 'in' operator can be used in a security predicate to filter a dataset column based on multiple selected items in a picklist. Example predicate expression:

'Demog' in ["\$User.Demographic c"]

In this example, Demographic c is of type multiPicklistField.

For details on available security predicate operators, review the article Comparison Operators.

# Integrate Wave Analytics in Communities and Lightning Experience and with Custom Action Menus

The great Wave Analytics visualizations you've already built just got more powerful. You can now share them across your Salesforce experience by integrating them into Communities (pilot) and Lightning Experience (pilot). And you can provide access to common Salesforce actions from custom menus within Wave lenses and dashboards.

### IN THIS SECTION:

### **Custom Actions Menus Now Support Additional Actions**

We've added support for additional action types you can add to custom menus that let users access Salesforce actions directly from Wave. This feature is available in Salesforce Classic only.

### Securely Share Wave Analytics Apps with Community Partners and Customers (Pilot)

With Wave Analytics for Communities, external users can view apps shared with them via Wave dashboards embedded in Visualforce pages on their community. This feature is available in Salesforce Classic only.

### Embed Wave Dashboards in Lightning Pages (Pilot)

By adding a Wave Analytics dashboard component to a Lightning Home or Record Page, you can provide an interactive visualization of your data. Users can drill in and explore the dashboard within the frame on the Lightning Page or in a Wave Analytics window. This feature is available in Lightning Experience only.

### **Custom Actions Menus Now Support Additional Actions**

We've added support for additional action types you can add to custom menus that let users access Salesforce actions directly from Wave. This feature is available in Salesforce Classic only.

Custom action menus you add to charts and tables let users take advantage of Salesforce actions directly from Wave lenses and dashboards. We've added support for additional actions to the action menus.

The previous release supported only so-called create actions. The menus now also support the following types of object specific actions and global actions:

- Log a Call
- Visualforce Pages
- Update

As before, menus can also contain an Open Record link to either a record in Salesforce or in an external website.

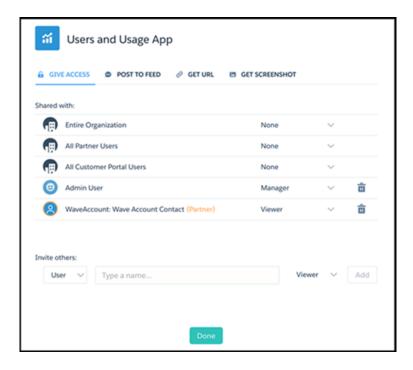
### Securely Share Wave Analytics Apps with Community Partners and Customers (Pilot)

With Wave Analytics for Communities, external users can view apps shared with them via Wave dashboards embedded in Visualforce pages on their community. This feature is available in Salesforce Classic only.



Note: Wave Analytics for Communities is in pilot. Contact your Salesforce account executive to enable this feature.

Community partner and customer users can view embedded Wave dashboards when their Salesforce org has the Wave Community permission and preference enabled. Also, Enable Wave Analytics for Communities must be selected in the Wave Analytics Settings for the org. Access to apps is then given by selecting **Share** from a Wave app or dashboard.



In the Share dialog, community partners and customers are highlighted in orange to distinguish them as external users. They are given **Viewer** access only. From their community, they can drill in and explore the dashboard, while all other areas of Wave remain inaccessible and secure.



**Note:** This feature is supported in communities but not in portals. The feature is supported for users with a user role and is not supported for high-volume portal users.

For more information about building Communities, see Getting Started With Communities. For more information about embedding Wave Analytics, see the wave:dashboard component in the Visualforce Developer's Guide Standard Component Reference.

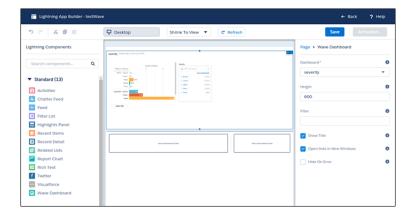
### Embed Wave Dashboards in Lightning Pages (Pilot)

By adding a Wave Analytics dashboard component to a Lightning Home or Record Page, you can provide an interactive visualization of your data. Users can drill in and explore the dashboard within the frame on the Lightning Page or in a Wave Analytics window. This feature is available in Lightning Experience only.



Note: Wave Analytics for the Lightning App Builder is in pilot. Contact your Salesforce account executive to enable this feature.

To add a dashboard to your Lightning Page, select the **Wave Dashboard** component and then select the dashboard to display. You can control the visibility of the dashboard's title and specify whether the dashboard appears on the page if an error occurs. With the **Open Links in New Windows** attribute, you can specify where links from the dashboard to other assets are opened.



With the **Filter** attribute, you can use JSON to filter dataset fields at run time. For example:

{datasetDeveloperName1:{field1:[value]},datasetDeveloperName1:{field1:[value1,value2],field2:["value3,with comma"]}}

# Explore Data with More Flexible Date Filters, Interface Enhancements, and More

Explore and visualize your data more easily by cloning lenses, creating open-ended date filters, and viewing your Wave assets in lists with descriptions. The enhancements include more tooltips and a new way to share via downloading screenshots. Theses features are available in both Lightning Experience and Salesforce Classic.

### USER PERMISSIONS

#### To explore data:

"Use Wave Analytics"

#### IN THIS SECTION:

#### Waterfall, Stacked Waterfall Chart Types Expand Wave Data Exploration Capabilities

We've added two new chart types — waterfall and stacked waterfall — you can use in Wave Analytics dashboards to show a running total as values are either added to or subtracted from it.

#### Create Open-Ended Date Filters with Absolute Date Ranges

Expanded options for date handling include new operators for specifying only the start date or end date for a filter.

### Exploring Year-Weeks Just Got Easier

Tooltips for the Year-Week scale now provide the start date of each week. Just mouse over any point in a time-series chart to view the week number within the year, the start date of the week, and other relevant information.

#### Create Visualizations More Easily with Clone and Save Options

The new clone and save options make it easier and faster to explore in multiple directions. When you reach a lens you like, you can both keep it and clone it in a new tab to build upon it further.

### Download and Share Screenshots of Wave Dashboards and Lenses

With this new sharing option, you can download .png screenshots. It's a fast way to share Wave Analytics with colleagues who don't have access to Wave or to a particular asset in Wave.

### Find Your Wave Analytics Assets with Ease

With the new view selector, you can find your apps, dashboards, lenses, and datasets via List or Tile views.

### Additional Changes to the User Interface

Salesforce continually works to improve the Analytics experience. In this release, you'll notice new graphical elements, revised icons, and our new brand: Wave Analytics.

### Waterfall, Stacked Waterfall Chart Types Expand Wave Data Exploration Capabilities

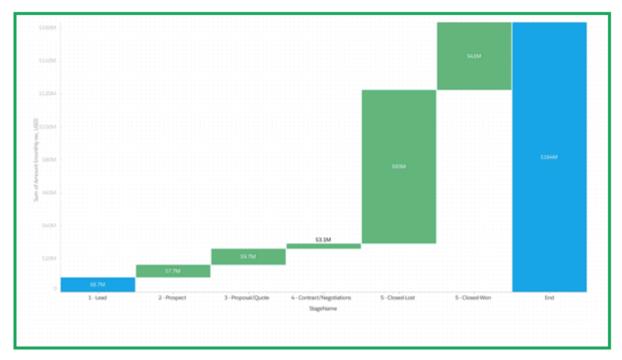
We've added two new chart types — waterfall and stacked waterfall — you can use in Wave Analytics dashboards to show a running total as values are either added to or subtracted from it.

The new waterfall chart type, and the closely related stacked waterfall, visualizes the cumulative effect of sequentially introduced positive or negative values. It's also known as a "flying bricks" or "Mario" chart.

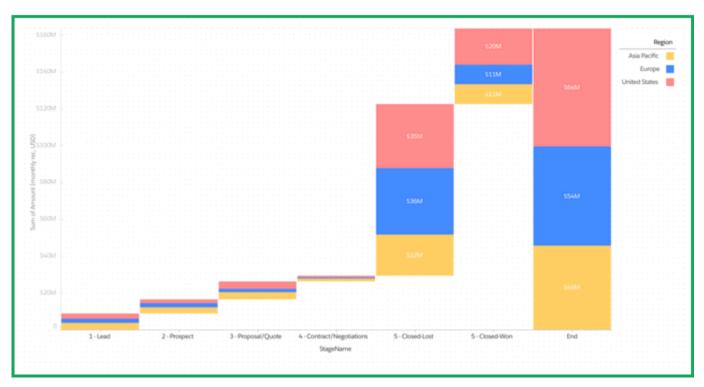
Use the new waterfall charts for Wave visualizations that start with an initial value and show what happens to it as it's affected negatively or positively by some business factor and results in some final value.

For example, to visualize profits a waterfall chart would start with a bar representing your revenue, then show bars representing overhead costs that are subtracted from revenue, and finally show bars representing the resulting gross margin and net profit. Common use cases for the chart type include the following:

- Sales analysis, where you compare target with actual and identify gaps
- Financial analysis, that is profit and loss
- Inventory analysis



Stacked waterfall charts show a breakdown of elements in waterfall chart bars.



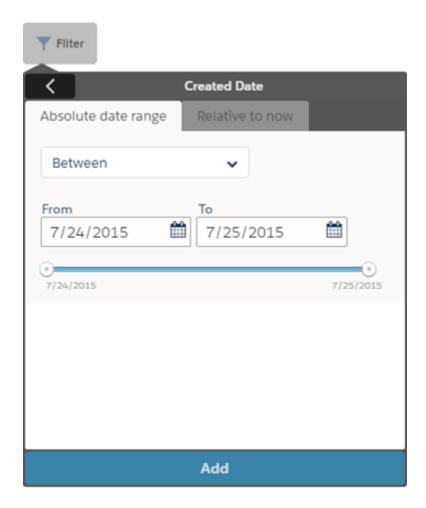
The data for waterfall is provided by the query step. The chart doesn't do any computation other than calculating the value for the final total bar. You can choose to include the final total in the query, in which case you unselect the Compute Totals checkbox in the chart widget.

You create waterfall and stacked waterfall chart types in Wave through dashboard JSON. For details, see the Wave Analytics Dashboard JSON Guide.

## Create Open-Ended Date Filters with Absolute Date Ranges

Expanded options for date handling include new operators for specifying only the start date or end date for a filter.

The absolute date range is now the default. You can specify a start date, an end date, or both. Select **Greater Than Or Equal To** for a time range after your specified date. Select **Less Than Or Equal To** for a time range before your specified date.



Absolute date ranges use Greenwich Mean Time (GMT) instead of the browser's time zone.

# Exploring Year-Weeks Just Got Easier

Tooltips for the Year-Week scale now provide the start date of each week. Just mouse over any point in a time-series chart to view the week number within the year, the start date of the week, and other relevant information.

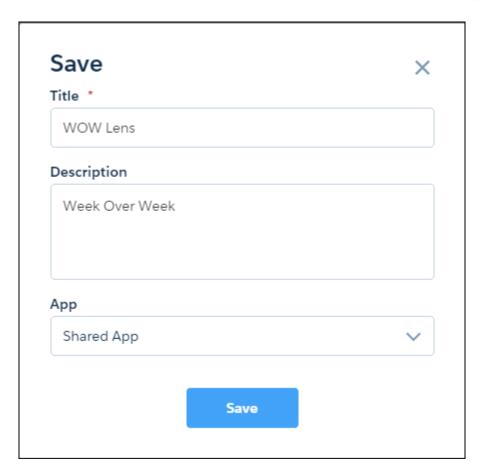
### Create Visualizations More Easily with Clone and Save Options

The new clone and save options make it easier and faster to explore in multiple directions. When you reach a lens you like, you can both keep it and clone it in a new tab to build upon it further.

The **Save As** button has been removed. Instead, click the **Clone to New Tab** icon to both keep the lens you like and continue changing it.



Take it in as many directions as you want. Then click the **Save** icon for the good ones.

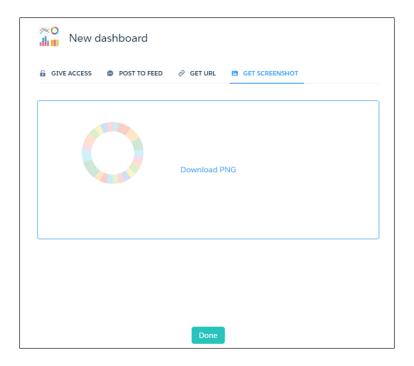


Note: You can only save to apps that you manage.

### Download and Share Screenshots of Wave Dashboards and Lenses

With this new sharing option, you can download .png screenshots. It's a fast way to share Wave Analytics with colleagues who don't have access to Wave or to a particular asset in Wave.

From an app, dashboard, or lens, select **Share** and then select Get Screenshot. Click the image to download it. Then you can send or post it as appropriate.



**Ø** 

Note: Once shared, downloaded screenshots are public.

### Find Your Wave Analytics Assets with Ease

With the new view selector, you can find your apps, dashboards, lenses, and datasets via List or Tile views.

On the Wave Analytics home page, click the icon next to the **Create** button to toggle between List View and Tile View.



List View provides the top five most recently viewed assets in each category, with the option to **Show More**. List View also includes the description, creator, and dates for each asset.



Each time you log in, the view you last selected will appear.

### Additional Changes to the User Interface

Salesforce continually works to improve the Analytics experience. In this release, you'll notice new graphical elements, revised icons, and our new brand: Wave Analytics.

The Analytics Cloud is changing its name to "Wave Analytics." You'll see our new name on the title bar and design similarities between Wave and the new Lightning Experience.



The revised icons on the home page are the App Launcher, Contextual Help and Training, Setup, and Settings.



Open a lens or start exploring a dataset. The Clip to Designer, Share, Clone in New Tab, Delete, and Save icons have a new look.



### **Build Powerful Queries Using SAQL**

Use the Salesforce Analytics Query Language (SAQL) to return exactly the Wave Analytics data that you're looking for.

Wave Analytics uses SAQL behind the scenes in lenses, dashboards, and explorer to gather data for visualizations. Developers can write SAQL to directly access Wave Analytics data via the Wave REST API and Dashboard JSON.

### IN THIS SECTION:

### SAQL case Statement

Use the SAQL case statement within a foreach statement to create logic that chooses between conditions. The case statement supports two syntax forms: searched case expression and simple case expression.

### Order a Cogrouped Stream Before a foreach Statement

You can order a cogrouped stream before a foreach statement.

### **SAQL Math Functions**

Use the SAQL math functions to perform numeric operations in SAQL queries.

### SEE ALSO:

**SAQL** Reference

#### SAQL case Statement

Use the SAQL case statement within a foreach statement to create logic that chooses between conditions. The case statement supports two syntax forms: searched case expression and simple case expression.

#### Syntax—Searched Case Expression

```
when search_condition then result_expr
[ when search_condition2 then result_expr2 ... ]
[ else default_expr ]
```

#### case...end

The case and end keywords begin and close the statement.

#### when...then

The when and then keywords define a conditional statement. A case statement can contain one or more conditional statements.

- search\_condition—Any logical expression that can be evaluated to true or false. This expression may be constructed using any values, identifiers, logical operator, comparison operator, or scalar functions (including date and math functions) supported by SAQL. Examples of valid search condition syntax:
  - xInt < 5</li>price > 1000 and price <= 2000</li>units\*round(price per unit) < abs(revenue)</li>
- result\_expr—Any expression that can be evaluated by the SAQL engine. May contain values, identifiers, and scalar functions (including date and math functions). The expression may evaluate to any data type. However, this data type must be consistent among all conditional statements. That is, if result\_expr is of NUMERIC type, then result\_expr2 ... result\_exprN must be of NUMERIC type. Examples of valid result expr syntax:
  - xInt
     toString('orderDate', "dd/MM/yyyy")
     "abc"

#### else

(Optional)—Allows a default expression to be specified. The else statement must follow the conditional when/then statements. There can be only one else statement.

default\_expr—Any expression that can be evaluated by the SAQL engine. May contain values, identifiers, and scalar
functions (including date and math functions). The data type must be consistent with the data type of result\_expr specified
in the preceding conditional statements.

### Usage—Searched Case Expression

Conditional statements are evaluated on a row by row basis in the order in which they are given. If a <code>search\_condition</code> evaluates as <code>true</code>, the corresponding <code>result\_expr</code> is returned for that row. Therefore, if more than one of the conditional statements returns <code>true</code>, only the first one is evaluated. At least one <code>when/then</code> statement must be provided. An unlimited number of <code>when/then</code> statements may be provided.

A default\_expr may be set with the optional else statement. If none of the search\_condition expressions evaluate to true, the default\_expr expression is returned. If no else statement is specified, null is returned as the default.

#### Syntax—Simple Case Expression

```
case primary_expr
    when test_expr then result_expr
    [ when test_expr2 then result_expr2 ... ]
    [ else default_expr ]
end
```

#### case...end

The case and end keywords begin and close the statement.

primary\_expr—Any scalar expression that can be evaluated by the SAQL engine. May contain values, identifiers, and scalar functions (including date and math functions). The expression may evaluate to any comparable data type (NUMERIC, STRING, or DATE). Examples of valid primary expr syntax:

```
- xInt % 3
- date('year', 'month', 'day')
- "abc"
```

Note: A scalar expression takes single values as input and outputs single values. When used with the case statement, the input values can be any expression that is valid in the context of a foreach statement.

#### when...then

The when and then keywords define a conditional statement. A case statement can contain one or more conditional statements.

- test\_expr—Any scalar expression that can be evaluated by the SAQL engine. This expression may be constructed using
  any values, identifiers, and scalar functions (including date and math functions), but must evaluate to the same data type as the
  primary expr. Examples of valid test expr syntax:
  - <del>-</del> 5
  - "abc"
  - abs(profit)
- result\_expr—Any scalar expression that can be evaluated by the SAQL engine. May contain values, identifiers, and scalar functions (including date and math functions). The expression may evaluate to any data type. However, this data type must be consistent among all conditional statements. That is, if result\_expr is of NUMERIC type, then result expr2...result exprN must be of NUMERIC type. Examples of result expr syntax:
  - xInt
  - toString('orderDate', "dd/MM/yyyy")
  - "abc"

#### else

(Optional) The else keyword allows a default expression to be specified. The else statement must follow conditional when/then statements. There can be only one else statement.

default\_expr—Any scalar expression that can be evaluated by the SAQL engine. May contain values, identifiers, and scalar functions (including date and math functions). The data type must be consistent with the data type of result\_expr specified in the preceding conditional statements.

#### Usage—Simple Case Expression

Conditional statements are evaluated on a row by row basis in the order that they are given. If primary expr == test expr for a given conditional statement, the corresponding result expr is returned for that row. At least one when/then statement must be provided. An unlimited number of when/then statements may be provided.

A default expr may be set with the optional else statement. If primary expr doesn't equal any of the test expr conditions, the default expr is returned. If no else statement is specified, null is returned as the default.



Tip: This simple case expression syntax is shorthand for a common instance of the searched case expression syntax. The first statement is simple case expression syntax and the second is searched case expression syntax. Both statements have the same meaning.

```
case primary expr
     when test expr then result expr
     when test expr2 then result expr2
else default expr
case
     when primary_expr == test_expr then result expr
     when primary expr2 == test expr2 then result expr2
else default expr
```

#### **New Keywords**



Important: These new keywords are no longer valid SAQL identifiers: case, when, then, else, end. As of Winter '16, any syntax that uses these five keywords, in lowercase, results in a syntax error. Dashboards built with custom SAQL and Wave REST API code that uses custom SAQL may be affected by this change. To use these keywords as identifiers, enclose them in single quotation marks.

The following query is still legal:

```
q = load "data";
q = foreach q generate Case as CASE, 'else';
q = filter q by 'end' == 0;
```

In the previous example, Case, else, and end are field names from the dataset called "data". Case and CASE are not keywords because SAQL is case-sensitive and only case is a keyword. The characters 'else' and 'end' are not keywords because they are enclosed in single quotation marks.

In this example, the use of when as an identifier is illegal. To make the syntax valid, surround the word in single quotes: 'when'.

```
q = load "data";
q = foreach q generate when;
q = filter q by when < toDate("01/05/2015", "mm/dd/yyyy");
```

#### Using case Statements

Use case statements in foreach clauses. Don't use case statements in order by, group by, or filter by clauses.

**Example:** This example guery uses the simple case expression syntax:

```
q = load "data";
q = foreach q generate xInt, (case xInt % 3)
      when 0 then "3n"
```

```
when 1 then "3n+1"
      else "3n+2"
end) as modThree;
```

**Example**: This example query uses the searched case expression syntax:

```
q = load "data";
q = foreach q generate price, (case
      when price < 1000 then "category1"
      when price >= 1000 and price < 2000 then "category2"
     else "category3"
end) as priceLevel;
```

#### Handling Null Values

In general, null values can't be compared. When search condition, primary expr, or test expr evaluates to null, the default expr specified by else (or null if no else clause is provided) is returned. For instance, the following query returns "Other" whenever Mea1 evaluates to null:

```
q = load "data";
q = foreach q generate Meal, (case Meal
      when 0 then "Type1"
     when 1 then "Type2"
      else "Other"
end) as Category;
```

However, it is possible to specifically a condition on a null value by using the is null and is not null operations.

```
q = load "data";
q = foreach q generate Meal, (case
     when Meal is null then "Is Null"
      else "Is Not Null"
end) as Category;
```

## Best Practices for Working with Dates

Before you use date values in case statements, use the SAQL toDate () function to convert the date values from strings or Unix epoch seconds. Doing do ensures the most consistent comparisons.



#### Example:

```
q = load "data/dates";
q = foreach q generate OrderDate, (case
      when toDate(OrderDate epoch secs) < toDate("2/1/2015", "M/d/yyyy") and
toDate(OrderDate epoch secs) >= toDate("1/1/2015", "M/d/yyyy") then "Jan"
     else "Other"
end) as Month;
```

## Order a Cogrouped Stream Before a foreach Statement

You can order a cogrouped stream before a foreach statement.

This SAQL orders from the left stream before the foreach statement:

```
a = load "0Fbxx00000002qCAA/0Fcxx00000002WCAQ";
b = load "0Fayy00000002qCAA/0Fbyy00000002WCAQ";
c = cogroup a by year, b by year;
c = order c by a.airlineName;
c = foreach c generate year as year;
```

### **SAQL Math Functions**

Use the SAQL math functions to perform numeric operations in SAQL queries.

You can use SAQL math functions in foreach statements and in the filter by clause after a foreach statement.

You can't use SAQL math functions in group by or order by clauses, or in the filter by clause before a foreach statement. This table lists the SAOL math functions:

Function	Description
ABS ( <b>n</b> )	Returns the absolute number of $n$ as a numeric value. $n$ can be any real numeric value in the range of -1e308 $<= n <=$ 1e308.
	These examples are valid:
	abs(-1.2345) = 1.2345
	<pre>q = foreach q generate abs(pct_change) as pct_magnitude;</pre>
	These examples are invalid:
	<pre>q = group q by abs(pct_change); q = order q by abs(pct_change);</pre>
CEIL(n)	Returns the nearest integer of equal or greater value to $n$ . $n$ can be any real numeric value in the range of -1e308 $<= n <= 1e308$ .  These examples are valid:
	ceil(-1.2345) = -1 ceil(1.2345) = 2
	<pre>q = foreach q generate ceil(miles) as distance;</pre>
	These examples are invalid:
	<pre>q = group q by ceil(miles); q = order q by ceil(miles);</pre>
FLOOR( <b>n</b> )	Returns the nearest integer of equal or lesser value to $n$ . $n$ can be any real numeric value in the range of -1e308 <= n <= 1e308.
	These examples are valid:
	floor(-1.2345) = -2 floor(1.2345) = 1

Function	Description		
	<pre>q = foreach q generate floor(miles) as distance;</pre>		
	These examples are invalid:		
	<pre>q = group q by floor(miles); q = order q by floor(miles);</pre>		
TRUNC(n[, m])	Returns the value of the numeric expression $n$ truncated to $m$ decimal places. $m$ can be negative, in which case the function returns $n$ truncated to $-m$ places to the left of the decimal point. If $m$ is omitted, it returns $n$ truncated to the integer place. $n$ can be any real numeric value in the range of -1e308 $<=$ n $<=$ 1e308. $m$ can be an integer value between -15 and 15 inclusive.		
	These examples are valid:		
	trunc(-1.2345) = -1 trunc(1.2345) = 1 trunc(2.355, 2) = 2.35 trunc(-3455.8, -1) = -3450		
	<pre>q = foreach q generate trunc(Price, 2) as Price;</pre>		
	These examples are invalid:		
	trunc(1.2345, 2.5) trunc(1.2345, 1000)		
	<pre>q = group q by trunc(Price, 2); q = order q by trunc(Price, 2);</pre>		
ROUND(n[, m])	Returns the value of $n$ rounded to $m$ decimal places. $m$ can be negative, in which case the function returns $n$ rounded to $m$ places to the left of the decimal point. If $m$ is omitted, it returns $n$ rounded to the nearest integer. For tie-breaking, it follows round half way from zero convention. $n$ can be any real numeric value in the range of $-1e308 <= n <= 1e308$ . $m$ can be an integer value between $-15$ and $15$ , inclusive.		
	These examples are valid:		
	round(-1.2345) = -1 round(2.355, 2) = 2.36 round(-3455.8, -1) = -3460		
	<pre>q = foreach q generate round(Price, 2) as Price;</pre>		
	These examples are invalid:		
	round(1.2345, 2.5) round(1.2345, 1000)		
	<pre>q = group q by round(Price, 2); q = order q by round(Price, 2);</pre>		

## Access More Data with the Wave REST API (Pilot)

You can now access Wave Analytics dashboards by using the Wave REST API. This release also includes other enhancements to the Wave REST API.



**Note**: We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee that it will become generally available within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features. Services provided by the Wave REST API are subject to change. Support is not provided.

#### **New Resources**

The following resources have been added to the Wave REST API.

Resource	Description	Supported HTTP Method	Resource URL
Dashboards List	Returns a list of Wave Analytics dashboards.	GET	/services/data/v35.0/wave/dashboards
Dashboard	Returns the Wave Analytics dashboard with the specified ID.	GET	/services/data/v35.0/wave/ dashboards/ <dashboard id=""></dashboard>
Lens File	Returns a JSON file that describes the structure of a Wave Analytics lens.	GET	/services/data/v35.0/wave/ lenses/ <lens id="">/files/<file id=""></file></lens>

#### **New Methods**

The following methods have been added to the Wave REST API.

- PUT on the XMD User resource (/wave/datasets/ID/versions/ID/xmds/user)
- GET on the Folders List resource (/wave/folders)
- PUT, PATCH, and DELETE on the Folder resource (/wave/folders/<folder ID>)

## **New Properties**

The following properties have been added to the Column representation, which is used by the Lens State, Lens State Input, and Multi-query Step representations.

- header: The header text for the column
- hidden: Indicates whether the column is hidden
- showBars: Indicates whether to show bars for the column
- sort: The sort order for the column

### **Removed Properties**



Warning: The folderId property is no longer supported on the Folder resource (/wave/folders/<folder ID>). The folder ID is now returned in the id property of the Folder resource. If you are using the folderId property, change your code to use the id property instead.

For more information about the Wave REST API resources, see the Wave REST API Developer's Guide (Pilot).

## Learn Wave Analytics with Trailhead

Trailhead is the fun and free way to learn Salesforce. Now you can get acquainted with Wave Analytics through Trailhead, using a special Wave-enabled Developer Edition org.



For the Wave Analytics trails, you can't use an old Developer Edition org. You must sign up for the special Developer Edition that comes with a limited Analytics Cloud Wave Platform license and contains sample data required for the Wave trails.

To access all of the Wave Analytics trails, start here: https://developer.salesforce.com/trailhead/trail/wave\_analytics\_explorer. You'll find the sign up for the special Developer Edition org in the Wave Analytics Basics trail.

SEE ALSO:

Wave Analytics Limits

## Reports and Dashboards: Let Data Drive Your Actions

Make informed decisions using Reports and Dashboards. Lightning Experience brings a heap of enhancements. Animated, interactive charts illustrate data. A robust new report run page is easier to read and filter. And a new dashboard editor supports more than three columns and features components that span multiple columns and rows.



Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



#### IN THIS SECTION:

#### Redesigned Reports and Dashboards Home Pages (Lightning Experience)

We've redesigned the Reports and Dashboards home pages in Lightning Experience so that it's easier to find and create reports and dashboards. This feature is available in Lightning Experience only.

#### Create Beautiful Dashboards Using a New, Feature-Rich Editor (Lightning Experience)

Lightning Experience introduces a new dashboard editor that'll usher in a whole new generation of dashboards. This feature is available in Lightning Experience only.

#### Present and Share Information in Interactive Dashboards (Lightning Experience)

Interactive dashboard components give viewers more information and link to data-supplying reports. This feature is available in Lightning Experience only.

#### Get More Information from Interactive Charts and Filters on the New Report Run Page (Lightning Experience)

In Lightning Experience, new features on the report run page ensure that reports answer even your toughest questions. This feature is available in Lightning Experience only.

#### Reports and Dashboards: Compatibility Between Lightning Experience and Salesforce Classic

Check out these tables to learn about compatibility between reports and dashboards created in Lightning Experience and Salesforce Classic.

#### Exclude the Confidential Information Disclaimer from Reports (Salesforce Classic)

By default, report footers include a disclaimer that reads "Confidential Information - Do Not Distribute." The disclaimer reminds users to be mindful of who they share reports with, helping to ensure that third parties don't view your reports. At your discretion, exclude the disclaimer from your reports. This feature is available in Salesforce Classic only.

#### New Names for Reporting Products and Features

The names of some products and features have changed.

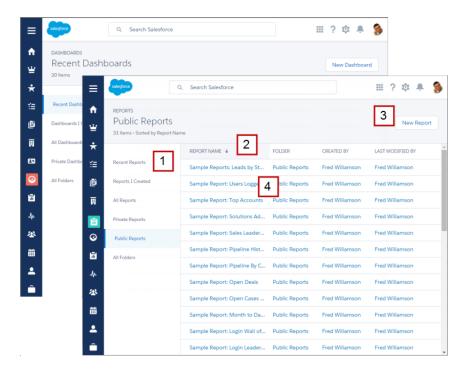
#### SEE ALSO:

How and When Reports and Dashboards Features Become Available Labels Streamlined in Setup

Reports and Dashboards REST API

## Redesigned Reports and Dashboards Home Pages (Lightning Experience)

We've redesigned the Reports and Dashboards home pages in Lightning Experience so that it's easier to find and create reports and dashboards. This feature is available in Lightning Experience only.



#### Find Your Report or Dashboard (1)

Filtered lists are the fastest way to find the report or dashboard you're looking for. For example, you can quickly find the Open Deals report you were reading last Friday in Recent Reports.

Folders let you group related reports or dashboards, so they're easy to find again later.

#### Sort the List of Reports or Dashboards (2)

Click a column heading to sort by name, folder, creator, or whoever last modified a report or dashboard. Click again to reverse the sort order.

#### Build a New Report or Dashboard (3)

On the Reports home page, launch the report builder by clicking **New Report**. In Lightning Experience, you build reports just like you did in Salesforce Classic using the report builder.

On the Dashboards home page, click **New Dashboard** to launch the brand new dashboard editor.

#### View a Report or Dashboard (4)

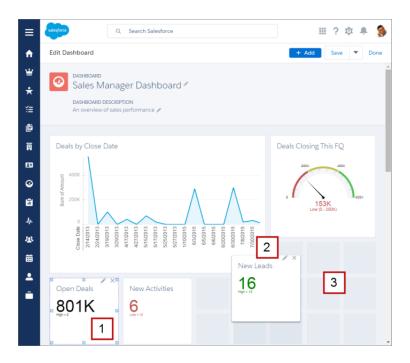
To run and view a report or open a dashboard, click its name.

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Create Beautiful Dashboards Using a New, Feature-Rich Editor (Lightning Experience)

Lightning Experience introduces a new dashboard editor that'll usher in a whole new generation of dashboards. This feature is available in Lightning Experience only.



#### **Customize Dashboard Components (1)**

Drag the corners and sides of dashboard components to scale them up or down. Components can span multiple columns and rows, so you can show more fields on a graph without needing to scroll. Charts automatically resize to match component size.

To choose the report that provides data for the component, chart type, the report data drawn in the chart, chart title, or range, click



#### Drag and Drop Dashboard Components (2)

Arrange dashboard components more easily than ever.

#### Create Dashboards with More than Three Columns (3)

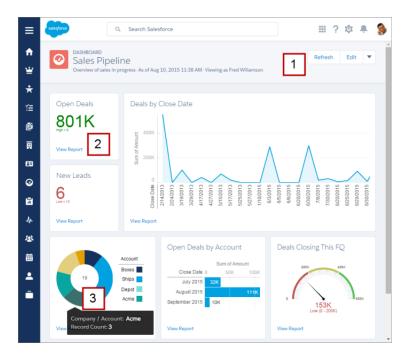
The foundation of each dashboard is a responsive grid, so you can compare metrics side-by-side-by...

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Present and Share Information in Interactive Dashboards (Lightning Experience)

Interactive dashboard components give viewers more information and link to data-supplying reports. This feature is available in Lightning Experience only.



#### Refresh, Edit, Clone, Save, or Delete a Dashboard (1)

The buttons and drop-down menu at the top of each dashboard provide one-click access to administrative tasks.

#### View a Component's Underlying Report (2)

Have more questions about a metric or chart? Click **View Report** to drill into the data.

#### Hover Over Charts to Learn More (3)

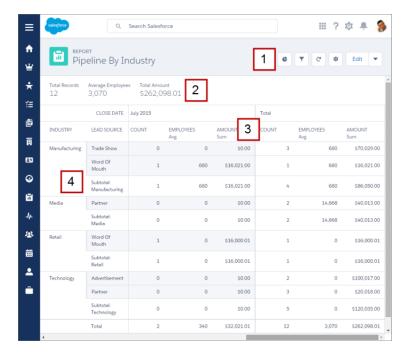
Hovering over a chart segment reveals more details.

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

## Get More Information from Interactive Charts and Filters on the New Report Run Page (Lightning Experience)

In Lightning Experience, new features on the report run page ensure that reports answer even your toughest questions. This feature is available in Lightning Experience only.



#### Get More from Your Report (1)

A set of toggles helps you get the info you need from a report.

- Show or hide a chart a report chart.
- Add, remove, or change report filters. After applying a filter, the report automatically refreshes to show filtered data. You no longer have to open the report builder to filter a report.
- Refresh your report to show the latest data.
- Show or hide subtotals, grand totals, and record counts from your report.

To customize the report further, click **Edit** to launch the report builder.

The drop-down menu provides one-click access to saving, cloning, and deleting the report.

#### See Key Info at the Top of a Report (2)

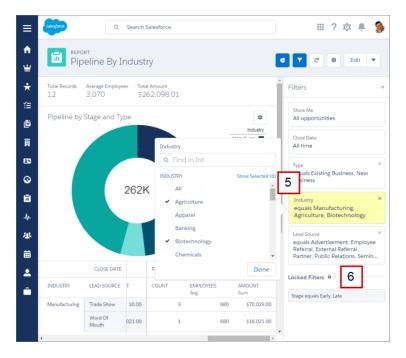
Quickly review key metrics at a glance before digging into the report.

#### Headers Float on Both the X and Y Axes (3)

While reading a report, you always know what field you're reviewing without needing to scroll.

#### **Groupings Are Easier to Read (4)**

A redesigned format ensures that you always know how data is grouped.

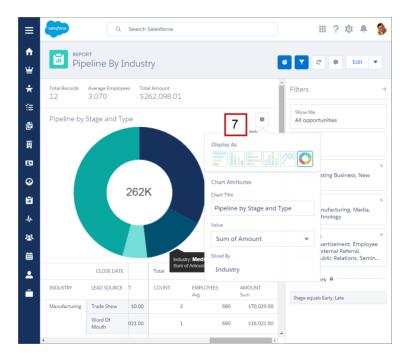


#### Add, Remove, and Edit Report Filters (5)

You no longer have to open the report builder to filter the report your reading. If you want to see your sales pipeline for the apparel industry, edit the Industry filter accordingly and your report refreshes.

#### Lock Filters (6)

If you want to share a report about your late-stage sales pipeline and don't want to share early-stage data, lock the Stage filter. Locked filters can't be edited on the report run page. You lock and unlock filters in the report builder.



#### **Customize the Report Chart (7)**

Change the chart type, title, and more from the chart options menu (\*\*).

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Reports and Dashboards: Compatibility Between Lightning Experience and Salesforce Classic

Check out these tables to learn about compatibility between reports and dashboards created in Lightning Experience and Salesforce Classic.

#### Reports and Dashboards created in Salesforce Classic

Feature	<b>Available in Lightning Experience</b>	Available in Salesforce1
Edit Dashboards	<b>▽</b>	
View Dashboards	<b>▽</b>	<b>✓</b>
Edit Reports	✓	
View Reports	✓	<b>▽</b>
Share and Rename Folders	Sharing rules set on report and dashboard folders in Salesforce Classic are obeyed in both Lightning Experience and Salesforce1. Users can't set sharing rules by folder in Lightning Experience nor Salesforce1.	
View and Open Folders	✓	

#### Reports and Dashboards created in Lightning Experience

Feature	Available in Salesforce Classic	Available in Salesforce1
Edit Dashboards		
View Dashboards	<b>▽</b>	<b>v</b>
	•	In Salesforce 1, dashboards with more than three columns adhere to the column limits of whichever device they're viewed on.

Feature	Available in Salesforce Classic	Available in Salesforce1
	with three columns (retaining all dashboard components).	Dashboards retain all dashboard components.
Edit Reports	✓	
View Reports	✓	<b>▽</b>

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

## Exclude the Confidential Information Disclaimer from Reports (Salesforce Classic)

By default, report footers include a disclaimer that reads "Confidential Information - Do Not Distribute." The disclaimer reminds users to be mindful of who they share reports with, helping to ensure that third parties don't view your reports. At your discretion, exclude the disclaimer from your reports. This feature is available in Salesforce Classic only.

You can exclude the disclaimer in Setup under **Reports and Dashboards Settings**.

## New Names for Reporting Products and Features

The names of some products and features have changed.

- Salesforce1 Reporting is now called Salesforce Reports and Dashboards.
- Salesforce1 Reporting API via Apex is now called Salesforce Reports and Dashboards API via Apex.
- Salesforce1 Reporting REST API is now called Salesforce Reports and Dashboards REST API.

References to these products and features in the user interface and documentation have been updated to use the new names.

## Service: Enhanced Design for Agents, More Automation for Administrators

Help your support team deliver incredible service faster. A redesigned service console lets your team spot customer data in a flash. Agents can also attach files more quickly to cases and better monitor times on service agreements. Agents using web chat can raise a virtual flag to get help from supervisors, and administrators can block sensitive data from chats in real time. Administrators can also approve social media posts before they go public and suspend a data sync connection between Salesforce organizations while deploying changes.

#### IN THIS SECTION:

#### Salesforce Console for Service

The Salesforce Console for Service is an app that gives support agents quick access to customer data to deliver superior service with fewer clicks. This feature is available in Salesforce Classic only.

#### Live Agent

Live Agent lets service organizations connect with customers or website visitors in real time through a Web-based, text-only live chat. This feature is available in Salesforce Classic only.

#### Push Work to Qualified, Available Support Agents with Omni-Channel (Generally Available)

We're pleased to introduce the greatest thing to happen to your contact center since the hands-free headset. Omni-Channel is the Service Cloud's comprehensive customer service solution that pushes work to agents in real time, right from the Salesforce console!

#### Cases: Support Customers Faster in Lightning Experience

Answering your customers' questions is easier than ever in Lightning Experience. The reorganized case layout puts the information you need most up front and center and helps you spot comments and history in a flash. This feature is available in Lightning Experience only.

#### Case Feed

Case Feed gives support agents a more streamlined way of creating, managing, and viewing cases. It includes publishers, which let agents create notes, log calls, change case statuses, and communicate with customers in a feed. This feature is available in both Lightning Experience and Salesforce Classic.

#### SOS Video Chat and Screen-Sharing Now on Android

You asked for it—we delivered. You can now use SOS, the Service Cloud's mobile support solution, with both iOS and Android. With SOS, you can add a help button to your native iOS or Android mobile application that lets your customers connect with agents over a two-way video or audio chat.

#### Service Communities

Chatter Questions, Chatter Answers, and Ideas provide customers with a self-service community where they can post questions and receive answers from other customers or support agents, as well as post, vote for, and comment on innovative ideas. With Question-to-Case, moderators can escalate questions in Chatter to cases, making it easier to track and resolve your customers' issues. These features are available in Salesforce Classic only.

#### Social Customer Service

Social Customer Service is the next-generation integration between Radian6 and the Salesforce Service Cloud. Customer service agents can engage with their customers by responding to cases created from Twitter and Facebook. Salesforce Adminstrators can customize how the inbound social content is processed using an Apex class and they can configure who in their organization has permission to respond using social accounts. This feature is available in Salesforce Classic only.

#### **Entitlement Management**

Entitlement Management lets you and your support agents verify and fulfill customers' support contracts. This feature is available in Salesforce Classic only.

#### Organization Sync

Looking for a way to give your users access to Salesforce during maintenance and planned upgrades? Organization Sync lets you set up a secondary, synced Salesforce organization where users can work when your primary organization is unavailable. This feature is available in Salesforce Classic only.

#### Assets: Keep Track of Your Customers' Products

Make it easy for support agents to know exactly what products a customer has when the customer contacts support. Assets let you keep track of the products that customers have purchased from you, making it simple for support agents to check the serial number, version, and other relevant details so they can provide better service.

#### Knowledge

Salesforce Knowledge is your Knowledge Centered Support certified knowledge base. This feature is available in Salesforce Classic only.

#### Email-to-Case

Email-to-Case helps your company efficiently receive and resolve cases via email. This feature is available in Salesforce Classic only.

#### MacroInstruction API Lets You Easily Migrate Macros

We've added API support for macros, so that you can migrate macros from one Salesforce organization to another. For example, you could test macros in a sandbox and migrate them to a production org.

#### SEE ALSO:

How and When Service Features Become Available Labels Streamlined in Setup

### Salesforce Console for Service

The Salesforce Console for Service is an app that gives support agents quick access to customer data to deliver superior service with fewer clicks. This feature is available in Salesforce Classic only.

#### IN THIS SECTION:

#### Introducing the Lightning Service Console

The Salesforce console is now the Lightning Service Console, and it looks better than ever. Its enhanced design makes it easier for sales reps and support agents to spot the information they need to get their jobs done faster. This feature is available in Salesforce Classic only.

#### New Methods for the Console Integration Toolkit

You can customize a console programmatically using the Salesforce Console API. This feature is available in Salesforce Classic only.

#### Other Changes in the Salesforce Console

We've made it easier for console users to work with lists.

### **EDITIONS**

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

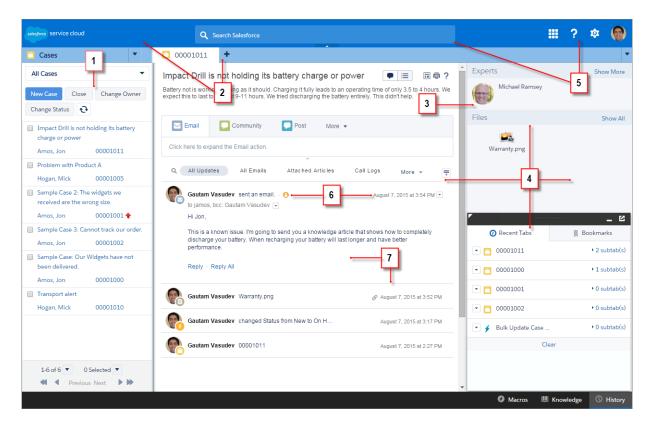
Available in: **Performance** and **Developer** Editions with the Sales Cloud

Available in: **Enterprise** and **Unlimited** Editions with the Sales Cloud for an extra cost

## Introducing the Lightning Service Console

The Salesforce console is now the Lightning Service Console, and it looks better than ever. Its enhanced design makes it easier for sales reps and support agents to spot the information they need to get their jobs done faster. This feature is available in Salesforce Classic only.

Here's what the redesigned console looks like.



- 1. Simpler lists with responsive columns and buttons to see more details without scroll bars.
- 2. Custom colors for branding headers and footers, and new color options for primary tabs.
- 3. Slicker sidebars to display custom console components better.
- 4. Extra space to improve searching and reading experiences.
- **5.** Cleaner header to get right to search, apps, and settings.
- 6. More modern fonts and icons with a consistent look.
- 7. Neater case feed for easier scanning.

The improved console is based on extensive customer feedback and is turned on for everyone; you can't turn it off. The console aligns with the new Lightning Experience, but it's available through the App menu on Salesforce Classic and App Launcher on Lightning Experience.



Note: The accessibility features introduced in Lighting Experience aren't available in the Lightning Service Console.

## New Methods for the Console Integration Toolkit

You can customize a console programmatically using the Salesforce Console API. This feature is available in Salesforce Classic only.

New and updated methods are available to help developers and advanced administrators update console tabs. For more information, see Salesforce Console API (Integration Toolkit) on page 476.

## Other Changes in the Salesforce Console

We've made it easier for console users to work with lists.

#### IN THIS SECTION:

#### Zoom on Lists

Users can now press keyboard shortcuts in a Salesforce console to zoom in on lists and easily spot items. This feature is available in Salesforce Classic only.

#### **Responsive Lists**

Users can now see redesigned lists in a Salesforce console, and each list automatically responds to list resizing. This feature is available in Salesforce Classic only.

#### Zoom on Lists

Users can now press keyboard shortcuts in a Salesforce console to zoom in on lists and easily spot items. This feature is available in Salesforce Classic only.

After you enable the zoom shortcut, console users can press N+Z to zoom in on lists on the navigation tab. To zoom out of lists, users press Z again. To enable keyboard shortcuts, see "Customize Keyboard Shortcuts for a Salesforce Console" in the Salesforce Help.

#### **Responsive Lists**

Users can now see redesigned lists in a Salesforce console, and each list automatically responds to list resizing. This feature is available in Salesforce Classic only.

As part of the console's updated design, lists appear more modern and automatically adjust so that users can see the information they need. Lists also include new edit and delete icons next to items. When pinned, lists now wrap text and align columns and buttons responsively.

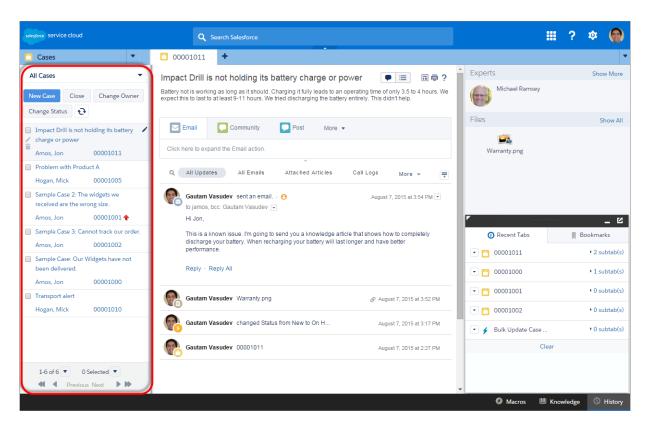
Here's what responsive lists look like.

#### **EDITIONS**

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

Available in: **Performance** and **Developer** Editions with the Sales Cloud

Available in: **Enterprise** and **Unlimited** Editions with the Sales Cloud for an extra cost



To get the most out of responsive lists, we recommend that you add the most important columns first so that they display at minimal sizes. To turn off responsive lists, deselect Responsive Lists on each console app's edit page. See "Create a Salesforce Console App" in the Salesforce Help.

## Live Agent

Live Agent lets service organizations connect with customers or website visitors in real time through a Web-based, text-only live chat. This feature is available in Salesforce Classic only.

#### IN THIS SECTION:

#### Block Sensitive Data in Chats

Your customers' privacy is as important to Salesforce as it is to you. That's why we're giving you the ability to block sensitive data in chats in real time.

#### Let Agents Raise a Flag for Help

Live Agent declares the end of spitballs and paper airplanes in the service center. Now agents who need help can raise a virtual flag that shows up in the supervisor panel. Supervisors are alerted of agents in trouble and can help them immediately via the Agent Status panel.

## EDITIONS

Live Agent is available in: **Performance** Editions and **Developer** Edition

organizations that were

created after June 14, 2012

Live Agent is available for an additional cost in: **Enterprise** and **Unlimited** Editions

#### Empower Your Supervisors to Assign Skills to Agents

Power to the people! Once upon a time, assigning skills to your agents required a middleman: your administrator. But no more. We've added a permission, "Assign Live Agent Skills to Users," that can give this power to your support supervisors or anyone else who needs it.

#### Extreme Makeover II: Live Agent Edition

We made Live Agent look better for support agents in our last release. Now we've brought this same goodness to your customers!

#### Time Customers Out After a Period of Inactivity

"Are you still there?..." When customers neglect to end a chat, it can waste a lot of your agents' time. So we've created a customer time-out feature on chat buttons and automated invitations that lets you end chats after the customer's been silent for too long.

#### See IDs of Attached Records in Your Post-Chat Data

Post-chat lets you share information with customers at the end of a chat. For example, you can direct customers to another web page or forward them to a survey about their chat experience. Post-chat data now includes the IDs of the Salesforce records attached to the chat, such as the case, contact, or lead.

SEE ALSO:

Labels Streamlined in Setup

#### Block Sensitive Data in Chats

Your customers' privacy is as important to Salesforce as it is to you. That's why we're giving you the ability to block sensitive data in chats in real time.

With Live Chat sensitive data rules, you can block specific patterns, such as credit card, Social Security, phone, and account numbers, or even profanity. You can choose to remove the text or replace it with your preferred characters.

You write a sensitive data rule as a JavaScript regular expression (regex), and you can test and preview the rule before activating it.

You can block the text from agents, supervisors, customers, or all the above. When a rule is triggered, it logs one of these new chat transcript events:

- Sensitive data blocked (Agent)
- Sensitive data blocked (Supervisor)
- Sensitive data blocked (Visitor)

Create these rules under Setup > Live Agent > Sensitive Data Rules.

A few considerations:

Sensitive data is visible while someone's typing, but is masked when the person sends it. So if you want to mask customer information from agents, we recommend disabling Agent Sneak Peek.

Sensitive data rules apply to the auto-greeting and any quick text that you have enabled. They don't apply to the agent name or other standard text in the chat window.

## Let Agents Raise a Flag for Help

Live Agent declares the end of spitballs and paper airplanes in the service center. Now agents who need help can raise a virtual flag that shows up in the supervisor panel. Supervisors are alerted of agents in trouble and can help them immediately via the Agent Status panel.

Either the agent or the supervisor can lower the flag when the issue is resolved. A flag action is recorded as one of these metrics in the agent's session activity:

- Assistance Flags Raised
- Assistance Flags Lowered (Agent)
- Assistance Flags Lowered (Supervisor)

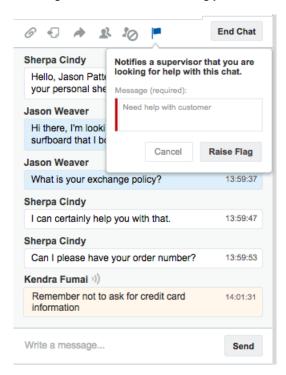
A flag action logs one of these new chat transcript events:

- Flag Raised
- Flag Lowered by Agent

• Flag Lowered by Supervisor

You enable the Assistance Flag per configuration under **Setup** > **Live Agent** > **Live Agent Configurations**.

#### Agent view with the Raise Flag panel



## Time Since Last Accept Message to Supervisor (Optional) 1. Help needed! I don't know what to do here. 16:41 Turn off flag Action 14:33:17 Sherpa Melissa Bulnes: Hello Lucy Baxter, Viewina I'm Melissa Bulnes, your personal sherpa, how can I help you? 13:38:25 Jason Wang: Yes, I would like to return a tent I bought two days ago 13:38:36 Jason Wang: It arrived yesterday but I don't want it anymore 13:38:41 Jason Wang: What is your return policy? 14:33:19 Flag for Supervisor: Help needed! I don't know what to do here. 13:54:31 i)) Cindy Chang: Melissa, you should point her to the knowledge base Send Write a message...

#### Supervisor panel showing a Raised Flag message

## **Empower Your Supervisors to Assign Skills to Agents**

Power to the people! Once upon a time, assigning skills to your agents required a middleman: your administrator. But no more. We've added a permission, "Assign Live Agent Skills to Users," that can give this power to your support supervisors or anyone else who needs it.

Now your supervisors can quickly update skill assignments as the expertise of agents evolves. You can give supervisors this permission by either enabling "Assign Live Agent Skills to Users" on their profiles, or assigning it to individual users via a permission set.

When supervisors have the "Assign Live Agent Skills to Users" permission, they can go to **Setup** > **Live Agent** > **Skills** and update the assigned profiles or users under each skill.

## Extreme Makeover II: Live Agent Edition

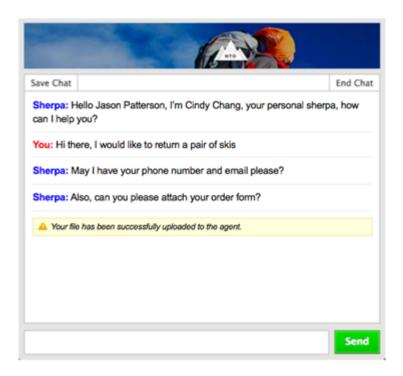
We made Live Agent look better for support agents in our last release. Now we've brought this same goodness to your customers! A few highlights:

- Participants' names are bolded and repeat only when the "speaker" changes.
- To better represent a dialog between the parties, agent responses align left, and customer responses align right.
- Different background colors distinguish who said what (blue = agent; white = customer).
- Time stamps show precisely when each reply was posted.

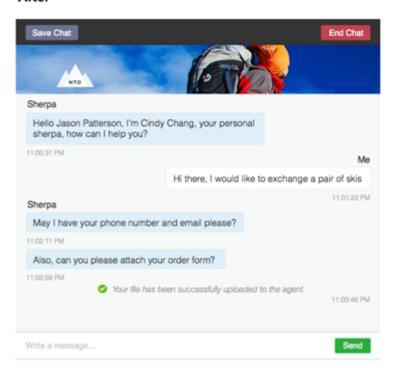
- Save and End Chat buttons have more prominent locations.
- Chat borders size to fit the text to help customers visually distinguish each response.

But don't worry: there aren't any functional changes with this visual update.

#### **Before**



#### After

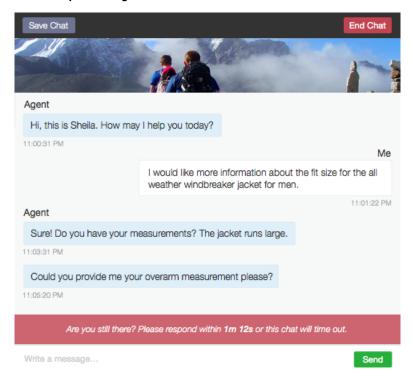


### Time Customers Out After a Period of Inactivity

"Are you still there?..." When customers neglect to end a chat, it can waste a lot of your agents' time. So we've created a customer time-out feature on chat buttons and automated invitations that lets you end chats after the customer's been silent for too long.

You can specify how long you want to wait before timing the customer out. And so that you don't suddenly ditch your customers, you can set a warning to appear before the chat times out. There's even a countdown timer to let them know how long they have to respond. If they respond before the time-out, the whole thing resets and you're back in business.

We create transcript events whenever a warning is presented or cleared, and when the chat times out. You can set the Customer Time-Out under **Setup** > **Live Agent** > **Chat Buttons & Invitations**.



#### See IDs of Attached Records in Your Post-Chat Data

Post-chat lets you share information with customers at the end of a chat. For example, you can direct customers to another web page or forward them to a survey about their chat experience. Post-chat data now includes the IDs of the Salesforce records attached to the chat, such as the case, contact, or lead.

Record IDs are available via the Messages Response Objects in the ChatEnded message. See the REST API on page 447 section for more information.



**Note**: Changes to attached records (via the Attach to Transcript icon) after the chat has ended aren't reflected in the post-chat data.

## Push Work to Qualified, Available Support Agents with Omni-Channel (Generally Available)

We're pleased to introduce the greatest thing to happen to your contact center since the hands-free headset. Omni-Channel is the Service Cloud's comprehensive customer service solution that pushes work to agents in real time, right from the Salesforce console!

Use Omni-Channel to create work items from Salesforce records and route them to the most qualified, available agents in your organization. That's right: You can automatically route most Salesforce objects in a Salesforce Queue—including cases, leads, chats, and SOS video calls—to your agents.

With Omni-Channel, you can set the priority of work items to make sure that critical assignments get taken care of quickly. You can manage your agents' capacity and availability for work to ensure that they're given only the number of assignments that they can handle. You can also define which

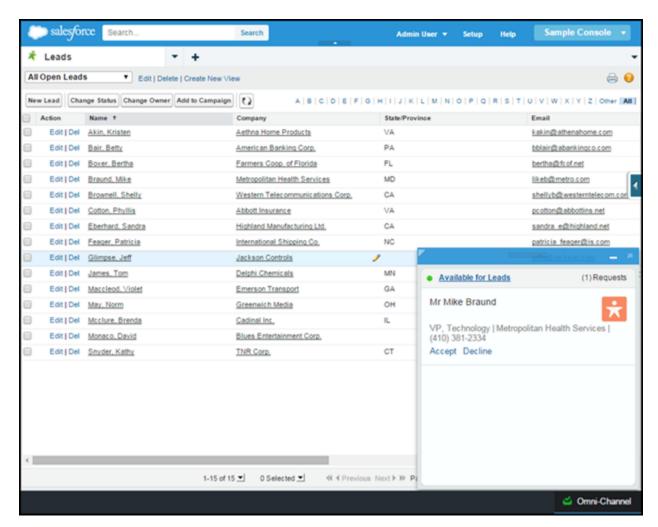
Available in: Salesforce
Classic

Omni-Channel is available
in: Enterprise, Performance,
Unlimited, and Developer

**Editions** 

agents can work on different types of assignments. Best of all, agents no longer have to pick and choose work items manually from a queue, and managers no longer have to triage or dispatch work to agents. Work is served to the most qualified available agent in real time!

Omni-Channel integrates seamlessly into the Salesforce console, so it's easy for your support agents to use. Agents can accept work assignments right from the Omni-Channel widget in the console.



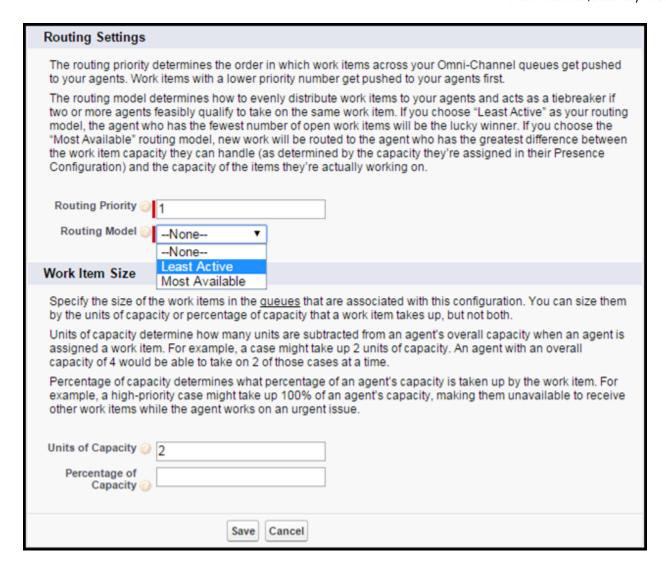
#### Turn a Salesforce Record into a Work Item with Service Channels

Service Channels let you turn most Salesforce objects such as a case, lead, SOS session, or even a custom object into a work item. Omni-Channel then plucks these work items from their Queues—like flowers from the garden of agent productivity—and routes them to your agents in real time.



## Define How Work Items Are Pushed to Agents with Routing Configurations

Routing Configurations determine how work items are routed to agents. They let you prioritize the relative importance and size of work items across your Omni-Channel Queues. Because not all work items take the same amount of effort, use Routing Configurations to control the relative size of items in your queues so agents can give the right amount of attention to their work. That way, the most important work items are handled quickly, and work is evenly distributed to your agents.



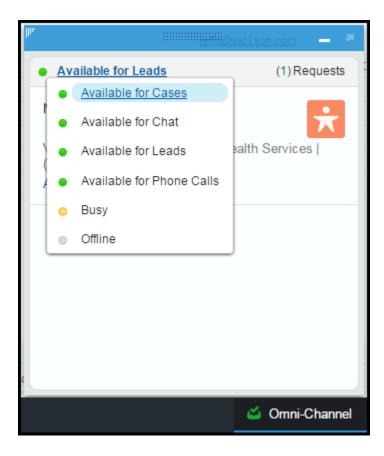
## Assign Users and Routing Configurations to Queues to Start Pushing Work Items to Agents

Associate routing configurations with a Salesforce Queues. The items in that Queue are pushed to your agents based on the settings in the Routing Configuration. You can integrate existing Queues into Omni-Channel.

## Available? Offline? Busy? Let Agents Define Their Availability with Presence Statuses

Presence Statuses indicate how "present" your agents are to receive work while they're signed into Omni-Channel. Create statuses to indicate whether an agent is away or available to receive incoming work items.

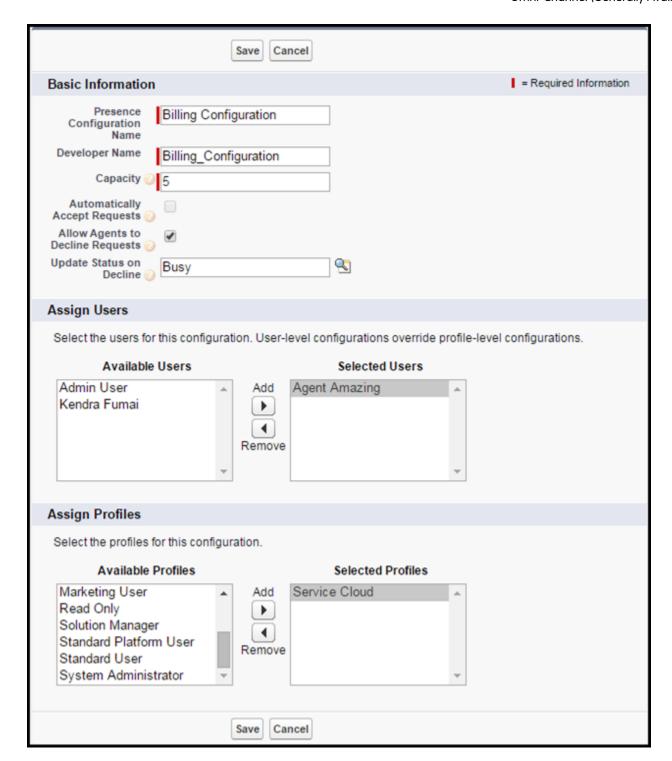
Presence Statuses are associated with one or more Service Channels. Agents who are signed in with online statuses can receive work items from those channels. If you have agents who can handle different work items at the same time, those agents can log in with a Presence Status that's associated with both of those channels.



## Define Agents' Omni-Channel Settings with Presence Configurations

Presence Configurations determine how much work agents can take on and what Omni-Channel behaviors they can access while they assist customers. You can have multiple configurations for different types or groups of agents who handle different work. Each agent can be assigned to only one Presence Configuration. Unless you assign them to another configuration, all your agents are assigned to the Default Presence Configuration, which Salesforce creates for you automatically to get you started quickly.

Use Presence Configurations to specify your agents' overall capacity for work items that is, the amount of work an agent can take on at a time. You can also indicate how agents can interact with work that's assigned to them, such as whether they can decline assignments.



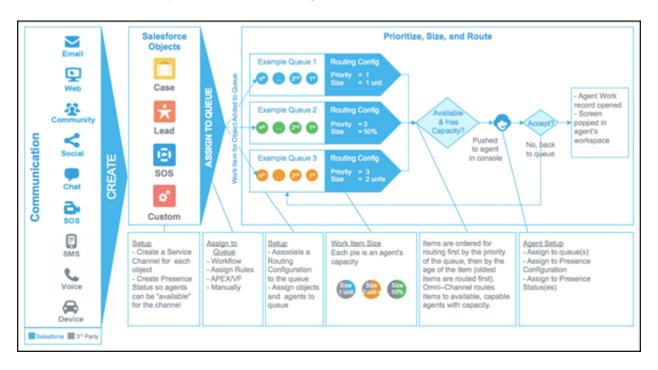
## Run Reports on Your Agents' Availability and Work Assignments

Gain insight into your Omni-Channel agents' activities with custom reports. You can run reports on your agents' Presence Statuses and their work assignments.

Want to know how much time your agents spend in a certain state or make sure they're meeting compliance standards? Run a report or create a dashboard on the User Presence object. The User Presence object tracks your agents' statuses throughout their Omni-Channel sessions.

Maybe you want to take a peek at how your agents are managing their work assignments. Create reports on the Agent Work object to see how many work items your agents accept and decline, their average speed to answer, or average handle times.

Here's an overview of how all the pieces of Omni-Channel fit together.



You can provide feedback and suggestions for Omni-Channel on the IdeaExchange. To learn more about setting up Omni-Channel and efficiently pushing work items to your agents, see *Set UpOmni-Channel*.

## Cases: Support Customers Faster in Lightning Experience

Answering your customers' questions is easier than ever in Lightning Experience. The reorganized case layout puts the information you need most up front and center and helps you spot comments and history in a flash. This feature is available in Lightning Experience only.

With case feed integration in Lightning Experience, support agents can check on cases' latest updates quickly, share suggestions with a click, and provide better service faster.

## EDITIONS

Available in Lightning Experience in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Case Feed

Case Feed gives support agents a more streamlined way of creating, managing, and viewing cases. It includes publishers, which let agents create notes, log calls, change case statuses, and communicate with customers in a feed. This feature is available in both Lightning Experience and Salesforce Classic.

#### ----

#### Available in:

**EDITIONS** 

- Enterprise
- Performance
- Unlimited
- Developer

#### IN THIS SECTION:

## Make It Easier for Agents to Update Case Info with Global Quick Actions and Custom Quick Actions in the Console Sidebar

Let your service agents quickly manage case information and records without interrupting their workflow. You can add quick actions as components to the Service Console sidebar, so agents can create records, update case info, search for related info, and link to parent records—all without ever leaving the tab. Fewer mouse clicks, a cleaner and more intuitive console interface, and the ability to quickly find the info agents need: it's the recipe for agent productivity and customer happiness.

#### Cut the Clutter with Custom Feed Filters

Custom feed filters let support agents quickly block out noise in their case feeds, so they can focus on the info most relevant to them. You can define filters to show only feed items that meet specified criteria. For example, you can show only feed items for customer interactions, so agents can see what info has been communicated to the customer.

#### Apply Feed Filters in Case Feed with Just One Click

Inline feed filters let you maximize Service Console screen real estate and improve usability so that support agents can focus on what's most important: solving customer issues. Agents can apply feed filters by clicking a link in the console page instead of opening a drop-down menu and then selecting the filters. Fewer mouse clicks plus less screen clutter = happier and more productive agents!

#### Improved File Widget Lets Agents Quickly Find and Attach Files in Case Feed

We've made key usability improvements to the file widget in Case Feed, so support agents can attach and find files with few mouse clicks. Now it's easier for agents to drag and drop files from their desktops to emails in Case Feed, attach files from Chatter and other sources to Case Feed emails, and find files.

#### Long Email Subject Lines Are No Longer Truncated, Making Them Easier to Read

Support agents can now use and see a maximum of 650 characters in email subject lines displayed using the Email Publisher in Case Feed. Previously, the Email Publisher supported only 100 characters, and subject lines over the character limit were truncated.

## Make It Easier for Agents to Update Case Info with Global Quick Actions and Custom Quick Actions in the Console Sidebar

Let your service agents quickly manage case information and records without interrupting their workflow. You can add quick actions as components to the Service Console sidebar, so agents can create records, update case info, search for related info, and link to parent records—all without ever leaving the tab. Fewer mouse clicks, a cleaner and more intuitive console interface, and the ability to quickly find the info agents need: it's the recipe for agent productivity and customer happiness.

## EDITIONS

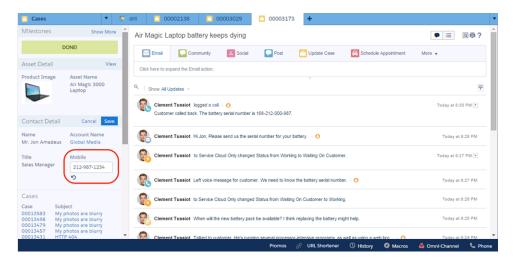
#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

#### Update case-related info on the fly

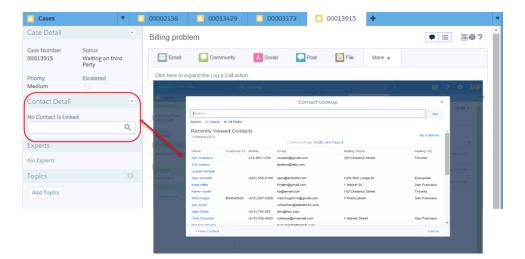
So, your support agent is working on a case and finds out that the case contact has a new phone number. Instead of leaving the case tab, opening the Contacts tab, and navigating the Contacts

Detail page to find the phone number field, the agent can update the phone number directly from the console sidebar.



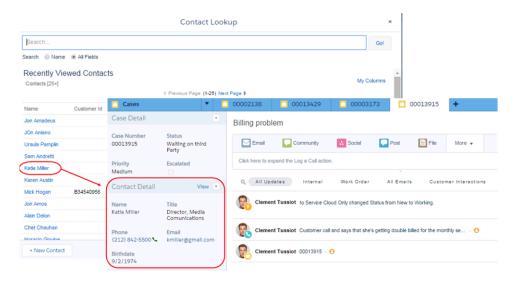
#### Search for case info

Quickly look up info related to cases in the console sidebar. For example, if no contact is listed, an agent can quickly look up the contact person, so the agent can provide relevant support.



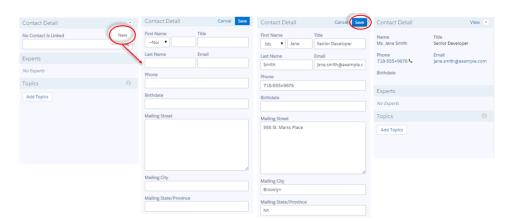
#### Link to parent records

Agents can look up and link parent records to the current record directly from the Service Console sidebar, so it's easier to find related information without navigating to other tabs. For example, agents can select a contact from the Lookup window and add it to the current case.



#### Create case-related records

Want to create a record that's related to your case? No problem! Now agents can click a button in the Service Console and quickly enter the new info. For example, while an agent is working on a case, the customer contact person changes. The agent can create a contact in a snap, using the intuitive and modern console.



To set up global and custom quick actions in the Service Console, first create the global quick action (for the Create action) and the custom quick action (for the Update action). Create actions must be global quick actions. Update actions must be object-specific quick actions that are based on the lookup field object type. For example, to update a contact lookup field, you must have a contact-specific update action. For detailed instructions, see Create Global Quick Actions and Create Object-Specific Quick Actions.

After you've created the quick actions, add them as components to the case page layouts so that the quick actions are available for your agents to use:

- 1. From Setup, enter "Case" in the Quick Find box, then select **Page Layouts**.
- 2. Select the page to which you want to add the quick actions and click Edit.
- **3.** In the Case Layout page, select **Custom Console Components**.
- 4. Go to the Sidebar section where you want to add the component (for example, go to the Left Sidebar section).
- 5. For Type, select Lookup.
- **6.** For Field, select the related field that the quick action acts on.

- 7. Select **Enable Linking** to allow support agents search for a record and link it to a related record. For example, a support agent can link a contact name to a case.
- 8. For Create Action, select the global guick action that creates a record. For example, a global action can create a contact.
- 9. For Update Action, select the quick action that updates a record. For example, a quick action can update a field on the contact.
- 10. Click Save.

SEE ALSO:

Idea Delivered: Enter New Contacts on the Fly When Opening a New Case

### Cut the Clutter with Custom Feed Filters

Custom feed filters let support agents quickly block out noise in their case feeds, so they can focus on the info most relevant to them. You can define filters to show only feed items that meet specified criteria. For example, you can show only feed items for customer interactions, so agents can see what info has been communicated to the customer.

Previously, only standard feed filters, which showed one feed item type at a time, were available for Case Feed. Custom feed filters are available only in the Service Console with Case Feed.

If a feed filter isn't selected, then Case Feed shows all feed items, including internal and external communications.

# EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, **Developer** with a Service Cloud license

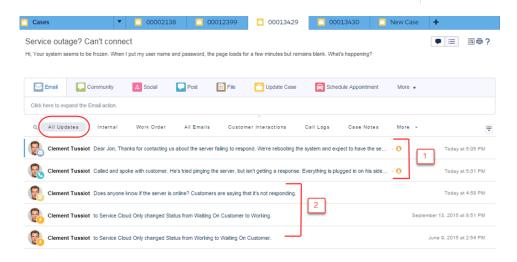
### **USER PERMISSIONS**

To create and edit page layouts:

"Customize Application"

To assign page layouts:

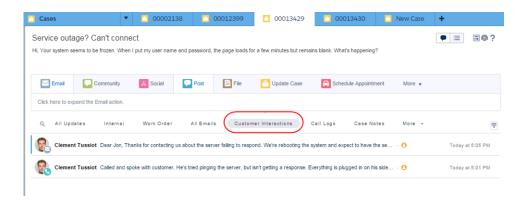
"Manage Users"



- 1. Customer-facing communications, such as emails and phone calls.
- 2. Internal-only communications, such as status changes and posts to internal users.

When a custom feed filter is selected, Case Feed shows only feed items specified by the custom filter. For example, you can create a filter that shows interactions with a customer. When support agents apply this filter, Case Feed shows email messages and case comments

that are visible to external users, such as customers. Other feed items—such as status changes, internal posts, and so on—are filtered out.



To create a feed filter, from Setup, enter Cases in the Quick Find box and then select **Feed Filters**. Define the criteria used to filter the feed items. After you've created a custom feed filter, add the filter to the list of selected filters in the Feed Filter Options section of the page layout's Feed View settings.

Field	Description
Feed Item Type	Specifies the feed type to include in the filter. For example, the Created Record feed item type shows feed items about new records.
Related Object	Specifies the object associated with the selected feed item. The list includes all objects related to the Case object. The objects in the list vary depending on how your organization is set up. For example, if you selected Created Record as the feed item type, you might select Case as the related object. This filter then shows new Cases.
Visibility	Specifies whether to include a feed item in the filter based on the feed item's visibility. The visibility depends on the security and sharing settings for the related object. Visibility can include either All Users or Internal Users. For example, suppose that you selected Case Comment Feed as the feed item type and Internal Users as the visibility. This feed filter then shows case comments made by internal users.

SEE ALSO:

Apply Feed Filters in Case Feed with Just One Click

# Apply Feed Filters in Case Feed with Just One Click

Inline feed filters let you maximize Service Console screen real estate and improve usability so that support agents can focus on what's most important: solving customer issues. Agents can apply feed filters by clicking a link in the console page instead of opening a drop-down menu and then selecting the filters. Fewer mouse clicks plus less screen clutter = happier and more productive agents!

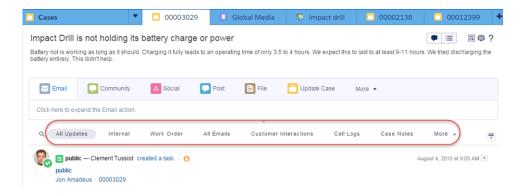
# **USER PERMISSIONS**

To create and edit page layouts:

"Customize Application"

To assign page layouts:

"Manage Users"



Inline feed filters are available only in compact feed. If compact feed isn't enabled on the page layout, then the inline feed filter option isn't shown.

To display feed filters as inline links:

- 1. From Setup, enter Cases in the Quick Find box, then select Page Layouts.
- 2. In the Case Page Layouts section, select the page layout that you want to add the inline feed filters to.

  If you don't have any page layouts, create a layout by clicking New. Make sure to select **Feed-Based Layout**.
- **3.** In the Case Layout section, click **Feed View**.
- **4.** Scroll to the Feed Filter Options section at the bottom of the Case Layout page.
- 5. For the setting Filters Appear, select As inline links in compact feed view in the console.
- 6. Click Save.

The filters that you selected in the case feed settings are displayed as inline links in the console.

**SEE ALSO:** 

Cut the Clutter with Custom Feed Filters

# Improved File Widget Lets Agents Quickly Find and Attach Files in Case Feed

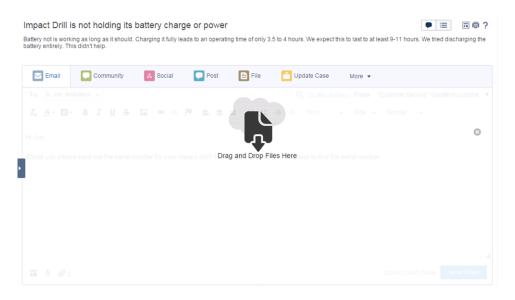
We've made key usability improvements to the file widget in Case Feed, so support agents can attach and find files with few mouse clicks. Now it's easier for agents to drag and drop files from their desktops to emails in Case Feed, attach files from Chatter and other sources to Case Feed emails, and find files.

### Seamlessly drag and drop files

Previously, support agents had to upload a file to the File Widget before they could attach it to a case or an email. Now, users can drag files from the file widget or their computer directly into the Email Publisher in Case Feed, saving at least five mouse clicks.

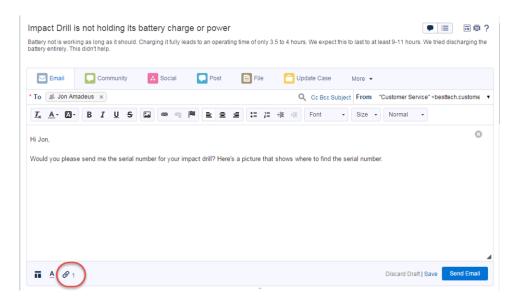


Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with a Service Cloud license



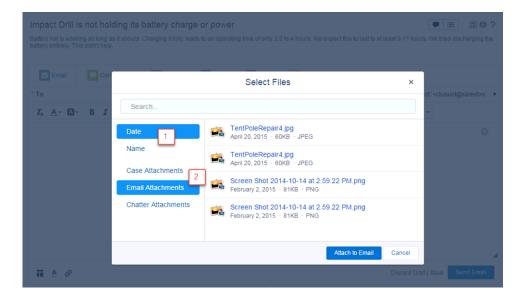
### Easily add files from Chatter and other emails to cases

Previously, support agents were limited in the files they could attach to emails in the Case Feed. If an agent wanted to add a file from Chatter or from another email, the agent had to download it and then upload it. Now, agents can easily attach files from case attachments, Chatter, and email attachments to Case Feed emails, making it simpler to share info with customers and other agents. The number of attachments to an email is shown in the email publisher footer, making it easy to see if a file's been attached successfully.



### **Quickly filter duplicate attachments**

We've also made it easier for agents to find the most recent file when there are multiple attached files with the same name. Only the most recent file is shown in the "Recent item" view. Agents can still see all attachments in the "All items" view.



In the file browser, agents can:

- 1. Search for files by date and name.
- 2. Filter files by origin. For example, if agents know that they received a file in an email, they can look in Email Attachments to see only files from emails.

# Long Email Subject Lines Are No Longer Truncated, Making Them Easier to Read

Support agents can now use and see a maximum of 650 characters in email subject lines displayed using the Email Publisher in Case Feed. Previously, the Email Publisher supported only 100 characters, and subject lines over the character limit were truncated.

SEE ALSO:

Idea Delivered: Increase the Number of Characters in Subject Field: Case Emails

# EDITIONS

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

# SOS Video Chat and Screen-Sharing Now on Android

You asked for it—we delivered. You can now use SOS, the Service Cloud's mobile support solution, with both iOS and Android. With SOS, you can add a help button to your native iOS or Android mobile application that lets your customers connect with agents over a two-way video or audio chat.

Gone are the days when your customers had to connect with a nameless, faceless agent over a phone call. SOS is integrated into the Salesforce console for the Service Cloud, meaning that with just one click, your customers can see the agents they're speaking to while your agents provide personalized, in-app guidance with video chat, screen-sharing, and agent annotations. Your customers get a comprehensive, personal support experience, and your agents have the information they need in the console to solve customer issues.

# **EDITIONS**

SOS is available for an additional cost in:

Enterprise, Performance,
Unlimited, and Developer
Editions



SOS is also fully integrated into Omni-Channel, the Service Cloud's routing engine that allows you to customize how work items are routed to your agents. SOS calls are routed to the most available, capable agents in your organization in real time.

For more information on integrating SOS into your mobile applications, ask your Salesforce account team about the SOS iOS SDK & Android SDK.

For more information on configuring SOS, see Set Up SOS Video Chat and Screen-Sharing.

# **Service Communities**

Chatter Questions, Chatter Answers, and Ideas provide customers with a self-service community where they can post questions and receive answers from other customers or support agents, as well as post, vote for, and comment on innovative ideas. With Question-to-Case, moderators can escalate questions in Chatter to cases, making it easier to track and resolve your customers' issues. These features are available in Salesforce Classic only.

### IN THIS SECTION:

### Hide or Expose Case Emails in the Community Case Feed

Support agents can now expose or hide individual case emails in the case feed of community users. This feature is automatically available in Winter '16 in organizations where the community case feed and compact case feed are enabled. This feature is available in Salesforce Classic only.

# **EDITIONS**

Chatter Questions is available in: Personal, Group, Professional, Developer, Performance, Enterprise, and Unlimited Editions

Question-to-Case is available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Chatter Answers is available in: **Enterprise**, **Developer**, **Performance**, and **Unlimited** Editions

Ideas is available in: **Enterprise**, **Developer**,

Enterprise, Developer, Performance, Unlimited, and Professional Editions

# Hide or Expose Case Emails in the Community Case Feed

Support agents can now expose or hide individual case emails in the case feed of community users. This feature is automatically available in Winter '16 in organizations where the community case feed and compact case feed are enabled. This feature is available in Salesforce Classic only.

# Important:

- For communities built on the Koa, Kokua, or Napili template, use Chatter Case Detail or (if available) Record Detail as your active case detail page. Otherwise, community users don't see emails in their case feed.
- For agents to see the options to make a case email public or private, the community case feed and the compact case feed must be enabled in your organization.

# **EDITIONS**

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

If the community case feed is enabled in your organization, external community users see case Chatter posts, questions, and emails in their case feed. By default, if the case contact sends or receives a case email, that email appears in the feed of all users—both internal and external—with access to the case.

Now, the case owner and their superiors see a **Make Public** or **Make Private** option in the drop-down action list on case emails in the compact case feed in the console. Internal users who don't own the case also see these options on case posts or emails that they authored.



Note: Agents gained the ability to make case Chatter posts public or private in Summer '15.



An agent can click **Make Private** to remove the email from the case feed of the case contact and other external users with access to the case. (It still appears in the feeds of internal users on the case.) Agents might choose to make an email private in order to hide their correspondence with the case contact from other external users with access to the case.

Conversely, an agent can click **Make Public** to expose the email in the case feed of the case contact and other external users with access to the case. Agents might choose to make an email in the community case feed public in order to keep the case contact updated about internal progress on the case.



### Tip:

- The case feed offers handy visual cues to help agents quickly identify which case posts are externally visible. To learn about enabling these visual cues, see "Feed View Options" in Settings for Feed Views in Case Feed.
- You can write an Apex trigger or process to hide or expose all case emails from the community case feed of external users. For more information, see Emails in the Community Case Feed.

# Social Customer Service

Social Customer Service is the next-generation integration between Radian6 and the Salesforce Service Cloud. Customer service agents can engage with their customers by responding to cases created from Twitter and Facebook. Salesforce Adminstrators can customize how the inbound social content is processed using an Apex class and they can configure who in their organization has permission to respond using social accounts. This feature is available in Salesforce Classic only.



### Available in:

- Enterprise
- Performance
- Unlimited

### IN THIS SECTION:

### Approve Social Posts Before they are Public

Social care agents are both problem solvers for your consumers and the voice of your brand on social networks like Facebook and Twitter. You may have guidelines so your agents write with a consistent tone and syntax that's in line with your organization's social media strategy. For example, you may require social agents to sign their tweets in a standard manner, such as "~John."

### Default Response Handle

If you have a portfolio of managed social accounts you may want to specify a particular account as the default author for your Social Customer Service posts. Hence you can standardize and raise awareness of your brand's support by setting a dedicated support handle, for example @acmehelp or @acmesupport. Also, agents have fewer clicks when they are sending outbound posts because the chosen account appears as the default value in the account drop-down in the social publisher.

### More Social Networks to Provide Customer Care (Pilot)

Make your customers feel listened to and supported by engaging with them on the social networks where they're active. You can now add LinkedIn and Instagram to your list of social networks for providing customer care.

### Social Customer Service Experience Enhancements

Learn about other changes that affect Social Customer Service.

# Approve Social Posts Before they are Public

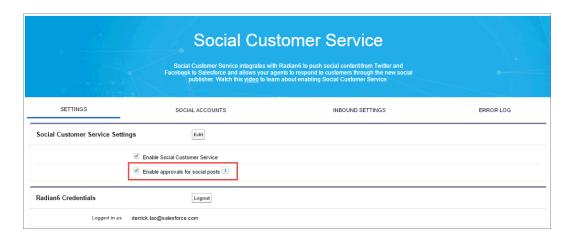
Social care agents are both problem solvers for your consumers and the voice of your brand on social networks like Facebook and Twitter. You may have guidelines so your agents write with a consistent tone and syntax that's in line with your organization's social media strategy. For example, you may require social agents to sign their tweets in a standard manner, such as "~John."

As part of a job training or quality review process, you may require some agents to have their posts approved rather than allowing them to post freely.

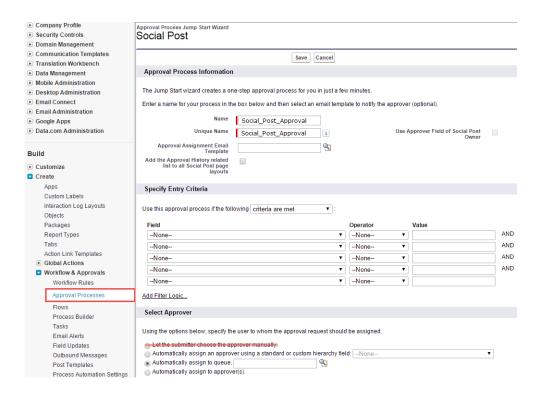
With approval processes and user permissions, selected agents can submit social posts for approval, recall the posts, and retry or resubmit them. Approvers can approve and reject posts for publication.

Salesforce Admins can create approval processes and assign agents and approvers permissions accordingly.

Start by selecting the Enable approvals for social posts checkbox on the Social Customer Service settings page in Setup.

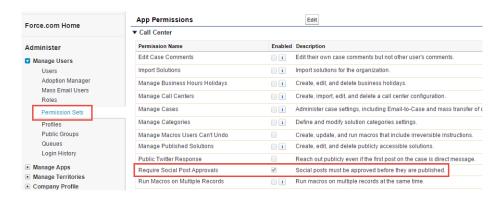


Next, build and activate approval processes for social posts using either the Jump Start Wizard or the Standard Setup Wizard.



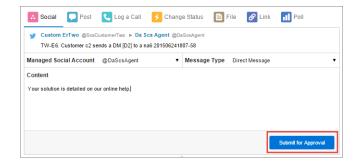
Note: The Jump Start Wizard is a popular streamlined way to create approval processes in Salesforce. However, the Let the submitter choose the approver manually option is not supported in the Jump Start Wizard. Choosing that option results in an error later when an agent submits a post for approval.

Then admins can enable the new Require Social Post Approvals user permission and assign it with a permission set

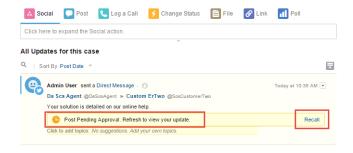


When assigning user permissions remember these two points.

- 1. Because approving a post automatically submits it for publishing, approvers must have the same access to social accounts as the agents whose work they're reviewing. Otherwise, the posts they approve result in an error.
- 2. If your user permissions include Require Social Post Approvals, then the submit button on the social publisher always reads **Submit for Approval** rather than "Comment," "Tweet," or other words. This is true even if no active approval process apply to the user. In that situation, clicking **Submit for Approval** publishes the social post normally since there is no active approval process in effect.



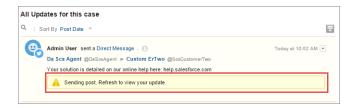
Once agents submit a post, they can recall it before it is approved.



If a post is rejected the agent can retry the post.



When a post is approved, it is automatically published.



Pending items can be approved in various ways within the Salesforce application, as well as on mobile devices and using one-word replies to email notifications. See Create an Approval Process, the Approval Process Checklist, and Useful Approval Processes. Specifically for social posts, the Social Posts tab has a Social posts pending approval list view that allows you to review multiple pending posts and approve or reject them as desired.



- Note: Once approvals are enabled, the Approve Posts and Reject Posts buttons remain on the Social Posts tab. However they don't work for inbound and posts not needing approval.
- Tip: If you approve a post from the Social posts pending approval list view and a system interruption, session timeout, or other unexpected issue prevents the post from being published on the intended social network, an error message displays on the individual case only, not on the list view. To help honor any commitments your company may have regarding response times on social networks, after approving posts from the list view, we recommend checking the posts' statuses to ensure they were sent successfully and don't need to be resent.
- Tip: If your agents work with social post record detail pages, rather than in the case feed, we recommend removing the approvals related list from the page layout. The same page layout is shared between inbound and outbound social posts. Removing the approvals related list avoids confusion when viewing an inbound post that is an invalid candidate for an approval process. Approvers can still approve or reject posts through all other normal means such as email, Chatter, and list views.

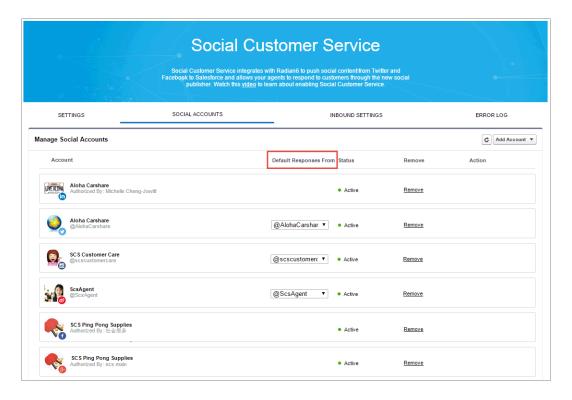
SEE ALSO:

Social Post Approval

# Default Response Handle

If you have a portfolio of managed social accounts you may want to specify a particular account as the default author for your Social Customer Service posts. Hence you can standardize and raise awareness of your brand's support by setting a dedicated support handle, for example @acmehelp or @acmesupport. Also, agents have fewer clicks when they are sending outbound posts because the chosen account appears as the default value in the account drop-down in the social publisher.

In Setup, on the Social Accounts tab on the Social Customer Service settings page (which can be found by typing <code>social c</code> in the Quick Find to narrow down the sidebar menu), you can set the <code>Default Responses From</code> for each Twitter, Instagram (pilot), and Sina Weibo (pilot) accounts.



The default response handle doesn't apply for Twitter direct messages and doesn't affect Facebook, Google Plus, or Linkedln, as they are restricted to the page handle itself.

# More Social Networks to Provide Customer Care (Pilot)

Make your customers feel listened to and supported by engaging with them on the social networks where they're active. You can now add Linkedln and Instagram to your list of social networks for providing customer care.



**Note**: Social Customer Service for LinkedIn and Instagram is currently available through a pilot program. For information on enabling these features in your organization, contact Salesforce.com.

Just like with Facebook, Twitter, Google+ (pilot), and Sina Weibo (pilot), you can monitor and respond to comments on your company's LinkedIn and Instagram pages, including on your mobile phone.



Comments made on your LinkedIn and Instagram pages automatically create a cases with social post items in the case feed. Agents simply click Reply to provide a personalized response.



**Note:** Instagram follows and @mentions are not supported. Only the agent's posts and customer comments under the agent's own posts are supported.

# Social Customer Service Experience Enhancements

Learn about other changes that affect Social Customer Service.

### **Case Source Field**

The case object has a new case source field on the case object that indicates the social post where the case originated. Agents and support managers can gain a better understanding of a case's context by seeing the original interaction that generated the case. You can add the case source field to the case object via its page layout.

### Persistence of Social Posts When Related Records Are Deleted

Social posts are no longer also deleted when their parent record, usually a case, is deleted. Similarly, if a social post is associated with an account, contact, or lead through the polymorphic Who field, deleting any of those related records does not affect the social post.

### **Twitter Direct Message User Setting**

Twitter has introduced a user setting, Receive Direct Messages from anyone, that allows users to receive messages from any other Twitter user, even if they do not follow the other user. This setting is off by default, meaning that unless they have manually enabled the new setting, users do not receive direct messages from any user they aren't following. When social customer service agents send a direct message, to ensure that the message is sent successfully, verify the outbound message's status in the case feed and/or confirm that the recipient is following the social account.

# **Entitlement Management**

Entitlement Management lets you and your support agents verify and fulfill customers' support contracts. This feature is available in Salesforce Classic only.

### IN THIS SECTION:

### Better Metrics for Tracking Milestone Completion

Ever wondered how long support agents spend unable to complete milestones? Now, your customer support managers and agents can track how long agents are "stopped" or blocked

from completing milestones. Service level agreements (SLAs) typically measure milestones in time, and agents must complete milestones by a deadline. Two new fields, Stopped Time and Actual Elapsed Time, give managers and agents more insight into milestone completion times and SLA compliance.s

# **Better Metrics for Tracking Milestone Completion**

Ever wondered how long support agents spend unable to complete milestones? Now, your customer support managers and agents can track how long agents are "stopped" or blocked from completing milestones. Service level agreements (SLAs) typically measure milestones in time, and agents must complete milestones by a deadline. Two new fields, Stopped Time and Actual Elapsed Time, give managers and agents more insight into milestone completion times and SLA compliance.s

The Stopped Time value is the total amount of time that the milestone clock was stopped between the time when the agent began working on a milestone and when the agent completed the milestone.

The Elapsed Time value is the amount of time between the time when the milestone clocked started and when the agent completed the milestone.

The Actual Elapsed Time value is the amount of time that it took the agent actively worked on the milestone. (Elapsed Time) - (Stopped Time) = (Actual Elapsed Time)

Enable Salesforce to track Stopped Time and Actual Elapsed Time, and then add the fields to your case page layouts:

- 1. Enable the **Enable stopped time and actual elapsed time** setting.
  - **a.** From Setup, enter *Entitlement Settings* in the Quick Find box, then select **Entitlement Settings**.
  - **b.** In the Milestone Stopped Time and Actual Elapsed Time section, select **Enable stopped time and actual elapsed time**.

# **EDITIONS**

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

# **EDITIONS**

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

### **USER PERMISSIONS**

To enable the stopped time and actual elapsed time fields:

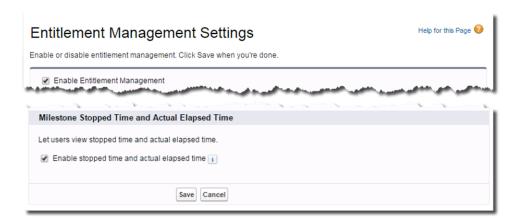
"Manage Entitlements"

To create and edit page layouts:

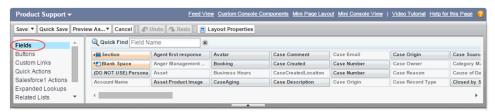
"Customize Application"

To assign page layouts:

"Manage Users"



- 2. After you've enabled this option, add the Stopped Time and Actual Elapsed Time fields to the case milestone page layout.
  - **a.** From Setup, enter *Cases* in the Quick Find box, then select **Page Layouts**.
  - **b.** Click **Edit** next to the case page layout that you want to add the fields to.
  - c. In the Page Name layout page, click Fields.



- **d.** Use the Quick Find search bar or scroll through the list of fields to find the Stopped Time field and the Actual Elapsed Time field.
- **e.** Drag the field to the case page layout section where you want the field to be.
- f. Click Save.
- Example: For example, suppose that a milestone must be completed within 8 hours to satisfy the SLA. At 9 am, when the agent begins working on a milestone, the milestone clock starts ticking. Suppose that the agent needs more info from the customer. At 10 am, the agent requests that info, and clicks the Stopped Time field to stop the milestone clock. The customer doesn't reply until three hours later, at 1 pm, at which point the agent resumes working on the milestone. The agent completes the milestone at 6 pm.

The Stopped Time is 3 hours, the period from 10 am to 1 pm when the agent couldn't work on the milestone.

The Actual Elapsed Time is 6 hours, because the agent actively worked on the milestone from 9-10 am (1 hour) and from 1-6 pm (5 hours).

The Elapsed Time is 10 hours, because the agent began working at 9 am and completed the milestone at 7 pm.

# **Organization Sync**

Looking for a way to give your users access to Salesforce during maintenance and planned upgrades? Organization Sync lets you set up a secondary, synced Salesforce organization where users can work when your primary organization is unavailable. This feature is available in Salesforce Classic only.

### IN THIS SECTION:

### Suspend Your Organization Sync Connection

You can now suspend your Organization Sync connection. This option pauses the syncing of all data between your organizations. This feature is available in Salesforce Classic only.

### Improvements to Sync Retries

A new Status column in the Organization Sync log makes it easier to track the progress of syncing retries, while a faster initial retry time speeds up the error resolution process. This feature is available in Salesforce Classic only.

### More Flexibility in Field Publishing

We've made some changes to the way fields are published in Organization Sync connections. This feature is available in Salesforce Classic only.

### Options to Sync Users and Metadata Go Their Separate Ways

Organization Sync customers can now opt to automatically sync user data, metadata, or both. If you prefer to just sync one or the other, separating these options makes it easier for you to implement your own syncing solution while still taking advantage of Salesforce's automatic syncing capabilities. This feature is available in Salesforce Classic only.

### SEE ALSO:

Labels Streamlined in Setup

# Suspend Your Organization Sync Connection

You can now suspend your Organization Sync connection. This option pauses the syncing of all data between your organizations. This feature is available in Salesforce Classic only.

Consider suspending your Organization Sync connection if:

- You're experiencing a very high volume of sync failures and need to diagnose and correct the issue
- You need to make significant changes in one or both organizations that will prevent data from syncing successfully

To suspend your connection, navigate to your connection's detail page in the primary organization and click **Suspend** at the top of the page.

# **EDITIONS**

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer



### Available in:

- Enterprise
- Performance
- Unlimited
- Developer



If you're using a two-way sync and want to suspend updates in both directions (recommended), click **Suspend** in the secondary organization as well. When the connection is suspended in both directions, updates made in either organization are added to the Organization Sync Record Queue. Suspending a connection in only one direction can lead to syncing errors.

### Impact on Users

For most users, nothing changes when the connection is suspended. Users with the "Manage Connections" permission will notice some changes on the connection detail page:

- A Resume button appears in place of the Suspend button.
- The Connection History log shows a recent Connection Admin Suspended event.
- The Connection Owner field and the options to sync metadata, users, and audit fields are still updateable. However, updates aren't sent to the linked organization until the connection is resumed.
- Depending on how long the connection has been suspended, the queue may contain more updates than usual.
- Users don't see updates made in the linked organization while the connection is suspended.

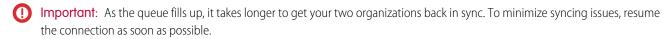
The connection owner and the user who suspended the connection also receive an email twice per day that provides the number of events in the queue.

(1) Important: If a user makes publishing or subscribing changes while the connection is suspended, those changes aren't saved.

### Resuming the Connection

When you're ready to resume the connection, click **Resume** on the connection detail page in the primary organization. If you suspended the connection in both directions, click **Resume** in the secondary organization as well.

When the connection is resumed, Salesforce starts sending updates in the queue to the linked organization. The time needed to process all of the queued updates varies depending on how large the queue is.



SEE ALSO:

Before You Suspend Your Organization Sync Connection

# Improvements to Sync Retries

A new Status column in the Organization Sync log makes it easier to track the progress of syncing retries, while a faster initial retry time speeds up the error resolution process. This feature is available in Salesforce Classic only.

When a user makes an update and the update fails to be sent to the linked organization, Salesforce retries sending the update multiple times. In Winter '16, the update is now added to the Organization Sync Log with a Retrying status as soon as it fails. After going through the retry process, the update appears a second time in the log with a status of either Failed or Resolved.

Note: Some syncing operations, such as the daily metadata sync and the bulk user sync, don't undergo the retry process. If they lead to failures, they appear once in the Organization Sync Log with a blank Status field.

# EDITIONS

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

In addition, we've cut down the time between the failure and the first retry from one hour to five minutes. You'll see this reflected in the Next Retry Date column in the Organization Sync Record Queue. The second retry still occurs two hours after the first retry.

The Organization Sync Log now has a limit of one million entries. When necessary, the oldest entries are periodically removed to stay within the limit.

And, two actions in the Organization Sync Record Queue were renamed for clarity:

- Initial Sync is now Bulk Sync
- Initial Sync Users is now Bulk Sync Users

# More Flexibility in Field Publishing

We've made some changes to the way fields are published in Organization Sync connections. This feature is available in Salesforce Classic only.

Previously, if a field was a lookup to an object that wasn't yet published, that field couldn't be published in Organization Sync. In Winter '16, lookup fields to unpublished objects appear in an object's list of publishable fields. They're not automatically published, but you can publish them by clicking **Edit** next to the object in the Publishing Objects section, selecting the field you want to publish, and clicking **Save**.

EDITIONS

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

For example, the Account ID field on contacts includes a lookup to accounts. If you haven't yet published the Account object, you can still publish the Account ID field on the Contact object. However, in most cases, we recommend only publishing a lookup field if the object that it references is already published.

If a custom field isn't published to your linked organization or doesn't exist because it's part of managed package, the syncing of this field was previously logged as an error in the Connection History log. In Winter '16, we no longer include these errors in the log.

Custom fields that contain a user lookup are now automatically published and subscribed to along with standard fields. This makes it extra important to keep user records current between your organizations. If a user lookup field on a record in either organization lists a user that hasn't been added to that organization, two things can happen:

- If the field is required, the record fails to sync.
- If the field is optional, the record syncs but the field is blank.



**Note**: If you're an existing customer who chose to leave customer user lookup fields unpublished on your published objects, don't worry. Those fields remain unpublished.

# Options to Sync Users and Metadata Go Their Separate Ways

Organization Sync customers can now opt to automatically sync user data, metadata, or both. If you prefer to just sync one or the other, separating these options makes it easier for you to implement your own syncing solution while still taking advantage of Salesforce's automatic syncing capabilities. This feature is available in Salesforce Classic only.

Previously, Organization Sync connections included a **Sync Metadata and Users** option. That option is now replaced by two options: **Sync Metadata** and **Sync Users**. These options appear as checkboxes on the connection invitation page if you're setting up a new connection, and at the top of the detail page for existing connections.



### Available in:

- Enterprise
- Performance
  - Unlimited
- Developer



Selecting the **Sync Metadata** checkbox syncs metadata daily from the primary to the secondary organization. You can edit this checkbox in the primary organization only.

Selecting the **Sync Users** checkbox syncs user data in real time in both directions between the primary and secondary organizations. If you want user updates to be synced only from the primary to the secondary organization, you can now deselect the **Sync Users** checkbox in the secondary organization. This prevents user updates from being sent back to the primary organization.

To minimize syncing issues, we recommend selecting both the **Sync Users** and **Sync Metadata** options. If you take a different approach, follow these best practices:

- If you choose to sync users but not metadata, develop your own processes to keep user-related metadata current in the secondary organization. If metadata such as user profiles are missing from the secondary organization, user replications may fail.
- If you choose to sync metadata but not users:
  - Develop your own processes to keep user records current in your organizations. If a record in the secondary organization references
    a user that doesn't exist in that organization, the field listing the user automatically updates to list the connection owner, and
    that field value then overwrites the correct value in the primary organization.
  - The Bulk Sync Users button no longer appears on the connection detail page in Winter '16. If you need to trigger the immediate replication of user records, see Managing User Data in Organization Sync for a workaround.

# Assets: Keep Track of Your Customers' Products

Make it easy for support agents to know exactly what products a customer has when the customer contacts support. Assets let you keep track of the products that customers have purchased from you, making it simple for support agents to check the serial number, version, and other relevant details so they can provide better service.

### IN THIS SECTION:

### Enable Feed-Based Page Layouts for Assets

Feed-based page layouts are supported on the Asset object. Feed-based layouts make it easy for support agents to quickly see the history of an asset. Previously, only the standard page layout was supported for the Asset object. This feature is available in Salesforce Classic only.

### Use Quick Actions on Assets

Quick actions are supported on the Asset object. Quick actions let your users quickly create and update asset records, and perform other actions that you define.

# Enable Feed-Based Page Layouts for Assets

Feed-based page layouts are supported on the Asset object. Feed-based layouts make it easy for support agents to quickly see the history of an asset. Previously, only the standard page layout was supported for the Asset object. This feature is available in Salesforce Classic only.

# EDITIONS

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# EDITIONS

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# Use Quick Actions on Assets

Quick actions are supported on the Asset object. Quick actions let your users quickly create and update asset records, and perform other actions that you define.

### SEE ALSO:

Make It Easier for Agents to Update Case Info with Global Quick Actions and Custom Quick Actions in the Console Sidebar

# EDITIONS

### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

# Knowledge

Salesforce Knowledge is your Knowledge Centered Support certified knowledge base. This feature is available in Salesforce Classic only.

### IN THIS SECTION:

### Reports and Lists of Knowledge Users

You can now create a list of and filter reports on all Knowledge users. Identifying Knowledge users is helpful for customer care supervisors to identify which agents can edit articles and for administrators to allocate and reallocate Knowledge user licenses.

# EDITIONS

Available in: **Performance** and **Developer** Editions

Available in: **Enterprise** and

**Unlimited** Editions for an

additional cost

### Article URLs for Communities in the Case Feed

In the Cases tab or the Service Console, agents can insert Community URLs for articles into the case feed. Customer service agents can easily provide their customers a link directly to articles in their Community.

### External Sources on Knowledge One

The Include in Salesforce Search parameter controls whether your external sources, connected via Lightning Connect or oData, appear in the Knowledge One home page.

### Other Changes for Salesforce Knowledge

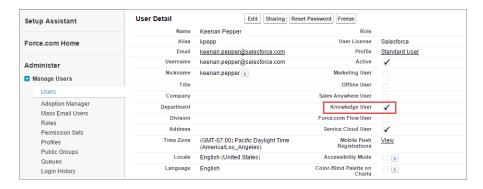
Learn about other changes that affect your Salesforce Knowledge users.

### SEE ALSO:

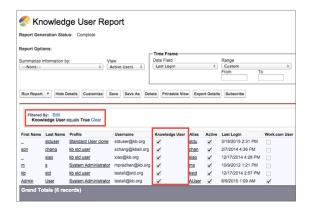
Labels Streamlined in Setup

# Reports and Lists of Knowledge Users

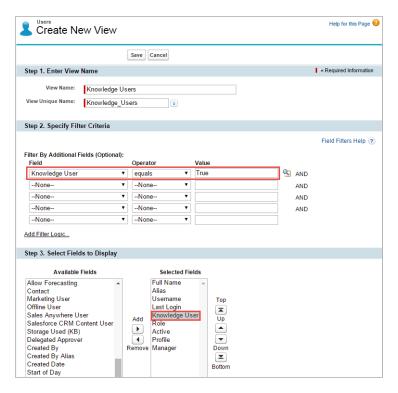
You can now create a list of and filter reports on all Knowledge users. Identifying Knowledge users is helpful for customer care supervisors to identify which agents can edit articles and for administrators to allocate and reallocate Knowledge user licenses.



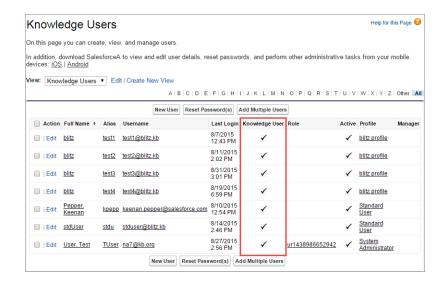
On reports, supervisors can filter on Knowledge User to identify agents with article edit access



Salesforce admins can create list views that include knowledge user information.



User lists can identify a Knowledge user without having to go into the user's personal detail page.



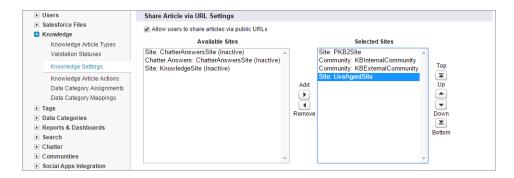
SEE ALSO:

Report on Knowledge Users

### Article URLs for Communities in the Case Feed

In the Cases tab or the Service Console, agents can insert Community URLs for articles into the case feed. Customer service agents can easily provide their customers a link directly to articles in their Community.

In Knowledge Settings (from Setup go to **Customize** > **Knowledge** > **Knowledge** Settings > **Edit**), identify which sites and Communities should be available in the Share Article Actions in Knowledge Articles.



Map a Communication Channel Mapping for each article type you want to have available for Community links and identify which channel and fields you want to use.

When you attach an article URL the community action, users are directed to view the article in the appropriate community. The article must be assigned to a community or public knowledge base channel for the option to be available. The agent must select the right Community URL for the article they are selecting and audience they are communicating with. The agent can select an article from the article widget or the knowledge sidebar. Email is the default action but agents can change to the Social or Community actions before they send the URL.



# External Sources on Knowledge One

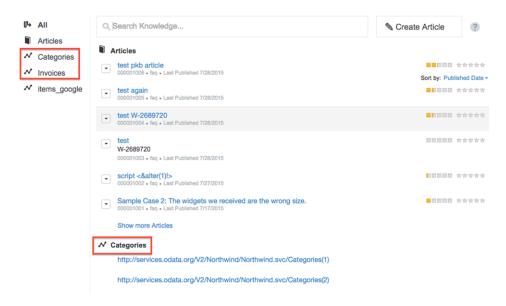
External Data Source: XDS external source

The Include in Salesforce Search parameter controls whether your external sources, connected via Lightning Connect or oData, appear in the Knowledge One home page.

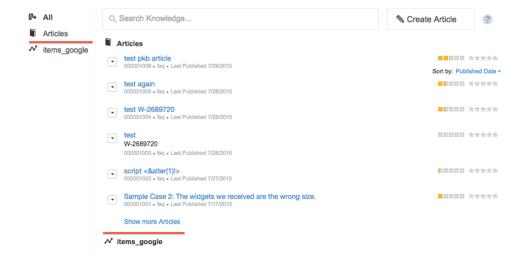
You can find the Include in Salesforce Search parameter when setting up or editing an external data source. From Setup, go to **Build > Develop > External Data Sources** and click the name of the external source.

# Connect to another Salesforce organization or a third-party database or content system. « Back to External Data Sources External Data Source XDS external source Name XDS\_external source Type Lightning Connect: OData 2.0 Parameters URL ② http://services.odata.org/V2/Northwind/Northwind.svc Connection Timeout (Seconds) ② 120 High Data Volume ② □ Server Driven Pagination ② □ Request Row Counts ② ✓ Compress Requests ② □ Include in Salesforce Searches ② □ Format ② AtomPub Special Compatibility ② Default V Authentication Certificate Identity Type ② Anonymous Authentication Protocol ② No Authentication

Check Include in Salesforce Search, if you want your external sources searched and visible on the Knowledge One home page.



Leave it unchecked if you don't want them searched or on the Knowledge One homepage.



# Other Changes for Salesforce Knowledge

Learn about other changes that affect your Salesforce Knowledge users.

### Thumbs Up or Down Ratings Count in Your Vote reports

The existing Article VoteStat report (which previously only contained totals for star ratings) now includes totals for the thumbs up or down ratings.

### Improved Performance for Knowledge One in the Salesforce Console

The Knowledge One sidebar in the Salesforce Console has significant improvements.

- It renders faster.
- The background color and font family matches the console.
- Agents can sort directly in the sidebar.
- Voting results are visible.

The article number is visible.

SEE ALSO:

Solution Helpfulness Rating

# **Email-to-Case**

Email-to-Case helps your company efficiently receive and resolve cases via email. This feature is available in Salesforce Classic only.

Available in: Professional, Enterprise, Performance, Unlimited, and Developer Editions.

IN THIS SECTION:

### Improvements to How Email-to-Case Works with Multiple Salesforce Instances

We've updated the code so that companies that use Salesforce and Email-to-Case can interact with each other without the hassle of duplicated cases. Emails that contain multiple Salesforce Email-to-Case email addresses now are routed to the proper case on the correct organization.

# Improvements to How Email-to-Case Works with Multiple Salesforce Instances

We've updated the code so that companies that use Salesforce and Email-to-Case can interact with each other without the hassle of duplicated cases. Emails that contain multiple Salesforce Email-to-Case email addresses now are routed to the proper case on the correct organization.

# EDITIONS

### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# MacroInstruction API Lets You Easily Migrate Macros

We've added API support for macros, so that you can migrate macros from one Salesforce organization to another. For example, you could test macros in a sandbox and migrate them to a production org.

You also can create macros programmatically.

SEE ALSO:

API Reference Guide: MacroInstruction

# EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with a Service Cloud license

# Mobile: Do More On the Go

Things keep getting better for sales reps on the go. The Salesforce1 mobile app gets a bit of a facelift, with an easier-to-read font, labels in the action bar to identify what each action is, and infinite scrolling on feeds and record pages. And new Notes and Files related lists make it a snap to stay up on business-critical resources. For the Service Cloud, empower your agents to provide personalized service to mobile customers with the SOS video chat and screen-sharing solution, now available for Android and iOS apps.

### IN THIS SECTION:

### Salesforce1: Boost Mobile Productivity With Related Notes and Files, Notifications, and More

The Salesforce1 mobile app helps sales reps stay up to date on their most-important records, activities, Chatter conversations, and dashboards and reports—from wherever they are. This release focuses on general usability improvements, better access to notes and files, richer notifications, and more controls for Chatter group owners and managers. Winter '16 also marks the end of support for Salesforce1 on Android 4.2 and 4.3 devices.

### SalesforceA

Manage users and view information for Salesforce organizations from your mobile device.

### SOS Video Chat and Screen-Sharing

You asked for it—we delivered. You can use SOS, the Service Cloud's mobile support solution, with both iOS and Android. With SOS, you can add a help button to your native iOS or Android mobile application that lets your customers connect with agents over a two-way video or audio chat.

### SEE ALSO:

How and When Mobile Features Become Available Labels Streamlined in Setup

# Salesforce1: Boost Mobile Productivity With Related Notes and Files, Notifications, and More

The Salesforce1 mobile app helps sales reps stay up to date on their most-important records, activities, Chatter conversations, and dashboards and reports—from wherever they are. This release focuses on general usability improvements, better access to notes and files, richer notifications, and more controls for Chatter group owners and managers. Winter '16 also marks the end of support for Salesforce1 on Android 4.2 and 4.3 devices.



Available in: All Editions except Database.com

### IN THIS SECTION:

### Access the Salesforce 1 App

Your users have several options for accessing Salesforce1 on mobile devices.

### What's New in the Latest Salesforce1 Downloadable Apps

The latest release of the Salesforce1 downloadable app for Android is version 8.0. It will be gradually rolled out to users on Google Play over several weeks, starting the week of December 7, 2015.

### Salesforce1 Enhancements in This Release

Our latest round of new and improved Salesforce1 features makes it easier to access Salesforce on the go.

### Salesforce 1 Differences from the Full Salesforce Site

The Salesforce1 mobile app doesn't have all the functionality of the full Salesforce site, and also includes some features that aren't available in the full site. See if there are differences between Salesforce1 and the full site for this release's new and enhanced features.

# Access the Salesforce1 App

Your users have several options for accessing Salesforce1 on mobile devices.

Install the Salesforce1 downloadable app on Apple® and Android ™ mobile devices. Users can download the app from the App Store or Google Play<sup>™</sup>.

• Access the Salesforce1 mobile browser app from a supported mobile browser on Apple, Android, and Windows 8.1 devices. This option doesn't require anything to be installed.

See "Requirements for the Salesforce1 Mobile App" in the Salesforce Help for more details about supported devices and browsers.

# What's New in the Latest Salesforce1 Downloadable Apps

The latest release of the Salesforce1 downloadable app for Android is version 8.0. It will be gradually rolled out to users on Google Play over several weeks, starting the week of December 7, 2015.



Note: The Salesforce1 downloadable app for iOS, version 8.0 is delayed. See below for more information.

At a glance, here is what's new in Salesforce1 for Android, version 8.0.

- Identify Action Icons Via Helpful Labels
- Access Salesforce Knowledge Articles in Salesforce1 (Generally Available)
- Get Enhanced Security for Salesforce1 Downloadable Apps with Mobile Device Management (MDM)
- Visual Styling of Salesforce1 Updated

Because of the delay in the release of Salesforce 1 for iOS, version 8.0, the new actionable push notifications for approval requests Beta feature that we previewed earlier is also delayed.

# Salesforce1 for iOS, Version 8.0 Delayed

The Salesforce1 downloadable app for iOS, version 8.0 was originally scheduled for release after the completion of the Salesforce Winter '16 release. Now, however, Salesforce1 for iOS, version 8.0 is delayed due to a software issue.

We are actively working to resolve the issue as quickly as we can. But at this time we have no estimate as to when we'll be able to release Salesforce1 for iOS, version 8.0.

In the meantime, we will continue to release bug fix versions of Salesforce1 for iOS, version 7.3.

### Salesforce1 Enhancements in This Release

Our latest round of new and improved Salesforce1 features makes it easier to access Salesforce on the go.



Note: The new Salesforce1 downloadable app for Android, version 8.0 is now available for download from Google Play. Here's the list of enhancements in this release. The Salesforce1 downloadable app for iOS, version 8.0 is delayed.

You've probably noticed that some Winter '16 features are available only in the Salesforce1 mobile browser app. Fear not—many of these enhancements will be in future updates to the Salesforce1 downloadable apps for Android and iOS.

The Salesforce 1 mobile app is available for all editions, except Database.com, without an additional license. Your organization's Salesforce edition and licenses, as well as a user's assigned profile and permission sets, determines the Salesforce data and features that are available to each Salesforce 1 user.

Salesforce1 Enhancement	Android Downloadable App	iOS Downloadable App	Mobile Browser App	Setup in the Full Site
Device and Browser Support				
Salesforce1 No Longer Supported on Android 4.2 and 4.3	✓		~	
	(As of v8.0)			

Salesforce1 Enhancement	Android Downloadable App	iOS Downloadable App	Mobile Browser App	Setup in the Full Site
Microsoft  Surface  Tablets  Run  Lightning  Experience  instead  of  Sales force 1			✓	
End of Support for Salesforce 1 Mobile Browser App on BlackBerry Devices in Winter '17			✓	
Test Salesforce1 with Mobile Devices or Device Emulators (Instead of Desktop Browsers)				<b>~</b>
Supported Data Enhancements				
Links on formula fields are now supported	✓	✓	<b>✓</b>	
Navigation and Actions Enhancements				
Identify Action Icons Via Helpful Labels	(As of v8.0)	<b>✓</b> (Partial)	✓	
See More Data Just By Scrolling	<b>✓</b> (Partial)	<b>✓</b> (Partial)	*	
Enjoy Spiffier Charts in List Views (Tablets Only)			✓	
Search Enhancements				
Get More Relevant Results When Searching in Lookups	✓	✓	<b>✓</b>	
Relationship and Data Management Enhancements				
Warn Mobile Users About Duplicate Records As Fields Are Completed	~	✓	✓	<b>~</b>
Account News Now Called Account Insights	~	✓	✓	<b>~</b>
Some Twitter Button Labels Have Changed	~	✓	✓	<b>~</b>
Auto-Completion for Standard Address Fields	<b>✓</b>	✓	✓	
Sales Productivity Enhancements				
Increase Productivity by Adding Notes to Records (Generally Available)	~	✓	✓	<b>✓</b>
Customer Service Tools Enhancements				
Access Salesforce Knowledge Articles in Salesforce1 (Generally Available)	(As of v8.0)		(As of Summer '14)	
Reports and Dashboards Enhancements				
View Lightning Experience Reports and Dashboards	✓	✓	✓	
See More Details on the Dashboard Home Page (Tablets Only)			✓	

Salesforce1 Enhancement	Android Downloadable App	iOS Downloadable App	Mobile Browser App	Setup in the Full Site
See More Report Rows on iPhone 6 Plus Phones	✓	✓	✓	
See In-App Alerts When Dashboards Finish Refreshing	✓	✓	✓	
Chatter Enhancements				
Delete Chatter Groups and Manage Membership Requests	✓	✓	✓	
View and Upload Profile Photos Without Chatter			<b>✓</b>	
Profile Related List Changes	✓	✓	<b>✓</b>	<b>~</b>
View Related Files From Records	✓	✓	<b>✓</b>	<b>~</b>
Salesforce Communities Enhancements				
Access External Files in Communities Using Salesforce1			✓	✓
Receive Notifications for Posts to Groups in Communities	(As of v7.3)	<b>✓</b> (As of v7.3)	✓	
Notifications Enhancements				
The Notifications List Just Got Better			✓	<b>~</b>
See More Detailed Approval Notifications	✓	✓	<b>✓</b>	✓
Edit Chatter Group Email and In-App Notification Settings	✓	✓	<b>✓</b>	
Security Enhancements				
Get Enhanced Security for Salesforce1 Downloadable Apps with Mobile Device Management (MDM)	(As of v8.0)			
Improved Access to Encrypted Data in Salesforce1	✓	✓	✓	
Other Enhancements				
Visual Styling of Salesforce1 Updated	(As of v8.0)		*	

# Salesforce No Longer Supported on Android 4.2 and 4.3

To ensure that your users have an optimal experience using Salesforce1, we have removed support for the older Android 4.2 and 4.3 operating systems. Version 8.0 of the Salesforce1 for Android downloadable app is available from Google Play only for Android phones running 4.4 or later. Salesforce1 for Android, version 8.0 marks the formal end of support for Salesforce1 on pre-4.4 operating systems and for earlier versions of Salesforce1 for Android. To ensure a smooth transition for your organization, we recommend that your users update their devices to Android 4.4 or later before attempting to install Salesforce1 for Android, version 8.0.

While users can continue to run previously installed, older versions of Salesforce1 for Android on devices running Android 4.2 or 4.3, Salesforce no longer provides support, including bug fixes or enhancements, for any issues users may encounter.

In addition, starting with Winter '16, the Salesforce1 mobile browser app is supported on Android phones and tablets running Android 4.4 or later. Users aren't prevented from accessing the mobile browser app on older versions of the Android operating system but may encounter performance or other issues that Salesforce won't address.



**Note:** A quick reminder that the Salesforce1 for Android downloadable app is supported on phones only. While Google Play doesn't prevent users from installing the downloadable app on Android tablets, be aware that the app is designed for phones and doesn't offer an ideal user experience on tablets. It's also important to understand that Salesforce doesn't provide support for any problems encountered when using the Salesforce1 for Android downloadable app on tablets. As an alternative, we recommend using the Salesforce1 mobile browser app on Android tablets.

### Microsoft Surface Tablets Run Lightning Experience instead of Salesforce1

When Microsoft Surface and Surface Pro users log into Salesforce, they now see the Lightning Experience desktop interface instead of the Salesforce1 mobile interface.

### End of Support for Salesforce 1 Mobile Browser App on BlackBerry Devices in Winter '17

Starting Winter '17, the Salesforce1 mobile browser app will no longer be supported on BlackBerry 10 devices.

After Winter '17, users won't be blocked from running the Salesforce1 mobile browser app on BlackBerry Z10 or Z30 phones. However, Salesforce will no longer provide technical support, bug fixes, or enhancements for any issues your users may encounter.

To provide the best experience possible for mobile customers with BlackBerry 10 devices, Salesforce is continuing to collaborate with BlackBerry on their native Connect to Salesforce app. For a smooth transition, we recommend that BlackBerry users switch to the Connect to Salesforce app by the Winter '17 Salesforce release. BlackBerry's app is available for download from BlackBerry World.

# Test Salesforce1 with Mobile Devices or Device Emulators (Instead of Desktop Browsers)

If you've been testing your Salesforce1 mobile app setup and customizations in a desktop browser by appending /one/one.app to your Salesforce instance's URL, this approach no longer works as of Winter '16. Going forward, we recommend testing your custom pages and apps on supported mobile devices or in a device emulator.

Starting with Winter '16, the https://<salesforce\_instance>/one.app URL is used exclusively for Lightning Experience, which has its own distinct user interface. You can still emulate Salesforce1 on your desktop using a mobile device emulator. Download and install the appropriate SDK for your supported devices.

- Apple iOS Simulator for iPhone and iPad developer.apple.com/library/ios/documentation/IDEs/ Conceptual/iOS Simulator Guide/
- Android Virtual Device Emulator for Phone and Tablet developer.android.com/tools/devices/emulator.html
- Note: Running Salesforce1 in an emulator isn't supported for normal use, and it's not a substitute for full testing on your organization's supported mobile devices. During development, you should regularly test your app on *every* device and platform on which you intend to deploy.

For on-the-fly testing on a desktop, you can still use the <code>/one/one.app</code> URL, provided you use a browser that supports device mode emulation. Don't forget to enable a mobile phone or table in device mode or you'll see the Lightning Experience interface! Keep in mind that using the <code>/one/one.app</code> URL when emulating a mobile device runs the Salesforce1 mobile browser app. The Salesforce1 downloadable apps for iOS and Android—the apps that most customers use—are built with a mix of native and Aura components, and have some different features as well. So depending on what you're testing in a desktop browser, you can get an inaccurate representation of how your page or app will behave in real life.

### Identify Action Icons Via Helpful Labels

Sometimes, icons aren't enough. The icons in the Salesforce1 action bar are now labeled so users can quickly find the action they're looking for. Action bar labels are fully available in the Salesforce1 downloadable app for Android, version 8.0 and the Salesforce1 mobile browser app; they're available on most action bars in the downloadable apps for iOS.

### See More Data Just By Scrolling

When there's more information than fits on a single screen, users can now keep scrolling down the page and Salesforce1 continually fetches and loads the older data. It's no longer necessary to pull up at the end of the page to load more. This enhancement is available in the Salesforce1 mobile browser app and on many pages in the downloadable apps for iOS and Android.



Note: The downloadable apps for iOS and Android don't yet include infinite scrolling on these pages:

- The main feed
- Files
- Profiles (iOS only)

### Enjoy Spiffier Charts in List Views (Tablets Only)

List view charts in the Salesforce1 mobile browser app get a little pop with a spruced up look. There's no change to how charts work in list views—they just stand out more with their cleaner, more modern design. List view charts are available on tablets only in the Salesforce1 mobile browser app.

### Get More Relevant Results When Searching in Lookups

Expanded search features, such as support for related lookup filters, out-of-order search term matches, and relevancy ranking in search results, are available in lookup searches. Lookup searches now search against all objects included in the search index. This enhancement is available in all versions of the Salesforce1 mobile app.

Salesforce admins define related lookup filters in the full Salesforce site Setup. User-defined lookup filter fields and admin-defined dependent lookup filters aren't supported in Salesforce1.

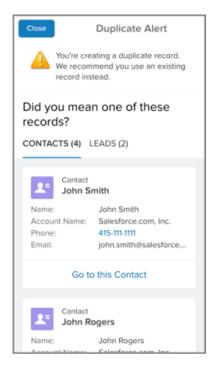
Salesforce Shield/Platform Encryption correctly masks encrypted fields in indexed objects.

### Warn Mobile Users About Duplicate Records As Fields Are Completed

Previously, Data.com Duplicate Management ran duplicate rules when users saved records, but you could change this behavior so the rules ran as users completed fields on a record. This option is especially useful on mobile devices as it saves users from typing unnecessary data. So we've made this setting the new default behavior. Duplicate management is available in all versions of the Salesforce 1 mobile app, but you need to set up it up in the full Salesforce site.

# EDITIONS

Data.com Duplicate Management available in: **Professional, Enterprise, Performance, Unlimited,** and **Developer** Editions



Because running duplicate rules as users complete fields is now the default behavior, the setting to turn on this behavior is no longer needed. We removed the Duplicate Rule Settings section from the Salesforce1 Settings page in the Setup tree.

For more information, see Duplicate Management in the Salesforce Help.

# Account News Now Called Account Insights

The Account News feature is renamed *Account Insights*. Account Insights now displays up to 20 news articles for each account, which are divided into categories for easy reference. This feature is available in all versions of the Salesforce1 mobile app.

For more details, see Account Insights: Provide Easy Access to News Articles in Lightning Experience on page 116.

### Some Twitter Button Labels Have Changed

The labels for some buttons on the Twitter card have changed to more accurately reflect the purpose of the buttons. No functionality has changed. The Twitter card is available in all versions of the Salesforce1 mobile app when the Social Accounts, Contacts, and Leads feature is enabled.

- The button previously labeled Associate a Twitter Account is now called Link Twitter Account.
- The button previously labeled Associate is now called Select.

### Increase Productivity by Adding Notes to Records (Generally Available)

The enhanced Notes tool is generally available in Winter '16. Expanding on the previous release, users can now take notes for cases, tasks, and events. And if you opt to add the new Notes related list to object page layouts, Salesforce1 users can quickly access related notes directly from records instead of having to switch away to the navigation menu to open the Notes item. Users can also create notes from the related list. Notes is available in the Salesforce1 downloadable apps and in the mobile browser app (except on BlackBerry devices).



Groups available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Contact Manager**, and **Developer** Editions For more information, including setup instructions, see Notes in the Sales Cloud section of these release notes.

SEE ALSO:

You Asked for It!

### Access Salesforce Knowledge Articles in Salesforce1 (Generally Available)

Salesforce Knowledge is generally available in version 8.0 of the Salesforce1 downloadable app for Android. Agents can search for and read knowledge articles, see articles related to cases, and read comments in article feeds. The Salesforce1 mobile browser app has supported Salesforce Knowledge articles since the Summer '14 release.



**Note**: Knowledge articles aren't available when accessing communities via Salesforce1.

Users access the Articles home page from the Recent section of the Salesforce1 navigation menu. Look for **Knowledge Article Versions** in Salesforce1 for Android or **Articles** in the mobile browser app. To locate this item, it may be necessary to expand the Recent section by tapping **More**. Salesforce Knowledge is automatically included in the navigation menu as part of the Smart Search Items element. See "Salesforce1 Mobile App Navigation Menu" in the Salesforce Help for information about how the navigation menu is populated.

# **EDITIONS**

Salesforce Knowledge is available in **Performance** and **Developer** editions.

Salesforce Knowledge is available for an additional cost in **Enterprise** and **Unlimited** editions.

Users can search for articles from the Articles home page or using global search. When searching from the Articles home page, search results show promoted search terms, highlighted search terms, and snippets of relevant text, so users can quickly identify the best article and see how search results match search terms. These features are also available in global search results when using the Salesforce1 mobile browser app, but aren't available when using global search in Salesforce1 for Android.

### View Lightning Experience Reports and Dashboards

Sales reps can bring important reports and dashboards created in Lightning Experience, like Top Open Opportunities, on the road. Reports and dashboards that users create in Lightning Experience are compatible with all versions of the Salesforce1 mobile app. However, in Salesforce1, legacy Salesforce Classic charts display instead of the new Lightning Experience charts.

Although users can view Lightning Experience reports and dashboards, their appearance isn't the same as in the new full site user interface.

For example, dashboards display a maximum of three columns. If a user opens a Lightning Experience dashboard that has five columns, the dashboard automatically reverts to a three-column layout

(retaining all dashboard components). The dashboard's layout isn't changed permanently, however. The next time the user views the dashboard in Lightning Experience, the original five columns display.

# EDITIONS

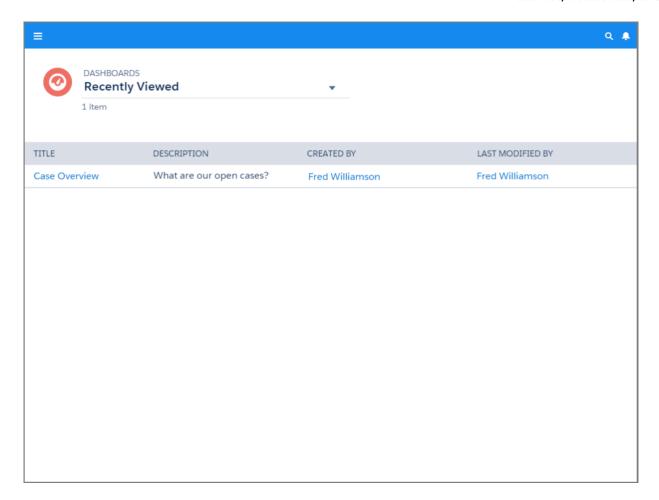
Reports and Dashboards available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# See More Details on the Dashboard Home Page (Tablets Only)

Tablet users now see extra information when viewing the dashboard home page. In addition to dashboard titles and descriptions, users see who created and who was the last to modify each dashboard in the list. This information is available on tablets only in the Salesforce1 mobile browser app.

# EDITIONS

Reports and Dashboards available in: **Group**, **Professional, Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



### See More Report Rows on iPhone 6 Plus Phones

In Spring '15, we limited reports to a maximum of 50 rows when accessed from an iPhone 6 Plus device, to improve the stability of Salesforce1 on these devices. Now, all Salesforce1 users can see up to 2,000 report rows, including users on iPhone 6 Plus devices. Reports are available in all versions of the Salesforce1 mobile app.

# **EDITIONS**

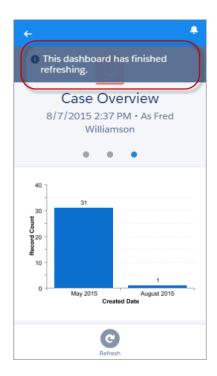
Reports and Dashboards available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# See In-App Alerts When Dashboards Finish Refreshing

To keep push and in-app notifications focused on business-critical issues, we've changed how mobile users learn that a dashboard has finished refreshing. Users see a brief alert at the top of the app instead of receiving a formal notification. This alert is available in all versions of the Salesforce1 mobile app.

# **EDITIONS**

Reports and Dashboards available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



The **Dashboard finishes running** setting was removed from the Push Notification Settings in the Salesforce1 downloadable apps.

### Delete Chatter Groups and Manage Membership Requests

More group manager and owner functionality on your mobile device! Group owners can delete groups while on the go. And both group owners and managers can use Salesforce1 to accept requests to join private groups. These options are available in all versions of the Salesforce1 mobile app. Previously, group owners and managers had to use their desktop to perform these tasks.

# EDITIONS

Groups available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Contact Manager**, and **Developer** Editions

# View and Upload Profile Photos Without Chatter

Salesforce 1 mobile browser app users can see and upload profile photos, even if Chatter is disabled. If Chatter is turned off for your organization, profiles show a photo and any information a user has entered in the Contact or About sections, but the feed, groups, files, and other Chatter functionality aren't available.

# EDITIONS

Profiles available in: Group, Professional, Enterprise, Performance, Unlimited, Contact Manager, and Developer Editions

### **Profile Related List Changes**

Profile pages in Salesforce1 now include the Groups, Files, Followers, and Following related lists (in that order). The Team related list no longer shows by default.

You can customize which related lists appear on profile pages in Salesforce1 by editing the User Profile page layout.

### View Related Files From Records

If you opt to add the new Files related list to page layouts for your standard and custom objects, the related list is available in all versions of the Salesforce1 mobile app. Mobile users can quickly access related files from records instead of having to switch away to the navigation menu to access their Files lists. Tap any file in the related list to view it.

To learn more, see Add the Files Related List to Page Layouts.

# **EDITIONS**

Groups available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Contact Manager**, and **Developer** Editions

# Access External Files in Communities Using Salesforce1

Share documents from Google Drive, SharePoint, and OneDrive for Business with customers and other community members using the Salesforce1 mobile browser app. Communities must use the Salesforce Files + Visualforce template and you need to configure Files Connect.

For more details, see Access External Files in Communities.

# **EDITIONS**

Communities available in: Enterprise, Performance, Unlimited, and Developer Editions

# Receive Notifications for Posts to Groups in Communities

Mobile community users can get notified about new posts in their groups—even if they aren't specifically mentioned—via notifications. This is the same notification type that was released for Salesforce organizations in Summer '15. Alerts are available as in-app notifications in all versions of the Salesforce1 mobile app. Community users can also receive push notifications in the Salesforce1 downloadable apps, version 7.3 or later.

Users can enable notifications for a group in a community from the full site. Set the email notification frequency for that group to **Every Post**. Users can't enable notifications for groups in communities from Salesforce1.

# **EDITIONS**

Communities available in: Enterprise, Performance, Unlimited, and Developer Editions

This feature requires that Salesforce1 in-app and push notifications are turned on. See Enable Salesforce1 Mobile App Notifications.

### The Notifications List Just Got Better

Are your users finding it hard to keep track of their in-app notifications because the Salesforce1 notifications list marks everything as read when the list is closed? We've improved notification tracking in the Salesforce1 mobile browser app, to make it much easier for users to know when they've received new notifications and to find the notifications they haven't yet read.

The notifications icon 🚺 displays the number of new notifications that a user has received since the last time they viewed the list.



Opening the notifications list automatically resets the number of *unseen* notifications to zero and removes the count from the notifications icon. As before, the list displays up to 20 of a user's most recent notifications from the last 90 days.

In the list, tapping a notification opens the relevant record and marks that notification as *read*. Salesforce 1 no longer marks all notifications as read when the user closes the list. But users can quickly do this for themselves by tapping the new **Mark all as Read** link in the list.

Unread notifications in the list display with a darker background, to help distinguish them from those that have been read already.

### See More Detailed Approval Notifications

In-app approval notifications include more details, making it easier to monitor and take the next step in the approval process. Salesforce sends notifications to users who are part of an approval process, either as a submitter, approver, or both. Now these notifications include more context, such as the name and description of the record submitted for approval. The notifications show the first four fields on the approval request page layout, which you can customize when you define the approval process. These fields are only shown if the approver has the permissions to view them. More detailed in-app approval notifications are available in all versions of the Salesforce1 mobile app. Push notifications don't show the extra details.

### Edit Chatter Group Email and In-App Notification Settings

Group members can configure their in-app and email notification frequency directly in Salesforce1. This feature is available in all versions of the Salesforce1 mobile app. However, this feature isn't available when accessing communities with Salesforce1.

Tap **Manage Notifications** in the group action bar to select the frequency of group email notifications. If you would also like to receive in-app notifications in Salesforce 1, select **Every Post**.

EDITIONS

Groups available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Contact Manager**, and **Developer** Editions

SEE ALSO:

Receive Notifications for Posts to Groups in Communities

### Get Enhanced Security for Salesforce Downloadable Apps with Mobile Device Management (MDM)

With version 8.0 or later of the Salesforce1 downloadable app for Android, Salesforce provides an additional level of security compliance through interoperation with the most popular MDM (mobile device management) suites. Salesforce1 for Android, version 8.0 in combination with an MDM gives you enhanced functionality for distribution and control over your users' Android devices. The enhanced security functions when you combine Salesforce1 for Android with an MDM are certificate-based authentication and automatic custom host provisioning.



Note: SAML 2.0 (security assertion markup language) must be enabled and configured for your organization.

#### Certificate-Based Authentication

Using certificates to authenticate simplifies Salesforce1 provisioning and your day-to-day mobile administration tasks by eliminating usernames and passwords. Salesforce uses X.509 certificates to authenticate users more efficiently, or as a second factor in the login process.

#### **MDM Settings for Certificate-Based Authentication**

To enable certificate-based authentication for your Salesforce1 users, you need to configure key-value pair assignments through your MDM suite. Here are the supported keys:

Key	Data Type	Platform	Description
RequireCertAuth	Boolean	Android	If true, initiates the certificate-based authentication flow.
			Salesforce1 uses the user certificate on the device for authentication inside a webview.

Key	Data Type	Platform	Description
ManagedAppCertAlias	String	Android	Alias of the certificate deployed on the device picked by the application for user authentication. Required for Android only.



**Note**: There's a minimum device OS version requirement to use certificate-based authentication. For Android, the minimum supported version is 5.0.

Once you save your key-value pair assignments, you can push Salesforce1 with the updated certificate-based authentication flow to your users via your MDM suite.

### **Automatic Custom Host Provisioning**

You can now push custom login host settings to your Salesforce1 users. This spares your mobile users from having to manually type long URLs for login hosts—typically a frustrating and error-prone activity. You can configure key-value pair assignments through your MDM to define multiple custom login hosts for your Salesforce1 users.

### **MDM Settings for Automatic Custom Host Provisioning**

To push custom login host configurations to your Salesforce1 users, you need to configure key-value pair assignments through your MDM suite. Here are the supported keys:

Data Type	Platform	Description
String, String Array	Android	Login hosts. First value in the array is the default host.
		Requires https:// in the host URL.
String, String Array	Android	Labels for the hosts.
		The number of AppServiceHostLabels
		enties must match the number
		of AppServiceHosts enties.
	••	String, String Array Android

### Improved Access to Encrypted Data in Salesforce1

Users with the View Encrypted Data permission can work with encrypted data in all versions of the Salesforce1 mobile app the same as in the browser.

### **Encrypted Files Are Indicated With an Icon**

If a file is encrypted, a special icon is overlaid on the file's icon. You can use this information to decide who to share the file with.

### **Encrypted Data is Searchable**

Search is supported for encrypted data. Previously, encrypting a field or file made its contents inaccessible to search.

#### **Related Lists Are Visible on Accounts and Contacts**

Previously, related lists on Accounts and Contacts were empty when the Name field was encrypted.

SEE ALSO:

Protect More Data With Platform Encryption
Security-Related Differences Between Salesforce Mobile and Browser Versions

### Visual Styling of Salesforce1 Updated

The visual appearance of Salesforce1 is subtly updated to match the Salesforce Lightning Design System and to keep the mobile experience consistent with Lightning Experience. Changes include a new font family and different background and border colors. These updates are available in the Salesforce1 downloadable app for Android, version 8.0 and in the Salesforce1 mobile browser app.

### Salesforce Differences from the Full Salesforce Site

The Salesforce1 mobile app doesn't have all the functionality of the full Salesforce site, and also includes some features that aren't available in the full site. See if there are differences between Salesforce1 and the full site for this release's new and enhanced features.



Groups available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Contact Manager**, and **Developer** Editions



**Note**: For complete details about the differences for all features available in Salesforce1, see "Salesforce1 Limits and Differences from the Full Salesforce Site" in the Salesforce Help in the Salesforce online help.

#### Salesforce Communities

- External users' photos in the Salesforce1 mobile browser app no longer include any visual indication that the user is an external user. In the full Salesforce site and the Salesforce1 downloadable apps, the upper left corner of an external user's photo is orange.
- Community members can't flag private messages as inappropriate. To flag private messages, members must use Salesforce Classic.
- Group members in communities can't edit their email and in-app notification settings in Salesforce 1. As a workaround, users can set their group email notification preference to **Every Post** in the community from the full site. Doing this automatically enables both email notifications and in-app notifications in Salesforce 1 for that group.

### **Notifications**

When users submit a record for approval in Salesforce Classic, they can add comments. These comments are included in the approval process step detail page. However, Salesforce 1 users can't see the comments when viewing approval details in the mobile app.

### Salesforce Knowledge

Issue	Android Downloadable App, v8.0	Mobile Browser App
Only published articles are available—not draft or archived articles.	•	•
Articles can't be created, edited, translated, or archived.	•	•
Articles can't be linked to cases. (But links that are set up from the full site can be viewed in Salesforce1 on the Related tab.)	•	•

Issue	Android Downloadable App, v8.0	Mobile Browser App
Smart links aren't supported.	•	•
Article ratings aren't supported.	•	•
Tables are sometimes cut off on the right side when included in article rich text fields.	•	•
Compact layouts display the article type API name instead of the article type name. So users see the article type API name in the highlights area when viewing an article.	•	
When searching from the Articles home page, only articles in the user's language are returned and only if that language is an active Knowledge language (from Setup, <b>Customize</b> > <b>Knowledge</b> > <b>Knowledge Settings</b> ). To see articles in another language, users can change to an active Knowledge language. From <b>My Settings</b> , use the Quick Find search box to locate the Language & Time Zone page.	•	
In global search, search results show articles in the language specified for the device, regardless of the active Knowledge language.		
Filtering search results by data categories, article type, validation status, or language isn't available.	•	•
In global search, articles don't appear in the list of recent records.	•	
In global search results, search highlights and snippets don't appear.	•	
These features are available in all versions of Salesforce1 when searching from the Articles home page.		

# SalesforceA

Manage users and view information for Salesforce organizations from your mobile device.

### IN THIS SECTION:

### SalesforceA for iOS Version 3.0

Version 3.0 of SalesforceA for iOS includes an entirely new user interface. The new layout lets you easily find the items you use most.

### SalesforceA for iOS Version 3.0

Version 3.0 of SalesforceA for iOS includes an entirely new user interface. The new layout lets you easily find the items you use most.

### **EDITIONS**

### Available in:

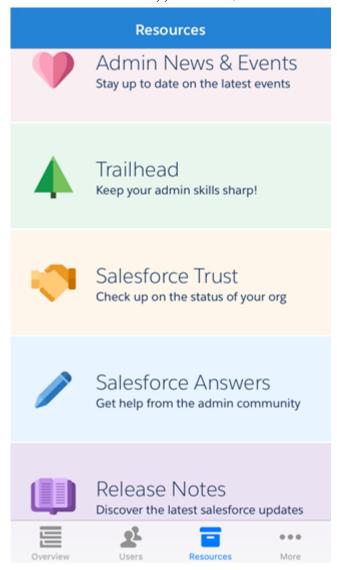
- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

### USER PERMISSIONS

To use SalesforceA:

"Manage Users"

All the SalesforceA functionality you're used to, now in a refreshed user interface.



# SOS Video Chat and Screen-Sharing

You asked for it—we delivered. You can use SOS, the Service Cloud's mobile support solution, with both iOS and Android. With SOS, you can add a help button to your native iOS or Android mobile application that lets your customers connect with agents over a two-way video or audio chat.

Gone are the days when your customers had to connect with a nameless, faceless agent over a phone call. With just a tap, your customers can see the agents they're speaking to while your agents provide personalized, in-app guidance with video chat, screen-sharing, and agent annotations. To learn more about SOS, see: SOS Video Chat and Screen-Sharing Now on Android.

Interested in integrating SOS into your mobile applications? Ask your Salesforce account team about the SOS iOS SDK & Android SDK.

# EDITIONS

SOS is available for an additional cost in:

Enterprise, Performance,
Unlimited, and Developer
Editions

For information about configuring SOS, see Set Up SOS Video Chat and Screen-Sharing.

SEE ALSO:

SOS Video Chat and Screen-Sharing Now on Android

# Communities: Lightning Upgrade, Extensible Templates, Insights, Moderation Rules, and Much More

Winter '16 is packed with changes that make templates more customizable. You can show more Salesforce data, create and use custom Lightning components, and support multiple languages. Plus, you can now create moderation criteria and act on community reports directly from Community Management. These features are available in Salesforce Classic only. Communities is not supported in Lightning Experience.

# EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

#### IN THIS SECTION:

#### Why You Must Get the Winter '16 Templates with Lightning Components

Update your Koa, Kokua, and Napili templates to make them compatible with the Lightning platform and Lightning components. Lightning technology is more performant and delivers a richer visual experience on both desktop and mobile devices. **The Winter '16 version of community templates is a prerequisite for many powerful Community Builder and template features in** 

#### Check Your Community's Template Version

Winter '16 and later releases.

The Community Builder General settings now includes information about your current template version for Koa, Kokua, and Napili templates. Previously, you could only see the template name. The template version determines which components are available in your template.

#### Extensible Community Templates—Yes, for Real

Extend your community beyond the preconfigured template functionality to expose more Salesforce object data, provide navigation, create custom components, and create pages to customize the display of object data. What's more, you no longer need to switch to Site.com Studio to edit your page and template configuration—you can do all of this in Community Builder. *You must update your community's template to the Winter'16 version to use this functionality.* 

### Other Template Improvements

Aside from extensibility, templates now support multiple languages, voting on knowledge articles, and more case detail page options.

### Community Management

We're making it easier to monitor and protect your community with moderation rules, Insights, and the ability to report spam messages. We've also enhanced topics in your community and provided a new menu in the global header to access customization tools.

#### Search Improvements for Communities

Users performing a search in communities now see similar questions and articles as they type. We've also changed a few properties in the search publisher.

### Work Better with Files in Communities

Access external files, manage file visibility by community, and get notified when someone shares a file.

#### Other Changes in Communities

Other important changes to Communities include a new login look and feel, more detailed password reset emails, and updates for partner users who work with accounts, contacts, and leads.

SEE ALSO:

How and When Communities Features Become Available

# Why You Must Get the Winter '16 Templates with Lightning Components

Update your Koa, Kokua, and Napili templates to make them compatible with the Lightning platform and Lightning components. Lightning technology is more performant and delivers a richer visual experience on both desktop and mobile devices. **The Winter '16 version of community templates is a prerequisite for many powerful Community Builder and template features in Winter '16 and later releases.** 

We strongly recommend that you update your community template immediately, or plan for it in the coming months so you can make the most of powerful Community Builder and template functionality. The benefits include the ability to create custom pages, add components to pages, create and use custom Lightning components in your communities, and expose additional Salesforce objects.

Another big advantage is that you can edit almost all Koa, Kokua, and Napili template pages and components directly in Community Builder. You no longer need to use Site.com Studio, except for a few site configuration settings. Not sure what your template version is? Check your template version in Community Builder.

(1) Important: Customer support for templates older than the Winter '16 version will be discontinued with the Summer '16 release. If you choose not to upgrade your template by then, your community will not be affected. However, if any issues arise with those templates, our customer support team won't be able to provide assistance.

A few important things to keep in mind:

- After you update your template, all template and component customizations are lost. Only the topic navigation carries over. Most
  of the branding specified via the Branding Editor in Community Builder carries over, but some community colors may be reset to
  the default values. After you update, check your branding properties in Community Builder and customize any that changed.
   For more information, see Update Your Community's Template in the Salesforce Help.
- New template components introduced in Winter '16 are not compatible with older template versions. For more information about component compatibility, see Which Components Can I Use with Each Template? in the *Using Templates to Build Communities* guide.
- This update affects only communities that use the Koa, Kokua, and Napili templates. Communities built using the Salesforce Tabs + Visualforce template won't be affected.

#### Compatibility with Lightning Experience

The Winter '16 versions of Koa, Kokua, and Napili and Lightning Experience use the same underlying technology: the Lightning platform and Lightning components. That said, you aren't required to enable Lightning Experience in your organization to upgrade your community templates.

Also, Salesforce Communities is not supported in Lightning Experience.

A few considerations of note if you're planning to enable Lightning Experience in your organization:

- Lightning Experience doesn't support the global header. This means that internal users in your organization can't switch between the internal Salesforce organization and your communities from Lightning Experience. If you do enable Lightning Experience in your organization, they will need to switch back to Salesforce Classic to access the global header.
- Salesforce Communities is not supported in Setup in Lightning Experience. To make any changes to your communities in Setup, you must switch back to Salesforce Classic.

• Enabling Lightning Experience doesn't change the look and feel of communities that use the Salesforce Tabs + Visualforce template, which uses the Salesforce Classic styling by default.

# Check Your Community's Template Version

The Community Builder General settings now includes information about your current template version for Koa, Kokua, and Napili templates. Previously, you could only see the template name. The template version determines which components are available in your template.

To view the template version, in Community Builder click on the left, and then click **General**. You don't have to update your community to the Winter '16 version to use this functionality; it's available immediately after the Winter '16 release.

For information about which components you can use with your current template version, see Which Components Can I Use with Each Template? in the *Using Templates to Build Communities* guide.

# Extensible Community Templates—Yes, for Real

Extend your community beyond the preconfigured template functionality to expose more Salesforce object data, provide navigation, create custom components, and create pages to customize the display of object data. What's more, you no longer need to switch to Site.com Studio to edit your page and template configuration—you can do all of this in Community Builder. *You must update your community's template to the Winter '16 version to use this functionality.* 

#### IN THIS SECTION:

#### Extend Your Napili Community to Show More Salesforce Data

What do you get when Napili spends its free time at the gym? You get a stronger more awesome template with muscles made of Lightning. Now with Napili, you get out-of-the-box pages and preconfigured layouts that help you get up and running faster. You can also dive right in and create your own custom Lightning components. So show off your own muscles and share your Salesforce data in your community. Let's go!

### Create Custom Pages with Community Builder

Create pages for your community to add custom content or share additional Salesforce object data in Koa, Kokua, and Napili templates. This allows you to extend the community template functionality to meet your business requirements.

### Drag to Add Components to Pages in Community Builder

Drag and drop components on to the Community Builder page canvas to add them to your community's pages. Use the Page Editor and Property Editor to select and edit components, and then preview your changes before publishing them from Community Builder.

### Customize Your Community Navigation Beyond Topics

In Winter '16, the Navigation Menu component replaces the Navigation Bar in the Napili template. Customize this component to include Salesforce objects and create record list views. You can also point to topics, pages in your community, and URLs to external sites. You can choose to hide navigation items from guest users in the community who aren't required to log in. Previously, you could only provide navigation through topics.

### Add Custom Components to Your Community

Add custom Lightning and rich text components to your Koa, Kokua, and Napili community pages.

### Hide or Customize the Default Napili Header

Hide the default header to use your own branding and custom components in the Napili template. We've also added customizable regions to the page both above and below the header so you can add your own components.

### Manage Active Template Pages with Community Builder

View and select active pages for each object and page type in communities built with the Koa, Kokua, and Napili templates.

### Delete Template Pages from Your Community

Conveniently remove a community page you no longer need by deleting it from the Page menu in Community Builder. The ability to delete pages is available in communities created using the Koa, Kokua, or Napili templates.

### Add Custom CSS to Templates Directly in Community Builder

Use custom CSS to brand your Koa, Kokua, and Napili communities directly in Community Builder. Previously, you could only add custom CSS from Site.com Studio.

SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### Extend Your Napili Community to Show More Salesforce Data

What do you get when Napili spends its free time at the gym? You get a stronger more awesome template with muscles made of Lightning. Now with Napili, you get out-of-the-box pages and preconfigured layouts that help you get up and running faster. You can also dive right in and create your own custom Lightning components. So show off your own muscles and share your Salesforce data in your community. Let's go!

Create list views and record detail pages with minimal configuration to share accounts, cases, contacts, and custom object data with your community members.



Note: You must update your community's template to the Winter '16 version to use this functionality.

#### IN THIS SECTION:

#### Create Record List Views in Napili

Create record list views for accounts, cases, contacts, and custom objects and link to them from the Napili navigation menu. Use an out-of-the-box or custom page layout to display the list of records.

### View and Create Record Detail Pages in Napili

Display record details using the generic Record Detail page or create custom record detail pages.

#### SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### Create Record List Views in Napili

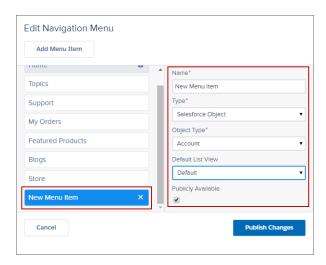
Create record list views for accounts, cases, contacts, and custom objects and link to them from the Napili navigation menu. Use an out-of-the-box or custom page layout to display the list of records.



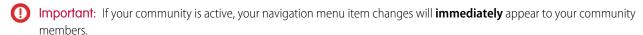
Note: You must update your community's template to the Winter '16 version to use this functionality.

Here are the high-level steps to create a list view with minimum configuration.

- 1. In Community Builder, add the Navigation Menu component to the appropriate template page.
- **2.** Create a navigation menu item pointing to a supported Salesforce object. Currently, Napili supports accounts, cases, contacts, and custom objects.



### 3. Publish your changes.



That's it! This creates a navigation menu item, which links to a list of the selected object's records. Under the hood, your data is retrieved from Salesforce and displayed using the generic Record List page. This page is available out-of-the-box in Napili and uses the Record Home List View Lightning component to display data in an appropriate layout.

Note: The generic Record List page provides the default list view layout for objects that don't have a predefined or custom list view page assigned. For example, if you create a navigation menu item for another Salesforce object, it'll use this same page. If you reconfigure the Record List page, be sure to account for all the affected objects.

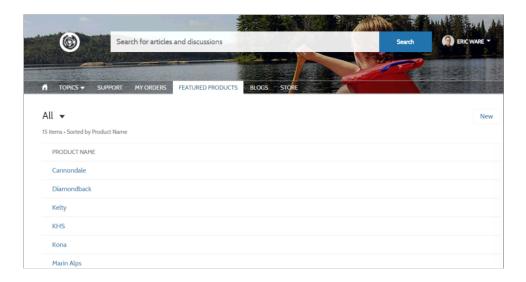
A few important things to note about record list views.

- Users can access only records they have access to via licenses, profiles, permissions, and sharing rules, same as in Salesforce. Users with the "Create" permission for the object can create new records from the list view page.
- When users click on a record on this page, the record details are displayed using the layout from the generic Record Detail page. If you create a custom record detail page and assign it to the object, we use that page instead.
- You can hide a navigation menu item from guest users, so they won't be able to access the list view page.
- Clicking on a record in the list view displays the record detail page, which uses the generic Record Detail page layout.
- The Record List page and the Record Home List View component are not available in the Koa and Kokua templates.

#### **Creating Custom List Views**

If you prefer to use a custom list view page for an object, you can create a new page in Community Builder. Choose the Standard page with single column layout, add the Record Home List View component to the page and configure the component properties to point to the object, then publish the page. To link to the page, create a custom navigation menu item and use the internal page URL.

**Example**: A list view page for a custom object called Featured Products.



#### SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### View and Create Record Detail Pages in Napili

Display record details using the generic Record Detail page or create custom record detail pages.



Note: You must update your community's template to the Winter '16 version to use this functionality.

Napili supports an out-of-the-box record detail layout that you can use immediately with no configuration, same as Salesforce. All objects without a preassigned record detail page use the generic Record Detail page to display record data. For example, consider the scenario where a user lands on a case detail page (that uses a preassigned case detail layout) and clicks a contact in the related records. If you haven't created a custom record detail page for contacts, the contact information is displayed using the generic Record Detail page. Under the hood, the Record Detail page uses the Record Headline and Record Information Lightning components to display record data.

- Record Headline: Displays the record name and key record highlights along with buttons to edit and delete the record.
- **Record Information**: Displays all record details including related records and the record feed. It also allows users to create new related records and post to the record feed.

A few important things to keep in mind about record detail pages:

- Objects with preassigned active record detail pages use those layouts for record data (cases, for example). You can check page assignments and availability for each object in Community Builder settings, under Page Management.
- We don't block unsupported objects (leads and opportunities, for example) from related lists. However, when users click a record for an unsupported object, they see an error message that directs them to contact their administrator.
- Objects without preassigned record detail pages use the generic Record Detail page. If you modify the Record Detail page layout or configuration, be sure to account for all objects that use this page layout.
- Users with the necessary permissions can create records from the related lists, and edit and delete the record from the record headline.

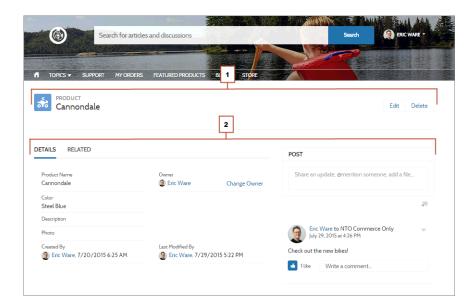
  Users without the necessary license, profile, and permissions can't access record data.
- The Record Information and Record Headline are driven by object page layouts defined in Salesforce. For example, if you've hidden a field on the account page layout in Salesforce, that field won't display in the community either. This feature includes support for record types.
- You must enable feeds on records in Salesforce to allow users to post on them in communities.

• The Record Detail page, the Record Headline component, and Record Information component are not available in the Koa and Kokua templates.

### **Creating Custom Record Detail Pages**

Optionally, you can create custom record detail pages for accounts, contacts, cases, tasks, events, and custom objects.

- 1. Create a new Data Detail page in Community Builder and pick the appropriate object.
- 2. Drag the Record Headline and Record Information components onto the page and configure their properties to associate them with the object.
- 3. Click to access Page Management in the Community Builder settings, and then set the new page as the active page for the object.
- 4. Publish your changes.
- **Example**: The record detail page for a custom object with the Record Headline (1) and Record Information (2) components.



SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

# Create Custom Pages with Community Builder

Create pages for your community to add custom content or share additional Salesforce object data in Koa, Kokua, and Napili templates. This allows you to extend the community template functionality to meet your business requirements.

Note: You must update your community's template to the Winter '16 version to use this functionality.

To create a new page, click Page Page Home in the Community Builder toolbar and then choose the type of page you want to create.

• Select **Standard Page** to use a page template or to create a blank page with columns. For example, you can start with the Home page template and customize it to your needs.

• Select **Data Detail Page** to create a record detail page. When prompted, pick the object you want to associate the page with and then the page layout you want to use.

In Winter '16, we support data detail pages for accounts, contacts, cases, tasks, events, and custom objects.

You can create multiple data detail pages for the same object, but only one can be active at any time. To manage the active page for all objects in your community, go to Page Management in the Community Builder Settings.

For more information about creating new community pages using Community Builder, see Create New Community Pages with Community Builder in the Salesforce Help.

SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

# Drag to Add Components to Pages in Community Builder

Drag and drop components on to the Community Builder page canvas to add them to your community's pages. Use the Page Editor and Property Editor to select and edit components, and then preview your changes before publishing them from Community Builder.

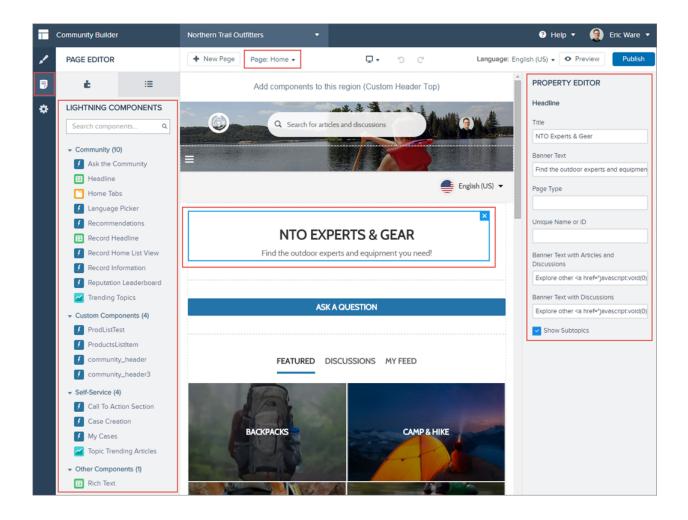


Note: You must update your community's template to the Winter '16 version to use this functionality.

Only the components that are supported on the selected page are available in the Page Editor. For example, you can't add the User Profile Detail component to the Home page. You can also create custom Lightning components and use them on community pages.

Locate or search for a component from the Page Editor and drag it to the page in an editable area. To edit the properties for a component that already exists on the page, click to select it from the main page canvas.

- Update the component properties in the Page Editor.
- Click the x in the upper-right corner to remove it from the page.
- Undo or redo your changes by clicking 5 c in the toolbar.
- **Example:** Here's a sample configuration of the Headline component on the Home page with the list of supported components and properties.



SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

# **Customize Your Community Navigation Beyond Topics**

In Winter '16, the Navigation Menu component replaces the Navigation Bar in the Napili template. Customize this component to include Salesforce objects and create record list views. You can also point to topics, pages in your community, and URLs to external sites. You can choose to hide navigation items from guest users in the community who aren't required to log in. Previously, you could only provide navigation through topics.



Note: You must update your community's template to the Winter '16 version to use this functionality.

When setting up the navigation menu, consider the following:

- You can't reorder menu items after you enter them, so take time to plan the structure of your menu before adding each item.
- Menu item labels must be unique within the community.
- You can add up to 20 navigation menu items.
- If you want to map a navigational topic to a menu item, you must first set it up in Community Management.
- There is no API support for navigation menu items.



**Note**: The breadcrumbs that appeared next to the Topics menu in the Navigation Bar component are not available in the Navigation Menu component.

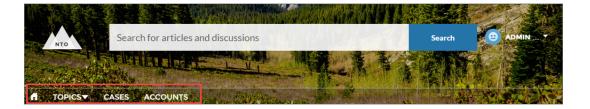
Here are the high-level steps for adding navigation menu items. For complete instructions, see Navigation Menu in the *Using Templates* to *Build Communities* guide.

- 1. In Community Builder, go to the Page Editor and highlight the Navigation Menu.
- 2. In the Property Editor, click Edit Navigation Menu.
- **3.** Add the necessary navigation menu items. You can pick from the following types.
  - Salesforce Object—Available objects include accounts, cases, contacts, and any custom objects.
    - ? Tip: Select this option to create a list view page for the selected object. This option is the easiest way to expose Salesforce record data in your community with minimum configuration.
  - External URL—Links to a URL outside of your community. For example, http://www.salesforce.com.
  - Internal URL—Links to a relative URL inside your community. For example, /contactsupport.
  - Navigational Topic—A drop-down with links to the navigational topics in your community. Navigational topics are set up in Community Management.
- 4. Save your changes.

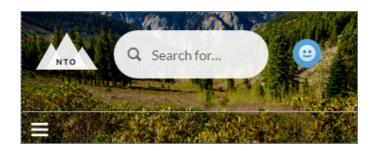
If your community is already active, you see a Publish Changes button. **When you click this button, your new navigation menu changes are immediately visible to community members.** 

If your community is still in Preview status, you see a Save Changes button. When you click this button, your changes are saved and will be visible to your community when you activate it.

**Example**: Sample Navigation Menu component:



On a mobile device, your community navigation menu collapses to better fit your screen.



If your community hosts users who speak different languages, you can translate your navigation menu using the Translation Workbench. From the workbench, choose the Navigation Menu Item setup component and enter translations. For information on using the Translation Workbench, see Entering Translated Terms in the Salesforce help.

SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### Add Custom Components to Your Community

Add custom Lightning and rich text components to your Koa, Kokua, and Napili community pages.



Note: You must update your community's template to the Winter '16 version to use this functionality.

To use a custom Lightning component (1), you must first create it and associate it with your community. For more information about creating custom Lightning components, see Custom Lightning Components in the *Using Templates to Build Communities* guide.

To add rich text on a community page, use the Rich Text component from the Other Components section (2) in the Page Editor.



SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

# Hide or Customize the Default Napili Header

Hide the default header to use your own branding and custom components in the Napili template. We've also added customizable regions to the page both above and below the header so you can add your own components.



Note: You must update your community's template to the Winter '16 version to use this functionality.

In Community Builder, click on the left, click **General**, and then select **Hide header region and navigation**. Choosing this option hides the default header image, the search box, the community menu, and user profile navigation menu on all the pages in your community.



Tip: If you choose to hide the header, consider replacing some of the hidden functionality with custom components. For example, you can create a custom navigation menu to replace the default community navigation. Or, add a language picker to the editable header regions above and below the default header.

#### SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### Manage Active Template Pages with Community Builder

View and select active pages for each object and page type in communities built with the Koa, Kokua, and Napili templates.

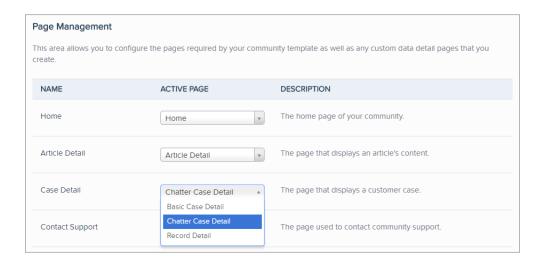


Note: You must update your community's template to the Winter '16 version to use this functionality.

You can create multiple custom pages for the same purpose, but only one can be active at a time in your community. For example, you can choose to create multiple Case Detail pages, and select the latest version as the active page in your community. This automatically deactivates the default Case Detail page defined in the template. You can change the active page selection at any time.

You can manage pages directly from the Community Builder Settings area. Click at the left, then click **Page Management**. Use the drop-down menu in the Active Page column to select a different active page for the object or page type.

Inactive pages remain available to use in your community unless you delete them. To see your list of inactive pages, click the **Page** drop-down in the Community Builder toolbar.



For more information, see Manage Active Community Pages in Templates in the Salesforce Help.

#### SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

### Delete Template Pages from Your Community

Conveniently remove a community page you no longer need by deleting it from the Page menu in Community Builder. The ability to delete pages is available in communities created using the Koa, Kokua, or Napili templates.



Note: You must update your community's template to the Winter '16 version to use this functionality.

To delete a page, hover over the page name in the Page menu and then click the trash icon next to it.



- You can delete only inactive community pages. To see inactive pages, scroll to the bottom of the Pages menu.
- You can't delete a Data Detail page if it's the only page associated with a given Salesforce object. If you have more than one Data Detail page for the same object, you can delete the inactive one.

SEE ALSO:

Why You Must Get the Winter '16 Templates with Lightning Components

# Add Custom CSS to Templates Directly in Community Builder

Use custom CSS to brand your Koa, Kokua, and Napili communities directly in Community Builder. Previously, you could only add custom CSS from Site.com Studio.



Note: You must update your community's template to the Winter '16 version to use this functionality.

In Community Builder, click on the Branding Editor toolbar to use your own CSS styles. We recommend using CSS sparingly and only when necessary, because future releases of template components might not support all CSS customizations.



# Other Template Improvements

Aside from extensibility, templates now support multiple languages, voting on knowledge articles, and more case detail page options.

#### IN THIS SECTION:

### Multiple Language Support for Napili Communities

Add the new Language Picker component to let guest users in Napili communities select their preferred language on a community page.

### New Case Detail Page Options for Community Templates

The Koa, Kokua, and Napili templates have a new default case detail page which gives community users a comprehensive view of case interactions when the community case feed is enabled. We've also streamlined the names of the case pages to help you select the case detail page that you want.

#### Let Community Users Vote on Knowledge Articles

Figure out which Knowledge articles are helping users—and which ones aren't—by letting Koa, Kokua, and Napili community users assign articles a thumbs up or thumbs down vote.

### See User Expertise on Profiles

On user profile pages in Napili communities, show topics people know about so the community can quickly see areas of expertise. Topic knowledge is calculated based on factors such as best answers, mentions, or likes on questions and posts.

#### User Profile Body Component on the Napili Template

The User Profile Body component combines several user profile components so that Napili community users can easily view another community member's details. The component shows user contact information, photo, reputation level, Chatter statistics, topics the user is knowledgeable about, and a Follow button.

#### User Profile Header Detail Component on the Koa and Kokua Templates

The User Profile Header Detail Component on the My Cases page combines several user profile components so that Koa and Kokua community users can easily view another community member's details. The component shows a user's contact information, photo, reputation level, and a Follow button.

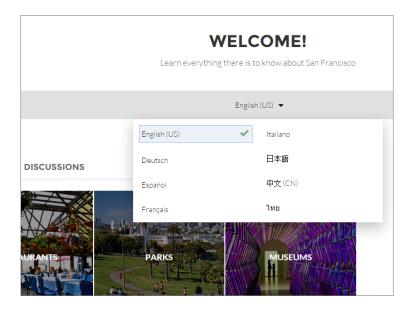
### Show or Hide Record Activity in Users' Feeds

Use the Show Record Activity checkbox on the User Profile Tabs component to choose whether users' feeds display only community-related activity or community activity and record activity. Record activity includes posts and comments on records available in your community.

# Multiple Language Support for Napili Communities

Add the new Language Picker component to let guest users in Napili communities select their preferred language on a community page.

Note: You must update your community's template to the Winter '16 version to use this functionality.



You can add the language picker to the header or footer, or to any section of any page. The language picker is **not** included on any pages by default.

Only guest users see the language picker. For authenticated users, the community automatically displays in their profile language.

When a guest user visits the community, Salesforce detects their browser language. If the browser language is one of our 18 fully supported languages, the community automatically displays in that language. If the browser language is *not* a Salesforce fully-supported language, the community displays in the default site language. Customized labels and Knowledge articles use the translations added by the community admin in Translation Workbench.

If the guest user wants to view the community in a different language, they can use the language picker. The language picker shows all languages supported in the community. When the user selects a language, the page reloads in that language.



### Note:

- The Language pane in Site.com Studio shows the default language as well as the list of languages supported in the community. If no other languages have been set in Site.com Studio, the language picker shows the default language without a drop-down option.
- To see the list of languages that guest users will see, go to the Branding Editor in Community Builder and navigate to a page that contains the language picker. Then click the language picker drop-down icon.

# New Case Detail Page Options for Community Templates

The Koa, Kokua, and Napili templates have a new default case detail page which gives community users a comprehensive view of case interactions when the community case feed is enabled. We've also streamlined the names of the case pages to help you select the case detail page that you want.

In Winter '16, you can select the active page for each page in your community. To select a case detail page, in Community Builder, click and select **Page Management**.

In the Active Page drop-down menu for Case Detail, you'll now see several options:

• Basic Case Detail gives users a limited view of their case. Its feed shows only case comments and attachments.

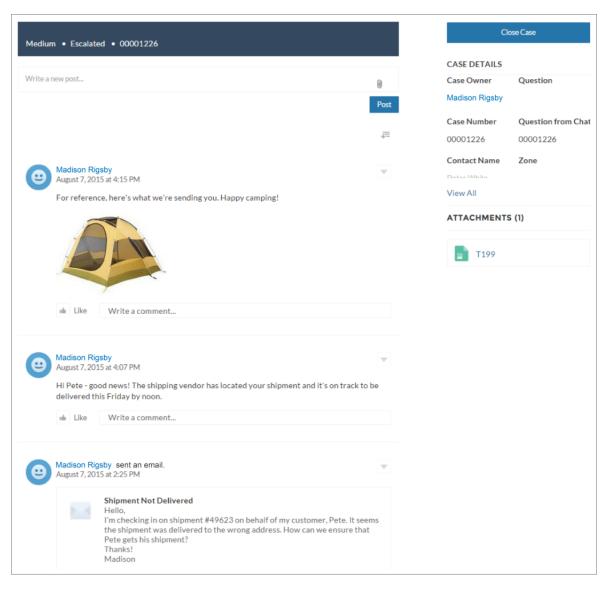
- **Chatter Case Detail**, the new default case detail page, gives users a full view of their case when the community case feed is enabled. Its feed shows case Chatter posts, related questions in Chatter, and case emails that the case contact sent or received.
- **Record Detail** is an additional option in Napili communities only. It closely matches the standard Salesforce record detail layout, and lets users view and edit related lists. As with Chatter Case Detail, this page's feed gives users a full view of their case when the community case feed is enabled.



We recommend enabling the community case feed and using Chatter Case Detail or Record Detail as your active case detail page. The community case feed lets community users see all case interactions in a unified feed, and gives agents more in-console communication tools.

(1) Important: If your community was created before Winter '16, the active case detail page switches to Chatter Case Detail only when you update your community to the Winter '16 version. If you made any customizations to your case detail page, those customizations are **not** carried over when you update.

Sample Chatter Case Detail page:



# Note:

- Unused case detail pages appear under Inactive Pages in the Page menu in Community Builder.
- If you use Chatter Case Detail as your active case detail page but don't enable the community case feed, users just see case comments in the feed.

#### SEE ALSO:

Set Up the Community Case Feed

# Let Community Users Vote on Knowledge Articles

Figure out which Knowledge articles are helping users—and which ones aren't—by letting Koa, Kokua, and Napili community users assign articles a thumbs up or thumbs down vote.



Note: You must update your community's template to the Winter '16 version to use this functionality.

The Napili Single Article View component and the Koa and Kokua Article View component now include an article voting option. To enable article voting in your community:

- 1. Navigate to the Article Detail page in Community Builder.
- 2. Select the Article View (Koa and Kokua) or Single Article View (Napili) component.
- 3. In the Property Editor, select **Enable Article Voting**. If you'd like, enter custom voting prompt and confirmation text.

When you enable article voting, authenticated community users see a prompt to vote below each article:



If your organization uses star rating on articles, thumbs up votes are recorded as five stars and thumbs down votes are recorded as one star.

When a user votes on an article, a confirmation message appears next to their vote. Thumbs up votes appear in green, while thumbs down votes are red.



The user can return to the article later to view their vote, but can't change it or see voting data from other community members. You can view an article's voting data at the top of the article in your organization.

# See User Expertise on Profiles

On user profile pages in Napili communities, show topics people know about so the community can quickly see areas of expertise. Topic knowledge is calculated based on factors such as best answers, mentions, or likes on questions and posts.



Note: You must update your community's template to the Winter '16 version to use this functionality.

Topic expertise appears in the User Profile Knowledgeable About component. You can display the component within the User Profile Body component, or place it elsewhere on the profile page.



For more details, see the *Using Templates to Build Communities* guide.

### User Profile Body Component on the Napili Template

The User Profile Body component combines several user profile components so that Napili community users can easily view another community member's details. The component shows user contact information, photo, reputation level, Chatter statistics, topics the user is knowledgeable about, and a Follow button.



**Note:** You must update your community's template to the Winter '16 version to use this functionality. Napili template versions before Winter '16 use the User Profile Header, User Profile Detail, User Profile Stats, and Follow Button components instead of User Profile Body.



Users in Napili communities access the user profile body by viewing their own profile or clicking another member's name. In their own profile, users can click the pencil icon to edit their contact information. In another user's profile, users can click **Follow** to see the user's community activity directly in their feed.

Chatter statistics for the community include number of posts and comments, likes received, followers, and people the user is following. Knowledgeable About shows top topics the person knows about so the community can quickly see areas of expertise. Topic knowledge is calculated based on factors such as best answers, mentions, or likes on questions and posts.

If nickname display is enabled for the community, the nickname is shown in place of the full name when a user views another user's profile. The full name is shown when a user views their own profile.

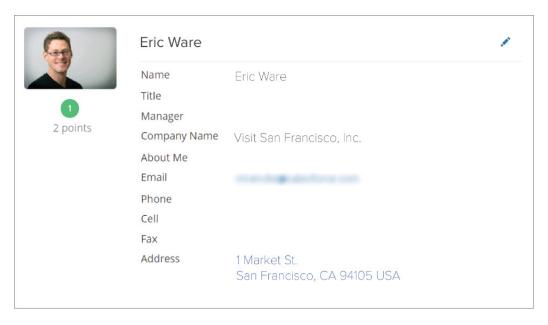
If you want a more customized layout, you can drag and drop the User Profile Header, Follow Button, User Profile Detail, User Profile Stats, and User Profile Knowledgeable About components into your User Profile page as needed.

# User Profile Header Detail Component on the Koa and Kokua Templates

The User Profile Header Detail Component on the My Cases page combines several user profile components so that Koa and Kokua community users can easily view another community member's details. The component shows a user's contact information, photo, reputation level, and a Follow button.



**Note:** You must update your community's template to the Winter '16 version to use this functionality. Koa and Kokua template versions before Winter '16 use the User Profile Header and User Profile Detail components instead of User Profile Header Detail.



Users in Koa and Kokua communities access the user profile body by viewing their own profile or clicking another member's name. In their own profile, users can click the pencil icon to edit their contact information. In another user's profile, users can click **Follow** to see the user's community activity directly in their feed.

If nickname display is enabled for the community, the nickname is shown in place of the full name when a user views another user's profile. The full name is shown when a user views their own profile.

### Show or Hide Record Activity in Users' Feeds

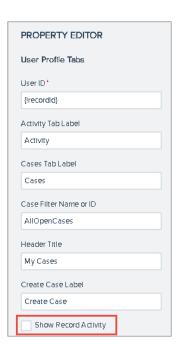
Use the Show Record Activity checkbox on the User Profile Tabs component to choose whether users' feeds display only community-related activity or community activity and record activity. Record activity includes posts and comments on records available in your community.

For example, if your community includes accounts, you'll see posts and comments made on accounts you have access to.

Showing record activity is disabled by default. To enable it, set Show Record Activity in the properties of the User Profile Tabs component.



**Example:** User Profile Tabs Property Editor:



# **Community Management**

We're making it easier to monitor and protect your community with moderation rules, Insights, and the ability to report spam messages. We've also enhanced topics in your community and provided a new menu in the global header to access customization tools.

#### IN THIS SECTION:

#### Your Community Management Home Page Now Maps to a Dashboard

To help community managers stay on top of things, you can map a dashboard to the Community Management Home page. When you access Community Management, you now see a message to install an AppExchange package that provides you with a preconfigured dashboard for your Home page.

### New Administration Page for Your Community Settings

Community Management has a new **Administration** > **Settings** page. On this page, you can edit your community name, description, and URL. You can also change your community status or template. Previously, these settings were on the **Overview** page, which has been renamed to **Home**.

### Easy Navigation Menu for Community Managers in the Global Header

We made it easier for you and your community managers to access customization tools, like Community Builder, Site.com Studio, and Force.com, by putting them all in the Community Management menu. You'll no longer see the **Launch Community Builder** link on the Community Management home page.

#### Moderate Inappropriate User-Generated Content In Your Community

Moderating user-generated content is one of the key factors in keeping your community thriving and healthy. Sure, you might have enabled your users to flag inappropriate content, but now you can do more! Set up moderation rules and criteria to block, flag, and replace keywords in your community members posts and comments. Moderation rules keep inappropriate and offensive language out of your communities, ensuring that your community members always feel respected. Moderation rules also work in communities using the Napili template.

### Spammers Beware! Report Spam in Chatter Messages

Your community members can now fight back against spammers by flagging private Chatter messages as inappropriate. Take that spammers! Community members can flag Chatter messages from within the community or from their email. Community members can also flag Chatter messages sent to notify them of file shares.

#### Insights for Community Managers

Say hello to Insights—your community manager's favorite new place. Insights are reports that let community managers monitor recent activity and access the source of that activity to take further action. You can get out-of-the-box Insights with the Salesforce Communities Dashboards AppExchange package or you can create and map your own. The AppExchange package will be available shortly after the Winter '16 release.

### Quickly Add Topics to Articles

Topics help communities organize content around common themes. You can now add multiple topics of any type to specific articles, or quickly remove them as your community needs change. Previously, you could only mass-assign articles in a data category to navigational topics.

### Structure Community Content with Subtopics

Guide community users through your site by creating parent-subtopic relationships for navigational topics. Each parent topic page conveniently links to subtopics and combines their feeds.

### **Translate Reputation Levels**

Use the Translation Workbench to translate the reputation levels for your community. This allows international community members to view their reputation levels in the appropriate language.

SEE ALSO:

Labels Streamlined in Setup

# Your Community Management Home Page Now Maps to a Dashboard

To help community managers stay on top of things, you can map a dashboard to the Community Management Home page. When you access Community Management, you now see a message to install an AppExchange package that provides you with a preconfigured dashboard for your Home page.



Tip: Get the preconfigured dashboard by installing the Winter '16 version of the Salesforce Communities Dashboards package available for download on the AppExchange shortly after the Winter '16 release. After you install the package, you can customize the provided dashboard by clicking **Edit Dashboard** on the Home page.

If you don't install the package or map one of your own dashboards, the message to install the package continues to display on the Home page.

# **USER PERMISSIONS**

To map dashboards in **Community Management:** 

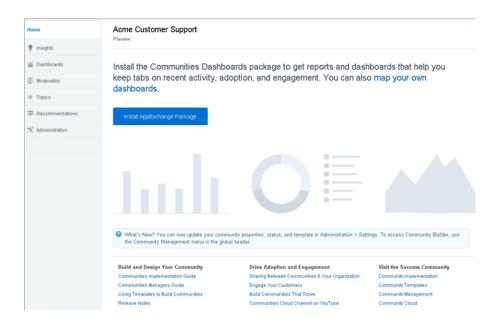
"Create and Set Up Communities" OR "Manage Communities"

**AND** 

"Manage Dashboards in Public Folders"

AND

Is a member of the community whose Community Management page they're trying to access



If you create or use your own dashboard, keep these things in mind:

- Use a two-column dashboard with only metric components in the first column and only charts in the second column.
- In the first column, use up to six metric components. Using more than six causes the row to wrap.
- In the second column, you can include any number of charts. However, keep the number of reports to a minimum.
- Your dashboard must have a title.

You can map any dashboard you have access to, but ensure that your community managers have access as well. You can map different dashboards for different communities.

- From within the community, click in the global header.
   Members of the community who have the "Create and Set Up Communities" permission can also access Community Management from the All Communities page in organization setup.
- 2. Click Dashboards > Settings.
- 3. Select the dashboard you want to show to community managers on the Home page.
- 4. Click Save.

#### SEE ALSO:

Create a Dashboard to Display on the Community Management Page Report on Communities with the Dashboards Package

# New Administration Page for Your Community Settings

Community Management has a new **Administration** > **Settings** page. On this page, you can edit your community name, description, and URL. You can also change your community status or template. Previously, these settings were on the **Overview** page, which has been renamed to **Home**.

### Easy Navigation Menu for Community Managers in the Global Header

We made it easier for you and your community managers to access customization tools, like Community Builder, Site.com Studio, and Force.com, by putting them all in the Community Management menu. You'll no longer see the **Launch Community Builder** link on the Community Management home page.

The Community Management menu appears in the global header inside Community Management. Pull down the menu to preview the community or access Community Builder, Site.com Studio, and Force.com.



Note: The Community Builder option doesn't appear when viewing a community created using Salesforce Tabs + Visualforce.

Within Community Management, users see the global header even if they don't have the "View Global Header" permission. Previously, only users with the "View Global Header" permission could see the global header. We recommend that you still assign the "View Global Header" permission to any users who need to switch between your internal organization and communities.



### Moderate Inappropriate User-Generated Content In Your Community

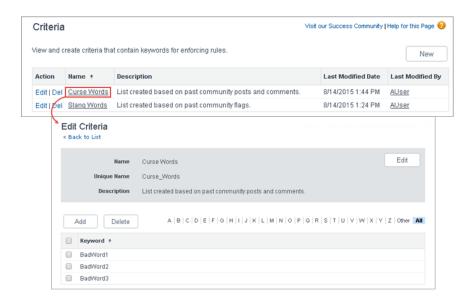
Moderating user-generated content is one of the key factors in keeping your community thriving and healthy. Sure, you might have enabled your users to flag inappropriate content, but now you can do more! Set up moderation rules and criteria to block, flag, and replace keywords in your community members posts and comments. Moderation rules keep inappropriate and offensive language out of your communities, ensuring that your community members always feel respected. Moderation rules also work in communities using the Napili template.

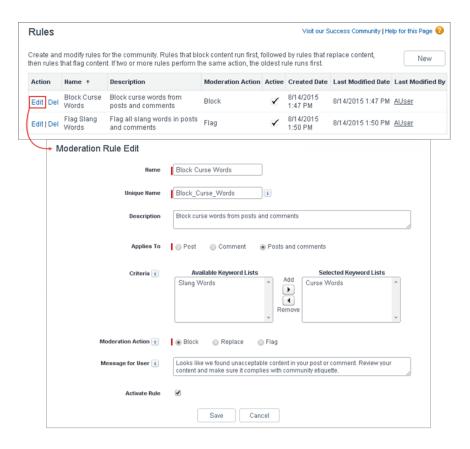
Moderation rules also apply to user-generated content created in Salesforce 1.



Note: You don't have to allow users to flag content to create moderation rules and criteria.

Here's what your new user interface looks like:





#### IN THIS SECTION:

### Create Moderation Criteria for Your Community

Create criteria that defines offensive language or inappropriate content that you don't want in your community. Criteria are used in rules to moderate user-generated content, such as posts and comments.

### Create Moderation Rules for Your Community

Create and modify rules for your community to moderate user-generated content. Each rule specifies the user-generated content the rule applies to, the criteria to enforce the rule on, and the moderation action to take. You can create rules that block, flag, or replace user-generated content that contains offensive language or inappropriate content.

### Create Moderation Criteria for Your Community

Create criteria that defines offensive language or inappropriate content that you don't want in your community. Criteria are used in rules to moderate user-generated content, such as posts and comments.

Some things to keep in mind:

- Your organization can have up to 10 keyword list criteria. This limit is per organization, not per community.
- A keyword list can have up to 2,000 keywords.
- Capitalization and trailing punctuation are ignored when matching your keywords to user-generated content. For example, if your criteria includes <code>BadWord</code>, it's matched when a user types <code>BADWORD</code> or <code>badword</code>.
- You can't use the API to set up moderation criteria.

Set up criteria to use in your moderation rules:

- From within the community, click in the global header.
   Members of the community who have the "Create and Set Up Communities" permission can also access Community Management from the All Communities page in organization setup.
- 2. Click Moderation > Criteria.
- 3. Click New.
- **4.** Enter a name, unique name, and description for your criteria.
- 5. Click Save.
- 6. Update the keywords in your criteria.

To add keywords, click **Add**.

- Keywords can be up to 100 characters and can only include letters, numbers, or ampersands (&).
- Wildcard characters aren't supported.
- Separate keywords with commas or line breaks.
- When adding keywords, you can copy and paste up to 32,000 characters at a time.

To delete keywords, select the keywords you want to remove, then click **Delete**.

A message indicates how many keywords were added or failed to add, and the number of duplicates that were ignored. If your entire entry failed to save, review the keyword requirements and then submit again. Don't worry about adding duplicates because they're ignored.

To delete criteria, click **Del** from the **Criteria** page. If criteria is being used by a rule, you can't delete it.

### **EDITIONS**

Available in: Salesforce Classic

Available in:

- Enterprise
- Performance
- Unlimited
- Developer

### **USER PERMISSIONS**

To view, create, edit, and delete criteria:

 "Manage Communities" OR "Create and Set Up Communities"

AND

Is a member of the community whose Community Management page they're trying to access.

### Create Moderation Rules for Your Community

Create and modify rules for your community to moderate user-generated content. Each rule specifies the user-generated content the rule applies to, the criteria to enforce the rule on, and the moderation action to take. You can create rules that block, flag, or replace user-generated content that contains offensive language or inappropriate content.

If your community is using the Napili template, moderation rules apply to questions created by your community members.

Some things to keep in mind:

- Your organization can have up to 10 rules. This limit is per organization, not per community.
- Each rule can have up to three criteria.
- Rules that block content run first, followed by rules that replace content, then rules that flag content. If two or more rules perform the same action, the oldest rule runs first.
- You can't use the API to set up moderation rules.
- Tip: Before creating a rule, make sure you've created criteria to use in that rule.
- From within the community, click in the global header.
   Members of the community who have the "Create and Set Up Communities" permission can also access Community Management from the All Communities page in organization setup.
- 2. Click Moderation > Rules.
- 3. Click New.
- **4.** Complete the following fields:
  - Name—Enter a name for your rule.
  - Unique Name—Enter a unique name for your rule. The unique name used by the API and managed packages.
  - Description—Optionally, enter a description.
  - Applies To—Specify which types of user-generated content this rule applies to. Posts and comments only apply to content created in groups and user profiles.
  - Criteria—Select the criteria to enforce this rule.
    - (!) Important: If you activate a rule without specifying criteria, the rule either flags all posts and comments or prevents users from creating posts and comments entirely. Yikes! Be careful.
  - Moderation Action—Specify what you want to happen when the criteria is matched.
    - Block prevents the content from being published.
    - Replace publishes the content with the keywords replaced as asterisks. For example, BadWord becomes \*\*\*\*\*\*\*.
    - Flag publishes the content and then automatically flags the content as inappropriate.
  - Message for User—Specify the message that your user sees when their content is blocked. If you don't specify a message, the user sees the standard message: "Looks like we found unacceptable content in your post or comment. Review your content and make sure it complies with community etiquette."
  - Activate Rule—If selected, the rule is activated.
- 5. Click **Save** to apply your changes.

### EDITIONS

Available in: Salesforce Classic

Available in:

- Enterprise
- Performance
- Unlimited
- Developer

### **USER PERMISSIONS**

To view, create, edit, and delete rules:

 "Manage Communities" OR "Create and Set Up Communities"

AND

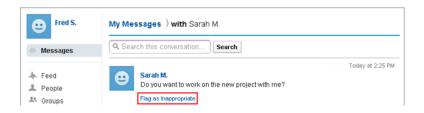
Is a member of the community whose Community Management page they're trying to access.

### Spammers Beware! Report Spam in Chatter Messages

Your community members can now fight back against spammers by flagging private Chatter messages as inappropriate. Take that spammers! Community members can flag Chatter messages from within the community or from their email. Community members can also flag Chatter messages sent to notify them of file shares.

To allow private messages to be flagged, turn on flagging in your community. You need the "Create and Set Up Communities" permission to enable flagging. From Community Management, click **Administration** > **Preferences**, then select **Allow members to flag content**. If flagging is already turned on in your community, you don't have to do anything else.

After flagging is enabled, users see a **Flag as Inappropriate** link when viewing messages from the My Messages page in the Chatter tab of your community. The My Messages page displays all your private messages, across all communities. If email notification is turned on for messages, users also see the link there. When they click the link, a confirmation message lets them know that the message was successfully flagged and reported.



Community managers and moderators can opt to receive an email every time a community member flags a message as inappropriate by selecting the **Flags an item as inappropriate** option on their Chatter email notifications. Community managers can also view a list of flagged private messages and see who sent them by installing the Salesforce Communities Dashboards package from the AppExchange. After the package is installed, they can access the report from the **Insights** > **Moderation** page in Community Management.

To report on flagged messages, create a custom report type with Networks as the primary object and Network Audits as the child object, then create a report and filter it by Audited Object Type for Chatter Message.

Here are a few limitations to keep in mind:

- To view the content of a private message and delete it, you need the "Manage Chatter Messages" permission.
- You can't flag messages sent from communities that you aren't a member of.
- You can't flag private messages in your internal organization, in Salesforce 1, and in portals.

SEE ALSO:

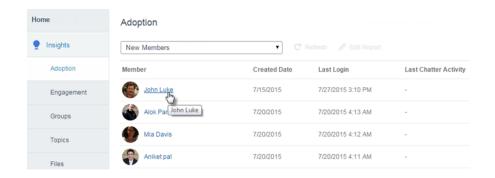
Enable Users to Flag Items in Your Community

# Insights for Community Managers

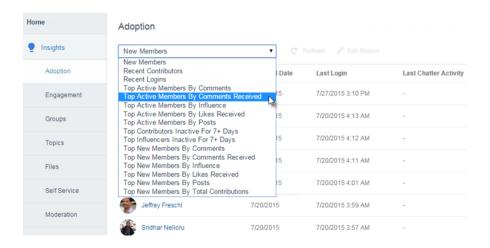
Say hello to Insights—your community manager's favorite new place. Insights are reports that let community managers monitor recent activity and access the source of that activity to take further action. You can get out-of-the-box Insights with the Salesforce Communities Dashboards AppExchange package or you can create and map your own. The AppExchange package will be available shortly after the Winter '16 release.

Insights help community managers nurture and encourage community engagement and adoption by allowing them to easily drill down to the source of activity. You can set up Insights to monitor new members, unanswered questions, newly created groups, trending topics, and even recent contributions.

For example, with an Insights report set up to track new members, community managers can quickly navigate to a new member's profile to send them a welcome message.



They can also access other reports about members directly from the page using the drop-down menu.



#### How does it work?

Insights pages map to report folders in your internal organization. All the reports included in that folder are displayed in the drop-down menu on the Insights page. Adding or removing an Insights report from the report folder in your internal organization updates the Insights page in Community Management. On the Insights page, entity links are automatically created for fields such as Created By or Group Name. This link is what allows community managers to easily drill down to the source of activity and take action.

#### How do I get out-of-the-box Insights?

Install the Winter '16 version of the Salesforce Communities Dashboards package, which is available on the AppExchange shortly after the Winter '16 release. To use the preconfigured Insights reports, your community must use Chatter.

When you install the package, Insights report folders are installed in your internal organization and then mapped to Insights pages in Community Management. During installation, you can give your community managers access to the package contents, saving you from the task of sharing folders later. After installation, expand **Insights** in Community Management and check out the new pages and reports. If you decide that the prepackaged Insights aren't working for you, customize them. To add or remove columns and update filters, click **Edit Report** on the Insights page.

The package provides the following Insights pages:

- **Adoption** to monitor member activity.
- Engagement to track posts and comments in groups.
- **Files** to monitor file uploads and downloads, including files receiving lots of comments.
- Groups to help with group management.
- Moderation to track flagged posts, files, messages, and content flagged by moderation rules.

- **Self-Service** to track questions and answers in user profiles, including questions escalated to cases. This Insights page is great for communities using the Napili template.
- Topics to keep an eye on recent topics.

You can have up to 10 Insights pages mapped in Community Management. The Salesforce Communities Dashboards package automatically maps seven pages, leaving you three pages to customize yourself. However, you can always rename, customize, or replace any of the prepackaged Insights pages.

For information about the Salesforce Communities Dashboards package, see Report on Communities with the AppExchange Package in the Salesforce online help.

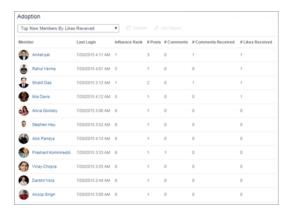
### Can I create my own Insights?

Yes. Keep in mind that Insights reports must be tabular-based reports, return 2,000 rows or less, and can't include pagination. Save the reports in a new report folder that you'll use for mapping in Community Management. In the report folder, make sure that you only include reports you want to use for Insights because once mapped, any report included in this folder appears in Community Management. Remember to give your community managers access to the Insights report folders in your internal organization. To set up Insights for your community, go to the **Insights > Settings** page in Community Management. For more information, see Create Insights to Display in Community Management.

### Confused about the difference between Insights and Dashboards?

Use **Insights** to view, monitor, and act on your community's activity. Insights give you a super-focused look at a specific area of your community.

Use **Dashboards** to view your community's analytics, such as metrics and trends on activity. Dashboards give you mid-term to long-term views on adoption and engagement in your community. They help you monitor return on investment (ROI) and key performance indicators (KPI).





You can visit the **Insights** > **Adoption** page to view a report about new members in your community that have received the most likes on their posts and comments. This Insights report helps you identify and engage with your active new members that are receiving positive feedback from other community members.

You can visit the **Dashboards** > **Activity** page to track total posts and comments including overall contribution trends in your community.

# **Quickly Add Topics to Articles**

Topics help communities organize content around common themes. You can now add multiple topics of any type to specific articles, or quickly remove them as your community needs change. Previously, you could only mass-assign articles in a data category to navigational topics.

### Add topics of any kind to articles, or remove them:

- From within the community, click in the global header.
   Members of the community who have the "Create and Set Up Communities" permission can also access Community Management from the All Communities page in organization setup.
- 2. Click Topics > Article Management.
- **3.** Select a data category group followed by a specific category.
- **4.** Click an article, and then type to assign topics, or click existing ones to remove them.

### Remove all articles from a navigational topic:

- From within the community, click in the global header.
   Members of the community who have the "Create and Set Up Communities" permission can also access Community Management from the All Communities page in organization setup.
- 2. Click Topics > Navigational Topics.
- **3.** Hover over a topic name, and click **//**.
- 4. Click Remove All Assigned Articles.

# Structure Community Content with Subtopics

Guide community users through your site by creating parent-subtopic relationships for navigational topics. Each parent topic page conveniently links to subtopics and combines their feeds.

- **1.** In Community Management, create the navigational topics you'd like to use as parents and subtopics. (If you want to use existing topics, you must delete and re-create them.)
- **2.** Create parent-subtopic relationships using the Managed Topics API in the Chatter REST API or Chatter in Apex.

Use the depth parameter to specify up to three hierarchical levels. Parents at each level can include up to 10 subtopics.

In the community, links to subtopics appear below the parent topic headline. On mobile devices, these links appear in a Subtopics menu.

# **TOPIC A**

TopicB | TopicC | TopicD

### **USER PERMISSIONS**

To access Community Management:

"Create and Set Up Communities" OR "Manage Communities"

**AND** 

Is a member of the community whose Community Management page they're trying to access

To add or remove topics:

• "Create Topics"

### **USER PERMISSIONS**

To access Community Management:

 "Create and Set Up Communities" OR "Manage Communities"

**AND** 

Is a member of the community whose Community Management page they're trying to access

To show or hide subtopics using Community Builder:

 "Create and Set Up Communities"



Tip: You can hide subtopics in Community Builder. Go to the Page Editor, and select the Topic Detail page. Choose the Headline component, and in the Property Editor deselect Show Subtopics.

# **Translate Reputation Levels**

Use the Translation Workbench to translate the reputation levels for your community. This allows international community members to view their reputation levels in the appropriate language.

You can translate labels for each community in your organization. Select the Reputation Level setup component in the Translation Workbench, and then expand the node next to the community.

Translated labels are shown when the user accessing the community selects the language you translated the labels into.

For more information on using the Translation Workbench to translate labels, see Entering Translated Terms in the Salesforce Help.

# Search Improvements for Communities

Users performing a search in communities now see similar questions and articles as they type. We've also changed a few properties in the search publisher.

#### IN THIS SECTION:

### Display Similar Questions and Articles in Napili Search (Generally Available)

It's now easier to reduce duplicate content in your Napili community. When a community user enters a question in Search, they see similar questions and relevant Knowledge Articles in a tabbed drop-down list as they type.

### Improved Napili Search Publisher Component

Improvements to Napili search include some changes to the Search Publisher component.

### Search Removed from Koa and Kokua Article Detail Header

In Koa and Kokua communities created in Winter '16 or updated to the Winter '16 version, the Article Detail page no longer contains a Search field in the header. To conduct a search, users can navigate to any other page in the community.

# Display Similar Questions and Articles in Napili Search (Generally Available)

It's now easier to reduce duplicate content in your Napili community. When a community user enters a question in Search, they see similar questions and relevant Knowledge Articles in a tabbed drop-down list as they type.



### Note:

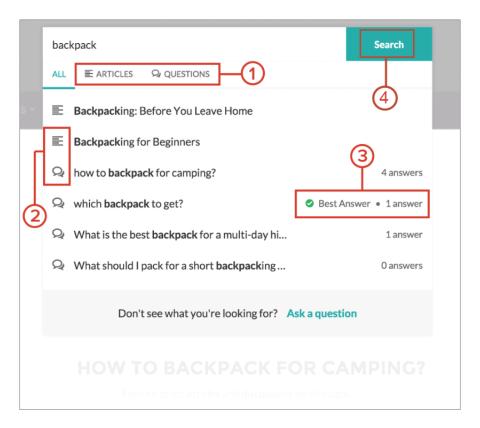
- You don't have to update your community to the Winter '16 version to use this functionality; it's available immediately after the Winter '16 release.
- This functionality is also available in Salesforce organizations with Chatter and in communities built using Salesforce Tabs + Visualforce. To learn more, see Display Similar Questions and Articles in Chatter Questions (Generally Available).
- For a community user to see similar articles, Salesforce Knowledge must be enabled and the user must have access to it.

When a user enters a question in Search, similar questions and Knowledge articles automatically appear in a drop-down list below the field. The drop-down list contains two tabs: **Articles** and **Questions**. To also expose an **All** tab that shows combined results (recommended), enable Similar Articles:

- 1. From Setup, enter Knowledge Settings in the Quick Find box, then select Knowledge Settings.
- 2. Under Chatter Questions Settings, select **Display relevant articles as users ask questions in Chatter (also applies to communities with Chatter)**.
  - **1**

Note: If Similar Articles isn't enabled, users still see article results in the **Articles** tab.

By default, each tab contains up to six results. The **All** tab shows both matching articles and questions, with articles appearing first. It displays an equal number of questions and articles, but if there aren't enough of one type of result, more results of the other type are displayed. To see results of a particular type, users can click the **Articles** and **Questions** tabs. If a search only returns one result type (for example, questions), users still see all of the tabs.



- The **Articles** and **Questions** tabs **(1)** let users view results of each type. Users can use the Up and Down arrow keys to navigate between results. Clicking a question or article in the drop-down list takes a user directly to it.
- Text and chat bubble icons (2) indicate whether a search result is an article or a question.
- Question results (3) include the number of answers and a green checkmark with the text Best Answer if one was selected.
- The drop-down search results **(4)** are based on whether the question or article title contains the text entered by the user. When the user performs a full search by clicking **Search**, the search engine also scans question descriptions and article text for matching terms.

You can customize the search settings by editing the Search Publisher component in Community Builder. For details about related changes to the Search Publisher component, see Improved Napili Search Publisher Component.

# Improved Napili Search Publisher Component

Improvements to Napili search include some changes to the Search Publisher component.

Note: You don't have to update your community to the Winter '16 version to use this functionality; it's available immediately after the Winter '16 release.

Here's what changed:

The Banner Text with Links property was removed to keep the search experience clean for users. If your Search Publisher
component contained banner text, that text will no longer be visible after the Winter '16 release.

- Drop-down search now displays search results in multiple tabs, so the Max Number of Questions Returned and Max Number of Articles Returned properties were replaced by a new Max Number of Results Returned property.
- The new All Results Label, Article Results Label, and Question Results Label properties let you choose a name for the search tabs.
- The new Show Questions Before Articles property lets you opt to show questions before articles in the drop-down search results.

To learn more about Winter '16 improvements to the Napili search, see Display Similar Questions and Articles in Napili Search (Generally Available).

### Search Removed from Koa and Kokua Article Detail Header

In Koa and Kokua communities created in Winter '16 or updated to the Winter '16 version, the Article Detail page no longer contains a Search field in the header. To conduct a search, users can navigate to any other page in the community.

# Work Better with Files in Communities

Access external files, manage file visibility by community, and get notified when someone shares a file.

#### IN THIS SECTION:

#### Access External Files in Communities

Share documents from Google Drive, SharePoint, and OneDrive for Business in communities that use the Salesforce Tabs + Visualforce template. Files Connect makes it possible.

#### Limit File Visibility by Community

You can now limit the visibility of files that users post on user profile pages, based on their community membership. Org-wide user sharing must be set to private for this feature to be available.

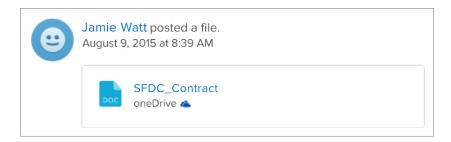
### Sharing Files in a Community Now Sends Private Chatter Messages

If your community has Chatter messages enabled, community members are notified of file shares in a private Chatter message. Community members can see the message in their My Messages page in Chatter. If they have email notifications turned on for messages, they also receive an email. Previously, members were only notified of the file share in email.

### Access External Files in Communities

Share documents from Google Drive, SharePoint, and OneDrive for Business in communities that use the Salesforce Tabs + Visualforce template. Files Connect makes it possible.

To get things started, set up Files Connect for your organization. If you configure your organization to reference external files rather than copy them, community users will need a related account for Google Drive, SharePoint, or OneDrive for Business. You can provide a single shared account or multiple personal ones. Users are asked to enter their credentials when they first access external files from the community.



If your organization uses the High Volume Customer Portal license, communities aren't supported for on-premises data sources like SharePoint 2010.

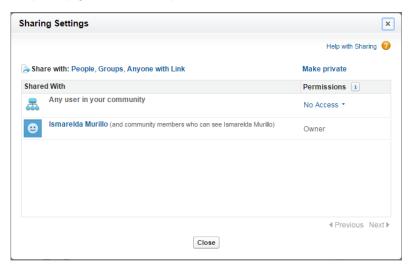


Tip: Use Chatter REST API to programmatically interact with external files in communities.

# Limit File Visibility by Community

You can now limit the visibility of files that users post on user profile pages, based on their community membership. Org-wide user sharing must be set to private for this feature to be available.

When a user attaches a file in a feed on their own profile page or another user's profile page, anyone who can see that user is also able to view the file. When limiting file visibility by community is enabled, users must be members of the same community in order to see these files. This is useful when, for example, you want partners and customers to be able to see each other's user profile pages, but not files they share in their feed. Sharing Settings indicate that the file is visible only to community members who have access to see the user profile page where the file is posted.





**Note**: In order for limiting file visibility by community to work, user sharing must be set to private in your org-wide sharing default settings for user records, and File Sharing by Community Membership must be enabled by Salesforce.

# Sharing Files in a Community Now Sends Private Chatter Messages

If your community has Chatter messages enabled, community members are notified of file shares in a private Chatter message. Community members can see the message in their My Messages page in Chatter. If they have email notifications turned on for messages, they also receive an email. Previously, members were only notified of the file share in email.

If Chatter messages aren't enabled in your community, members continue to be notified of the file share in email.

Want even more bang for your buck? If you allow flagging in your community, members can flag any private message, including file share notification messages, as inappropriate. If a spammer shares an inappropriate file, your community members can report the message.

# Other Changes in Communities

Other important changes to Communities include a new login look and feel, more detailed password reset emails, and updates for partner users who work with accounts, contacts, and leads.

#### IN THIS SECTION:

### New Community Login Look and Feel

We've redesigned and improved the usability of the login experience to make it more intuitive for your external community members. In addition to the main community login page, the updated design appears when external users approve OAuth access (give apps access to their data) and perform other login-related tasks.

### **UserInfo Endpoint Supported in Communities**

After OAuth authentication for a Salesforce community org, you can use the UserInfo endpoint to get information associated with a user based on the user's access token. Previously, a No\_Site\_Endpoint error occurred.

### Switch to Lightning Experience from the Global Header

If your organization enables Lightning Experience, users who have the Communities global header turned on and who have permission to access Lightning Experience can easily change between Salesforce Classic and the new interface using the Switcher. The Switcher is available from the global header. Look for the Switch to Lightning Experience link in the Your Name menu.

#### Compose and Edit Posts with Rich Text in Communities

Format your posts with bold, italic, and underlined characters, and bulleted and numbered lists. This feature is only available in communities created using the Salesforce Tabs + Visualforce. The rich text editor is enabled in the publisher by default in all new and existing orgs.

### Changes to Member-Initiated Password Resets

When community members forget their password and request to reset it, they receive an email with a link to reset the password. Member-initiated password reset links expire in 24 hours. Previously, this link never expired.

#### Share Wave Analytics with Your Community (Pilot)

With Wave Analytics for Communities, your partner and customer users can view and explore Wave dashboards embedded in Visualforce pages on your community.

### Partner Users in Your Community Can Import Accounts, Contacts, and Leads

Partner users in your community can now use the Data Import Wizard you know and love. We bet they'll love it too. Your partner users can upload a CSV file and quickly import their data. The import wizard doesn't include any Salesforce branding, so they don't know that they're using Salesforce under the covers.

### Partner Users in Your Community Can Mass Update Leads

Partner users can now mass update the owner and status of leads in a list view.

### Customer Community Plus Users Can Assign a Queue as the Case Owner

Users with a Customer Community Plus license can now change the owner of a case to a queue. Previously, they could change only the owner of a case to a specific user.

### Usage-Based Entitlements Display Customer Community Plus Login Licenses Correctly

The Usage-Based Entitlements section accessed in Setup via the **Company Profile** > **Company Information** page, now displays the number of logins for Customer Community Plus Login licenses. This number is updated weekly. Previously, this information was not displayed.

### My Cases Heading Change for Mobile Devices

As part of an effort to make the My Cases component more space-efficient, the name of the first column in My Cases now displays as the case title on mobile devices for Koa, Kokua, and Napili community users. We recommend using Subject as the first column so mobile users can easily scan their cases.

### Different Behavior When Adding one/one.app to the Community URL

In desktop browsers, when you append the community URL with one/one.app you will be redirected to the Active Site Home Page for the community.

### Google Maps Not Shown by Default on a User's Profile

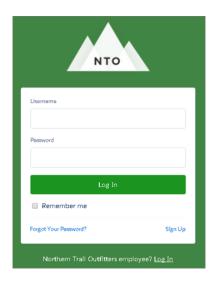
You can see a community member's location on a Google map by clicking the address in their user profile. Previously, the map showed below the user's address on the user profile page. This change impacts communities created using the Koa, Kokua, or Napili templates.

### Orange Corner Removed from External Users' Photos in Salesforce1

When viewing an external user's photo in the Salesforce1 Mobile App, you don't see a visual indicator that the user is an external user

# New Community Login Look and Feel

We've redesigned and improved the usability of the login experience to make it more intuitive for your external community members. In addition to the main community login page, the updated design appears when external users approve OAuth access (give apps access to their data) and perform other login-related tasks.



If your community has self-registration enabled, the **Not a member?** link on the main community login page is now called **Sign Up**. The action is the same, just the name is different.

Your login page is at the same address and users continue to use their existing usernames and passwords. Login pages with the old look and feel can appear for some users while we roll out the change across all instances. All customers will see the new login pages no later than October 18.



**Note:** This change doesn't apply to custom login pages built using Community Builder, Site.com Studio, or Visualforce. This change is available on a rolling basis during the Winter '16 release.

#### SEE ALSO:

New Login Look and Feel Salesforce Maintenance Calendar Login Rollout in Winter '16 Release

# UserInfo Endpoint Supported in Communities

After OAuth authentication for a Salesforce community org, you can use the UserInfo endpoint to get information associated with a user based on the user's access token. Previously, a No\_Site\_Endpoint error occurred.

#### SEE ALSO:

The UserInfo Endpoint

# Switch to Lightning Experience from the Global Header

If your organization enables Lightning Experience, users who have the Communities global header turned on and who have permission to access Lightning Experience can easily change between Salesforce Classic and the new interface using the Switcher. The Switcher is available from the global header. Look for the Switch to Lightning Experience link in the Your Name menu.



"Manage Connected Apps"



Salesforce Communities isn't currently supported in Lightning Experience. This has a few implications for your users.

- The Switcher in the global header is only available from the internal organization. It doesn't show when accessing the global header from within a community.
- The global header isn't available in Lightning Experience. To access communities, users must switch back to Salesforce Classic.

#### SEE ALSO:

Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic Saying Hello to Lightning Experience Doesn't Mean Saying Goodbye to Salesforce Classic Gotchas If Users Switch Between Lightning Experience and Salesforce Classic

# Compose and Edit Posts with Rich Text in Communities

Format your posts with bold, italic, and underlined characters, and bulleted and numbered lists. This feature is only available in communities created using the Salesforce Tabs + Visualforce. The rich text editor is enabled in the publisher by default in all new and existing orgs.

Users can format text posts, questions, and posts with link or file attachments. The text can include @mention, topics, and emoticons. For more information, see Format Posts with Rich Text.

# Changes to Member-Initiated Password Resets

When community members forget their password and request to reset it, they receive an email with a link to reset the password. Member-initiated password reset links expire in 24 hours. Previously, this link never expired.

When you reset a community member's password, the user also receives an email to reset the password. Administrator-initiated password reset links never expire. This behavior hasn't changed.

Community members now also receive emails if an error was encountered trying to process their password reset request. For example, if a community member tries to reset a password too many times in a 24-hour period, an email is sent stating that the reset request couldn't be processed and to try again later. Other password reset failures can happen when:

- A member's account is temporarily or permanently locked due to too many unsuccessful login attempts.
- The reset request was sent from an unapproved IP address or network location.
- The reset request was sent outside of approved login hours.

Currently, these emails can't be suppressed or customized.

If your community is using single sign-on (SSO) and community members with the "Is Single Sign-On Enabled" user permission request a password reset, they receive an email with a link that directs them to a Salesforce error page. This page lets them know that they can't reset their password. Previously, these community members didn't receive an email.



Note: These changes affect portal license users only when requesting password resets in communities, not in portals.

# Share Wave Analytics with Your Community (Pilot)

With Wave Analytics for Communities, your partner and customer users can view and explore Wave dashboards embedded in Visualforce pages on your community.



**Note**: Wave Analytics for Communities is in pilot. Contact your Salesforce account executive to enable this feature.

Your partner and customer users can view embedded Wave dashboards when your Salesforce org has the Wave Community permission and preference enabled. Also, Enable Wave Analytics for Communities must be selected in the Wave Analytics Settings for your org. Access is then given through sharing a Wave app.



Wave Analytics is available for an extra cost in: **Enterprise, Performance**, and **Unlimited** Editions

Community partner and customer users are granted read-only access to Wave Analytics. From your community, they can drill in and explore embedded dashboards, but all other areas of Wave Analytics remain inaccessible and secure.



**Note:** This feature is supported in communities but not in portals. The feature is supported for users with a user role and is not supported for high-volume portal users.

For more information about embedding Wave Analytics, see the wave: dashboard component in the Visualforce Developer's Guide Standard Component Reference.

# Partner Users in Your Community Can Import Accounts, Contacts, and Leads

Partner users in your community can now use the Data Import Wizard you know and love. We bet they'll love it too. Your partner users can upload a CSV file and quickly import their data. The import wizard doesn't include any Salesforce branding, so they don't know that they're using Salesforce under the covers.

On the Accounts and Contacts tabs, partner users now see an **Import My Organization's Accounts & Contacts** link. On the Leads tab, partner users now see an **Import Leads** link. When the import is complete, the partner user receives an email with the import results. The user also becomes the owner for all the accounts, contacts, and leads that were imported.

To allow your partner users to access and use the import wizard, assign the following user permissions: "Import Personal Contacts" and "Import Leads."



Note: Partner users with legacy portal licenses can import leads and contacts in communities but not in portals.

## Partner Users in Your Community Can Mass Update Leads

Partner users can now mass update the owner and status of leads in a list view.

Partner users can select the checkboxes next to the desired leads and click one of the following buttons:

- **Change Status**: Changes the status of the leads. Partner users must have the "Manage Leads" permission and read/write access to the leads.
- **Change Owner**: Assigns leads to a specific user or queue. Partner users must have the "Transfer Leads" permission and read/write access to the leads.



Note: Partner users with legacy portal licenses can mass update leads in communities but not in portals.

# Customer Community Plus Users Can Assign a Queue as the Case Owner

Users with a Customer Community Plus license can now change the owner of a case to a queue. Previously, they could change only the owner of a case to a specific user.

# Usage-Based Entitlements Display Customer Community Plus Login Licenses Correctly

The Usage-Based Entitlements section accessed in Setup via the **Company Profile** > **Company Information** page, now displays the number of logins for Customer Community Plus Login licenses. This number is updated weekly. Previously, this information was not displayed.

To track daily logins, you can install the Salesforce Communities Dashboards package from the AppExchange. For more information, see *Get Started with Communities Dashboards and Insights*.

# My Cases Heading Change for Mobile Devices

As part of an effort to make the My Cases component more space-efficient, the name of the first column in My Cases now displays as the case title on mobile devices for Koa, Kokua, and Napili community users. We recommend using Subject as the first column so mobile users can easily scan their cases.

To change the column order in the My Cases component, edit the case list view that your organization has assigned to it. By default, the My Cases component uses the All Open Cases list view from Salesforce.

# Different Behavior When Adding one one app to the Community URL

In desktop browsers, when you append the community URL with <code>one/one.app</code> you will be redirected to the Active Site Home Page for the community.

This doesn't affect users accessing communities in the Salesforce1 Mobile Browser App app or Salesforce1 Downloadable App.

# Google Maps Not Shown by Default on a User's Profile

You can see a community member's location on a Google map by clicking the address in their user profile. Previously, the map showed below the user's address on the user profile page. This change impacts communities created using the Koa, Kokua, or Napili templates.



**Note**: When viewing a community on a mobile device, the map continues to appear below the address unless disabled by the administrator.

# Orange Corner Removed from External Users' Photos in Salesforce1

When viewing an external user's photo in the Salesforce1 Mobile App, you don't see a visual indicator that the user is an external user. In the full Salesforce site and Salesforce1 Downloadable App, the upper left corner of an external user's photo is still orange.

# Chatter: Rich Text Posts, More Relevant Mentions, Mute Posts

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, and mute feed posts. There are also several improvements to files, user profiles, and groups.

### IN THIS SECTION:

#### Files

Read all about the latest and greatest in Salesforce Files, such as more flexibility in file sharing, better and faster file previews, and new ways to relate files to records.

### User Profiles

Share relevant information through user profiles in Chatter. This feature is available in both Lightning Experience and Salesforce Classic.

#### Groups

Create group-record relationships by mentioning a group on a record.

### Feeds

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, mute feed posts, and more.

### Other Changes in Chatter

Smaller changes that improve your experience with Chatter.

#### SEE ALSO:

How and When Chatter Features Become Available Labels Streamlined in Setup

# **Files**

Read all about the latest and greatest in Salesforce Files, such as more flexibility in file sharing, better and faster file previews, and new ways to relate files to records.

### IN THIS SECTION:

### Enjoy Fast, Beautiful File Previews!

Get ready to gaze upon the beautiful, feature-filled SVG file preview player in Lightning Experience! You are in for some *oohs* and *ahhs* as your file preview loads faster, lets you scroll continuously through multi-page documents, renders clearly on high-res displays, and gives you quick access to actions directly from the preview window. This feature is available in Lightning Experience only.

# EDITIONS

### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Contact Manager
- Developer

### Freeze Sharing of a File

Now you can freeze the sharing of a file in its current state, preventing new shares without removing any existing shares. This feature is available in Salesforce Classic only.

### Enable or Disable Selecting Files from Salesforce

Now you can control whether users can select files from Salesforce or only upload files in Chatter feed posts. Set this up in user profiles or permissions sets. This feature is available in both Lightning Experience and Salesforce Classic.

### Sync 2 GB Files

Salesforce Files Sync now lets you upload and sync up to 2 GB files. Up from 500 MB, the new limit is now aligned with Chatter files and the APIs. Salesforce Files Sync is available in Salesforce Classic only.

### Add the Files Related List to Page Layouts

The Files related list is an optional related list that you can now add to any of your page layouts for opportunities, accounts, cases, leads, custom objects, and many other objects. Organizations created after Winter '16 have the Files related list on page layouts for many objects by default. This feature is available in Lightning Experience, Salesforce Classic, and the Salesforce 1 mobile app.

### Set History Tracking on Content Version Fields

Now you can track changes to Content Version fields, just as you can do for fields on other standard objects. This feature is available in both Lightning Experience and Salesforce Classic.

#### Ensure Access to On-Premises Data Sources for Files Connect

Secure Agent clusters provide failover protection, ensuring that Salesforce users can always access on-premises external data sources like SharePoint 2010 or 2013. This feature is available in Salesforce Classic only.

### Create Triggers to Customize File Sharing Behavior

To customize file sharing behavior, define an Apex trigger for the ContentDistribution or ContentDocumentLink objects. The ContentDistribution object represents a file shared externally. A ContentDocumentLink represents a file shared with an internal object, such as a user, group, or record.

#### SEE ALSO:

#### Labels Streamlined in Setup

Email: Send and Manage Email and Templates Directly from Records in Lightning Experience

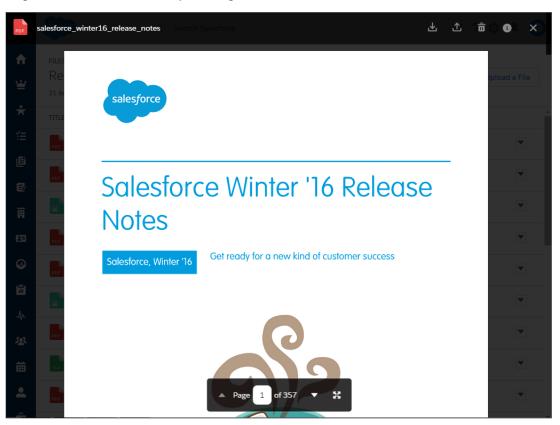
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The new file preview player in Lightning Experience provides a far richer preview experience, both visually and functionally. Preview images are vector-based rather than pixel-based, so the render quality is higher and doesn't degrade on high-res screens. Since the new preview player isn't SWF-based, there's no need for users to install Adobe Flash Player in order to preview their files. What's even better? It has full-screen mode and works with most presentation clickers, so you can dazzle your audience with your latest deck in a browser without needing to download a thing. Your animated GIFs will play well, too!

Go ahead. Do a happy dance. When you're done with that, check out how fabulous your files will look!

### Page or Scroll Continuously Through Documents:



# Crystal-Clear Render Quality



Quick Access to Download, Upload New Version, Delete, and File Details



# Freeze Sharing of a File

Now you can freeze the sharing of a file in its current state, preventing new shares without removing any existing shares. This feature is available in Salesforce Classic only.

In Winter '16, freeze sharing is available in Salesforce CRM Content and in the API. If you've been using attachments to limit file sharing to a record, use freeze sharing instead to get the same results while leveraging the rich features and flexibility of Salesforce Files.

### Freeze Sharing in Salesforce CRM Content

When the freeze sharing feature is enabled for your org, you can add the new Freeze Sharing field to a page layout in Salesforce Content. When you add this checkbox, file owners and admins can freeze sharing of any file in Salesforce. The checkbox is turned off by default.

### Freeze Sharing in APIs

You can also use the Chatter REST API, SObject API, or SOQL query to freeze sharing of files. The new SharingOption field on ContentVersion allows freeze sharing for files.

### View Freeze Sharing Status

Whether a file's sharing is frozen via Salesforce CRM Content or the API, the sharing status of a file is visible in **Sharing Settings** in Chatter. Frozen files can still be shared by administrators and the file owner, provided that they have Collaborator access to the file.

# Enable or Disable Selecting Files from Salesforce

Now you can control whether users can select files from Salesforce or only upload files in Chatter feed posts. Set this up in user profiles or permissions sets. This feature is available in both Lightning Experience and Salesforce Classic.

When attaching a file in a Chatter feed post or comment, by default, users can choose whether to upload a file or select a file from Salesforce. You can disable this user permission in user profiles, or apply it in permission sets. Users who have this permission disabled can still attach files by uploading them, but won't be able to select files from Salesforce to attach.

To disable the permission in user profiles, go to User Profiles in Setup. Select the profile name. In the **Administrative Permissions** section, disable **Select Files from Salesforce**.

To enable the permission in a permission set, go to **Setup > Administration > Users > Permission Sets**. Select a permission set or create a new one. In the System Permissions section, click **Edit**. Enable **Select Files from Salesforce**.

# Sync 2 GB Files

Salesforce Files Sync now lets you upload and sync up to 2 GB files. Up from 500 MB, the new limit is now aligned with Chatter files and the APIs. Salesforce Files Sync is available in Salesforce Classic only.

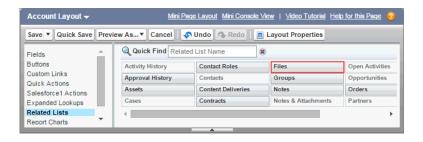
# Add the Files Related List to Page Layouts

The Files related list is an optional related list that you can now add to any of your page layouts for opportunities, accounts, cases, leads, custom objects, and many other objects. Organizations created after Winter '16 have the Files related list on page layouts for many objects by default. This feature is available in Lightning Experience, Salesforce Classic, and the Salesforce1 mobile app.

From the Files related list in Lightning Experience, users can upload files to attach to a record while leveraging the rich features and flexibility of Salesforce Files, such as sharing with people and groups, sharing to libraries, and syncing.

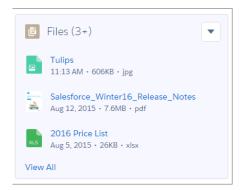
Files uploaded to a related list are visible only to those who can access the record where they reside, but those with access to the record can share it further (unless the file is frozen). When a user uploads a file to a record, it is also listed on the Files page, where more actions are available.

To add the Files related list to an object, edit the page layout for that object in Setup. Click **Related Lists**, and drag **Files** to the Related Lists section in the order you want.



# View Related Files in Lightning Experience

In Lightning Experience, the Files card lets users upload files and shows the most recently uploaded files for the record.



The related files card also links to the full related list of files for that record.



### View Related Files in Salesforce Classic

The Files related list in Salesforce Classic shows all the files that have been shared with the record. From this list, users can download, delete, preview, or view details for each file.



SEE ALSO:

Recommended Features for Lightning Experience

# Set History Tracking on Content Version Fields

Now you can track changes to Content Version fields, just as you can do for fields on other standard objects. This feature is available in both Lightning Experience and Salesforce Classic.

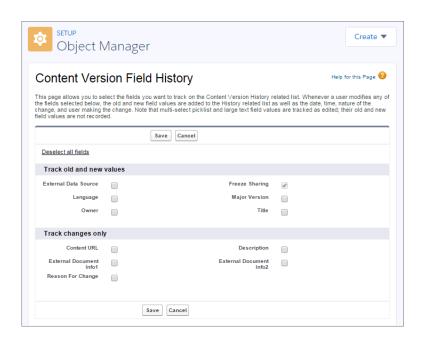
You can enable or disable tracking for each field on Content Version. For some tracked fields, both old and new values are recorded:

- External Data Source
- Language
- Owner
- Freeze Sharing
- Major Version
- Title

For other tracked fields, only the new values are recorded:

- Content URL
- External Document Info1
- Reason for Change
- Description
- External Document Info2

To set history tracking for Content Version, from Setup, enter *Object Manager* in the Quick Find box, then select **Content Version**. In the **Fields & Relationships** section, click **Set History Tracking**. Enable the fields you want to track, and save.



### Ensure Access to On-Premises Data Sources for Files Connect

Secure Agent clusters provide failover protection, ensuring that Salesforce users can always access on-premises external data sources like SharePoint 2010 or 2013. This feature is available in Salesforce Classic only.



**Note:** The Secure Agent setup process requires a paid permission set license, "Files Connect for on-premises external data sources." For information about permission set licenses, see Salesforce Help.

- 1. Create multiple Secure Agents on different servers by repeating this process: Set Up a Secure Agent.
- 2. From Setup, enter Secure Agent Clusters in the Quick Find box, then select Secure Agent Clusters.
- 3. Click New Secure Agent Cluster.
- **4.** Enter a **Label** for the user interface and **Name** for the API.
- **5.** To add available agents to the cluster, select them, and click **Add**.

Change the priority order in which agents are used by moving them up or down in the Selected Secure Agents list. The accessible agent with highest priority is used first.

6. Click Save.



Tip: To check current connection status and agent priority for an existing cluster, go to **Secure Agents Clusters** in Setup, and click the cluster name.

# Create Triggers to Customize File Sharing Behavior

To customize file sharing behavior, define an Apex trigger for the ContentDistribution or ContentDocumentLink objects. The ContentDistribution object represents a file shared externally. A ContentDocumentLink represents a file shared with an internal object, such as a user, group, or record.

## **EDITIONS**

Available for an additional cost in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# USER PERMISSIONS

To set up Secure Agent clusters:

"Customize Application"

The ContentDocumentLink object supports triggers before and after these operations: insert, update, delete.

The ContentDistribution object supports triggers before and after these operations: insert, update, delete. It supports triggers after undelete.

Some common use cases for content triggers are:

- Publish content to multiple libraries.
- Prevent sharing specific files or specific file types.
- Deliver content to certain users, profiles, or groups.
- Deliver content only if external sharing is allowed.
- Verify that the latest version of a file is shared.
- **Example**: Rita has a "managing" library, which she uses to hold all her team's content. When content is published to this library, she also wants to publish it to another library depending on the owner of the content. You can write a trigger for the ContentDocumentLink object that, when content is published to the managing library, publishes the same content into another library.

```
trigger publishConentToAnotherLibrary on ContentDocumentLink (after insert) {
   for (ContentDocumentLink cdl : trigger.new) {
      String docId = cdl.ContentDocumentId;
      if (CDLHelper.shouldPublishToAnotheribrary(cdl)) {
            CDLHelper.shareWithLibrary(docId);
      }
   }
}
```

The trigger calls this helper class.

```
public class CDLHelper {
      * Helper method to get OwnerId of ContentDocument.
      */
    public static String getContentDocumentOwner(String docId) {
        String ownerId;
        List<ContentDocument> cd = [select OwnerId from ContentDocument where Id =
:docId1;
        if(cd.size() > 0){
           ownerId = [select OwnerId from ContentDocument where Id =
:docId].get(0).OwnerId;
        return ownerId;
    }
     /**
      * Helper method to publish ContentDocument into another Library.
    public static void shareWithLibrary(String docId) {
        ContentDocumentLink cdl = new ContentDocumentLink();
        cdl.ContentDocumentId = docId;
        cdl.LinkedEntityId = '058D00000004eQ5'; // workspaceId where user wants to
publish the file.
        cdl.ShareType = 'I';
        cdl.Visibility = 'AllUsers';
        insert(cdl);
```

```
/**
    * Helper method to decide whether to share the file with other library.
    * If content is published to a specific library, depending on the file owner
    * this method decides whether to share the file with other library.
    */
    public static boolean shouldPublishToAnotheribrary(ContentDocumentLink cdl) {

        String docId = cdl.ContentDocumentId;
        String libid = cdl.LinkedEntityId;
        String ownerId = getContentDocumentOwner(docId);
        if(ownerId != null && ownerId.contains('005D00000001Zn9S') &&

libid.contains('058D00000004eQ0')) {
            return true;
        } else {
               return false;
        }
    }
}
```

**Example**: This trigger for the ContentDocumentLink object prevents public XLSX files from being shared.

```
trigger NoShareXLSX on ContentDocumentLink (after insert) {
   for (ContentDocumentLink cdl : trigger.new) {
      if (!CDLHelper.isSharingAllowed(cdl)) {
         cdl.addError('Sorry, you cannot share this file.');
      }
   }
}
```

The trigger calls this helper class.

```
public class CDLHelper {
    /**
     * Gets FileExtension of the inserted content.
    public static String getFileExtension(ContentDocumentLink cdl) {
       String fileExtension;
        String docId = cdl.ContentDocumentId;
      FileExtension = [select FileExtension from ContentVersion where ContentDocumentId
= :docId].get(0).FileExtension;
       return FileExtension;
    }
    /**
     * Checks the file's PublishStatus and FileExtension to decide whether user can
share the file with others.
     * PublishStatus 'P' means the document is in a public library.
     * /
    public static boolean isSharingAllowed(ContentDocumentLink cdl) {
        String docId = cdl.ContentDocumentId;
       ContentVersion version = [select PublishStatus,FileExtension from ContentVersion
```

```
where ContentDocumentId = :docId].get(0);
       if (version.PublishStatus.equals('P') && (version.FileExtension != null &&
version.FileExtension.equals('xlsx'))) {
            return false;
        }
        return true;
    }
    /**
    ^{\star} Gets the parent account name if the file is linked to an account.
   public static String getAccountName(ContentDocumentLink cdl) {
        String name;
        String id = cdl.LinkedEntityId;
        if (id.substring(0,3) == '001') {
            name = [select Name from Account where Id = :id].get(0).Name;
        return name;
    }
```

Example: The VP of Marketing wants file authors to specify whether their files can be shared with external people using content delivery. He also wants some files to have a password. You can add a custom field DeliveryPolicy on the ContentVersion object. Make the custom field a picklist with the values, Allowed, Blocked, and Password required. Add the field to the ContentVersion layout so that the user can set the delivery policy per file. Then, add an insert trigger for the ContentDistribution object to enforce the rules based on the delivery policy set in the file.

This trigger for the ContentDistribution object enforces the delivery policy rules for each file:

```
trigger deliveryPolicy on ContentDistribution (before insert) {
    for (ContentDistribution cd : trigger.new) {
        String versionId = DeliveryPolicyHelper.getContentVersionId(cd);
        ContentVersion version = [select DeliveryPolicy_c from ContentVersion where
Id = :versionId];
    String policy = version.DeliveryPolicy_c;
    if (policy.equals('Blocked')) {
        cd.addError('This file is not allowed to be delivered.');
    } else if (policy.equals('Password required')) {
        if (!DeliveryPolicyHelper.requirePassword(cd)) {
            cd.addError('To deliver this file, set a password.');
        }
    }
}
```

The trigger calls this helper class:

```
public class DeliveryPolicyHelper {
   public static String getContentVersionId(ContentDistribution cd) {
      if (cd.ContentVersionId != null) {
            return cd.ContentVersionId;
      } else {
            String versionId = [select LatestPublishedVersionId from ContentDocument where Id = :cd.ContentDocumentId].get(0).LatestPublishedVersionId;
```

```
return versionId;
}

public static boolean requirePassword(ContentDistribution cd) {
    return cd.PreferencesPasswordRequired;
}
```

(1) Important: Apex has a per organization limit of 10 concurrent requests that last longer than 5 seconds. A trigger that uploads files can easily hit this limit.

# **User Profiles**

Share relevant information through user profiles in Chatter. This feature is available in both Lightning Experience and Salesforce Classic.

### IN THIS SECTION:

#### User Profiles Available Without Chatter in Lightning Experience

In organizations using Lightning Experience, users can see and edit their profiles and upload a photo even if Chatter is disabled. On a profile, users see a photo and any information the user entered in the About and Contact sections but don't see the feed, files, groups, or any other Chatter functionality.

### Renamed Contact Information Visibility Label

We clarified the label above contact information fields that are always visible in communities. The new label, Everyone see this, appears above Last Name, First Name, Nickname, and About Me fields.

# User Profiles Available Without Chatter in Lightning Experience

In organizations using Lightning Experience, users can see and edit their profiles and upload a photo even if Chatter is disabled. On a profile, users see a photo and any information the user entered in the About and Contact sections but don't see the feed, files, groups, or any other Chatter functionality.

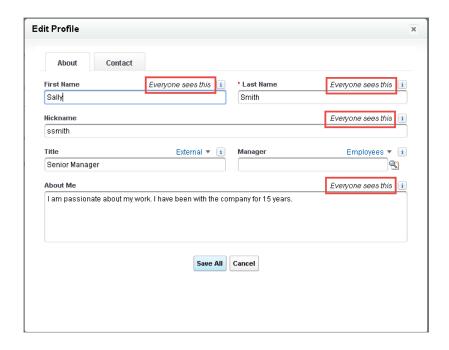
Profiles without Chatter are only available in Lightning Experience and won't show if a user switches back to Salesforce Classic.

# Renamed Contact Information Visibility Label

We clarified the label above contact information fields that are always visible in communities. The new label, Everyone see this, appears above Last Name, First Name, Nickname, and About Me fields.



Example:



### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Groups

Create group-record relationships by mentioning a group on a record.

### IN THIS SECTION:

### Groups in Lightning Experience

Check out the snazzy new groups user interface in Lightning Experience.

### Broadcast Groups—Pilot

Broadcast groups are a special type of public, private or unlisted group where only group owners and managers can create new posts. Group members can comment on the posts created by the group owner or manager.

### Group @Mentions on Records Create Group-Record Relationship

When you @mention a group on a record's feed, a group-record relationship record is created and the record displays in the Group Records related list in the group. Only users with sharing access to the record can view the record. This feature is available in both Lightning Experience and Salesforce Classic.

### Apex Trigger Support for Chatter Group Records

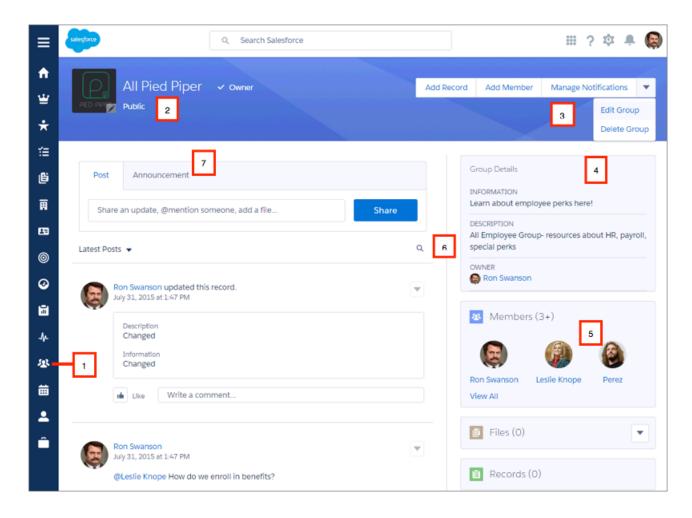
Administrators or developers can now use Apex triggers to control record operations in groups in sensitive contexts such as in public communities, where you want close control over who adds records to groups. This feature is available in both Lightning Experience and Salesforce Classic.

# **Groups in Lightning Experience**

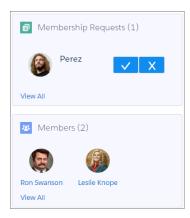
Check out the snazzy new groups user interface in Lightning Experience.

As always, you can create new groups from the group list page.

- Quickly access your groups from the navigation menu (1).
- View basic group details (2) such as the group name, photo, and group type. Groups also sport a colored banner, with a different color each for public, private, and unlisted groups.
- Access group member, owner, and manager actions from the banner (3). Group members can join or leave groups, modify their
  notification settings, and add records. Group owners and managers can also add group members, edit group settings, and delete
  the group.
- View group information and details (4) in a more prominent position.
- Access group members, files, and records (5) right next to each other.
- Quickly search the group feed (6).
- Post updates, share files, and @mention your coworkers from the group publisher (7). Group owners and managers can also post announcements.



Group owners and managers can also accept or deny membership requests for private groups from the group detail page.



SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Broadcast Groups—Pilot

Broadcast groups are a special type of public, private or unlisted group where only group owners and managers can create new posts. Group members can comment on the posts created by the group owner or manager.

By restricting the ability to post to a few individuals, group owners and managers can keep group discussions focused and relevant by cutting down noise from off-topic posts. Creating broadcast groups are ideal when one person or a fixed set of individuals regularly needs to communicate or share information with a large group of people. Some examples include:

- Organization-wide updates from the executive leadership in the company
- Policy changes from your company's HR department
- Event updates from the organizer of large events or company conferences
- Important action alerts from key IT personnel, including their awesome Salesforce administrator

Public, private, and unlisted groups support this feature. To set a group to broadcast mode, go to the group settings and select **Broadcast Only**.



**Note:** Broadcast groups is currently available to select customers through a pilot program. To be nominated to join this pilot program, contact Salesforce. Additional terms and conditions may apply to participate in the pilot program. Please note that pilot programs are subject to change, and as such, we cannot guarantee acceptance into this pilot program or a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based upon features that are currently available.

# Group @Mentions on Records Create Group-Record Relationship

When you @mention a group on a record's feed, a group-record relationship record is created and the record displays in the Group Records related list in the group. Only users with sharing access to the record can view the record. This feature is available in both Lightning Experience and Salesforce Classic.

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# **Apex Trigger Support for Chatter Group Records**

Administrators or developers can now use Apex triggers to control record operations in groups in sensitive contexts such as in public communities, where you want close control over who adds records to groups. This feature is available in both Lightning Experience and Salesforce Classic.

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

### **Feeds**

Format your posts with rich text, see more relevant suggestions when mentioning people and groups, mute feed posts, and more.

#### IN THIS SECTION:

### Feeds in Lightning Experience

Wondering what's up with Chatter in Lightning Experience? We moved the Chatter tab and added a Collaborate tab on record pages. And we made everything look spiffier too!

#### **Mute Posts**

Control what appears in your news feed and mute posts you're no longer interested in. This feature is enabled by default in all new orgs and in some existing orgs. If the Mute feature isn't available in your existing org, contact Salesforce and we enable the feature for you. This feature is available in Salesforce Classic only.

# **EDITIONS**

#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Contact Manager
- Developer

### Format Posts with Rich Text

Format your posts with bold, italic, and underlined characters, and bulleted and numbered lists. The rich text editor is enabled in the Chatter publisher by default in all new and existing orgs. This feature is available in Salesforce Classic only.

### See More Relevant Information in Your Chatter Feed

We changed the way Chatter selects posts for your news feed (What I Follow). Previously, if you followed a person in Chatter, everything that other people posted to that person's profile showed up in your news feed. With the new follow feature, you no longer see updates from people you don't follow. The new follow feature is automatically enabled in all new orgs. Contact Salesforce to get this feature for an existing org. This feature is available in both Lightning Experience and Salesforce Classic.

### See the Most Relevant Suggestions When Mentioning People or Groups

Relevant @mentions make it easier than ever before to quickly mention people and groups. This new algorithm learns your behavior to suggest the people and groups with which you interact the most. In private groups, it suggests members of the group, helping to find and mention people fast. Suggested names are sorted alphabetically. This feature is available in both Lightning Experience and Salesforce Classic.

### Display Similar Questions and Articles in Chatter Questions (Generally Available)

It's now easier to reduce duplicate content in your organization or community. When an internal user or a community user enters a question in Chatter, they now see similar questions—and if desired, relevant Knowledge Articles—in a drop-down list as they type. This feature is available in Salesforce Classic only.

SEE ALSO:

Labels Streamlined in Setup

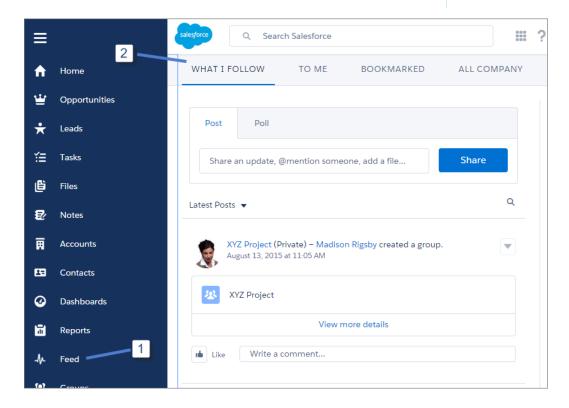
# Feeds in Lightning Experience

Wondering what's up with Chatter in Lightning Experience? We moved the Chatter tab and added a Collaborate tab on record pages. And we made everything look spiffier too!

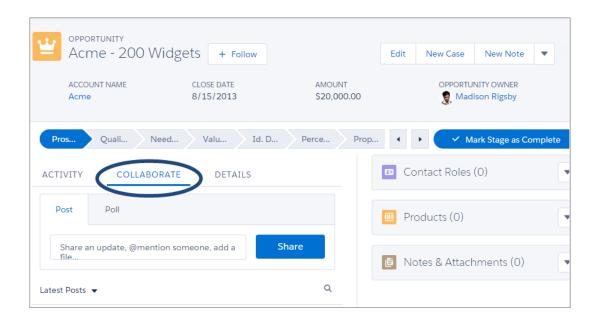
In Lightning Experience, users access their feeds from the navigation menu (1) and switch between the different feeds using the links at the top (2) of the page.

# EDITIONS

Available in Lightning Experience in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



In the opportunity workspace and on records, the feed displays on the Collaborate tab. Chatter actions are available in the composer.



### **Mute Posts**

Control what appears in your news feed and mute posts you're no longer interested in. This feature is enabled by default in all new orgs and in some existing orgs. If the Mute feature isn't available in your existing org, contact Salesforce and we enable the feature for you. This feature is available in Salesforce Classic only.

To mute a post, users select **Mute** from the post's drop-down menu. Users can mute posts in their feed on the Home and Chatter tabs, but not on group, profile, or record feeds. If email replies are enabled, users can mute posts by replying to post emails with the single word *mute*.

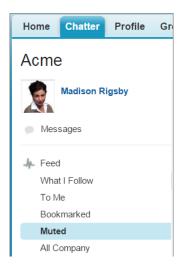
After a user mutes a post:

- The post no longer appears in the feed on the user's Home and Chatter tabs.
- The user no longer gets notifications for updates to that post.
- The user can use the Muted filter on the side panel to view the muted posts.
- If someone mentions the user on a muted post, the post is unmuted. It reappears in the user's feed. If the user has email notifications enabled, the user gets a notification about the update.
- If the post was originally posted to a group, profile, and record feed, it still appears on that feed.

  For example, someone posts to a group that the user is a member of. The post appears on the group feed and the user's news feed on the Home and Chatter tabs. The user can mute the post in the news feed, but the post remains visible in the group feed.
- Example: Here's how you mute a post from the drop-down menu.



To view all posts you muted, select the Muted filter.



Chatter REST API and Chatter in Apex support muting posts and the Muted feed.

### Format Posts with Rich Text

Format your posts with bold, italic, and underlined characters, and bulleted and numbered lists. The rich text editor is enabled in the Chatter publisher by default in all new and existing orgs. This feature is available in Salesforce Classic only.

To disable and hide the formatting options, deselect **Allow users to compose rich text posts** on the Chatter Settings page in Setup.





Users can format text posts, questions, and posts with link or file attachments on the Chatter publisher on the Home page, the Chatter tab, groups, profile, and record detail pages. The text can include @mention, topics, and emoticons. We also support inserting inline images via the Connect API. The rich text editor isn't available on announcement, polls, thanks, notes, and Canvas posts.

Community users can compose and edit rich text only if the community was created using Salesforce Tabs + Visualforce.

This table summarizes where users can compose and edit rich text, and where rich text formatting is displayed.

Feature	Salesforce Classic	API	Salesforce1	Lightning Experience	Communities
Compose rich text posts					
Text post	~	~			
Question	~	~			
Post with link or file attachment		~			
Visualforce	~	~			
Edit rich text posts					
Text post	~	~			
Question	~	~			
Post with link or file attachment					
Visualforce					
Display rich text posts					
Text post	~	~	~	<b>✓</b>	
Question	~	~	~	~	~
Post with link or file attachment		~	~	~	
Visualforce	~	~	~	~	~

Chatter REST API and Chatter in Apex support rich-text posts and inline images.

### See More Relevant Information in Your Chatter Feed

We changed the way Chatter selects posts for your news feed (What I Follow). Previously, if you followed a person in Chatter, everything that other people posted to that person's profile showed up in your news feed. With the new follow feature, you no longer see updates from people you don't follow. The new follow feature is automatically enabled in all new orgs. Contact Salesforce to get this feature for an existing org. This feature is available in both Lightning Experience and Salesforce Classic.

The new follow model makes your Chatter news feed more relevant, because it shows you the updates from the people you actually follow. You also see updates from groups you belong to and records you follow. We didn't change the way the follow feature works on groups and records.

Here are some tips that help you get the most out of the new follow feature.

- Review your Following list on your profile page. Follow the people that are relevant to your work and from whom you want to see
  updates.
- When you post an update on a coworker's profile, remember that only that coworker, the people who follow you, and people you @mention see your post. If you want to reach a broader audience, post to a group that has the type of members you want to reach.

# See the Most Relevant Suggestions When Mentioning People or Groups

Relevant @mentions make it easier than ever before to quickly mention people and groups. This new algorithm learns your behavior to suggest the people and groups with which you interact the most. In private groups, it suggests members of the group, helping to find and mention people fast. Suggested names are sorted alphabetically. This feature is available in both Lightning Experience and Salesforce Classic.



Available in all editions

# Display Similar Questions and Articles in Chatter Questions (Generally Available)

It's now easier to reduce duplicate content in your organization or community. When an internal user or a community user enters a question in Chatter, they now see similar questions—and if desired, relevant Knowledge Articles—in a drop-down list as they type. This feature is available in Salesforce Classic only.

# Note:

- The Similar Questions and Similar Articles search features are available in internal Salesforce
  organizations, communities built using Salesforce Tabs + Visualforce, and communities
  built using the Napili template. To learn how they work in Napili communities, see Display
  Similar Questions and Articles in Napili Search (Generally Available).
- Similar Questions and Similar Articles aren't available in Salesforce1 or mobile browsers.
- Similar Articles was previously available in Beta release, but was referred to as Knowledge Deflection.

EDITIONS

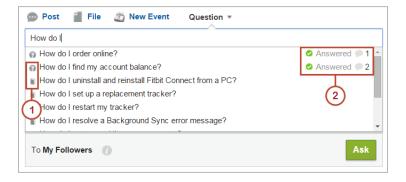
#### Available in:

- Group
- Professional
- Developer
- Performance
- Enterprise
- Unlimited

When a user enters a question in Chatter using the Question action, similar questions automatically appear in a drop-down list below the title field. You can enable Similar Articles to display relevant Knowledge articles along with similar questions:

- 1. From Setup, enter Knowledge Settings in the Quick Find box, then select Knowledge Settings.
- 2. Under Chatter Questions Settings, select **Display relevant articles as users ask questions in Chatter (also applies to communities with Chatter)**.

Drop-down search results of similar questions and articles:



• 1: Book and question mark icons indicate whether a search result is an article or a question.

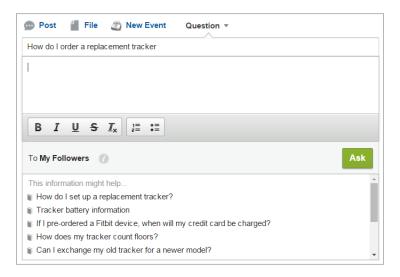
• 2: Question results show the question title, number of answers, and a green flag with the text Answered if a best answer was selected.

Users see up to 10 results in the drop-down list, with questions appearing first. Salesforce displays an equal number of questions and articles, but if there aren't enough of one result type, extra results of the other type are displayed. If no question or article title matches the text entered, the drop-down list doesn't appear.

The drop-down results are based on whether the question or article title contains the text entered by the user. The search accounts for partially matching terms and non-adjacent terms; for example, the results for "best backpack" could include a question titled "Which backpack is best for day hikes?", and the results for "backpack" could include an article titled "Backpacking Tips."

If the user wants to conduct a more in-depth search that also scans question descriptions and article text, they can press TAB or click out of the title field. This displays a separate drop-down list of results below the question publisher.

Advanced drop-down search results of similar questions and articles:



If none of the results answer the user's question, they can post their question by clicking **Ask**.

# Other Changes in Chatter

Smaller changes that improve your experience with Chatter.

### IN THIS SECTION:

#### Report on Records Assigned to Topics

Users with the "Manage Custom Report Types" permission can create a report type that reveals all records assigned to a topic. Choose the Topic Assignments primary object, and select the Record Name and Record ID fields. This feature is available in Salesforce Classic only.

### More Preview Links Added

Salesforce provides rich media support for various URLs to make your users' experience even better. This feature is available in Salesforce Classic only.

### Automatically Remove Signatures from Email Reply Comments and Group Posts

Tired of your personal signature appearing in your email reply comments and group posts, or of having to manually remove your signature? Add a separator line to the top of your signature to have it automatically removed. This feature is available in Salesforce Classic only.

### Redesigned Email Notifications

Chatter email notifications, including digests, have an updated look to improve readability and consistency.

## Report on Records Assigned to Topics

Users with the "Manage Custom Report Types" permission can create a report type that reveals all records assigned to a topic. Choose the Topic Assignments primary object, and select the Record Name and Record ID fields. This feature is available in Salesforce Classic only.



#### Available in:

- Enterprise
- Performance

Search: Find Information

- Unlimited
- Developer

### More Preview Links Added

Salesforce provides rich media support for various URLs to make your users' experience even better. This feature is available in Salesforce Classic only.

Previews are powered by Embed.ly, a third-party service, and include thumbnails, descriptions, and video players for links to videos. In this release, we've added support for



Available in all editions

dailymotion.com

# Automatically Remove Signatures from Email Reply Comments and Group Posts

Tired of your personal signature appearing in your email reply comments and group posts, or of having to manually remove your signature? Add a separator line to the top of your signature to have it automatically removed. This feature is available in Salesforce Classic only.

The separator line must have a minimum of one of the following characters:

- Dash (-)
- Equal sign (=)
- Underscore ( )

You can also use any combination of these characters, such as -=-.

# Redesigned Email Notifications

Chatter email notifications, including digests, have an updated look to improve readability and consistency.

# Search: Find Information

Salesforce search gives you the power to find information faster. You control which custom objects are stored in the search index. We also made several improvements to how we handle punctuation in your searches. You get more relevant results with less guessing with nickname search results. In addition, search in Lightning Experience offers users enhanced instant results and a redesigned search results page.



Available in all editions

For more information about searching, check out the newly improved, streamlined documentation in the Salesforce Help under Find and Organize Information.

### IN THIS SECTION:

### Search Faster by Disabling Search for Some Custom Objects

Choose which custom objects your users can search by enabling the **Allow Search** setting on the custom object setup page. This feature is available in both Lightning Experience and Salesforce Classic.

#### Get More Relevant Search Results

We've improved the way the search engine stores your org's information and matches it to your users' search terms. The search engine's more precise matching rules make it easier for your users to find the information they're looking for when they search for terms that include punctuation, such as website addresses and file paths. This feature is available in both Lightning Experience and Salesforce Classic.

#### Get More Relevant Search Results in Japanese

When users search for a term in Japanese Hiragana, they can now find corresponding matching search results in Japanese Katakana, and vice versa. The search engine recognizes the two scripts as interchangeable. This feature is available in both Lightning Experience and Salesforce Classic.

### Find Matching Records for Nicknames

Find your records with less guessing. The search engine automatically returns results associated nicknames. This feature is available in both Lightning Experience and Salesforce Classic.

### Find What You Need with Lightning Experience Search

Use the new search to find records faster. This feature is available in Lightning Experience only.

#### SEE ALSO:

How and When Search Features Become Available

# Search Faster by Disabling Search for Some Custom Objects

Choose which custom objects your users can search by enabling the **Allow Search** setting on the custom object setup page. This feature is available in both Lightning Experience and Salesforce Classic.

Previously, all your org's custom objects were searchable by default via the API, and the Salesforce user interface when associated with a custom tab. The search index stored each custom object's record information, even if you didn't need the information to be searchable. Making a custom object searchable when you don't need your users to find its records slows down searches across your org.

If you don't need a custom object's records to be searchable, disable search for that custom object. Disabling search for custom objects doesn't change the way your org interacts with the objects outside of search.

In Winter '16, search is disabled by default for new custom objects.



**Note**: No changes have been made to custom objects created before Winter '16. Your users can still find matching records for those custom objects when they search.

For more information, see "Guidelines for Making Search Faster" in the Salesforce Help.



**Example:** The company Acme uses a custom object called web\_metrics\_\_c to track activity on the company's site. The object contains fields for a customer's Account Id, Date of Last Visit, and Date of Purchase. Acme then uses the information it collects to programmatically determine what communications to send to its customers.

Acme users don't need to find web\_metrics\_\_c records in search results because the values in the metrics fields are meaningful only to the programmatic process. In fact, including these records in search results distracts users from the results they're really looking for. So Acme disabled search for web\_metrics\_\_c. Now all searches across the org are faster, and when users search for a particular account ID that's associated with web\_metrics\_\_c records, they don't see the web\_metrics\_\_c records in search results and they can more easily find the account record they're looking for.

# Get More Relevant Search Results

We've improved the way the search engine stores your org's information and matches it to your users' search terms. The search engine's more precise matching rules make it easier for your users to find the information they're looking for when they search for terms that include punctuation, such as website addresses and file paths. This feature is available in both Lightning Experience and Salesforce Classic.

Typically, the search engine ignores certain punctuation symbols in both the search index and the search term. In most cases, ignoring punctuation symbols returns the most meaningful results, and your users are able to find the information they're looking for. However, in some instances, removing punctuation symbols returns irrelevant results.

The search engine now handles punctuation differently in instances when doing so gives your users more relevant results. When users search for terms that contain punctuation symbols, the search results can contain:

- Alternate punctuation symbols from those entered in the search term
- Search terms separated by other words, phrases, or punctuation symbols
- Search terms split up and matched to record information in a different order

For more details, see "How Does Search Break Up Information?" in the Salesforce Help.



**Example**: When users search for the following terms, they could find records with these corresponding terms in the results.

Search Term	Results Added	Results Removed
alb1	SKU-A1B1	skua
acme.com	www.acme.com	No results
sysmail.xml	z:\app/sysmail.xml sysmailxml	zapp
Exhibit-69530	GHCCOPS-Exhibit-69530-ABC GHCCOPS-Exhibit-69530 xx.69530_Exhibit:yy 69530.xx_yy:Exhibit Exhibit.xx_yy:69530	No results

These improvements are available on a rolling basis starting with the Summer '15 release and before the Spring '16 release.

# Get More Relevant Search Results in Japanese

When users search for a term in Japanese Hiragana, they can now find corresponding matching search results in Japanese Katakana, and vice versa. The search engine recognizes the two scripts as interchangeable. This feature is available in both Lightning Experience and Salesforce Classic.



Example: When users enter the search term とうきょう in Japanese Hiragana to find items that contain the word *Tokyo*, they find records that contain the word *Tokyo* in Japanese Katakana, トウキョウ.

# Find Matching Records for Nicknames

Find your records with less guessing. The search engine automatically returns results associated nicknames. This feature is available in both Lightning Experience and Salesforce Classic.

Can't remember if someone goes by Mike or Michael? You can look for a name, and the returned results include matches for associated nicknames. Nickname search is available for the English language and only in the Account, Contact, Lead, and User objects.

For more details, see "Are Nicknames Included in the Search Results?" in the Salesforce Help.

# Find What You Need with Lightning Experience Search

Use the new search to find records faster. This feature is available in Lightning Experience only.

#### IN THIS SECTION:

#### Get Enhanced Instant Results

Instant results are auto-suggested records displayed after you select the search box or start typing. The records are chosen based on various factors, including record activity, search terms, and which object is searched. Instant results now return results for stopwords, such as *how* and *to*, so names spelled the same as stopwords aren't removed from results. And, as you type in search terms, the results are expanded to include records that match the search terms entered, even if they aren't in the same order as you entered them. This feature is available in Lightning Experience only.

### Find a Record Faster in Search Results

The redesigned search experience to help you find the record you're looking for faster. Search results feature Top Results, which display the most relevant records for the objects you use the most. This feature is available in Lightning Experience only.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience Search: Lightning Experience Limitations

### Get Enhanced Instant Results

Instant results are auto-suggested records displayed after you select the search box or start typing. The records are chosen based on various factors, including record activity, search terms, and which object is searched. Instant results now return results for stopwords, such as *how* and *to*, so names spelled the same as stopwords aren't removed from results. And, as you type in search terms, the results are expanded to include records that match the search terms entered, even if they aren't in the same order as you entered them. This feature is available in Lightning Experience only.

When you click the search bar, a list of your recent records across all objects appears. If you're on a searchable (indexed) object, an extra list of recent records scoped by object appear—before you even start typing!

After you start entering search terms, a list of suggested records that matches your search term appears. For example, you search for headquarters salesforce san francisco and the record with salesforce headquarters is located in san francisco appears. If you don't see the record you're looking for, perform a full search.

Instant results appear when you're looking for records within indexed objects, including Files and Chatter Question objects.

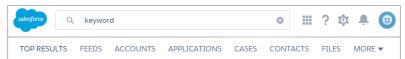
For more details, see "What Are the Results I See As I Type in the Search Bar?" and "Lookup Dialog Search in Lightning Experience" in the Salesforce Help.

Instant results are also available in the lookup dialog search, where you associate one record to another.

Administrators change the secondary field that appears under the primary record name field displayed in instant results for global search and lookup dialog search. For example, the billing city would display as the secondary field for account record names. The secondary field is automatically populated using the second usable field as defined in Search Layouts. Examples of unusable fields are HTML-formatted fields, inline image fields, or long-text fields.

### Find a Record Faster in Search Results

The redesigned search experience to help you find the record you're looking for faster. Search results feature Top Results, which display the most relevant records for the objects you use the most. This feature is available in Lightning Experience only.



Global search, at the top of the page, is the single starting point for search.

If you don't see your record auto-suggested in instant results, perform a full search. After you're on the search results page, look at the search scope bar beneath the global search box. to see results filtered by the object. Top Results, Feeds (if enabled), Applications, and More always appear on the bar. The other objects change their order depending on how often you use them.

If you can't find an object, use More to see an alphabetical list of all available objects. Most frequently used objects that don't fit in the search scope bar appear at the top of the list.

If you want to see results for multiple objects, use Top Results. In Lightning Experience, Top Results make finding a record easier and faster because it lists the top record results, by relevancy, for each of your most frequently used objects.

For more details, see "How Do I Refine Search Results in Lightning Experience?" in the Salesforce Help.

Search in Salesforce Lightning Experience

# Data.com: Company Hierarchies, New SIC8 and Firmographic Data, and More

Data.com accounts now come loaded with even more valuable financial and industry details, so your sales team can get a complete picture of potential customers. There are new visual representations of company hierarchies that help your sales reps identify new prospects for cross-sell opportunities. In addition, we've beefed up the Data.com API. Data.com is available in Salesforce Classic only.

Data.com delivers leading business data inside Salesforce. Using the Data.com product suite, your sales and marketing teams have all the information they need to convert leads, close deals, and maintain customer relationships. If you want complete, accurate, and relevant customer information, then check out Data.com.

The Data.com product suite includes Data.com Prospector and Data.com Clean, with two levels of data availability and features for each (Corporate and Premium). Data.com also provides more offerings for Salesforce customers, including the Data.com Assessment App (available on the AppExchange) and Data.com Duplicate Management.



**Note**: The Data.com database does not contain data from all the countries where Salesforce is used. Data.com documentation may be translated into languages used in countries not represented in the Data.com database.

You can now purchase a Data.com Prospector license as an add-on to your Force.com license. Force.com does not work with the Salesforce Lead object, read Force.com help for more information.

### **EDITIONS**

Data.com Prospector license available in: **Contact Manager** (no Lead object), **Group, Professional, Enterprise, Performance, Unlimited**, and **Force.com** (no Lead object) Editions

Data.com Clean license available in: **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions

Data.com Social Key available in: **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions

## IN THIS SECTION:

## Data.com Company Hierarchy (Beta)

Data.com Company Hierarchy provides an intuitive visual representation of linkages between a corporation's subsidiaries, branches, and divisions for Data.com Premium Prospector customers. Company Hierarchy is designed to help your sales reps more easily and quickly identify new prospects for cross-sell opportunities at existing related accounts. This feature is available in Salesforce Classic only.

## Data.com Coverage Expanded and Prospecting Insights Supported on Sales Console

Did you want to add Prospecting Insights to your organization's console? Well, now you can. Data.com Prospecting Insights give your reps access to existing and new fields from Data.com. We've combined Dunn & Bradstreet company details and industry intelligence on one page to help your reps start smarter conversations with their prospects and customers. We've expanded firmographics data coverage for Prospecting Insights to literally millions of Data.com records.

## New SIC8 and Firmographics Data to Help Identify and Assign Prospects

Quickly identify and assign prospective accounts to your sales reps. Now when you add accounts from Data.com, you get tons of new company details, including SIC8 details, Fortune 1000 rank, annual revenue growth, and employee number growth. With all this new data, it's a cinch to create Salesforce reports chocked full of critical industry and financial information on companies and quickly assign prospects to the right sales rep. Access these new fields from the Data.com Search API. This feature is available in Salesforce Classic only.

## Data.com API: Improved

We've added new functionality to the Data.com API. We added firmographic and SIC8 fields to the DandBCompany, DatacloudCompany, and DatacloudDandBCompany objects. SIC8 fields provide identification of a company's line of business at a specific level, enabling more precise reporting. The new firmographic fields provide more detailed company details and financial information.

## Retirement of Data.com Social Key

As of Spring '16, Data.com Social Key and the Data.com Social Profile Match API are no longer available. This feature is available in Salesforce Classic only.

## SEE ALSO:

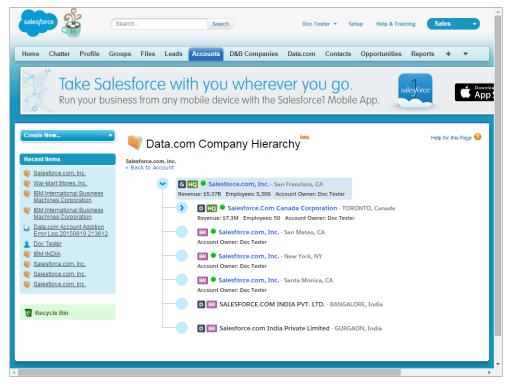
How and When Data.com Features Become Available Labels Streamlined in Setup

# Data.com Company Hierarchy (Beta)

Data.com Company Hierarchy provides an intuitive visual representation of linkages between a corporation's subsidiaries, branches, and divisions for Data.com Premium Prospector customers. Company Hierarchy is designed to help your sales reps more easily and quickly identify new prospects for cross-sell opportunities at existing related accounts. This feature is available in Salesforce Classic only.

Ask your Salesforce administrator to add the Company Hierarchy button to the Account details page.

Company Hierarchy is built using Dun & Bradstreet company data. In addition to showing the relationships between corporate entities, you can see the associated annual revenue and number of employees at different entities in the hierarchy. Information from your Salesforce organization is also included to provide more context, such as whether an entity exists as an account record, along with the listed account owner. Using this information, sales reps can identify relevant prospective customers, and then add them as accounts to your Salesforce organization with the click of a button directly from the hierarchy view.



This release contains a beta version of Data.com Company Hierarchy that is production quality. You can provide feedback and suggestions for Company Hierarchy on the IdeaExchange. For information on enabling this feature for your organization, contact Salesforce.



**Note**: The Data.com Company Hierarchy feature is in a beta version and is subject to the terms at http://www.sfdcstatic.com/assets/pdf/misc/Beta-Services-Agreement.pdf.

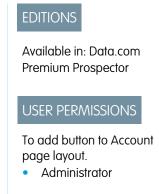
## IN THIS SECTION:

Add Company Hierarchy Button to Account Page Layout

# Add Company Hierarchy Button to Account Page Layout

Add the **Company Hierarchy** button to an Account page layout.

- From Setup, enter Accounts in the Quick Find box, then select Page Layouts under Accounts.
- 2. Click **Edit** in the Action column next to the layout you want to add **Company Hierarchy** to.
- 3. Click Buttons.
- **4.** Drag the **Company Hierarchy** button to the **Standard Buttons** group box.
- 5. Click Save.



# Data.com Coverage Expanded and Prospecting Insights Supported on Sales Console

Did you want to add Prospecting Insights to your organization's console? Well, now you can. Data.com Prospecting Insights give your reps access to existing and new fields from Data.com. We've combined Dunn & Bradstreet company details and industry intelligence on one page to help your reps start smarter conversations with their prospects and customers. We've expanded firmographics data coverage for Prospecting Insights to literally millions of Data.com records.

## **Expanded Record Coverage**

In this release, we not only added new fields, but we've added those fields to millions of Data.com records. Our expanded coverage enables your sales reps to gather more critical information more quickly.

## **Sales Console Support for Prospecting Insights**

The Sales Console now supports Prospecting Insights. View Prospecting Insights on your organization's sales console.

# New SIC8 and Firmographics Data to Help Identify and Assign Prospects

Quickly identify and assign prospective accounts to your sales reps. Now when you add accounts from Data.com, you get tons of new company details, including SIC8 details, Fortune 1000 rank, annual revenue growth, and employee number growth. With all this new data, it's a cinch to create Salesforce reports chocked full of critical industry and financial information on companies and quickly assign prospects to the right sales rep. Access these new fields from the Data.com Search API. This feature is available in Salesforce Classic only.

Dun & Bradstreet's 8-digit Standard Industrial Classification (SIC8) codes identify a company's line of business at the most specific level. Along with key financial details about employee growth, company revenue, and locations size, the enhanced SIC8 codes give your sales reps a more comprehensive view of a company's development and health. We have added SIC8 and other firmographic data to hundreds of millions of records.

Data.com Premium Prospector customers have access to the new data on the D&B Company tab.

To get the new data, Data.com Premium Prospector and Data.com Corporate Prospector customers can map the new fields to custom fields on your accounts before you add records from Data.com. Not all the new data is available for mapping for all customers.

(1) Important: When you clean records using Data.com Clean, your account records aren't updated with this new data. These new fields are added to your organization when you import them with Data.com Prospector. Data.com Premium Clean can access these fields from the DatacloudDandBCompany object.

## Firmographic Fields

Prospecting Insights coverage is expanded to millions of more companies. For Data.com Premium Prospector customers, these new firmographic fields are automatically added to the Primary Data section on the D&B Company tab. Data.com Corporate Prospector customers must create custom field mappings to add these fields to Accounts or other page layouts, see "Customize Data.com-to-Salesforce Field Mappings" in the Salesforce Help.

Data.com Premium Prospector License			Data.com Corporate Prospector License			
Field	Available	Automatically Added to D&B Company Page	Map to Custom Field	Available	Automatically Added to D&B Company Page	Map to Custom Field
Fortune 1000 Rank	~	~	~	~		~
S&P 500	~	~	~	~		~

Data.com Premium Prospector License				Data.com C	Data.com Corporate Prospector License		
Field	Available	Automatically Added to D&B Company Page	Map to Custom Field	Available	Automatically Added to D&B Company Page	Map to Custom Field	
Location Size	~	~	~	~		~	
Location Size Accuracy	~	~	~	~		~	
Location Size Unit of Measure	~	~	~	~		~	
Employee Growth	<b>~</b>	~	~	~		~	
Annual Revenue Growth	~	~	~	~		~	
Prior Year Number of Employee	~	~	~	~		~	
Prior Year Revenue	<b>~</b>	~	~	~		~	

## **SIC8 Fields**

SIC 8 fields identify companies at the most specific level, improving the creation of reports, workflows, and triggers. These fields are available to Data.com Premium Prospector customers only. These fields are automatically added to the D&B Company page layout.

- Primary SIC8 Code
- Primary SIC8 Description
- Second SIC8 Code
- Second SIC8 Description
- Third SIC8 Code
- Third SIC8 Description
- Fourth SIC8 Code
- Fourth SIC8 Description
- Fifth SIC8 Code
- Fifth SIC8 Description
- Sixth SIC8 Code
- Sixth SIC8 Description

SEE ALSO:

Expand SIC Codes to 8 Digits in Data.com

# Data.com API: Improved

We've added new functionality to the Data.com API. We added firmographic and SIC8 fields to the DandBCompany, DatacloudCompany, and DatacloudDandBCompany objects. SIC8 fields provide identification of a company's line of business at a specific level, enabling more precise reporting. The new firmographic fields provide more detailed company details and financial information.

## **DandBCompany**

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.
- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc,
  FourthSic8, FourthSic8Desc, FifthSic8, FifthSic8Desc, SixthSic8, and SixthSic8Desc—The
  eight-digit Standard Industrial Classification (SIC) code and description that's used to categorize business establishments by
  industry.
- FortuneRank—The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
- IncludedInSnP500— A true or false value. If true, the company is listed in the S&P 500 Index. If false, the company isn't listed in the S&P 500 Index.
- PremisesMeasure—A numeric value for the measurement of the premises.
- PremisesMeasureReliability—A descriptive accuracy of the measurement such as actual, estimated, or modeled.
- PremisesMeasureUnit—A descriptive measurement unit such as acres, square meters, or square feet.
- EmployeeQuanityGrowthRate—The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
- SalesTurnoverGrowthRate—The increase in annual revenue from the previous value for an equivalent period expressed as a decimal percentage.

## DatacloudCompany

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

## DatacloudDandBCompany

- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc,
  FourthSic8, FourthSic8Desc, FifthSic8, FifthSic8Desc, SixthSic8, and SixthSic8Desc—The
  eight-digit Standard Industrial Classification (SIC8) code and description that's used to categorize business establishments by
  industry.
- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

For complete information about the Data.com API, see Data.com API Developer's Guide.

# Retirement of Data.com Social Key

As of Spring '16, Data.com Social Key and the Data.com Social Profile Match API are no longer available. This feature is available in Salesforce Classic only.

After the retirement of Data.com Social Key and the Data.com Social Profile Match API, social profile handles, such as those from LinkedIn®, aren't added to records that are cleaned with Data.com. And, you can't use the Data.com Social Profile Match API to search for social profile handles.

You can still manually associate social profile handles with records.

# **EDITIONS**

Available with a Data.com Clean license in: Professional, Enterprise, Performance, and Unlimited Editions

# Work.com: Enhanced Feedback and Performance Summaries, Manager Groups for Coaching and Goals

Help your sales managers and teams learn faster and perform better with a suite of sales-management and service-management tools that boost performance. We're bringing Enhanced Feedback and Enhanced Performance Summaries to everyone, and you can now enable manager groups for goals and coaching spaces so you can automatically share related records up the management hierarchy. Work.com is available in Salesforce Classic only.

# **EDITIONS**

Work.com is available for an additional cost in **Professional, Enterprise, Unlimited**, and **Developer** editions, and is included in **Performance** edition.

#### IN THIS SECTION:

## Upgrade to Enhanced Feedback and Performance Summaries (Generally Available)

Help your sales team give and offer feedback with Enhanced Feedback and Enhanced

Performance Summaries! The new features are faster and customizable like other objects. All organizations will be upgraded with the Winter '16 release. This feature is available in Salesforce Classic only.

#### Customize More Features for Feedback and Performance Summaries

Use more features for feedback and performance summaries, including custom fields and validation rules. These Work.com features are available in Salesforce Classic only.

## See More Coaching and Goal Details with Manager Groups Access

You can now share coaching and goal information up the management hierarchy. Enable manager groups to give managers access to the coaching and goals records of users that report to them. This feature is available in Salesforce Classic only.

## Link Thanks Badges to the Related Chatter Post

Thanks badges under the Recognition tab on Chatter profiles now automatically link to the related Chatter feed item. This feature is available in Salesforce Classic only.

## Other Changes in Work.com

We've made other important changes in Work.com. Work.com is available in Salesforce Classic only.

#### SEE ALSO:

How and When Work.com Features Become Available Labels Streamlined in Setup

# Upgrade to Enhanced Feedback and Performance Summaries (Generally Available)

Help your sales team give and offer feedback with Enhanced Feedback and Enhanced Performance Summaries! The new features are faster and customizable like other objects. All organizations will be upgraded with the Winter '16 release. This feature is available in Salesforce Classic only.

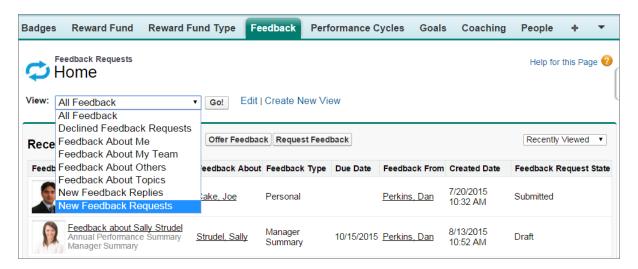
Your sales teams can now manage feedback offers, feedback requests, and feedback related to performance summaries all on the Feedback tab. The Feedback tab displays the recent feedback a user has viewed, and users can filter to see different types of feedback records. For example, users can select **New Feedback Requests** to see feedback records that require their input. You can also create custom list views with different filter options.

The default feedback filters include:

- All Feedback—All feedback, including one-time feedback and performance summary feedback
- Declined Feedback Requests—All the feedback you've requested that others have declined
- Feedback About Me—All the completed feedback about you
- Feedback About My Team—All the completed feedback about your team
- Feedback About Others—Completed feedback about others
- Feedback About Topics—Completed feedback about topics
- New Feedback Replies—New replies to the feedback you've requested
- New Feedback Requests—New feedback requests for one-time feedback and performance summaries

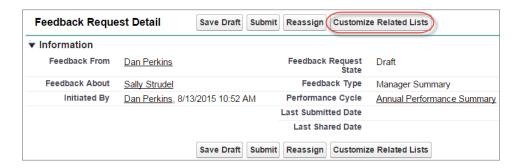
# EDITIONS

Feedback and performance summaries require a Work.com license, which is available for an additional cost in **Professional**, **Enterprise**, **Unlimited**, and **Developer** editions, and is included in **Performance** edition.



When offering one-time feedback to others, users must limit their feedback to 1,333 characters.

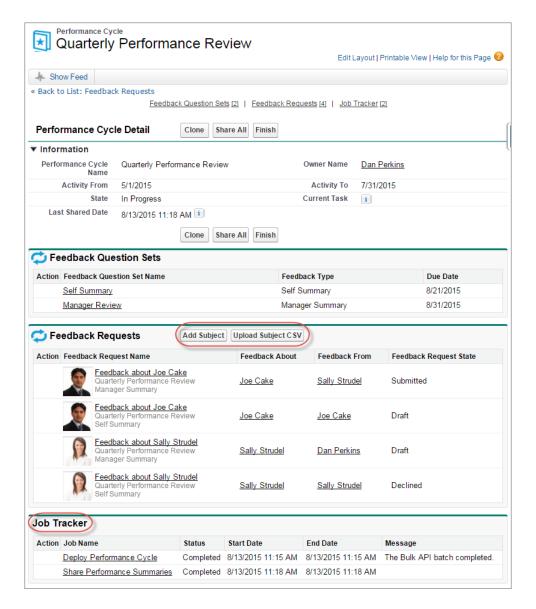
Performance cycle feedback is now listed on the Feedback tab instead of the Performance tab. To see recent work, such as thanks, goals, metrics, and feedback, click **Customize Related Lists**. You can't quote recent work directly in your responses, but you can manually add this information.



The Performance Cycles tab is exclusively dedicated to creating and managing performance summary cycles. The performance cycle detail page includes the question sets, individual performance summary requests, and other information related to a performance cycle. Administrators can now easily upload CSV files containing user IDs or usernames. Additionally, the Job Tracker tracks and displays processes such as cycle deployment, CSV upload, and Share All. Finally, all performance cycle tasks perform significantly faster, including viewing performance cycle details, deploying performance cycles, and uploading users.



**Note**: You can no longer add #first\_name in feedback question text to display summary subjects' first names in performance summaries. Please use a generic term, such as user, to refer to summary subjects instead.



For more information about creating performance summary cycles, see "Performance Summary Cycles Overview" in the Salesforce Help.

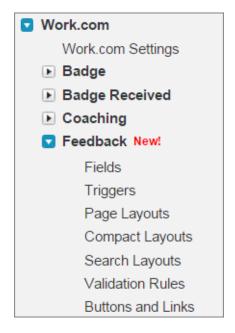
# Customize More Features for Feedback and Performance Summaries

Use more features for feedback and performance summaries, including custom fields and validation rules. These Work.com features are available in Salesforce Classic only.

You can find the new features in Setup under **Work.com**.



Feedback and performance summaries require a Work.com license, which is available for an additional cost in **Professional**, **Enterprise**, **Unlimited**, and **Developer** editions, and is included in **Performance** edition.



Several additional platform features are now available:

- Fields—Modify existing fields or create new fields.
- Triggers—Execute Apex code before or after specific events occur.
- Page Layouts—Customize the layout and organization of a page.
- Compact Layouts—Display a record's key fields at a glance in Salesforce1.
- Search Layouts—Modify the fields that display for users in search results.
- Validation Rules—Verify that the data a user enters meets standards that you specify before a record can be saved.
- Button and Links—Integrate Salesforce data with external websites and services with custom buttons and links.
- Record Types—Offer different business processes, picklist values, and page layouts to different users by creating different record types.

Objects	New Features
Feedback	Fields
Feedback Questions	Triggers
Feedback Question Set	Page Layouts
	Compact Layouts
	Search Layouts
	Validation Rules
	Buttons and Links
Feedback Request	Fields
Performance Cycle	Triggers
	Page Layouts
	Compact Layouts

Objects	New Features
	Search Layouts
	Validation Rules
	Buttons and Links
	Record Types

# See More Coaching and Goal Details with Manager Groups Access

You can now share coaching and goal information up the management hierarchy. Enable manager groups to give managers access to the coaching and goals records of users that report to them. This feature is available in Salesforce Classic only.

Manager groups allow users to share records up the management chain, and you can now enable this setting for all goals and coaching spaces without any additional customization.

You can enable manager groups in Setup, under Work.com Settings.



**Note**: To enable manager groups for coaching or goals, the Manager Groups setting must first be enabled in Setup, under **Sharing Settings**.

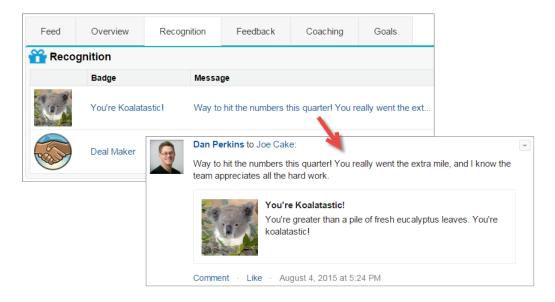
For more information, see "Sharing Records with Manager Groups" in the Salesforce Help.

# EDITIONS

Coaching and goals require a Work.com license, which is available for an additional cost in **Professional**, **Enterprise**, **Unlimited**, and **Developer** editions, and is included in **Performance** edition.

# Link Thanks Badges to the Related Chatter Post

Thanks badges under the Recognition tab on Chatter profiles now automatically link to the related Chatter feed item. This feature is available in Salesforce Classic only.



# Other Changes in Work.com

We've made other important changes in Work.com. Work.com is available in Salesforce Classic only.

## Use Work.com Objects in the Sales Console

Thanks, skills, rewards, coaching spaces, and goals are supported in the Sales Console.

## **Display Badge Access for Relevant Users Only**

The Access related list on thanks badges is visible only to the badge owner and users who have access to give the badge.

## Use the Updated Goal Templates Package

We've updated the Goal Templates package for new goals. See the AppExchange for more details.

#### **Use More Options for Goals and Metrics**

The Status field for Goals and Metrics objects has a new Not Completed picklist value. Additionally, metrics have a new Start Date field, and the Start Date and Due Date fields on a metric are initially set to the related goal's Start Date and Due Date by default.

## **Use New Notes with Coaching Spaces**

Coaching spaces support the enhanced note-taking tool, but the feature must be enabled for your organization and added to the Coaching page layout. Leave the existing **Notes & Attachments** related list to the Coaching page layout to access your old notes. For more information, see Notes: Add Important Information to Records (Generally Available). The new Notes don't currently support private notes related to a coaching space, but you can make a note private if it's not related to any records.

# Customization: Easier Setup, Object Management and Flows, and Much More

Lightning Experience simplifies setup and gives you better ways to manage your data. Your processes and flows are less likely to hit SOQL limits. It's easier to build flow choice fields and processes that update records, and the email you get when flows fail now has a lot more detail.

Customization features help you expand your organization by enhancing your objects, data, and fields, customizing your organization's look and feel, augmenting your business processes, creating websites, and creating apps—all by using point-and-click tools and maybe some code. Customization features also include tools to administer and secure your organization.

## IN THIS SECTION:

## General Administration

Administration helps you manage your organization to suit your business needs.

## Lightning Experience Setup

Use Setup with more ease in Lightning Experience and save time. Lightning Experience expands your options for seamlessly interacting with data that's stored outside of your Salesforce organization. Lightning Experience also simplifies the user interface. This feature is available only in Lightning Experience.

#### **Data Customization**

The Force.com platform makes it easy for you to manage and track your data. Your users, apps, and processes can seamlessly interact with all relevant data, including data that's stored in external systems.

## Lightning Connect

Lightning Connect expands your options for seamlessly interacting with data that's stored outside your Salesforce organization.

## **Process Builder**

We've made it easier to optimize your business processes with multiple schedules, streamlined operations to help avoid hitting SOQL limits, and an improved UI for update records actions. This feature is available in both Lightning Experience and Salesforce Classic.

## Visual Workflow

This release, we're introducing a bunch of enhancements geared toward making your life as a flow admin easier. We bulkified queries so you're less likely to hit limits and made it easier to create choices based on picklist fields. We also significantly improved the fault email that you receive when a flow interview fails. This feature is available in both Lightning Experience and Salesforce Classic.

#### Sharing

Sharing improves your control over who sees what. This feature is available in both Lightning Experience and Salesforce Classic.

#### Globalization

Globalization tools help administrators manage resources that vary from country to country, such as multilanguage, multicurrency, and translated content.

#### SEE ALSO:

How and When Customization Features Become Available

# General Administration

Administration helps you manage your organization to suit your business needs.

## IN THIS SECTION:

#### Configure Lightning Experience Record Home Pages Using the Lightning App Builder (Pilot)

In Developer Edition orgs, you can use the Lightning App Builder to configure Lightning Experience record home pages. This feature is available in Lightning Experience only.

## Access More Recent Items from the Setup and Force.com Home Pages (Beta)

The Recent Items list on the Setup and Force.com home pages now includes more types of items. You can easily view the items that you've recently edited or created, and click any item in the list to go directly to its page. This feature is available in both Lightning Experience and Salesforce Classic.

## Pinpoint the Accuracy of Geolocation Data

Enhance your geolocation data with the new accuracy field on all standard address fields. Now your applications can get the accuracy level of the geocode for an address via the SOAP or REST API. Geolocation applications use this accuracy level to show end users how accurate a mapped location is. This feature is available in both Lightning Experience and Salesforce Classic.

## Auto-Completion for Standard Address Fields

If your organization has state and country picklists enabled, standard address fields now include auto-completion. This saves users from having to manually enter addresses. While entering text in standard address fields, users can select from possible matches in a picklist. This feature is available in Lightning Experience and all versions of the Salesforce1 mobile app.

## Create More Roll-Up Summary Fields per Object

Create 150 percent more roll-up summary fields with an increased limit per object. The default limit on roll-up summary fields per object has been increased from 10 to 25. Gain more insights about related records by adding more roll-up summary fields to your standard and custom objects. This feature is available in both Lightning Experience and Salesforce Classic.

## REQUIRESCRIPT No Longer Executes JavaScript on Page Load

We've changed the way custom JavaScript buttons and links work when they use REQUIRESCRIPT. The REQUIRESCRIPT resources aren't included in the page until the user clicks the custom JavaScript button or link. This feature is available in Salesforce Classic only.

## Enjoy a More Intuitive Picklist Replace Process

We've improved the user interface in the picklist replace wizard to make completing the process easier. Updated text and links tell you how to check the job's status, and what to expect next. We've also added an email notification to let the admin who kicked off the job know when it's completed. And improved job performance means that replace jobs are finished more efficiently. This feature is available in both Lightning Experience and Salesforce Classic.

## Use More Values with Multi-Select Picklists

You can add up to 500 values to a custom multi-select picklist, more than three times as many as before. Now you can have as many values as you need in a multi-select picklist. This feature is available in both Lightning Experience and Salesforce Classic.

## Eliminate Picklist Clutter with Restricted Picklists (Pilot)

Enforce the integrity of your picklist data with restricted picklists. Values in a restricted picklist field can include only the values you've defined. This keeps your picklist data clean by preventing users from adding erroneous or redundant values. This feature is available in both Lightning Experience and Salesforce Classic.

## Share Picklists Across Objects and Fields with Global Picklists (Pilot)

Efficiently reuse a single list of values for multiple custom picklist fields. Global picklists make it easy to share picklists across objects by letting you create picklist fields based on a master list of values. And, they keep your picklist data clean by preventing users from adding erroneous or redundant values through the API. This feature is available in both Lightning Experience and Salesforce Classic.

#### Labels Streamlined in Setup

To make it easier for you to search and find what you're looking for from Setup, we've renamed several nodes. The result? No duplicates!

# Configure Lightning Experience Record Home Pages Using the Lightning App Builder (Pilot)

In Developer Edition orgs, you can use the Lightning App Builder to configure Lightning Experience record home pages. This feature is available in Lightning Experience only.



**Note:** Editing Lightning Experience record home pages using the Lightning App Builder is currently available to Developer Edition organizations through a pilot program. Pilot programs are subject to change, and as such, we cannot guarantee a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based on features that are currently available.



Available in: Lightning Experience

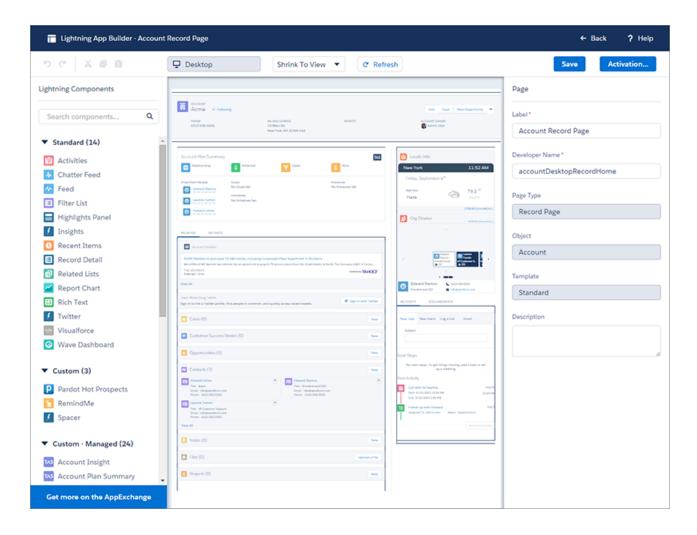
Available in: **Developer** Edition

Before you can edit Lightning Experience pages with the Lightning App Builder, enable the feature in your Developer Edition org. From Setup, enter App Builder in the Quick Find box, then select **Lightning App Builder**. From the Lightning App Builder page, select Enable App Builder for Lightning Experience.

Then, from any record home page, select **Edit Page** from the Setup menu, and you're ready to go. You can add, edit, or remove components to change the page's layout, and reorder components by dragging them around the canvas.



Warning: Any record home pages you create as part of this pilot will revert to the default page experience after Winter '16.



You can also create custom Lightning components that work on record home pages in Lightning Experience. To learn more about that, see "Configure Components for Lightning Experience Record Home Pages (PILOT)" in the Lightning Components Developer Guide.

SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

# Access More Recent Items from the Setup and Force.com Home Pages (Beta)

The Recent Items list on the Setup and Force.com home pages now includes more types of items. You can easily view the items that you've recently edited or created, and click any item in the list to go directly to its page. This feature is available in both Lightning Experience and Salesforce Classic.



Note: The Recent Items list is in beta. It is production quality but has known limitations.

Available in: all editions except **Database.com** 

We've added the following to the Recent Items list.

Record types

For more information, see "Recent Items List (Beta)" in the Salesforce Help.

# Pinpoint the Accuracy of Geolocation Data

Enhance your geolocation data with the new accuracy field on all standard address fields. Now your applications can get the accuracy level of the geocode for an address via the SOAP or REST API. Geolocation applications use this accuracy level to show end users how accurate a mapped location is. This feature is available in both Lightning Experience and Salesforce Classic.

Geocoding service providers typically provide accuracy data for an address's latitude and longitude coordinates. If the address is incomplete or ambiguous, or is in a remote region where the geocoding provider doesn't have good data, its accuracy rating is low.

The GeocodeAccuracy field stores the accuracy rating for the geocode of addresses on standard objects like Accounts and Opportunities. An external geolocation app can use this accuracy rating to show the accuracy level of map points — for example, by coloring pins on a map.

GeocodeAccuracy is a subfield of the Address compound field. When you retrieve a compound address field via the API, its accuracy field is included. For how to retrieve an Address field, see Address Compound Fields.

# EDITION<u>S</u>

## Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

# **Auto-Completion for Standard Address Fields**

If your organization has state and country picklists enabled, standard address fields now include auto-completion. This saves users from having to manually enter addresses. While entering text in standard address fields, users can select from possible matches in a picklist. This feature is available in Lightning Experience and all versions of the Salesforce1 mobile app.

# **EDITIONS**

Available in Lightning Experience in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Available in Salesforce1 in: **All** Editions except
Database.com

# Create More Roll-Up Summary Fields per Object

Create 150 percent more roll-up summary fields with an increased limit per object. The default limit on roll-up summary fields per object has been increased from 10 to 25. Gain more insights about related records by adding more roll-up summary fields to your standard and custom objects. This feature is available in both Lightning Experience and Salesforce Classic.

Roll-up summary fields let you perform calculations on values from related records and display the result on a master record.

# EDITIONS

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

# REQUIRESCRIPT No Longer Executes JavaScript on Page Load

We've changed the way custom JavaScript buttons and links work when they use REQUIRESCRIPT. The REQUIRESCRIPT resources aren't included in the page until the user clicks the custom JavaScript button or link. This feature is available in Salesforce Classic only.

REQUIRESCRIPT now loads scripts using loadScript(), instead of the <script> tag. As a result, the way you refer to your custom buttons and links in JavaScript when using REQUIRESCRIPT must change.

The console.log(this); call no longer returns a button. It now returns a window object. To return a button, use console.log(element);.

# **EDITIONS**

Available in: Salesforce Classic

Custom buttons and links are available in: **All** Editions



#### Example:

console.log(this);//returns "window"
console.log(element);//returns "button"

# Enjoy a More Intuitive Picklist Replace Process

We've improved the user interface in the picklist replace wizard to make completing the process easier. Updated text and links tell you how to check the job's status, and what to expect next. We've also added an email notification to let the admin who kicked off the job know when it's completed. And improved job performance means that replace jobs are finished more efficiently. This feature is available in both Lightning Experience and Salesforce Classic.

For how to replace a picklist value, see "Replace Picklist Values" in the Salesforce Help.

# EDITIONS

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

# Use More Values with Multi-Select Picklists

You can add up to 500 values to a custom multi-select picklist, more than three times as many as before. Now you can have as many values as you need in a multi-select picklist. This feature is available in both Lightning Experience and Salesforce Classic.

# **EDITIONS**

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

# Eliminate Picklist Clutter with Restricted Picklists (Pilot)

Enforce the integrity of your picklist data with restricted picklists. Values in a restricted picklist field can include only the values you've defined. This keeps your picklist data clean by preventing users from adding erroneous or redundant values. This feature is available in both Lightning Experience and Salesforce Classic.



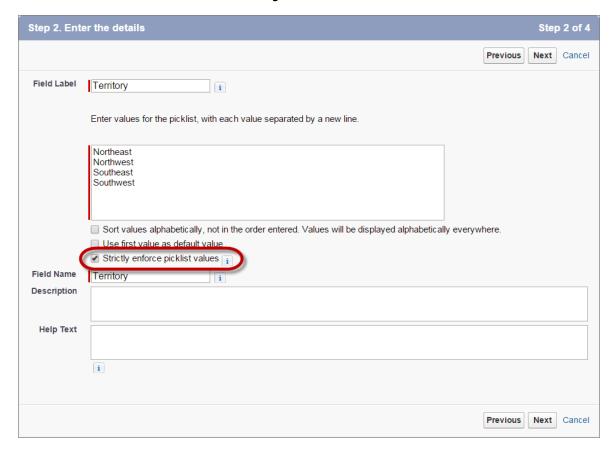
**Note:** We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.



Edition and sandboxes

You define the list of values for a picklist when you create the custom picklist field. However, users can introduce extraneous values by loading values through the API. Select **Strictly enforce picklist values** to enable validation of picklist values against the list of defined values.

## **Defining a Restricted Picklist**



Only a new custom picklist field can be a restricted picklist. You can't convert an existing non-restricted picklist to a restricted picklist.

# Share Picklists Across Objects and Fields with Global Picklists (Pilot)

Efficiently reuse a single list of values for multiple custom picklist fields. Global picklists make it easy to share picklists across objects by letting you create picklist fields based on a master list of values. And, they keep your picklist data clean by preventing users from adding erroneous or redundant values through the API. This feature is available in both Lightning Experience and Salesforce Classic.



Available in: **Developer** Edition and sandboxes



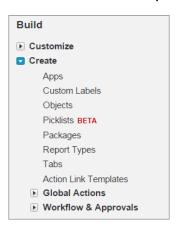
**Note:** We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.

A global picklist is by definition a restricted picklist. When you create a global picklist, the list of values you specify is "locked" so you can add or change values only by editing the global picklist.

When you create a custom picklist and base it on the global picklist, its list of values is automatically populated and non-editable. Users can't load extraneous values to the global picklist, or to picklist fields that are based on it, through the API.

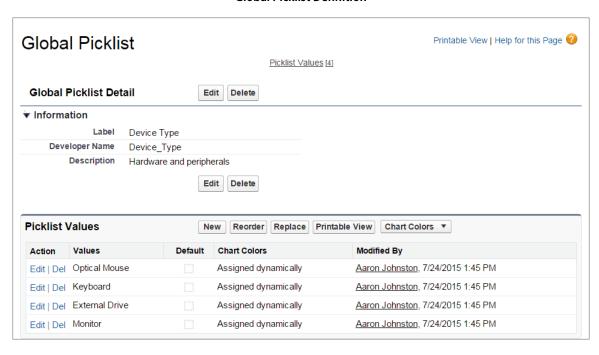
You create a custom picklist field for a particular object by editing the fields for that object. In contrast, create a global picklist right from the Setup tree.

## **New Picklists Node in Setup**



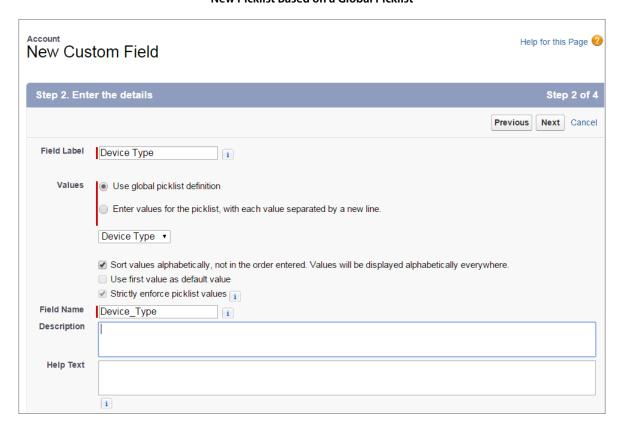
Create your global picklist and specify its values.

## **Global Picklist Definition**



Any new picklist that's based on the global picklist inherits its values. If you edit the global picklist, the other picklists that use its values are updated too.

## **New Picklist Based on a Global Picklist**





Note: For this pilot, the list of inherited values doesn't appear on the detail page for a picklist that's based on a global picklist.

# Labels Streamlined in Setup

To make it easier for you to search and find what you're looking for from Setup, we've renamed several nodes. The result? No duplicates!

Location	Label in Summer '15 and earlier	Label in Winter '16 and later
(Directly from Setup)	Salesforce1 Setup	Salesforce1 Quick Start
Google Apps	Settings	Google Apps Settings
Mobile Administration   Mobile Dashboards	Settings	Mobile Dashboard Settings
Mobile Administration   Salesforce1	Branding	Salesforce1 Branding
Mobile Administration   Salesforce1	Offline	Salesforce1 Offline
Mobile Administration   Salesforce1	Mobile Navigation	Salesforce1 Navigation
Mobile Administration   Salesforce1	Notifications	Salesforce1 Notifications
Mobile Administration   Salesforce1	Settings	Salesforce1 Settings
Mobile Administration   Salesforce Classic	Configurations	Salesforce Classic Configurations
Mobile Administration   Salesforce Classic	Settings	Salesforce Classic Settings
Data.com Administration	Preferences	Prospector Preferences
Data.com Administration	Users	Prospector Users
Data.com Administration   Clean	Settings	Clean Settings
Data.com Administration   Social Key	Settings	Social Key Settings
Customize   Accounts	Contact Roles	Contact Roles on Accounts
Customize   Accounts	Settings	Account Settings
Customize   Answers	Settings	Answers Settings
Customize   Assets	Settings	Asset Settings
Customize   Cases	Contact Roles	Contact Roles on Cases



Customize   Cases As Customize   Cases Se	ettings riggers	Case Auto-Response Rules  Case Assignment Rules  Support Settings  Case Comment Triggers
Customize   Cases Se	ettings	Support Settings
<u>'</u>	iggers	
Customize   Cases   Case Comments Tri		Case Comment Triggers
	ettings	Case Comment mygers
Customize   Cases   Quick Text Se		Quick Text Settings
Customize   Chatter Se	ettings	Chatter Settings
Customize   Chatter Answers Se	ettings	Chatter Answers Settings
Customize   Chatter Answers Zo	ones	Chatter Answers Zones
Customize   Chatter Answers   Activities Tri	iggers	Answers Activity Triggers
Customize   Chatter   Feed Item Ac	ctions	Feed Item Actions
Customize   Communities Se	ettings	Communities Settings
Customize   Contracts Se	ettings	Contract Settings
Customize   Customer Portal Se	ettings	Customer Portal Settings
Customize   Forecasts Se	ettings	Forecasts Settings
Customize   Ideas Se	ettings	Ideas Settings
Customize   Ideas Zo	ones	Ideas Zones
Customize   Ideas   Idea Themes Se	ettings	Idea Themes Settings
Customize   Knowledge Art	rticle Actions	Knowledge Article Actions
Customize   Knowledge Art	rticle Types	Knowledge Article Types
Customize   Knowledge Se	ettings	Knowledge Settings
Customize   Leads Au	uto-Response Rules	Lead Auto-Response Rules
Customize   Leads As	ssignment Rules	Lead Assignment Rules
Customize   Live Agent Se	ettings	Live Agent Settings
Customize   Live Agent   Live Agent Fie Transcript Events	elds, Limits, etc.	Transcript Fields, Transcript Limits, etc.
Customize   Live Agent   Live Chat Visitors Fie	elds, Limits, etc.	Visitor Fields, Visitor Limits, etc.
Customize   Maps and Location Se	ettings	Maps and Location Settings
Customize   Notes Se	ettings	Notes Settings
Customize   Omni-Channel Se	ettings	Omni-Channel Settings
Customize   Opportunities Co	ontact Roles	Contact Roles on Opportunities
Customize   Opportunities Se	ettings	Opportunity Settings

Location	Label in Summer '15 and earlier	Label in Winter '16 and later
Customize   Opportunity Teams	Settings	Opportunity Team Settings
Customize   Orders	Settings	Order Settings
Customize   Products	Schedule Setup	Product Schedules Settings
Customize   Products	Settings	Product Settings
Customize   Quotes	Settings	Quotes Settings
Customize   Reports & Dashboards	User Interface	Reports and Dashboards Settings
Customize   Salesforce Files   Settings	Files Connect	Files Connect Settings
Customize   Salesforce to Salesforce	Settings	Salesforce to Salesforce Settings
Customize   Salesforce to Salesforce	Connection Finder	Salesforce to Salesforce Connection Finder
Customize   Sales Path	Settings	Sales Path Settings
Customize   Social Apps Integration   Social Accounts and Contacts	Settings	Social Accounts and Contacts Settings
Customize   Work.com	Settings	Work.com Settings
Create   Global Actions	Actions	Global Actions
Create   Workflow & Approvals	Settings	Process Automation Settings
Develop	Components	Visualforce Components
Develop	Pages	Visualforce Pages
(Directly from Setup)	Checkout Summary	Checkout

# **Lightning Experience Setup**

Use Setup with more ease in Lightning Experience and save time. Lightning Experience expands your options for seamlessly interacting with data that's stored outside of your Salesforce organization. Lightning Experience also simplifies the user interface. This feature is available only in Lightning Experience.

## IN THIS SECTION:

## Improved Setup User Interface in Lightning Experience

The Setup tree in Lightning Experience makes it easier than ever to view and manage administrative setup tasks. This feature is available only in Lightning Experience.

## Manage Standard and Custom Objects from One Location

We've added an Object Manager to improve your Setup experience! The Object Manager is a one-stop shop for managing all objects in your organization. Now you can access all objects and their related functions—fields, validation rules, page layouts, and so on—from a single entry point. This feature is available only in Lightning Experience.

## Easily Access Personal Settings in Lightning Experience

We've made it easier than ever before to access your personal settings. At the top of any page, click your Chatter image, click **Settings**, and you're there! This feature is available only in Lightning Experience.

# Improved Setup User Interface in Lightning Experience

The Setup tree in Lightning Experience makes it easier than ever to view and manage administrative setup tasks. This feature is available only in Lightning Experience.

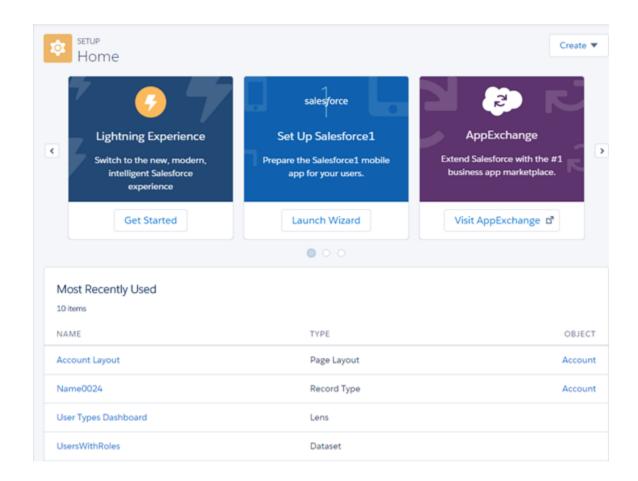
The Setup tree in Lightning Experience includes these features.

- A reorganized Setup menu with a simplified top-level menu and a logical, easy-to-navigate structure. As before, to quickly find a page, type the first few characters of its name in the Quick Find box.
- The Create menu provides quick access to common Setup creation functions, including users, custom objects, custom tabs, apps, email templates, and processes. The Create menu is available from any page in Setup.
- A carousel of quick-access tiles gives you instant access to important setup tools and information.
- The Most Recently Used list on the Setup Home page shows metadata items that you've recently viewed, edited, or created and their related objects.
- The Object Manager provides a one-stop shop for managing all objects in your organization, both standard and custom.



#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



To access the Setup tree, click > **Setup Home** in the Lightning Experience header.



Note: Be aware of the following limitations.

- The Setup tree in Lightning Experience is limited to:
  - Pages that support Lightning Experience features
  - Administration pages that apply across your organization, such as company settings, security, user management, and mobile app setup

To access administration pages for features that aren't in Lightning Experience, use Salesforce Classic.

Advanced Setup Search isn't available in Lightning Experience.

# Manage Standard and Custom Objects from One Location

We've added an Object Manager to improve your Setup experience! The Object Manager is a one-stop shop for managing all objects in your organization. Now you can access all objects and their related functions—fields, validation rules, page layouts, and so on—from a single entry point. This feature is available only in Lightning Experience.

Previously you accessed management settings one way for standard objects and another way for custom objects. With Lightning Experience, everything's in one place!

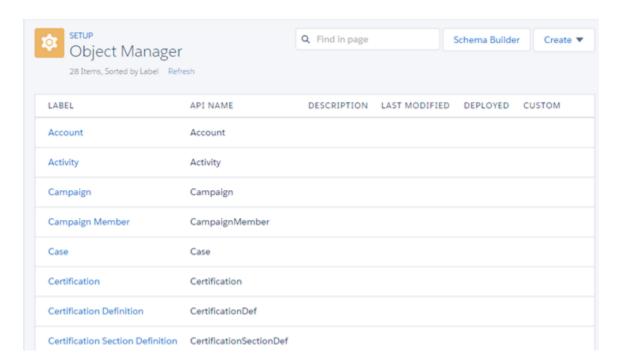
To access the Object Manager, from Setup, enter *Object Manager* in the Quick Find box, then select **Object Manager**.

- To find an object, enter the first few characters of its label or name in the Find in page box.
- To edit a custom object, in the Actions column, select ... > Edit.
- To view more details about an object, or to access its related functions, click the object label.



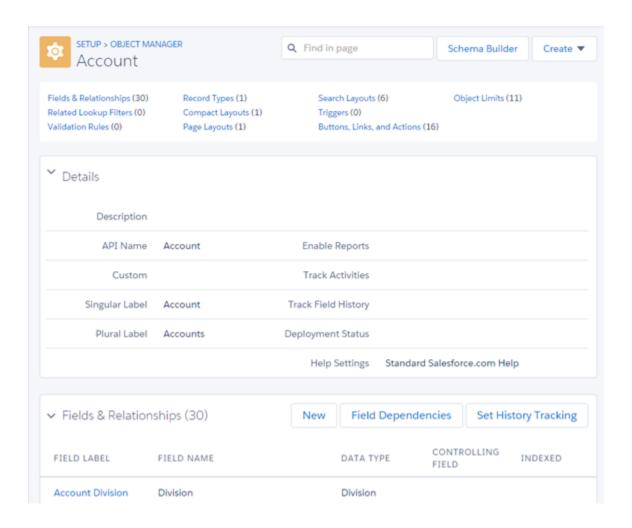
#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer



From the object detail page, you can view the object details and access all related functions, such as fields, validation rules, and page layouts.

- To jump to a function or control, use the links at the top of the page.
- To find a function or control by name, enter it in the Find in page box.
- If an ellipsis (...) appears in the Actions column for an item, click it to perform an action on that item, such as edit or delete.



- Note: Be aware of the following limitations.
  - The Object Manager is limited to objects that support Lightning Experience features.
  - The following object functions aren't listed in the Object Manager. You can access them from Setup.
    - Case Comment Triggers
    - FeedComment Triggers
    - FeedItem Triggers
    - Feed Item Layouts
    - Group Layouts
    - Group Triggers
    - Group Member Triggers

- Group Record Triggers
- Publisher Layouts
- Topic Triggers
- TopicAssignment Triggers

# Easily Access Personal Settings in Lightning Experience

We've made it easier than ever before to access your personal settings. At the top of any page, click your Chatter image, click **Settings**, and you're there! This feature is available only in Lightning Experience.



#### Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# **Data Customization**

The Force.com platform makes it easy for you to manage and track your data. Your users, apps, and processes can seamlessly interact with all relevant data, including data that's stored in external systems.

#### IN THIS SECTION:

## Salesforce Analytics Cloud Support in Data Pipelines (Pilot)

We're continuing the pilot availability of Data Pipelines, a new capability to leverage all your customer data for intelligence and actionable information. We've now added the ability to upload data into Salesforce Analytics Cloud datasets after processing data with Data Pipelines. This feature is available in Salesforce Classic only.

## Data Import Wizard: Email Notification Enhancements

The email notifications sent after a completed Data Import Wizard job are more helpful than ever. The emails provide you with detailed information on the number of successfully created, updated, and failed imported records.

## Legacy Data Import Tools

To provide users with the best experience, Salesforce has begun retiring the individual import wizards for accounts, contacts, person and business accounts, leads, solutions, and custom objects. The individual import wizards are no longer available in Setup. But don't worry! You'll be even more productive with the unified Data Import Wizard.

# Salesforce Analytics Cloud Support in Data Pipelines (Pilot)

We're continuing the pilot availability of Data Pipelines, a new capability to leverage all your customer data for intelligence and actionable information. We've now added the ability to upload data into Salesforce Analytics Cloud datasets after processing data with Data Pipelines. This feature is available in Salesforce Classic only.

Data Pipelines helps you engage with customers and build data-driven applications. With Data Pipelines, you can use the power of custom Apache Pig scripts on Hadoop to process large-scale data that's stored in Salesforce.

# EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer



**Note:** We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.

To learn more about the pilot, see the *Data Pipelines Implementation Guide*.

For more information about joining the pilot, contact your account team or Salesforce Customer Support.

# Data Import Wizard: Email Notification Enhancements

The email notifications sent after a completed Data Import Wizard job are more helpful than ever. The emails provide you with detailed information on the number of successfully created, updated, and failed imported records.

Starting in Winter '16, the emails sent after the Data Import Wizard completes an import are to help you identify any import errors. The email contains a CSV file that highlights where the errors are in the import file.

# **Legacy Data Import Tools**

To provide users with the best experience, Salesforce has begun retiring the individual import wizards for accounts, contacts, person and business accounts, leads, solutions, and custom objects. The individual import wizards are no longer available in Setup. But don't worry! You'll be even more productive with the unified Data Import Wizard.

The individual import wizards open in small separate pop-up windows, while the The Data Import Wizard combines all the functionality of the individual import wizards into a single browser. The Data Import Wizard provides a unified interface that lets you import a variety of objects from one wizard, rather than using each individual import wizard to import a specific object. The Data Import Wizard also improves the import process with progress tracking and helpful tips during data import workflow. Depending on user permissions, the Data Import Wizard also lets you import data for custom objects.

Starting in Winter '16, the individual import wizards remain accessible only from the Legacy Data Import Tools page until they're officially retired. You can currently access the individual import wizards for accounts, contacts, person and business accounts, leads, solutions, and custom objects until they are officially deprecated. From Setup, click **Data Management** > **Data Import Wizard**. On the **Data Import Wizard** page, click **Legacy Data Import Tools**.

This table provides a comparison between the functionality of the unified Data Import Wizard and individual legacy data import wizards.

Feature	Data Import Wizard	Legacy Data Import Tools
Wizards	Unified wizard for:	Individual wizards for:
	<ul> <li>Accounts and Contacts</li> </ul>	<ul> <li>Accounts and Contacts</li> </ul>
	<ul><li>Leads</li></ul>	<ul> <li>Person and Business Accounts</li> </ul>
	<ul> <li>Solutions</li> </ul>	• Leads
	<ul> <li>Custom Objects</li> </ul>	<ul> <li>Solutions</li> </ul>
	New Campaign Members	<ul> <li>Custom Objects</li> </ul>
Processing method	Asynchronous Bulk API database processing	Synchronous (immediate) database processing
Enablement	Automatic for all organizations	Automatic for all organizations
Importing master/detail relationships	Supported	Supported

Data Import Wizard	Legacy Data Import Tools
Supported (Phone extensions are not supported.)	Supported in Accounts and Contacts wizard
Supported	Supported in all wizards
Supported	Supported in Solutions and Custom Objects wizards
<b>Update existing account information</b> option. If left deselected, the wizard does not update any account information, including blank fields.	<b>Override existing account values</b> option. If left deselected, the wizard does not update existing account information, but does update blank fields.
Cannot map to name values. Can only map to Salesforce ID and email values.	Can map to name values
Can save in a notes field attached to an account or contact	Can save in a notes field attached to an account or contact
Supported	Supported
Email notification sent to all users. Import status displayed on Bulk Data Load Jobs page (available to administrators).	Email notification sent to all users. Import status displayed on status page (available to all users).
	Supported (Phone extensions are not supported.)  Supported  Supported  Supported  Supported  Supported  Update existing account information option. If left deselected, the wizard does not update any account information, including blank fields.  Cannot map to name values. Can only map to Salesforce ID and email values.  Can save in a notes field attached to an account or contact  Supported  Email notification sent to all users. Import

# **Lightning Connect**

Lightning Connect expands your options for seamlessly interacting with data that's stored outside your Salesforce organization.

## IN THIS SECTION:

## Modify External Data with Writable External Objects

Now your users can create, edit, and delete external object records without leaving the Salesforce user interface! For example, users can see all orders that reside in an SAP system and are associated with an account in Salesforce. They can also place a new order or route an existing order without leaving the Salesforce user interface. As a developer or admin, use a specialized set of asynchronous Apex operations to create, update, and delete external object records. This feature is available in both Lightning Experience and Salesforce Classic.

## Easily Manage External System Authentication with User Interface Improvements

See which external systems Salesforce is set to authenticate with improvements to the authentication settings user interface. And, troubleshoot external data source connection problems with friendlier error messaging. This feature is available in both Lightning Experience and Salesforce Classic.

## Use an OData 4.0 Adapter with Lightning Connect

You can now use an OData 4.0 adapter to connect to an external system, giving you more options for integrating your data with Salesforce. OData 4.0 offers the Ssearch system query option, which can perform more sophisticated querying and searching than the OData 2.0 filter query system. This feature is available in both Lightning Experience and Salesforce Classic.

#### Monitor and Troubleshoot OData Callouts for User Access to External Data

To help you troubleshoot issues with Lightning Connect, debug logs now include the callout requests and responses that occur when a user accesses an external object. The external object must be associated with an external data source that uses an OData adapter for Lightning Connect. This feature is available in both Lightning Experience and Salesforce Classic.

## Separately Load Related Lists of External Objects

If load times are slow for record detail pages that display related lists of external objects, you can separately load those related lists. Doing so can improve performance, and lets your users immediately see primary record details while they wait for the external data to load. This feature is available in both Lightning Experience and Salesforce Classic.

## Simplify the Setup of OData External Data Sources by Using Named Credentials

If you already created a named credential, you can specify the named credential as the URL of a Lightning Connect OData external data source. Doing so lets you skip the authentication settings on the external data source. This feature is available in both Lightning Experience and Salesforce Classic.

# Modify External Data with Writable External Objects

Now your users can create, edit, and delete external object records without leaving the Salesforce user interface! For example, users can see all orders that reside in an SAP system and are associated with an account in Salesforce. They can also place a new order or route an existing order without leaving the Salesforce user interface. As a developer or admin, use a specialized set of asynchronous Apex operations to create, update, and delete external object records. This feature is available in both Lightning Experience and Salesforce Classic.



**Note**: You can make external objects writable only when an OData or Apex custom adapter is used to connect Salesforce with the external data source. Writable external objects aren't supported with the Salesforce adapter for Lightning Connect.

When users create, modify, or delete external object records via the user interface, the operations

occur synchronously, as with standard and custom object records. When developers use Apex to manipulate external object records, asynchronous timing and an active background queue minimize potential save conflicts.

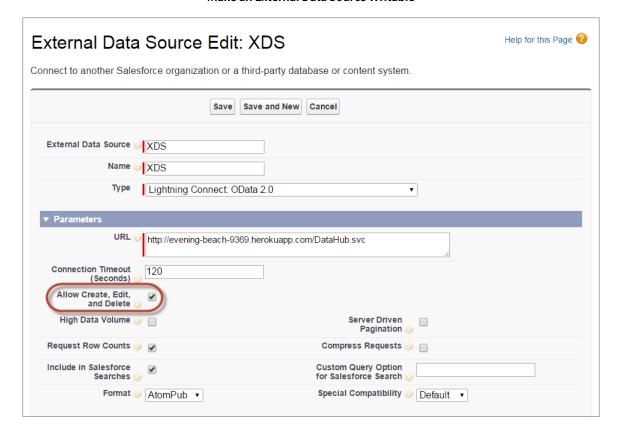
A new set of Apex methods and keywords handles potential timing issues with write execution. Apex also lets you retrieve the results of delete and upsert operations. The BackgroundOperation object lets you monitor job progress for write operations via the API or SOQL.

It's easy to make external objects writable. From Setup, enter External in the Quick Find box, then select External Data Source. By default, external objects associated with external data sources are read only. When you create or edit an external data source, you can make all its associated external objects writable. Select Allow Create, Edit, and Delete on the External Data Source page, as shown.



Lightning Connect external data sources are available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions.

#### Make an External Data Source Writable



SEE ALSO:

Force.com Apex Code Developer's Guide: Writable External Objects in Lightning Connect

# Easily Manage External System Authentication with User Interface Improvements

See which external systems Salesforce is set to authenticate with improvements to the authentication settings user interface. And, troubleshoot external data source connection problems with friendlier error messaging. This feature is available in both Lightning Experience and Salesforce Classic.

For external data sources that use per-user authentication, we've improved the labeling so you can easily see which types of external systems are set up.

View how Salesforce is set to authenticate external systems from your personal settings. From your personal settings page, enter *Authentication* in the Quick Find box, then select **Authentication Settings for External Systems**.

We've clarified the error messages that appear when Salesforce can't connect to an external data source due to problems with the URL, protocol, or filter.

EDITIONS

Lightning Connect external data sources are available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions.

Files Connect external data sources are available in: **Enterprise, Performance, Unlimited**, and **Developer** Editions.

# Use an OData 4.0 Adapter with Lightning Connect

You can now use an OData 4.0 adapter to connect to an external system, giving you more options for integrating your data with Salesforce. OData 4.0 offers the \$search system query option, which can perform more sophisticated querying and searching than the OData 2.0 filter query system. This feature is available in both Lightning Experience and Salesforce Classic.

Lightning Connect supports OData 2.0, OData 4.0, Salesforce, and Apex custom adapters. Specify the adapter type when you create an external data source in Salesforce.

# **EDITIONS**

Lightning Connect external data sources are available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions.

Files Connect external data sources are available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions.

# Monitor and Troubleshoot OData Callouts for User Access to External Data

To help you troubleshoot issues with Lightning Connect, debug logs now include the callout requests and responses that occur when a user accesses an external object. The external object must be associated with an external data source that uses an OData adapter for Lightning Connect. This feature is available in both Lightning Experience and Salesforce Classic.

Access debug logs from the Logs tab in the Developer Console, or from Setup, enter *Debug Logs* in the Quick Find box.

Event Name	Fields or Information Logged with Event	Category Logged	Level Logged
CALLOUT_REQUEST	External endpoint and method	Callout	INFO and above
CALLOUT_RESPONSE	Status and status code	Callout	INFO and above



Note: Debug logs don't include:

- Callouts that occur when an administrator clicks Validate and Sync or Sync for an
  external data source. Those options access the external system's schema, not the data
  that corresponds with external object records.
- Callouts via these Lightning Connect adapters:
  - Salesforce adapter
  - Custom adapter created via the Apex Connector Framework

If a user has problems accessing the data of an external object:

- 1. Add a trace flag for the user. For the trace flag's debug level and filters:
  - a. Set Callouts to INFO.

# EDITIONS

Lightning Connect is available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

# **USER PERMISSIONS**

To view, retain, and delete debug logs:

"Manage Users"

To use the Developer Console

"View All Data"

- **b.** Set all other categories to **NONE**.
- 2. Have the user attempt to access the external object data between the start and expiration date of the trace flag.
- 3. View the OData callout events in the debug logs.

#### SEE ALSO:

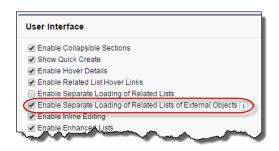
Salesforce Help: Debug Log Levels
Salesforce Help: Using Debug Logs

# Separately Load Related Lists of External Objects

If load times are slow for record detail pages that display related lists of external objects, you can separately load those related lists. Doing so can improve performance, and lets your users immediately see primary record details while they wait for the external data to load. This feature is available in both Lightning Experience and Salesforce Classic.

It can take a while to retrieve data from an external system, depending on the network latency and availability of the external system.

- 1. From Setup, enter User Interface in the Quick Find box, then select User Interface.
- 2. Select Enable Separate Loading of Related Lists of External Objects.





- Enable Separate Loading of Related Lists of External Objects is selected by default.
- The options for separately loading related lists don't apply to Visualforce pages, the Self-Service portal, or other pages for which you can't control the layout.

# **EDITIONS**

Lightning Connect external objects are available in:

Developer Edition and for an extra cost in: Enterprise,
Performance, and
Unlimited Editions

Files Connect external objects are available in:

Enterprise, Performance,
Unlimited, and Developer
Editions.

# **USER PERMISSIONS**

To modify user interface settings:

"Customize Application"

# Simplify the Setup of OData External Data Sources by Using Named Credentials

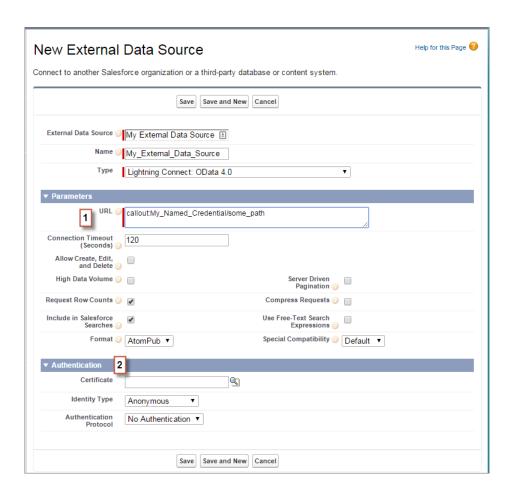
If you already created a named credential, you can specify the named credential as the URL of a Lightning Connect OData external data source. Doing so lets you skip the authentication settings on the external data source. This feature is available in both Lightning Experience and Salesforce Classic.

A named credential specifies the URL of a callout endpoint and its required authentication parameters in one definition. When connecting with the external system to access its schema or data for external objects, Lightning Connect uses the authentication settings of the named credential.

# EDITIONS

Lightning Connect is available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions In the URL field on an external data source, enter the prefix callout:, the name of the named credential, and an optional path. Then simply skip the Authentication section for the external data source. After you save the external data source, the Authentication section no longer appears.

- **Example**: The following screenshot shows:
  - The URL (1) of the external data source defined as <code>callout:My\_Named\_Credential/some\_path</code>
  - The Authentication section (2) that's ignored because Lightning Connect uses the named credential's authentication settings to access the external system



## SEE ALSO:

Salesforce Help: Named Credentials

Salesforce Help: Define an External Data Source for Lightning Connect—OData 2.0 or 4.0 Adapter

# **Process Builder**

We've made it easier to optimize your business processes with multiple schedules, streamlined operations to help avoid hitting SOQL limits, and an improved UI for update records actions. This feature is available in both Lightning Experience and Salesforce Classic.

## IN THIS SECTION:

## Schedule Multiple Groups of Actions

You're no longer limited to just one schedule when you configure time-dependent actions in the Process Builder. With multiple schedules it's easier to optimize sales responsiveness, automate

follow-up on important cases and opportunities, and support your business needs all within a single process.

## Reduced Chances of Hitting SOQL Limits in Processes

We've continued to optimize how we bulkify elements in processes so you avoid hitting existing platform limits as your business scales and grows.

## Update Records with an Improved UI

When you configure an update records action, it's now easier to choose the record that started the process. Previously, you could select the same record that triggered your process, but it may not have been obvious. Now, selecting the same record that started your process is as simple as clicking a radio button.

#### Admins Notified When Processes Fail to Resume Due to Inactive Owner

When a process is started by something a user does—creating or editing a record—that user becomes the owner of the process and its associated actions. Previously, if the process tried to execute a group of scheduled actions when its owner was inactive, the scheduled actions failed silently. With this release, the process admin receives a fault email with details about what happened and how to fix it.

#### Scheduled Actions Are Always Based on Current Data

To make sure your business always operates in the present, processes now use the latest data from a record when executing scheduled actions.

## Other Changes in the Process Builder

A schedule now needs an action defined before you can activate the process. We also changed how we support operators in update records filters.

# Schedule Multiple Groups of Actions

You're no longer limited to just one schedule when you configure time-dependent actions in the Process Builder. With multiple schedules it's easier to optimize sales responsiveness, automate follow-up on important cases and opportunities, and support your business needs all within a single process.

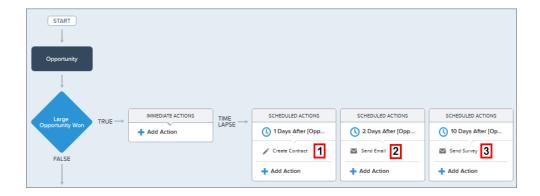
For example, when an opportunity with an amount greater than \$500,000 is won, your process can now execute multiple groups of scheduled actions, such as:

- Create a related contract record one day after the opportunity's closed date (1)
- Send a follow-up email to the account owner two days after the opportunity's last modified date (2)
- Send a satisfaction survey 10 days after the opportunity's closed date (3)

# EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer



# Reduced Chances of Hitting SOQL Limits in Processes

We've continued to optimize how we bulkify elements in processes so you avoid hitting existing platform limits as your business scales and grows.

With bulkification, processes properly handle more than one operation at a time. If a transaction's operations would normally violate limits, the operations are grouped and performed in batches.



# Example:

## Before Winter '16

The process issues 200 SOQL queries for the transaction. Because the limit is 100 SOQL queries, the entire transaction fails, and none of the cases are uploaded. For the upload to succeed, you reduce the batch size to 100 records and try again.

#### As of Winter '16

The process buckets as many of the queries together as it can without reaching the 20,000 character limit for SOQL queries. In this example, the bucketing results in a handful of queries. The process then issues the bucketed queries for the transaction. Because the limit is 100 SOQL queries, the transaction doesn't fail, and the cases are uploaded.

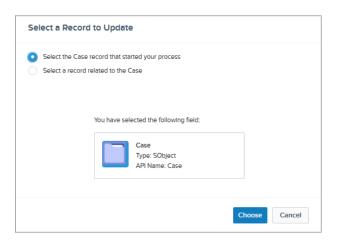
SEE ALSO:

Idea Delivered: Bulkify Process Builder

# Update Records with an Improved UI

When you configure an update records action, it's now easier to choose the record that started the process. Previously, you could select the same record that triggered your process, but it may not have been obvious. Now, selecting the same record that started your process is as simple as clicking a radio button.

Here's a peek of the new UI showing a Case as the record that started the process.



#### SEE ALSO:

Idea Delivered: Make it Easier to Select Fields when Updating Records

#### Admins Notified When Processes Fail to Resume Due to Inactive Owner

When a process is started by something a user does—creating or editing a record—that user becomes the owner of the process and its associated actions. Previously, if the process tried to execute a group of scheduled actions when its owner was inactive, the scheduled actions failed silently. With this release, the process admin receives a fault email with details about what happened and how to fix it.

Because processes run in the background as flows, the email you receive references "flow interviews" instead of groups of scheduled actions.



#### Example:

Every waiting flow interview has an associated user - the person who caused the interview to start waiting. If that user is inactive, the interviews can't resume.

Madison Rigsby (005xx000001SwCd) is inactive, so please delete the following flow interviews.

http://<instance>.salesforce.com/0Foxx00000003P

#### SEE ALSO:

Salesforce Help: Delete Unexecuted Scheduled Actions

#### Scheduled Actions Are Always Based on Current Data

To make sure your business always operates in the present, processes now use the latest data from a record when executing scheduled actions.



Example: Your process starts when an account balance is more than \$500,000. The process waits three days before sending a reminder email, which includes the account balance value, to the account owner. When the scheduled action executes after three days, the process also checks whether the account's balance is still more than \$500,000. If the account balance has been updated and it still meets the criteria, the follow-up email uses the new value.

Previously, scheduled actions executed based on the data from the record only at the time the process started, not when the scheduled action(s) started.

#### Other Changes in the Process Builder

A schedule now needs an action defined before you can activate the process. We also changed how we support operators in update records filters.

#### A Schedule Needs Actions Before You Can Activate a Process

Previously, you could activate a process if it had either an immediate action or a schedule defined (even if the schedule contained no actions). We made a slight change so you can't activate a process if it has a schedule defined but no scheduled actions.

#### **Changes in Support for Operators in Update Records Filters**

Some field and operator combinations are no longer supported in update records filter conditions.

For processes with update records actions, if you filter the record you update:

- Using an ID field, you can't use the Contains, Starts with, or Ends with operators.
- Using a multi-select picklist field, you can't use the **Contains** operator.

For example, your process updates a case record when a related account is Platinum, but you don't want to update the case if it has a Closed status. You can define filters so that the case isn't updated if the status (a multi-select picklist field) equals Closed, but you can't define this same filter using the **Contains** operator.

#### Visual Workflow

This release, we're introducing a bunch of enhancements geared toward making your life as a flow admin easier. We bulkified queries so you're less likely to hit limits and made it easier to create choices based on picklist fields. We also significantly improved the fault email that you receive when a flow interview fails. This feature is available in both Lightning Experience and Salesforce Classic.

#### EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer

#### IN THIS SECTION:

#### Reduced Chances of Hitting SOQL Limits with Bulkified Flows

In Summer '14, we started to bulkify elements in flows that create, update, or delete records.

We're taking it one step further by bulkifying elements that look up records, which helps you avoid the limit of 100 SOQL queries per transaction. With *bulkification*, flows handle more than one operation at a time. If a transaction's operations would normally violate limits, the operations are grouped together and performed in batches.

#### Replicate a Picklist Field in a Flow Screen

Have you ever wanted to generate a set of choices in a flow that corresponds to a picklist field in Salesforce? Or maybe a multi-select picklist? A new era is upon us! The era of the Picklist Choice resource.

#### Debug Flows with Better Fault Emails (Beta)

We want to make it way easier for you to debug flows! Last release, we delivered a new flow fault email that displayed a list of every element that was executed in a flow interview that failed. We've iterated, and now you get a lot more information about the flow interview and what happened in each element.

#### Dynamic Choice Renamed to "Dynamic Record Choice"

We've changed the resource name to make the differences between the three choice resources more intuitive.

#### Post to a Community Feed from a Flow

We've removed one of the limitations on the Post to Chatter flow element. Now you can automate posts to Chatter feeds in Salesforce Communities.

#### Admins Notified When Interviews Fail to Resume Due to Inactive Owner

If a flow interview tries to resume and the interview's owner is inactive, the interview fails. Before, if a flow interview tried to resume but the owner was inactive, it failed silently. Now, the flow admin receives a flow fault email with details about what happened and how to fix it.

#### **Unsupported Operator Removed**

Salesforce doesn't support the "contains" operator for multi-select picklists. To prevent you from designing a flow that will fail automatically, that operator no longer appears when you select a multi-select picklist field in a record filter.

#### Boolean Data Types Treat null as Different from false

When you check whether a checkbox field is set to null, the flow no longer returns records where that checkbox field is set to false.

SEE ALSO:

New Field for Flow Interviews: Ownerld

#### Reduced Chances of Hitting SOQL Limits with Bulkified Flows

In Summer '14, we started to bulkify elements in flows that create, update, or delete records. We're taking it one step further by bulkifying elements that look up records, which helps you avoid the limit of 100 SOQL queries per transaction. With *bulkification*, flows handle more than one operation at a time. If a transaction's operations would normally violate limits, the operations are grouped together and performed in batches.

Starting with this release, flows intelligently combine queries from the following elements to reduce the number of total SOQL queries that the flow issues.

- Record Lookup
- Record Update
- Record Delete
- Fast Lookup



**Example**: You upload 200 cases. In one transaction, the same flow is triggered for each case. In the flow, a Record Lookup finds the corresponding account. The Record Lookup generates one query for every case.

#### Before Winter '16

The flow issues 200 SOQL queries for the transaction. Because the limit is 100 SOQL queries, the entire transaction fails, and none of the cases are uploaded. For the upload to succeed, you reduce the batch size to 100 records and try again.

#### As of Winter '16

The flow buckets as many of the queries together as it can without reaching the 20,000 character limit for SOQL queries. In this example, the bucketing results in a few queries. The flow then issues the bucketed queries for the transaction. Because the limit is 100 SOQL queries, the transaction doesn't fail, and the cases are uploaded.

#### Replicate a Picklist Field in a Flow Screen

Have you ever wanted to generate a set of choices in a flow that corresponds to a picklist field in Salesforce? Or maybe a multi-select picklist? A new era is upon us! The era of the Picklist Choice resource.

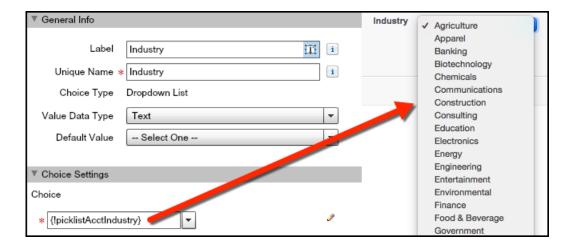
Gone are the days when you had to manually create a different choice for every possible case status, account industry, or whatever other information you're storing in picklist and multi-select picklist fields. Gone are the days when you had to manually update a flow every time someone added a value to a picklist field.



Note: Knowledge Article fields and global picklists aren't supported.

It's pretty simple to configure a picklist choice.

- 1. In a screen choice field, for Choice click CREATE NEW > Picklist Choice.
- 2. Configure the picklist choice in the dialog that appears.
- **3.** Save and run the flow as usual.
- Example: This dropdown list (in a Screen element) is configured to use a single picklist choice. The picklist choice is configured to use the values from the Account. Industry field. When you run the flow, the dropdown list has one option for every value available for Account. Industry.



#### SEE ALSO:

Idea Delivered: Dynamic Choices for Picklist Values in Flow

Dynamic Choice Renamed to "Dynamic Record Choice"

Salesforce Help: Flow Picklist Choice Resource

Salesforce Help: Options for Choice Fields in Flow Screen Elements

Metadata API: New Fields for Picklist Choices

#### Debug Flows with Better Fault Emails (Beta)

We want to make it way easier for you to debug flows! Last release, we delivered a new flow fault email that displayed a list of every element that was executed in a flow interview that failed. We've iterated, and now you get a lot more information about the flow interview and what happened in each element.



**Note**: This release contains a beta version of the flow fault email that is production quality but has known limitations. We welcome your feedback on IdeaExchange.

If the interview fails at an element that uses a fault connector, you receive two flow fault emails: one when the error occurs and one when the interview finishes.



Example: Here's an example for the same flow as we showed you last release. Your flow calculates the discount for an opportunity based on its account's annual revenue. You run an interview of that flow, and it fails. Like with the previous release, the fault email that you receive begins with the error message.

```
An error occurred at element Submit Record.
No applicable approval process was found.
```

Then it gives details about the flow and the flow interview, including who started the interview and whether any variables were set when it started. This example flow was distributed through a custom button on an opportunity, which is where the values for opptyId and accountId come from.

```
Flow Details
Flow Name: Calculate Opportunity Discount
Type: Autolaunched Flow
Version: 1
Status: Inactive
Flow Interview Details
Interview Label: Calculate Oppty Discount 7/30/2015 12:04 PM
Current User: Admin User (005D0000001Zijk)
Start Time: 7/30/2015 12:04 PM
Duration: 0 seconds
How the Interview Started
Admin User (005D0000001Zijk) started the flow interview.
Some of this flow's variables were set when the interview started.
opptyId = 006D000000CzKuH
accountId = 001D000000K2Fut
```

Next, like the previous release, the email lists the elements that the flow interview executed. But this release, it goes a little further by including detailed information about what happened in each element.

```
RECORD QUERY: Find Related Account
Find one Account record where:
Id Equals {!accountId} (001D000000K2Fut)
Result
Successfully found record.
\{!accountRev\} = 1.0E+8
DECISION: Determine Discount
Executed this outcome: Full
1. {!accountRev} ($100,000,000.00) Greater than $1,000,000.00
Logic: All conditions must be true (AND)
ASSIGNMENT: X10 Discount
{!opptyDiscount} Equals 10
Result
{!opptyDiscount} = "10"
RECORD UPDATE: Update Discount Field
Find all Opportunity records where:
Id Equals {!opptyId} (006D00000CzKuH)
Update the records' field values.
Discount c = \{!opptyDiscount\} (10)
Result
```

```
All records that meet the filter criteria are ready to be updated when the next Screen or Wait element is executed or when the interview finishes.

SUBFLOW: Submit_for_Approval
Enter flow Submit_for_Approval version 1.
Inputs:
recordId = {!opptyId} (006D000000CzKuH)

SUBMIT FOR APPROVAL: Submit_Record
Inputs: objectId = {!recordId} (006D000000CzKuH)

Error Occurred: No applicable approval process was found.
```

#### Dynamic Choice Renamed to "Dynamic Record Choice"

We've changed the resource name to make the differences between the three choice resources more intuitive.

Here's a recap of the three choice resources for flows.

- Choice—Manually creates one standalone choice.
- Dynamic Record Choice—Dynamically creates a set of choices based on filtered records.
- Picklist Choice—Dynamically creates a set of choices based on the values for an existing picklist or multi-select picklist field.

SEE ALSO:

Replicate a Picklist Field in a Flow Screen

Salesforce Help: Flow Dynamic Record Choice Resource

#### Post to a Community Feed from a Flow

We've removed one of the limitations on the Post to Chatter flow element. Now you can automate posts to Chatter feeds in Salesforce Communities.

To post to a community from a flow, still enter values for the Message, Target Name or ID, and Target Type parameters. Then also enter values for these new parameters, which are specific to community posts.

- Community ID—Identifies the community to post to
- Visibility—Specifies whether this feed item is available to all users (allUsers) or internal users only (internalUsers).

SEE ALSO:

Idea Delivered: Flow Post to Chatter Element to work Communities

#### Admins Notified When Interviews Fail to Resume Due to Inactive Owner

If a flow interview tries to resume and the interview's owner is inactive, the interview fails. Before, if a flow interview tried to resume but the owner was inactive, it failed silently. Now, the flow admin receives a flow fault email with details about what happened and how to fix it.



#### Example:

Every waiting flow interview has an associated user — the person who caused the interview to start waiting. If that user is inactive, the interviews can't resume.

Madison Rigsby (005xx000001SwCd) is inactive, so please delete the following flow interviews.

http://<instance>.salesforce.com/0Foxx000000003P

#### SEE ALSO:

Salesforce Help: Delete a Paused or Waiting Flow Interview

#### **Unsupported Operator Removed**

Salesforce doesn't support the "contains" operator for multi-select picklists. To prevent you from designing a flow that will fail automatically, that operator no longer appears when you select a multi-select picklist field in a record filter.

#### Boolean Data Types Treat null as Different from false

When you check whether a checkbox field is set to null, the flow no longer returns records where that checkbox field is set to false. If your flow checks whether checkbox fields or Boolean variables are null, reconfigure them to instead check whether the value is

false.

#### Sharing

Sharing improves your control over who sees what. This feature is available in both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Faster Organization-Wide Default Updates

Your organization-wide default changes now take effect immediately when you're increasing the default access.

#### Object-Specific Share Locks (Pilot)

When you create, edit, or delete a sharing rule, recalculation runs to update record access in

the organization. This operation can take some time if you have many users and a lot of data. The object-specific share locks feature enables you to make changes to a sharing rule for other objects, without waiting for recalculation across all objects to complete. Depending on the object, sharing rule type, and target group of the users, you can make changes to sharing rules on another object or the same object via the UI or API.

#### Faster Organization-Wide Default Updates

Your organization-wide default changes now take effect immediately when you're increasing the default access.

When you update organization-wide defaults, sharing recalculation applies the access changes to your records. If you have a lot of data, the update can take longer.

#### EDITIONS

#### Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

• If you are increasing the default access, such as from Public Read Only to Public Read/Write, your changes take effect immediately. All users get access based on the updated default access. Sharing recalculation is then run asynchronously to ensure that all redundant access from manual or sharing rules are removed.



**Note**: When the default access for contacts is Controlled by Parent and you increase the default access for accounts, opportunities, or cases, the changes take effect after recalculation is run.

• If you are decreasing the default access, such as from Public Read/Write to Public Read Only, your changes take effect after recalculation is run.

You'll receive a notification email when the recalculation completes. Refresh the Sharing Settings page to see your changes. To view the update status, from Setup, enter View Setup Audit Trail in the Quick Find box, then select View Setup Audit Trail.

#### Object-Specific Share Locks (Pilot)

When you create, edit, or delete a sharing rule, recalculation runs to update record access in the organization. This operation can take some time if you have many users and a lot of data. The object-specific share locks feature enables you to make changes to a sharing rule for other objects, without waiting for recalculation across all objects to complete. Depending on the object, sharing rule type, and target group of the users, you can make changes to sharing rules on another object or the same object via the UI or API.



**Note:** We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Because pilot programs are subject to change, we can't guarantee acceptance. This pilot feature isn't generally available, as referenced in this document or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available features.

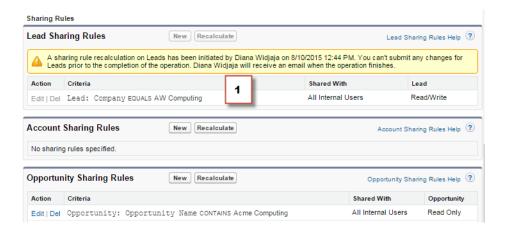
Without object-specific share locks, you can't submit simultaneous sharing changes until recalculation across all objects is complete. If you are enabling object-specific share locks, consider the following changes in your organization.

#### Criteria-based and ownership-based sharing rules

Recalculation is run if a sharing rule has changed or when you click the **Recalculate** button on the Sharing Settings page. Clicking this button locks sharing rules for that object (1), but you can still make changes to sharing rules for another object.

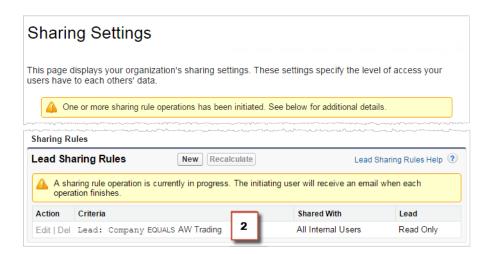


**Note**: You don't need to recalculate each time you edit or create a sharing rule. Only use the Recalculate buttons on the Sharing Rules related lists if sharing rule updates have failed or are not working as expected. The administrator will receive a notification email if sharing rule updates have failed.

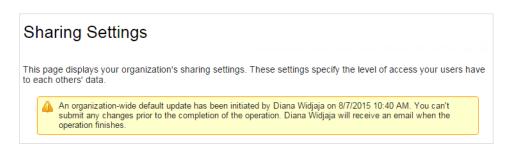


When an ownership-based sharing recalculation is in progress, you can't create, edit, or delete ownership-based sharing rules for an object that targets the affected group of users. For example, let's say you're creating an ownership-based lead sharing rule targeting all internal users. You can create, update, or delete another ownership-based sharing rules for leads targeting all internal users only after the recalculation finishes. You'll receive an email notification when the recalculation is complete. However, you can still create another ownership-based sharing rules for leads targeting any other public group except the All Internal Users group, while the recalculation from the creation of the first sharing rule is still in progress.

When a criteria-based sharing recalculation is in progress, you can't edit or delete that rule (2). But you can simultaneously create, edit, or delete any other criteria-based or ownership-based sharing rule.



You can't modify the organization-wide defaults when a recalculation is running and vice versa.



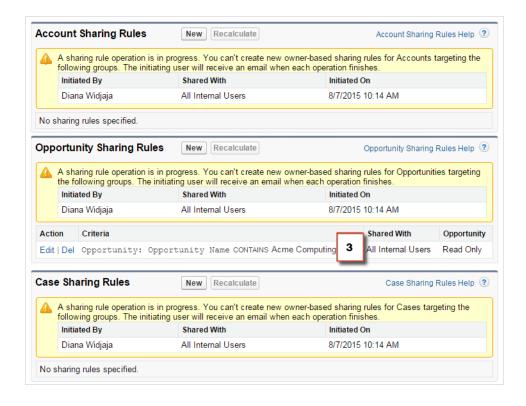
#### Account, cases, contacts, and opportunities

Sharing rules can affect accounts and the associated account children—cases, contacts, and opportunities, so they are locked together to ensure that recalculation runs properly. For example, creating and editing account sharing rules prevents you from creating or editing a case, contact, or opportunity sharing rule. Similarly, creating or editing an opportunity sharing rule prevents you from creating or editing a case, contact, or account sharing rule before recalculation is complete. Note that locks are not shared across objects, except in the case of accounts and associated account children.



**Note:** Clicking the **Recalculate** button for any of these four objects' sharing rules prevents anyone from making changes to any sharing rules for those objects until recalculation is completed.

In the following example, an ownership-based account sharing rule has been deleted and recalculation is in progress. Although you can't create, edit, or delete another ownership-based sharing rule belonging to any of these objects, you can make changes to a criteria-based sharing rule (3) belonging to those objects.



#### Globalization

Globalization tools help administrators manage resources that vary from country to country, such as multilanguage, multicurrency, and translated content.

#### IN THIS SECTION:

#### Time Zone Names Have Changed

The names for some time zones have changed due to an updated internationalization process. For example, the time zone name (GMT+14:00) Line Islands Time (Pacific/Kiritimati) is now (GMT+14:00) Line Is. Time (Pacific/Kiritimati). This feature is available in both Lightning Experience and Salesforce Classic.

#### Time Zone Names Have Changed

The names for some time zones have changed due to an updated internationalization process. For example, the time zone name (GMT+14:00) Line Islands Time (Pacific/Kiritimati) is now (GMT+14:00) Line Is. Time (Pacific/Kiritimati). This feature is available in both Lightning Experience and Salesforce Classic.

Time zone field values are determined based on address field values. See *Supported Time Zones* in the Salesforce Help.

# Available in: Contact Manager Group Professional Enterprise Performance Unlimited Developer Database.com

#### Security and Identity

Protect your Salesforce organization and your users with a new, more intuitive login experience and more secure login handling. In Lightning Experience, get to Salesforce apps, custom apps, and connected apps from one App Launcher view. Transaction Security policies let you respond quickly to specified security situations. You can encrypt more fields, and you can store larger OAuth tokens and password fields.

#### IN THIS SECTION:

#### New Login Look and Feel

We've redesigned and improved the usability of the login experience to make it more intuitive for users. In addition to the main login page, the updated design appears when your users forget their password, verify their identity, give apps access to their data, and other login-related tasks. This feature is available in Lightning Experience, Salesforce Classic, and the Salesforce1 mobile app.

#### Improved Security When Logged In as Another User

As a security measure, you can't approve OAuth data access while you are logged in as another user. This change ensures that OAuth access isn't provided without a user's knowledge.

#### Improved Security for Unwanted Login Attempts

We added measures to prevent scripts, sites, and other sources from automatically logging in users (also known as a "forced login") without the user knowing. Users are now warned when a website, application, or other source uses a link or script to force a user to log in to Salesforce.

#### Track Geographic Location of User Logins in Personal Settings and User Details

You can now track the geographic location of the IP addresses of your logins in your personal settings. You can also track the geographic location of the login IP addresses for any of your users in the user's detail page. This feature is available in both Lightning Experience and Salesforce Classic.

#### Twitter Auth. Provider No Longer Prompts User for Access on Repeated Logins

When users log in to Salesforce using Twitter, they are prompted to authorize Twitter to access Salesforce. After the first successful authorization, users are not asked to reauthorize Twitter again during subsequent logins in the same session. Previously, users had to reauthorize the Twitter app each time. This feature is available in both Lightning Experience and Salesforce Classic.

#### Display and Customize Error Messages for Single Sign-On Using an Auth. Provider

If an error occurs during single sign-on using an authentication provider, the error code and description (if both are available) now display in text on the page and in the URL. Previously, the code and description displayed in the URL only. This feature is available in both Lightning Experience and Salesforce Classic.

#### Time-Based Token Setting Name Changed in the User's Personal Settings

For clarification, we've changed the name of the setting that lets your users register an authenticator app for their account. They use the authenticator app for identity verification or two-factor authentication. The new setting name on the user's Advanced User Details page is **App Registration: One-Time Password Generator**. This feature is available in both Lightning Experience and Salesforce Classic.

#### Store Larger OAuth Tokens and Longer Passwords

Enjoy increased capacity for OAuth tokens and password fields for external data sources, and for OAuth tokens for named credentials. Some external systems generate large passwords or OAuth tokens. The size limit for passwords and OAuth tokens has been increased to accommodate these systems. This feature is available in both Lightning Experience and Salesforce Classic.

#### New Dynamic Size for Login Flow Page

When you publish a login flow, the login flow content area now resizes automatically to approximately 50% of the page size, based on your device's screen size. Previously, the login flow content area was 340px wide. This feature is available in both Lightning Experience and Salesforce Classic.

#### All Users Get the App Launcher in Lightning Experience

All users of Lightning Experience have access to the App Launcher to navigate to Salesforce apps, custom apps, and connected apps from one view.

#### Reorder Apps Easier

Use the improved user interface to arrange the default sort order for Salesforce, custom, and connected apps in your organization. You can also hide apps from the App Launcher. This feature is available in both Lightning Experience and Salesforce Classic.

#### Customize Connected App Behavior with Apex

Associate your own Apex class with a connected app to provide more authentication options and manage user attribute handling.

#### Learn About Possible Security Issues Quickly with Transaction Security Policies

Transaction Security policies give you a way to look through events in your organization and specify actions to take when certain combinations occur. This feature is available in both Lightning Experience and Salesforce Classic.

#### Protect More Data With Platform Encryption

Platform Encryption continues to expand the range of data you can protect. You can now encrypt Person Account fields and selected Case fields, and we've made it easier to work with encrypted data from mobile devices. This feature is available in Salesforce Classic only.

#### Restrictions Added to My Domain Names

To reduce confusion identifying sites, and to increase security for users trying to log in to custom domains, you can't use specific words in custom domain names. This feature is available in both Lightning Experience and Salesforce Classic.

#### Customize the Headers and Bodies of Apex Callouts That Use Named Credentials

Developers can now customize how headers and bodies are constructed in Apex callouts that specify named credentials as endpoints. This flexibility enables you to use named credentials in special situations, for example, when the remote endpoint requires security tokens or encrypted credentials in request headers. This feature is available in both Lightning Experience and Salesforce Classic.

#### Simplify Development of Web Service Callouts by Using Named Credentials

You can now specify named credentials as web service callout endpoints. A named credential specifies the URL of a callout endpoint and its required authentication parameters in one definition. Salesforce manages all authentication for Apex callouts that specify a named credential as the callout endpoint so that your code doesn't have to. This feature is available in both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

How and When Security and Identity Features Become Available Security: Lightning Experience Limitations

#### New Login Look and Feel

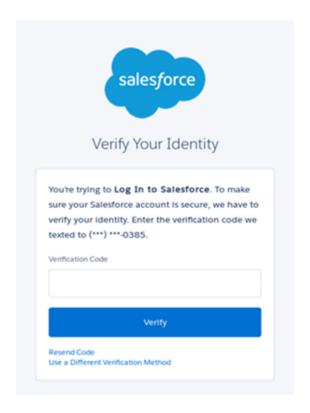
We've redesigned and improved the usability of the login experience to make it more intuitive for users. In addition to the main login page, the updated design appears when your users forget their password, verify their identity, give apps access to their data, and other login-related tasks. This feature is available in Lightning Experience, Salesforce Classic, and the Salesforce1 mobile app.



Available in all editions



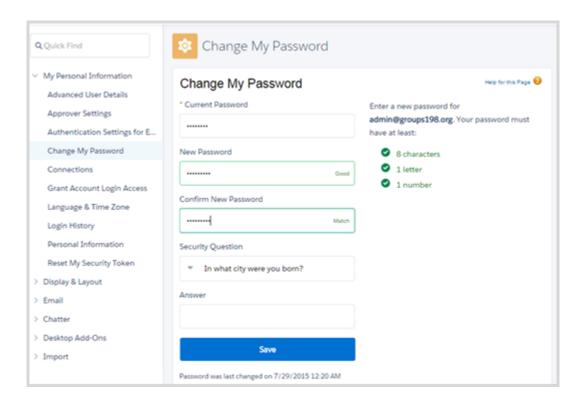
We've streamlined account security when your users log in from a device we don't recognize or when they take other sensitive actions. In previous releases, when we verified your users' identity, they chose how to receive a verification code. Now, we automatically select the highest priority method available to verify their identity, saving them time. (Don't worry, your users can choose a different verification method if they need to.) For more details about methods of identity verification and their priority, see Identity Confirmation Activations in the Salesforce Help.



Also, when we successfully verify your users' identity after they log in, we don't show them a page that confirms device activation. Your users simply go to Salesforce, so that they can get to work quickly.

We've improved how your users change their password by replacing the password strength indicator bar with clearer feedback indicating whether the new password meets your Salesforce org's minimum requirements. Email messages, such as those users receive when they

forget their password, are more concise and clear, and subject lines are more relevant. To improve user security, the reset password email now contains only a password reset link, not a temporary password. Users simply click the link to reset their password.



Your login page is at the same address, and your users continue to use their existing usernames and passwords. Login pages with the old look and feel can appear for some users while we roll out the change across all instances. All customers will see the new login pages no later than October 18.



Note: This change is available on a rolling basis during the Winter '16 release.

SEE ALSO:

Salesforce Maintenance Calendar Login Rollout in Winter '16 Release

#### Improved Security When Logged In as Another User

As a security measure, you can't approve OAuth data access while you are logged in as another user. This change ensures that OAuth access isn't provided without a user's knowledge.

SEE ALSO:

Log In as Another User

# EDITIONS Available in: Enterprise Performance Unlimited Developer Database.com

#### Improved Security for Unwanted Login Attempts

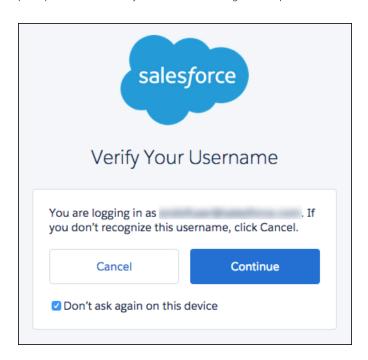
We added measures to prevent scripts, sites, and other sources from automatically logging in users (also known as a "forced login") without the user knowing. Users are now warned when a website, application, or other source uses a link or script to force a user to log in to Salesforce.



Sometimes an application sends a username and password in a URL directly to the Salesforce login page without prompting the user to type anything for authentication. For example, users bookmark

Available in all editions

the Salesforce login page with their username and password and then click the bookmark link. When Salesforce detects this activity, we prompt the user to verify the account and login attempt.



Users can select or deselect **Don't ask again on this device**. When this option is selected and the user clicks **Continue**, Salesforce remembers the preference for the account and browser combination.

Salesforce doesn't prompt users when logging in through a web form and using a standard login page, such as at https://login.salesforce.com, or a login page for custom Salesforce domains, portals, or communities. Single sign-on users also don't receive this message.

## Track Geographic Location of User Logins in Personal Settings and User Details

You can now track the geographic location of the IP addresses of your logins in your personal settings. You can also track the geographic location of the login IP addresses for any of your users in the user's detail page. This feature is available in both Lightning Experience and Salesforce Classic.





To get more detailed geographic information, such as city and postal code, you can download the login history. Due to the nature of geolocation technology, the accuracy of geolocation fields (for example, country, city, postal code) can vary.

# Twitter Auth. Provider No Longer Prompts User for Access on Repeated Logins

When users log in to Salesforce using Twitter, they are prompted to authorize Twitter to access Salesforce. After the first successful authorization, users are not asked to reauthorize Twitter again during subsequent logins in the same session. Previously, users had to reauthorize the Twitter app each time. This feature is available in both Lightning Experience and Salesforce Classic.

Salesforce now redirects the user to Twitter using oauth/authenticate, instead of oauth/authorize. Due to this change, the Twitter access token that is issued can't be used to access Twitter direct messages during an auth. provider flow.



#### Available in:

- Developer
- Enterprise
- Performance
- Professional
- Unlimited

# Display and Customize Error Messages for Single Sign-On Using an Auth. Provider

If an error occurs during single sign-on using an authentication provider, the error code and description (if both are available) now display in text on the page and in the URL. Previously, the code and description displayed in the URL only. This feature is available in both Lightning Experience and Salesforce Classic.

As an administrator, this change enables you to display a custom error message from the createUser and updateUser methods in your Apex registration handler class. To learn how to throw a custom exception to display an error message to the user, see the Auth.RegistrationHandler interface in the Force.com Apex Code Developer's Guide.

#### EDITIONS

#### Available in:

- Developer
- Enterprise
- Performance
- Professional
- Unlimited

SEE ALSO:

Force.com Apex Code Developer's Guide

#### Time-Based Token Setting Name Changed in the User's Personal Settings

For clarification, we've changed the name of the setting that lets your users register an authenticator app for their account. They use the authenticator app for identity verification or two-factor authentication. The new setting name on the user's Advanced User Details page is **App Registration:**One-Time Password Generator. This feature is available in both Lightning Experience and Salesforce Classic.



Available in all editions

While the setting name changed, the process for requiring your users to use two-factor authentication when they log in remains the same.



**Note:** This setting doesn't set two-factor authentication for a user's account; it only registers an authenticator app. If you set two-factor authentication for your org, your users can use a code (TOTP) from the app to log in. They can also use the code if we ever need to verify their identity.

SEE ALSO:

About Salesforce Two-Factor Authentication

#### Store Larger OAuth Tokens and Longer Passwords

Enjoy increased capacity for OAuth tokens and password fields for external data sources, and for OAuth tokens for named credentials. Some external systems generate large passwords or OAuth tokens. The size limit for passwords and OAuth tokens has been increased to accommodate these systems. This feature is available in both Lightning Experience and Salesforce Classic.

The OAuth token storage limit for external data sources and named credentials has increased from 1,020 characters to 4,000 characters per token. Password fields for external data sources can now support up to 1,020 characters.



**Note**: These values represent the token and password size after encryption is applied.

For limits related to external data sources, search for "limits for Lightning Connect" in the Salesforce Help.

#### EDITIONS

Named credentials are available in: **All** Editions.

Lightning Connect external data sources are available in: **Developer** Edition and for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions.

Files Connect external data sources are available in: **Enterprise, Performance, Unlimited**, and **Developer** Editions.

#### New Dynamic Size for Login Flow Page

When you publish a login flow, the login flow content area now resizes automatically to approximately 50% of the page size, based on your device's screen size. Previously, the login flow content area was 340px wide. This feature is available in both Lightning Experience and Salesforce Classic.



#### EDITIONS

#### Available in:

- Developer
- Enterprise
- Performance
- Unlimited

#### **USER PERMISSIONS**

To open, edit, or create a flow in the Cloud Flow Designer:

"Manage Force.com Flow"

SEE ALSO:

Create a Login Flow

#### All Users Get the App Launcher in Lightning Experience

All users of Lightning Experience have access to the App Launcher to navigate to Salesforce apps, custom apps, and connected apps from one view.

Administrators don't have to set permissions or edit profiles to give Lightning Experience users the App Launcher.

In the upper-right corner of any Salesforce page, click the App Launcher icon.

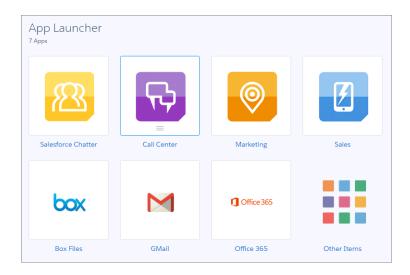


#### **EDITIONS**

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

The App Launcher displays all available Salesforce apps, and the connected apps you have permission to use.



Administrators can hide or show individual apps, and change the default sort order in the App Launcher. Users drag icons to resort them, or click **Other Items** to see more items and apps.

SEE ALSO:

Reorder Apps Easier

#### Reorder Apps Easier

Use the improved user interface to arrange the default sort order for Salesforce, custom, and connected apps in your organization. You can also hide apps from the App Launcher. This feature is available in both Lightning Experience and Salesforce Classic.

As an administrator, you control the default sort order of the apps your users see in the organization. These apps include Salesforce standard apps, such as the Salesforce Marketing app, the Call Center app, and any custom apps for your organization. Your organization may also use connected apps. Connected apps include productivity apps, such as Gmail  $^{\text{M}}$  and Microsoft Office  $365^{\text{M}}$ , or other apps to help your users get work done.

In Lightning Experience, these apps appear in the App Launcher. In Salesforce Classic, these apps appear in the Force.com app menu at the top of the page.

From Setup, enter Apps in the Quick Find box, then select **Apps**, and then click **Reorder**.

Drag the apps in the list to change the app order. Click **Visible** or **Hidden** to show or hide individual apps from the App Launcher for all users of the organization.

#### **EDITIONS**

#### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

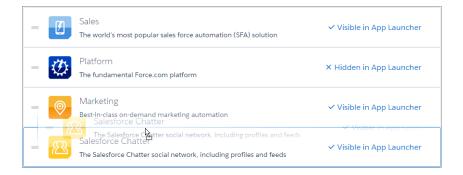
#### **USER PERMISSIONS**

To view apps:

 "View Setup and Configuration"

To manage apps:

"Customize Application"



SEE ALSO:

All Users Get the App Launcher in Lightning Experience

#### Customize Connected App Behavior with Apex

Associate your own Apex class with a connected app to provide more authentication options and manage user attribute handling.

Customize the behavior of a connected app with Apex. Create a class that extends the ConnectedAppPlugin Apex class, and associate it with a connected app. The class can support new authentication protocols or respond to user attributes in a way that benefits a business process.

When you create or edit a connected app, enter the name of the Apex class in the Custom Connected App Handler section of the connected app settings.

SEE ALSO:

New and Changed Apex Classes

#### **EDITIONS**

Connected Apps can be created in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Connected Apps can be installed in: **All** Editions

# Learn About Possible Security Issues Quickly with Transaction Security Policies

Transaction Security policies give you a way to look through events in your organization and specify actions to take when certain combinations occur. This feature is available in both Lightning Experience and Salesforce Classic.



**Note**: You may need to purchase extra services or subscriptions to use this feature. For pricing details, contact your Salesforce account executive.

You can create policies that evaluate activity on specific events. Depending upon the policy, the real-time actions that can be taken are:

- Notify a Salesforce admin that the policy was triggered
- Block access
- Require the use of two-factor authentication
- Require the end of a current login session

Transaction Security includes a predefined Concurrent Sessions Limiting policy and a corresponding Apex class to implement the policy. An administrator can edit the Apex class to modify it, and enable the policy immediately.

For example, suppose that you activate the Concurrent Sessions Limiting policy to limit the number of concurrent sessions per user. In addition, you change the policy to notify you via email when the policy is triggered. You also update the policy's Apex implementation to limit users to three sessions instead of the default five sessions. (That's easier than it might sound.) Later, a user with three login sessions tries to create a fourth. The policy prevents that and requires the user to end one of the

existing sessions before proceeding with the new session. At the same time, you are notified that the policy was triggered.

#### SEE ALSO:

About Transaction Security Policies New and Changed Apex Classes

#### **USER PERMISSIONS**

To create, edit, and manage transaction security policies:

"Author Apex"

**AND** 

"Customize Application"

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in:

- Enterprise
- Performance
- Unlimited
- Developer

#### Protect More Data With Platform Encryption

Platform Encryption continues to expand the range of data you can protect. You can now encrypt Person Account fields and selected Case fields, and we've made it easier to work with encrypted data from mobile devices. This feature is available in Salesforce Classic only.

Platform Encryption lets customers encrypt data stored throughout Salesforce, whether in the Sales Cloud, Service Cloud, or even custom apps. Encrypt sensitive, confidential, and private data at rest on the Salesforce 1 Platform to help meet privacy policies, regulatory requirements, and contractual obligations for handling private data.



**Note:** You may need to purchase additional services or subscriptions to use this feature. For pricing details, please contact your Salesforce account executive. Platform Encryption is not available if your instance is in the Government Cloud.

#### IN THIS SECTION:

#### **Encrypt Person Account Fields**

Platform Encryption now supports person accounts. When you encrypt certain fields in a person account, the equivalent fields in the Account and Contact objects are also encrypted, and vice versa.

#### **Encrypt Selected Case and Case Comment Fields**

In addition to selected fields in the Account and Contact objects, you can now encrypt selected fields in Cases and Case Comments, including those created by customers via Web to Case.

#### Group Data in Reports

Users can now group reports using data that's encrypted. This removes a key limitation of Platform Encryption.

#### Encrypt Custom Text Area Fields

Custom text area fields are now supported for encryption, in addition to the Text and Text Area (Long) custom field types that were already supported.

#### SEE ALSO:

Improved Access to Encrypted Data in Salesforce1 Platform Encryption Help Security Implementation Guide

#### **Encrypt Person Account Fields**

Platform Encryption now supports person accounts. When you encrypt certain fields in a person account, the equivalent fields in the Account and Contact objects are also encrypted, and vice versa.

For example, when you encrypt the Account Name field on an account, the Contact Name on a person account is also encrypted, and if you encrypt Contact Name, Account Name is also encrypted.

These fields are shared between Accounts and Person Accounts. When one is encrypted, the other is too.

- Account Name
- Contact Name
- Mailing Address
- Phone

#### **EDITIONS**

Available in: Enterprise, Performance, and Unlimited Editions. Available in Developer Edition at no charge for organizations created in Summer '15 and later.

Available in Salesforce Classic only.

#### **USER PERMISSIONS**

To view setup:

 "View Setup and Configuration"

To enable encrypted fields:

"Customize Application"

- Fax
- Mobile
- Home Phone
- Other Phone
- Email

If you've already encrypted account fields, and you enable person accounts, the appropriate person account fields are automatically encrypted.

SEE ALSO:

What is a Person Account?

#### **Encrypt Selected Case and Case Comment Fields**

In addition to selected fields in the Account and Contact objects, you can now encrypt selected fields in Cases and Case Comments, including those created by customers via Web to Case.

These fields are now available for encryption:

- On the Case object:
  - Subject
  - Description
- On Case Comments:
  - Body

SEE ALSO:

Case Fields

Web to Case

#### **Group Data in Reports**

Users can now group reports using data that's encrypted. This removes a key limitation of Platform Encryption.

Previously, when a field was encrypted, users could not use that field as a grouping. Now they can; for example, in a report on support cases, users can now group the results according to which customer account generated the case, even if the Account Name field is encrypted.

Grouping encrypted fields is supported in the Report Builder, but not when invoked by the GROUP BY operator in queries.

#### **Encrypt Custom Text Area Fields**

Custom text area fields are now supported for encryption, in addition to the Text and Text Area (Long) custom field types that were already supported.

Encrypted custom text area fields enable you to protect more of the free-form data that customers submit. For example, if your users are submitting textual information to a "Comments" field in a custom object, and that information may contain personally identifiable information (PII), you may want to encrypt that text area field.

#### Restrictions Added to My Domain Names

To reduce confusion identifying sites, and to increase security for users trying to log in to custom domains, you can't use specific words in custom domain names. This feature is available in both Lightning Experience and Salesforce Classic.

You can't use these reserved words for subdomains in a My Domain name:

- www
- salesforce
- heroku

And, you can't start the domain name with these words:

- root
- status

For more information, see My Domain Overview in the Salesforce Help.

#### EDITIONS

#### Available in:

- Performance
- Unlimited
- Enterprise
- Developer
- Professional
- Group

#### USER PERMISSIONS

To define a domain name:

"Customize Application"

# Customize the Headers and Bodies of Apex Callouts That Use Named Credentials

Developers can now customize how headers and bodies are constructed in Apex callouts that specify named credentials as endpoints. This flexibility enables you to use named credentials in special situations, for example, when the remote endpoint requires security tokens or encrypted credentials in request headers. This feature is available in both Lightning Experience and Salesforce Classic.



Available in all editions

Previously, Salesforce always generated a standard authorization header for each callout to a named credential—defined endpoint. Apex code couldn't construct that authorization header. Also, merge fields weren't allowed in HTTP headers or request bodies. Now developers have these customization options for Apex callouts.

When defining a named credential, administrators use the following callout options to allow these new customizations in the Apex code that references the named credential.

Field	Description
Generate Authorization Header	By default, Salesforce generates an authorization header and applies it to each callout that references the named credential.
	Deselect this option only if one of the following statements applies.
	<ul> <li>The remote endpoint doesn't support authorization headers.</li> </ul>
	<ul> <li>The authorization headers are provided by other means. For example, in Apex callouts, the developer can have the code construct a custom authorization header for each callout.</li> </ul>
	This option is required if you reference the named credential from an external data source.

Field	Description
Allow Merge Fields in HTTP Header Allow Merge Fields in HTTP Body	In each Apex callout, the code specifies how the HTTP header and request body are constructed. For example, the Apex code can set the value of a cookie in an authorization header.
	These options enable the Apex code to use merge fields to populate the HTTP header and request body with org data when the callout is made.
	These options aren't available if you reference the named credential from an external data source.

If the named credential allows merge fields in HTTP headers or request bodies, developers can use the special merge fields in the following table.

Merge Field	Description
{!\$Credential.Username}	Username and password of the running user. Available only if the named
{!\$Credential.Password}	credential uses password authentication.
	<pre>// non-standard authentication req.setHeader('X-Username',     '{!\$Credential.UserName}'); req.setHeader('X-Password',     '{!\$Credential.Password}');</pre>
{!\$Credential.OAuthToken}	OAuth token of the running user. Available only if the named credential uses OAuth authentication.
	<pre>// The external system expects "OAuth" as // the prefix for the access token. req.setHeader('Authorization', 'OAuth {!\$Credential.OAuthToken}');</pre>
{!\$Credential.AuthorizationMethod}	Valid values depend on the authentication protocol of the named credential.  Basic—password authentication  Bearer—OAuth 2.0  null—no authentication
{!\$Credential.AuthorizationHeaderValue}	<ul> <li>Valid values depend on the authentication protocol of the named credential.</li> <li>Base-64 encoded username and password—password authentication</li> <li>OAuth token—OAuth 2.0</li> <li>null—no authentication</li> </ul>

Merge Field	Description
{!\$Credential.OAuthConsumerKey}	Consumer key. Available only if the named credential uses OAuth authentication.

#### SEE ALSO:

Salesforce Help: Define a Named Credential
Force.com Apex Code Developer's Guide: Invoking Callouts Using Apex

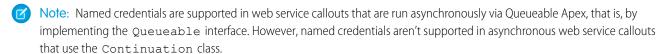
#### Simplify Development of Web Service Callouts by Using Named Credentials

You can now specify named credentials as web service callout endpoints. A named credential specifies the URL of a callout endpoint and its required authentication parameters in one definition. Salesforce manages all authentication for Apex callouts that specify a named credential as the callout endpoint so that your code doesn't have to. This feature is available in both Lightning Experience and Salesforce Classic.



Available in all editions

Previously, only HTTP callouts could specify named credentials as the callout endpoints. Now web service callouts can also do so.



Example: This code snippet shows how the callout endpoint is specified by the prefix callout:, the name of the named credential, and an optional path.

```
WebServiceCallout.invoke(
this,
request_x,
response_map_x,
new String[]{'callout:My_Named_Credential/some_path',
'http://test-uri/soap/export/getUsers',
'http://test-uri/soap/export/',
'getUsers',
'http://test-uri/soap/export/',
'getUsersResponse',
'testUriSoapExport.getUsersResponse_element'});
```

#### SEE ALSO:

Force.com Apex Code Developer's Guide: Invoking Callouts Using Apex Salesforce Help: Named Credentials

#### Deployment

You now have new ways to deploy changes to your organization. Deployment changes include test options for change sets. Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

#### IN THIS SECTION:

#### **New Change Set Components**

New components are available for deployment.

#### Choose Test Options for Change Sets

You can now choose which tests to run when deploying or validating an inbound change set in production or sandbox. Test options provide flexibility in how much testing is done to achieve quality and code coverage requirements and can reduce execution time in a deployment. This feature is available in both Lightning Experience and Salesforce Classic.

#### Improved Deployment Experience During Service Upgrades

If your deployment was running tests during a Salesforce service upgrade, test execution now resumes after the service is restored. Results of already executed tests are preserved and those tests aren't rerun, saving you time. Previously, test execution was restarted from the beginning. This enhancement applies to file-based deployments started with the Metadata API or a tool, such as the Force.com Migration Tool. This enhancement doesn't apply to change sets.

#### Sandbox Enhancements

Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

#### SEE ALSO:

How and When Deployment Features Become Available Metadata API

#### **New Change Set Components**

New components are available for deployment.

The components available for a change set vary by edition. The following components are now available for change sets.

#### TransactionSecurityPolicy

Represents a transaction security policy definition, including events monitored and actions to take

#### **EDITIONS**

Available in **Enterprise**, **Performance**, **Unlimited**, and **Database.com** Editions

Available in **Professional** Edition with a sandbox purchase.

#### **Choose Test Options for Change Sets**

You can now choose which tests to run when deploying or validating an inbound change set in production or sandbox. Test options provide flexibility in how much testing is done to achieve quality and code coverage requirements and can reduce execution time in a deployment. This feature is available in both Lightning Experience and Salesforce Classic.

The following test options are available when you deploy or validate an inbound change set.

#### **Default**

Keeps the default behavior for all tests. In sandbox, no tests are executed. In production, all local tests are executed if your change sets contain Apex classes or triggers. Local tests are all tests, except the ones that originate from managed packages. If your package doesn't contain Apex components, no tests are run.

#### **Run Local Tests**

All tests in your organization are run, except the ones that originate from installed managed packages. This test level is the default for production deployments that include Apex classes or triggers.

#### **Run All Tests**

All tests in your organization are run, including tests of managed packages.

#### **Run Specified Tests**

Only the tests that you specify are run. Provide the names of test classes in a comma-separated list.



**Note**: Code coverage requirements differ from the default coverage requirements when using this level in production. The executed tests must cover the class or trigger modified in your change sets with a minimum of 75% code coverage. This coverage is computed for each class or trigger individually and is different from the overall coverage percentage.

#### SEE ALSO:

Lightning Experience: A New, Modern, Intelligent User Experience

#### Improved Deployment Experience During Service Upgrades

If your deployment was running tests during a Salesforce service upgrade, test execution now resumes after the service is restored. Results of already executed tests are preserved and those tests aren't rerun, saving you time. Previously, test execution was restarted from the beginning. This enhancement applies to file-based deployments started with the Metadata API or a tool, such as the Force.com Migration Tool. This enhancement doesn't apply to change sets.

Salesforce performs major service upgrades three times a year, and other maintenance updates throughout the year. Although it isn't common that the deployment falls within a service upgrade, this enhancement makes deployments more resilient.



Note: To check whether your Salesforce instance is due for an upgrade, see http://trust.salesforce.com.

#### Sandbox Enhancements

Sandbox enhancements include sandbox auto-activation, improved data security, and a new sandbox copy engine.

#### IN THIS SECTION:

#### Auto-Activate a Refreshed Sandbox

You can automatically activate a refreshed sandbox, skipping the activation alert email and the manual activation step.

#### Let Users Manage Sandboxes with Improved Data Security

Users no longer need the "Modify All Data" permission to create, refresh, activate, and delete sandboxes. Instead, users need the new "Manage Sandbox" permission to create, refresh, activate, and delete sandboxes. With the "Manage Sandbox" permission, users can manage sandboxes without compromising your control over data security, access management, and more.

#### Improved Sandbox Copy Engine for Developer and Developer Pro Sandboxes (Generally Available)

We've rebuilt our sandbox copy engine to optimize performance, scalability, and customer success. The new engine impacts Developer and Developer Pro sandboxes as they are created and existing Developer and Developer Pro sandboxes as they are refreshed.

#### Edit Link Removed

Changing a sandbox name or description is no longer available unless you are refreshing the sandbox.

#### Auto-Activate a Refreshed Sandbox

You can automatically activate a refreshed sandbox, skipping the activation alert email and the manual activation step.

#### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Database.com** Editions

Available for purchase in **Professional** Edition.

When you refresh a sandbox, click **Auto Activate** under Sandbox Options. Salesforce refreshes your sandbox, and you don't receive an activation alert email or have to click **Activate** in Setup.

#### Let Users Manage Sandboxes with Improved Data Security

Users no longer need the "Modify All Data" permission to create, refresh, activate, and delete sandboxes. Instead, users need the new "Manage Sandbox" permission to create, refresh, activate, and delete sandboxes. With the "Manage Sandbox" permission, users can manage sandboxes without compromising your control over data security, access management, and more.

Users who have the "Modify All Data" permission automatically get the "Manage Sandbox" permission with Winter '16.

### Improved Sandbox Copy Engine for Developer and Developer Pro Sandboxes (Generally Available)

We've rebuilt our sandbox copy engine to optimize performance, scalability, and customer success. The new engine impacts Developer and Developer Pro sandboxes as they are created and existing Developer and Developer Pro sandboxes as they are refreshed.

Several enhancements to the copy engine make sandbox creation and refresh faster and minimize sandbox inconsistencies. These improvements are available on a rolling basis during the Winter '16 release.

#### **Intelligent Routing**

The copy engine selects the best instance for your sandbox based on available storage space, CPU consumption, and import activity on each sandbox instance.

#### **New Data Copy Framework**

The copy engine divides your organization's data into small chunks for exporting and copying to the sandbox. Copying is faster, because chunks are processed in parallel. Importing begins as soon as the first data chunk is exported. Export and import are independent, so the system is robust and flexible.

#### **New Post-Copy Framework**

If a production organization changes during sandbox creation or refresh, the sandbox can contain data inconsistencies. The new automated post-copy process quickly fixes these inconsistencies after copying is complete and tracks the fixes.

#### **Progress Tracking**

You can monitor the progress of your sandbox creation or refresh. From Setup, click **Sandboxes** or **Data Management** > **Sandboxes** to view a list of your sandboxes. The list displays a progress bar for sandboxes in the queue, in process, or recently completed. Hover over the progress bar to view the percentage completed of a copy in progress. Click a name to go to a detail page showing information about the sandbox, including how much time before the next available refresh. If your sandbox is suspended or stopped for more than one hour, contact Salesforce Customer Support.



Note: Full sandboxes began using the new engine in Summer '15. All other sandbox products will use the new engine in later releases.

#### **Edit Link Removed**

Changing a sandbox name or description is no longer available unless you are refreshing the sandbox.

The **Edit** button has been removed from Sandbox tabs to improve business logic and to keep the user interface and API behavior consistent.

#### Development: Create Your Own Salesforce App

Force.com helps you develop new applications and integrations to help your organization or for resale to other organizations.

#### IN THIS SECTION:

#### Force.com Canvas

#### Debugging

Use new debugging features to root out problems in your Salesforce org. This feature is available in both Lightning Experience and Salesforce Classic.

#### **Developer Console**

Use new features of Developer Console to more easily manage code in your organization. This feature is available in both Lightning Experience and Salesforce Classic.

#### **Custom Metadata Types**

Use new features to create, edit, protect, and control custom metadata.

#### Visualforce

Develop apps to customize your organization using Visualforce, including Salesforce 1 and other mobile apps. This feature is available in both Lightning Experience and Salesforce Classic.

#### Apex Code

Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code execution can be initiated by Web service requests and from triggers on objects.

#### **Lightning Components**

The Lightning Component framework powers Salesforce 1. Use the framework to build mobile apps and pages faster than ever in Lightning Experience, Salesforce 1, Salesforce Classic, and Communities.

#### API

Access more metadata types and data objects in API version 35.0.

#### **ISVforce**

Winter '16 includes enhancements to the Environment Hub and the SignupRequest API. The License Management App (LMA) is also now available in Lightning Experience.

#### **AppExchange**

Winter '16 includes the availability of Lightning components on the AppExchange and a new publishing experience.

#### SEE ALSO:

How and When Development Features Become Available

#### Force.com Canvas

Force.com Canvas enables you to easily integrate a third-party application in Salesforce. Force.com Canvas is a set of tools and JavaScript APIs that you can use to expose an application as a canvas app. This means you can take your new or existing applications and make them available to your users as part of their Salesforce experience.

The version of the Force.com Canvas SDK is 35.0.

For more information, see the Force.com Canvas Developer's Guide.

#### IN THIS SECTION:

#### Canvas Apps Wrapped in Two <iframe> Tags

Canvas apps are embedded into Salesforce using HTML <iframe> tags. Beginning in this release, Canvas apps are wrapped in two <iframe> tags, an inner <iframe> and an outer <iframe>. This double wrapping ensures that Canvas apps are isolated from Salesforce in all contexts, except via the Canvas APIs.

#### **EDITIONS**

Available in: Salesforce Classic

#### Available in:

- Enterprise
- Performance
- Unlimited
- Professional (with Force.com Canvas enabled)
- Developer

#### Canvas Apps Wrapped in Two <iframe> Tags

Canvas apps are embedded into Salesforce using HTML <iframe> tags. Beginning in this release, Canvas apps are wrapped in two <iframe> tags, an inner <iframe> and an outer <iframe>. This double wrapping ensures that Canvas apps are isolated from Salesforce in all contexts, except via the Canvas APIs.

In prior releases Canvas apps were embedded in only one <iframe> tag.

If you've written JavaScript to integrate a Canvas app with Salesforce and you've used parent.postMessage() to send messages across the iframe boundary, the extra iframe breaks your code. The resolution is to revise your code to use the official Canvas APIs to handle your integration.

Using parent.postMessage () or similar techniques that depend on the frame hierarchy is inherently fragile. Use the documented Canvas APIs for sending and receiving events because that's the best way to isolate yourself from implementation changes such as this one.

#### SEE ALSO:

"Implementing Canvas App Events" in the Force.com Canvas Developer's Guide

"Using Events between a Visualforce Page and a Canvas App" in the Force.com Canvas Developer's Guide

#### Debugging

Use new debugging features to root out problems in your Salesforce org. This feature is available in both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Debug Apex Code in Eclipse (Generally Available)

The Apex Debugger extends the Force.com IDE plug-in for Eclipse and behaves similarly to debuggers available for other languages. Use it in sandbox orgs to root out the bugs in your

Apex code. After you've set a breakpoint and started a debugging session, you can debug actions in your org that cause the line of code to execute.

#### EDITIONS

Available in: Enterprise, Performance, Unlimited, Developer, and Database.com Editions

#### Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags

Trace flags now include a customizable duration. You can also reuse debug levels across trace flags and control which debug logs to generate more easily than ever before. We've also removed a limit: Because all trace flags include a duration, the 20-request logging limit for user-based logging no longer applies. This feature is available in both Lightning Experience and Salesforce Classic.

#### Customize Trace Flags and Debug Levels in Setup

You can now configure debug log levels for users, Apex classes, and Apex triggers in Setup. This feature is available in both Lightning Experience and Salesforce Classic.

#### Receive Less Granular Logs at the Debug Level for Apex Code

Sifting through debug logs is now easier, because we've made them less cluttered. When you select the <code>Debug</code> log level for the <code>APEX\_CODE</code> log category, you no longer receive logs for method or constructor entry or exit. To log these events, use the <code>Fine</code> log category or higher.

#### Debug Apex Code in Eclipse (Generally Available)

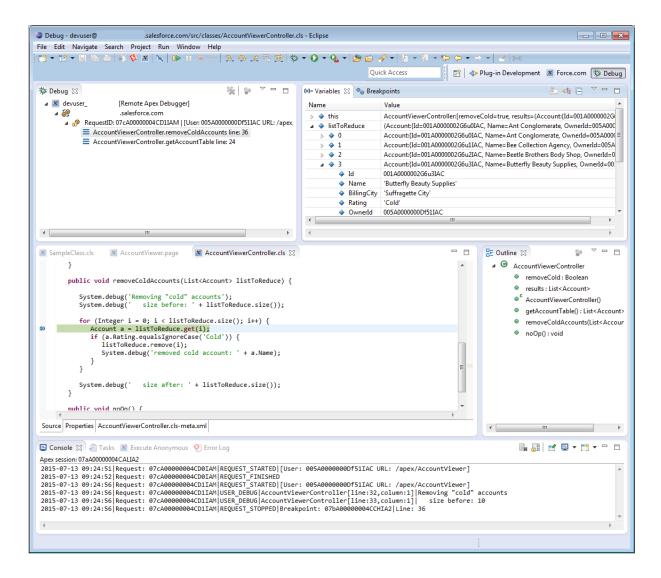
The Apex Debugger extends the Force.com IDE plug-in for Eclipse and behaves similarly to debuggers available for other languages. Use it in sandbox orgs to root out the bugs in your Apex code. After you've set a breakpoint and started a debugging session, you can debug actions in your org that cause the line of code to execute.



**Note**: Some services and subscriptions include the Apex Debugger for an extra cost. For pricing details, contact your Salesforce account executive.

Use the Apex Debugger to complete the following actions.

- Set breakpoints in Apex classes and triggers.
- View variables, including sObject types, collections, and Apex System types.
- View the call stack, including triggers activated by Apex Data Manipulation Language (DML), method-to-method calls, and variables.
- Interact with global classes, exceptions, and triggers from your installed managed packages. When you inspect objects that have managed types that aren't visible to you, only global variables are displayed in the variable inspection pane.
- Complete standard debugging actions, including step into, over, and out, and run to breakpoint.
- Output your results to the Console window.



SEE ALSO:

Read Force.com IDE Documentation in Your Browser

#### Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags

Trace flags now include a customizable duration. You can also reuse debug levels across trace flags and control which debug logs to generate more easily than ever before. We've also removed a limit: Because all trace flags include a duration, the 20-request logging limit for user-based logging no longer applies. This feature is available in both Lightning Experience and Salesforce Classic.

A debug level is a set of log levels for debug log categories: Database, Workflow, Validation, and so on. A trace flag includes a debug level, a start time, an end time, and a log type. The log types are DEVELOPER LOG, USER DEBUG, and CLASS TRACING.

When you open the Developer Console, it sets a DEVELOPER\_LOG trace flag to log your activities. USER\_DEBUG trace flags cause logging of an individual user's activities. CLASS\_TRACING trace flags override logging levels for Apex classes and triggers, but don't generate logs.

#### SEE ALSO:

Customize Trace Flags and Debug Levels in Setup

Customize Your Trace Flags and Debug Levels in the Developer Console

Salesforce Help: Debug Log Levels

IdeaExchange: Retain 20 Latest Debug Logs

IdeaExchange: Debug Logs Should Not Cost a Log When Filters are Changed

#### Customize Trace Flags and Debug Levels in Setup

You can now configure debug log levels for users, Apex classes, and Apex triggers in Setup. This feature is available in both Lightning Experience and Salesforce Classic.

- **1.** Navigate to the appropriate Setup page.
  - For user-based trace flags and debug levels, enter Debug Logs in the Quick Find box, then click Debug Logs.
  - For class-based trace flags and debug levels, enter *Apex Classes* in the Quick Find box, click **Apex Classes**, click the name of a class, then click **Trace Flags**.
  - For trigger-based trace flags and debug levels, enter *Apex Triggers* in the Quick Find box, click **Apex Triggers**, click the name of a trigger, then click **Trace Flags**.
- 2. From the Setup page, complete these actions.
  - To add a trace flag, click New.
  - To change an existing trace flag, click an option in the Action column.
    - To delete a trace flag, click Remove.
    - To modify a trace flag, click Edit.
    - To modify a trace flag's debug level, click Filters.
    - To create a debug level, click **Edit**, click the magnifying glass icon next to the Debug Level field, and then click **New**.

#### SEE ALSO:

Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags Customize Your Trace Flags and Debug Levels in the Developer Console

#### Receive Less Granular Logs at the Debug Level for Apex Code

Sifting through debug logs is now easier, because we've made them less cluttered. When you select the <code>Debug</code> log level for the <code>APEX\_CODE</code> log category, you no longer receive logs for method or constructor entry or exit. To log these events, use the <code>Fine</code> log category or higher.

The minimum log category at which logs are generated has changed from Debug to Fine for the following events.

- METHOD ENTRY
- METHOD EXIT

- SYSTEM\_METHOD\_ENTRY
- SYSTEM\_METHOD\_EXIT
- CONSTRUCTOR\_ENTRY
- CONSTRUCTOR\_EXIT
- SYSTEM\_CONSTRUCTOR\_ENTRY
- SYSTEM CONSTRUCTOR EXIT

#### **Developer Console**

Use new features of Developer Console to more easily manage code in your organization. This feature is available in both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Customize Your Trace Flags and Debug Levels in the Developer Console

You can now configure debug log levels for users, Apex classes, and Apex triggers in the Developer Console. This feature is available in both Lightning Experience and Salesforce Classic.

#### Run Selected Tests in the Developer Console

We've improved the Developer Console's test-running interface. You can now select individual test methods from your test classes to include in a run. You can also choose whether to run tests synchronously, and you can rerun only the failed tests. This feature is available in both Lightning Experience and Salesforce Classic.

#### Customize Your Trace Flags and Debug Levels in the Developer Console

You can now configure debug log levels for users, Apex classes, and Apex triggers in the Developer Console. This feature is available in both Lightning Experience and Salesforce Classic.

To configure trace flags and debug levels from the Developer Console, click **Debug > Change Log Levels**. Then complete these actions.

- To create a trace flag, click Add.
- To edit an existing trace flag's duration, double-click its start or end time.
- To change a trace flag's debug level, click **Add/Change** in the Debug Level Action column. You can then edit your existing debug levels, create a debug level, and assign a debug level to your trace flag.

#### SEE ALSO:

Set Trace Flag Durations and Reuse Debug Levels Across Trace Flags Customize Trace Flags and Debug Levels in Setup

#### Run Selected Tests in the Developer Console

We've improved the Developer Console's test-running interface. You can now select individual test methods from your test classes to include in a run. You can also choose whether to run tests synchronously, and you can rerun only the failed tests. This feature is available in both Lightning Experience and Salesforce Classic.

The Developer Console's Test menu includes new options.

#### EDITIONS

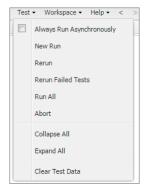
Available in: Enterprise,
Performance, Unlimited,
Developer, and
Database.com Editions

#### **Always Run Asynchronously**

Unless Always Run Asynchronously is enabled, test runs that include tests from only one class run synchronously. Test runs that include more than one class run asynchronously regardless of whether this option is enabled.

#### **Rerun Failed Tests**

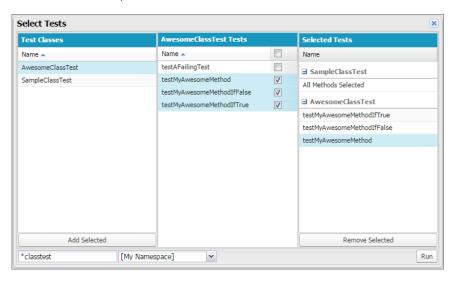
To rerun only the failed tests from the test run that's highlighted in the Tests pane, choose this option.



We've also improved the Developer Console's Select Tests interface. You can now select individual methods from various classes. Previously, this interface let you select only full classes of tests.

To filter the list of classes, type in the **Filter test classes (\* = any)** box. To select specific test methods, click a test class and then select the tests from the center column. You can hold down the SHIFT or CTRL key to select more than one test class. To select all methods in all classes that you've highlighted, click **Add Selected**.

To access this interface, choose **New Run** from the **Test** menu.



# **Custom Metadata Types**

Use new features to create, edit, protect, and control custom metadata.

#### IN THIS SECTION:

### Declaratively Create and Update Custom Metadata Types and Records

You can now create, update, and delete custom metadata types and records in Setup as well as the Metadata API. To create or update a custom metadata type, search for "Custom Metadata Types" in Setup. After you have created a custom metadata type, you can add and update records by clicking Manage Records.

### Protect Custom Metadata Records

In addition to limiting access to custom metadata types, you can now limit access to custom metadata records.

#### Choose Who Can Update Custom Metadata Field Values

Custom metadata field manageability lets you determine who can update field values in custom metadata records.

# Track Custom Metadata Changes in Setup Audit Trail

Setup Audit Trail now records changes to custom metadata types and records.

# Declaratively Create and Update Custom Metadata Types and Records

You can now create, update, and delete custom metadata types and records in Setup as well as the Metadata API. To create or update a custom metadata type, search for "Custom Metadata Types" in Setup. After you have created a custom metadata type, you can add and update records by clicking Manage Records.

# Protect Custom Metadata Records

In addition to limiting access to custom metadata types, you can now limit access to custom metadata records.

When protected metadata records are released in a managed package, access to them is limited in specific ways.

- Code that's in the same managed package as custom metadata records can read the records.
- Code that's in the same managed package as custom metadata types can read the records that belong to that type.
- Code that's in a managed package that doesn't contain either the type or the protected record can't read the protected records.
- Code that's created in the subscriber org and code that's in an unmanaged package can't read the protected records.
- You can modify protected records only with a package upgrade.

If you create a protected custom metadata record in your organization, it's accessible only by your code, code from unmanaged packages, and code from the managed package that defines its type.

You can also apply the same access protection to custom metadata types as for protected records. If you change a type from protected to public, its protected records remain protected, and all other records become public. When you use Setup to create a record on a protected type, the Protected Component option is selected by default. After a type is public, you can't convert it to protected.

# Choose Who Can Update Custom Metadata Field Values

Custom metadata field manageability lets you determine who can update field values in custom metadata records.

The developer of a custom metadata type can decide who can change field values after the type is deployed to a subscriber organization.

• Locked after release—The value of the field is immutable after deployment, even on the developer organization where the field was created.

# EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

- Subscriber editable—Anyone with the correct permissions can change the value of the field at any time. Changes deployed by the developer don't overwrite values in the subscriber's organization.
- Upgradable—The developer can change the value of the field by releasing a new version of the custom metadata package. The subscriber can't change the value of the field.

# Track Custom Metadata Changes in Setup Audit Trail

Setup Audit Trail now records changes to custom metadata types and records.

Tracking includes changes to the following items.

- Custom metadata type definitions
- Custom field definitions, including field manageability
- Page layouts
- Custom metadata record values
- Values in custom fields

# Visualforce

Develop apps to customize your organization using Visualforce, including Salesforce1 and other mobile apps. This feature is available in both Lightning Experience and Salesforce Classic.

Visualforce language and feature improvements make app development easier. Enhancements in this release are focused on Lightning Experience. These release notes explain new features in this release.

For further information on features affected by these enhancements, refer to the *Visualforce Developer's Guide*.

#### IN THIS SECTION:

### Visualforce for Lightning Experience (Beta)

This release contains a beta version of Visualforce for Lightning Experience that is production quality but has known limitations.

# "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed

In Summer '15 we made a change to the behavior of the <code>getContent()</code> and <code>getContentAsPDF()</code> methods of the <code>PageReference</code> object. This change was released as a critical update named "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

# "Serve Static Resources from the Visualforce Domain" Critical Update Postponed

In Summer '15 we made a change to the domain from which static resources are served. This change was released as a critical update named "Serve Static Resources from the Visualforce Domain" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

# Updated Label Text for Mobile Page Setting

The Visualforce setting to allow a page to be accessed in Salesforce1 has been changed to more accurately reflect its use. The new label is "Available for Salesforce mobile apps and Lightning Pages."

#### New Attributes for liveAgent:clientChatLog

The liveAgent:clientChatLog component supports three new attributes in API versions 35.0 and later.

# **EDITIONS**

### Available in:

- Contact Manager
- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# New liveAgent:clientChatLogAlertMessage Component

The liveAgent:clientChatLogAlertMessage is a new component available in API versions 35.0 and later. It provides an area within a Live Agent customer chat window that displays the idle time-out warning to customers.

SEE ALSO:

Labels Streamlined in Setup

# Visualforce for Lightning Experience (Beta)

This release contains a beta version of Visualforce for Lightning Experience that is production quality but has known limitations.

Visualforce itself remains Generally Available. It's only the use of Visualforce pages with Lightning Experience enabled that's considered beta. For a summary of Visualforce for Lightning Experience issues, see What's Not Available in Lightning Experience.

We've also written a whole new Trailhead trail to help developers get started creating apps for Lightning Experience, which includes a dedicated Visualforce module with all the details. Visit the Trailhead site to get started.

SEE ALSO:

Visualforce & Lightning Experience
Developer Trail - Lightning Experience
Trailhead

# "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed

In Summer '15 we made a change to the behavior of the getContent() and getContentAsPDF() methods of the PageReference object. This change was released as a critical update named "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

Additionally, in this release we've enhanced these calls to allow them to be used in asynchronous Apex. The full details of these changes are described in the Apex section of the release notes.

SEE ALSO:

Make Calls to PageReference.getContent() in Asynchronous Apex Critical Updates

# "Serve Static Resources from the Visualforce Domain" Critical Update Postponed

In Summer '15 we made a change to the domain from which static resources are served. This change was released as a critical update named "Serve Static Resources from the Visualforce Domain" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

SEE ALSO:

Critical Updates

# **Updated Label Text for Mobile Page Setting**

The Visualforce setting to allow a page to be accessed in Salesforce 1 has been changed to more accurately reflect its use. The new label is "Available for Salesforce mobile apps and Lightning Pages."

The API name of this setting, isTouchEnabled, remains unchanged.

SEE ALSO:

Standard Lightning Page Components

# New Attributes for liveAgent:clientChatLog

The liveAgent:clientChatLog component supports three new attributes in API versions 35.0 and later.

The new attributes:

# chatEndedByVisitorIdleTimeoutLabel

Specifies the label that appears when the chat is ended by our new Customer Time-Out on page 203 feature. The default English label is "Chat session ended by visitor idle time-out."

### combineMessagesText

Specifies whether the chat log displayed in the customer chat window supports combined messages based on the user ID (true) or not (false).

# showTimeStamp

Specifies whether the chat log that displays in the customer chat window displays the timestamp text input field (true) or not (false).



**Note**: If you turn on combineMessagesText or showTimeStamp for existing custom chat windows, it will change your markup and you might need to modify your CSS.

# New liveAgent:clientChatLogAlertMessage Component

The liveAgent:clientChatLogAlertMessage is a new component available in API versions 35.0 and later. It provides an area within a Live Agent customer chat window that displays the idle time-out warning to customers.

It must be used within liveAgent:clientChat. Each chat window can have only one idle time-out warning. This corresponds to our new Customer Time-Out on page 203 feature.



Live Agent is available in: **Performance** Editions and **Developer** Edition

organizations that were

created after June 14, 2012

Live Agent is available for an additional cost in: **Enterprise** and **Unlimited** Editions

# EDITIONS

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# Apex Code

Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and Visualforce pages. Apex code execution can be initiated by Web service requests and from triggers on objects.

Apex includes the following enhancements. For detailed information on these enhancements, refer to the *Force.com Apex Code Developer's Guide*.

# EDITIONS

#### Available in:

- Enterprise
- Performance
- Unlimited
- Developer
- Database.com

#### IN THIS SECTION:

### Set Approval Process Locks and Unlocks with Apex Code

New lock() and unlock() methods in the System. Approval namespace let you lock records by passing in record IDs or sObjects. Previously, you could set approval-process locks and unlocks only through the Salesforce user interface.

### Set Recipients of Email Notifications for Unhandled Apex Exceptions

Configure email addresses that receive emails when your Apex code encounters unhandled exceptions. Previously, these emails were sent only to the developer who'd last modified a failing class or trigger. Now you can also notify users of your Salesforce org and arbitrary email addresses.

### Improve Performance and Reliability with Platform Cache

Utilize the new Force.com platform caching layer to cache Salesforce session and org data for faster performance and better reliability. The Cache namespace in Apex lets you specify what to cache and for how long, without needing to use custom objects and settings or overloading a Visualforce viewstate. Also use org partitions to improve performance by distributing cache space so some apps or operations don't steal capacity from others. This feature is available in both Lightning Experience and Salesforce Classic.

### Reorder Your Batch Jobs in the Flex Queue Programmatically

Apex methods in the new System.FlexQueue class enable you to automate the prioritization of batch jobs in the Apex flex queue. Previously, you could reorder jobs in the flex queue only from the Salesforce user interface. New methods in the System.Test class enable you to enqueue no-operation batch jobs in a test version of your batch queue and flex queue.

# Make Unlimited Concurrent Callouts to Internal Salesforce URLs

You can now make unlimited concurrent callouts to endpoints in your Salesforce org's domain. You no longer need to live in fear of hitting limits when you set up cross-org integrations to synchronize data between your orgs. You can also make unlimited callouts back into your own org to access the Metadata API, use describeLayout (), and so on.

### Make Calls to PageReference.getContent() in Asynchronous Apex

You can now make calls to the getContent() and getContentAsPdf() methods of the PageReference class from within asynchronous Apex such as Batch Apex, Schedulable and Queueable classes, and @future methods. This allows you to design much more flexible and scalable services that, for example, render Visualforce pages as PDF files.

#### Receive More Consistent, Clear Results for Tests Containing Callouts

Callouts, including the getContent() methods of PageReference, aren't supported in Apex tests. Previously, test methods that contain callouts were skipped. To receive mock responses in test methods, use WebServiceMock, StaticResourceCalloutMock, MultiStaticResourceCalloutMock, and Test.setMock.

#### View Apex Hammer Execution Status (Generally Available)

Salesforce runs your organization's Apex tests in both the current and new release, and compares the results to quickly identify issues for you.

# Catch Exceptions for Excess Enqueued Batch Jobs

We've changed the type of exception that's thrown when you try to enqueue too many batch jobs from an uncatchable LimitException to a catchable AsyncException. This exception type change affects API version 35.0 and later.

# Serialize and Deserialize JSON Objects Reliably

We've made improvements to the JSON serialization and deserialization process for Map and String objects. We also fixed a bug in equality checks for IDs after roundtrip serialization.

# Sort Long and Short IDs Together in Apex Lists

When you use sort () methods on List<Id>s that contain both 15-character case-sensitive IDs and 18-character case-safe IDs, IDs for the same record now sort together. We've fixed this bug in API version 35.0 and later.

### split() Methods Return Extra List Items in Old API Versions

Changes introduced by Oracle in the Java<sup>™</sup> Platform, Standard Edition 8, affect some Salesforce behaviors. For example, a zero-width match at the beginning of a split() method's input sequence produces an extra list item at the beginning of the method's output. However, we've corrected this split() method behavior in API version 35.0 and later.

# New and Changed Apex Classes

These classes, methods, annotations, and interfaces are new or have changed in this release.

# Set Approval Process Locks and Unlocks with Apex Code

New lock() and unlock() methods in the System. Approval namespace let you lock records by passing in record IDs or sObjects. Previously, you could set approval-process locks and unlocks only through the Salesforce user interface.

To enable this feature, from Setup, enter *Process Automation Settings* in the Quick Find box, then click **Process Automation Settings**. Then, select Enable record locking and unlocking in Apex.

Salesforce admins can edit locked records. Depending on your approval process configuration settings, an assigned approver can also edit locked records. Locks and unlocks that are set programmatically use the same record editability settings as other approval-process locks and unlocks. Record locks and unlocks are treated as DML. They're blocked before a callout, they count toward your DML limits, and if a failure occurs, they're rolled back along with the rest of your transaction. To change this rollback behavior, use an allorNone parameter.

The new Approval.LockResult and Approval.UnlockResult classes let you interact with the results of your programmatic record locks and unlocks.



# Example:

```
// Query the accounts to lock
Account[] accts = [SELECT Id from Account WHERE Name LIKE 'Acme%'];
// Lock the accounts
Approval.LockResult[] lrList = Approval.lock(accts, false);
// Iterate through each returned result
for(Approval.LockResult lr : lrList) {
    if (lr.isSuccess()) {
        // Operation was successful, so get the ID of the record that was processed
        System.debug('Successfully locked account with ID: ' + lr.getId());
    }
    else {
        // Operation failed, so get all errors
        for(Database.Error err : lr.getErrors()) {
            System.debug('The following error has occurred.');
            System.debug(err.getStatusCode() + ': ' + err.getMessage());
          System.debug('Account fields that affected this error: ' + err.getFields());
```

```
}
```

SEE ALSO:

New and Changed Apex Classes

IdeaExchange: Lock and Unlock a Record in Apex Code

# Set Recipients of Email Notifications for Unhandled Apex Exceptions

Configure email addresses that receive emails when your Apex code encounters unhandled exceptions. Previously, these emails were sent only to the developer who'd last modified a failing class or trigger. Now you can also notify users of your Salesforce org and arbitrary email addresses.

Unhandled exception emails are sent by default to the developer specified in the LastModifiedBy field on the failing class or trigger. In addition, you can have emails sent to users of your Salesforce org and to arbitrary email addresses. To set up these email notifications, from Setup, enter Apex Exception Email in the Quick Find box, then select Apex Exception Email. You can also configure Apex exception emails using the Tooling API object ApexEmailNotification.

SEE ALSO:

IdeaExchange: Unhandled Exception Email Notifications

# Improve Performance and Reliability with Platform Cache

Utilize the new Force.com platform caching layer to cache Salesforce session and org data for faster performance and better reliability. The Cache namespace in Apex lets you specify what to cache and for how long, without needing to use custom objects and settings or overloading a Visualforce viewstate. Also use org partitions to improve performance by distributing cache space so some apps or operations don't steal capacity from others. This feature is available in both Lightning Experience and Salesforce Classic.

There are two types of cache:

- **Session cache**—Stores data for individual user sessions. For example, in an app that finds customers within specified territories, the calculations that run while users browse different locations on a map are reused.
  - A session cache lives alongside a user session. The maximum life of a session is eight hours. A session cache expires when its specified time-to-live (ttlsecs value) is reached or when the session expires after eight hours, whichever comes first.
- **Org cache**—Stores data that any user in an org reuses. For example, the contents of navigation bars that dynamically display menu items based on user profile are reused.
  - Unlike a session cache, an org cache is accessible across sessions, requests, and org users and profiles. An org cache expires when its specified time-to-live (ttlsecs value) is reached.

Session data is cached alongside user sessions. Org data is accessible across sessions, requests, and org users. The session cache expires when its specified time-to-live (ttlsecs value) is reached, or when the session expires, whichever comes first. Because Apex runs in a multitenant environment with cached data living alongside internally cached data, there's minimal disruption to core Salesforce processes.

Easily set up and manage partitions with the Platform Cache Partition tool in Setup, without using Apex code. Use the tool to create or remove cache partitions, and allocate their cache capacities to balance performance across apps. The tool displays a snapshot of all partitions with their allotted capacities, and lets you reallocate space as needed.



**Note:** To use caching, you need at least one partition in your org. Optionally, create multiple partitions and designate one as the default partition.

To access the Partition tool in Setup, enter Platform Cache in the Quick Find box, then select Platform Cache.

The Cache namespace includes classes and methods for managing your org's cache space programmatically. Use five specialized Apex classes to:

- Add, retrieve, and manage values in the session cache or the org cache.
- Manage cache values in the org cache of a specific partition.
- Manage cache values in the session cache of a specific partition.
- Get a specific partition in order to perform cache operations.
- Perform cache operations on a default partition without having to use fully qualified key references.

For information about managing cache space and behavior with Apex, see the *Force.com Apex Code Developer's Guide*. For information about the new Metadata API type for partitions, see the *Metadata API Developer's Guide*.

SEE ALSO:

New and Changed Apex Classes

# Reorder Your Batch Jobs in the Flex Queue Programmatically

Apex methods in the new System.FlexQueue class enable you to automate the prioritization of batch jobs in the Apex flex queue. Previously, you could reorder jobs in the flex queue only from the Salesforce user interface. New methods in the System.Test class enable you to enqueue no-operation batch jobs in a test version of your batch queue and flex queue.

You can place up to 100 batch jobs in a holding status for future execution. When system resources become available, the jobs are taken from the top of the Apex flex queue and moved to the batch job queue. Up to five queued or active jobs can be processed simultaneously for each org. When a job is moved out of the flex queue for processing, its status changes from Holding to Queued. Queued jobs are executed when the system is ready to process new jobs.

This example moves a job in the flex queue so that it is executed immediately before the specified job in the queue. To move the job, call the System.FlexQueue.moveBeforeJob() method and pass it both jobs' IDs.

Use the two new methods in the System. Test class—enqueueBatchJobs and getFlexQueueOrder—to enqueue and reorder no-operation jobs within the contexts of tests.

SEE ALSO:

New and Changed Apex Classes Monitoring the Apex Flex Queue

# Make Unlimited Concurrent Callouts to Internal Salesforce URLs

You can now make unlimited concurrent callouts to endpoints in your Salesforce org's domain. You no longer need to live in fear of hitting limits when you set up cross-org integrations to synchronize data between your orgs. You can also make unlimited callouts back into your own org to access the Metadata API, use describeLayout(), and so on.

Previously, you could make only 20 simultaneous requests to URLs within one host, including to URLs within your org's domain. That limit has been lifted for internal URLs. However, you can still make only 100 total callouts in a transaction, including to internal URLs. PageReference.getContent() callouts to Visualforce pages are exempt from the per-transaction limit.

SEE ALSO:

Make Calls to PageReference.getContent() in Asynchronous Apex

# Make Calls to PageReference.getContent() in Asynchronous Apex

You can now make calls to the getContent() and getContentAsPdf() methods of the PageReference class from within asynchronous Apex such as Batch Apex, Schedulable and Queueable classes, and @future methods. This allows you to design much more flexible and scalable services that, for example, render Visualforce pages as PDF files.

For the purposes of limits and restrictions, calls to getContent() (and getContentAsPdf(), which behaves the same) are treated as callouts. The behavior and restrictions vary depending on the PageReference it's called on, and in certain cases are relaxed. There are three different possibilities.

# PageReference instances that explicitly reference a Visualforce page

For example, Page.existingPageName.

Calls to getContent () aren't subject to either the maximum concurrent callouts limit or the maximum total callouts per transaction limit.

Additionally, only PageReference instances that reference a Visualforce page can call getContent() from scheduled Apex, that is, Apex classes that implement the Schedulable interface.

### PageReference instances that reference a Salesforce URL

For example, PageReference ('/' + recordId).

Calls to getContent() for Salesforce URLs aren't subject to the maximum concurrent callouts limit, but they are subject to the maximum total callouts per transaction limit.

You can't call getContent() for Salesforce URLs from within scheduled Apex.

#### PageReference instances that reference an external URL

For example, PageReference ('https://www.google.com/').

Calls to getContent() for external URLs are subject to both the maximum concurrent callouts limit and the maximum total callouts per transaction limit.

You can't call getContent() for external URLs from within scheduled Apex.



 $oxed{oxed}$  Note: Even when calls to getContent() and getContentAsPdf() aren't tracked against callout limits, they're still subject to the usual Apex limits such as CPU time, etc. These limits are cumulative across all callouts within the originating transaction.

Finally, we've relaxed the restrictions on calling getContent() and getContentAsPdf() after performing DML operations (excluding creating Savepoints). If the calls to getContent() and getContentAsPdf() are internal calls, they're now allowed. External callouts after DML operations are still blocked, and you still can't make callouts from within getContent() calls themselves, that is, during the rendering of the page.

#### SEE ALSO:

Make Unlimited Concurrent Callouts to Internal Salesforce URLs

"PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed

IdeaExchange: Allow getContent() Method in Apex Batch

PageReference getContent() and getContentAsPDF() Methods Behave as Callouts

Critical Updates

# Receive More Consistent, Clear Results for Tests Containing Callouts

Callouts, including the getContent() methods of PageReference, aren't supported in Apex tests. Previously, test methods that contain callouts were skipped. To receive mock responses in test methods, use WebServiceMock, StaticResourceCalloutMock, MultiStaticResourceCalloutMock, and Test.setMock.

getContent() and getContentAsPDF() are treated as callouts in API version 34.0 and later.

#### SEE ALSO:

PageReference getContent() and getContentAsPDF() Methods Behave as Callouts

"Testing HTTP Callouts" in the Force.com Apex Code Developer's Guide

"Test Web Service Callouts" in the Force.com Apex Code Developer's Guide

# View Apex Hammer Execution Status (Generally Available)

Salesforce runs your organization's Apex tests in both the current and new release, and compares the results to quickly identify issues for you.

The page displays the results of running Apex tests for your organization, in both the current and new release, and compares the results. Salesforce uses these results to identify any issues to resolve before the release. For a list of the data displayed and how to run your tests, see "Apex Hammer Execution Status" in the Salesforce Help.

# Catch Exceptions for Excess Enqueued Batch Jobs

We've changed the type of exception that's thrown when you try to enqueue too many batch jobs from an uncatchable LimitException to a catchable AsyncException. This exception type change affects API version 35.0 and later.

SEE ALSO:

"Exception Class and Built-In Exceptions" in the Force.com Apex Code Developer's Guide

# Serialize and Deserialize JSON Objects Reliably

We've made improvements to the JSON serialization and deserialization process for Map and String objects. We also fixed a bug in equality checks for IDs after roundtrip serialization.

### IN THIS SECTION:

# Compare ID Values After Roundtrip JSON Serialization

The equality operator == should show that the 15-character and 18-character versions of a record's ID are equal. However, in previous releases, after JSON serialization and describilization of an ID, equality checks between the long and short versions of an ID would fail. We've fixed this bug as of API version 35.0.

# Deserialize JSON String Objects with Extraneous Attributes

We've made improvements to the JSON deserialization process for String objects. Previously, if you passed attributes that weren't present in your Apex type to the System. JSON and System. JSONParser classes' deserialization methods, these methods threw a runtime exception. Runtime exceptions are now thrown for extraneous attributes only in some cases.

# Serialize and Deserialize JSON Map Objects Reliably

We've made improvements to the JSON serialization and deserialization process for Map objects. Previously, some Map key values were converted into String values during serialization, resulting in unpredictability and potential data type changes. Now, you can use a supported list of data types as keys in JSON-serialized Maps, and serialization and deserialization function properly.

# Compare ID Values After Roundtrip JSON Serialization

The equality operator == should show that the 15-character and 18-character versions of a record's ID are equal. However, in previous releases, after JSON serialization and deserialization of an ID, equality checks between the long and short versions of an ID would fail. We've fixed this bug as of API version 35.0.



#### Example:

```
Id longId = id.valueOf('001xx000003FvbSAAS');
Id shortId = id.valueOf('001xx000003FvbS');

// Formerly, if you roundtrip serialized the ID, then compared it to the orignal,
// the System.assertEquals() test would pass, but the == would not.

String s = JSON.serialize(shortId);
System.debug('serialized ID:' + s);
System.debug(s);

// These tests pass in any API version.
Id result = (Id) JSON.deserialize(s, Id.class);
System.assertEquals(shortId, result);
System.assertEquals(result, shortId);

// This next test passes only in API version 35.0 and later.
System.assert(result == a);
```

# Deserialize JSON String Objects with Extraneous Attributes

We've made improvements to the JSON descrialization process for String objects. Previously, if you passed attributes that weren't present in your Apex type to the System. JSONParser classes' descrialization methods, these methods threw a runtime exception. Runtime exceptions are now thrown for extraneous attributes only in some cases.

When you descrialize JSON Strings using JSON.descrialize, JSON.descrializeStrict, JSONParser.readValueAs, and JSONParser.readValueAsStrict, there are four possible outcomes.

# When a method is invoked to deserialize a JSON String with extraneous attributes into an Apex class:

In strict mode (when calling the methods ending with Strict), an exception is thrown in all API versions.

In normal mode, no exception is thrown in any API version-.

# When a method is invoked to deserialize a JSON String with extraneous attributes into a custom object or an sObject:

In strict mode (when calling the methods ending with Strict), no exception is thrown in any API version.

In normal mode, an exception is thrown in API version 34.0 and earlier. In API version 35.0 and later, no exception is thrown.

# Serialize and Deserialize JSON Map Objects Reliably

We've made improvements to the JSON serialization and deserialization process for Map objects. Previously, some Map key values were converted into String values during serialization, resulting in unpredictability and potential data type changes. Now, you can use a supported list of data types as keys in JSON-serialized Maps, and serialization and deserialization function properly.

You can use the following data types as keys in JSON-serialized Map objects.

- Boolean
- Date
- DateTime
- Decimal
- Double
- Enum
- ld
- Integer
- Long
- String
- Time

# Sort Long and Short IDs Together in Apex Lists

When you use sort () methods on List<Id>s that contain both 15-character case-sensitive IDs and 18-character case-safe IDs, IDs for the same record now sort together. We've fixed this bug in API version 35.0 and later.

# split() Methods Return Extra List Items in Old API Versions

Changes introduced by Oracle in the Java<sup>™</sup> Platform, Standard Edition 8, affect some Salesforce behaviors. For example, a zero-width match at the beginning of a split() method's input sequence produces an extra list item at the beginning of the method's output. However, we've corrected this split () method behavior in API version 35.0 and later.

These methods are affected.

- System.Pattern.split(regExp)
- System.Pattern.split(regExp, limit)
- System.String.split(regExp)
- System.String.split(regExp, limit)



### Example:

```
// Split a String using a zero-width substring
String myFirstString = 'abc';
String myEmptyString = '';
```

```
String[] mySplitString = myFirstString.split(myEmptyString);
System.debug(mySplitString);
```

In API version 34.0 and earlier, this System. debug statement generates the following log details.

```
[5]|DEBUG|(, a, b, c)
```

In API version 35.0 and later, the System.debug statement generates only these log details.

```
[5]|DEBUG|(a, b, c)
```

# **New and Changed Apex Classes**

These classes, methods, annotations, and interfaces are new or have changed in this release.

# **New Methods**

The following existing classes have new methods.

#### DataSource.Column Class

#### integer (name, length)

Returns a new numeric column with no decimal places using the specified name and length.

#### DataSource.Connection Class

#### deleteRows (deleteContext)

Invoked when external object records are deleted via the Salesforce user interface, APIs, or Apex.

#### upsertRows (upsertContext)

Invoked when external object records are created or updated via the Salesforce user interface, APIs, or Apex.

# Messaging.SingleEmailMessage Class

The following method has been deprecated

#### setDocumentAttachments (documentIds)

Deprecated. Use setEntityAttachments () instead.

The following methods have been added.

# setEntityAttachments(ids)

Optional. Array of IDs of Document or ContentVersion items to attach to the email.

# setOptOutPolicy(emailOptOutPolicy)

Optional. If you added recipients by ID instead of email address and the Email Opt Out option is set, this method determines the behavior of the sendEmail() call. If you add recipients by their email addresses, the opt-out settings for those recipients aren't checked and those recipients always receive the email.

#### setTreatBodiesAsTemplate(treatAsTemplate)

Optional. If set to true, the subject, plain text, and HTML text bodies of the email are treated as template data.

### setTreatTargetObjectAsRecipient(treatAsRecipient)

Optional. If set to true, the targetObjectId (a contact, lead, or user) is the recipient of the email. If set to false, the targetObjectId is supplied as the WhoId field for template rendering but isn't a recipient of the email. The default is true.

### QuickAction.DescribeAvailableQuickActionResult Class

#### getActionEnumOrId()

Returns the unique ID for the action. If the action doesn't have an ID, its API name is used.

# QuickAction.DescribeLayoutSection Class

### getParentLayoutId()

Returns the ID of the layout upon which this DescribeLayoutSection resides.

#### QuickAction.DescribeQuickActionResult Class

#### getActionEnumOrId()

Returns the unique ID for the action. If the action doesn't have an ID, its API name is used.

# reports.ReportMetadata Class

#### getDescription()

Returns the description of the report.

#### reports.ReportMetadata Class

#### getShowGrandTotal()

Indicates whether the report shows the grand total.

### reports.ReportMetadata Class

#### getShowSubtotals()

Indicates whether the report shows subtotals, such as column or row totals.

### reports.ReportMetadata Class

#### setDescription(description)

Sets the description of the report.

# reports.ReportMetadata Class

# setShowGrandTotal(showGrandTotal)

Specifies whether the report shows the grand total.

# reports.ReportMetadata Class

#### setShowSubtotals(showSubtotals)

Specifies whether the report shows subtotals, such as column or row totals.

### Schema.DescribeTabSetResult Class

#### getDescription()

Returns the display description for the standard or custom app.

# Schema.RecordTypeInfo Class

# isMaster()

Returns true if this is the master record type and false otherwise. The master record type is the default record type that's used when a record has no custom record type associated with it.

### System.Approval Class

#### lock (recordId)

Locks an object, and returns the lock results.

#### lock(recordIds)

Locks a set of objects, and returns the lock results, including failures.

#### lock(recordToLock)

Locks an object, and returns the lock results.

#### lock(recordsToLock)

Locks a set of objects, and returns the lock results, including failures.

### lock(recordId, allOrNothing)

Locks an object, with the option for partial success, and returns the lock result.

#### lock(recordIds, allOrNothing)

Locks a set of objects, with the option for partial success. It returns the lock results, including failures.

#### lock(recordToLock, allOrNothing)

Locks an object, with the option for partial success, and returns the lock result.

# lock(recordsToLock, allOrNothing)

Locks a set of objects, with the option for partial success. It returns the lock results, including failures.

#### unlock (recordId)

Unlocks an object, and returns the unlock results.

# unlock (recordIds)

Unlocks a set of objects, and returns the unlock results, including failures.

#### unlock (recordToUnlock)

Unlocks an object, and returns the unlock results.

#### unlock (recordsToUnlock)

Unlocks a set of objects, and returns the unlock results, including failures.

### unlock(recordId, allOrNothing)

Unlocks an object, with the option for partial success, and returns the unlock result.

# unlock(recordIds, allOrNothing)

Unlocks a set of objects, with the option for partial success. It returns the unlock results, including failures.

# unlock(recordToUnlock, allOrNothing)

Unlocks an object, with the option for partial success, and returns the unlock result.

# unlock(recordsToUnlock, allOrNothing)

Unlocks a set of objects, with the option for partial success. It returns the unlock results, including failures.

# System.Database Class

#### deleteAsync(sobject, callback)

Initiates a request to delete the external data that corresponds to the specified external object record. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source. Allows referencing a callback class whose processDelete method is called after deletion.

### deleteAsync(sobjects, callback)

Initiates requests to delete the external data that corresponds to the specified external object records. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source. Allows referencing a callback class whose processDelete method is called for each record after deletion.

#### deleteAsync(sobject)

Initiates a request to delete the external data that corresponds to the specified external object record. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source.

# deleteAsync(sobjects)

Initiates requests to delete the external data that corresponds to the specified external object records. The requests are executed asynchronously, as background operations, and are sent to the external systems that are defined by the external objects' associated external data sources.

# deleteImmediate(sobject)

Initiates a request to delete the external data that corresponds to the specified external object record. The request is executed synchronously and is sent to the external system that's defined by the external object's associated external data source. If the Apex transaction contains pending changes, the synchronous operation can't be completed and throws an exception.

#### deleteImmediate(sobjects)

Initiates requests to delete the external data that corresponds to the specified external object records. The requests are executed synchronously and are sent to the external systems that are defined by the external objects' associated external data sources. If the Apex transaction contains pending changes, the synchronous operations can't be completed and throw exceptions.

### getAsyncDeleteResult(asyncLocator)

Retrieves the result of an asynchronous delete operation based on the result's unique identifier.

#### getAsyncDeleteResult(deleteResult)

Retrieves the status of an asynchronous delete operation that's identified by a Database. DeleteResult object.

#### getAsyncLocator(result)

Returns the asynclocator associated with the result of a specified asynchronous insert, update, or delete operation.

#### getAsyncSaveResult(asyncLocator)

Returns the status of an asynchronous insert or update operation based on the unique identifier associated with each modification.

#### getAsyncSaveResult(saveResult)

Returns the status of an asynchronous insert or update operation that's identified by a Database.SaveResult object.

#### insertAsync(sobject)

Initiates a request to add external object data to the relevant external system. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source.

# insertAsync(sobjects)

Initiates requests to add external object data to the relevant external systems. The requests are executed asynchronously, as background operations, and are sent to the external systems that are defined by the external objects' associated external data sources.

### insertAsync(sobject, callback)

Initiates a request to add external object data to the relevant external system. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source. Allows referencing a callback class whose process Save method is called after the remote operation is completed.

#### insertAsync(sobjects, callback)

Initiates requests to add external object data to the relevant external systems. The requests are executed asynchronously, as background operations, and are sent to the external systems that are defined by the external objects' associated external data sources. Allows referencing a callback class whose processave method is called for each record after the remote operations are completed.

# insertImmediate(sobject)

Initiates a request to add external object data to the relevant external system. The request is executed synchronously and is sent to the external system that's defined by the external object's associated external data source. If the Apex transaction contains pending changes, the synchronous operation can't be completed and throws an exception.

# insertImmediate(sobjects)

Initiates requests to add external object data to the relevant external systems. The requests are executed synchronously and are sent to the external systems that are defined by the external objects' associated external data sources. If the Apex transaction contains pending changes, the synchronous operations can't be completed and throw exceptions.

#### updateAsync(sobject)

Initiates a request to update external object data on the relevant external system. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source.

#### updateAsync(sobjects)

Initiates requests to update external object data on the relevant external systems. The requests are executed asynchronously, as background operations, and are sent to the external systems that are defined by the external objects' associated external data sources.

#### updateAsync(sobject, callback)

Initiates a request to update external object data on the relevant external system. The request is executed asynchronously, as a background operation, and is sent to the external system that's defined by the external object's associated external data source. Allows referencing a callback class whose processsave method is called after the remote operation is completed.

### updateAsync(sobjects, callback)

Initiates requests to update external object data on the relevant external systems. The requests are executed asynchronously, as background operations, and are sent to the external systems that are defined by the external objects' associated external data sources. Allows referencing a callback class whose processave method is called for each record after the remote operations are completed.

#### updateImmediate(sobject)

Initiates a request to update external object data on the relevant external system. The request is executed synchronously and is sent to the external system that's defined by the external object's associated external data source. If the Apex transaction contains pending changes, the synchronous operation can't be completed and throws an exception.

# updateImmediate(sobjects)

Initiates requests to update external object data on the relevant external systems. The requests are executed synchronously and are sent to the external systems that are defined by the external objects' associated external data sources. If the Apex transaction contains pending changes, the synchronous operations can't be completed and throw exceptions.

# System. Network Class

# loadAllPackageDefaultNetworkPulseSettings()

Maps the Insights reports from the Salesforce Communities Dashboards package onto each community's unconfigured Insights settings. Returns the number of settings it configures.

#### System. SObject Class

# getCloneSourceId()

Returns the ID of the entity from which an object was cloned. You can use it for objects cloned through the Salesforce user interface. If you don't use a preserveId parameter, of if you use a preserveId value of false, you can also used it for objects created using the System. SObject.clone (preserveId, isDeepClone, preserveReadonlyTimestamps, preserveAutonumber) method.

#### isClone()

Returns true if an entity is cloned from something, even if the entity hasn't been saved.

#### recalculateFormulas()

Recalculates all formula fields on an sObject, and sets updated field values. Rather than inserting or updating objects each time you want to test changes to your formula logic, call this method and inspect your new field values. Then make further logic changes as needed.

# System. Test Class

#### enqueueBatchJobs(numberOfJobs)

Adds the specified number of jobs with no-operation contents to the test-context queue. It first fills the test batch queue, up to the maximum 5 jobs, and then places jobs in the test flex queue. It throws a limit exception when the number of jobs in the test flex queue exceeds the allowed limit of 100 jobs.

#### getFlexQueueOrder()

Returns an ordered list of job IDs for jobs in the test-context flex queue. The job at index 0 is the next job slated to run. This method returns only test-context results, even if it's annotated with @IsTest(SeeAllData=true).

# **New Properties**

The following classes have new properties.

# Reports.ReportMetadata Class

#### showGrandTotal

Indicates whether the report shows the grand total.

#### showSubtotals

Indicates whether the report shows subtotals, such as column or row totals.

# **Updated Enums**

The following enum has been updated.

#### DataSource.Capability Enum

### ROW CREATE, ROW UPDATE, and ROW DELETE Values

Enum values have been added to indicate whether external data can be created, updated, and deleted in the external system.

#### **New Classes**

The following classes have been added.

#### AppMenu Class in the AppLauncher Namespace

The new AppLauncher. AppMenu class sets the appearance of apps and items in the App Launcher. This class has the following methods.

# setAppVisibility(appMenuItemId, isVisible)

Shows or hides specific apps in the App Launcher.

# setOrgSortOrder(appIds)

Sets the organization-wide default sort order for the App Launcher based on a List of app menu item IDs in the desired order.

### setUserSortOrder(appIds)

Sets an individual user's default sort order for the App Launcher based on a List of app menu item IDs in the desired order.

#### Classes in the Approval Namespace

### Approval.LockResult Class

The new Approval.LockResult class contains methods that show the results of record locks placed by System.Approval.lock() methods.

#### getErrors()

If an error occurred, returns an array of one or more database error objects, providing the error code and description.

#### getId()

Returns the ID of the sObject you are trying to lock.

#### isSuccess()

A Boolean value that is set to true if the lock operation is successful for this object, or false otherwise.

#### Approval.UnlockResult Class

The new Approval.UnlockResult class contains methods that show the results of record unlocks by System.Approval.unlock() methods.

#### getErrors()

If an error occurred, returns an array of one or more database error objects, providing the error code and description.

#### getId()

Returns the ID of the sObject you are trying to unlock.

#### isSuccess()

A Boolean value that is set to true if the unlock operation is successful for this object, or false otherwise.

# ConnectedAppPlugin Class in the Auth Namespace

The new Auth. Connected AppPlugin class lets you customize the behavior of a connected app. This class has the following methods.

### authorize(userId, connectedAppId, isAdminApproved)

Authorizes the specified user for the connected app.

#### customAttributes(userId, formulaDefinedAttributes)

Sets new attributes for the specified user. When the connected app gets the user's attributes from the UserInfo endpoint or through a SAML assertion, use this method to update those attribute values.

#### refresh(userId, connectedAppId)

Salesforce calls this method during a refresh token exchange.

# Classes in the Cache Namespace

#### Cache. Org Class

Use the Cache.Org class to add, retrieve, and manage values in the org cache. Unlike the session cache, the org cache is not tied to any session and is available to the organization across requests and to all users. This class has the following methods.

# contains (keys)

Returns true if the org cache contains the specified key entries.

# contains (key)

Returns true if the org cache contains a cached value corresponding to the specified key.

# get(key)

Returns the cached value corresponding to the specified key from the org cache.

# getCapacity()

Returns the percentage of org cache capacity that has been used.

### getKeys()

Returns a set of all keys that are stored in the org cache and visible to the invoking namespace.

#### getPartition(partitionName)

Returns a partition from the org cache that corresponds to the specified partition name.

### put(key, value, ttlSecs, visibility, immutable)

Stores the specified key/value pair as a cached entry in the org cache. This method also sets the cached value's lifetime, visibility, and whether it can be overwritten by another namespace.

### put(key, value, ttlSecs)

Stores the specified key/value pair as a cached entry in the org cache and sets the cached value's lifetime.

#### put(key, value, visibility)

Stores the specified key/value pair as a cached entry in the org cache and sets the cached value's visibility.

#### put(key, value)

Stores the specified key/value pair as a cached entry in the org cache. The put method can write only to the cache in your org's namespace.

#### remove (key)

Deletes the cached value corresponding to the specified key from the org cache.

#### Cache.OrgPartition Class

Contains methods to manage cache values in the org cache of a specific partition. Unlike the session cache, the org cache is not tied to any session. It'ss available to the organization across requests and to all users. This class inherits all of its methods from the Cache.Partition class. The only exceptions are the utility methods for creating and validating keys, which are supported only in Cache.Partition.

#### Cache. Partition Class

Base class of Cache.OrgPartition and Cache.SessionPartition. Use the subclasses to manage the cache partition for org caches and session caches. This class has the following methods.

#### contains (key)

Returns true if the cache partition contains a cached value corresponding to the specified key.

#### createFullyQualifiedKey(namespace, partition, key)

Generates a fully qualified key from the passed-in key components. The format of the generated key string is namespace.partition.key.

# createFullyQualifiedPartition(namespace, partition)

Generates a fully qualified partition name from the passed-in namespace and partition. The format of the generated partition string is namespace.partition.

### get(key)

Returns the cached value corresponding to the specified key from the cache partition.

### getCapacity()

Returns the percentage of cache used of the total capacity for this partition.

# getKeys()

Returns the cached value corresponding to the specified key from the cache partition.

#### getName()

Returns the name of this cache partition.

#### isAvailable()

Returns true if the Salesforce session is available. Only applies to Cache. SessionPartition.

#### put(key, value, ttlSecs, visibility, immutable)

Stores the specified key/value pair as a cached entry in the cache partition. This method also sets the cached value's lifetime, visibility, and whether it can be overwritten by another namespace.

# put(key, value, ttlSecs)

Stores the specified key/value pair as a cached entry in the cache partition and sets the cached value's lifetime.

# put(key, value, visibility)

Stores the specified key/value pair as a cached entry in the cache partition and sets the cached value's visibility.

### put(key, value)

Stores the specified key/value pair as a cached entry in the session cache. The put method can write only to the cache in your org's namespace.

#### remove (key)

Deletes the cached value corresponding to the specified key from this cache partition.

#### validateKey(isDefault, key)

Validates the specified cache keys. This method throws a Cache.InvalidParamException if the key is not valid. A valid key is not null and contains alphanumeric characters.

### validateKeyValue(isDefault, key, value)

Validates a cache key and ensures that the cache value is non-null. This method throws a

Cache.InvalidParamException if the key or value is not valid. A valid key is not null and contains alphanumeric characters.

# validateKeys(isDefault, keys)

Validates the specified cache keys. This method throws a Cache.InvalidParamException if the key is not valid. A valid key is not null and contains alphanumeric characters.

#### validatePartitionName(name)

Validates the partition name — for example, that it is not null.

#### Cache. Session Class

Use the Cache.Session class to add, retrieve, and manage values in the session cache. The session cache is active as long as the user's Salesforce session is valid (the user is logged in and the session is not expired). This class has the following methods.

#### contains (key)

Returns true if the session cache contains a cached value corresponding to the specified key.

# get(key)

Returns the cached value corresponding to the specified key from the session cache.

# getCapacity()

Returns the percentage of session cache capacity that has been used.

#### getKeys()

Returns all keys that are stored in the session cache and visible to the invoking namespace.

#### getPartition(partitionName)

Returns a partition from the session cache that corresponds to the specified partition name.

#### isAvailable()

Returns true if the session cache is available for use.

### put(key, value, ttlSecs, visibility, immutable)

Stores the specified key/value pair as a cached entry in the session cache. This method also sets the cached value's lifetime, visibility, and whether it can be overwritten by another namespace.

#### put(key, value, ttlSecs)

Stores the specified key/value pair as a cached entry in the session cache and sets the cached value's lifetime.

#### put(key, value, visibility)

Stores the specified key/value pair as a cached entry in the session cache and sets the cached value's visibility.

### put(key, value)

Stores the specified key/value pair as a cached entry in the session cache. The put method can write only to the cache in your org's namespace.

#### remove (key)

Deletes the cached value corresponding to the specified key from the session cache.

#### Cache.SessionPartition Class

Contains methods to manage cache values in the session cache of a specific partition. This class inherits all of its methods from the Cache. Partition class. The only exceptions are the utility methods for creating and validating keys, which are supported only in Cache. Partition.

# Classes in the DataSource Namespace

#### AsyncDeleteCallback Class

A callback class that the Database.deleteAsync method references. Salesforce calls this class after the remote deleteAsync operation is completed. This class provides the compensating transaction in the completion context of the delete operation. Extend this class to define the actions to execute after the remote delete operation finishes execution. This class has the following methods.

#### processDelete(deleteResult)

Override this method to define actions that Salesforce executes after a remote <code>Database.deleteAsync</code> operation is completed. For example, based on the results of the remote operation, you can update custom object data or other data that's stored in the Salesforce org..

# AsyncSaveCallback Class

A callback class that the Database.insertAsync or Database.updateAsync method references. Salesforce calls this class after the remote operation is completed. This class provides the compensating transaction in the completion context of the insert or update operation. Extend this class to define the actions to execute after the remote insert or update operation finishes execution. This class has the following methods.

### processSave(saveResult)

Override this method to define actions that Salesforce executes after the remote Database.insertAsync or Database.updateAsync operation is completed. For example, based on the results of the remote operation, you can update custom object data or other data that's stored in the Salesforce org.

#### DeleteContext Class

An instance of DeleteContext is passed to the deleteRows () method on your Database. Connection class. The class provides context information about the delete request to the implementor of deleteRows (). This class has the following properties.

#### externalIds

The external IDs of the rows representing external object records to delete.

# tableSelected

The name of the table to delete rows from.

### **DeleteResult Class**

An instance of DeleteContext is passed to the deleteRows () method on your Database. Connection class. The class provides context information about the delete request to the implementor of deleteRows (). This class has the following methods and properties.

### equals(obj)

Maintains the integrity of lists of type DeleteResult by determining the equality of external objects in a list. This method is dynamic and is based on the equals method in Java.

### errorMessage property

The error message that's generated by a failed delete operation. Recorded with a result of type DataSource. DeleteResult.

### externalId property

The unique identifier of a row that represents an external object record to delete.

#### failure(externalId, errorMessage)

Creates a delete result indicating the failure of a delete request for a given external ID.

#### hashCode()

Maintains the integrity of lists of type DeleteResult by determining the uniqueness of the external object records in a list.

#### success(externalId)

Creates a delete result indicating the successful completion of a delete request for a given external ID.

# success property

Indicates whether a delete operation succeeded or failed.

# **UpsertContext Class**

An instance of UpsertContext is passed to the upsertRows () method on your Datasource. Connection class. This class provides context information about the upsert request to the implementor of upsertRows (). This class has the following properties.

#### rows

List of rows corresponding to the external object records to upsert.

#### tableSelected

The name of the table to upsert rows in.

### **UpsertResult Class**

Represents the result of an upsert operation on an external object record. The result is returned by the upsertRows method of the DataSource. Connection class. This class has the following methods and properties.

# equals(obj)

Maintains the integrity of lists of type UpsertResult by determining the equality of external object records in a list. This method is dynamic and is based on the equals method in Java.

#### errorMessage property

The error message that's generated by a failed upsert operation.

#### externalId property

The unique identifier of a row that represents an external object record to upsert.

# failure(externalId, errorMessage)

Creates an upsert result that indicates the failure of a delete request for a given external ID.

#### hashCode()

Maintains the integrity of lists of type UpsertResult by determining the uniqueness of the external object records in a list.

#### success(externalId)

Creates a delete result that indicates the successful completion of an upsert request for a given external ID.

### success property

Indicates whether a delete operation succeeded or failed.

# System

# FlexQueue Class in the System Namespace

The new System.FlexQueue class contains methods that reorder jobs in the Apex flex queue.

### moveAfterJob(jobToMoveId, jobInQueueId)

Moves the job with the ID <code>jobToMoveId</code> immediately after the job with the ID <code>jobInQueueId</code> in the flex queue. You can move <code>jobToMoveId</code> forward or backward in the queue. If either job isn't in the queue, it throws an element-not-found exception. Returns <code>true</code> if the job is moved, or <code>false</code> if <code>jobToMoveId</code> is already immediately after <code>jobInQueueId</code>, so no change is made.

#### moveBeforeJob(jobToMoveId, jobInQueueId)

Moves the job with the ID <code>jobToMoveId</code> immediately before the job with the ID <code>jobInQueueId</code> in the flex queue. You can move <code>jobToMoveId</code> forward or backward in the queue. If either job isn't in the queue, it throws an element-not-found exception. Returns <code>true</code> if the job is moved, or <code>false</code> if <code>jobToMoveId</code> is already immediately before <code>jobInQueueId</code>, so no change is made.

#### moveJobToEnd(jobId)

Moves the specified job the end of the flex queue, to index position (size - 1). All jobs after the job's starting position move one spot forward. If the job isn't in the queue, it throws an element-not-found exception. Returns true if the job is moved, or false if the job is already at the end of the queue, so no change is made.

### moveJobToFront(jobId)

Moves the specified job to the front of the flex queue, to index position 0. All other jobs move back one spot. If the job isn't in the queue, it throws an element-not-found exception. Returns true if the job is moved, or false if the job is already at the front of the queue, so no change is made.

# QuestionSuggestionFilter Class in the Search Namespace

The new Search. Question Suggestion Filter class filters results from a call to

System.Search.suggest (searchQuery, sObjectType, options) when the SOSL searchQuery contains a FeedItem object. This class has the following methods.

#### addGroupId(groupId)

Adds a filter to display questions associated with the single specified group whose ID is passed in as an argument. This filter is optional.

### addNetworkId(networkId)

Adds a filter to display questions associated with the single specified network whose ID is passed in as an argument. This filter is optional.

# addUserId(userId)

Adds a filter to display questions belonging to the single specified user whose ID is passed in as an argument. This filter is optional.

# setGroupIds(groupIds)

Sets a new list of groups to replace the current list of groups where the group IDs are passed in as an argument. This filter is optional.

# setNetworkIds(networkIds)

Sets a new list of networks to replace the current list of networks where the network IDs are passed in as an argument. This filter is optional.

# setTopicId(topicId)

Sets a filter to display questions associated with the single specified topic whose ID is passed in as an argument. This filter is optional.

#### setUserIds(userIds)

Sets a new list of users to replace the current list of users where the users IDs are passed in as an argument. This filter is optional.

# PolicyCondition Interface in the TxnSecurity Namespace

Implement the new PolicyCondition interface to specify actions to take when certain events occur based on a transaction security policy. This interface has the following method.

#### evaluate (event)

Evaluates an event against a transaction security policy. If the event triggers the policy, true is returned.

As part of this new interface, the Event class has been added. The Event class contains event information that the PolicyCondition.evaluate method uses to evaluate a transaction security policy.

# **Objects That Support Triggers**

You can now create triggers for the following objects:

- ContentDistribution
- ContentDocumentLink

See Create Triggers to Customize File Sharing Behavior.

#### IN THIS SECTION:

ConnectApi (Chatter in Apex)

Use Chatter in Apex to create custom experiences in Salesforce.

### SEE ALSO:

Customize Connected App Behavior with Apex

Learn About Possible Security Issues Quickly with Transaction Security Policies

"Reference" Chapter in the Force.com Apex Code Developer's Guide

IdeaExchange: isClone() Within Trigger

# ConnectApi (Chatter in Apex)

Use Chatter in Apex to create custom experiences in Salesforce.

Many Chatter REST API resource actions are exposed as static methods on Apex classes in the ConnectApi namespace. These methods use other ConnectApi classes to input and return information. The ConnectApi namespace is referred to as *Chatter in Apex*.

In Apex, it's possible to access some Chatter data using SOQL queries and objects. However, ConnectApi classes expose Chatter data in a much simpler way. Data is localized and structured for display. For example, instead of making many calls to access and assemble a feed, you can do it with a single call.



**Note**: To integrate mobile apps, intranet sites, and third party Web applications with Chatter and Communities, use Chatter REST API.

### IN THIS SECTION:

New and Changed Chatter in Apex Classes

New and Changed Chatter in Apex Input Classes

New and Changed Chatter in Apex Output Classes

New and Changed Chatter in Apex Enums

# New and Changed Chatter in Apex Classes

### Communities

### Allow guest user access to ConnectApi.Communities.getCommunity(communityId)

• getCommunity (communityId) —If your community allows access without logging in, this method is available to guest users.

### Get a User Profile feed that includes only feed elements scoped to the community

Pass ConnectApi.FeedFilter.CommunityScoped as the last parameter to these methods to get a feed whose feed elements have a User or Group parent. Users and Groups are always specific to a community. Other record types are visible across all communities and are filtered out of this feed.

- ConnectApi.ChatterFeeds.getFeedElementsFromFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, filter)
- ConnectApi.ChatterFeeds.getFeedElementsUpdatedSince(communityId, feedType, subjectId, recentCommentCount, elementsPerBundle, density, pageParam, pageSize, updatedSince, filter)

# Search a User Profile feed that includes only feed elements scoped to the community

Pass ConnectApi.FeedFilter.CommunityScoped as the last parameter to this method to search a feed whose feed elements have a User or Group parent. Users and Groups are always specific to a community. Other record types are visible across all communities and are filtered out of this feed.

 searchFeedElementsInFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, q, filter)

### Get, set, and delete user profile photos even when Chatter is off

- (Important: In API version 35.0, these methods have been moved from the ConnectApi.ChatterUsers class to the ConnectApi.UserProfiles class so they can be called whether Chatter is off or on.
  - deletePhoto(communityId, userId)
  - getPhoto(communityId, userId)
  - setPhoto(communityId, userId, fileId, versionNumber)
  - setPhoto(communityId, userId, fileUpload)
  - setPhotoWithAttributes(communityId, userId, photo)
  - setPhotoWithAttributes(communityId, userId, photo, fileUpload)

#### Feeds

These methods are in the ConnectApi.ChatterFeeds class.

# Make a rich-text feed post

• Use the existing postFeedElement (communityId, feedElement, feedElementFileUpload) method with the new ConnectApi.MarkupBeginSegmentInput and ConnectApi.MarkupEndSegmentInput classes to make a rich-text feed post.

# Include an inline image in a feed post

• Use the existing postFeedElement (communityId, feedElement, feedElementFileUpload) method with the new ConnectApi.InlineImageInput class to include an inline image in a feed post.

#### Mute or unmute a feed element

setIsMutedByMe (communityId, feedElementId, isMutedByMe) — Mute or unmute a feed element.

#### Groups

This method is in the ConnectApi. ChatterGroups class.

### Update a request to join a private group and provide a message when the request is denied

• updateRequestStatus(communityId, requestId, status, responseMessage)—Updates a request to join a private group and optionally provides a message when the request is denied.

# Managed Topics

These methods are in the ConnectApi.ManagedTopics class.

# Get managed topics, including parent and children topics

- getManagedTopic (communityId, managedTopicId, depth) Returns information about a managed topic, including its parent and children managed topics, in a community.
- getManagedTopics (communityId, managedTopicType, depth) Returns managed topics of a specified type, including their parent and children managed topics, in a community.
- getManagedTopics (communityId, managedTopicType, recordId, depth) Returns managed topics of a specified type, including their parent and children managed topics, that are associated with a given topic in a community.

# Create children managed topics

- createManagedTopic(communityId, recordId, managedTopicType, parentId)—Creates a child managed topic for a community.
- createManagedTopicByName(communityId, name, managedTopicType, parentId)—Creates a child managed topic by name for a community.

# Recommendations

These methods are in the ConnectApi.Recommendations class.

Community managers (users with the "Create and Set Up Communities" or "Manage Communities" permission) can access, create, and delete recommendation audiences, recommendation definitions, and scheduled recommendations in their communities. Users with the "Modify All Data" permission can also access, create, and delete recommendation audiences, recommendation definitions, and scheduled recommendations.

These recommendations appear directly in the feed in communities in the Salesforce1 mobile browser app. They also appear, by default, on the right side of the home page and anywhere community managers add them using Community Builder in communities using the Summer '15 or later version of the Napili template.

# Create recommendation audiences

- createRecommendationAudience (communityId, recommendationAudience) Create an audience for a recommendation.
- createRecommendationAudience (communityId, name) Create an audience for a recommendation.

### **Delete recommendation audiences**

 deleteRecommendationAudience (communityId, recommendationAudienceId) — Delete a recommendation audience.

#### Get recommendation audiences

- getRecommendationAudience (communityId, recommendationAudienceId) Get information about a recommendation audience.
- getRecommendationAudiences (communityId) —Get recommendation audiences.
- getRecommendationAudiences (communityId, pageParam, pageSize)—Getapageofrecommendation audiences.

### Get recommendation audience membership

- getRecommendationAudienceMembership (communityId, recommendationAudienceId) Getthe members of a recommendation audience.
- getRecommendationAudienceMembership (communityId, recommendationAudienceId, pageParam, pageSize) —Get a page of recommendation audience members.

### **Update recommendation audiences**

 updateRecommendationAudience (communityId, recommendationAudienceId, recommendationAudience) — Update a recommendation audience.

#### Create recommendation definitions

- createRecommendationDefinition(communityId, recommendationDefinition)—Create a recommendation definition.
- createRecommendationDefinition(communityId, name, title, actionUrl, actionUrlName, explanation)—Create a recommendation definition with the specified parameters.

#### Delete recommendation definitions

 deleteRecommendationDefinition(communityId, recommendationDefinitionId)—Delete a recommendation definition.

#### Delete recommendation definition photos

• deleteRecommendationDefinitionPhoto(communityId, recommendationDefinitionId)—Delete a recommendation definition photo.

# **Get recommendation definitions**

- getRecommendationDefinition(communityId, recommendationDefinitionId)—Geta recommendation definition.
- getRecommendationDefinitions (communityId) —Get recommendation definitions.

# Get recommendation definition photos

• getRecommendationDefinitionPhoto (communityId, recommendationDefinitionId) —Geta recommendation definition photo.

#### **Update recommendation definitions**

- updateRecommendationDefinition(communityId, recommendationDefinitionId, name, title, actionUrl, actionUrlName, explanation)—Updatearecommendation definition with the specified parameters.
- updateRecommendationDefinition(communityId, recommendationDefinitionId, recommendationDefinition)—Update a recommendation definition.

#### Update recommendation definition photos

 updateRecommendationDefinitionPhoto (communityId, recommendationDefinitionId, fileUpload) — Update a recommendation definition photo with a file that hasn't been uploaded.

- updateRecommendationDefinitionPhoto (communityId, recommendationDefinitionId, fileId, versionNumber) Update a recommendation definition photo with a file that's already uploaded.
- updateRecommendationDefinitionPhotoWithAttributes (communityId, recommendationDefinitionId, photo) Update a recommendation definition photo with a file that's been uploaded but requires cropping.
- updateRecommendationDefinitionPhotoWithAttributes (communityId, recommendationDefinitionId, photo, fileUpload) Update a recommendation definition photo with a file that hasn't been uploaded and requires cropping.

#### Create scheduled recommendations

- createScheduledRecommendation(communityId, scheduledRecommendation)—Create a scheduled recommendation
- createScheduledRecommendation(communityId, recommendationDefinitionId, rank, enabled, recommendationAudienceId)—Create a scheduled recommendation with the specified parameters.

#### **Delete scheduled recommendations**

 deleteScheduledRecommendation(communityId, scheduledRecommendationId, deleteDefinitionIfLast)—Delete a scheduled recommendation.

#### Get scheduled recommendations

- getScheduledRecommendation(communityId, scheduledRecommendationId)—Getascheduled recommendation
- getScheduledRecommendations (communityId) Get scheduled recommendations.

### **Update scheduled recommendations**

- updateScheduledRecommendation(communityId, scheduledRecommendationId, scheduledRecommendation)—Update a scheduled recommendation.
- updateScheduledRecommendation(communityId, scheduledRecommendationId, rank, enabled, recommendationAudienceId)—Update a scheduled recommendation with the specified parameters.

#### **Get static recommendations**

These existing methods can now be used to get static recommendations for the community:

- getRecommendationsForUser(communityId, userId, contextAction, contextObjectId, maxResults)
- getRecommendationsForUser(communityId, userId, action, contextAction, contextObjectId, maxResults), where action is view.
- getRecommendationsForUser(communityId, userId, action, objectCategory, contextAction, contextObjectId, maxResults), where action is view and objectCategory is apps.
- getRecommendationForUser(communityId, userId, action, objectId), where action is view and objectId is Today.

# Reject a static recommendation

This existing method can now be used to reject a static recommendation in the community.

 rejectRecommendationForUser(communityId, userId, action, objectId), where action is view and objectId is Today.

### **Topics**

These methods are in the ConnectApi. Topics class.

# Get the most recent renamed topic if there isn't an exact match

• getTopicsOrFallBackToRenamedTopics (communityId, q, exactMatch, fallBackToRenamedTopics) — Specify true for exactMatch and fallBackToRenamedTopics and if there isn't an exact match, get the most recent renamed topic match. If there are multiple renamed topic matches, only the most recent is returned. If there are no renamed topic matches, an empty collection is returned.

# Reassign all the topics on a record or feed item

• reassignTopicsByName (communityId, recordId, topicNames) — Reassigns all the topics on a record or feed item, that is, removes all the assigned topics on a record or feed item and adds topics.

# New and Changed Chatter in Apex Input Classes

Feeds

### ConnectApi.InlineImageSegmentInput

This new input class is a subclass of ConnectApi. MessageSegmentInput and has these properties:

- altText—Alt text for the inline image.
- fileId—ID of the inline image file.

# ConnectApi.MarkupBeginSegmentInput

This new input class is a subclass of ConnectApi.MessageSegmentInput and has one property, markupType, that specifies the type of rich text markup.

### ConnectApi.MarkupEndSegmentInput

This new input class is a subclass of ConnectApi. MessageSegmentInput and has one property, markupType, that specifies the type of rich text markup.

# ConnectApi.MessageSegmentInput Class

This input class is a superclass of ConnectApi.InlineImageSegmentInput,
ConnectApi.MarkupBeginSegmentInput, and ConnectApi.MarkupEndSegmentInput.

#### ConnectApi.MuteCapabilityInput

This new input class has one property, isMutedByMe, that indicates whether the context user muted the feed element.

Files

# ConnectApi.ContentCapabilityInput

This input class has one new property, sharingOption, that specifies the sharing option of the file.

Recommendations

### ConnectApi.RecommendationAudienceInput

This new class has these properties:

- memberOperationType—The operation to carry out on the audience members.
  - Add—Adds specified members to the audience.
  - Remove—Removes specified members from the audience.
- members—A collection of user IDs.

name—The unique name of the recommendation audience.

#### ConnectApi.RecommendationDefinitionInput

This new class has these properties:

- actionUrl—The URL for acting on the recommendation, for example, the URL to join a group.
- actionUrlName—The text label for the action URL in the user interface, for example, "Launch."
- explanation—The explanation, or body, of the recommendation.
- name—The name of the recommendation definition. The name is displayed in Setup.
- title—The title of the recommendation definition.

### ConnectApi.ScheduledRecommendationInput

This new class has these properties:

- enabled—Indicates whether scheduling is enabled.
- rank—Relative rank of the scheduled recommendation indicated by ascending whole numbers starting with 1.
- recommendationAudienceId—ID of the audience for this scheduled recommendation.
- recommendationDefinitionId—ID of the recommendation definition that this scheduled recommendation schedules.

### **Topics**

# ConnectApi.TopicNamesInput

This new class has one property, topicNames, that is a list of topics to replace currently assigned topics on a record or feed item.

# New and Changed Chatter in Apex Output Classes

Feeds

### ConnectApi.AbstractMessageBody

This output class has one new property, isRichText, that indicates whether the body is rich text.

#### ConnectApi.Feed

This output class has one new property, respectsMute, that indicates whether the feed respects the mute feature.

### ConnectApi.FeedElementCapabilities

This output class has one new property, mute, that indicates whether a feed element can be muted.

#### ConnectApi.FeedElementCapability

This class is a superclass of ConnectApi.MuteCapability.

#### ConnectApi.InlineImageSegment

This new output class is a subclass of connectApi. MessageSegment and has these properties:

- altText—Alt text for the inline image.
- contentSize—Size of the file in bytes.
- thumbnails—Information about the available thumbnails for the image.
- url—The URL to the latest version of the inline image.

# ConnectApi.MarkupBeginSegment

This new output class is a subclass of connectApi. MessageSegment and has these properties:

- htmlTag—The HTML tag for this markup.
- markup—Specifies the type of rich text markup.

### ConnectApi.MarkupEndSegment

This new output class is a subclass of connectApi. MessageSegment and has these properties:

- htmlTag—The HTML tag for this markup.
- markup—Specifies the type of rich text markup.

#### ConnectApi.MessageSegment

This abstract class is a super class of ConnectApi.InlineImageSegment, ConnectApi.MarkupBeginSegment, and ConnectApi.MarkupEndSegment.

### ConnectApi.MuteCapability

This new output class is a subclass of ConnectApi. FeedElementCapability and has one property, isMutedByMe, that indicates whether the context user muted the feed element.

Files

#### ConnectApi.ContentCapability

This output class has one new property, sharingOption, that specifies the sharing option of the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

#### ConnectApi.File

This output class has one new property, sharingOption, that specifies the sharing option of the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

### ConnectApi.FileSummary

This output class has one new property, sharingOption, that specifies the sharing option of the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

# Managed Topics

# ConnectApi.ManagedTopic

This output class has these new properties:

- children—Children managed topics of the managed topic.
- parent—Parent managed topic of the managed topic.

# Recommendations

#### ConnectApi.RecommendationAudience

This new output class has these properties:

- id—18-character ID of the recommendation audience.
- memberCount—Number of members in the recommendation audience.
- members—Members of the recommendation audience.
- name—Name of the recommendation audience.
- url—URL for the recommendation audience.

# ConnectApi.RecommendationAudiencePage

This new output class has these properties:

- audienceCount—The total number of recommendation audiences.
- currentPageUrl—URL to the current page.
- nextPageUrl—URL to the next page.
- previous PageUrl—URL to the previous page.
- recommendationAudiences—A list of recommendation audiences.

#### ConnectApi.RecommendationDefinition

This new output class has these properties:

- actionUrl—The URL for acting on this recommendation.
- actionUrlName—The text label for the action URL in the user interface.
- explanation—Explanation of the recommendation definition.
- id—18-character ID of the recommendation definition.
- name—Name of the recommendation definition. The name is displayed in Setup.
- photo—Photo of the recommendation definition.
- title—Title of the recommendation definition.
- url—URL to the Chatter REST API resource for the recommendation definition.

# ${\tt ConnectApi.RecommendationDefinitionPage}$

This new output class has these properties:

- recommendationDefinitions—A list of recommendation definitions.
- url—URL to the Chatter REST API resource for the recommendation definition collection.

#### ConnectApi.RecommendedObject

The idOrEnum property of this output class now supports the enum value Today for static recommendations that don't have an ID.

# ConnectApi.ScheduledRecommendation

This new output class has these properties:

- enabled—Indicates whether scheduling is enabled. If true, the recommendation is enabled and appears in communities.
   If false, recommendations in feeds in the Salesforce1 mobile browser app aren't removed, but no new recommendations appear. In communities using the Summer '15 or later version of the Napili template, disabled recommendations no longer appear.
- id—18-character ID of the scheduled recommendation.
- rank—The rank determining the order of this scheduled recommendation.
- recommendationAudienceId—ID of the audience for the scheduled recommendation.
- recommendationDefinitionRepresentation—Recommendation definition that this scheduled recommendation schedules.
- url—URL to the Chatter REST API resource for the scheduled recommendation.

#### ConnectApi.ScheduledRecommendationPage

This new output class has these properties:

- scheduledRecommendations—A list of scheduled recommendations.
- url—URL to the Chatter REST API resource for the scheduled recommendation collection.

### ConnectApi.UserReferencePage

This new output class has these properties:

- currentPageUrl—URL to the current page.
- nextPageUrl—URL to the next page.
- previousPageUrl—URL to the previous page.
- userCount—Number of users in the collection.
- users—A collection of user references.

# New and Changed Chatter in Apex Enums

For complete information about these enums, see ConnectApi Enums in Force.com Apex Code Developer's Guide.

#### ConnectApi.FeedElementCapabilityType

This enum has this new value:

Mute—The context user can mute the feed element.

# ConnectApi.FeedFilter

This enum has one new value that filters the UserProfile feed:

• CommunityScoped—Only feed elements that are scoped to communities. Currently, these feed elements have a User or a Group parent record. However, other parent record types could be scoped to communities in the future. Feed elements that are always visible in all communities are filtered out. This value is valid only for the UserProfile feed.

# ConnectApi.FeedType

This enum has this new value:

• Mute—Contains all feed items that the context user muted.

# ConnectApi.FileSharingOption

This new enum specifies the sharing option of the file and has these values:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

# ConnectApi.MarkupType

This new enum specifies the type of rich text markup and has these values:

- Bold—Bold tag.
- Italic—Italic tag.
- ListItem—List item tag.
- OrderedList—Ordered list tag.
- Paragraph—Paragraph tag.
- StrikeThrough—Strikethrough tag.
- Underline—Underline tag.
- UnorderedList—Unordered list tag.

### ConnectApi.MessageSegmentType

This enum has these new values to support rich text:

- InlineImage
- MarkupBegin
- MarkupEnd

### ConnectApi.RecommendationAudienceMemberOperationType

This new enum specifies the operation to carry out on audience members.

- Add—Adds specified members to the audience.
- Remove—Removes specified members from the audience.

# **Lightning Components**

The Lightning Component framework powers Salesforce 1. Use the framework to build mobile apps and pages faster than ever in Lightning Experience, Salesforce 1, Salesforce Classic, and Communities.

Use out-of-the-box components or build your own components with JavaScript, HTML, CSS, Apex, or any web-enabled code.

The AppExchange for Components enables you to install components created by Salesforce partners or publish your own components.

For more information, refer to the *Lightning Components Developer's Guide*.

### IN THIS SECTION:

# Lightning Components (Generally Available)

We're thrilled to announce that Lightning components are now generally available across all Salesforce-supported platforms.

# Enable My Domain To Use Lightning Components

For security purposes, Lightning components now require you to define a custom Salesforce domain name for your organization.

If you're using Lightning components today, you might need to take action to avoid having Lightning components-based customizations disabled when Winter '16 is released.

# **Lightning Components**

Components help you build apps faster. Use them in your Lightning apps or in Salesforce1.

# Lightning Events

Events add a layer of interaction to your components.

#### Other Changes in Lightning Components

We've made additional changes in Lightning Components.

# Lightning Components (Generally Available)

We're thrilled to announce that Lightning components are now generally available across all Salesforce-supported platforms.

Whether you're developing for the desktop or for Salesforce 1, Lightning components help you quickly build beautiful applications. Also, since Lightning components were designed with the Lightning Experience in mind, your components integrate seamlessly into the new Salesforce user interface.

# Enable My Domain To Use Lightning Components

For security purposes, Lightning components now require you to define a custom Salesforce domain name for your organization. If you're using Lightning components today, you might need to take action to avoid having Lightning components-based customizations disabled when Winter '16 is released.

If you're using Lightning components to create:

# **EDITIONS**

Available for use in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

Create Lightning components using the UI in **Enterprise, Performance, Unlimited, Developer** Editions or a sandbox.

- Lightning tabs
- Lightning pages (formerly FlexiPages), for example, in Lightning App Builder
- Standalone apps

And you don't have My Domain enabled for your organization, your Lightning tabs, components, and pages will be disabled when your organization is upgraded to Winter '16.

If you participated in the Lightning components for Salesforce1 beta, you can temporarily re-enable your customizations by enabling this update in the Critical Update Console. With this update, references and links to Lightning components, applications, and documentation that use non-customized https://lightning.force.com/URLs continue to work.



**Note**: This critical update behaves differently than normal critical updates. The actual change in behavior is automatically applied to your org *immediately* in Winter '16. The critical update, when enabled, allows you to temporarily revert to the old behavior. But just like the snooze button on your alarm clock, it's a temporary reprieve. When the auto-activation date arrives, the change in behavior will be enforced in all organizations, regardless of the setting for the critical update itself.

If you didn't participate in the Lightning components for Salesforce 1 beta, you don't have access to this critical update. If you're affected by this change, contact Salesforce for assistance.

The correct long-term solution for this change is to enable My Domain for your organization. If you do this before your org is upgraded to Winter '16 you can avoid the issue entirely. When you enable My Domain, references and links to Lightning resources are in the format https://<myDomain>.lightning.force.com.

There are many benefits to creating a custom domain for your organization beyond enabling Lightning components. If you're not already using a custom domain name, refer to the "Guidelines and Best Practices for Implementing My Domain" and related online help.

Finally, you don't need to enable My Domain to use Lightning components in the following contexts.

- Lightning components with Communities in Community Builder
- Lightning Components for Visualforce

#### SEE ALSO:

"My Domain" in the Salesforce Help
"Set Up a Domain Name" in the Salesforce Help
"Guidelines and Best Practices for Implementing My Domain" in the Salesforce Help
Critical Updates

# **Lightning Components**

Components help you build apps faster. Use them in your Lightning apps or in Salesforce 1.

# **New Components**

The following component is new.

#### force:canvasApp

The force: canvasApp component allows you to create Lightning components that include a Force.com Canvas application.

# **Changed Components**

The following components have changed attributes or styling for Salesforce1, Lightning Experience, and standalone apps.

# ui:button

The uiButton—neutral class has been added to the <button> tag. This change doesn't apply to standalone apps.

#### ui:input

The uiInput—default and uiInput—input classes have been added to the <div> tag that wraps the <input> tag. The <input> tag now contains only the input class. These changes apply to all components that extend ui:input, such as ui:inputText and ui:inputDate.

# ui:inputCheckbox

The uiInput--default and uiInput--checkbox classes have been added to the <div> tag that wraps the <input> tag.

### ui:inputDate

The following classes have been added to the <div> tag that wraps the <input> tag: uiInput--default, uiInput--default, uiInput--input, uiInput--datetime. The uiDatePicker--default class has been added to the date picker in this component. Depending on the form factor, the date picker has one of the following classes: PHONE, TABLET, DESKTOP.

Additionally, the placeholder text displays only when the date picker is not available, when displayDatePicker"false". To assist with user input, the placeholder text displays based on the browser locale, such as MMM d, yyyy.

### ui:inputDateTime

The following classes have been added to the <div> tag that wraps the <input> tag: uiInput--default, uiInput--datetime. When the form factor is a desktop, this component displays as two separate date and time fields. These fields are wrapped in a <form> tag with the form--stacked class. Depending on the form factor, the date picker has one of the following classes: PHONE, TABLET, DESKTOP. The time picker displays as a scrollable menu that provides the time in 30-minute increments.

Additionally, the placeholder text displays only when the date picker is not available, when displayDatePicker"false". To assist with user input, the placeholder text displays based on the browser locale, such as MMM d, yyyy for the date field and h:mm a for the time field.

# ui:outputCheckbox

The altChecked and altUnchecked attributes contain the default values True and False respectively.

### ui:outputRichText

These HTML tags are no longer supported: <object>, <iframe>, <embed>, <form>, <button>, and <input>.

A URL that's passed to the component via the href attribute is now validated and supported only for http:// and https://prefixes. For example, passing <div>&lt;a href='javascript:alert(1)'&gt;Click
Here!&lt;/a&gt;</div> to ui:outputRichText fails validation and aborts the rendering process.

Unescaped comments that are passed to the component are removed. For example, passing <div>&lt;!--comment--&gt;&lt;img src=x onerror='alert(1)'&gt;</div> to ui:outputRichText removes &lt;!--comment--&gt; from the payload.

The CSS expression () directive is no longer supported for Microsoft Internet Explorer.

### **New Interfaces**

The following interfaces are new.

### force:hasRecordId

The force: hasRecordId interface is useful for record home components. Implement this interface if you want your component to receive the ID of the currently displaying record.

# force:hasSObjectName

The force: has SObjectName interface is useful for record home components. Implement this interface if your component needs to know the API name of the object of the currently displaying record.

# **Lightning Events**

Events add a layer of interaction to your components.

The following ui event is now available.

Event Name	Description
ui:menuFocusChange	Indicates that the user changed menu item focus in a menu component.

# Other Changes in Lightning Components

We've made additional changes in Lightning Components.

### IN THIS SECTION:

### Slimmed Down the JavaScript API Doc

In a patch for the Summer '15 release in July, we filtered the JavaScript API section of the reference doc app to only show the methods that you need to build Lightning components. This is a reminder to only use the set of supported methods. We are not guaranteeing support for code that uses unsupported methods.

### Component Event Bubbling

Component event bubbling is similar to standard event bubbling in browsers. When a component event is fired, the component that fired the event can handle it. The event then bubbles up and can be handled by a component in the containment hierarchy that receives the bubbled event.

# Improved Responsiveness with Multiple Requests

The framework can now execute more than one request (XHR) in parallel. Previously, the framework only processed one request at ime.

### Improved Default Value Initialization for Array, List, and Set Attributes

You can use array syntax ([]) to initialize default values for attributes of type List or Set or arrays of basic types.

### Simplified Input Component Error Handling

The JavaScript API for handling field-level errors for input components has been simplified so that it's easier to set and handle errors. The change isolates error handling into the handful of input components that require it.

### Call Component Methods with <aura:method>

Use <aura:method> to define a method as part of a component's API. This enables you to directly call a method in a component's client-side controller instead of firing and handling a component event. Using <aura:method> simplifies the code needed for a parent component to call a method on a child component that it contains.

# Browser Console Warnings for Access Check Violations

If you access a resource, such as a component or attribute, that doesn't have an access system attribute allowing you to access it, you'll see a warning in your browser console. The framework will enforce these access checks more strictly in a later release so you shouldn't ignore them.

### Use \$A.getCallback() instead of \$A.run()

\$A.run() is deprecated. Use \$A.getCallback() to wrap any code that accesses a component outside the normal rerendering lifecycle, such as in a setTimeout() call. This enables the framework to grant the correct access level to the asynchronous code.

#### Set Default Values on Attributes in Design Files

You can now set a default value on an attribute in design files that are part of component bundles for the Lightning App Builder.

# Add an App Launcher Component in Lightning App Builder

Include navigation between apps for your Lightning app users.

# Add a Wave Dashboard Component in Lightning App Builder (Pilot)

Embedding Wave Analytics dashboard component on a Lightning Home or Record Page provides an interactive visualization of your data. Users can drill in and explore the dashboard within the frame on the Lightning Page or in a Wave Analytics window.

### Make Your Lightning Components Available For Lightning Experience

Include your components in the App Launcher for Lightning Experience users.

# Make Your Lightning Components Available For Communities

Enable administrators to drag and drop custom Lightning components in Community Builder by following these guidelines.

### Assign Versions to Your Components

Component versioning lets you declare dependencies against specific revisions of an installed managed package.

# Add Lightning Components to Visualforce Pages

Integrate Lightning components into Visualforce pages for a dynamic development experience.

# Slimmed Down the JavaScript API Doc

In a patch for the Summer '15 release in July, we filtered the JavaScript API section of the reference doc app to only show the methods that you need to build Lightning components. This is a reminder to only use the set of supported methods. We are not guaranteeing support for code that uses unsupported methods.

Previously, the JavaScript API doc was showing many objects and methods that should only be used internally in the framework code so it was promoting anti-patterns for developers.

Access the reference doc app at:

https://<mySalesforceInstance>.lightning.force.com/auradocs/reference.app, where <mySalesforceInstance> is the name of the instance hosting your org; for example, na1.

# Component Event Bubbling

Component event bubbling is similar to standard event bubbling in browsers. When a component event is fired, the component that fired the event can handle it. The event then bubbles up and can be handled by a component in the containment hierarchy that receives the bubbled event.

Previously component events could only be handled by the component that fired the event or by a parent component that contained the component. The addition of component event bubbling makes component events much more powerful and intuitive for developers.

# **Event Bubbling Rules**

A component event can't be handled by every parent in the containment hierarchy. Instead, it bubbles to every facet value provider in the containment hierarchy. A facet value provider is the outermost component containing the markup that references the component firing the event. Confused? It makes more sense when you look at an example.

 $\verb|c:eventBubblingParent| contains c:eventBubblingChild|, which in turn contains c:eventBubblingGrandchild|.$ 

If c:eventBubblingGrandchild fires a component event, it can handle the event itself. The event then bubbles up the containment hierarchy. c:eventBubblingChild contains c:eventBubblingGrandchild but it's not the facet value provider as it's not the outermost component in the markup so it can't handle the bubbled event. c:eventBubblingParent is the facet value provider as c:eventBubblingChild is in its markup. c:eventBubblingParent can handle the event.

### Handle Bubbled Event

A component that fires a component event registers that it fires the event by using the <aura:registerEvent>tag.

```
<aura:component>
     <aura:registerEvent name="bubblingEvent" type="c:compEvent" />
</aura:component>
```

A component handling the bubbled component event uses the <aura:handler> tag to assign a handling action in its client-side controller.

```
<aura:component>
     <aura:handler name="bubblingEvent" event="c:compEvent" action="{!c.handleBubbling}"/>
</aura:component>
```



**Note**: The name attribute in <aura:handler> must match the name attribute in the <aura:registerEvent> tag in the component that fires the event.

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

# Improved Responsiveness with Multiple Requests

The framework can now execute more than one request (XHR) in parallel. Previously, the framework only processed one request at a time.

The framework automatically throttles requests and it's not user controlled. The framework manages the number of requests, which varies depending on available resources.

As in previous releases, multiple gueued actions are batched in a single request (XHR) to minimize network traffic.

# Improved Default Value Initialization for Array, List, and Set Attributes

You can use array syntax ([]) to initialize default values for attributes of type List or Set or arrays of basic types.

This example sets default values for attributes of type String[], List, and Set.

```
<aura:attribute name="colorPaletteArray" type="String[]" default="['red', 'green', 'blue']"
/>
<aura:attribute name="colorPaletteList" type="List" default="['red', 'green', 'blue']" />
<aura:attribute name="colorPaletteSet" type="Set" default="['red', 'green', 'blue']" />
```

Previously, you could only use a comma-separated list, such as default="red, green, blue", to set default values for these types. This syntax still works but can cause unexpected issues as leading and trailing whitespace is preserved for each item. Use the array syntax instead.

# Simplified Input Component Error Handling

The JavaScript API for handling field-level errors for input components has been simplified so that it's easier to set and handle errors. The change isolates error handling into the handful of input components that require it.

This table summarizes the updated patterns for working with input component errors.

Old Method Call	Replacement Method Call
<pre>cmp.addErrors("v.value", errors)</pre>	<pre>cmp.set("v.errors", errors)</pre>
<pre>cmp.getErrors("v.value", errors)</pre>	<pre>cmp.get("v.errors")</pre>
<pre>cmp.clearErrors("v.value")</pre>	<pre>cmp.set("v.errors", null)</pre>
<pre>cmp.setValid("v.value", true)</pre>	<pre>cmp.set("v.errors", null)</pre>
<pre>cmp.setValid("v.value", false)</pre>	No longer needed
<pre>cmp.isValid("v.value")</pre>	<pre>\$A.util.isEmpty(cmp.get("v.errors"))</pre>

If you use custom error handling with input components, you no longer have to manually fire the onError, onClearErrors, or updateError events. The framework automatically fires and handles the events depending on the value in the errors attribute.

# Call Component Methods with <aura:method>

Use <aura:method> to define a method as part of a component's API. This enables you to directly call a method in a component's client-side controller instead of firing and handling a component event. Using <aura:method> simplifies the code needed for a parent component to call a method on a child component that it contains.

For more information, see the Lightning Components Developer's Guide.

# Browser Console Warnings for Access Check Violations

If you access a resource, such as a component or attribute, that doesn't have an access system attribute allowing you to access it, you'll see a warning in your browser console. The framework will enforce these access checks more strictly in a later release so you shouldn't ignore them.

The framework enables you to control access to your applications, interfaces, components, attributes, and events via the access system attribute on these tags: aura:application, aura:interface, aura:component, aura:attribute, and aura:event. The default value for all these resources is access="public", which means the resources are only available within the same namespace.

For more information about the access system attribute, see the Lightning Components Developer's Guide.

### Fixing Access Check Warnings

Fix any access check warnings using one or more of these techniques:

- Add appropriate access system attributes to the resources that you own
- Remove references in your code to resources that are not available
- Ensure that any attribute that you're accessing exists and that you're using the correct spelling. Undefined attributes trigger the same access violation as accessing a private attribute. The message is the same because the access context doesn't know whether the attribute exists or is undefined.
- Use \$A.getCallback() to wrap any code that accesses a component outside the normal rerendering lifecycle, such as in a setTimeout() or setInterval() call or in an ES6 Promise. \$A.getCallback() preserves the current execution context and grants the correct access level to the asynchronous code. Otherwise, the framework loses context and only allows access to global resources.

# Use \$A.getCallback() instead of \$A.run()

\$A.run() is deprecated. Use \$A.getCallback() to wrap any code that accesses a component outside the normal rerendering lifecycle, such as in a setTimeout() call. This enables the framework to grant the correct access level to the asynchronous code.

# Set Default Values on Attributes in Design Files

You can now set a default value on an attribute in design files that are part of component bundles for the Lightning App Builder.



Example:

<design:attribute name="Name" datasource="value1, value2, value3" default="value1" />

# Add an App Launcher Component in Lightning App Builder

Include navigation between apps for your Lightning app users.

The Lightning App Builder now includes the App Launcher component you can drag onto any page. The App Launcher displays all of a user's available Salesforce apps, as well as any connected apps the administrator configures. Users navigate between apps using the App Launcher.

Contact Salesforce to enable the App Launcher component for the Lightning App Builder in your organization.

# Add a Wave Dashboard Component in Lightning App Builder (Pilot)

Embedding Wave Analytics dashboard component on a Lightning Home or Record Page provides an interactive visualization of your data. Users can drill in and explore the dashboard within the frame on the Lightning Page or in a Wave Analytics window.

The component allows you to control the visibility of the dashboard's title and to specify whether the dashboard appears on the page if an error occurs. With the **Open Links in New Windows** attribute, you can specify where links from the dashboard to other Wave Analytics assets are opened.

With the **Filter** attribute, you can use JSON to filter dataset fields at run time. For example:

{datasetDeveloperName1:{field1:[value]},datasetDeveloperName1:{field1:[value1,value2],field2:["value3,with comma"]}}



Note: Wave Analytics for the Lightning App Builder is in pilot. Contact your Salesforce account executive to enable this feature.

# Make Your Lightning Components Available For Lightning Experience

Include your components in the App Launcher for Lightning Experience users.

In the components you wish to include in Lightning Experience, add implements="force:appHostable" in the aura:component tag and save your changes.

```
<aura:component implements="force:appHostable">
```

The appHostable interface makes the component available as a custom tab.

Follow these steps to include your components in Lightning Experience and make them available to users in your organization.

- 1. Create a custom tab for this component.
  - a. From Setup, enter Tabs in the Quick Find box, then select Tabs.
  - **b.** Click **New** in the Lightning Component Tabs related list.
  - **c.** Select the Lightning component that you want to make available to users.

- **d.** Enter a label to display on the tab.
- e. Select the tab style and click Next.
- **f.** When prompted to add the tab to profiles, accept the default and click **Save**.
- 2. Add your Lightning components to the App Launcher.
  - a. From Setup, enter Apps in the Quick Find box, then select Apps.
  - **b.** Click **New**. Select *Custom app* and then click **Next**.
  - c. Enter Lightning for App Labeland click Next.
  - **d.** In the Available Tabs dropdown menu, select the Lightning Component tab you created and click the right arrow button to add it to the custom app.
  - e. Click Next. Select the Visible checkbox to assign the app to profiles and then Save.
- **3.** Check your output by navigating to the App Launcher in Lightning Experience. Your custom app should appear in the App Launcher. Click the custom app to see the components you added.

For more information on creating custom apps, see "Creating Custom Apps" in the Salesforce Help.

# Make Your Lightning Components Available For Communities

Enable administrators to drag and drop custom Lightning components in Community Builder by following these guidelines.

# Add a New Interface to Your Component

To appear in the Community Builder, a component must implement the forceCommunity: availableForAllPageTypes interface.

Here's the sample code for a simple "Hello World" component.



**Note:** As access checks will be more strictly enforced in a later release, mark your resources with access="global" now to make the resource usable outside of your own org; for example, if you want the resource to be usable in an installed package or by a Lightning App Builder user or a Community Builder user in another org.

### Add a Design Resource to Your Component Bundle

A design resource describes the design-time behavior of a Lightning component—information that visual tools need to allow adding the component to a page or app.

To make an attribute available for administrators to edit in the Community Builder, add a design:attribute node for the attribute into the design resource. An attribute marked as required in the component definition automatically appears for users in the Community Builder, unless it has a default value assigned to it. Required attributes with default values and attributes not marked as required in the component definition must be specified in the design resource or they won't appear for users.

Here's the design resource that goes in the bundle with the "Hello World" component.

To render a field as a picklist, add a datasource onto the attribute in the design resource, like this:

```
<design:attribute name="Name" datasource="value1, value2, value3" />
```

Any string attribute with a datasource in a design resource is treated as a picklist.

You can set a default value on an attribute in a design resource, like this:

```
<design:attribute name="Name" datasource="value1, value2, value3" default="value1" />
```



**Note**: A design resource supports only attributes of type int, string, or boolean. Design resources must be named componentName.design.

# Assign Versions to Your Components

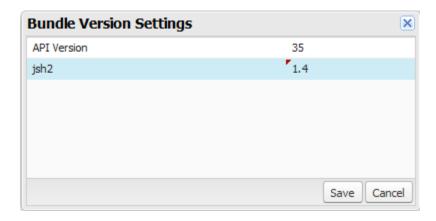
Component versioning lets you declare dependencies against specific revisions of an installed managed package.

By assigning a version to your component, you have granular control over how the component functions when new versions of a managed package are released. For example, imagine that a **<packageNamespace>:** button is pinned to version 2.0 of the package. Upon installing version 3.0, the button retains its version 2.0 functionality.



**Note**: The package developer is responsible for inserting versioning logic into the markup when updating a component. If the component wasn't changed in the update or if the markup doesn't account for version, the component behaves in the context of the most recent version.

Versions are assigned declaratively in the Developer Console. When you're working on a component, click **Bundle Version Settings** in the right panel to define the version. You can only version a component if you've installed a package, and the valid versions for the component are the available versions of that package. Versions are in the format <major>. <minor>. So if you assign a component version 1.4, its behavior depends on the first major release and fourth minor release of the associated package.



# Add Lightning Components to Visualforce Pages

Integrate Lightning components into Visualforce pages for a dynamic development experience.

You only have to use a few lines of Visualforce markup to get up and running with Lightning Components for Visualforce.

See the Lightning Components Developer's Guide for more information.

SEE ALSO:

"Add Lightning Components to Visualforce Pages" in the Lightning Components Developer's Guide

# API

Access more metadata types and data objects in API version 35.0.

#### IN THIS SECTION:

### New and Changed Objects

These objects are new or have changed.

#### SOSL

Salesforce Object Search Language (SOSL) now includes support for searching in internal communities.

### **REST API**

REST API includes new and changed resources and enhanced cache validation support.

# SOAP API

SOAP API includes a new call, several changed calls, a new header, and a changed header.

### Chatter REST API

Use Chatter REST API to integrate mobile apps, intranet sites, and third-party web applications with Salesforce. In this release you can make rich-text feed posts, manage topic hierarchies in communities, target custom recommendations to audiences, and much more.

# Reports and Dashboards REST API

Reports and Dashboards REST API enhancements enable you to save and clone dashboards, as well as give you access to new report and dashboard properties.

### Live Agent REST API

The Live Agent REST API includes new and changed resources.

# **EDITIONS**

#### Available in:

- Developer
- Enterprise
- Unlimited
- Performance

### Data.com API

The Data.com APIs provide access to the most up-to-date Data.com records. You can search, match, and purchase company and contact records.

### Tooling API

Tooling API includes new objects and headers, behavior changes, and enhanced support for a REST resource.

### Metadata API

Metadata API includes new and changed types and fields.

# Salesforce Console API (Integration Toolkit)

The toolkit includes new and updated methods that let you customize a console programmatically. This feature is available in Salesforce Classic only.

### **Invocable Actions**

Invocable Actions represent the actions that can be accomplished on Salesforce with APIs.

### Other API Changes

We're changing our API login endpoint routing. We've also added and changed API error codes and made enhancements to sending email messages.

### SEE ALSO:

API

# **New and Changed Objects**

These objects are new or have changed.

# IN THIS SECTION:

# **New Objects**

These objects are new.

# **Changed Objects**

These objects have changed.

# **New Objects**

These objects are new.

### AttachedContentNote

This read-only object contains all ContentNote objects associated with an object.

### BackgroundOperation

Represents a background operation in an asynchronous job queue.

### ContentFolderItem

Represents a file (ContentDocument) or folder (ContentFolder) that resides in a ContentFolder in a ContentWorkspace.

### FolderedContentDocument

Represents the relationship between a parent and child ContentFolderItem in a ContentWorkspace.

# Live Chat Sensitive Data Rule

Represents a rule for masking or deleting data of a specified pattern. Written as a regular expression (regex).

#### MacroInstruction

Represents an instruction in a macro. An instruction can specify the object that the macro interacts with, the context or publisher that the macro works within, the operation or action that the macro performs, and the target of the macro's actions. It is a useful way to programmatically define instructions, instead of using the macro widget in the console.

### ReputationLevelLocalization

Represents the translated value of a reputation level. Reputation level localization only applies for reputation levels in communities.

### SecureAgentsCluster

Represents a cluster consisting of several Secure Agents on different servers. Clusters provide failover protection if an agent on a particular server becomes inaccessible.

### SetupAuditTrail

Represents changes you or other administrators made in your organization's Setup area.



**Note:** SetupAuditTrail is not a supported standard controller. Using SetupAuditTrail as a standard controller in a Visualforce page results in an error.

### UserAppMenuCustomization

Represents an individual user's settings for items in the Force.com app menu or App Launcher.

### UserAppMenuCustomizationShare

Represents a sharing entry on a UserAppMenuCustomization record

### UserAppMenuItem

Represents the organization-wide settings for items in the Force.com app menu or App Launcher that the requesting user has access to in Setup.

# **Changed Objects**

These objects have changed.

### Changed Objects That Affect Earlier API Versions

These objects have changed in API version 35.0 and affect earlier API versions.

# User

The AboutMe, FullPhotoURL, and SmallPhotoURL fields no longer require Chatter. This change is available in all API versions. Starting in Winter '16 with API version 35.0, users can view and upload photos even when Chatter is disabled.

# **Changed Objects**

These objects have changed in API version 35.0.

#### **ActivityHistory**

The following field was added:

ActivitySubtype—Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable.

#### **AppMenultem**

The following fields have been added to support sorting and visibility of individual apps.

- IsAccessible—If true, the current user is authorized to use the app.
- IsVisible—If true, the app is visible to users of the organization, by default.

- LogoUrl—If no logo path is specified, the default image uses the initials of the Label value. Previously, the default was an image of a cloud.
- UserSortOrder—The index value that represents where the user set this item in the menu (or App Launcher). For example, an item with a sort order value of 5 will appear between items with sort order values of 3 and 9.

# AttachedContentDocument

The following new fields have been added:

- ExternalDataSourceType indicates the type of external data source in which the document is stored.
- SharingOption controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default value is Allowed, which means that sharing is not frozen and new shares are allowed. When set to Restricted, new shares are prevented without affecting existing shares of the file.

Queries to AttachedContentDocument will not return notes (SNOTE). To query notes, use the AttachedContentNote object.

### **AuthProvider**

The ProviderType field accepts a new picklist value: GitHub. Use the GitHub provider to log in users of your Force.com app to GitHub using OAuth. When logged in to GitHub, your app can make calls to GitHub APIs. The GitHub provider isn't available as a single sign-on provider, which means users can't log in to your Salesforce organization using their GitHub login credentials.

### **AuthSession**

You can now query the related LoginGeo record, specified by LoginGeoId, by including LoginGeo in your query. Following are some examples.

```
SELECT Id FROM AuthSession WHERE LoginGeo.CountryIso = 'US'
```

SELECT AuthSession.LoginGeo.CountryIso FROM AuthSession WHERE Id='<loginhistoryid>'

#### CombinedAttachment

The following new fields have been added:

- ExternalDataSourceType indicates the type of external data source in which the document is stored.
- SharingOption controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default value is Allowed, which means that sharing is not frozen and new shares are allowed. When set to Restricted, new shares are prevented without affecting existing shares of the file.

### ContentDocument

A new field, SharingOption, controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default value is Allowed, which means that sharing is not frozen and new shares are allowed. When set to Restricted, new shares are prevented without affecting existing shares of the file.

# ContentNote

The following fields have been added:

- LastViewedDate indicates the date the note was last viewed.
- TextPreview represents a preview of the note.

### ContentVersion

The following fields have been added:

- SharingOption, controls whether or not sharing is frozen for a file. Only administrators and file owners with Collaborator access to the file can modify this field. Default value is Allowed, which means that sharing is not frozen and new shares are allowed. When set to Restricted, new shares are prevented without affecting existing shares of the file.
- TextPreview represents a preview of a document.

The ReasonForChange and VersionData fields now support the Update property.

### **DandBCompany**

The following company financial fields have been added:

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.
- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc,
  FourthSic8, FourthSic8Desc, FifthSic8, FifthSic8Desc, SixthSic8, and SixthSic8Desc—The
  eight-digit Standard Industrial Classification (SIC) code and description that's used to categorize business establishments by
  industry.
- FortuneRank—The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
- IncludedInSnP500— A true or false value. If true, the company is listed in the S&P 500 Index. If false, the company isn't listed in the S&P 500 Index.
- PremisesMeasure—A numeric value for the measurement of the premises.
- PremisesMeasureReliability—A descriptive accuracy of the measurement such as actual, estimated, or modeled.
- PremisesMeasureUnit—A descriptive measurement unit such as acres, square meters, or square feet.
- EmployeeQuanityGrowthRate—The yearly growth rate of the number of employees in a company expressed as a decimal percentage. The data includes the total employee growth rate for the past two years.
- SalesTurnoverGrowthRate—The increase in annual revenue from the previous value for an equivalent period expressed
  as a decimal percentage.

#### Dashboard

A new field, FolderName, indicates the name of the folder that contains the dashboard.

### DatacloudCompany

The following fields have been added:

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

# DatacloudDandBCompany

- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc, FourthSic8, FourthSic8Desc, FifthSic8, FifthSic8Desc, SixthSic8, and SixthSic8Desc—The eight-digit Standard Industrial Classification (SIC8) code and description that's used to categorize business establishments by industry
- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

#### DuplicateRule

A new field, IsActive, has been added. This read-only field indicates whether a duplicate rule is active (true) or not (false).

### **EmailMessage**

For email messages whose Status is not Draft, the IsExternallyVisible field is updateable. You can reference this field in Apex triggers or flow processes to control the visibility of case emails in the community case feed.

### EnvironmentHubMember

The following new field has been added:

MemberType—Represents the member organization type, such as branch, patch, or release.

The following field has changed:

• Origin—A new value, Provisioned, is available. The value represents a hub member organization that was created directly from the Environment Hub. This value doesn't appear for hub member organizations created from the Environment Hub before the Winter '16 release

# **EmailTemplate**

Two new fields, UIType and EntityType, have been added. UIType indicates the user interface where this template is usable. When UIType is 1, this template is available in Salesforce Classic. When UIType is 2 (Lightning Experience) or 3 (Lightning Experience Sample), this template is available in Lightning Experience. EntityType indicates which entities this template can be used with (for example, accounts or leads).

### EnvironmentHubMember

The following new field has been added:

• MemberType—Represents the member organization type, such as branch, patch, or release.

The following field has changed:

Origin—A new value, Provisioned, is available. The value represents a hub member organization that was created
directly from the Environment Hub. This value doesn't appear for hub member organizations created from the Environment
Hub before the Winter '16 release.

#### **Event**

The following field was added:

EventSubtype—Provides standard subtypes to facilitate creating and searching for events. This field isn't updateable.

### EventLogFile

Several new fields have been added to the set of EventType field values.

A TIMESTAMP\_DERIVED field has been added to every event type. It's a Datetime field derived from the TIMESTAMP field representing the access time of Salesforce services in ISO8601-compatible format (YYYY-MM-DDTHH: MM: SS.ssz).

A USER\_ID\_DERIVED field has been added to every event type except Time-Based Workflow. It's a String field derived from the USER ID field representing 18-character, case insensitive user ID of the user accessing Salesforce services.

A VERSION\_ID\_DERIVED field was added to Content Transfer to represent the 18-character, case-insensitive ID of the content version.

A DASHBOARD\_ID\_DERIVED field was added to Dashboard to represent the 18-character, case-insensitive ID of the dashboard that was run in the event.

A DELEGATED\_USER\_ID\_DERIVED field was added to Login As to represent the 18-character, case-insensitive ID of the delegated user.

A REPORT\_ID\_DERIVED field was added to Report to represent the 18-character, case-insensitive ID of the report that was run in the event.

The following fields were added to UI Tracking:

- ACTION LOCATION— The name of the component where the action occurred.
- ACTION\_TYPE—The database that's associated with the user action.
- DELTA—The elapsed time between the start and end of the event in milliseconds.
- PAGE OPTION—A comma-separated list of additional information about the current page.
- RECORD TYPE ID—The ID of the record type that the user accessed.
- USER TYPE—The user license of the user who's accessing Salesforce services.

### ExternalDataSource

The following field was added.

isWritable—Allows users to create, update, or delete external object records for this data source from within Salesforce. By default, external objects are read-only. You can make external objects writable only when an OData or Apex custom adapter is used to connect Salesforce with the external data source. The Salesforce adapter does not support writable external objects.

### FieldHistoryArchive

You can now sort the FieldHistoryType, ParentId, and CreatedDate fields.

#### **FlowInterview**

The following field was added.

OwnerId—The ID of the user who owns the interview. Only this user or an admin can resume the interview.

### Goal

The Status field has a new picklist value: NotCompleted.

### IsRichText Field

A new field, IsRichText, has been added to several objects. This field indicates whether the body of the feed item contains rich text. IsRichText has been added to the following objects:

AccountFeed	AssetFeed	CampaignFeed	CaseFeed
CertificationDefFeed	CollaborationGroupFeed	ContactFeed	ContentDocumentFeed
ContractFeed	Custom ObjectFeed	DashboardComponentFeed	DashboardFeed
EntitlementFeed	EventFeed	FeedItem	GoalFeed
LeadFeed	MetricFeed	OpportunityFeed	OrderFeed
OrderItemFeed	Product2Feed	ProfileSkillEndorsementFeed	ProfileSkillFeed
ProfileSkillUserFeed	ReportFeed	SolutionFeed	TaskFeed
TopicFeed	UserFeed	WorkCoachingFeed	WorkFeedbackRequestFeed
WorkGoalFeed	WorkPerformanceCycleFeed		

### LiveAgentSession

The following fields were added:

NumFlagRaised—The number of assistance flags raised by the agent.

NumFlagLoweredAgent—The number of assistance flags lowered by the agent.

NumFlagLoweredSupervisor—The number of assistance flags lowered by the supervisor.

# LiveChatUserConfig

The following field was added:

OptionsHasAssistanceFlag—Determines whether agents can raise an assistance flag to notify a supervisor that they need help.

# LoginHistory

You can now query the related LoginGeo record, specified by LoginGeoId, by including LoginGeo in your query. Following are some examples.

SELECT Id FROM LoginHistory WHERE LoginGeo.CountryIso = 'US'

SELECT LoginHistory.LoginGeo.CountryIso FROM LoginHistory WHERE Id='<loginhistoryid>'

# LookedUpFromActivity

The following field was added:

ActivitySubtype—Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable.

# MailmergeTemplate

The following fields have been added:

- SecurityOptionsAttachmentHasFlash—True if Flash Injection was detected in the attachment.
- SecurityOptionsAttachmentHasXSSThreat—True if a cross site scripting threat was detected in the attachment.
- SecurityOptionsAttachmentScannedforFlash—True if the attachment has been scanned for Flash Injection.
- SecurityOptionsAttachmentScannedForXSS—True if the attachment has been scanned for a cross site scripting threat.

#### Metric

The Status field has a new picklist value: NotCompleted. A new field, StartDate, indicates the start date of the metric.

#### NamedCredential

The following fields have been added:

- CalloutOptionsAllowMergeFieldsInBody—For Apex callouts, indicates whether the code can use merge fields to populate HTTP request bodies with org data.
- CalloutOptionsAllowMergeFieldsInHeader—For Apex callouts, indicates whether the code can use merge fields to populate HTTP headers with org data.
- CalloutOptionsGenerateAuthorizationHeader—Indicates whether Salesforce automatically generates a standard authorization header for each callout to the named credential—defined endpoint.

### NetworkActivityAudit

The following values were added to the Action field:

- ModerationRuleFlag—A moderation rule flagged user-generated content.
- ModerationRuleBlock—A moderation rule blocked user-generated content.
- ModerationRuleReplace—A moderation rule replaced user-generated content.

The following entities are now tracked for the EntityId field:

- Chatter Message
- Content Document
- Feed Comment
- Feed Item

# OpenActivity

The following field was added:

ActivitySubtype—Provides standard subtypes to facilitate creating and searching for specific activity subtypes. This field isn't updateable.

# Opportunity

The following fields have been added:

- HasOpenActivity indicates whether an opportunity has an open event or task.
- HasOverdueTask indicates whether an opportunity has an overdue task.

# OpportunityContactRole

This object now supports the describeLayout () call.

#### OwnedContentDocument

A new filed, ExternalDataSourceType, indicates the type of external data source in which the document is stored.

#### PartnerNetworkConnection

A new field, IsSyncUsers, indicates whether users with standard Salesforce user licenses are synced between the primary and secondary organization in an Organization Sync connection.

# PartnerNetworkSyncLog

A new picklist field, Status, indicates the replication status of an update being sent to the linked organization in an Organization Sync connection. Its values are Retrying, Failed, and Resolved.

#### **PlatformAction**

The following new fields have been added:

- ActionTarget—Represents the URL to invoke or describe the action when the user invokes the action. Replaces ActionTargetUrl.
- Section—Represents the section of the user interface the action resides in. This field is applicable only to Lightning Experience.

The following field has changed:

• The ActionTargetUrl field has been deprecated. Use ActionTarget instead.

You can now include multiple ActionListContext values in the WHERE clauses of SOQL queries. ActionListContext enables you to return all actions across the different sections of an object record when displayed in the Lightning Experience user interface. Here's an example.

```
SELECT ActionListContext, Label, Type, Subtype, Section, SourceEntity,
RelatedSourceEntity, ActionTarget, ActionTargetType, ApiName, Category,
ConfirmationMessage, DeviceFormat, ExternalId, GroupId, IconContentType,
IconHeight, IconUrl, IconWidth, Id, InvocationStatus, InvokedByUserId,
IsGroupDefault, LastModifiedDate, PrimaryColor
FROM PlatformAction
WHERE ActionListContext IN ('Record', 'Chatter', 'RelatedList') AND
SourceEntity = '001xx000003DlvX' AND
DeviceFormat = 'Desktop'
```

### **Post to Chatter Action**

Posting to community-specific groups has been improved with two new fields. These fields are valid only if Salesforce Communities is enabled.

- visibilty—Specifies whether the feed item is available to all users or only to internal users.
- communityId—Required if posting to a user or Chatter group that belongs to a Salesforce Community.

#### Pricebook2

This object now supports the search () call.

### ProcessInstanceHistory

A new field, ProcessNodeID, has been added. This field indicates the current step in the process instance.

#### Product2

The following new fields have been added:

- LastReferencedDate—The timestamp for when the current user last viewed a record related to this record.
- LastViewedDate—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.

#### Report

A new field, FolderName, indicates the name of the folder that contains the report.

### SignupRequest

The following new fields have been added:

- Edition—Represents the Salesforce edition used to create the organization.
- PreferredLanguage—Represents the language of the organization being created.
- ResolvedTemplateId—Populated during the sign-up request and for internal use by Salesforce.
- ShouldConnectToEnvHub—When set to true, the trial organization is connected to the Environment Hub. The sign-up must take place within the hub network.

The following field has changed:

TemplateId—The field is now nillable.

The following limits apply:

Daily Limit—You are limited to 20 sign-ups per day. To make more sign-ups, log a case in the Partner Community.

#### Task

The following field was added:

TaskSubtype—Provides standard subtypes to facilitate creating and searching for specific task subtypes. This field isn't updateable.

#### User

The following field has been removed:

UserPreferencesProcessAssistantCollapsed

The following new fields have been added:

- UserPreferencesPathAssistantCollapsed When true, Sales Path appears collapsed or hidden to the user. This field replaces UserPreferencesProcessAssistantCollapsed.
- UserPreferencesLightningExperiencePreferred— When true, redirects the user to the Lightning Experience interface. Label is **Switch to Lightning Experience**.

# WorkFeedbackRequest

The FeedbackRequestState field's Dismissed picklist value is now replaced with the Declined picklist value. Additionally, the TemplateId field is no longer supported.

### WorkGoal

The WorkGoal object has been removed. Use the Goal object to guery information about Work.com goals instead.

### WorkGoalCollaborator

The WorkGoalCollaborator object has been removed. Use the Goal object to query information about Work.com goals instead.

# WorkGoalCollaboratorHistory

The WorkGoalCollaboratorHistory object has been removed. Use the Goal object to query information about Work.com goals instead.

### WorkGoalFeed

The WorkGoalFeed object has been removed. Use the GoalFeed object to query information about feed items for Work.com goals instead.

### WorkGoalHistory

The WorkGoalHistory object has been removed. Use the GoalHistory object to query historical information for Work.com goals instead.

### WorkGoalLink

The WorkGoalLink object has been removed. Use the GoalLink object to query information about the relationship between two Work.com goals instead.

#### WorkGoalShare

The WorkGoalShare object has been removed. Use the GoalShare object to query information about sharing for Work.com goals instead.

#### WorkThanks

A new field, FeedItemId, indicates the ID of the associated feed item.

# **Documentation Changes**

### EnvironmentHubMember

Updated the EnvironmentHubMember topic to include the ShouldEnableSso field, available in version 33.0 and later.

# **ObjectName**Share

Updated all ObjectNameShare topics to indicate that their RowCause field can be created in versions 32.0 and later.

# **SOSL**

Salesforce Object Search Language (SOSL) now includes support for searching in internal communities.

### SOSL support for searching in internal communities

You can search in an internal community for users and feed items by using the WITH NETWORK optional clause.

For example:

```
FIND {test} RETURNING User (id),

FeedItem (id, ParentId WHERE CreatedDate =

THIS_YEAR Order by CreatedDate DESC)

WITH NETWORK = '00000000000000'
```

# **REST API**

REST API includes new and changed resources and enhanced cache validation support.

### **New Resources**

### **Relevant Items**

/vXX.X/sobjects/relevantItems

Gets the current user's most relevant items. Relevant items include records for objects in the user's global search scope and also most recently used (MRU) objects.

# **Changed Resources**

#### **Actions**

/vXX.X/sobjects/actions

Beginning in v35.0, the Batch resource now supports Actions, /vXX.X/actions/, to improve your application's performance.

For more information on invocable actions, see the Actions Developer's Guide.

### Search

```
/vXX.X/search/?qs=search string (Beta)
```

Added the qs parameter to allow simple searches using the GET method.

POST method is also now supported for more complex searches using the qs parameter.

This release contains a beta version of the qs parameter that is production quality. You can provide feedback and suggestions for this parameter on the IdeaExchange. For information on enabling this feature for your organization, contact Salesforce.

### **SObject Tree**

/vXX.X/composite/tree/**SObjectName** 

Previously we piloted the SObject Tree resource, which you can use to create nested records. The SObject Tree resource is now generally available, and XML support has been added. This resource is available within 24 hours after the Winter '16 release.

## **Search Suggested Records**

vXX.X/search/suggestions?q=**search** string&sobject=object type

The resource that auto-suggests records before you perform a full search was expanded with filters for groups, communities, topics, and users. The following request parameters were added:

- fields
- groupld
- networkld
- topicld
- type
- userld
- where

The requested lookup fields' values are returned in the response as part of the attributes element.

In the absence of a standard Name or Title response field, the main identifying field is used. For example, in cases, the Case Number is used.

Notes about usage and examples were updated to reflect current functionality.

# New and Changed Headers for Cache Validation

We've enhanced support for cache validation through the introduction of HTTP entity tags (ETag) on SObject Rows results and two request headers that leverage them, If-Match and If-None-Match. We've also added a new, time-based validation request header, If-Unmodified-Since, and expanded support for If-Modified-Since.

### **ETag**

The ETag header is a response header that's returned when you access the SObject Rows resource. It's a hash of the content that's used by the If-Match and If-None-Match request headers in subsequent requests to determine if the content has changed.

Example request: /v35.0/sobjects/account/001D000000LFhvhIAD

Example response header: ETag: "U5iWijwWbQD18jeiXwsqxeGpZQk=-gzip"

ETag is supported only for account records.

#### If-Match

The If-Match header is a request header for SObject Rows that includes a list of ETags. If the ETag of the record you're requesting matches any ETag specified in the header, the request is processed. Otherwise, a 412 Precondition Failed status code is returned, and the request isn't processed. For example, let's say you attempt to update the record from the previous example. In the request, if you include the If-Match header with the ETag returned in the previous response, the record is updated.

Example request header:

 $\label{lem:match: "Jbjuzw7dbhaEG3fd90kJbx6A0ow=-gzip", "U5iWijwWbQD18jeiXwsqxeGpZQk=-gzip" } \\$ 

Example response:

```
HTTP/1.1 204 No Content
Record is updated
```

But if you include the If-Match header without the returned ETag, the record isn't updated.

Example request header:

```
If-Match: "Jbjuzw7dbhaEG3fd90kJbx6A0ow=-gzip"
```

Example response:

```
HTTP/1.1 412 Precondition Failed
```

If-Match is supported only for account records.

#### If-None-Match

The If-None-Match header is a request header for SObject Rows that's the inverse of If-Match. If the ETag of the record you're requesting matches any ETag specified in the header, the request isn't processed. A 304 Not Modified status code is returned for GET or HEAD requests, and a 412 Precondition Failed status code is returned for PATCH requests. For example, let's say you attempt to GET the record data from the ETag example. If you include the If-None-Match header with the ETag returned in the response, a 304 Not Modified status code is returned.

Example request header:

```
If-None-Match: "Jbjuzw7dbhaEG3fd90kJbx6A0ow=-gzip", "U5iWijwWbQD18jeiXwsqxeGpZQk=-gzip"
```

Example response:

```
HTTP/1.1 304 Not Modified
```

But if you include the If-None-Match header without the ETag, the record data is returned.

Example request header:

```
If-Match: "Jbjuzw7dbhaEG3fd90kJbx6A0ow=-gzip"
```

Example response:

```
HTTP/1.1 200 OK
Record data
```

If-None-Match is supported only for account records.

# If-Unmodified-Since

The If-Unmodified-Since header is a request header that's the inverse of If-Modified-Since. If you make a request and include the If-Unmodified-Since header, the request is processed only if the data hasn't changed since the specified date. Otherwise, a 412 Precondition Failed status code is returned, and the request isn't processed. The If-Unmodified-Since header is supported for the same resources that support If-Modified-Since.

Example request header: If-Unmodified-Since: Tue, 10 Aug 2015 00:00:00 GMT

### If-Modified-Since

The SObject Rows, Invocable Actions, and Describe Global resources now support the If-Modified-Since header.

# **Documentation Changes**

#### Actions

/vXX.X/sobjects/actions

Actions can be created in versions 32.0 and later. For more information on actions, see the Actions Developer's Guide.

# **SOAP API**

SOAP API includes a new call, several changed calls, a new header, and a changed header.

# **New Calls**

This call is new in API version 35.0.

#### renderEmailTemplate()

Replaces merge fields in the text bodies of email templates with their corresponding Salesforce record IDs, even for polymorphic fields. The email template bodies and their corresponding whold and whatld values are specified in the argument. This call takes an array of RenderEmailTemplateRequest objects and returns the rendered template bodies as part of the body results in RenderEmailTemplateResult.

# **Changed Calls**

These calls have changed in API version 35.0.

### describeAppMenu()

The networkId field has been added. This field represents the community to retrieve the tab set from if the appMenuType is set to NetworkTabs.

### describeFlexiPages()

The contexts argument has been added. This argument represents the contexts for the FlexiPages, such as Account or Contact.

### describeLayout() and DescribeLayoutResult

The parentLayoutId field has been added to the DescribeLayoutSection subtype. This field represents the ID of the layout upon which the DescribeLayoutSection resides.

### describeAvailableQuickActions() and DescribeAvailableQuickActionResult

The actionEnumOrId field has been added. This field represents the unique ID for the action. If the action doesn't have an ID, its API name is used.

# ${\tt describeQuickActions()} \ \ and \ DescribeQuickActionResult$

The actionEnumOrId field has been added. This field represents the unique ID for the action. If the action doesn't have an ID, its API name is used.

The showQuickActionVfHeader field has been added. This field indicates whether to show the Visualforce quick action header and footer.

The visualforcePageUrl field has been added. This field represents the URL for the Visualforce page associated with the action.

### describeSObjects() and DescribeSObjectResult

The mruEnabled field has been added. This field indicates whether the object appears in Most Recently Used (MRU) lists (true) or not (false).

The master field has been added to the RecordTypeInfo subtype. This field indicates whether the record type is the master record type (true) or not (false). The master record type is the default record type that's used when a record has no custom record type associated with it.

### describeTabs() and DescribeTabSetResult

The description field has been added to DescribeTabSetResult. This field is the description for this standard or custom app.

#### describeTheme()

The Id-Modified\_Since header has been added. Use it to determine if object metadata has changed. You can include the If-Modified-Since header with a date in EEE, dd MMM yyyy HH:mm:ss z format when you use the SObject Describe resource. If you do, response metadata will only be returned if the object metadata has changed since the provided date. If the metadata has not been modified since the provided date, a 304 Not Modified status code is returned, with no response body.

### runTests() and RunTestsResult

The apexLogId field has been added. This field represents the ID of an ApexLog object that is created at the end of a test run. The ApexLog object is created if there is an active trace flag on the user running an Apex test, or on a class or trigger being executed.

# sendEmail() and SingleEmailMessage

The following fields of SingleEmailMessage have changed in all API versions.

#### bccAddresses, ccAddresses, and toAddresses

- You can set contacts, leads, and users as email recipients by specifying their IDs instead of email addresses.
- If you add an email recipient by ID instead of email address, you can specify opt-out email options with the optOutPolicy field
- Email addresses are verified to ensure that they have the correct format and haven't been marked as bounced.

The following fields have been added to SingleEmailMessage and are available in API version 35.0 and later.

#### documentAttachments

This field is deprecated. Use entityAttachments instead.

### entityAttachments

Optional. Array of IDs of Document or ContentVersion items to attach to the email.

# optOutPolicy

Optional. If you added recipients by ID instead of email address and the Email Opt Out option set, this field determines the behavior of the sendEmail() call. The opt-out settings for recipients added by their email addresses aren't checked and those recipients always receive the email. Possible values of the SendEmailOptOutPolicy enumeration are:

- SEND (default)—The email is sent to all recipients and the Email Opt Out option of the recipients is ignored.
- FILTER—No email is sent to the recipients that have the Email Opt Out option set and emails are sent to the other recipients.
- REJECT—If any of the recipients have the Email Opt Out option set, sendEmail() throws an error and no email is sent.

### treatBodiesAsTemplate

Optional. If set to true, the subject, plain text, and HTML text bodies of the email are treated as template data. The merge fields are resolved using the renderEmailTemplate() call. Default is false.

### treatTargetObjectAsRecipient

Optional. If set to true, the targetObjectId (a contact, lead, or user) is the recipient of the email. If set to false, the targetObjectId is supplied as the WhoId field for template rendering but isn't a recipient of the email. The default is true.

### **New Headers**

This header is new in API version 35.0.

### OwnerChangeOption

Represents a flag for a specific action performed when changing a record owner though an update or upsert call. Used only inside the ChangeOwnerOptions header.

# **Changed Headers**

This header has changed in API version 35.0.

### OwnerChangeOptions

Represents actions that can be performed when a record's owner is changed.

# Chatter REST API

Use Chatter REST API to integrate mobile apps, intranet sites, and third-party web applications with Salesforce. In this release you can make rich-text feed posts, manage topic hierarchies in communities, target custom recommendations to audiences, and much more.



Note: To create custom Chatter and Communities experiences in Salesforce, use ConnectApi (Chatter in Apex).

### IN THIS SECTION:

General Updates to Chatter REST API

New and Changed Chatter REST API Resources

New and Changed Chatter REST API Request Bodies

New and Changed Chatter REST API Response Bodies

# General Updates to Chatter REST API

# Upload File Size Increased to 2 GB

The maximum upload file size limit for Chatter REST API is now 2 GB, which includes the binary data and the request headers.

# New and Changed Chatter REST API Resources

# Async Queries (Pilot)



**Note:** This feature is currently available to select customers through a pilot program. To be nominated to join this pilot program, contact salesforce.com. Additional terms and conditions may apply to participate in the pilot program. Please note that pilot programs are subject to change, and as such, we cannot guarantee acceptance into this pilot program or a particular time frame in which this feature can be enabled. Any unreleased services or features referenced in this document, press releases, or public statements are not currently available and may not be delivered on time or at all. Customers who purchase our services should make their purchase decisions based upon features that are currently available.

Submit SOQL queries to be processed asynchronously and check on their status. Use async query resources to make consistent SOQL queries, no matter what size the data is or where the data is stored.

### Submit an async query job

To submit a SOQL query to be processed asynchronously, make a POST request to /async-queries and pass an Async Query Input request body.

# Check the status of an async query job

To get the status of an asynchronous job, make a GET request to /async-queries/jobId.

### Communities



nportant: In API versions 35.0 and later, the /chatter/users/userId/photo and the

/connect/communities/communityId/chatter/users/userId/photoresources aren't supported. Instead, use these new resources to work with user profile photos even when Chatter is off.

### Get, set, and delete user photos

Now you can work with user profile photos whether Chatter is on or off.

- /connect/user-profiles/userId/photo
- /connect/communities/communityId/user-profiles/userId/photo

To get a photo, make a GET request.

To delete a photo, make a DELETE request.

To post an image that was already uploaded to Files, make a POST request and pass a Photo Input request body.

To upload a new image, make a POST request and include the binary file in a multipart/form-data message.

To crop an image (either an existing image or while uploading), make a POST request and pass a Photo Input request body.

### **Feeds**

### Make a rich-text feed post

Make a POST request to the existing /chatter/feed-elements resource with the new Message Segment Input: Markup Begin and Message Segment Input: Markup End request bodies to make a rich-text feed post.

# Include an inline image in a feed post

Make a POST request to the existing /chatter/feed-elements resource with the new Message Segment Input: Inline Image request body to include an inline image in a feed post.

### Get information about whether a feed element is muted

Make a GET request to the new /chatter/feed-elements/feedElementId/capabilities/mute resource to get information about whether a feed element is muted.

#### Mute or unmute a feed element

Make a PATCH request to the new /chatter/feed-elements/feedElementId/capabilities/mute resource with the new isMutedByMe parameter or with the new Mute Capability Input to mute or unmute a feed element.

#### Get the URL for the mute feed

Make a GET request to the new /chatter/feeds/mute/me resource to get the URL for the mute feed for the context user.

### Get the mute feed

Make a GET request to the new /chatter/feeds/mute/me/feed-elements resource to get a feed of muted feed elements.

### **Files**

# Set or update the sharing option for a file

Make a POST or PATCH request to the existing /chatter/files/fileId resource with the new sharingOption parameter to set or update the sharing option for a file.

Make a POST request to the existing /chatter/folders/**folderId**/items resource with the new sharingOption parameter to set the sharing option for a file.

Make a POST request to the existing /chatter/users/userId/files resource with the new sharingOption parameter to set the sharing option for a file

### Get information about a file's supported previews

Make a GET request to the new /chatter/files/**fileId**/previews resource to get information about a file's supported previews.

### Generate a file preview

Make a PATCH request to the new /chatter/files/fileId/previews resource to generate a file preview.

# Get a file preview or a specific page in a file preview

Make a GET request to the new /chatter/files/**fileId**/previews/**previewFormat** resource, where previewFormat is one of these:

- pdf—Preview format is PDF.
- svg—Preview format is SVG.
- thumbnail—Preview format is 240 x 180 PNG.
- big-thumbnail—Preview format is 720 x 480 PNG.
- tiny-thumbnail—Preview format is 120 x 90 PNB.

Make the same request using the startPageNumber and endPageNumber parameters to get a specific page of a file preview.

### **Files Connect**

#### Files Connect resources available in communities

These resources are now available in communities:

- /connect/communities/communityId/content-hub/repositories
- /connect/communities/communityId/content-hub/repositories/repositoryId
- /connect/communities/communityId/content-hub/repositories/repositoryId/files/repositoryFileId
- /connect/communities/communityId/content-hub/repositories/repositoryId/files/repositoryFileId/content
- /connect/communities/communityId/content-hub/repositories/repositoryId/folders/repositoryFolderId/items

### Get the user and group directory entries of a repository

Make a GET request to the new /connect/content-hub/repositories/**repositoryId**/directory-entries resource to get the user and group directory entries of a repository.

# Get or update the permissions of a repository file

Make a GET request to the new

/connect/content-hub/repositories/**repositoryId**/items/**repositoryItemId**/permissions resource to the get the permissions of a repository file.

Make a PATCH request to the new

 $/{\tt connect/content-hub/repositories}/ \textit{\textbf{repositoryId}}/{\tt items/\textbf{repositoryItemId}}/{\tt permissions} \\ resource with the Files Connect Permission Collection Input to update the permissions of a repository file. \\$ 

Managing external file permissions is supported only for Google Drive.

# Get the permission types of a repository file

Make a GET request to the new

/connect/content-hub/repositories/**repositoryId**/items/**repositoryItemId**/permissions/types resource to get the permission types of a repository file.

Managing external file permissions is supported only for Google Drive.

### Get permissions information when creating a reference to an external file

Make a POST request to the /chatter/users/userId/files resource with the new

includeExternalFilePerimissionsInfo parameter set to true or with the File Input to get the permissions information when creating a reference to an external file.

# Get item types that are allowed to be created in a repository folder

Make a GET request to the new

/connect/content-hub/repositories/**repositoryId**/folders/**repositoryFolderId**/allowed-item-types resource to get the item types that are allowed to be created in a repository folder.

### Get information about an item type associated with a repository

Make a GET request to the new

/connect/content-hub/repositories/**repositoryId**/item-types/**repositoryItemTypeId**resource to get information about an item type.

# Create a repository file

Make a POST request to the existing

/connect/content-hub/repositories/**repositoryId**/folders/**repositoryFolderId**/items resource with the new Files Connect Item Input to create a repository file.

### Update a repository file

Make a PATCH request to the existing

/connect/content-hub/repositories/**repositoryId**/files/**repositoryFileId**resource with the new Files Connect Item Input to update a repository file.

# **Managed Topics**

# Get managed topics, including parent and children managed topics

Make a GET request to the existing /connect/communities/communityId/managed-topics resource with the existing managedTopicType parameter and the new depth parameter to get the managed topics, including the parent and children managed topics, for a community.

### Get managed topics associated with a given topic

Make a GET request to the existing /connect/communities/communityId/managed-topics resource with the existing managedTopicType parameter and the new recordId parameter to get the managed topics associated with a given topic.

### Get a managed topic's parent and children topics

Make a GET request to the existing /connect/communities/communityId/managed-topics/managedTopicId resource with the new depth parameter to get a managed topic's parent and children managed topics.

### Create a child managed topic

Make a POST request to the existing /connect/communities/communityId/managed-topics resource with the new parentId parameter or with the Managed Topic Input to create a child managed topic.

### Recommendations

Community managers (users with the "Create and Set Up Communities" or "Manage Communities" permission) can access, create, and delete recommendation audiences, recommendation definitions, and scheduled recommendations in their communities. Users with the "Modify All Data" permission can also access, create, and delete recommendation audiences, recommendation definitions, and scheduled recommendations.

These recommendations appear directly in the feed in communities in the Salesforce1 mobile browser app. They also appear, by default, on the right side of the home page and anywhere community managers add them using Community Builder in communities using the Summer '15 or later version of the Napili template.

### Delete a recommendation definition when the last scheduled recommendation is deleted

Make a DELETE request to the existing /connect/scheduled-recommendations/scheduledRecommendationId resource with the new deleteDefinitionIfLast parameter set to true. If you're requesting to delete the last scheduled recommendation for a particular recommendation definition, then the recommendation definition is also deleted.

### Get a list of recommendation audiences or create a recommendation audience

Make a GET or POST request to the new /connect/recommendation-audiences resource to get a list of recommendation audiences or to create a recommendation audience.

# Get information about, update, or delete a recommendation audience

Make a GET, PATCH, or DELETE request to the new

/connect/recommendation-audiences/**recommendationAudienceId** resource to get information about, update, delete a recommendation audience.

#### Get the members of a recommendation audience

Make a GET request to the new /connect/recommendation-audiences/**recommendationAudienceId**/members resource to get the members of a recommendation audience.

### Create a scheduled recommendation with a specific audience

Make a POST request to the existing /connect/scheduled-recommendations resource with the new recommendationAudienceId parameter or with the Scheduled Recommendation Input to create a scheduled recommendation with a specific audience.

# Update a scheduled recommendation with a specific audience

Make a PATCH request to the existing /connect/scheduled-recommendations/**scheduledRecommendationId** resource with the new recommendationAudienceId parameter or with the Scheduled Recommendation Input to update a scheduled recommendation with a specific audience.

### **Get static recommendations**

Make a GET request to these existing resources to get static recommendations:

- /chatter/users/userId/recommendations
- /chatter/users/userId/recommendations/view
- /chatter/users/userId/recommendations/view/apps
- /chatter/users/userId/recommendations/view/T
- /chatter/users/userId/recommendations/view/Today

#### Delete static recommendations

Make a DELETE request to the existing /chatter/users/users/userId/recommendations/action/objectID resource, where action is view and objectId is Today, to delete a custom recommendation.

# **Topics**

### Get the most recent renamed topic if there isn't an exact match

Make a GET request to the existing /connect/topics resource with the q parameter, the exactMatch parameter set to true, and the new fallBackToRenamedTopics parameter set to true. If there isn't an exact match, the most recent renamed topic match is returned. If there are multiple renamed topic matches, only the most recent is returned. If there are no renamed topic matches, an empty collection is returned.

### Reassign the topics on a record or feed item

Make a PUT request to the existing /connect/records/**recordId**/topics resource with the new Topic Names Input to remove all the assigned topics from a record or feed item and replace them with different topics.

# New and Changed Chatter REST API Request Bodies

# Async Queries (Pilot)

### **Async Query Input**

Use this new request body to submit an SOQL query to be processed asynchronously. The request body includes these properties:

- query—SOQL query string. The pilot release supports these SOQL features in WHERE statements: simple equality filtering;
   AND and OR clauses; 1-level relationship fields (no subqueries); GROUP BY; aggregate functions COUNT (field), SUM(),
   AVG().
- targetFieldMap—A map showing which SOQL query fields correspond to which target object fields.
- targetObject—An object that stores the results of the SOQL query. The object can be a standard or custom Salesforce object, a big object, or an external object.

### **Feeds**

# **Message Body Input**

The messageSegments property now includes Message Segment Input: Inline Image, Message Segment Input: Markup Begin, and Message Segment Input: Markup End request bodies.

### Message Segment Input: Inline Image

This new request body represents an inline image segment and has these properties:

- altText—Alt text for the inline image.
- fileId—ID of the inline image file.
- type—Value is InlineImage.

# Message Segment Input: Markup Begin

This new request body represents the beginning tag for rich text markup and has these properties:

- markupType—Specifies the type of rich text markup.
- type—Value is MarkupBegin.

# Message Segment Input: Markup End

This new request body represents the ending tag for rich text markup and has these properties

- markupType—Specifies the type of rich text markup.
- type—MarkupEnd

# **Mute Capability Input**

This new request body represents the ability to mute and unmute feed elements and has one property, isMutedByMe, that indicates whether the feed element is muted for the context user.

# **Files**

### **Content Capability Input**

This request body has one new property, sharingOption, that specifies the sharing option of the file.

### File Input

This request body has one new property, sharingOption, that specifies the sharing option of the file.

### **Files Connect**

#### File Input

This request body has one new property, includeExternalFilePerimissionsInfo, that specifies whether to include permission info when creating a reference to an external file.

# **Files Connect Field Value Input**

This new request body has these properties:

- name—Name of the field.
- value—Value of the field.

# **Files Connect Item Input**

This new request body has these properties:

- fields—List of fields for the item to be created.
- itemTypeId—ID of the item type.

# **Files Connect Permission Collection Input**

This new request body has these properties:

- permissionsToApply—List of permissions to apply to the file.
- permissionsToRemove—List of permissions to remove from the file.

### **Files Connect Permission Input**

This new request body has these properties:

- directoryEntryId—ID of the user or group.
- permissionTypesIds—List of IDs of the permission types.

# **Managed Topics**

### **Managed Topic Input**

This request body has one new property, parentId, that is the ID of the parent managed topic.

### **Recommendations**

# **Recommendation Audience Input**

This new request body has these properties:

- memberOperationType—The operation to carry out on the audience members.
  - Add—Adds specified members to the audience.
  - Remove—Removes specified members from the audience.
- members—A collection of user IDs.
- name—The unique name of the recommendation audience.

# **Scheduled Recommendation Input**

This request body has one new property, recommendationAudienceId, that is the ID of the audience for the scheduled recommendation.

### **User ID Collection Input**

This new request body has one property, userIds, that is a collection of user IDs.

# **Topics**

# **Topic Names Input**

This new request body has one property, topicNames, that is a list of topics to replace currently assigned topics on a record or feed item.

# New and Changed Chatter REST API Response Bodies

# Async Queries (Pilot)

### **Async Query**

This new response body contains information about an async query job. It contains these properties:

- jobId—Job ID. To get the status of an async query job, use this ID in an Async Query, Status request (/async-queries/jobId).
- query—SOQL query string. The pilot release supports these SOQL features in WHERE statements: simple equality filtering;
   AND and OR clauses; 1-level relationship fields (no subqueries); GROUP BY; aggregate functions COUNT (field), SUM(),
   AVG().
- status—Status of an async query job. One of these values:
  - Complete—The job is complete.
  - Error—The job has an error.
  - New—The job is new.
  - Running—The job is running.
  - Scheduled—The job is scheduled.
- targetFieldMap—A map showing which SOQL query fields correspond to which target object fields.
- targetObject—An object that stores the results of the SOQL query. The object can be a standard or custom Salesforce object, a big object, or an external object.

### **Feeds**

### Feed

This response body has one new property, respectsMute, that indicates whether the feed respects the mute feature.

### **Feed Element Capabilities**

This response body has one new property, mute, that indicates whether the feed element can be muted.

### **Feed Item Body**

The messageSegments property of this response body now includes the Message Segment: Inline Image, Message Segment: Markup Begin, and Message Segment: Markup End response bodies.

# Message Segment: Inline Image

This new response body represents an inline image in the feed body and has these properties:

- altText—Alt text for the inline image.
- contentSize—Size of the file in bytes.
- text—Alt text for the inline image or the ID of the inline image if no alt text is available.
- thumbnails—Information about the available thumbnails for the image.
- type—InlineImage
- url—The URL to the latest version of the inline image.

### Message Segment: Markup Begin

This new response body represents the beginning of rich text markup and has these properties:

- htmlTag—The HTML tag for this markup.
- markupType—Specifies the type of rich text markup.
- text—Empty string, "", for segments of this type.
- type—MarkupBegin

### Message Segment: Markup End

This new response body represents the end of rich text markup and has these properties:

- htmlTag—The HTML tag for this markup.
- markupType—Specifies the type of rich text markup.
- text—Empty string, "", for segments of this type.
- type—MarkupEnd

# **Mute Capability**

This new response body represents the ability to mute a feed element and has one property, isMutedByMe, that indicates whether the feed element is muted by the context user.

#### **Files**

### **Content Capability**

This response body has one new property, sharingOption, that specifies the sharing option for the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

### File Detail

This response body has one new property, sharingOption, that specifies the sharing option for the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

### **File Preview**

This new response body represents a file preview and has these properties:

- format—The format of the preview. Values are:
  - Pdf—Preview format is PDF.
  - Svg—Preview format is compressed SVG.
  - Thumbnail—Preview format is 240 x 180 PNG.
  - ThumbnailBig—Preview format is 720 x 480 PNG.
  - ThumbnailTiny—Preview format is 120 x 90 PNG.
- previewUrlCount—The total number of preview URLs for this preview format.

- previewUrls—A list of preview URLs.
- status—The availability status of the preview. Values are:
  - Available—Preview is available.
  - InProgress—Preview is being processed.
  - NotAvailable—Preview is unavailable.
  - NotScheduled—Generation of the preview isn't scheduled yet.
- url—The URL for the file preview.

#### **File Preview Collection**

This new response body represents a collection of file previews and has these properties:

- fileId—ID of the file.
- previews—Previews supported for the file.
- url—URL to the current page of file previews.

#### File Preview URL

This new response body represents a file preview URL and has these properties:

- pageNumber—The preview page number starting from zero, or null for PDFs.
- previewUrl—The file preview URL.

### **File Summary**

This response body has one new property, sharingOption, that specifies the sharing option for the file. Values are:

- Allowed—Resharing of the file is allowed.
- Restricted—Resharing of the file is restricted.

#### Files Connect

#### **External File Permission Information**

This new response body represents external file permissions information and has these properties:

- externalFilePermissionTypes—The available permission types for the parent folder of the external file, or null for non-external files or when includeExternalFilePermissionsInfo is false.
- externalFilePermissionsFailure—true if the retrieval of external file information failed or if includeExternalFilePermissionsInfo is false; false otherwise.
- externalFilePermissionsInfoFailureReason—A failure explanation, if includeExternalFilePermissionsInfo is true and there was a failure; null otherwise.
- externalFileSharingStatus—Specifies the current sharing status for the external file. Values are:
  - DomainSharing—File is shared with the domain.
  - PrivateSharing—File is private or shared only with individuals.
  - PublicSharing—File is publicly shared.
- repositoryPublicGroups—The available public groups in the external repository or null for non-external files or when includeExternalFilePermissionsInfo is false.

### File Detail

This response body has one new property:

• externalFilePermissionInformation—External file permission information, such as available groups, available permission types, and current sharing status, or null for non-external files or when includeExternalFilePermissionsInfo is false.

# **File Summary**

This response body has one new property:

externalFilePermissionInformation—External file permission information, such as available groups, available
permission types, and current sharing status, or null for non-external files or when
includeExternalFilePermissionsInfo is false.

# **Files Connect Allowed Item Type Collection**

This new response body represents the item types that are allowed to be created in the repository folder and has one property, allowedItemTypes, that is the collection of item types allowed to be created in the repository folder.

#### **Files Connect Field Definition**

This new response body represents the field definition for the item type and has these properties:

- displayName—Label or caption for the field.
- isMandatory—Specifies whether this field is mandatory for the item type.
- maxLength—The maximum length of the value of the field.
- name—Name of the field.
- type—Specifies the data type of the value of the field. Values are:
  - BooleanType
  - DateTimeType
  - DecimalType
  - HtmlType
  - IdType
  - IntegerType
  - StringType
  - UriType
  - XmlType

### **Files Connect Item Type Detail**

This new response body represents detailed information about an item type associated with a repository folder and has these properties:

- contentStreamSupport—Specifies support for content streaming. Values are:
  - ContentStreamAllowed
  - ContentStreamNotAllowed
  - ContentStreamRequired
- description—Description of the item type.
- displayName—Display name of the item type.
- fields—A list of fields that can be set for the item type.
- id—ID of the item type.
- isVersionable—Indicates whether the item type can have versions.
- url—URL to the detailed information of the item type.

# **Files Connect Item Type Summary**

This new response body represents the summary of an item type associated with a repository folder and has these properties:

- contentStreamSupport—Specifies support for content streaming. Values are:
  - ContentStreamAllowed
  - ContentStreamNotAllowed
  - ContentStreamRequired
- description—Description of the item type.
- displayName—Display name of the item type.
- id—ID of the item type.
- isVersionable—Indicates whether the item type can have versions.
- url—URL to the detailed information of the item type.

#### **Files Connect Permission**

This new response body represents a permission and has these properties:

- directoryEntry—The detailed information of a directory entry.
- isUpdatable—Specifies whether this permission can be updated.
- rights—A collection of permission types.

### **Files Connect Permission Collection**

This new response body represents a collection of permissions and has one property, permissions, that is a collection of permissions.

### **Files Connect Permission Type**

This new response body represents a permission type and has these properties:

- id—The internal ID of the permission type in the repository.
- label—The label as returned by the repository.

### **Repository Directory Entry Collection**

This new response body represents a collection of repository directory entries and has one property, directoryEntries, that is a collection of repository directory entries.

#### **Repository File Summary**

This response body has one new property, itemTypeUrl, that is the URL to the item type information.

### **Repository Folder Summary**

This response body has one new property, itemTypeUrl, that is the URL to the item type information.

### **Repository Group Summary**

This new response body represents a repository group and has these properties:

- domain—Domain of the group.
- email—Email of the group.
- groupType—Specifies the type of group. Values are:
  - Everybody—Group is public to everybody.
  - EverybodyInDomain—Group is public to everybody in the same domain.
  - Unknown—Group type is unknown.
- id—ID of the group.
- name—Name of the group.

• type—The type of entry. Value is GroupEntry.

### **Repository Permission Type Collection**

This new response body represents a collection of permission types and has one property, permissionTypes, that is a collection of permission types.

# **Repository User Summary**

This new response body represents a repository user and has these properties:

- domain—Domain of the user.
- email—Email of the user.
- firstName—First name of the user.
- id—ID of the user.
- lastNameLast name of the user.
- type—The type of entry. Value is UserEntry.

# **Managed Topics**

### **Managed Topic**

This response body has these new properties:

- children—Children managed topics of the managed topic.
- parent—Parent managed topic of the managed topic.

### Recommendations

### **Recommendation Audience**

This new response body has these properties:

- id—18-character ID of the recommendation audience.
- memberCount.—Number of members in the recommendation audience.
- members—Members of the recommendation audience.
- name—Name of the recommendation audience.
- url—URL for the recommendation audience.

# **Recommendation Audience Collection**

This new response body has these properties:

- audienceCount—The total number of recommendation audiences.
- currentPageUrl—URL to the current page.
- nextPageUrl—URL to the next page.
- previousPageUrl—URL to the previous page.
- recommendationAudiences—A collection of recommendation audiences.

# **Recommended Object**

The idOrEnum property now supports the enum value Today for static recommendations that don't have an ID.

### **Scheduled Recommendation**

This response body has one new property, recommendationAudienceId, that is the ID of the audience for the scheduled recommendation.

#### **User Reference Collection**

This new response body has these properties:

- currentPageUrl—URL to the current page.
- nextPageUrl—URL to the next page.
- previousPageUrl—URL to the previous page.
- userCount—Number of users in the collection.
- users—A collection of user references.

# Reports and Dashboards REST API

Reports and Dashboards REST API enhancements enable you to save and clone dashboards, as well as give you access to new report and dashboard properties.

#### IN THIS SECTION:

## New Reports and Dashboards REST API Methods

You can now save and clone dashboards using the new Reports and Dashboards REST API methods.

## Changed Reports and Dashboards REST API Request and Response Bodies

Reports and Dashboards REST API includes new properties in reportMetadata and dashboardMetadata for request and response bodies of resources.

## New Reports and Dashboards REST API Methods

You can now save and clone dashboards using the new Reports and Dashboards REST API methods.

The Reporting REST API has the following new methods.

Resource	Description	Supported HTTP Method	Resource URL
Dashboard Results	Saves changes to the dashboard.	PATCH	/services/data/v35.0/analytics/dashboards/ <dashboardid></dashboardid>
Dashboard List	Creates a copy of the dashboard.	POST	/services/data/v35.0/analytics/dashboards?cloneId≒dashboardId>

For more information about these methods, see the Reports and Dashboards REST API Developer's Guide.

## Changed Reports and Dashboards REST API Request and Response Bodies

Reports and Dashboards REST API includes new properties in reportMetadata and dashboardMetadata for request and response bodies of resources.

reportMetadata contains the following new properties for the Report, Report List, Execute Sync, Execute Async, and Instances Results resources.

Property	Description	
Chart	Each chart contains the following properties:	
	• chartType–Type of chart.	

Property	Description	
	<ul><li>groupings–Groupings included in the report.</li><li>hasLegend–Indicates whether the report has a legend.</li></ul>	
	<ul> <li>summaries—Unique identities for summary or custom summary formula fields in the report, like a!Amount and s!Amount.</li> </ul>	
	<ul><li>summaryAxisLocations—Specifies the axis that shows the summary values.</li><li>title—Name of the chart.</li></ul>	
showGrandTotal	Indicates whether the report shows the grand total.	
showSubTotals	Indicates whether the report shows subtotals, such as column or row totals.	

dashboardMetadata contains the following new properties for the Dashboard List and Dashboard Results resources.

Property	Description	
aggregates	Unique identities for summary or custom summary formula fields in the report. For example:	
	a!Amount represents the average for the Amount column.	
	<ul> <li>s! Amount represents the sum of the Amount column.</li> </ul>	
	m! Amount represents the minimum value of the Amount column.	
	• x! Amount represents the maximum value of the Amount column.	
	• s! < customfieldID> represents the sum of a custom field column. For custom fields and custom report types, the identity is a combination of the summary type and the field ID.	
autoSelectColumns	Indicates whether groupings and aggregates are automatically selected.	
groupings	Report groupings included in the dashboard.	
useReportChart	Indicates whether the dashboard component uses the chart as defined in the report.	
visualizationProperties	Each chart visualization has the following properties:	
(for chart only)	<ul> <li>axisRange—Range of values specified for the axis.</li> </ul>	
	<ul> <li>groupByType—Type of second-level grouping.</li> </ul>	
	<ul> <li>legendPosition—Position of legend on the grid.</li> </ul>	
	<ul> <li>showValues—Indicates whether to include values in the chart.</li> </ul>	
layout	For dashboards created in Lightning Experience, this property contains a components property that provides the following details about each dashboard component:	
	<ul> <li>colspan—Width of component in columns. For example, if colspan=3, then the component spans 3 columns.</li> </ul>	
	<ul> <li>rowspan-Height of component in rows. For example, if rowspan=4, then the component spans 4 rows.</li> </ul>	
	• column–Column position on the grid.	
	• row–Row position on the grid.	



Note: The aggregateName property under the dashboardMetadata property has been deprecated.

For more information about these properties, see the Reports and Dashboards REST API Developer's Guide.

## Live Agent REST API

The Live Agent REST API includes new and changed resources.

## **New Resources**

## ChasitorIdleTimeoutWarningEvents

https://hostname/chat/rest/Chasitor/ChasitorIdleTimeoutWarningEvent Informs the server when a warning is shown or cleared so that a transcript event can be created.

## **Changed Resources**

## ChatEnd

https://hostname/chat/rest/Chasitor/ChatEnd

There's a new parameter, ChatEndReason. Include this parameter in the request body of your request to specify the reason that the chat ended. For example:

```
{ reason: "client" }
```

## Messages

https://hostname/chat/rest/System/Messages

There's a new field, chasitorIdleTimeout, on the ChatEstablished and ChatTransferred response objects. This field gives the settings for visitor idle (customer) time-out. The field type, ChasitorIdleTimeoutSettings, is also new.

Starting in API version 35.0, the ChatEnd message has new response properties that include attached record IDs. You can use this Visualforce component to display the attached record IDs in the post-chat page:

<apex:outputText value="{!\$CurrentPage.parameters.attachedRecords}" /><br />
ChatEnded also has a new parameter, ChatEndReason, which represents the reason that the chat ended.

## Data.com API

The Data.com APIs provide access to the most up-to-date Data.com records. You can search, match, and purchase company and contact records.

We've updated the DandBCompany and DatacloudCompany objects with more firmographics details.

## New Firmographics fields in the DandBCompany Object

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.
- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc, FourthSic8, FourthSic8Desc, FifthSic8Desc, FifthSic8Desc, SixthSic8 and SixthSic8Desc—The eight-digit Standard Ind

FifthSic8Desc, SixthSic8, and SixthSic8Desc—The eight-digit Standard Industrial Classification (SIC) code and description that's used to categorize business establishments by industry.

# EDITIONS

Available in: Salesforce Classic

Available in: **Developer**Edition, **Professional** Edition
(add-on), **Enterprise** Edition,
and **Unlimited** Edition.

- FortuneRank—The numeric value of the company's Fortune 1000 ranking. A null or blank value means that the company isn't ranked as a Fortune 1000 company.
- IncludedInSnP500— A true or false value. If true, the company is listed in the S&P 500 Index. If false, the company isn't listed in the S&P 500 Index.
- PremisesMeasure—A numeric value for the measurement of the premises.
- PremisesMeasureReliability—A descriptive accuracy of the measurement such as actual, estimated, or modeled.
- PremisesMeasureUnit—A descriptive measurement unit such as acres, square meters, or square feet.
- EmployeeQuanityGrowthRate—The yearly growth rate of the number of employees in a company expressed as a
  decimal percentage. The data includes the total employee growth rate for the past two years.
- SalesTurnoverGrowthRate—The increase in annual revenue from the previous value for an equivalent period expressed
  as a decimal percentage.

## New Firmographics fields in the DatacloudCompany Object

- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

## New Firmographics fields in the DatacloudDandBCompany Object

- PrimarySic8, PrimarySic8Desc, SecondSic8, SecondSic8Desc, ThirdSic8, ThirdSic8Desc,
  FourthSic8, FourthSic8Desc, FifthSic8, FifthSic8Desc, SixthSic8, and SixthSic8Desc—The
  eight-digit Standard Industrial Classification (SIC8) code and description that's used to categorize business establishments by
  industry.
- PriorYearEmployees—The total number of employees for the prior year.
- PriorYearRevenue—The annual revenue for the prior year.

# **Tooling API**

Tooling API includes new objects and headers, behavior changes, and enhanced support for a REST resource.

The Force.com Tooling API Developer's Guide contains all Tooling API information.

## **Behavior Changes**

## Expanded Support for COUNT ()

SOQL COUNT () is now supported for all objects in Tooling API.

## **Retrieval Limit**

To ensure performance for client applications, only one record can be returned for any Metadata or FullName field.

## Sandbox

Two new objects, SandboxInfo and SandboxProcess, allow you to create and refresh sandboxes.

## **New Objects**

## ApexEmailNotification

Stores Salesforce users and external email addresses to be notified when unhandled Apex exceptions occur.

## **AssignmentRule**

Represents an assignment rule associated with a case or lead.

## AutoResponseRule

Represents an auto-response rule that sets conditions for sending automatic email responses to lead or case submissions based on the attributes of the submitted record.

## DebugLevel

Represents a set of logging levels to assign to a TraceFlag. If you delete a debug level, all of the trace flags that use it are deleted.

## HomePageComponent

Represents a home page component.

## HomePageLayout

Represents a home page layout.

## OwnerChangeOptionInfo

Represents default and optional actions that can be performed when a record's owner is changed.

## **PostTemplate**

Represents a template for feed posts.

#### SandboxInfo

Represents a sandbox.

## SandboxProcess

Represents the copy process of a sandbox.

## TransactionSecurityPolicy

Represents a transaction security policy definition, including events monitored and actions to take.

## **Changed Objects**

## CompactLayout

Added the MasterLabel field and the system field LastModifiedById.

## DataType

Added the DeveloperName field.

#### **EntityDefinition removed fields**

- IsCreatable is no longer available on EntityDefinition. Use IsCreatable on UserEntityAccess instead.
- IsDeletable is no longer available on EntityDefinition. Use IsDeletable on UserEntityAccess instead.

## **EntityDefinition new fields**

- IsCustomSetting
- IsDeprecatedAndHidden
- IsEverCreatable
- IsEverDeletable
- IsEverUpdatable
- IsExternal
- IsLayoutable
- IsReplicatable
- IsRetrievable
- IsSearchable
- IsSearchLayoutable
- IsTriggerable

- NewUrl
- OwnerChangeOptions
- RecordtypesSupported

## **EntityParticle new fields**

- ByteLength
- DefaultValueFormula
- Digits
- FieldDefinition
- FieldDefinitionId
- InlineHelpText
- IsAutoNumber
- IsCaseSensitive
- IsCreatable
- IsDefaultedOnCreate
- IsDependentPicklist
- IsDeprecatedAndHidden
- IsDisplayLocationInDecimal
- IsEncrypted
- IsHTMLFormatted
- IsIdLookup
- IsLayoutable
- IsNamePointing
- IsPermissionable
- IsUnique
- IsUpdatable
- IsWriteRequiresMasterRead
- Mask
- MaskType
- Name
- ReferenceTargetField
- RelationshipName
- RelationshipOrder
- ValueType
- ValueTypeId

## **EntityParticle removed fields**

- ServiceDataType
- ServiceDataTypeId

## FieldDefinition now searchable

The property searchable is available.

#### FieldDefinition new fields

- IsIndexed
- ValueTypeId

## FieldDefinition removed field

ServiceDataTypeId

## FlexiPage new field

ParentFlexiPage

## Flow changed field

Metadata

## Layout new field

LayoutType

## SearchLayout new type

SearchLayoutField

## ServiceFieldDataType

Removed from version 35.0 and later.

## RelationshipDomain and RelationshipInfo new field

JunctionIdListName

## TraceFlag new fields

DebugLevelId

LogType

StartDate

## **New Headers for SOAP**

## AllOrNoneHeader

Allows a call to roll back all changes unless all records are processed successfully.

## AllowFieldTruncationHeader

Specifies that for some fields, when a string is too large, the operation fails. Without the header, strings for these fields are truncated.

## DebuggingHeader

Return the debug log in the output header, DebuggingInfo, and specify the level of detail in the debug log.

## Disable Feed Tracking Header

Specifies that changes made in the current call are tracked in feeds.

#### MetadataWarningsHeader

Allows you to save metadata even if warnings are returned.

## **PackageVersionHeader**

Specifies the package version for each installed managed package.

## SessionHeader

Specifies the session ID returned from the login server after a successful login (). This session ID is used in all subsequent calls.

## **New Headers for REST**

## **Call Options**

Specifies the client-specific options when accessing REST API resources. For example, you can write client code that ignores namespace prefixes by specifying the prefix in the call options header.

#### **Limit Info**

This response header is returned in each request to the REST API. You can use the information to monitor API limits.

## Package Version

Specifies the version of each package referenced by a client. A package version is a number that identifies the set of components and behavior contained in a package. This header can also be used to specify a package version when making calls to an Apex REST web service.

## **Query Options**

Specifies options used in a query, such as the query results batch size. Use this request header with the Query resource.

## **New Capabilities for REST**

## POST JSON arrays of test methods to runTestsSynchronous

You can now POST a JSON array of test methods to the runTestsSynchronous endpoint. Formerly, the runTestsSynchronous endpoint supported only the GET verb. To run tests synchronously, all test methods in a test run must be in the same class.

Format:

```
POST
/runTestsSynchronous/
Body:
{"tests":<tests array>}
```

Example <tests array>:

```
[{
"classId" : "yourClassId",
"testMethods" : ["testMethod1","testMethod2","testMethod3"]
}];
```

## **Documentation Changes**

## ChildRelationship

Information about the object ChildRelationship is available.

## **EntityDefinition and FieldDefinition**

Information about SOSL limitations on EntityDefnition and FieldDefinition is available.

#### StandardAction

Information about the object StandardAction is available.

## **Result Type**

Information about result types is available.

#### **SOSL Limitations**

Information about SOSL limitations for EntityDefinition and FieldDefinition is available.

## UserFieldAccess

Information about UserFieldAccess is available.

## **Legacy Flow Limitations**

Legacy flows created with the Desktop Flow Designer can't be modified with the API. Update your flow by recreating it with the Cloud Flow Designer.

## Metadata API

Metadata API includes new and changed types and fields.

## **New Metadata Types**

#### CustomFeedFilter

Represents a custom feed filter that limits the feed view to feeds from the Cases object. The custom feed filter shows only feed items that satisfy the criteria specified in the CustomFeedFilter definition.

#### LiveChatSensitiveDataRule

Represents a rule for blocking (masking or deleting) data of a specified pattern. Written as a regular expression (regex).

## PlatformCachePartition

Represents a partition in the Platform Cache.

## TransactionSecurityPolicy

Represents a transaction security policy definition, including events monitored and actions to take.

## Updated Metadata Types and Fields

These metadata types have changed or have fields that have been added or changed.

## AuraDefinitionBundle

The following fields have been added:

#### apiVersion

The API version for this definition bundle. When you create an Aura bundle, you can specify the API version to save it with.

## description

The specification of the Aura bundle.

## packageVersions

The list of installed managed package versions that this Aura definition bundle references.

The following fields have been changed:

#### markup

This field is no longer required.

#### type

This field is no longer required.

## **AuthProvider**

The following field has changed:

## ProviderType

Accepts GitHub as a provider type value. Use the GitHub provider to log in users of your Force.com app to GitHub using OAuth. When logged in to GitHub, your app can make calls to GitHub APIs. The GitHub provider isn't available as a single sign-on provider, which means users can't log in to your Salesforce organization using their GitHub login credentials.

## ConnectedApp

The following field has been added:

#### plugin

The name of a custom Apex class that extends Auth. Connected AppPlugin to customize the behavior of the app.

## CustomApplication

The following fields have been added:

#### footerColor

Determines the footer color in a Salesforce console app.

#### headerColor

Determines the header color in a Salesforce console app.

## primaryTabColor

Determines the primary tab color in a Salesforce console app.

## CustomObject

The following field has been added.

#### enableSearch

Indicates whether the object can be searched via the search () call (true) or not (false). By default, search is disabled for new custom objects. For more information, see Search Faster by Disabling Search for Some Custom Objects.

#### Dashboard

The following fields have been added:

## dashboardGridLayout

Lists the included DashboardGridComponent objects, specifies the number of dashboard columns, and sets each dashboard row's height in pixels.

#### folderName

Name of the folder that houses the dashboard.

## isGridLayout

Specifies whether a dashboard uses the Lightning Experience layout (true) or not (false).

## **FlexiPage**

The following field has been added:

## parentFlexiPage

This field is reserved for future use.

The following fields have been added to the FlexiPageRegion subtype:

## appendable

This field is reserved for future use.

#### mode

This field is reserved for future use.

#### prependable

This field is reserved for future use.

## replaceable

This field is reserved for future use.

#### type

The FlexiPage region type. This is a required field.

## Flow

The following fields have been added to the FlowDynamicChoiceSet subtype.

#### picklistField

Required for picklist choices. The field whose available values you want to retrieve from the database and use to generate the picklist choice. For example, use "Industry" to dynamically generate one choice for each available value on the Industry picklist field.

## picklistObject

Required for picklist choices. The sObject whose field metadata you want to retrieve from the database and use to generate the picklist choice. For example, use "Account" to dynamically generate choices from a picklist field on the Account object.

The following field of the FlowDynamicChoiceSet subtype has been updated.

#### dataType

The dataType field now accepts these additional FlowDataType enumeration values: Picklist and Multipicklist.

## Layout

The following field has been added to the FeedLayoutFilter subtype:

#### feedFilterName

The name of a CustomFeedFilter component. Names are prefixed with the name of the parent object. For example, Case.MyCustomFeedFilter.

## LiveChatAgentConfig

The following field has been added:

## enableAssistanceFlag

Indicates whether agents can raise an assistance flag to notify a supervisor that they need help.

#### LiveChatButton

The following fields have been added to the LiveChatButton type:

## chasitorIdleTimeout

Specifies the time that a customer has to respond to an agent message before the session automatically ends

## chasitorIdleTimeoutWarning

Specifies the time that a customer has to respond to an agent message before a warning appears and a timer begins a countdown.

## optionsHasChasitorIdleTimeout

Indicates whether chats are automatically ended if the customer doesn't respond within a specified period (true) or not (false).

## LiveChatUserConfig

The following field has been added:

#### OptionsHasAssistanceFlag

Determines whether agents can raise an assistance flag to notify a supervisor that they need help.

## ManagedTopic

The following field has been added:

## parentName

The name of a parent topic for which this topic is a child. Child topics are accessible from the subtopics section of the parent topic page and their feeds are added to the parent topic feed. Only navigational topics support parent-child relationships.

## Report

The following field has been added:

## folderName

Name of the folder that houses the report.

#### RunTestsResult

The following field has been added:

## apexLogId

The ID of an ApexLog object that is created at the end of a test run. The ApexLog object is created if there is an active trace flag on the user running an Apex test, or on a class or trigger being executed.

## SecuritySettings

The following field has been added to the SessionSettings subtype:

#### enableCSPOnEmail

Indicates whether a content security policy is enabled for the email template. A content security policy helps prevent cross-site scripting attacks by whitelisting sources of images and other content.

## **Updated Headers**

This metadata header has a field that has changed.

## DebuggingHeader

The following field has been changed:

## LogInfo.level

The LogCategoryLevel enumeration has a new value: None.

SEE ALSO:

Deployment

# Salesforce Console API (Integration Toolkit)

The toolkit includes new and updated methods that let you customize a console programmatically. This feature is available in Salesforce Classic only.

For more information (English only) about the toolkit, see the *Salesforce Console Integration Toolkit Developer's Guide*.

The following methods are new or have changed in API version 35.0.

## closeTab()

A new argument, callback, has been added to receive responses from pinned tabs in a console.

## reopenLastClosedTab()

Reopens the last closed primary tab, and any of its subtabs that were open, the moment it was closed.

## **EDITIONS**

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

Available in: **Performance** and **Developer** Editions with the Sales Cloud

Available in: **Enterprise** and **Unlimited** Editions with the Sales Cloud for an extra cost

# **Invocable Actions**

Invocable Actions represent the actions that can be accomplished on Salesforce with APIs. Invocable actions are available through the REST API. The following action has changed:

#### Post to Chatter Action

Posting to community-specific groups has been improved with two new fields. These fields are valid only if Salesforce Communities is enabled.

- visibilty—Specifies whether the feed item is available to all users or only to internal
  users
- communityId—Required if posting to a user or Chatter group that belongs to a Salesforce Community.

For more information on invocable actions, see the Actions Developer's Guide.

## **EDITIONS**

Available in: Salesforce Classic

## Available in:

- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# Other API Changes

We're changing our API login endpoint routing. We've also added and changed API error codes and made enhancements to sending email messages.

## IN THIS SECTION:

## Retirement of Endpoint Routing for API Logins

We're changing our endpoint routing to deliver better performance and higher availability for our dedicated API endpoints.

## **API Status Code Changes**

New error codes have been added related to sending email messages and rendering email templates, and one error code has been changed.

## Choose Email Message Options for Opted-Out Recipients and Template Rendering

When using SingleEmailMessage, you can now choose whether to enforce the Email Opt Out setting of recipients. Previously, the Email Opt Out setting was ignored for SingleEmailMessage and was enforced for MassEmailMessage only. Use other enhancements in SingleEmailMessage for more flexibility in setting recipients and email templates. Also, with the new SOAP API call, renderEmailTemplate(), you can render text bodies of email templates directly without having to call sendEmail().

## Retirement of Endpoint Routing for API Logins

We're changing our endpoint routing to deliver better performance and higher availability for our dedicated API endpoints.

Currently, you can use www.salesforce.com as an API login endpoint, which then routes you to the correct login instance. As of January 1, 2016, we are removing internal routing, and you must change your API login endpoints from www.salesforce.com to https://login.salesforce.com.

This change applies only to API login traffic. Logging in from a browser by clicking **login** still works.

## **API Status Code Changes**

New error codes have been added related to sending email messages and rendering email templates, and one error code has been changed.

## **New Error Codes**

These error codes can be returned by sendEmail().

## EMAIL ADDRESS BOUNCED

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

## EMAIL OPTED OUT

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

These error codes can be returned by the new renderEmailTemplate() call or by sendEmail().

## EMAIL\_TEMPLATE FORMULA ERROR

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

## EMAIL TEMPLATE MERGEFIELD ACCESS ERROR

You don't have access to one or more merge fields in this template. Contact your Salesforce administrator to request access.

## EMAIL TEMPLATE MERGEFIELD ERROR

One or more merge fields don't exist. Check the spelling of field names.

#### EMAIL TEMPLATE MERGEFIELD VALUE ERROR

One or more merge fields have no value. Update the records before sending the email to provide values.

#### EMAIL TEMPLATE PROCESSING ERROR

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

## **Changed Error Codes**

## UNABLE TO LOCK ROW

The error message now contains the IDs of the records that couldn't be locked, when available.

## Choose Email Message Options for Opted-Out Recipients and Template Rendering

When using SingleEmailMessage, you can now choose whether to enforce the Email Opt Out setting of recipients. Previously, the Email Opt Out setting was ignored for SingleEmailMessage and was enforced for MassEmailMessage only. Use other enhancements in SingleEmailMessage for more flexibility in setting recipients and email templates. Also, with the new SOAP API call, renderEmailTemplate(), you can render text bodies of email templates directly without having to call sendEmail().

To determine how opted-out recipients are handled in an email, first add recipients to the To, CC, and BCC fields by using their IDs. Next, set the <code>optOutPolicy</code> of SingleEmailMessage to the appropriate value. For a description of this field and all other new and changed fields of SingleEmailMessage, see <code>sendEmail()</code> and SingleEmailMessage Changes.

The new renderEmailTemplate () SOAP API call replaces merge fields in the template text bodies with their corresponding values from Salesforce objects. This call returns the converted template bodies.

As part of the new renderEmailTemplate () SOAP API call, new status codes were added. See New Error Codes.

# **ISVforce**

Winter '16 includes enhancements to the Environment Hub and the SignupRequest API. The License Management App (LMA) is also now available in Lightning Experience.

## IN THIS SECTION:

## Manage App Licenses in Lightning Experience

The License Management App (LMA) is now available in Lightning Experience. View connected packages, modify license records, and support subscribers in an intuitive, efficient user interface. This feature is available in both Lightning Experience and Salesforce Classic.

## Find and Manage Environment Hub Orgs More Easily

It's now easier to find and manage the hub member organizations that matter to you. You can add topics to hub members, view and filter organizations by member type, and quickly check My Domain status. This feature is available in Salesforce Classic only.

## SignupRequest API Provides More Flexibility Creating Organizations

You can now create organizations for development, testing, and demo purposes with the SignupRequest API. You can also connect organizations directly to the Environment Hub, as well as choose the language of the organizations you create. In addition, you can automate ISV business processes using the Signup Request object in Visual Workflow and Lightning Process Builder.

# Manage App Licenses in Lightning Experience

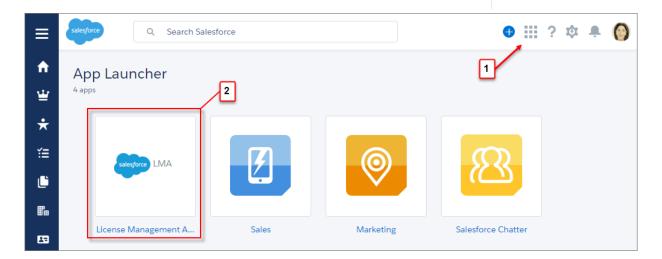
The License Management App (LMA) is now available in Lightning Experience. View connected packages, modify license records, and support subscribers in an intuitive, efficient user interface. This feature is available in both Lightning Experience and Salesforce Classic.

If you already have the LMA installed, the new version (v1.18) will be pushed to your license management org automatically. To open the LMA in Lightning Experience, first select the App Launcher (1) and then select **License Management App (2)**.



#### Available in:

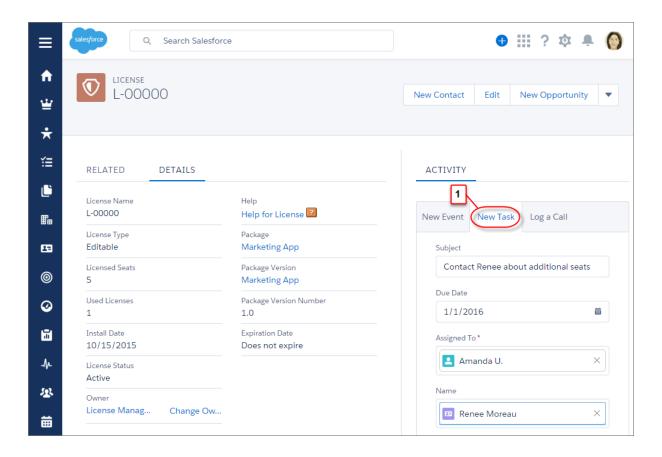
- Enterprise
- Performance
- Unlimited



The LMA in Lightning Experience supports all of the license management tasks you're accustomed to performing in Salesforce Classic, including:

- Viewing packages that you've connected to the AppExchange.
- Modifying a license record to change a customer's access to your offering.
- Refreshing licenses for a package.
- Logging in to subscriber orgs to provide assistance.

And because Lightning Experience integrates the sales process throughout the app, it's easier to manage relationships with customers and prospects directly from the LMA. For example, within the LMA you can create a reminder for yourself to follow-up with a subscriber about adding more seats to their org (1).



## Other Changes

LMA v1.18 also includes these changes and enhancements.

## New Field: Version Number

We've added a new field, Version Number, to the Package Version detail page to help you differentiate between package versions.

## New Behavior: Subscriber Org Opens in a New Window in Lightning Experience

When you log in to a subscriber org in Lightning Experience, the Subscriber Support Console opens in a new window. If you don't see the window, try temporarily disabling any pop-up blockers.

While logged in to a subscriber's org, you can't use other features in the LMA. To use these features, first log out of the subscriber org, and then log in to your license management org again.

## Find and Manage Environment Hub Orgs More Easily

It's now easier to find and manage the hub member organizations that matter to you. You can add topics to hub members, view and filter organizations by member type, and quickly check My Domain status. This feature is available in Salesforce Classic only.

# EDITIONS

## Available in:

- Enterprise
- Performance
- Unlimited

## IN THIS SECTION:

## Add Topics to Hub Member Organizations in the Environment Hub

If you manage many organizations in the Environment Hub, categorize them with topics so that you can easily find the organizations that interest you. This feature is available in Salesforce Classic only.

## View and Filter Organizations by Member Type in the Environment Hub

It can be difficult to track the organizations used to support an app over the app's lifecycle. But now you can view member organization type—like sandbox, patch, and release—in the Environment Hub. You can also create list views and filter by member type, allowing you to quickly locate organizations according to the role they play in your business. This feature is available in Salesforce Classic only.

## View My Domain Status for Hub Member Organizations in the Environment Hub

You get the best single sign-on (SSO) performance in the Environment Hub when you enable My Domain for each organization in the hub network. A new field on the Hub Member Detail page makes it easy to see if you've set up My Domain in an organization. This feature is available in Salesforce Classic only.

## Add Topics to Hub Member Organizations in the Environment Hub

If you manage many organizations in the Environment Hub, categorize them with topics so that you can easily find the organizations that interest you. This feature is available in Salesforce Classic only.

Categorize hub member organizations based on criteria you choose. For example, you could create a topic for organizations associated with an app that you sell. Then create a list view that filters by this topic, letting you quickly find the organizations. Salesforce remembers the topics that you create and offers them as suggestions on new hub members.

- 1. From Setup, enter Topics for Objects in the Quick Find box, and then select Topics for Objects.
- 2. From the object list, choose **Hub Member**, and then select **Enable Topics**.
- **3.** Add topics from the Hub Member Detail page for any organization connected to the Environment Hub.

## View and Filter Organizations by Member Type in the Environment Hub

It can be difficult to track the organizations used to support an app over the app's lifecycle. But now you can view member organization type—like sandbox, patch, and release—in the Environment Hub. You can also create list views and filter by member type, allowing you to quickly locate organizations according to the role they play in your business. This feature is available in Salesforce Classic only.

The Member Type field appears on the Hub Member Detail page, and you can add it to a hub member list view. We recognize these kinds of organizations.

- Branch Orgs
- Patch Orgs
- Release Orgs
- Sandbox Orgs
- Trialforce Management Orgs (TMOs)
- Trialforce Source Orgs (TSOs)

## View My Domain Status for Hub Member Organizations in the Environment Hub

You get the best single sign-on (SSO) performance in the Environment Hub when you enable My Domain for each organization in the hub network. A new field on the Hub Member Detail page makes it easy to see if you've set up My Domain in an organization. This feature is available in Salesforce Classic only.

If you've set up My Domain for an organization, a subdomain appears in the field. Otherwise, the field is empty. The field is also empty if the organization is a sandbox.

# SignupRequest API Provides More Flexibility Creating Organizations

You can now create organizations for development, testing, and demo purposes with the SignupRequest API. You can also connect organizations directly to the Environment Hub, as well as choose the language of the organizations you create. In addition, you can automate ISV business processes using the Signup Request object in Visual Workflow and Lightning Process Builder.



#### Available in:

- Enterprise
- Performance
- Unlimited

#### IN THIS SECTION:

## Create Organizations for Development, Testing, and Demos Using the SignupRequest API

The Environment Hub is useful when you're provisioning a single organization for development, testing, or demo purposes. But what if you want to create several organizations at once? Now you can provision development, test, and demo organizations programmatically using the SignupRequest API, making it quick and easy to create organizations in bulk. This feature is available in Salesforce Classic only.

## Choose the Language of Trial Organizations Created with the SignupRequest API

When the SignupRequest API creates a trial organization, the language is assigned according to locale. You can choose a different language for trial organizations, making it easier to provision trials in countries where multiple languages are spoken. This feature is available in Salesforce Classic only.

#### Connect New Trial Organizations Created with the SignupRequest API to the Environment Hub

Previously, you needed to connect trial organizations created with the SignupRequest API to the Environment Hub manually one at a time. You can now connect new trial organizations to the Environment Hub directly from the API, saving time and effort when provisioning trial organizations in bulk. This feature is available in Salesforce Classic only.

## Use the Signup Request Object in Visual Workflow and Lightning Process Builder to Automate ISV Business Processes

Do you routinely perform the same tasks after creating an organization with the SignupRequest API? For example, do you send an email to your sales team asking them to follow up with a prospect? You can now use an intuitive, point-and-click interface to automate these tasks. This feature is available in Salesforce Classic only.

## Create Organizations for Development, Testing, and Demos Using the SignupRequest API

The Environment Hub is useful when you're provisioning a single organization for development, testing, or demo purposes. But what if you want to create several organizations at once? Now you can provision development, test, and demo organizations programmatically using the SignupReguest API, making it guick and easy to create organizations in bulk. This feature is available in Salesforce Classic only.

You can use the SignupRequest API to create the following standard Salesforce organization types.

Developer Edition

You can also create the following partner-oriented Salesforce organizations, which have longer trial periods, more licenses, and other customizations designed with ISVs in mind.

- Consulting Edition
- Partner Group Edition

- Partner Professional Edition
- Partner Enterprise Edition
- Partner Developer Edition

To create these organizations, you must have partner functionality enabled in your organization.

## Choose the Language of Trial Organizations Created with the SignupRequest API

When the SignupRequest API creates a trial organization, the language is assigned according to locale. You can choose a different language for trial organizations, making it easier to provision trials in countries where multiple languages are spoken. This feature is available in Salesforce Classic only.

You can specify any fully supported language listed in "Which Languages Does Salesforce Support?" in the Salesforce Help. When specifying a language, keep the following in mind.

- If you specify a language that isn't supported by the Salesforce edition associated with your trial template, the trial organization defaults to English.
- If you specify an invalid language, the trial organization defaults to English.

## Connect New Trial Organizations Created with the SignupRequest API to the Environment Hub

Previously, you needed to connect trial organizations created with the SignupRequest API to the Environment Hub manually one at a time. You can now connect new trial organizations to the Environment Hub directly from the API, saving time and effort when provisioning trial organizations in bulk. This feature is available in Salesforce Classic only.

To connect a trial organization, the signup request must originate from an organization within the hub network, such as a spoke organization or the hub master organization.

# Use the Signup Request Object in Visual Workflow and Lightning Process Builder to Automate ISV Business Processes

Do you routinely perform the same tasks after creating an organization with the SignupRequest API? For example, do you send an email to your sales team asking them to follow up with a prospect? You can now use an intuitive, point-and-click interface to automate these tasks. This feature is available in Salesforce Classic only.

Some of the tasks that you can automate in Visual Workflow and Lightning Process Builder include:

- Sending a custom welcome email to a prospect who signs up for a trial organization
- Posting to your development team's Chatter feed if a test organization is about to expire
- Creating a work record for your support team when a sign-up request fails

To automate an ISV business process, choose a tool, and then complete the related steps.

Tool	Steps
Visual Workflow	<ol> <li>From Setup, enter Flows in the Quick Find box, and then select Flows.</li> <li>Select New Flow.</li> </ol>
Lightning Process Builder	<ol> <li>From Setup, enter <i>Process Builder</i> in the Quick Find box, and then select <b>Process Builder</b>.</li> <li>Select <b>New</b>.</li> </ol>

# **AppExchange**

Winter '16 includes the availability of Lightning components on the AppExchange and a new publishing experience.

#### IN THIS SECTION:

## Lightning Components Now Available on the AppExchange

If you're an admin or developer, the AppExchange for Components store makes it even faster to build apps using the Lightning component framework. If you're a partner, you have an entirely new way of enhancing how customers experience Salesforce.

## Create and Manage Listings in the New AppExchange Publishing Experience

We streamlined the AppExchange publishing experience so that it's faster and easier to list your app, Lightning component, or consulting service. To put you closer to partner resources, we moved publishing tools to the Partner Community. The Publishing Console also got a brand new look and feel that's modern and mobile-friendly.

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## IN THIS SECTION:

## Build Apps Faster with the AppExchange for Components Store

The Lightning component framework lets you build apps quickly using clicks, not code. With the AppExchange for Components store, we've made the process even faster. Select from hundreds of Lightning components that are ready to use in tools like the Lightning App Builder. And because it's the AppExchange, you can count on each offering being secure.

## Distribute Lightning Components on the AppExchange

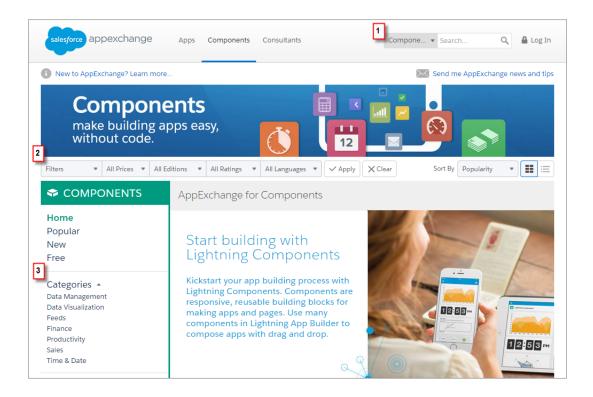
The Lightning component framework makes it easy for customers to build responsive apps for any screen. As a partner, you can now distribute Lightning components to millions of Salesforce users on the world's No. 1 business app marketplace.

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Visit the AppExchange for Components store online.

- **1.** Go to the AppExchange.
- **2.** Find a Lightning component for your app using one of these methods.
  - Search using criteria you specify (1).
  - Filter according to price, Salesforce edition, rating, or language (2).
  - Browse for components in one of our curated categories (3).



## Distribute Lightning Components on the AppExchange

The Lightning component framework makes it easy for customers to build responsive apps for any screen. As a partner, you can now distribute Lightning components to millions of Salesforce users on the world's No. 1 business app marketplace.

List a Lightning component on the AppExchange by following these high-level steps.

- 1. Package your functionality in a managed package.
- **2.** Upload your package to the Partner Community.
- 3. Log in to the Partner Community and navigate to the Publishing page.
- **4.** On the Organizations tab, connect your packaging organization.
- **5.** On the Packages tab, submit your Lightning component for security review.
- **6.** On the Listings tab, create and publish your listing.

For more information about publishing on the AppExchange, see the ISV force Guide.

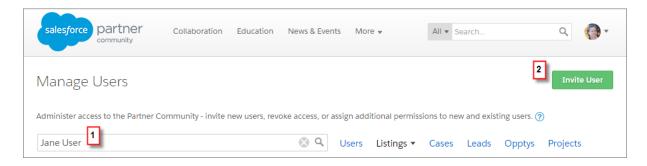
# Create and Manage Listings in the New AppExchange Publishing Experience

We streamlined the AppExchange publishing experience so that it's faster and easier to list your app, Lightning component, or consulting service. To put you closer to partner resources, we moved publishing tools to the Partner Community. The Publishing Console also got a brand new look and feel that's modern and mobile-friendly.

To create, publish, or update AppExchange listings, users need the "Manage Listings" permission. Assign this permission in the Partner Community.

1. Log in to the Partner Community and navigate to the Manage Users page.

2. Search for the person you want to assign permission to using the search bar (1). If that person isn't a member of the Partner Community, choose **Invite User (2)** instead.



3. From the Listings drop-down list, choose Manage Listings.

For more information about publishing on the AppExchange, see the ISV force Guide.

# Marketing

Marketing Cloud is the premier platform for delighting customers with 1:1 customer journeys. It enables you to build a single view of your customer-leveraging data from any source, and plan and optimize unique customer journeys based on your business objectives. Deliver personalized content across every channel and device at precisely the right time, and measure the impact of each interaction on your business so you can optimize your approach in real time and deliver better results.

For more information, see the Marketing Cloud Release Notes.

## SEE ALSO:

Marketing Cloud Overview

Marketing Cloud June Release Notes

Marketing Cloud July Release Notes

Salesforce Marketing Cloud Facebook Page

# Salesforce Overall: Set Audit Fields, Improved Accessibility, and More

Winter '16 improves your overall Salesforce experience with the ability to set audit fields when you create records through the API, improved accessibility for Lightning Experience, and more!

## IN THIS SECTION:

## Access Salesforce During Planned Maintenance With Read-Only Mode (Generally Available)

To minimize interruption to your business, Salesforce now gives users read-only access during splits, instance migrations, instance switches, and certain other maintenance events. Previously, Salesforce was unavailable during these times. This feature is available in Salesforce Classic only.

#### Run Asynchronous SOQL Queries (Pilot)

Async SOQL is a method for running SOQL queries in the background over Salesforce entity data, including sObjects, BigObjects, and external objects (accessed via Lightning Connect). It provides a convenient way to query large amounts of data stored in Salesforce.

## Field Audit Trail Supports Additional Objects

You can set Field Audit Trail policies on additional objects. This extends the types of data whose field history you can archive.

## Set Audit Fields and Update Records with Inactive Owners

Migrating data to Salesforce and mass updating records just got easier. Now you can set audit fields when you create records through the API and update records with inactive owners without contacting Salesforce.

## Accessibility in Lightning Experience

Learn about how Salesforce has improved accessibility in Lightning Experience to ensure a better experience for users.

## Release Notes Usability Improvements

We've also added filters to the release notes so you can focus on just the news you need. But that's not all! We've reorganized things to help you find information faster and given the HTML release notes a face-lift.

## SEE ALSO:

How and When General Enhancements Become Available

# Access Salesforce During Planned Maintenance With Read-Only Mode (Generally Available)

To minimize interruption to your business, Salesforce now gives users read-only access during splits, instance migrations, instance switches, and certain other maintenance events. Previously, Salesforce was unavailable during these times. This feature is available in Salesforce Classic only.

EDITIONS

Available in: All Editions

When Salesforce is in read-only mode, you can navigate within the application and view and report on your business data.

During read-only mode, you can't:

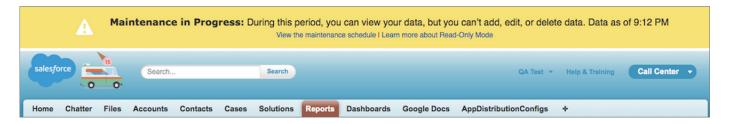
- Add, edit, or delete data
- Perform any actions in Salesforce that modify your Salesforce data. For example:
  - Post on Chatter
  - Use LiveAgent
  - Refresh dashboards
  - Perform API write or edit actions
  - Perform bulk API read actions
  - Save new or edited reports



Note: You can still run existing reports.

Activity reminders don't occur, and Recent Items lists don't update. Login history is still recorded for compliance purposes, but it isn't reflected in your organization until a few minutes after the organization exits read-only mode.

When your organization is in read-only mode, desktop and mobile browser users see a banner at the top of their browser window:



If a user tries to perform an action that isn't available in read-only mode, an error message notifies them that Salesforce is read-only. After the maintenance is complete, users are prompted to log in again.

SEE ALSO:

When to Expect Read-Only Mode

# Run Asynchronous SOQL Queries (Pilot)

Async SOQL is a method for running SOQL queries in the background over Salesforce entity data, including sObjects, BigObjects, and external objects (accessed via Lightning Connect). It provides a convenient way to query large amounts of data stored in Salesforce.



**Note**: Async SOQL is available to select customers through a pilot program. For information on joining the pilot program, contact your Salesforce account executive.

With the advent of BigObjects, it's possible to keep billions of records on the platform. Salesforce has made new platform services available to help you work at this new scale, by combining BigObject data with your core business data.



## Available in:

- Enterprise
- Performance
- Unlimited
- Developer

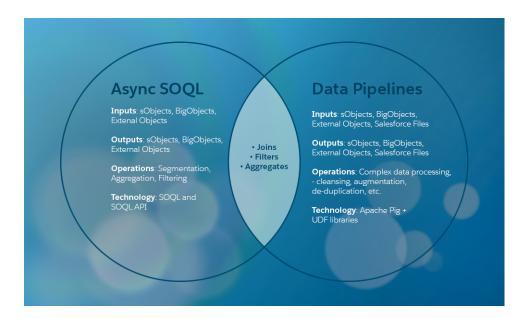
Async SOQL is implemented in the form of a RESTful API that enables you to run queries in the familiar syntax of the SOQL language. You can run multiple queries in parallel, and monitor their completion status.

Each query runs in the background, and the results are deposited into an object you specify, which can be an sObject or BigObject. As a result, you can subset, join, and create more complex queries that are not subject to timeout limits. This is ideal when you have millions or billions of records, and need more performant processing than is possible with synchronous SOQL.

For more information, see the Async SOQL Guide.

# Async SOQL Versus Data Pipelines

Async SOQL is related to Data Pipelines, but is focused on object-level segmentation, aggregation, and filtering, and does not allow you to interact with Salesforce files. The figure below compares the two methods.



To use Async SOQL effectively, it's helpful to understand its key components and other related concepts. Why would you use an asynchronous SOQL query instead of standard SOQL? The following table lists the key decision criteria across the broadest array of use cases.

Reasons For	Reasons Against
Reliability	Immediacy of Result
Resilience	User Experience
Scale	< 50M Scale

# Field Audit Trail Supports Additional Objects

You can set Field Audit Trail policies on additional objects. This extends the types of data whose field history you can archive.

The following additional objects are now supported.

- Assets
- Entitlements
- Service Contracts
- Contract Line Items
- Solutions
- Products
- Price Books



## Available in:

- Developer
- Enterprise
- Unlimited
- Performance

# Set Audit Fields and Update Records with Inactive Owners

Migrating data to Salesforce and mass updating records just got easier. Now you can set audit fields when you create records through the API and update records with inactive owners without contacting Salesforce.

For some scenarios, you need to set values for fields that aren't normally editable, for example, when migrating data to Salesforce. In that situation, it's often preferable to replace the Salesforce record creation date with the date on which the record was created in the original system. Or when working with a record that has an inactive owner, you often want to change ownership of the record to an active owner.

# EDITIONS

# Available in:

- Developer
- Enterprise
- Unlimited
- Performance

For common objects, we've added two user permissions to cover these scenarios, which previously required that you contact Salesforce.

## **Set Audit Fields upon Record Creation**

Set audit fields, such as Created By and Last Modified By, when you create a record (API only).

## **Update Records with Inactive Owners**

Update owner and sharing-based fields on records with inactive owners.

The "Set Audit Fields upon Record Creation" permission is supported for the following objects: Account, ArticleVersion, Attachment, CampaignMember, Case, CaseComment, Contact, ContentVersion, Contract, Event, Idea, IdeaComment, Lead, Opportunity, Question, Task, Vote, and all custom objects.

The "Update Records with Inactive Owners" permission is supported for the following objects: Account, Asset, Case, Contact, Lead, Note, Opportunity, Order, PersonAccount, ServiceContract, SalesTeam, and all custom objects.

Because these permissions give users the power to alter sensitive record data, we've placed them behind an organization preference called "Enable Set Audit Fields upon Record Creation and Update Records with Inactive Owners." To enable the user permissions, first enable the organization preference on the User Interface page. From Setup, enter <code>User Interface</code> in the <code>Quick Find</code> box, then select <code>User Interface</code>. After you enable the organization preference, enable one or both of the user permissions in a permission set or profile. You can set audit fields only in API-enabled editions of Salesforce.

The organization preference defaults to off unless you've previously contacted Salesforce to enable the "Create Audit Fields" permission, which the organization preference replaces.

SEE ALSO:

IdeaExchange: Allow Salesforce Administrators to Update Records Owned by Inactive/Terminated Users

# Accessibility in Lightning Experience

Learn about how Salesforce has improved accessibility in Lightning Experience to ensure a better experience for users.

# Full Keyboard Access Support

- Interactive Components Follow Best Practices: We've designed Salesforce's interactive
  components—including menus, modals, dialogs, tabsets, auto-complete combo boxes, and
  tree views—to use international best practices set by the W3C.
- **Improved Cursor Placement:** When a page loads, the tab focus is located on the main content of the page, making it easier to navigate.
- **Skip Links Improve Navigation:** To move directly to the navigation menu, click the **Skip to Navigation** link. To move to the beginning of the main page content, click the **Skip to Main Content** link.

# EDITIONS

## Available in:

- Group
- Professional
- Enterprise
- Performance
- Unlimited
- Developer

# **Support for Screen Readers**

- **Consistent Heading Levels:** We've use consistent heading levels to make it easier for users who use screen readers to navigate pages. For example, we use H1 headings for main page content. We use H2 headings for page subsections, such as related lists.
- Shortcuts Increase Accessibility of Dashboard Reports: To display a chart as a table, select the chart and press Enter.

# Support for Browsers and Assistive Technology

- **Screen Reader Testing:** We've tested the Lightning Experience with NVDA on the latest versions of Firefox and Internet Explorer on Windows and on the latest version of Safari with VoiceOver on Mac OS X.
- Designed to Comply with U.S. Government and International Best Practices: Other browsers and screen reader combinations
  that follow Section 508 of the Rehabilitation Act and the Web Content Accessibility Guidelines (WCAG) 2.0 Level AA are likely to
  work as well.

# Release Notes Usability Improvements

We've also added filters to the release notes so you can focus on just the news you need. But that's not all! We've reorganized things to help you find information faster and given the HTML release notes a face-lift.

#### IN THIS SECTION:

## Focus on the Right Information with Release Note Filters (Beta)

Filters help you zero in on the news that matters most. Instead of scrolling through screen after screen, now you can get right to the release notes that affect you. These filters narrow down the list of release notes on the right side of your screen, never the content on the left. If you're more a fan of search than browsing, use these filters to further narrow down your search results.

## Find Information Faster

The release notes' new format balances the big picture with the specific changes that affect your organization, so it's easier to find the news you need with fewer clicks.

## Visual Enhancements to the HTML Release Notes

We've made a few changes to the HTML release notes. Among those changes are an updated look-and-feel and the ability to change the language that you're reading in.

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**Note**: Release notes filters are a beta feature and are only available in the English version of the HTML release notes. If you have feedback on the available filters, let us know.

## **Edition**

Which of the feature enhancements for Winter '16 are available to you depends on your edition. Narrow down the list of release notes so it shows only enhancements that are available in your edition.

#### Feature Impact

Every release includes some features that you need to turn on or configure before users can start getting the benefits. As an administrator, you can now filter the release notes to focus on, or hide, just those features. Or maybe you want to see only the features that are enabled for your users automatically.

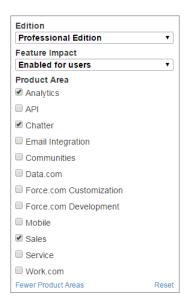
#### **Product Area**

Narrow down the list of release notes to see only the products that your organization uses. If your organization does sales but not support, set up your release notes so that only the sales-related news appears.

To narrow down the list of release notes, click **Show Filters** on the right side of the screen. [Add image for Winter '16]



**Example:** Your Professional Edition organization uses Sales Cloud, Chatter, and Analytics Cloud. First you want to see all relevant release notes that your users will have immediate access to when Winter '16 is released. Do just that with these filters.



Once you've selected filters, you can share your narrowed-down list of release notes with anyone. Simply copy the URL after you select filters, and then distribute that URL however you want. The corresponding URL for the previous example is: Add URL here

## Find Information Faster

The release notes' new format balances the big picture with the specific changes that affect your organization, so it's easier to find the news you need with fewer clicks.

- A summary of the whole Winter '16 release, organized by application area, now appears at the top of the release notes. On the web, it's the first page you see; in the PDF, it immediately follows the table of contents. You can drill down from here to get as deep into the details as you want to.
- A high-level summary of changes now appears as an introduction to each application area. Take in the basic facts at a glance, or click through to the detailed information you need.

## Visual Enhancements to the HTML Release Notes

We've made a few changes to the HTML release notes. Among those changes are an updated look-and-feel and the ability to change the language that you're reading in.

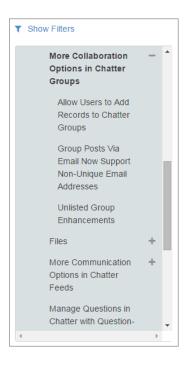
## **Updated Skin**

We updated the HTML release notes to reflect our updated look.

## Relocated and Contextualized the List of Release Notes

We moved the list of release notes from the left side of the screen to the right, so you can focus on the content of the release notes.

Because the list of release notes is contained in a smaller box, you always know where in the list you are. The release note that you're currently viewing is always visible; more often than not, it's at the top of the list.



## Select the Language You Want to Read

By default, your browser's language settings determine the language we show you in the HTML release notes. Now you can easily change the language that you're viewing the release notes in. Scroll to the footer at the bottom of the page, click **Change Language**, and select a language.

# Critical Updates

This release includes updates that improve the performance, logic, and usability of Salesforce but might affect your existing customizations.

To ensure a smooth transition, each critical update has an opt-in period, which ends on the auto-activation date that's displayed on the Critical Updates page in Setup. During this period, you can manually activate and deactivate the update as often as you need to evaluate the impact on your organization and modify affected customizations. After the opt-in period has passed, the update is automatically activated. For more details, see "Critical Updates Overview" in the Salesforce Help.

## **Enable My Domain to Use Lightning Components**

For security purposes, Lightning components now require you to define a custom Salesforce domain name for your organization. If you're using Lightning components today, you might need to take action to avoid having Lightning components-based customizations disabled when Winter '16 is released.

## "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed

In Summer '15 we made a change to the behavior of the getContent() and getContentAsPDF() methods of the PageReference object. This change was released as a critical update named "PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

## "Serve Static Resources from the Visualforce Domain" Critical Update Postponed

In Summer '15 we made a change to the domain from which static resources are served. This change was released as a critical update named "Serve Static Resources from the Visualforce Domain" and was scheduled for auto-activation in Winter '16. The auto-activation date has been postponed until Spring '16.

#### SEE ALSO:

Enable My Domain To Use Lightning Components

"PageReference getContent() and getContentAsPDF() Methods Behave as Callouts" Critical Update Postponed

Make Calls to PageReference.getContent() in Asynchronous Apex

"Serve Static Resources from the Visualforce Domain" Critical Update Postponed

# Help and Training

We implemented a new content strategy and added walkthroughs and Trailhead modules, and added and updated instructional videos. We also updated some of our trust and compliance documents.

## IN THIS SECTION:

## Enhanced Help & Training Site

Find the information you need front and center in our redesigned Help & Training site, whether you're at your desk or on the go.

## More Engaging Content Where You Need It Most

Access more and better in-app user assistance. We give you just the information you need, where you need it, to make you more efficient.

## Walkthroughs

Get interactive, step-by-step guidance for specific tasks and features. We created these walkthroughs to introduce you to different features in Salesforce, and more are on their way!

## Videos

We created instructional videos to help your users learn about new and improved Salesforce features.

#### Trailhead Modules

Looking for a good way to get started with Salesforce or dive into a new feature? Meet Trailhead, a fun, guided, and interactive tool to learn Salesforce. You can follow guided learning paths for admins or developers, or choose your own adventure with self-paced modules.

#### **Trust and Compliance Documentation**

The Salesforce Trust and Compliance Documents have undergone seasonal updates.

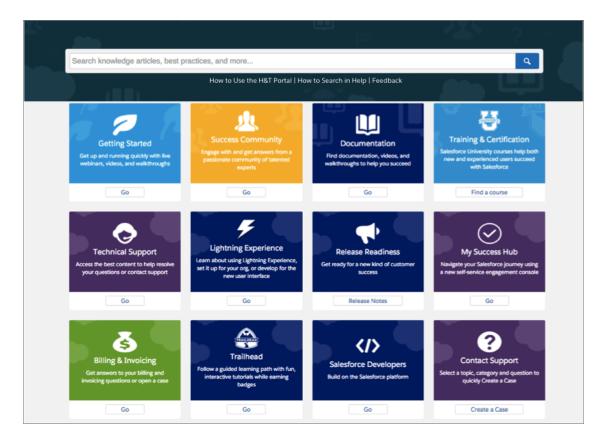
#### Read Force.com IDE Documentation in Your Browser

The Force.com IDE Developer Guide is now available on the Salesforce Developers website in HTML and as a PDF file. Use Salesforce search tools or your favorite browser-based search tool to access the Eclipse documentation. The Force.com IDE documentation was previously available only as part of the Force.com IDE plug-in for Eclipse.

# **Enhanced Help & Training Site**

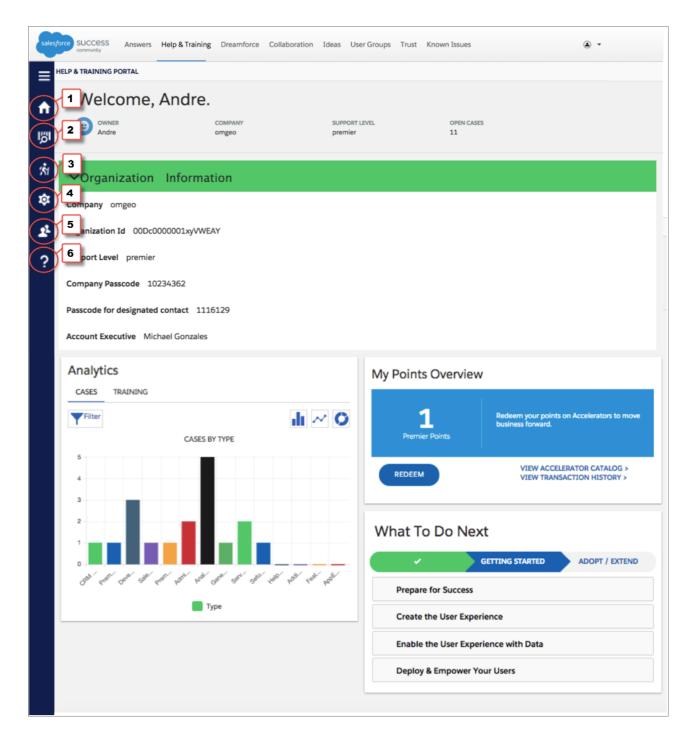
Find the information you need front and center in our redesigned Help & Training site, whether you're at your desk or on the go.

We've improved the Help & Training site. The redesigned site includes easier access to help you get up and running quickly, handle typical tasks, get out of jams, and engage with other folks in our Salesforce Success Community.



You can now also use these Help & Training site features on your mobile device.

- Search to find how-to videos, walkthroughs, Help topics, technical support articles, and other helpful resources.
- Preview recommended and trending content on the Technical Support page.
- Use the self-service Help Finder to find answers to common questions.
- Start a chat or submit a support case quickly.
- Get access to your org's cases, training, and your personalized Success Hub.



Let's take a tour of what you can expect to find when you log into the Success Hub.

## Dashboard (1)

Get a snapshot of your support case and training activity and find best practices to set your org up for success.

## Goal Tracker (2)

When you define your success metrics, we provide personalized content to help you achieve your goals.

#### Services (3)

If you have premier points, find and request accelerators, manage your balance, and review your transaction history.

## Support Cases (4)

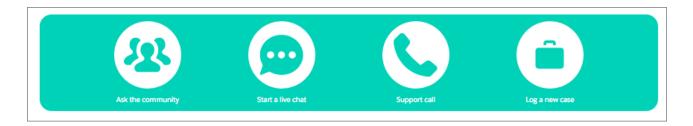
View support cases you've logged and filter results for open and closed cases.

## Training (5)

See the training sessions you have in progress, scheduled, and already completed.

## Contact Us (6)

Find answers to the most common questions or log a support case.



# More Engaging Content Where You Need It Most

Access more and better in-app user assistance. We give you just the information you need, where you need it, to make you more efficient.

## Lightning Experience Help and Training Menu

Each page in Lightning Experience features a Help menu with links to resources—help topics, walkthroughs, videos, developer guides, and PDF files—related to the specific tasks on that page. On object pages, the menu replaces the Help for this Page link that you're used to using in Salesforce Classic.

For Setup pages, the original Help & Training link still appears, but we encourage you to use the new Help menu instead for a broader selection of useful information. If you've created custom help links, those links still work from the Help for this Page links in the Salesforce Classic pages. However, your custom help links don't appear in the new Help menu.

## Let Salesforce Walk You Through It

Earlier this year we started delivering new interactive walkthroughs that help you understand key concepts and complete important tasks. If you're using Lightning Experience, look in our new help menus for links to these walkthroughs..

#### Videos

This release provides even more engaging videos that help you quickly visualize tasks and concepts. If you're using Lightning Experience, clicking a video link opens a player, where you can watch the video without leaving Salesforce.

## Intelligent Search

Expect to see different search results depending on the user interface you're using: Salesforce Classic or Lightning Experience. For example, if you're using Lightning Experience and searching the Help and Training site (help.salesforce.com), you'll notice that Lightning-specific help appears at the top of your search results.

## Trailhead

Tailhead modules take less than 20 minutes and include knowledge checks. If you're using a Developer Edition, you can collect badges to track your progress

# Walkthroughs

Get interactive, step-by-step guidance for specific tasks and features. We created these walkthroughs to introduce you to different features in Salesforce, and more are on their way!

Before you start a walkthrough, make sure you have the correct user permissions and license associated with the feature so you can access the proper pages in Salesforce. Bon voyage!

(1) Important: Keep in mind that walkthroughs guide you through your own Salesforce account, so you're actually making changes to your data as you walk through the steps. If you're concerned about making these changes, follow the walkthrough in a sandbox account or another test environment first.

# **Lightning Experience Walkthroughs**

Feature	Walkthroughs	You'll need
Object Manager	Access and Edit Objects with the Object  Manager	Access to Lightning Experience
		"View Setup" permission
Setup	, J	Access to Lightning Experience
		"View Setup" permission
Home	Check Out Your Home in Lightning Experience	Access to Lightning Experience
Permission Sets	Create, Edit, and Assign a Permission Set inLightning Experience	Access to Lightning Experience
		"Manage Profiles and Permission Sets" permission
		"Assign Permission Sets"
Sales Path	Set Up a Sales Path inLightning Experience	Access to Lightning Experience
		Sales Path enabled for your organization
		"View Setup" permission
		"Modify All Data" permission
List Views	Create a List View for Opportunities	Access to Lightning Experience
		"Read" permission on the type of record included in the list
		"Create and Customize List Views" permission

# Salesforce Classic Walkthroughs

Feature	Walkthroughs	You'll need
Sharing	Grant a User Access to Your Account	To grant access to a record, you must be one of the following users.
		The record owner
		• A user in a role above the owner in the hierarchy (if your organization's sharing

Feature	Walkthroughs	You'll need
		settings control access through hierarchies)
		<ul> <li>Any user granted "Full Access" to the record</li> </ul>
		An administrator
Analytics Cloud	■ Welcome to Wave	Access to Analytics Cloud
Omni-Channel	The Route to Awesome: Get to Know Omni-Channel	<ul> <li>Service Cloud user license</li> <li>"Customize Application" and "Manage Profiles" permission</li> </ul>
Two-Factor Authentication	Secure Logins with a Unique Code (Two-Factor Authentication)	<ul> <li>"View Setup and Configuration" permission</li> </ul>
		<ul> <li>"Manage Profiles and Permission Sets" permission</li> </ul>
		<ul> <li>"Assign Permission Sets" permission</li> </ul>
		The System Administrator profile has these permissions.

## **Videos**

We created instructional videos to help your users learn about new and improved Salesforce features.

- Create the Sales Wave App, Part 1: Using the Configuration Wizard shows you how to create and share the Sales Wave app, an end-to-end analytics app that brings the power of Wave Analytics to Sales Cloud.
- Create the Sales Wave App, Part 2: Upload the Quota CSV File and Schedule a Dataflow shows you how to update the Sales Wave app Quotas dataset by uploading a CSV file. It also takes you through scheduling a daily dataflow so you can be sure your app uses the latest Sales Cloud data.
- Use Tasks in Lightning Experience to Boost Sales Productivity shows three powerful new ways for sales teams to manage tasks. Managing tasks in Salesforce is the ideal way to stay on top of customer relationships.
- Salesforce Exchange Sync Setup in Office 365 via Point and Click shows your Exchange administrator how to set up your company's server to sync your sales reps' contacts and events using Exchange Sync. This video demonstrates how to navigate set up using the Microsoft® Exchange admin center.
- Salesforce Exchange Sync Setup in Exchange via the Command Line shows your Exchange administrator how to set up your company's server to sync your sales reps' contacts and events using Exchange Sync. This video demonstrates how to set up Microsoft<sup>®</sup> Exchange for Exchange Sync using Microsoft<sup>®</sup> Exchange Management Shell.
- Creating Custom Links and Buttons shows you how to create a custom link or button on an object so users can easily get relevant information from an external resource, or do a complex action right from a record.
- Using and Building List Views walks you through creating two different list views. In the first view, you learn to sort, filter, and mass edit. In the second, you use filter logic to create a view that shows your records and those of a teammate.

- Custom Fields: Tips and Gotchas shows you some best practices, details about deleting fields, field usage limits, field history
  tracking and more. We also provide some caveats when changing field types, and advice on choosing the appropriate type of text
  field.
- Force.com Quick Access Menu shows you how to use the Force.com Quick Access Menu. It's a handy tool that Admins can use to make changes to an object's configuration or import data for that object without having to go to Setup pages.
- Merging Duplicate Accounts: Tips and Gotchas shows you how to merge duplicate account records into one, and choose which data to keep from each record. This video guides you through the process so you can get clean, useful data, quickly.

## **Trailhead Modules**

Looking for a good way to get started with Salesforce or dive into a new feature? Meet Trailhead, a fun, guided, and interactive tool to learn Salesforce. You can follow guided learning paths for admins or developers, or choose your own adventure with self-paced modules.

Check out Trailhead at https://developer.salesforce.com/trailhead and find the right trail for you. These are the latest trails.

## Admin Trail - Migrating to Lightning Experience

Increase the productivity of your sales team by migrating to the new Lightning Experience. This trail teaches you how to get your existing org ready for new powerful sales tools.

## **Developer Trail - Lightning Experience**

Develop gorgeous, intelligent apps on the new Lightning Experience. This trail helps you understand how the new UX impacts core Force.com features.

## Sales Rep Trail - Lightning Experience

Take your sales game to a new level by unlocking the power of Lightning Experience. This trail teaches you how to use Salesforce to sell lightning fast with as few clicks as possible.

## Admin Trail - Starting with Lightning Experience

Boost your sales team's productivity by harnessing the new Salesforce, powered by Lightning. This trail teaches you the skills you need to help your company be successful with Salesforce.

# Trust and Compliance Documentation

The Salesforce Trust and Compliance Documents have undergone seasonal updates.

## Notices and Licenses

We've made changes to Notices and Licenses Documentation.

#### Salesforce

Updated third party notices to reflect current product offerings, including adding new third party content providers, products, services and/or platforms.

Updated open source table.

Added information about SOS feature.

Added information about Files Connect feature.

## **Analytics Cloud**

Updated open source table.

#### ExactTarget

Updated Third Party Notices to reflect current product offerings, including adding new third party services.

## **Marketing Cloud**

Updated Customer Data section to account for Third Party Platform deletion requirements.

Updated Third Party Platforms section.

Updated Third Party Notices to reflect current product offerings, including adding new third party content providers.

## **Predictive Intelligence**

Updated Restricted Uses of Information section.

Updated Third Party Notices to reflect current product offerings.

#### Desk.com

Updated "Third Party Applications" section to: (1) include the following apps: Appbot, Argo, ClientSuccess, Custom Action, Elevio, Shopify, and Wombat; and (2) delete the following apps: Cirrus, Constant Contact, Postmark, SumAll.

#### Heroku

No changes.

## Data.com

No changes.

## SalesforceIQ

Product name has been re-branded from RelatelQ to SalesforcelQ.

## Security, Privacy, and Architecture

We've made changes to Security, Privacy, and Architecture Documentation.

## **All Services**

Intrusion Detection: Included information on Salesforce controls for the detection of users' compromised web browsers.

Tracking and Analytics: Included disclosure that Salesforce uses usage activity data for security purposes.

## Salesforce

Salesforce Infrastructure: Updated information about geographic location of primary and secondary data centers for EU1 and EU4 instances.

Deletion of Customer Data: Included background on controls around handling of physical media on which Customer Data is stored and sanitization prior to removing such media from data centers.

Tracking and Analytics: Added information about Salesforce CloudPulse and Adoption Manager programs.

## Work.com on Salesforce

Audits and Certifications: Updated information on how to find the Safe Harbor certification on the U.S. Department of Commerce's website.

Deletion of Customer Data: Included background on controls around handling of physical media on which Customer Data is stored and sanitization prior to removing such media from data centers.

Tracking and Analytics: Added information about Salesforce CloudPulse and Adoption Manager programs.

## **Analytics Cloud**

Salesforce Infrastructure: Updated information about geographic location of primary and secondary data centers for EU1 and EU4 instances.

Deletion of Customer Data: Included background on controls around handling of physical media on which Customer Data is stored and sanitization prior to removing such media from data centers.

Tracking and Analytics: Added information about Salesforce CloudPulse and Adoption Manager programs.

## ExactTarget

Third-Party Architecture: Added details to existing disclosure regarding use of content delivery networks.

## Predictive Intelligence

Third-Party Architecture: Updated to reflect that customers now have the option of choosing to store data in Brazil, and no longer have the option to store data in Singapore.

## Social.com

Third-Party Architecture: Section added to note addition of Microsoft Corporation as a third-party hosting provider.

Audits and Certifications: Added reference to the Microsoft Azure Compliance Web site, for information concerning audits and certifications related to Microsoft Corporation.

Deletion of Customer Data: Updated to state that back-up data will be deleted within 6 months of deletion of Customer Data, and to remove references to retention in inactive status and on backup media.

Viruses: Revised to note that the Social.com Services have controls in place designed to prevent the introduction of viruses.

## SalesforceIQ

Sensitive Personal Data: Included a prohibition on submitting certain sensitive "personal data" to the SalesforcelQ Services, including personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, trade-union membership, and the processing of data concerning health or sex life.

SEE ALSO:

Salesforce.com Trust and Compliance Documents

## Read Force.com IDE Documentation in Your Browser

The Force.com IDE Developer Guide is now available on the Salesforce Developers website in HTML and as a PDF file. Use Salesforce search tools or your favorite browser-based search tool to access the Eclipse documentation. The Force.com IDE documentation was previously available only as part of the Force.com IDE plug-in for Eclipse.

The Force.com IDE Developer Guide includes a new chapter, "Getting Started with the Apex Debugger."

SEE ALSO:

Debug Apex Code in Eclipse (Generally Available)

Force.com IDE Developer Guide

# Other Salesforce Products

# desk.com

Desk.com is an all-in-one customer support app for small businesses and growing teams.

For information on new features, go to the Desk.com Product Updates Blog.

# Heroku

Heroku is a cloud-based application platform for building and deploying web apps.

For information on new features, go to the Heroku Changelog.