

# Salesforce Winter '18 Release Notes

Salesforce, Winter '18

Blaze your trail to innovation





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# SALESFORCE WINTER '18 RELEASE NOTES

Winter '18 builds artificial intelligence (AI) right into the Salesforce platform, so you can build apps that get smarter with every interaction. Salesforce Einstein also powers improved lead scoring, data discovery, duplicate management, and recommendations. Lightning Partner Central extends Salesforce CRM to your partner network, while Lightning Omni-Channel helps you route customer service cases to the right agent at the right time. You get more tools to help your users adopt Lightning Experience, plus Lightning console split view, which lets you open multiple records and related records on one screen.

## IN THIS SECTION:

### [How to Use the Release Notes](#)

Our release notes offer brief, high-level descriptions of enhancements and new features. We include setup information, 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 '18 affect all users immediately after the release goes live. Consider communicating these changes to your users beforehand so that they're 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.

### [Salesforce Overall: Improved Productivity with Lightning Experience Readiness Check, Console, and Search](#)

Measure how much Lightning Experience can impact your sales team's productivity with the redesigned Readiness Check. The new look and feel of Lightning Experience makes work a whole lot easier. Style meets new functionality with a Lightning Experience search results page that lets you easily resize columns, wrap text, and sort records. Console users work more quickly with favorites, navigation rules, and two new components.

### [Lightning Experience: A Modern and Intelligent 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. Check out the new features and considerations in this release.

### [Salesforce Einstein: The World's Smartest CRM with Artificial Intelligence \(AI\) for Everyone](#)

Salesforce Einstein is AI built into the Salesforce platform. It delivers advanced AI capabilities to sales, service, and marketing—and enables anyone to use clicks or code to build AI-powered apps that get smarter with every interaction. Now, every Trailblazer in every role and industry can use AI to be their best.

### [Sales: Einstein Lead Scoring, Collaborative Forecasts, and Campaign Influence](#)

Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Help reps stay focused on the sales pipeline directly in Outlook and Gmail.

### [Marketing: Content Sharing, Enhanced SMS and Push Messages, and Other Features](#)

Build a single view of customer-leveraging data from any source. Plan and optimize unique customer journeys based on your company's business objectives. And deliver personalized content across every channel and device at the right time. Marketing Cloud helps marketers measure the impact of each interaction on your business to optimize your approach and deliver better results.

### [Service: Field Service for Android, New Social Accounts, and More Lightning Experience Support](#)

Enjoy Lightning Experience support for Live Agent, Omni-Channel, service contracts, case milestones, macros, case cloning, and more. Expand your field service operation with the Field Service Lightning mobile app for Android. Share knowledge faster by embedding videos and code blocks in Knowledge articles. And support up to 10 social accounts with the Social Customer Service Pro add-on.

### [Analytics: Reports and Dashboards and Einstein Analytics](#)

Building reports just got fun (or more fun, depending on your perspective) with this release's introduction of the Lightning Report Builder. And Einstein Analytics (formerly Wave) adds smart features, including simplified and more intuitive app creation, chart suggestions, and the Einstein Discovery story improver.

### [Communities: Customer Account Portal, Dynamic Branding, and Community Pulse](#)

Designed with account management in mind, the Customer Account Portal gives your customers a private and secure place to access and update their account information. Branding sets partner with audience targeting, making it easy to dynamically change the appearance and style of your community based on the audience viewing the page. And Community Pulse displays your most important community metrics front and center in the Workspaces area.

### [Chatter: Encryption for Chatter, Pinned Posts, Top Groups, and Trailhead Theme](#)

Encryption for Chatter is generally available and includes more fields. Pin a post to the top of a group or topics feed (beta), and discover which groups have the most activity. Groups and user profiles get a new Trailhead look.

### [Files: Quip, Private Files on Records, and Improved Search](#)

Create, share, and collaborate on documents with Quip without an external file provider. Attach a file to a record and keep it private, or share it with the people and groups you choose. Files search results are now sortable with more fields.

### [Salesforce Integrations: Cisco Spark and Microsoft and Google Applications](#)

Empower your sales and service pros to be more productive by connecting Salesforce to some of the industry's leading business applications.

### [Mobile: Do More on the Go](#)

Salesforce mobile apps help your users stay productive throughout their busy days, no matter where they are. So we've been hard at work adding new ways to help your users outside of the office. Salesforce offers improvements to Chatter, tasks, and many other sales features, so sales professionals can take care of even more business from their phones.

### [Financial Services Cloud: Data Model Extensions and Lightning Apps for Banking, Intelligent Need-Based Referrals and Scoring, and More](#)

Now personal bankers, as well as financial advisors, can deepen customer relationships and boost productivity with data model extensions for banking and three tailored Lightning apps for Financial Services Cloud: Retail Banking, Retail Banking Console, and Wealth Management. Intelligent Need-Based Referrals and Scoring makes it a cinch for users to create, track, and manage referrals in an easy flow. We've boosted your power to customize Financial Services Cloud with new ways to configure the Financial Account UI components and rollup summary fields. And now you can roll up a financial account balance to multiple joint owners. Plus, use new Lightning components, four new profiles, and a new permission set to jump-start your customer and partner communities. And there's more: See the full list of usability enhancements.

### [Health Cloud: Lightning Experience Comes to the Console, Health Cloud Empower Timeline Component, Householding Map, and More](#)

Health Cloud has taken a huge jump forward in providing the tools that your care coordinators, caregivers, and patients need. Care coordinators will love the awesome user interface and components of Lightning Experience and the holistic view of a patient's household and relationships on the Householding map. Patients can log in to the community and see a timeline of their past, current, and future healthcare events. And there are many more features that support patient care, such as filterable timelines and support for person accounts.

### [Customization: Dynamic Lightning Pages, Translatable Flows, Custom Lightning Page Templates](#)

Make your Lightning pages dynamic by choosing when to display certain components. Start processes when something other than a record change happens—inside or outside of your org. And distribute the same flow to all your users, regardless of language, with Translation Workbench. If you've expanded your horizons into the world of code, check out custom Lightning page templates.

### [Security and Identity: Single Logout, Branded Login Pages, and Chatter Encryption](#)

With single logout, users can log out of multiple applications at once when Salesforce is the identity provider or service provider. You can brand your login page at runtime based on who logs in and from where, and adopt the Lightning look in your login flows. And you can encrypt even more data, including your Chatter feeds.

### [Salesforce IoT](#)

Use Salesforce IoT Explorer Edition to process events from connected devices in near real time and create meaningful interactions with your customers.

### [Deployment: Changing a Field Type Between Master-Detail and Lookup Is Not Supported for Test Deployments](#)

If you change a field type from Master-Detail to Lookup or vice versa, the change isn't supported when running a test deployment (validation) to avoid data loss or corruption. If a change that isn't supported for test deployments is included in a deployment package, the test deployment fails and issues an error. If your deployment package changes a field type from Master-Detail to Lookup or vice versa, you can still validate the changes before deploying to production. Perform a full deployment to another test sandbox. A full deployment includes a validation of the changes as part of the deployment process.

### [Development: Create Your Own Salesforce App](#)

Salesforce DX is the new frontier for Salesforce app development, and provides both individual developers and development teams with an integrated, end-to-end life cycle designed for high-performance agile development. Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to other organizations.

### [Critical Updates](#)

We're enforcing the critical update that blocks execution of JavaScript in the HYPERLINK function. And we delayed the critical update that routes records to the right approval process when they're submitted behind the scenes.

### [Help and Training](#)

We added Trailhead modules and instructional videos. We also updated our Trust and Compliance documentation.

### [Other Salesforce Products and Services](#)

## How to Use the Release Notes

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Our release notes offer brief, high-level descriptions of enhancements and new features. We include setup information, tips to help you get started, and best practices to ensure your continued success.

- We offer [PDF](#) and [HTML](#) versions.
- For the HTML version, your browser's settings determine the language you see. To change the language, scroll to the bottom, click **Change Language**, and select a language.
- The release notes include details about new and modified features, not known issues, which you can access from the [Salesforce Known Issues site](#).



**Note:** Until the new release is available to you, links from release notes to Salesforce Help, implementation guides, developer guides, and other documentation don't work. And sometimes, the links point to materials for the previous release.

Some of our documentation has preview versions available several weeks before the release. To access the preview versions on [Salesforce Developers](#), select Preview from the Documentation Version dropdown list.

## IN THIS SECTION:

[Use Filters to Zero In on the News That Matters Most](#)

The filters narrow down the list of release notes on the right side of your screen, not the content on the left.

[Know 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 Experience as it evolves.

[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.

[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.

## Use Filters to Zero In on the News That Matters Most

The filters narrow down the list of release notes on the right side of your screen, not the content on the left.

**Experience**

See which features are available in Lightning Experience, Mobile, and Salesforce Classic.

**Edition**

Which feature enhancements are available to you depends on your edition. Filter the release notes to show only enhancements that are available in your edition.

**Feature Impact**

Some features require you to enable or configure them before users can get the benefits. As an admin, filter the release notes to focus on, or hide, just those features. Or maybe you want to see only the features that are automatically enabled for your users.

**Product Area**

See only the products that your org uses. If your org 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.

Experience

☒ Lightning Experience

☒ Mobile

☐ Salesforce Classic

Edition

Professional Edition

Feature Impact

Enabled for users

Product Area

☒ Analytics

☐ API

☒ Chatter

☐ Email Integration

☐ Communities

☐ Data.com

☐ Force.com Customization

☐ Force.com Development

☐ Mobile

☒ Sales

☐ Service

☐ Work.com

Fewer Product Areas

Reset

You can share your filtered list of release notes with anyone. Select filters, copy the URL, and then distribute that URL however you want.

## Know 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 Experience as it evolves.

One key to success during this time of transition is understanding what’s available in one, both, or all 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 two examples.

- Case Feed, a Service Cloud feature, is available in *both desktop experiences*, so its description says “This change applies to both Lightning Experience and Salesforce Classic.”
- Opportunity Workspace, a new Sales Cloud feature, is available in Lightning Experience *only*, so its description says “This change applies to Lightning Experience only.”

If a *key* feature is also available for Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, we mention that in the feature description. But you can also check the Mobile section for a complete list of what's new.

## You Asked for It!

We delivered the features you asked for on IdeaExchange.

IdeaExchange	Idea delivered
Sales	
Lightning - Save and Add Products on Opportunity Button	Prompt Users to Add Products to Opportunities

**IdeaExchange****Idea delivered**

Edit the Forecast Category in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web

Change Opportunity Forecast Category

Easy Way to Create Mass Email

Expand Your Reps' Email Reach with List Email

Allow Mass Content Delivery via Email

Mass Email Directly from a List View

Ability to Mass Email Contacts within Lightning

Display the Email Subject for Mass Emails In Activity History

Keep Track of List Emails in the Activity Timeline

Filter More Ways in the Activity Timeline

Automatically Filter Out Mass Emails from Activity Reporting

Keep Track of List Emails in the Activity Timeline

Filter More Ways in the Activity Timeline

Ability to Reposition Reminder Fields in Activity Layouts

Make Sure Your Reps Never Forget to Remember with Task Reminders

Bring Pop Up Reminders for Tasks and Events to Lightning Experience

Lightning Experience Should Display Archived Activities

Get Your Fill of Past and Archived Activities with All Activity History

Account, Contact, Leads Merge

Wrangle Duplicates Using Duplicate Record Sets in Lightning Experience

Data.com Duplicate Management: Provide a Merge button on Duplicate Record Set

Merge Accounts with completely unrelated Account Names

Merge contact function is limited

Ability to merge records using the Lightning Experience

Merge Person Accounts in Lightning Experience

**Service**

Send Images on Outbound Social Posts

Help Your Customers by Attaching Images to Social Posts

Track Knowledge Article Searches and / or Views by User

Track Article Views with Event Monitoring

Knowledge Article Viewed Date / Voted Date Filter in Reports

Track Article Views with Event Monitoring (*partially delivered*)

Wistia video embedding in KB articles

Embed Videos and Code Blocks in Knowledge Articles

Please enable embedding Youku videos to articles to serve Chinese customers

Embed Videos and Code Blocks in Knowledge Articles

Knowledge Article Assignment Reporting

Follow the Flow with Article Assignments

**Customization**

More than 4 fields on Related List in Lightning Experience

View Related List Data Quickly with Related List Quick Links

Make Used Licenses / Total Licenses from UserLicense object Generally Available

Changed Objects

<b>IdeaExchange</b>	<b>Idea delivered</b>
Visual Workflow / Flow translation for labels and fields	Translate Flows from the Translation Workbench
Support for Flows in Lightning and Salesforce for Android, Salesforce for iOS, or Salesforce Mobile Web	Add Flows Anywhere in Salesforce with the Flow Lightning Component
Add attribute to flow:interview component to render flow in the Lightning UX	

## 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.
- [Release Overview](#). Create internal training for your users, review setup screens, and learn how to use features.
- [Release Readiness & Feature Focus Event Calendar](#). Register for expert hours and other events.
- [Release Readiness Live](#). Register and make the most of the new features.
- [Winter '18 Release](#). Check out the new features.
- [Winter '18 Release module](#). Get the Winter '18 Trailhead badge.
- [Maintenance Exams](#). Keep your certification updated.

## Release Notes Changes

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

### January 17, 2018

#### **Popup Helps You and Your Users Adopt Lightning Experience**

Added information about a prompt to try Lightning Experience.

### January 3, 2018

#### **Tooling API New and Changed Objects**

Added five new first- and second-generation packaging objects.

#### **Be More Productive with the Salesforce CLI (Generally Available)**

Added link to the weekly CLI update release notes.

#### **Track More Types of Time-Based Workflow Events**

Added a note about a new type on the Time-Based Workflow event log file type.

#### **Changed Objects**

Added documentation for a new `Type` value on the Time-Based Workflow event log file type.

## December 13, 2017

### Apex

Removed the announcement that deployments now recompile all Apex code. This change wasn't rolled out to all orgs.

### Increase the Visibility of Critical Information with Pinned Posts (Beta)

Added that a pinned post appears twice in a feed, where it's posted and where it's pinned. Added that users can pin only those posts directly added to a feed and not posts that were added through @mentions.

## December 6, 2017

### Enjoy a Modern Chatter Experience in Salesforce for iOS

Added a note about viewing **All Company** in the new feed experience.

## November 28, 2017

### New Objects on page 587

Added coverage for the `OutOfOffice` object.

### Refresh the Performance Chart for Up-to-Date Data

Added documentation about refreshing the performance chart on the Home page.

### Opportunities: Opportunity Teams, Opportunity Products, Contact Roles, Forecast Category

Updated editions tables for Opportunity release notes to clarify feature availability.

### Be More Productive with the Salesforce CLI (Generally Available)

Removed Powershell as a system requirement for running the Salesforce CLI on Windows. Indicated that the `SFDX_DISABLE_ENCRYPTION` environment variable will be deprecated in Spring '18. Added information regarding the new `--synchronous` parameter for the `force:apex:test:run` command.

### Tooling API New and Changed Objects

Added five new Package2\* objects.

### Update Record Owners from List Views

Announced the ability to update record owners from list.

### Approve and Disable Automation Services in Salesforce Authenticator

Updated automation text in the UI.

### Easily Connect to Salesforce Authenticator with a Guided Tour

Added a guided tour through the app on new authentication methods.

### Track Account Activity on Salesforce Authenticator

Created more ways to access and track account activity.

### Keep Your Data Flowing with Dataflow Enhancements

Announced that data extraction from Salesforce Big Objects is supported in `sfdcDigest` Nodes.

## November 15, 2017

### Explore Features with Trailhead

Added new admin trail for Collaborative Forecasts in Lightning Experience: Optimize Sales Forecasts.

### Field Service Mobile: Android App Generally Available and iOS App Turns 3.0

Added call out for a bug with the branding system for Android 3.0.



**Enhance Fields on Your Salesforce Records with Lightning Data**

Changed “third-party data” to “Lightning Data.” Lightning Data, now on AppExchange, offers packages of industry data that you can add to Salesforce accounts, contacts, and leads.

**Changed Objects**

Added documentation for the `Guid` field on the `FlowInterview` object.

**Formula Field References Must Match Process Trigger Objects**

Field references in formulas must now have the same object as the process’s trigger.

**Update Your Facebook Authentication Provider to Get User Information**

Added more fields that the default Facebook authentication provider returns.

**Chatter Answers is No Longer Supported in Spring '18**

Chatter Answers will no longer be supported in Spring '18. Previously, Chatter Answers was scheduled to retire in Spring '18.

## November 1, 2017

**Salesforce1 Is Now Salesforce**

Salesforce1 is now Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

**Locate Image Objects with Einstein Object Detection (Beta)**

Announced the beta availability of Einstein Object Detection.

**Explore Features with Trailhead**

Added new Trailhead module Einstein Intent API Basics.

**Get Updated Email\_Verified Value in UserInfo Endpoint and Identity URL Response**

Added release note about the updated `email_verified` definition when an org or community user successfully verifies their email address after clicking a link in an email confirmation message.

**Feature Gaps for Live Agent in Lightning Experience**

Added a limitation to Live Agent in Lightning Experience about using subtabs and navigation rules with Live Chat Transcripts.

**Metadata API**

Added metadata types that let you drive app behavior and track activation metrics in subscriber orgs that install your package: `FeatureParameterBoolean`, `FeatureParameterDate`, and `FeatureParameterInteger`.

**Experience New Charts on iOS Devices**

Added the latest features.

**Explore the Latest Dashboards and Lenses on Android Devices**

Added the latest features.

**Deployment: Changing a Field Type Between Master-Detail and Lookup Is Not Supported for Test Deployments**

If you change a field type from Master-Detail to Lookup or vice versa, the change isn’t supported when running a test deployment (validation).

## October 25, 2017

**Field Service Mobile: Android App Generally Available and iOS App Turns 3.0**

Added call out for new perm requirement to run flows.

**Latest Service Analytics Version Lets You Choose Between Fast (Basic) and Custom Creation Options**

Added note about new VisualForce configuration wizard that makes app setup and creation easier and more precise.

**Field Service Mobile: Android App Generally Available and iOS App Turns 3.0**

Removed the release note entitled "Customize Mobile App Settings for Different Users" because the feature was removed from the Winter '18 release. For more information, contact Salesforce.

**Control Action Visibility on Record Pages with a System Permission**

Added information about a new user perm that can affect whether users see customized actions from a object's page layout when they view record pages.

**Filter More Options in the Tasks Component**

Added back the topic about filtering the tasks component on the Home page in Lightning Experience.

**Create Contact Roles for Opportunities from Contacts in Lightning Experience**

Added a release note about new functionality on the opportunity related list for contacts.

**Update Your Facebook Authentication Provider to Get User Information**

Added release note about a change to the default Facebook authentication provider to return a user's email address.

**AppExchange: Redesigned Website, New Solution Types**

Added release notes announcing changes to AppExchange's design and product inventory.

**Other Changes to the AppExchange Publishing Console**

Added information about minimum pricing for paid AppExchange listings.

**Shorten the Dev Life Cycle with Scratch Orgs (Generally Available)**

Corrected the information for scratch org allocations. Maximum and daily allocations were switched.

**Metadata API**

Removed the announcement about the `compactLayoutAssignment` field on the CustomObject metadata type. No changes in this release.

## October 18, 2017

**Let Sales and Marketing Track the Influence of Multiple Campaigns on Opportunities**

Clarified that Campaign Influence multi-touch attribution models require Sales Cloud and Pardot licenses, and do not become available in Sales Cloud until November 14, 2017.

**What's New in the Latest Version of Salesforce for Android and Salesforce for iOS**

Announcing the general availability on the week of 10/16/17 for version 14.0 of Salesforce for Android and Salesforce for iOS. Learn all about the new enhancements for your users.

**Macros: Creating Efficient Support Agents and Happy Customers**

Added a note about quick text and email template support for macros in Lightning Experience.

**Other API Changes**

Updated the API section to reflect that SOQL queries based on record type return results only for objects to which the user running the query has Read access.

**Connect, Learn, and Blaze Trails Together in the New Trailblazer Community**

Announced that the Salesforce Success Community has been renamed the Trailblazer Community.

**Supercharge Financial Accounts with Customizable Views and Rollups**

Functionality to create new Financial Account rollup rules and filter criteria, and to determine when a rollup is triggered and under what conditions, is not supported.

**Turn Event Data into Engaging Customer Experiences with Salesforce IoT Explorer Edition**

Added release notes for Salesforce IoT Explorer Edition.

## October 11, 2017

### Salesforce DX: The New Frontier for Salesforce App Development

Updated the release notes in the Salesforce DX section to reflect changes introduced in the mid-October GA of the Salesforce DX features.

### Metadata API

Announced changes to the `compactLayoutAssignment` field on the CustomObject metadata type.

### Personalize Your Community with CMS Connect

Added a link to instructions and code for creating the connector JSP page necessary for setting up personalization.

### Changes to \$Label Expression Processing

Undocumented methods of accessing custom labels using the `$Label` global value provider won't work in the latest release.

### New and Changed Lightning Interfaces

Added support for the `force:hasRecordId` interface for Lightning components used in the Utility Bar.

## October 4, 2017

### Changes to G Suite Setup Required to Continue Syncing Events

Alerting Lightning Sync for Google customers that to continue syncing events in Winter '18, they need to work with their Google admin to update their G Suite configuration.

### Added Field to Network Object

Added the `enableUpDownVote` field to the Network object in the Metadata API.

### Leads: Speed Through Lead Conversions with Added Flexibility

Clarified that the new Convert Lead dialog box requires orgs to use the newer Apex-based lead convert and not the old lead convert based on PLSQL.

### Collaborative Forecasts: Do More with Sales Predictions

Added information about the new video for Collaborative Forecasts in Lightning Experience.

### Manage Service Contracts in Lightning Experience (Generally Available)

Clarified that contract line items cannot be mass-edited in Lightning Experience, and described a limitation regarding record types.

### Make Sure Your Reps Never Forget to Remember with Task Reminders

Clarified that users can create and edit, but not receive, task reminders in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Also, the New Task global action doesn't support task reminders.

### Help Reps Stay on Task with Task Notifications

Clarified that push notifications and reminders in the notification tray aren't supported in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

## September 27, 2017

### Add New Picklist Values in Managed Package Upgrades

We removed this entry from the release notes. This feature is no longer available in the Winter '18 release, and we are evaluating it for a future release.

### New Objects

Added two new APIs: ListEmail and ListEmailRecipientSource.

### Prevent Apex Callouts During Read-Only Mode

Added release notes about Apex callout best practices in read-only mode. A Salesforce org is in read-only mode during some Salesforce maintenance activities, such as planned site switches and instance refreshes.

**New and Changed Lightning Components**

Added information about changes to `lightning:button` and `lightning:buttonStateful`.

**Help and Training**

Added Help and Training section.

**Changed Objects**

Noted that on the `DuplicateRecordSet` object, the `DuplicateRuleId` field label has been changed back to `Duplicate Rule ID`. Earlier in Winter '18, the label was `Parent`.

**New Launch Experience for Salesforce Optimizer**

Added information about Optimizer's redesigned launch page.

**Add Person Accounts to Campaigns from Account Reports**

Added information about adding person accounts to campaigns.

**Productivity Features: Task Reminders, Enhanced List Views, and Forecasting in the Sales Console**

Removed the topic about filtering the tasks component on the Home page in Lightning Experience.

**Create Your Own Mega-Feeds with Streams**

Corrected name of components to Stream List and Stream Detail.

**Pardot Available in Japanese (Beta)**

Added information about Pardot's Japanese beta release.

## September 20, 2017

**Other Changes in Sales Cloud Einstein**

Added information about label changes in Sales Cloud Einstein

**Supported Browsers for Lightning Experience**

Updated information about Internet Explorer 11 support for Lightning apps.

**You Asked for It!**

Added Ideas that we delivered.

**Component Code Validation Occurs Automatically When You Save**

Added a link to the corresponding developer guide section, which provides details about the validations performed.

**Relax While We Convert Your Relative URLs to Absolute URLs (Beta)**

Added details about where relative URLs are converted.

**Use Macros in Your Lightning Console Apps**

Added information about support for Macros in all Lightning console apps, including the [Sales Console](#).

**Lightning Dialer: Record Custom Voicemail Greetings**

Removed the topic about showing a standard company phone number when making calls.

**Assets: Get a Bird's-Eye View of Asset Hierarchies**

Explained how to add the View Asset Hierarchy action to asset page layouts.

**New and Changed Lightning Components**

Added information about new components, `lightning:outputField` and `lightning:recordViewForm`, and changes to `lightning:datatable` and `lightning:verticalNavigation`.

**Changed Objects**

For the Task object, on the `TaskSubtype` field, the picklist value List Email was added.

**Attach External Documents to Cases and Report on Them, Too**

Added consideration that Chatter must be enabled for users to attach external documents to cases.

**Customize Console Apps with the Lightning Console JavaScript API (Generally Available)**

The Utility Bar API, Workspace API, and Omni-Channel API have moved to the `lightning` namespace. Console tab events, such as `lightning:tabClosed` and `lightning:tabFocused`, have also moved to the `lightning` namespace.

**Interact More Easily with Salesforce Authenticator Through Accessibility Updates**

Added information on accessibility updates in Salesforce Authenticator 2.10.1.

**Get More Time Before Backup and Restore Notifications Appear**

Added information on changes to backup and restore notifications in Salesforce Authenticator 2.10.1.

## September 13, 2017

**View Read-Only and Formula Fields on Update a Record Quick Actions**

Added information about this change.

**Simplify Scheduling with Service Crews**

Noted that the crew size fields on work types are hidden for all users by default.

**Do More with Multiple Signatures on Service Reports**

Noted that the Signature Type field appears in the service report template editor as Type.

**View Read-Only Fields in the Related Record Component**

Added information about updates to the Related Record component.

**Create Tomorrow's Reports Today with the Lightning Report Builder (Beta)**

Added another difference between the Salesforce Classic report builder and the Lightning Experience report builder. In the Lightning Experience report builder, when grouping by a date field, you can't customize date granularity.

**Let Users Hold Video Meetings and Send Instant Messages Right from a Record with the Cisco Spark Group Conversations Component**

Updated the names of the components.

**Let Users Manage Shared Work Spaces in Cisco Spark for Salesforce**

Updated the names of the components.

**Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce (Generally Available)**

Updated the names of the components.

**New Financial Services Cloud Record Types**

New record types added to objects.

**Change Opportunity Forecast Category**

Added information about updating Forecast Category on opportunities.

**Keep Your External Data up to Date with Change Data Capture (Pilot)**

Clarified that data change events must be explicitly enabled for custom objects.

**Beef Up Your Community Pages with JSON Content (Beta)**

Added a note about SEO.

**Change CustomTab Type From S-Control to Visualforce Page**

Clarified that you can now use Metadata API to change a CustomTab type.

## September 6, 2017

**Reports and Dashboards REST API**

Added information about `folders` resources in the Reports and Dashboards REST API.

**Rapidly Clicking a Custom Action No Longer Launches Multiple Instances**

Added details about this bug fix.

**View Read-Only and Formula Fields on Update a Record Quick Actions**

Added information about this change.

**Package Your Recipes**

Added information concerning the need to use a recipe in a dataset before packaging the recipe.

**Integrate Sharing Inheritance with Security Predicates**

Added note that you can choose only one supported object per dataset for sharing inheritance in Analytics.

**Critical Updates for Stricter CSP Restrictions**

The critical updates will be extended to production orgs in Spring '18, rather than the previously scheduled Winter '18 release.

## August 30, 2017

**View Related List Data Quickly with Related List Quick Links**

Removed statement that the component will be automatically added to uncustomized record pages when orgs upgrade to Winter '18.

**Field Service Managed Package: Smarter Territory Creation, Multiday Work, and Designated Work**

Removed statement that deep clone will be available on scheduling policies.

**SAML Signing Certificate Has Been Retired**

Clarified instructions concerning whom is affected and how to act.

## August 21, 2017

**Salesforce Winter '18 Release Notes**

Published preview release notes.

## 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 in Salesforce Help, release notes, or developer guides, look for the feedback form and vote up or down. Add comments if you have them.
- **Twitter**—When you follow @salesforcedocs on Twitter, you receive notices whenever we publish new documentation or make significant updates to existing documentation. Tweet us at [@salesforcedocs](https://twitter.com/salesforcedocs).

## How and When Do Features Become Available?

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Some features in Winter '18 affect all users immediately after the release goes live. Consider communicating these changes to your users beforehand so that they're 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.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Supported Browsers for Lightning Experience</a>	✓			
<a href="#">Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11</a>			✓	
<a href="#">Supported Browsers for Salesforce Classic</a>	✓			

## Salesforce Overall

Measure how much Lightning Experience can impact your sales team's productivity with the redesigned Readiness Check. The new look and feel of Lightning Experience makes work a whole lot easier. Style meets new functionality with a Lightning Experience search results page that lets you easily resize columns, wrap text, and sort records. Console users work more quickly with favorites, navigation rules, and two new components.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">New Launch Experience for Salesforce Optimizer (not immediately available)</a>		✓		
<a href="#">The Lightning Experience Readiness Check Got a Promotion</a>		✓		
<a href="#">Lightning Experience Gets a New Look and Feel</a>	✓			
<a href="#">Popup Helps You and Your Users Adopt Lightning Experience</a>	✓			
<a href="#">Search</a>				
<a href="#">Resize Columns, Wrap Text, and Easily Sort on the Search Results Page</a>	✓			
<a href="#">Get to the Right Record Faster with Enhanced Instant Results</a>	✓			
<a href="#">See More Relevant Objects in the Default Top Results</a>	✓			
<a href="#">Get Search Results for More Objects</a>		✓		
<a href="#">Find Things in Setup Faster with Enhanced Quick Find</a>	✓			
<a href="#">Lightning Console Apps: Favorites and Customized Navigation</a>				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Use Favorites in Console Apps</a>	✓			
<a href="#">Automatically Open Related Records in Console Apps with Navigation Rules</a>			✓	
<a href="#">Work More Quickly with Cmd+Click in Lightning Console Apps</a>	✓			
<a href="#">Use Macros in Your Lightning Console Apps</a>			✓	
<a href="#">Add Milestone and Accordion Components to Your Console App Pages</a>			✓	
<a href="#">Let Console Users View Read-Only Fields in the Related Record Component</a>			✓	
<a href="#">Open Favorites in a New Browser Tab</a>	✓			
<a href="#">Navigate More Quickly with Keyboard Shortcuts</a>	✓			
<a href="#">Add Tabs to Lightning Apps Installed from Managed Packages</a>		✓		
<a href="#">Connect, Learn, and Blaze Trails Together in the New Trailblazer Community</a>	✓			

## Sales

Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Help reps stay focused on the sales pipeline directly in Outlook and Gmail.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Trailhead</a>			✓	
<a href="#">Sales Cloud Einstein</a>				
<a href="#">Einstein Lead Scoring</a>				
<a href="#">Use Einstein Lead Scoring in Salesforce Classic</a>			✓	
<a href="#">Use More Types of Lead Conversion with Einstein Lead Scoring</a>			✓	



Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Keep Track of and Control Einstein Lead Scoring Enablement			✓	
<b>Einstein Automated Contacts</b>				
Say Goodbye to Contact Data Entry (Beta)			✓	
See How Many Contacts Einstein Added to Salesforce (Beta)			✓	
<b>Einstein Activity Capture</b>				
Welcome Microsoft® Exchange 2013 and 2016 Accounts			✓	
Add Activities for Quotes and Contracts			✓	
See Automatically Captured Microsoft® Office 365® Events from Salesforce Calendar			✓	
Decide How Long We Retain Your Data				✓
Easily Manage the Excluded Addresses List			✓	
<b>Einstein Sales Analytics</b>				
<b>Other Changes in Sales Cloud Einstein</b>				
	✓			
<b>Core Sales Features</b>				
<b>Leads</b>				
	✓			
<b>Accounts</b>				
Set Up Person Accounts with Ease			✓	
Add Person Accounts to Campaigns from Account Reports	✓			
<b>Campaigns</b>				
Let Sales and Marketing Track the Influence of Multiple Campaigns on Opportunities			✓	
Other Changes Make Campaign Influence More Flexible			✓	
<b>Collaborative Forecasts</b>				
		✓		
<b>Enterprise Territory Management</b>				
		✓		
<b>Opportunities</b>				
Add Opportunity Team Members Faster	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Prompt Users to Add Products to Opportunities			✓	
Create Contact Roles for Opportunities from Contacts in Lightning Experience	✓			
Change Opportunity Forecast Category	✓			
<b>Productivity Features</b>				
<b>Sales Console</b>			✓	
<b>Email</b>				
Expand Your Reps' Email Reach with List Email	✓			
Keep Track of List Emails in the Activity Timeline	✓			
No More Errors for Empty Email Merge Fields	✓			
<b>Activities</b>				
Make Sure Your Reps Never Forget to Remember with Task Reminders	✓			
Help Reps Stay on Task with Task Notifications	✓			
Get Your Fill of Past and Archived Activities with All Activity History	✓			
Filter More Ways in the Activity Timeline	✓			
<b>List Views</b>				
List View Column Widths Dynamically Adjust to the Content	✓			
Set Custom Column Widths on More List Views	✓			
Reset Custom List View Column Widths to Their Default	✓			
Wrap Text in List Views	✓			
Use Clone or Save As to Make List Views Your Own	✓			
Update Record Owners from List Views	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Edit More Records at Once with Mass Inline Editing	✓			
<b>Notes</b>	✓			
<b>Calendar</b>				
Get Event Attendee Details into Salesforce with Lightning Sync for Google			✓	
Share Calendars with Coworkers in Lightning Experience	✓			
Cloud Scheduler Is Retired	✓			
<b>Lightning Dialer</b>			✓	
<b>Home</b>				
Filter More Options in the Tasks Component	✓			
Refresh the Performance Chart for Up-to-Date Data	✓			
<b>Data Quality</b>				
<b>Merge Person Accounts in Lightning Experience</b>			✓	
<b>Wrangle Duplicates Using Duplicate Record Sets in Lightning Experience</b>			✓	
<b>Enhance Fields on Your Salesforce Records with Lightning Data</b>			✓	
<b>Google Integration</b>				
<b>Lightning for Gmail: Time-Saving Features and New Insights</b>				
Enjoy More Features for Templates			✓	
Manage Salesforce Tasks from Gmail	✓			
Easily Find and Relate Items to the Right Salesforce Records	✓			
Zero In on the Leads Most Likely to Convert			✓	
<b>Lightning Sync</b>				
Changes to G Suite Setup Required to Continue Syncing Events			✓	
Set Up Users on Service Cloud and Force.com Licenses			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Sync Events Between Google Calendar and Salesforce</a>			✓	
<a href="#">Do More with Meeting Attendees on Salesforce Events</a>			✓	
<b>Microsoft® Integration</b>				
<b>Lightning for Outlook</b>				
<a href="#">Enjoy More Features for Templates</a>			✓	
<a href="#">Manage Salesforce Tasks from Microsoft® Outlook®</a>	✓			
<a href="#">Easily Find and Relate Items to the Right Salesforce Records</a>	✓			
<a href="#">Zero In on the Leads Most Likely to Convert</a>			✓	
<a href="#">Get Insights on Prospect Activity with Engage for Outlook</a>			✓	
<b>Lightning Sync</b>				
<b>Salesforce for Outlook</b>				
<a href="#">Critical Upgrade Required to Continue Using Salesforce for Outlook</a>			✓	
<a href="#">Avoid Manual Upgrades</a>			✓	
<b>Security</b>				
<a href="#">Encrypt More of Your Customers' Personally Identifying Information (Generally Available)</a>			✓	
<a href="#">Encrypt the Opportunity Description and Next Steps Fields (Beta)</a>			✓	
<a href="#">Encrypt the Opportunity Name Field (Pilot)</a>		✓		
<b>Other Changes in the Sales Cloud</b>				
<a href="#">Salesforce Events Calendar Is Now Called My Events</a>	✓			
<a href="#">Recent Calendar Changes Visible from Lightning Experience Without Browser Refresh</a>	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Data.com Account Data Assessment Has Been Retired</a>		✓		
<a href="#">Data.com Tab Is Available Only to Prospector Customers</a>		✓		
<a href="#">Pardot Available in Japanese (Beta)</a>				

## Service

Enjoy Lightning Experience support for Live Agent, Omni-Channel, service contracts, case milestones, macros, case cloning, and more. Expand your field service operation with the Field Service Lightning mobile app for Android. Share knowledge faster by embedding videos and code blocks in Knowledge articles. And support up to 10 social accounts with the Social Customer Service Pro add-on.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Service Console</b>				
<a href="#">Do More in Service Console with Macros, Live Agent, and Other Enhancements</a>			✓	
<a href="#">Brand Your Community in the Lightning Service Setup Flow</a>		✓		
<a href="#">Enjoy a Streamlined Lightning Knowledge Setup Flow</a>		✓		
<a href="#">Get Valuable Insight into Customer Activity with Community 360 (Generally Available)</a>	✓			
<b>Field Service</b>				
<a href="#">Simplify Scheduling with Service Crews</a>			✓	
<a href="#">New Assignment Options on Service Appointments</a>			✓	
<a href="#">Assign Service Report Templates to Work Orders and Work Order Line Items</a>			✓	
<a href="#">Do More with Multiple Signatures on Service Reports</a>	✓			
<a href="#">No More Signature Reuse on Service Reports</a>	✓			
<a href="#">Track Product SKUs</a>			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Schedule Night Shifts with 24-Hour Time Slots	✓			
View Field Service Location Hierarchy Details and Files				
Create Sharing Rules for Work Types			✓	
Save Time with Field Service Flow Actions			✓	
Filter Work Orders by Record Type			✓	
Field Service for Mobile				
Field Service Lightning Comes To Android (Generally Available)			✓	
Capture Multiple Signatures on Service Reports			✓	
Verify Service Reports with Enhanced Service Report Previews			✓	
Set Background Mode Geolocation Preferences			✓	
Increase Usability for International Workforces with Flow Localization			✓	
Save Time with Smarter Product Requests			✓	
Get the Parts You Need with Enhanced Product Searching			✓	
Field Service Managed Package				
Draw Your Territories on the Map with Map Polygons			✓	
Schedule Work Over Multiple Days			✓	
Schedule Work Dependencies with Complex Work			✓	
Reserve Time Slots for Designated Work			✓	
Display Service Resources in All Territories			✓	
Control Which Absences Appear on the Resource Gantt Chart			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Schedule High Priority Appointments over Those of Lower Urgency			✓	
Field Technicians Automatically Follow Their Appointments			✓	
Display Both Planned and Actual Travel Routes on the Console Map			✓	
Set Custom Permissions for Field Service Lightning Users			✓	
Control Drip Feed Dispatch Setting at the Territory Level			✓	
Cases				
Save Time When Emailing Customers with Merge Fields and Salesforce Classic Templates	✓			
Use Recipient Fields to Associate Emails with Case Contacts			✓	
Use Case Milestones in Lightning Experience			✓	
Seamlessly Clone Cases	✓			
Add a Case Comment from a Related List			✓	
Knowledge				
Access Knowledge Articles in Multi-Language Orgs with Lightning Experience (Beta)	✓			
Create Articles from the Knowledge Component	✓			
Embed Videos and Code Blocks in Knowledge Articles	✓			
Track Article Views with Event Monitoring		✓		
Follow the Flow with Article Assignments	✓			
Choose Your Data Categories in Lightning	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Knowledge Search: Article Result Sorting and External Documents Case Attachment</b>				
Sort Knowledge Article Search Results	✓			
Attach External Documents to Cases and Report on Them, Too			✓	
<b>Live Agent</b>				
Chat with Customers in Lightning Experience			✓	
Control the Placement and Height of the Agent Chat Window			✓	
Access All of Your Chat Transcripts in Lightning Experience			✓	
Continue the Conversation with Past Chats for Repeat Customers	✓			
Help Agents Multitask with Chat Header Previews	✓			
Enhanced Toolbar for Chat Agents	✓			
Feature Gaps for Live Agent in Lightning Experience	✓			
<b>Omni-Channel</b>				
Route Work to Agents in Lightning Experience (Generally Available)			✓	
Route Live Agent Chats with Omni-Channel in Lightning Experience			✓	
Monitor Your Support Center with Omni-Channel Supervisor in Lightning Experience (Beta)			✓	
Let Supervisors See Only What Matters in Omni-Channel Supervisor (Beta)				✓
Use an External Routing Implementation with Omni-Channel (Beta)				✓
Get More Done with Raised Limits for Omni-Channel	✓			



Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Use Omni-Channel Methods in the Console API and a New Component in Lightning Experience (Beta)		✓		
Keep Waiting Customers at the Front of the Line with the Custom Requested Datetime Field		✓		
Delete User Presence Statuses to Make More Room in Your Org		✓		
Snap-ins for Web				
Chat with Customers in Lightning Experience Using Snap-Ins Chat			✓	
Give Spammers the Boot with Visitor Blocking			✓	
Pre-Chat Form Records Automatically Attach to the Chat Transcript	✓			
Pass Customer Information to Post-Chat			✓	
Entitlement Management				
Manage Service Contracts in Lightning Experience (Generally Available)	✓			
Track Your Case Milestones in Lightning Experience			✓	
Macros				
Build Macros and Save Time in Lightning Experience	✓			
There's No Place like Macro Record Home	✓			
Run Your Macros from the Utility Bar			✓	
Assets	✓			
CTI				
Create Click-to-Dial Phone Numbers with the lightning:clickToDial Component		✓		
Open CTI notifyInitializationComplete Method Available in Lightning Experience		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Social Customer Service</b>				
<b>Get More Social with Social Customer Service Pro Add-On</b> (not immediately available)				✓
<b>Set Up Social Service Faster with Social Business Rules</b>		✓		
<b>Help Your Customers by Attaching Images to Social Posts</b>	✓			
<b>Preview Image Attachments in the Case Feed</b>	✓			
<b>Help Your Customers Privately by Hiding Facebook Comments and Replies</b>	✓			
<b>Add More Fields to Social Persona to Learn About Customers</b>			✓	
<b>Social Studio Replaces Radian6 on Buttons and Text</b>	✓			
<b>Other Changes</b>				
<b>Chatter Answers is No Longer Supported in Spring '18</b>	✓			
<b>Set Up Users on Service Cloud Licenses for Lightning Sync</b>			✓	

## Analytics

Building reports just got fun (or more fun, depending on your perspective) with this release's introduction of the Lightning Report Builder. And Einstein Analytics (formerly Wave) adds smart features, including simplified and more intuitive app creation, chart suggestions, and the Einstein Discovery story improver.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Reports and Dashboards</b>				
<b>Create Tomorrow's Reports Today with the Lightning Report Builder (Beta)</b>			✓	
<b>Open Reports in Quip</b>	✓			
<b>Add Tables with Up to 10 Columns to Dashboards (Beta)</b>	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Embed Dashboards on the Home Tab and in Lightning Apps</b>		✓		
<b>View Filtered Reports by Clicking Chart Segments from Dashboards</b>	✓			
<b>Get the Full Power of Enhanced Folder Sharing in Lightning Experience</b>			✓	
<b>Chart Enhancements for Reports and Dashboards in Lightning Experience</b>	✓			
<b>Other Enhancements to Reports and Dashboards in Lightning Experience</b>	✓			
<b>Einstein Analytics</b>				
<b>Einstein Analytics, the New Name for Wave Analytics</b>	✓			
<b>Analytics Prebuilt Apps</b>				
Latest Service Analytics Version Lets You Choose Between Fast (Basic) and Custom Creation Options	✓			
Watch Step-by-Step Creation of Your App			✓	
Turn Data into Dollars with Sales Analytics, Now Powered by Einstein	✓			
Service Analytics Takes the Guesswork Out of App Creation, Gives Agents Greater Insight into Their Performance	✓			
Get Fine-Grained Insights into Mobile Technicians and Territories with Field Service Analytics	✓			
<b>Analytics Home</b>				
Curate the Analytics Experience for Your Teams	✓			
Amp Up Your Productivity with Lightning Experience in Your Analytics Home	✓			
Locate Lenses and Dashboards Lightning Fast with Lightning Experience Global Search	✓			
Stay Organized with the New Browse App and App Details Pages	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Analytics Exploration and Visualization</b>				
Explore More Easily with the Enhancements to Explorer	✓			
Give Your Tables Style with New Properties	✓			
Do More with Compare-Table Formulas and Functions (Beta)	✓			
Get Your Focus Back	✓			
Drag and Drop to Reorder Values Table Columns	✓			
Control the Visibility of Your Dataset Fields	✓			
Let Explorer Suggest a Chart for Your Data	✓			
Visualize How Your Data Flows Using a Sankey Chart	✓			
Unfold Your Data with the Origami Chart	✓			
Customize Chart Tooltips	✓			
Control the Appearance of Map Charts	✓			
Other Enhancements to Charts	✓			
<b>Analytics Dashboard Design</b>				
Tune Your Dashboard Based on Inspector Recommendations	✓			
Break Up Monolithic Dashboards to Improve Performance (Beta)	✓			
Save Time by Editing Steps	✓			
Find Your Step Without a Flashlight and Map	✓			
Control Dashboard Filters with New Faceting Behavior	✓			
Round Out Your Dashboard with Related Web Content	✓			
Create Dashboard Controls Using Global Filters	✓			
Get Familiar with Dashboard JSON Changes for Wave Designer		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Other Enhancements to Wave Dashboard Designer</a>	✓			
<b>Analytics Data Integration</b>				
<a href="#">Stay on Top of Replication</a>		✓		
<a href="#">Branch Out with New Connectors</a>		✓		
<a href="#">Intelligently Prepare .csv Data When You Create Datasets</a>	✓			
<a href="#">Build Datasets in the Dataflow of Your Choice</a>		✓		
<a href="#">Keep Your Data Flowing with Dataflow Enhancements</a>		✓		
<a href="#">Export Data to Einstein Discovery with the export Transformation (Beta)</a>				✓
<a href="#">Get Straight to the Point with the Refreshed Dataset Edit Page</a>	✓			
<a href="#">Turn Back the Data Clock: Restore Datasets to Previous Versions</a>		✓		
<a href="#">Intelligently Prepare and Clean Your Data in Recipes with Smart Suggestions and Column Profiles</a>		✓		
<a href="#">Integrate Sharing Inheritance with Security Predicates</a>			✓	
<b>Analytics Einstein Discovery</b>				
<a href="#">Connect to Your Salesforce Data Even More Easily with Einstein Discovery</a>				✓
<a href="#">Display Einstein Discovery Recommendations in a Salesforce Object (Pilot)</a>				✓
<a href="#">Make Your Story Even Better with Story Improver</a>				✓
<a href="#">Learn Which Factors Drive Changes Over Time with the Story Timeline</a>				✓
<a href="#">Keep Your Analysis Current with Story Refresh</a>				✓

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create Datasets from an Einstein Analytics Dataflow (Beta)				✓
<b>Analytics Mobile</b>				
Experience New Charts on iOS Devices	✓			
Explore the Latest Dashboards and Lenses on Android Devices	✓			
<b>Analytics Development and Customization</b>				
Analytics Templates Enable More Robust Apps Functionality		✓		
Updates to the REST API		✓		
Discover Dashboards with New SDK Functionality.		✓		
Take Advantage of New SAQL Functionality		✓		
Collaborate on Dashboards with Annotations in Communities			✓	
Control the Display and Functionality of Embedded Dashboards		✓		
Bring Apex Capabilities into Analytics Dashboards (Beta)		✓		
Package Your Recipes		✓		

## Communities

Designed with account management in mind, the Customer Account Portal gives your customers a private and secure place to access and update their account information. Branding sets partner with audience targeting, making it easy to dynamically change the appearance and style of your community based on the audience viewing the page. And Community Pulse displays your most important community metrics front and center in the Workspaces area.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Lightning Templates and Bolt Solutions</b>				
<b>Update Your Customer Service (Napili) Community</b>		✓		
<b>Do More with the Updated Partner Central Community</b>		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Announcing Customer Account Portal, a Whole New Way to Keep Your Customers Happy		✓		
Developers, Build Your Community Your Way		✓		
Lightning Bolts Know No Bounds		✓		
Dynamic Branding		✓		
Audience Targeting				
Create Audiences Based on User Criteria		✓		
Prioritize What Your Audiences See		✓		
CMS Connect (Beta)				
Personalize Your Community with CMS Connect				
Beef Up Your Community Pages with JSON Content (Beta)		✓		
Align Your Community and Website Content with Support for More CMS Providers (Beta)		✓		
Relax While We Convert Your Relative URLs to Absolute URLs (Beta)		✓		
Usability and Performance Improvements				
Experience Faster Community Performance with Free Content Delivery Network (Beta)			✓	
Customize Navigation Background and Text Color		✓		
Add a Custom Font Family More Easily		✓		
Improve Community Performance with Browser Caching	✓			
Get Performance Information with the Salesforce Community Page Optimizer (Generally Available)		✓		
Delete Components from the Page Structure Panel		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Edit Custom Components in the Developer Console		✓		
Edit the Current Published Page in Community Builder		✓		
See Changes by Refreshing the Current Page		✓		
Lightning Communities				
Introduce a More Intuitive Navigation Experience with the Tile Menu (Beta)		✓		
Give Portal Members Access to Edit Their Profiles		✓		
See Your Customers' Community Activity with Community 360 (Generally Available)		✓		
Find What You Need with Global Search for Peer-to-Peer Communities		✓		
New User Profile Menu for Updated Templates		✓		
Access Libraries and More with the New Resources Page		✓		
Discover Popular Files		✓		
Use Path on Contracts, Orders, Quotes, and Custom Objects		✓		
Embed Flows in Lightning Community Pages		✓		
Add Global Actions to Your Navigation Menu		✓		
Koa and Kokua Templates No Longer Available for New Communities		✓		
Chatter in Lightning Communities				
Embed Rich Publisher Apps in the Chatter Publisher (Generally Available)	✓			
Do More with the Ask Button	✓			
Create Your Own Mega-Feeds with Streams	✓			



Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">View All Your Community Streams in Salesforce (Pilot)</a>	✓			
<a href="#">Increase the Visibility of Critical Information with Pinned Posts (Beta)</a>	✓			
<a href="#">Assign a Default Community to a User Profile</a>	✓			
<a href="#">Spice Up Your Community with Emojis</a>	✓			
<a href="#">Highlight the Best Solutions in Your Community</a>	✓			
<a href="#">Enable Topics Suggestions Per Org and Community</a>		✓		
<a href="#">Add Topics with Hashtags in Communities</a>	✓			
<a href="#">Create a Custom Report Type to See Your Top-Ranked Groups (not immediately available)</a>		✓		
<a href="#">See How Many People Are Discussing a Topic in a Community</a>		✓		
<b>Files in Lightning Communities</b>				
<a href="#">Get External Files in Communities</a>	✓			
<a href="#">Let Libraries and Folders Strut Their Stuff in Tile View (Beta)</a>	✓			
<a href="#">Organize Your Libraries in Communities</a>	✓			
<a href="#">Let Partners Create Content Deliveries and Public Links to Files (available within 24 hours after the release)</a>	✓			
<a href="#">Create Custom File Preview Components</a>	✓			
<a href="#">Improve the Upload Experience with the File Upload Component</a>	✓			
<a href="#">Keep Files on Records Private (available within 24 hours after the release)</a>	✓			
<a href="#">Create and Collaborate on Documents in Salesforce with Quip</a>	✓			
<b>Partner Relationship Management</b>				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Manage Partners with Channel Programs and Levels</a>		✓		
<a href="#">Boost Your Partners' Exposure with Market Development Funds</a>		✓		
<b>Take the Easy Path and Use Guided Setup to Configure Features</b>				
<a href="#">Let Partners Register Their Own Deals</a>		✓		
<a href="#">Distribute Leads with Ease</a>		✓		
<a href="#">Provide Partners with Market Development Funds</a>		✓		
<a href="#">Monitor Performance with Partner Scorecards (Beta)</a>		✓		
<a href="#">Create Partner Campaigns Using Distributed Marketing (Pilot)</a>		✓		
<b>Community Analytics</b>				
<a href="#">Get Your Stats Front and Center with Community Pulse</a>		✓		
<a href="#">Collaborate on Analytics Dashboards with Annotations</a>			✓	
<a href="#">Boost Engagement with Community Cloud and Marketing Cloud Integration (Beta)</a>		✓		
<b>Moderation</b>				
<a href="#">Do It All in the Member Engagement Queue</a>		✓		
<a href="#">Pending Discussion Queue Is Cleaner and More Robust</a>		✓		
<a href="#">Switch to Workspaces and Do More with Communities</a>		✓		
<b>Other Changes in Communities</b>				
<a href="#">Move Communities More Easily with Enhanced Change Sets Support</a>		✓		
<a href="#">Manage External Community Users in Lightning Experience</a>		✓		
<a href="#">Use More Objects in Communities</a>		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create Communities in Enterprise, Performance, and Unlimited Editions—Even Without Communities Licenses		✓		
SEO-Friendly URLs for Case, Dashboard, Group, and Report Detail Pages		✓		
Article URLs No Longer Include the Record ID		✓		
Customize Your Community's Login Experience Based on the User		✓		
Show or Hide the Title of the Top Articles by Topic Component		✓		
External Community Moderators Can See Group Information		✓		
Reports Open on the Page You're On		✓		

## Chatter

Encryption for Chatter is generally available and includes more fields. Pin a post to the top of a group or topics feed (beta), and discover which groups have the most activity. Groups and user profiles get a new Trailhead look.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Feeds</b>				
Increase Security with Encryption for Chatter (Generally Available)	✓			
View All Your Community Streams in Salesforce (Pilot)	✓			
Increase the Visibility of Critical Information with Pinned Posts (Beta)	✓			
Spice Up Your Conversations with Emojis	✓			
Enable Topic Suggestions For Your Org		✓		
<b>Groups</b>				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create a Custom Report Type to See Your Top Ranked Groups (not immediately available)		✓		
Groups Get a Trailhead Makeover	✓			
User Profiles				
User Profiles Get a Trailhead Makeover	✓			
Astro Is Your Default Avatar in More Places	✓			
Take a Guilt-Free Vacation with Out of Office (Generally Available)	✓			

## Files

Create, share, and collaborate on documents with Quip without an external file provider. Attach a file to a record and keep it private, or share it with the people and groups you choose. Files search results are now sortable with more fields.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create and Collaborate on Quip Documents in Salesforce	✓			
Keep Files on Records Private (available within 24 hours after the release)	✓			
Sort Your Files Search Results with New Fields	✓			
Renamed Permissions for Content Deliveries Public Link Creation	✓			
Create Custom File Preview Components	✓			

## Salesforce Integrations

Empower your sales and service pros to be more productive by connecting Salesforce to some of the industry's leading business applications.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce (Generally Available)</a>			✓	
<a href="#">Google Integration: Flexible Record Matching, More Template Options, Two-Way Event Sync, and Required Change to Lightning Sync Setup</a>			✓	
<a href="#">Skype for Salesforce: Chat and Send Instant Messages (Generally Available)</a>			✓	
<a href="#">Microsoft® Integration: Task Management, Pardot Engagement, and Sync for the Masses</a>			✓	

## Mobile

Salesforce mobile apps help your users stay productive throughout their busy days, no matter where they are. So we've been hard at work adding new ways to help your users outside of the office. Salesforce offers improvements to Chatter, tasks, and many other sales features, so sales professionals can take care of even more business from their phones.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</a>				
<a href="#">What's New in the Latest Version of Salesforce for Android and Salesforce for iOS</a>	✓			
<a href="#">Everything That's New in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</a>				
<a href="#">See More Relevant Objects in the Recent Section</a>	✓	✓	✓	
<a href="#">Updated Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Requirements</a>	✓			
<a href="#">Manage Territories on the Go</a>	✓			
<a href="#">Manage Service Contracts in the Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</a>	✓			
<a href="#">Access Case Milestones on the Go</a>			✓	
<a href="#">Add a Case Comment from a Related List</a>			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Seamlessly Clone Cases	✓			
Legacy Charts in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Will Retire in Spring '18 (Phased Retirement)	✓			
Enjoy a Modern Chatter Experience in Salesforce for iOS	✓	✓	✓	
Share Content with the New Chatter Post Composer	✓	✓	✓	
View Inline Images and Multiple Attachments in the Chatter Feed	✓	✓	✓	
<b>Salesforce1 Is Now Salesforce</b>	✓			
<b>Get Answers Quicker with the Updated Help in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</b>	✓			
<b>Salesforce Authenticator</b>	✓			
<b>Salesforce Chatter: A New Way to Work with Windows 10</b>				
<b>Supported Devices and Installing Salesforce Chatter</b>	✓	✓	✓	
<b>What's Available in Salesforce Chatter</b>	✓	✓	✓	
<b>Salesforce Mobile Classic</b>		✓		

## Financial Services Cloud

Now personal bankers, as well as financial advisors, can deepen customer relationships and boost productivity with data model extensions for banking and three tailored Lightning apps for Financial Services Cloud: Retail Banking, Retail Banking Console, and Wealth Management. Intelligent Need-Based Referrals and Scoring makes it a cinch for users to create, track, and manage referrals in an easy flow. We've boosted your power to customize Financial Services Cloud with new ways to configure the Financial Account UI components and rollup summary fields. And now you can roll up a financial account balance to multiple joint owners. Plus, use new Lightning components, four new profiles, and a new permission set to jump-start your customer and partner communities. And there's more: See the full list of usability enhancements.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Boost Productivity with the Retail Banking App and Retail Banking Console</a>				
<a href="#">Optimize the Financial Services Cloud Experience with Wealth Management, a New Lightning App</a>				
<a href="#">Create and Manage Referrals with Intelligent Need-Based Referrals and Scoring</a>				
<a href="#">Supercharge Financial Accounts with Customizable Views and Rollups</a>				
<a href="#">Jump-Start Your Customer and Partner Communities</a>				
<a href="#">Usability Enhancements to Financial Services Cloud</a>				
<a href="#">Other Enhancements to Financial Services Cloud</a>				
<a href="#">Financial Services Cloud Has New Objects and Fields</a>				
<a href="#">New Financial Services Cloud Record Types</a>		✓		

## Health Cloud

Health Cloud has taken a huge jump forward in providing the tools that your care coordinators, caregivers, and patients need. Care coordinators will love the awesome user interface and components of Lightning Experience and the holistic view of a patient's household and relationships on the Householding map. Patients can log in to the community and see a timeline of their past, current, and future healthcare events. And there are many more features that support patient care, such as filterable timelines and support for person accounts.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Lightning Experience Comes to the Health Cloud Console</a>			✓	
<a href="#">Let Patients View the Timeline from the Community</a>			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Manage Patient Relationships with the Householding Map</a>	✓			
<a href="#">Decide Which Records Appear in Health Cloud Console and Health Cloud Empower Community Timelines</a>			✓	
<a href="#">Support for Person Accounts in Health Cloud</a>			✓	
<a href="#">New and Changed Health Cloud Lightning Components</a>			✓	
<a href="#">Changed Health Cloud Objects</a>		✓		

## Customization

Make your Lightning pages dynamic by choosing when to display certain components. Start processes when something other than a record change happens—inside or outside of your org. And distribute the same flow to all your users, regardless of language, with Translation Workbench. If you've expanded your horizons into the world of code, check out custom Lightning page templates.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Lightning App Builder</b>				
<a href="#">Make Your Lightning Pages Dynamic</a>		✓		
<a href="#">Take Lightning Page Customization to a Whole New Level with Custom Page Templates</a>		✓		
<a href="#">Create Custom Lightning Pages by Cloning the Ones You Already Have</a>		✓		
<a href="#">View Related List Data Quickly with Related List Quick Links</a>		✓		
<a href="#">Let Users Hold Video Meetings and Send Instant Messages Right from a Record with the Cisco Spark Group Conversations Component</a>		✓		
<a href="#">Let Users Manage Shared Work Spaces in Cisco Spark for Salesforce</a>		✓		
<a href="#">Get Familiar with the Updated Filter List Component</a>		✓		



Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Rich Text Components Have a New Style		✓		
Configure Lightning Pages with Custom Components More Easily with Fewer My Domain Restrictions		✓		
Add Milestones to Case Record Pages		✓		
View Read-Only Fields in the Related Record Component		✓		
Set More Variable Values in the Flow Component		✓		
Related List Component Is Now Related List – Single		✓		
Quarterly Performance Component Is Now Called Performance		✓		
Custom Settings No Longer Supported for List View Component		✓		
Visual Workflow				
Translate Flows from the Translation Workbench		✓		
Launch a Flow from an Object-Specific Action (Beta)		✓		
Configure a Flow to Wait for a Platform Event to Occur (available within 24 hours after the release)		✓		
Add Flows Anywhere in Salesforce with the Flow Lightning Component		✓		
Add Flows to Lightning Communities		✓		
Set Values for Picklist and Multi-Select Picklist Variables		✓		
Customize the Look and Feel of Flow Interviews with the REST API (Pilot)				✓
Access Encrypted Data in Your Flows (Generally Available)			✓	
Process Builder				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Start a Process When a Platform Event Occurs</a> (available within 24 hours after the release)		✓		
<a href="#">Quickly Reference Specific Users and Queues in Your Processes</a>		✓		
<a href="#">Access Encrypted Data in Process Builder</a> (Generally Available)			✓	
<a href="#">Formula Field References Must Match Process Trigger Objects</a>		✓		
Globalization				
<a href="#">Turn On Multiple Currencies Without Contacting Support</a>			✓	
<a href="#">Import and Export Translation Files as XLIFF</a>		✓		
<a href="#">Translation Workbench Supports Flow</a>		✓		
Salesforce Connect				
<a href="#">Process Large Sets of External Object Data Using Batch Apex</a>		✓		
<a href="#">Verify Access to External Object Data</a>			✓	
<a href="#">Track External Object Data Callouts with Event Log Files (Pilot)</a>		✓		
Fields and Picklists				
<a href="#">Track Time with the Time Field Type (Beta)</a>				✓
<a href="#">Manage Inactive Picklist Values Easier with Pagination</a>		✓		
Sharing				
<a href="#">Don't Wait to Perform Operations with Asynchronous Deletion of Obsolete Shares</a> (Generally Available)			✓	
<a href="#">Share Business Contacts Manually in Orgs That Use Person Accounts</a> (Generally Available)			✓	
AppExchange				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Find the Perfect Solution Faster in the New, Intelligent AppExchange</a>		✓		
<a href="#">Bolt Solutions and Lightning Data Now Available on AppExchange</a>		✓		
Setup				
<a href="#">Swagger Is Supported in External Services (Beta)</a>		✓		
<a href="#">Run More Workflow Time Triggers Per Hour</a>		✓		✓
<a href="#">Block Execution of JavaScript in the HYPERLINK Function To Be Enforced (Critical Update)</a>			✓	
<a href="#">View Read-Only and Formula Fields on Update a Record Quick Actions</a>		✓		
<a href="#">Actions Included on a Page Layout Are No Longer Deletable</a>		✓		
<a href="#">Rapidly Clicking a Custom Action No Longer Launches Multiple Instances</a>	✓			
<a href="#">“Make Sure Records that Are Submitted Behind the Scenes Are Routed to the Right Approval Process” Critical Update Postponed</a>			✓	
<a href="#">Set Up Users on Force.com Licenses for Lightning Sync</a>			✓	
<a href="#">Control Action Visibility on Record Pages with a System Permission</a>		✓		

## Security and Identity

With single logout, users can log out of multiple applications at once when Salesforce is the identity provider or service provider. You can brand your login page at runtime based on who logs in and from where, and adopt the Lightning look in your login flows. And you can encrypt even more data, including your Chatter feeds.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Authentication and Identity				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Change Your Users' Login Experience with Dynamic Branding</b>		✓		
<b>Let Users Log Out of All Apps at Once with Single Logout (Generally Available)</b>		✓		
<b>Make Your Login Flows New Fashioned</b>		✓		
<b>SAML Signing Certificate Has Been Retired</b>		✓		
<b>Named Credentials: More Deployment Options, URL Scheme Enforcement</b>				
Deploy Named Credential Callout Options via Change Sets, Packages, or Metadata API		✓		
Avoid Incorrect Schemes in Named Credential URLs		✓		
<b>Update Your Facebook Authentication Provider to Get User Information</b>		✓		
<b>Get Updated Email_Verified Value in UserInfo Endpoint and Identity URL Response</b>		✓		
<b>Salesforce Shield</b>				
<b>Platform Encryption</b>				
Filter Encrypted Data with Deterministic Encryption (Pilot)			✓	
Extend Platform Encryption and Key Management to Public Cloud (Generally Available)	✓			
Encrypt Your Data in Chatter (Generally Available)			✓	
Check Your Encryption Coverage with Encryption Statistics (Beta)			✓	
Access Encrypted Data with Flows and Process Builder (Generally Available)			✓	
Require High-Assurance Session for Key Management Tasks (Beta)			✓	
Encrypt More PII Fields on Accounts, Person Accounts, Contacts, and Leads (Generally Available)			✓	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Encrypt Opportunity Description and Next Step Fields (Beta)			✓	
Encrypt the Opportunity Name Field (Pilot)		✓		
Encryption Compatibility with Skinny Tables (Beta)			✓	
Last Reminder: Turn Off Masking for Encrypted Data Critical Update to Auto Activate			✓	
Track Encryption Key Management Usage in Event Monitoring Logs			✓	
<b>Event Monitoring</b>				
Track User Searches and Clicks with Event Log Files		✓		
Track Knowledge Article Views with Event Log Files		✓		
Gain Visibility into Tenant Secret Usage with Event Log Files		✓		
Client IP Field Now Contains a String Value		✓		
New Names but Same Great Data in the Event Monitoring Analytics App		✓		
UI Tracking Event Type Is Retired		✓		
Track More Types of Time-Based Workflow Events		✓		
<b>Other Changes</b>				
<b>Improved Browser Protection for Visualforce Pages, Sites, and Communities</b>			✓	
<b>HSTS (HTTP Strict Transport Security) Redirects Browsers to Use HTTPS</b>			✓	
<b>Health Check: Choose a Default Baseline and Rename Baselines as Needed</b>		✓		

## Salesforce IoT

Use Salesforce IoT Explorer Edition to process events from connected devices in near real time and create meaningful interactions with your customers.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Turn Event Data into Engaging Customer Experiences with Salesforce IoT Explorer Edition</a>			✓	

## Development

Salesforce DX is the new frontier for Salesforce app development, and provides both individual developers and development teams with an integrated, end-to-end life cycle designed for high-performance agile development. Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to other organizations.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Salesforce DX (not immediately available)</b>				
<a href="#">Explore Salesforce DX (not immediately available)</a>		✓		
<a href="#">Be More Productive with the Salesforce CLI (Generally Available) (not immediately available)</a>		✓		
<a href="#">Shorten the Dev Life Cycle with Scratch Orgs (Generally Available) (not immediately available)</a>		✓		
<a href="#">Manage Your Scratch Orgs with Developer Hub (Generally Available) (not immediately available)</a>		✓		
<a href="#">Track and Sync Your Source (Generally Available)</a>				
<a href="#">Build Faster with Salesforce Developer Tools for Visual Studio Code (Generally Available) (not immediately available)</a>			✓	
<a href="#">Imagine What You Can Do with Second-Generation Packaging (Beta) (not immediately available)</a>				
<a href="#">Get Your Scratch Orgs in Shape (Pilot)</a>				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Einstein Platform Services</b>				
<b>Einstein Language (Beta): Build Natural Language Processing into Your Apps</b>		✓		
<b>Einstein Vision: Multi-Label Models, Model Feedback, and Global Datasets</b>				
Switch to the New API Endpoint		✓		
Use Feedback to Optimize Your Model		✓		
Identify Multiple Objects with a Multi-Label Model		✓		
Classify Images with Prebuilt Models		✓		
Add Data to a Model with Global Datasets		✓		
Creating a Dataset Requires a Dataset Type		✓		
Deprecated Einstein Image Classification API Calls		✓		
Locate Image Objects with Einstein Object Detection (Beta)		✓		
<b>Lightning Components</b>				
<b>Critical Updates for Stricter CSP Restrictions</b>			✓	
<b>Build Exciting User Interfaces with New Base Lightning Components</b>		✓		
<b>Meet the New Component Library (Beta)</b>		✓		
<b>Meet the Refreshed LockerService API Viewer</b>		✓		
<b>Component Code Validation Occurs Automatically When You Save</b>		✓		
<b>Changes to \$Label Expression Processing</b>		✓		
<b>Create Custom Page Templates with Lightning Components</b>		✓		
<b>Use Apex Services in lightning:container (Generally Available)</b>		✓		
<b>Use Lightning Data Service to Perform Record Operations Without Apex Code (Generally Available)</b>		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Return a Result from aura:method</a>		✓		
<a href="#">Client Payload Data Limit Increased to 4 MB</a>		✓		
<a href="#">Translate Lightning Component Tabs</a>			✓	
<a href="#">Wildcard Matching in aura:dependency Is Deprecated</a>		✓		
<b>New and Changed Lightning Components</b>				
<a href="#">Update Your Components to the Latest API Version to Use New lightning: Components</a>			✓	
<a href="#">Make Your Lightning Page Components Width-Aware with lightning:flexipageRegionInfo</a>				
<a href="#">New and Changed Lightning Events</a>		✓		
<a href="#">New and Changed Lightning Interfaces</a>		✓		
<b>Visualforce</b>				
<a href="#">Allow CSRF Protection on GET Requests to Visualforce Pages To Be Enforced (Critical Update)</a>			✓	
<a href="#">Automatically Style Existing Visualforce Pages with Lightning Experience Stylesheets (Beta)</a>		✓		
<a href="#">Get Your Pages Ready for Lightning Experience</a>		✓		
<a href="#">Access Values in the Platform Cache Org Cache Using Visualforce Global Variables</a>		✓		
<a href="#">JavaScript Remoting Request Data Limit Increased to 4 MB</a>			✓	
<a href="#">Other Changes to Visualforce</a>			✓	
<b>Apex</b>				
<a href="#">Run Parallel Tests Using a New Option on the @isTest Annotation</a>		✓		
<a href="#">Run Apex Tests Through the API Using Class Names</a>		✓		



Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Run Apex Tests Synchronously Without Firing Case Assignment Rules</a>		✓		
<a href="#">Find and Surface Duplicate Records in New Ways</a>		✓		
<a href="#">Access Values in the Platform Cache Org Cache Using Visualforce Global Variables</a>		✓		
<a href="#">Cache.Org.put Lifetime Value Now Matches the Documentation</a>		✓		
<a href="#">Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset</a>		✓		
<a href="#">Improved Access to External Objects from Batch Apex</a>		✓		
<a href="#">Control Access to Apex REST Services</a>		✓		
<a href="#">Prevent Apex Callouts During Read-Only Mode</a>		✓		
<b>Apex: New and Changed Classes</b>				
<a href="#">New Apex Classes</a>		✓		
<a href="#">Changed Apex Classes</a>		✓		
<b>ConnectApi (Chatter in Apex): New and Changed Classes and Enums</b>				
<a href="#">New and Changed Chatter in Apex Classes</a>		✓		
<a href="#">New and Changed Chatter in Apex Input Classes</a>		✓		
<a href="#">New and Changed Chatter in Apex Output Classes</a>		✓		
<a href="#">New and Changed Chatter in Apex Enums</a>		✓		
<b>ISVforce</b>				
<a href="#">Build Your ISV Business Faster with the AppExchange Trailblazer Checklist</a>	✓			
<a href="#">Manage Business Plans in the AppExchange Publishing Console</a>		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<a href="#">Control and Track Access to Your App with Feature Parameters (Generally Available)</a> (not immediately available)			✓	
<a href="#">Managed Package Updates Preserve Deactivated and Reactivated Global Value Set Values</a>		✓		
<a href="#">My Domain Enabled Automatically in Patch Orgs</a>		✓		
<a href="#">Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset</a>		✓		
<a href="#">Delete S-Controls from Managed - Released Packages</a>		✓		
<a href="#">Change CustomTab Type From S-Control to Visualforce Page</a>		✓		
<a href="#">Salesforce DX Features for Partners (Generally Available)</a>				
<a href="#">Other Changes to the AppExchange Publishing Console</a>	✓			
<b>Debugging</b>				
<a href="#">Retain More Debug Logs for Longer</a>		✓		
<a href="#">Debug Log Events for Platform Event Subscriptions</a>		✓		
<b>API</b>				
<b>New and Changed Objects</b>				
<a href="#">New Objects</a>		✓		
<a href="#">Changed Objects</a>		✓		
<b>SOSL</b>		✓		
<b>REST API</b>				
<a href="#">New Resources: Flows and Flow Interviews (Pilot)</a>				✓
<b>SOAP API</b>				
<a href="#">New, Changed, and Deprecated Calls and Types</a>		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Chatter REST API</b>				
New and Changed Chatter REST API Resources		✓		
New and Changed Chatter REST API Request Bodies		✓		
New and Changed Chatter REST API Response Bodies		✓		
<b>Reports and Dashboards REST API</b>				
New Resources and Parameters: Folders and Analytic Notifications		✓		
New and Changed Methods: Report Instances		✓		
Changed Resources: Dashboard Describe and Dashboard Results		✓		
<b>User Interface API (Generally Available)</b>				
All Resources Updated to API Version 41.0		✓		
Less SOQL, More Actions!		✓		
Manage Favorites		✓		
Upload Binary Files				
Get Child Records		✓		
Get Lookup Field Suggestions		✓		
Specify Fields and Layout Type for Clone and Create Record Defaults		✓		
Other User Interface API Changes		✓		
<b>Bulk API 2.0 (Generally Available)</b>				
<b>Tooling API</b>				
Tooling API Now Supports CRUD Operations in Active Orgs		✓		
Update Individual Fields for More Tooling API Objects		✓		
Tooling API New and Changed Objects		✓		
Tooling API Changed Calls and Resources		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
<b>Metadata API</b>		✓		
<b>Data Services: Work on Millions of Records with Custom Big Objects and Async SOQL</b>				
Manipulate Millions (or Even Billions!) of Records with Custom Big Objects (Generally Available)		✓		
Query Millions of Records with Async SOQL (Generally Available)		✓		
<b>Enterprise Messaging</b>				
Keep Your External Data up to Date with Change Data Capture (Pilot)				✓
Deliver Millions of Events Per Day with High-Volume Platform Events (Pilot)				✓
<b>Customize Console Apps with the Lightning Console JavaScript API (Generally Available)</b>		✓	✓	
<b>Open CTI API</b>		✓		
<b>Other API Changes</b>				

## 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](#)

See the supported browsers and limitations for Lightning Experience.

#### [Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11](#)

Opt in to Extended Support for IE11 to continue using Internet Explorer 11 with Lightning Experience beyond the December 16, 2017 retirement date.

#### [Supported Browsers for Salesforce Classic](#)

Salesforce Classic is supported with Microsoft® Internet Explorer® version 9, 10, and 11, and Apple® Safari® version 10.x on macOS. The most recent stable versions of Microsoft Edge, Mozilla® Firefox®, and Google Chrome™ are also supported. There are some limitations.

## Supported Browsers for Lightning Experience

See the supported browsers and limitations for Lightning Experience.



### Note:

- Salesforce doesn't support non-browser applications that embed WebView or similar controls to render content for Salesforce Classic, Lightning Experience, or Salesforce mobile web. Examples of approaches that embed this type of control include Salesforce Mobile SDK, Microsoft's WebBrowser Control, Electron's embedded Chromium browser, iOS's UIWebView and WKWebView, and Android's WebView.
- You can't access Lightning Experience in a mobile browser. Instead, we recommend using the Salesforce app when you're working on a mobile device. For a list of supported mobile browsers on Salesforce, see [Requirements for the Salesforce App](#).

### EDITIONS

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



**Important:** Support for Internet Explorer 11 to access Lightning Experience is retiring beginning in Summer '16.

- You can continue to use IE11 to access Lightning Experience until December 16, 2017.
- If you opt in to [Extended Support for IE11](#), you can continue to use IE11 to access Lightning Experience until December 31, 2020.
- IE11 has [significant performance issues](#) in Lightning Experience.
- This change doesn't impact Salesforce Classic or users of orgs with Communities and no opt in is required to use IE11 with Communities.

	Microsoft® Internet Explorer®	Microsoft® Edge	Google Chrome™	Mozilla® Firefox®	Apple® Safari®
Lightning Experience	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	10.x+
Lightning Console Apps	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	10.x+
Lightning Communities	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	10.x+
Special setup considerations?	No	No	No	No	No
Limitations?	Yes	Yes	No	Yes	Yes



**Note:** The term "latest version" is defined by the browser vendors. Use the support for your browser(s) to understand what "latest version" means.

## Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11

Opt in to Extended Support for IE11 to continue using Internet Explorer 11 with Lightning Experience beyond the December 16, 2017 retirement date.

Extended Support for IE11 is available through December 31, 2020. The extended period gives you time to migrate from IE11 to more modern and secure browsers while allowing you to take advantage of the benefits of Lightning Experience now.

For complete details of Extended Support for IE11, including what's covered and what isn't, and steps you need to take, see [Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11](#).

### EDITIONS

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


 **Important:** Keep in mind that IE11 has [significant performance issues](#) in Lightning Experience.

## Supported Browsers for Salesforce Classic

Salesforce Classic is supported with Microsoft® Internet Explorer® version 9, 10, and 11, and Apple® Safari® version 10.x on macOS. The most recent stable versions of Microsoft Edge, Mozilla® Firefox®, and Google Chrome™ are also supported. There are some limitations.

### EDITIONS

Salesforce Classic available in: **All** Editions

 **Note:** Using Salesforce Classic in a mobile browser isn't supported. Instead, we recommend using the Salesforce app when you're working on a mobile device. To see the mobile browsers that are supported for Salesforce, check out [Requirements for the Salesforce App](#).

	Microsoft® Internet Explorer®	Microsoft® Edge	Google Chrome™	Mozilla® Firefox®	Apple® Safari®
Salesforce Classic	IE 9+	Latest	Latest	Latest	10.x+
Salesforce Console	IE 9+	Latest	Latest	Latest	No
Special setup considerations?	<a href="#">Yes</a>	No	No	<a href="#">Yes</a>	No
Limitations?	<a href="#">Yes</a>	<a href="#">Yes</a>	No	No	<a href="#">Yes</a>

 **Note:**

- The term "latest version" is defined by the browser vendors. Use the support for your browser(s) to understand what "latest version" means.
- Salesforce Classic support for Microsoft® Internet Explorer® versions 7 and 8 is discontinued as of Summer '15.

## Salesforce Overall: Improved Productivity with Lightning Experience Readiness Check, Console, and Search

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Measure how much Lightning Experience can impact your sales team's productivity with the redesigned Readiness Check. The new look and feel of Lightning Experience makes work a whole lot easier. Style meets new functionality with a Lightning Experience search results page that lets you easily resize columns, wrap text, and sort records. Console users work more quickly with favorites, navigation rules, and two new components.

### IN THIS SECTION:

#### [New Launch Experience for Salesforce Optimizer](#)

We redesigned the Setup page for launching an Optimizer report. These changes are available in late September.

#### [The Lightning Experience Readiness Check Got a Promotion](#)

We expanded the role for the Lightning Experience Readiness Check. Need help influencing stakeholders and executives to support your move to Lightning Experience? Want to know where your customizations stand as of Winter '18? Or are you looking for more support to replace Visualforce pages or those old, tired s-controls? Run the Lightning Experience Readiness Check and get the support you need, presented clearly in the updated Readiness Report. These changes apply to both Lightning Experience and Salesforce Classic.

#### [Lightning Experience Gets a New Look and Feel](#)

Based on your feedback, we improved information density, legibility, contrast, and even added a splash of color. That means less time scrolling and scanning and more time focused on what matters most. This change applies to Lightning Experience only.

#### [Popup Helps You and Your Users Adopt Lightning Experience](#)

If you've enabled Lightning Experience, we're here to help you and your users make the move. Starting on January 15, your eligible users still using Salesforce Classic are prompted to give Lightning Experience a shot.

#### [Search: Adjustable Search Results Columns and Smarter Instant Results](#)

Two popular features have arrived in the instant results dropdown list. Spelling correction saves the day—or at least the search—when users enter a questionable term. Also, users can find quick matches for contacts and opportunities by including the account name in their search term. On the search results page, users can adjust column widths and text wrapping, and sort results more easily—even results for Knowledge articles. Support reps can attach external documents to cases, and admins can report on which external documents were attached. Feature availability differs between Lightning Experience and Salesforce Classic.

#### [Lightning Console Apps: Favorites and Customized Navigation](#)

We're bringing more features from Salesforce Classic console apps into Lightning Experience and adding new features. Help your users work more quickly by defining how records open in Lightning console apps and adding new components to Lightning pages. This change applies to Lightning Experience only.

#### [Open Favorites in a New Browser Tab](#)

We made it easier to access favorites. Now you can right-click a favorite to open it in a new browser tab. This change applies to Lightning Experience only.

#### [Navigate More Quickly with Keyboard Shortcuts](#)

New keyboard shortcuts allow your users to be more efficient in both console and standard navigation Lightning apps. This change applies to Lightning Experience only.

#### [Add Tabs to Lightning Apps Installed from Managed Packages](#)

Do you have a Salesforce feature that you frequently access while working with a managed package? If you install a Lightning app from a managed package, you can append standard navigation items or custom tabs to the app. This feature is new in Lightning Experience.

### Connect, Learn, and Blaze Trails Together in the New Trailblazer Community

The Success Community is now the Trailblazer Community. To go along with our new name, we redesigned the home page so it's easier to find answers, share ideas, and connect with the community. It's everything you love about the Success Community, topped with a sprinkle of Trailhead magic.

## New Launch Experience for Salesforce Optimizer

We redesigned the Setup page for launching an Optimizer report. These changes are available in late September.

- The launch button label is now **Run Optimizer**.
- We added links to resources and the Trailblazer Community for easy access to help.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## The Lightning Experience Readiness Check Got a Promotion

We expanded the role for the Lightning Experience Readiness Check. Need help influencing stakeholders and executives to support your move to Lightning Experience? Want to know where your customizations stand as of Winter '18? Or are you looking for more support to replace Visualforce pages or those old, tired s-controls? Run the Lightning Experience Readiness Check and get the support you need, presented clearly in the updated Readiness Report. These changes apply to both Lightning Experience and Salesforce Classic.

To optimize your rollout planning, we spruced up the Readiness Report to make content more accessible.

- Support your case for moving to Lightning Experience. Sales Cloud customers get predictions on how Lightning Experience can impact user productivity. Predictions are based on your current Salesforce usage and the average return on investment anonymously reported by other Salesforce customers.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

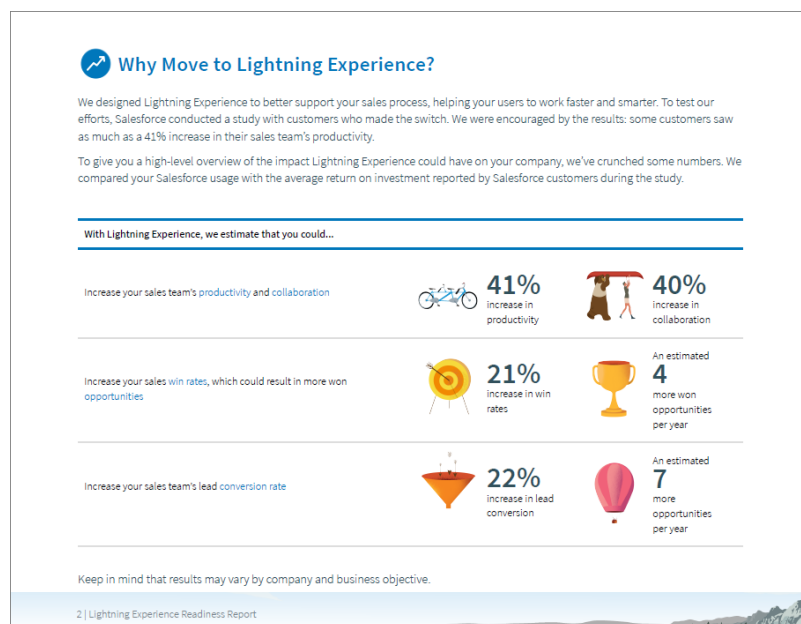
### USER PERMISSIONS

To run the Lightning Experience Readiness Check

- Customize Application AND Modify All Data


To get the email with your Readiness Report

- In Setup, Email Deliverability set to the access level All email





- Some Sales Cloud customers also get an estimate on the effort to address Lightning Experience gaps and roll out features. Predictions are based on the average number of hours that specific migration tasks have taken. If you don't see this estimate in your report, register for a free consultation with a Lightning Experience expert. You get an invitation to register after you run the check.



### Estimate of Your Rollout Effort


While we can't predict your Lightning Experience rollout in detail, we can offer some high-level, educated guesses about how much effort the recommendations in this report might require of you.

To estimate your effort, we established an average for the number of hours specific migration tasks have taken in our experience. Then we compared our averages with your report results.

Keep a few things in mind. First of all, these estimates assume that you've taken steps to educate yourself about Lightning Experience and how to tackle required transition tasks; these estimates don't include time for that preparatory work. To give you a complete understanding of the stuff we're assuming that you already know, we've supplied a list of Lightning Experience educational materials that you and your team should familiarize yourselves with.

These estimates also assume that you'll address all of the recommendations in this report. But for many customers, the Readiness Check unearths lots of features and customizations that you no longer use, so there's no need to move them into Lightning Experience. Look at that: you've only just begun and you're already ticking things off the to-do list! Not to mention taking a great opportunity to identify and toss some old customization relics. With Lightning Experience, a fresh start awaits you.

To learn more, download our [Estimated Effort spreadsheet](#), which includes calculation details and a list of the Lightning Experience educational materials that your team should review before you start your rollout.

FEATURE	ESTIMATED HOURS SPENT ON SALESFORCE DEVELOPMENT, CONFIGURATION, AND ADMINISTRATION	ESTIMATED HOURS SPENT ON CHANGE MANAGEMENT, USER TESTING, AND USER TRAINING
 Custom buttons and links – JavaScript	4	1

- Recognize when to reach for your Readiness Report. Check out the details that we added to our high-level description of the Lightning Experience rollout process. See key milestones where you can turn to your report for guidance.



### How Do I Use This Report?

To help you stay on task, we've provided a path that shows you when to reference your report for guidance during your rollout. This path includes best practices learned from our experience and the experience of customers who have already transitioned to the new interface. Because your rollout is an iterative process, you'll visit some of these milestones multiple times. For example, we'll describe how to first launch a pilot for a small group of users on features that are Lightning Experience ready. After making some tweaks, you'll launch again for subsequent groups of users and features, until you've phased all of your users and features into Lightning Experience.

- 1. Review your Readiness Report**

Review this report, the first draft of your gap analysis. You'll iterate on your draft as you continue planning.
- 2. Schedule a consultation with an expert**

To get feedback on your report and learn how to use it to start developing your rollout plan, bring your questions to a free, small-group consultation on Lightning Experience. [Register >](#)
- 3. Engage your stakeholders**

Get the internal support you need to make the move to Lightning Experience. To demonstrate the business value, present the calculations in this report to important stakeholders and executives at your company. To identify the right representatives to support you, take the [Educate Yourself and Your Company on Lightning Experience](#) module in the Lightning Experience Rollout Trail. [Check Out Trailhead >](#)
- 4. Continue your gap analysis**

See if there are gaps for features that the Readiness Check hasn't evaluated. To learn how, take the [Educate Yourself and Your Company on Lightning Experience](#) module in the Lightning Experience Rollout Trail. [Check Out Trailhead >](#)
- 5. Draft your rollout plan**

Define the business and technical requirements you need to meet based on the gaps you've identified, and establish your change management plan. To learn how, check out the [Craft and Execute Your Rollout Strategy](#) module in the Lightning Experience Rollout Trail. [Check Out Trailhead >](#)

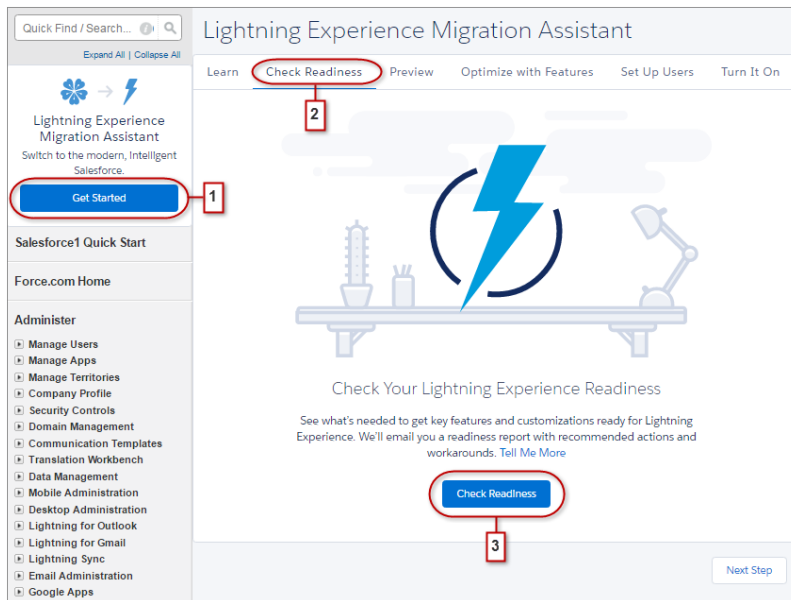
5 | Lightning Experience Readiness Report

- Get more support preparing your Visualforce pages for Lightning Experience, and more easily navigate our recommendations on those gaps. We're introducing the Lightning Experience Visualforce Check, which you can run from your Readiness Report PDF.

- Identify functionality that's still built on our retired feature, s-controls.
- See which users are working on unsupported web browsers. And get advice about which browsers help users get the most out of Lightning Experience.

And as always, Readiness Check offers the latest Lightning Experience updates that are most relevant to you. Scan your report for Winter '18 roadmap updates and new recommendations for the features and customizations in your Salesforce Classic implementation.

To get your personalized Lightning Experience Readiness Report, run the Readiness Check.



From Setup, click **Get Started** in the Migration Assistant tile (1). On the Check Readiness tab (2), click **Check Readiness** (3).

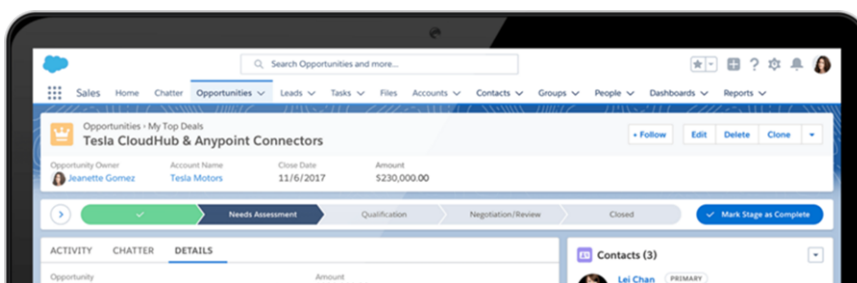
SEE ALSO:

[Get Your Pages Ready for Lightning Experience](#)

[Salesforce Help: Check Your Lightning Experience Readiness \(can be outdated or unavailable during release preview\)](#)

## Lightning Experience Gets a New Look and Feel

Based on your feedback, we improved information density, legibility, contrast, and even added a splash of color. That means less time scrolling and scanning and more time focused on what matters most. This change applies to Lightning Experience only.



Here's a closer look at what's changed.

- More information density and less white space, so you can see more of what you need without scrolling.
- Improved legibility (using font size and color) to draw attention to what's most important.
- Better contrast between foreground and background, making it easier to scan and scroll while staying focused on what you need. We even added color and a background image inspired by our own Trailhead.

Opportunities

**Recently Viewed** ▾

20 Items • Sorted by Opportunity Name • Last updated a few seconds ago

<input type="checkbox"/>	Opportunity Name ↑	Account Name	Amount
1 <input type="checkbox"/>	Burlington Textiles Weaving Plant Generator	Burlington Textiles Corp of America	\$235,000.00
2 <input type="checkbox"/>	Dickenson Mobile Generators	Dickenson plc	\$15,000.00
3 <input type="checkbox"/>	Edge Primary Generator	Edge Communications	\$75,000.00
4 <input type="checkbox"/>	Edge Emergency Generator	Edge Communications	\$35,000.00
5 <input type="checkbox"/>	Edge Installation	Edge Communications	\$50,000.00
6 <input type="checkbox"/>	Edge SLA	Edge Communications	\$60,000.00
7 <input type="checkbox"/>	Express Logistics Portable Truck Generators	Express Logistics and Transport	\$80,000.00
8 <input type="checkbox"/>	Express Logistics SLA	Express Logistics and Transport	\$120,000.00

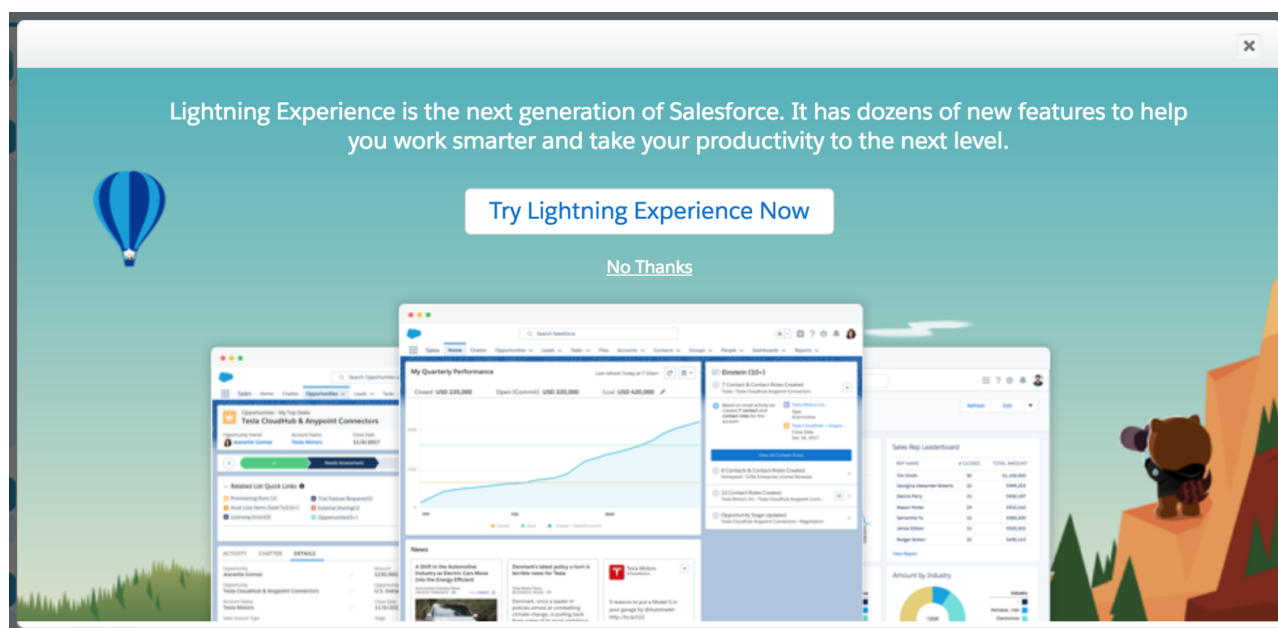
The screenshot displays the Salesforce Lightning Experience interface. At the top, there's a navigation bar with a search bar and various icons. Below it, a sidebar contains navigation links like Sales, Home, Chatter, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Groups, People, Dashboards, and Reports. The main content area shows a group page for 'Roadshow Planners'. The group has a profile picture of a cartoon character and a banner image of a landscape with a hot air balloon. The group is private and owned by Travis Royal. The 'CHATTER' tab is active, showing a post by Samantha Peterson about a sales deck. The post includes a 'Share' button and engagement metrics (17 likes, 20 comments, 3 shares, 10k views). The 'Group Details' sidebar on the right lists top marketing campaigns, accounts, and a description of the group's purpose for sales representatives. It also shows a list of 13 members, including Sue Jenkins, Carole Hernandez, Gordon Davis, and Amanda Rollins.

You don't need to do anything to start enjoying these enhancements. If you like, though, you can change the background image and blue color to a neutral gray. In Setup, enter *Themes and Branding* in the Quick Find box, then select **Themes and Branding**, and select **Hide**.

## Popup Helps You and Your Users Adopt Lightning Experience

If you've enabled Lightning Experience, we're here to help you and your users make the move. Starting on January 15, your eligible users still using Salesforce Classic are prompted to give Lightning Experience a shot.

Here's how it works. Users with access to Lightning Experience and with their language set to English see a popup message to try it out. The user can click the **Try Lightning Experience Now** link to switch to Lightning Experience. Or users can click **No Thanks** and take a short survey to let us know why they're not ready to switch. If the user closes the popup without clicking a link, it shows up again up to three times.



**Note:** Users on Internet Explorer 11 without extended IE11 support don't see the popup.

## Search: Adjustable Search Results Columns and Smarter Instant Results

Two popular features have arrived in the instant results dropdown list. Spelling correction saves the day—or at least the search—when users enter a questionable term. Also, users can find quick matches for contacts and opportunities by including the account name in their search term. On the search results page, users can adjust column widths and text wrapping, and sort results more easily—even results for Knowledge articles. Support reps can attach external documents to cases, and admins can report on which external documents were attached. Feature availability differs between Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: **All Editions**  
**except** Database.com

## IN THIS SECTION:

[Resize Columns, Wrap Text, and Easily Sort on the Search Results Page](#)

Users can adjust column widths and wrap long lines of text in search results, making it easier for users to scan results without scrolling back and forth. Also, an improved sorting menu gets search results in order. This change applies to Lightning Experience only.

[Get to the Right Record Faster with Enhanced Instant Results](#)

Find the right record even before reaching the search results page. Spell correction has arrived in instant results. And if you know the account associated with the contact or opportunity, instant results provides more relevant suggestions. This change applies to Lightning Experience only.

[See More Relevant Objects in the Default Top Results](#)

When users first start using Salesforce, Top Results on the search results page contains the same items as the Lightning Experience navigation bar. When users start building a search history, the default list is replaced with their frequently used objects. This change applies to Lightning Experience only.

[Get Search Results for More Objects](#)

Analytics, partner fund, and service crew records are searchable. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Find Things in Setup Faster with Enhanced Quick Find](#)

Quick Find gives you more ways to find what you need with results from related searches, links to global search, and more. These changes apply to Lightning Experience only.

## SEE ALSO:

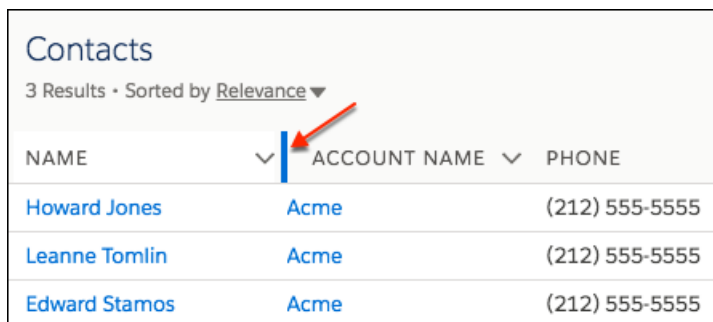
[Knowledge Search: Article Result Sorting and External Documents Case Attachment](#)[Sort Your Files Search Results with New Fields](#)[Track User Searches and Clicks with Event Log Files](#)

## Resize Columns, Wrap Text, and Easily Sort on the Search Results Page

Users can adjust column widths and wrap long lines of text in search results, making it easier for users to scan results without scrolling back and forth. Also, an improved sorting menu gets search results in order. This change applies to Lightning Experience only.

### Resize and Wrap

To adjust a column's width, click and drag the border in the column header.



NAME	ACCOUNT NAME	PHONE
Howard Jones	Acme	(212) 555-5555
Leanne Tomlin	Acme	(212) 555-5555
Edward Stamos	Acme	(212) 555-5555

To change the text wrapping preferences for a column, click the down arrow in the column header.

**Contacts**  
3 Results • Sorted by Relevance ▼

NAME	ACCOUNT NAME
Howard Jones	Acme
Leanne Tomlin	
Edward Stamos	

Column width and text wrapping preferences are remembered, so results for future searches look as good as today's. A few exceptions: Search results for Tasks, Events, and Dashboards go back to their defaults in future searches.

By default, text wrapping is on. When a user turns off text wrapping, an ellipsis indicates when text is too long to fit within the column. The length of the column header label determines the minimum width of the column.

**Opportunities**  
5+ Results • Sorted by Opportunity Name ▼

OPPORTUNITY NAME	ACCO...	STAGE
2000 Widgets	Acme	Needs Analysis
salesforce.com - 500 Wi...	Global Media	Closed Won
salesforce.com - 5000 ...	Global Media	Closed Won
Acme - 200 Widgets	Acme	Prospecting
salesforce.com - 2,000 ...	salesforce.-com	Value Proposition

Column resizing and text wrapping aren't available for search results from external sources.

## Sort Results


To sort search results, click a column header or use the redesigned sort menu.

**Accounts**  
3 Results • Sorted by Relevance ▼

ACCOUNT NAME	SORT BY
Acme Carts	✓ Relevance
Acme Boxes	Account Name
Acme	Phone 5555
	Account Owner Alias

**Contacts**

To change the direction of the sort, click the arrow in the column header.

Accounts	
3 Results • Sorted by <u>Account Name</u> ▼	
ACCOUNT NAME 	PHONE
Acme	(212) 555-5555
Acme Boxes	
Acme Carts	

For Knowledge article search results, choose a field to sort by in the sort menu, then change the sort direction using the **Ascending** or **Descending** link.

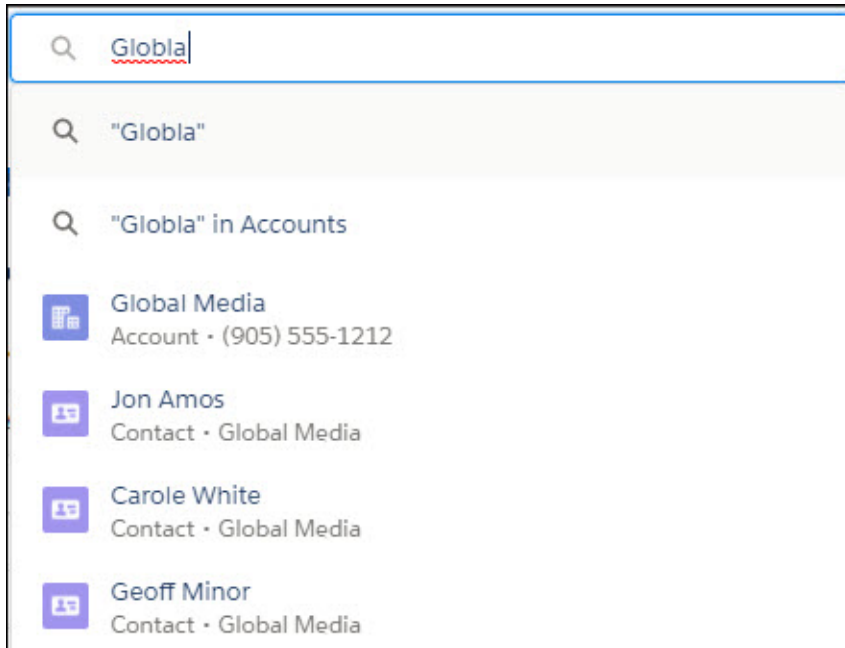
Results that are sorted by relevance always show the most relevant results at the top.

Knowledge	
7 Results • Sorted by <u>Article Title</u> ▼ <span>Descending ↓</span>	
<p><b>telescopes</b> come back in style</p> <p>000001157 • Not Validated • Last Modified Jan 20, 2017 1:32 PM</p> <p>after signals from aliens discovered</p>	
<p><b>me and my refractor telescope</b></p> <p>000001160 • Not Validated • Last Modified Jan 20, 2017 1:35 PM</p> <p>it has a special place in my heart, since it was my first <b>telescope</b>....My history with my refractor <b>telescope</b>.</p>	
<p><b>How to setup a telescope</b></p> <p>000001153 • Not Validated • Last Modified May 3, 2017 2:58 PM</p> <p>The details on setting up a Dobsonian <b>telescope</b>.... intended to familiarize folks who are in the process of choosing a <b>telescope</b> with the setup procedures</p>	

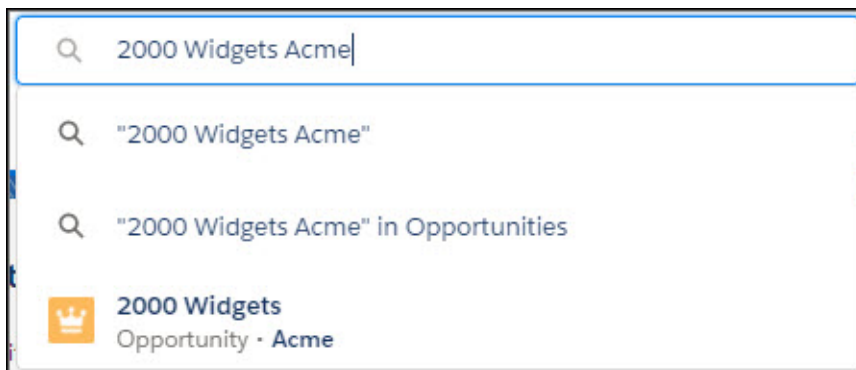
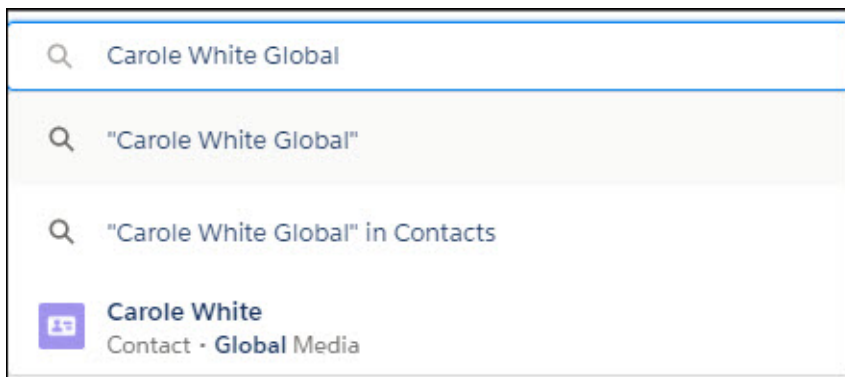
## Get to the Right Record Faster with Enhanced Instant Results

Find the right record even before reaching the search results page. Spell correction has arrived in instant results. And if you know the account associated with the contact or opportunity, instant results provides more relevant suggestions. This change applies to Lightning Experience only.

When a search term gets no results because of a possible misspelling, users see suggestions that match corrected spellings of the search term. Salesforce checks only the record name. Spell correction works for only one term, even when multiple terms are entered. If multiple terms are misspelled, Salesforce corrects only the first misspelled term.



Users who include the account name when they search for a contact or opportunity get more relevant search results. For example, search for the contact Carole White associated with the Global Media company faster by entering *Carole White Global*.



This feature works only with contacts, opportunities, and accounts.





**Note:** This related record search feature is made available to orgs on a rolling basis up to a month after the release goes live. During this time, records are being reindexed. Once reindexed, they'll be searchable using the new feature.

SEE ALSO:

[Salesforce Help: Why Am I Seeing Search Results for Similar Terms? \(can be outdated or unavailable during release preview\)](#)

## See More Relevant Objects in the Default Top Results

When users first start using Salesforce, Top Results on the search results page contains the same items as the Lightning Experience navigation bar. When users start building a search history, the default list is replaced with their frequently used objects. This change applies to Lightning Experience only.

You determine which objects appear by default in Top Results by changing the Lightning Experience navigation bar for the Lightning app. If your users use Groups and People, be sure to include those objects in the menu.

SEE ALSO:

[Salesforce Help: Create Lightning Apps \(can be outdated or unavailable during release preview\)](#)

## Get Search Results for More Objects

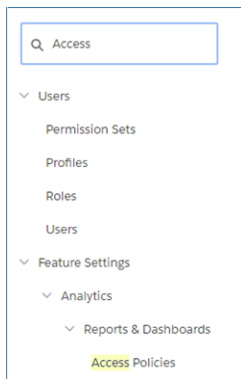
Analytics, partner fund, and service crew records are searchable. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

Object	New to Salesforce Classic	New to Lightning Experience	New to Salesforce Mobile Web	New to Salesforce for iOS and Android
Analytics (Dashboard and Lens)		✓		
Channel Program	✓	✓	✓	✓
Channel Program Level	✓	✓	✓	✓
Partner Fund Allocation	✓	✓	✓	✓
Partner Fund Claim	✓	✓	✓	✓
Partner Fund Request	✓	✓	✓	✓
Partner Marketing Budget	✓	✓	✓	✓
Service Crew	✓	✓	✓	✓
Service Crew Member	✓	✓	✓	✓

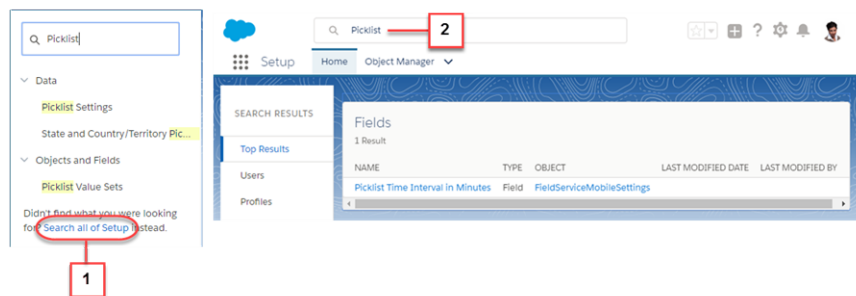
## Find Things in Setup Faster with Enhanced Quick Find

Quick Find gives you more ways to find what you need with results from related searches, links to global search, and more. These changes apply to Lightning Experience only.

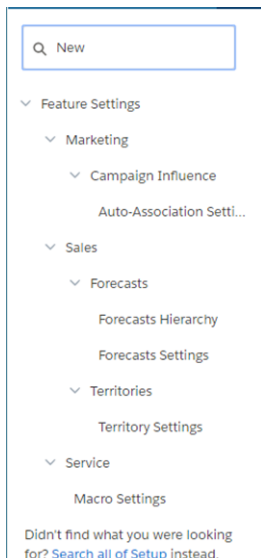
Unfamiliar with Salesforce lingo or what's in Setup? Now when you search in Quick Find, you get results for related items. For example, search for *Access* and you see *Permission Sets* in your search results.



Can't find what you need in Quick Find? Click the link (1) at the bottom of your search results to search for your term in all of Setup (2).



Want to know what's new in Setup? Search for *new* in Quick Find to see new Setup nodes.



#### SEE ALSO:

[Salesforce Help: Searchable Setup Objects in Lightning Experience \(can be outdated or unavailable during release preview\)](#)

## Lightning Console Apps: Favorites and Customized Navigation

We're bringing more features from Salesforce Classic console apps into Lightning Experience and adding new features. Help your users work more quickly by defining how records open in Lightning console apps and adding new components to Lightning pages. This change applies to Lightning Experience only.



[Walk Through It: Explore Lightning Console Apps](#)



**Note:** Lightning console apps don't yet have full parity with Salesforce Classic console apps. For example, some features in Salesforce Classic console apps, such as push notifications and multi-monitor support, aren't available in Lightning console apps. [Learn more](#).

You also can't migrate Salesforce Classic console apps to Lightning Experience.

### IN THIS SECTION:

#### [Use Favorites in Console Apps](#)

Let users have their most-visited pages and important records, lists, groups, dashboards at their fingertips. Favorites are similar to bookmarks in a web browser, providing quick access to frequently used items. This feature is new in Lightning Experience.

#### [Automatically Open Related Records in Console Apps with Navigation Rules](#)

Use navigation rules to make your console users' workflows more efficient. For example, you can configure navigation rules so that when a user clicks a contact, it opens as a subtab of that contact's related account. This feature is new in Lightning Experience.

#### [Work More Quickly with Cmd+Click in Lightning Console Apps](#)

Opening a new workspace tab in the background is just a Cmd+click away. Users can click a link in a Lightning console app and open records without losing focus on what they're working on. This feature is new in Lightning Experience.

#### [Use Macros in Your Lightning Console Apps](#)

Use macros in Lightning Experience to automate common repetitive tasks and resolve issues efficiently. To let your console users work with macros, add the Macro utility to your Lightning console app. This change applies to Lightning Experience only.

#### [Add Milestone and Accordion Components to Your Console App Pages](#)

The Milestones component lets users see active, completed, and violated milestones for cases. The Accordion component lets them quickly access information from a collection of vertically stacked sections with multiple content areas. These changes apply to Lightning Experience only.

#### [Let Console Users View Read-Only Fields in the Related Record Component](#)

The Related Record component now displays read-only fields, so console users can see fields like Last Modified By and Product Images.

### SEE ALSO:

[Salesforce Help: Lightning Experience Console Limitations \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: What Features Are Available in Lightning Console Apps? \(can be outdated or unavailable during release preview\)](#)

### EDITIONS

Available in: Lightning Experience

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

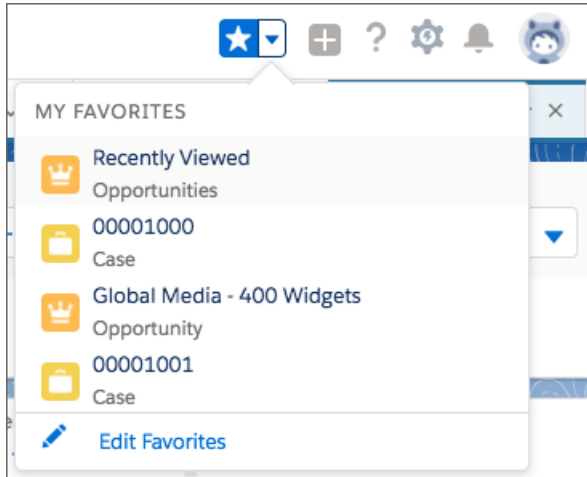
Lightning console apps are available for an extra cost to users with Salesforce Platform user licenses for certain products. Some restrictions apply. For pricing details, contact your Salesforce account executive.

## Use Favorites in Console Apps

Let users have their most-visited pages and important records, lists, groups, dashboards at their fingertips. Favorites are similar to bookmarks in a web browser, providing quick access to frequently used items. This feature is new in Lightning Experience.

Click  to add the current page. If the star is highlighted, the current page is already in your favorites. To remove a favorite, click the highlighted star.

View all your favorites in the favorites list.



SEE ALSO:

[Salesforce Help: Create Shortcuts to Your Top Salesforce Pages with Favorites \(can be outdated or unavailable during release preview\)](#)

## Automatically Open Related Records in Console Apps with Navigation Rules

Use navigation rules to make your console users' workflows more efficient. For example, you can configure navigation rules so that when a user clicks a contact, it opens as a subtab of that contact's related account. This feature is new in Lightning Experience.

1. From Setup, enter *App Manager* in the Quick Find box and click **App Manager**.
2. Click the dropdown next to the app you want to customize and click **Edit**.
3. In the App Manager, click the **Navigation Rules** tab.
4. From there, choose an object and choose whether it opens as a workspace tab or as a subtab of a related record.

**Edit App**

APP DETAILS & BRANDING   APP OPTIONS   UTILITY BAR   SELECT ITEMS   **NAVIGATION RULES**   ASSIGN TO USER PROFILES

### Navigation Rules

Navigation rules determine whether to open a related record in addition to the primary record.

**Cases**

Campaigns

Opportunities

Cases open as

☐ Workspace tabs

☒ Subtabs of

Account (Account) ▼

**Cancel** **Save**

SEE ALSO:

[Salesforce Help: Create and Edit a Custom Lightning Console App \(can be outdated or unavailable during release preview\)](#)

## Work More Quickly with Cmd+Click in Lightning Console Apps

Opening a new workspace tab in the background is just a Cmd+click away. Users can click a link in a Lightning console app and open records without losing focus on what they're working on. This feature is new in Lightning Experience.

SEE ALSO:

[Navigate More Quickly with Keyboard Shortcuts](#)

## Use Macros in Your Lightning Console Apps

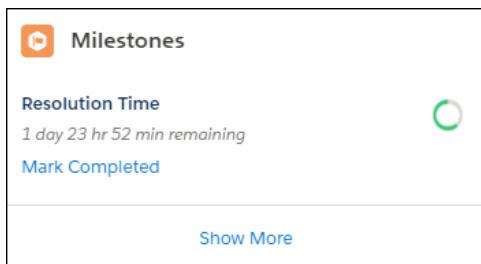
Use macros in Lightning Experience to automate common repetitive tasks and resolve issues efficiently. To let your console users work with macros, add the Macro utility to your Lightning console app. This change applies to Lightning Experience only.

For more information, see [Macros: Creating Efficient Users and Happy Customers](#).

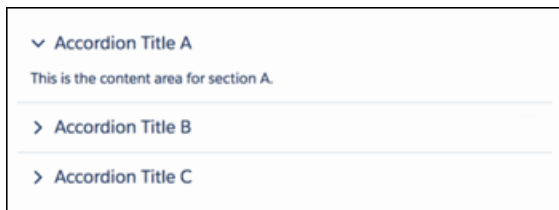
## Add Milestone and Accordion Components to Your Console App Pages

The Milestones component lets users see active, completed, and violated milestones for cases. The Accordion component lets them quickly access information from a collection of vertically stacked sections with multiple content areas. These changes apply to Lightning Experience only.

The Milestone component is similar to the case milestone tracker in Salesforce Classic. To add the Milestones component, edit your case record page in the Lightning App Builder and drag the Milestones component onto the page. You can use this component only for cases.



The Accordion component is similar to the Tabs component, but instead of horizontal tabs, the accordion stacks vertically. The Accordion component isn't available in the Lightning App Builder. To create an Accordion component, work with your developers to create a `lightning:accordion` component via the Developer Console.



SEE ALSO:

[Track Your Case Milestones in Lightning Experience](#)

[New and Changed Lightning Components](#)

## Let Console Users View Read-Only Fields in the Related Record Component

The Related Record component now displays read-only fields, so console users can see fields like Last Modified By and Product Images. For more information, see [View Read-Only Fields in the Related Record Component](#).

## Open Favorites in a New Browser Tab

We made it easier to access favorites. Now you can right-click a favorite to open it in a new browser tab. This change applies to Lightning Experience only.

## Navigate More Quickly with Keyboard Shortcuts

New keyboard shortcuts allow your users to be more efficient in both console and standard navigation Lightning apps. This change applies to Lightning Experience only.

To view the available keyboard shortcuts, press:

- Windows: Ctrl+/
- macOS: Cmd+/

Keyboard Shortcuts		
Global		Navigation
Close or deselect	Esc	Focus notifications c
Edit	e	Focus notifications (reverse order) ⬆+c
Open or close Notes	n	Go to docked composer g+d
Post to feed	⌘+Enter	Go to publisher g+p
Save	⌘+s	Go to utility bar g+u
Search	/	Switch walkthrough focus F6
Show this menu	⌘+/	
⇧ shift   ⌘ command		

Lightning console apps have additional keyboard shortcuts.

Keyboard Shortcuts					
Global		Navigation		Tabs	
Close or deselect	Esc	Focus notifications	c	Close workspace tab	⇧+x
Edit	e	Focus notifications (reverse order)	⇧+c	Refresh tab	⇧+r
Open or close History	h	Go to docked composer	g+d		
Open or close Notes	n	Go to item menu	g+i		
Open or close Omni-Channel	o	Go to list view	g+l		
Post to feed	⌘+Enter	Go to publisher	g+p		
Save	⌘+s	Go to subtab	g+s		
Search	/	Go to utility bar	g+u		
Show this menu	⌘+/	Go to workspace tab	g+w		
		Switch tabs	← or →		
		Switch walkthrough focus	F6		
⇧ shift   ⌘ command					

The following shortcuts are new.

Switch walkthrough focus	F6
Focus notifications	C
Focus notifications (reverse order)	Shift+C
Go to utility bar	G+U
Go to docked composer	G+D

SEE ALSO:

[Salesforce Help: Keyboard Shortcuts for Lightning Experience \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Keyboard Shortcuts for Lightning Console Apps \(can be outdated or unavailable during release preview\)](#)

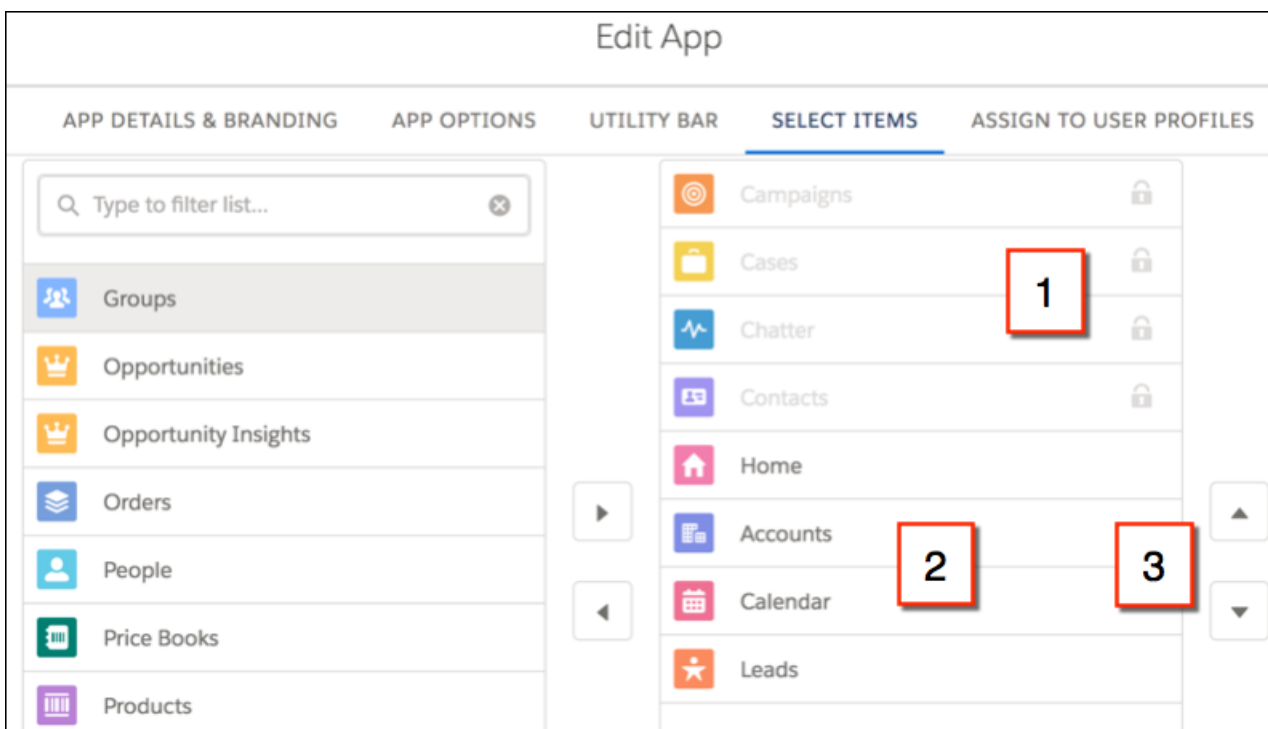
## Add Tabs to Lightning Apps Installed from Managed Packages

Do you have a Salesforce feature that you frequently access while working with a managed package? If you install a Lightning app from a managed package, you can append standard navigation items or custom tabs to the app. This feature is new in Lightning Experience. For example, add a calendar or Accounts tab.

1. From Setup, open the Lightning Experience App Manager to see a list of your apps.



2. Select the Lightning app where you want to add your own tabs, and click **Edit**.



3. In the Edit App window, click **Select Items**.

The list of tabs included in the Lightning App appears on the right. The locked icon (1) indicates that this set of tabs is fixed and can't be changed.

4. Select each tab you want to include from the list on the left, and move it to the list on the right (2).
5. To change the order of the tabs, click the up and down arrows (3).

As a group, the appended tabs always appear below the Lightning App tabs.

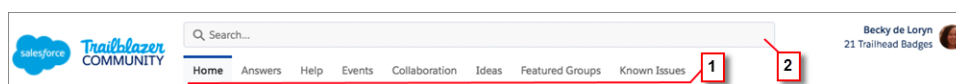
SEE ALSO:

[Salesforce Help: Lightning Apps \(can be outdated or unavailable during release preview\)](#)

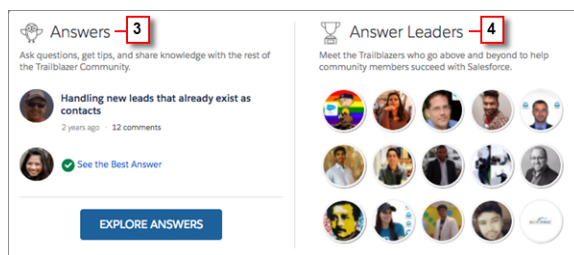
## Connect, Learn, and Blaze Trails Together in the New Trailblazer Community

The Success Community is now the Trailblazer Community. To go along with our new name, we redesigned the home page so it's easier to find answers, share ideas, and connect with the community. It's everything you love about the Success Community, topped with a sprinkle of Trailhead magic.

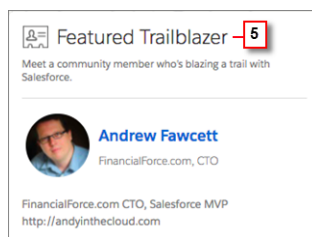
At the top of the home page, you still have quick access to popular resources like Answers and Ideas (1). To make it easier to find people and content, we simplified the search experience by replacing two smaller search boxes with a single large box (2).



The Answers section (3) now shows you a trending question from the community and a preview of the best answer. Next to the trending question, you can see the Trailblazers who go above and beyond by contributing answers and sharing knowledge (4).



The Collaboration section now shows you where conversations are happening on the community, so it's easier to jump in and participate. We're also shining the spotlight on what makes the community so special—the people. The new Featured Trailblazer section (5) lets you meet someone in the community who's growing their career with Salesforce.



As you're exploring the Trailblazer Community, [stop by your profile](#) and verify your personal details and work experience. If your profile photo isn't recent, it's a great time to update that too. You might be our next featured Trailblazer!

## Lightning Experience: A Modern and Intelligent 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. Check out the new features and considerations in this release.

### IN THIS SECTION:

#### [Lightning Experience Features in This Release](#)

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. Check out the new features and considerations in this release.

#### [What's Different or Not Available in Winter '18 Lightning Experience Features](#)

For new Lightning Experience features and enhancements, review these topics to see if functionality that's critical to your business is limited or unavailable in this release.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## Lightning Experience Features in This Release

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. Check out the new features and considerations in this release.

[Lightning Experience: A Modern and Intelligent User Experience](#)

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[Lightning Sync for Microsoft Exchange: Set Up Service Cloud and Force.com Users](#)

[Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available](#)

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[Encrypt the Opportunity Description and Next Steps Fields \(Beta\)](#)

[Encrypt the Opportunity Name Field \(Pilot\)](#)

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Rapidly Clicking a Custom Action No Longer Launches Multiple Instances

"Make Sure Records that Are Submitted Behind the Scenes Are Routed to the Right Approval Process" Critical Update Postponed

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## What's Different or Not Available in Winter '18 Lightning Experience Features

For new Lightning Experience features and enhancements, review these topics to see if functionality that's critical to your business is limited or unavailable in this release.



**Note:** For the full list of feature gaps and limitations in Lightning Experience, see “What are the Gaps Between Lightning Experience and Salesforce Classic” in the Salesforce Help.

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**Performance**, **Unlimited**,  
and **Developer** Editions

### IN THIS SECTION:

[Search: Lightning Experience Considerations](#)[Sales Features: Lightning Experience Considerations](#)[Productivity Features: Lightning Experience Considerations](#)[Customer Service Features: Lightning Experience Considerations](#)[Reports and Dashboards: Lightning Experience Considerations](#)

## Search: Lightning Experience Considerations

Learn about the issues to expect when searching in Lightning Experience.

### Results for Groups Can't Be Sorted

Sorting isn't available for group search results.

### Knowledge Article Search Results

You can't customize which columns appear in search results. The default columns are article number, publication status (if enabled by the admin), and last modified date.

**Attaching External Documents to Cases Not Available in Knowledge One Widget**

Documents from external data sources, including Federated Search, can't be attached to cases from the Knowledge sidebar.

**Spell Correction Can't Be Disabled for Knowledge Articles**

The **Enable English-Only Spell Correction for Knowledge Search** option on the Salesforce Classic Search Settings page doesn't apply to Knowledge searches in Lightning Experience.

## Sales Features: Lightning Experience Considerations

Learn about the issues that your Sales team can encounter in Lightning Experience.

**Enterprise Territory Management**

- The Assigned Territories related list on accounts is read only, even for users with the Manage Territories permission.
- The Users in Assigned Territories related list on accounts isn't available.
- The option to evaluate an account against territory rules when it's updated and saved isn't available. So active account assignment rules run automatically only if the update happens via API.
- Object management settings for territory-related objects aren't available.

**Opportunities**

- Users will not be prompted to add products on new opportunities created by cloning.

## Productivity Features: Lightning Experience Considerations

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.

### Activities: Events and Calendars

**Event Attendees**

Lightning Experience offers event attendees, which are similar to event invitees in Salesforce Classic. Salesforce admins and users have to meet several conditions to view, invite, or remove attendees in Lightning Experience.

- Admins have to set up Lightning Sync for users with the sync direction Sync Both Ways. Selecting Sync Both Ways limits some Salesforce Classic functionality. See [Lightning Sync Considerations](#) in Salesforce Help.
- Admins have to add the Attendees field to the Event page layout or the quick actions layout for events. The Attendees field isn't supported for Compact Layouts.
- Users have to have access to a calendar that's associated with an account for Microsoft® Office 365® or Google G Suite.
- Users have to create the event or edit events from Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

**Event Invitations**

Salesforce admins and users have to meet several conditions to send event invitations for Lightning Experience events.

- Admins have to set up Lightning Sync for users with the sync direction Sync Both Ways. Selecting Sync Both Ways limits some Salesforce Classic functionality. See [Lightning Sync Considerations](#) in Salesforce Help.
- Admins have to add the Attendees field to the Event page layout or the quick actions layout for events. The Attendees field isn't supported for Compact Layouts.
- Users have to create or edit events from Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

Invitations initiated in Lightning Experience are emailed from Microsoft® Office 365® or Google Calendar™. Attendees can accept or decline event invitations from those emails or those calendar applications only. Attendee responses then sync to Salesforce so that other attendees can see the attendance status.

### Calendar Sharing and Ownership

You can share your My Events calendar with your manager or other coworkers, but not with personal and public groups or roles. When you share your calendar, you can control whether coworkers see event details or add events, but you can't give coworkers full access to edit your events. You can't share calendars that you've created from Salesforce objects. Managers in the role hierarchy can use reports to view events owned by people below them in the role hierarchy, but not to edit them. Only one person can own a meeting. If you reassign a meeting, it no longer appears on your calendar.

## Customer Service Features: Lightning Experience Considerations

Learn about the issues to expect if your org uses customer service tools.

### Milestones

- The Case Milestones related list isn't available on cases.
- The milestone tracker isn't available on work orders.
- Case milestone record detail pages are supported, but the Milestone Name and Entitlement Process fields aren't available.
- The Milestone Status Icon field on cases isn't available.
- In Lightning Experience, milestones don't have a warning state.

### Omni-Channel

Omni-Channel settings (including enabling Omni-Channel) are available only in Salesforce Classic.

Objects that aren't supported in Lightning Experience can't be routed using the Omni-Channel utility. Currently, you can't route SOS sessions.

Omni-Channel Supervisor is available in Lightning Experience as a beta feature with known limitations. Omni-Channel settings (including settings for Omni-Channel Supervisor) are available only in Salesforce Classic. Hovering in the agent timeline isn't supported. Live Agent supervisor features aren't available. Instead, create a skill for agents handling chats routed with Omni-Channel, and supervisors can use Live Agent Supervisor in Salesforce Classic.

External Routing (Beta) isn't supported in Lightning Experience.

### Live Agent

Live Agent settings (including enabling Live Agent) are available only in Salesforce Classic.

You must route chats with Omni-Channel to chat in Lightning Experience. Make sure that you have Omni-Channel ready for Lightning Experience and have set up your chat button or snap-in to route with Omni-Channel. Considerations for Omni-Channel routing apply.

Chat features aren't available in Omni-Channel Supervisor. Support Supervisors can use Live Agent Supervisor in Salesforce Classic for chat monitoring features, even when agents are using Omni-Channel routing. Create a skill for agents handling chats routed with Omni-Channel, and their chats appear in Live Agent Supervisor alongside chats routed with Live Agent routing.

The Console Integration Toolkit methods for Live Agent are available in Salesforce Classic only.

You can use the Lightning Knowledge component only with cases, so you can't use it with Live Agent in Lightning Experience. For Knowledge integration with chats, use Salesforce Classic.

Quick text isn't supported with Live Agent for Lightning Experience.

File previewing isn't available with file transfer in Lightning Experience. Instead, files are downloaded to the agent's computer.

Agents can encounter Unsupported Item tabs when opening Live Agent records that aren't yet supported in Lightning Experience. They can view these records in Salesforce Classic.

When chatting with customers, we recommend that you open Live Chat Transcripts as primary tabs, not subtabs. Don't set custom navigation rules for Live Chat Transcripts if you plan to chat.

### Field Service Lightning

- Service reports can't be deleted in Lightning Experience. To delete a service report, switch to Salesforce Classic.
- Service reports can't be viewed in Lightning Experience. To view a service report, download it or switch to Salesforce Classic.

### Service Contracts

- The Status Icon field isn't available in Lightning Experience.
- When you are adding multiple contract line items to a service contract, picklist fields on contract line items show all values in your org rather than only the values corresponding to the line item's record type. However, selecting a value corresponding to a different record type results in an error. This issue doesn't occur when you are editing a single line item.

## Reports and Dashboards: Lightning Experience Considerations

Learn about the issues to expect when using reports and dashboards in Lightning Experience.

### Lightning Report Builder (Beta)

These features aren't available in the beta version of the Lightning report builder, but we're working hard to implement them in a future release.

- Joined reports
- Bucketing
- Custom summary formulas
- Cross filters
- Row limit filters
- Role hierarchy filters
- Dashboard Settings menu
- Report Properties menu

### Lightning Tables, the Dashboard Component (Beta)

These features aren't available in the beta version of Lightning tables, but we're working hard to implement them in a future release.

- Chatter photos
- Conditional highlighting
- Dashboard filters aren't applied to Lightning tables.

### Viewing Filtered Reports After Clicking a Dashboard Component

If a chart displays one of these types of data, then the source report won't filter:

- Encrypted strings
- Dates fields with month-in-year or day-in-month granularity

### Embedded Dashboards

You can't embed dashboards on record pages.



# Salesforce Einstein: The World's Smartest CRM with Artificial Intelligence (AI) for Everyone

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Salesforce Einstein is AI built into the Salesforce platform. It delivers advanced AI capabilities to sales, service, and marketing—and enables anyone to use clicks or code to build AI-powered apps that get smarter with every interaction. Now, every Trailblazer in every role and industry can use AI to be their best.

Here's the list of Einstein features that help make Salesforce the world's smartest CRM.

## Overview

### **Trailhead: Get Smart with Salesforce Einstein**

See how AI is transforming CRM with smart predictions, intelligent recommendations, and timely automation. Learn about many of the Einstein features available today and how you can use them to discover insights and predict outcomes.

## Analytics

### **Einstein Analytics, the New Name for Wave Analytics**

The Wave Analytics brand is now Einstein Analytics. It includes multiple products: Einstein Analytics Platform, prebuilt apps, and Einstein Data Discovery, which is now Einstein Discovery. The prebuilt apps, permission set licenses, and user permissions also have modified names. Starting in Summer '17 and continuing in Winter '18, we applied the new names throughout the product and documentation.

### **Einstein Discovery: Better Answers, Explanations, and Recommendations**

New features in Einstein Discovery make it easier for anyone to tap into the power of data science. Statistical and predictive analytics give you answers, explanations, and recommendations.

### **Trailhead: Einstein Discovery Basics**

Do the [Einstein Discovery Basics](#) module to learn how to listen to the stories your data can tell you. Then do the [Einstein Discovery Data Integration](#) module to learn how to bring your Salesforce, Oracle, and Postgres data into Einstein Discovery to get answers, insights, and recommendations.

## Commerce

### **Einstein Search Dictionaries (Beta): Better Search Results for Shoppers**

Using the power of artificial intelligence, Einstein Search Dictionaries surfaces search terms that aren't in your retail dictionary and suggests which synonym list to add them to. You save time and money and your shoppers get more powerful, comprehensive search results.

### **Trailhead: Learn About Commerce Cloud Einstein**

Learn more about the features and capabilities of Commerce Cloud Einstein

## Communities

### **Discover Popular Files**

Use the new Recommendations component in Partner Central communities to show members which files are popular. Popularity is determined by the number of people who have recently viewed a file and whether the file includes text and is in a library.

## Development

### **Einstein Language (Beta): Build Natural Language Processing into Your Apps**

Use the Einstein Language APIs to build natural language processing into your apps and unlock powerful insights within text. The language APIs include the Einstein Intent API and the Einstein Sentiment API.

### **Einstein Vision: Multi-Label Models, Model Feedback, and Global Datasets**

Einstein Vision Version 2.0 has been released. With this version, Einstein Vision is now the umbrella term for all image recognition APIs. The Einstein Vision API is now called the Image Classification API. The Image Classification API new features include multi-label models, the ability to add feedback to your models, and global datasets.

### **Trailhead: Einstein Vision Quick Start**

Learn all about Einstein Vision by using Apex to create a simple app to recognize and classify images.

### **Trailhead: Build a Cat Rescue App that Recognizes Cat Breeds**

Use Apex, Lightning components, and Einstein Vision to recognize and classify cat images.

### **Trailhead: Einstein Intent API Basics**

Build a deep-learning custom model to categorize text and automate business processes.

## Marketing

### **Einstein Engagement Scoring: Supercharged Customer Targeting, Engagement, and Subscription Services**

Leveraging the power of artificial intelligence, Einstein Engagement Scoring puts a score on how likely each of your subscribers opens an email, clicks links, and stays subscribed. You can also monitor the health of your engaged subscriber list, create an audience with attributes similar to your best-performing subscribers, segment your subscriber list to better target a specific audience, and easily target subscribers through other Marketing Cloud applications.

## Sales

### **Einstein Lead Scoring: Salesforce Classic Availability and Improved Setup**

Use Einstein Lead Scoring in Salesforce Classic, set up lead scoring with more types of lead conversion, and see detailed information about issues that occur during setup.

### **Einstein Automated Contacts: New Automated Options and Reporting**

We've put the "automated" into Einstein Automated Contacts. We also added a handy dashboard to help you track how well Einstein is doing.

### **Einstein Activity Capture: Support for Microsoft® Exchange and More Salesforce Records**

Einstein Activity Capture is now available for Microsoft Exchange 2013 and 2016 users. We also expanded Einstein Activity Capture functionality to include quotes and contracts. And, you take charge of how long Salesforce retains your Einstein Activity Capture data.

### **Sales Cloud Einstein Analytics: Enjoy More Dashboards and New Names**

We added an Analytics app for Einstein Automated Contacts, so you can track how many contacts Einstein added to Salesforce. Plus, we improved navigation by renaming a few things.

### **Other Changes in Sales Cloud Einstein**

We changed the name of some fields and components to make things more consistent and intuitive.

### **Trailhead: Sales Cloud Einstein**

Learn how AI and Sales Cloud Einstein can transform your team's sales productivity.

### **Trailhead: Einstein High Velocity Sales Cloud**

Learn how to turbocharge sales by pairing up powerful sales features with the smarts of Einstein.

## Security and Identity

### New Names but Same Great Data in the Event Monitoring Analytics App

In Summer '17, the Event Monitoring Wave app was renamed Event Monitoring Analytics. Now the Analytics name appears on all app-related pages, including the configuration wizard, standard permission sets, permission set license, and prebuilt dashboards. The Wave Change, Wave Interaction, and Wave Performance event type names are unchanged.

## Sales: Einstein Lead Scoring, Collaborative Forecasts, and Campaign Influence

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Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Help reps stay focused on the sales pipeline directly in Outlook and Gmail.

### IN THIS SECTION:

#### [Trailhead: Optimize Lightning Experience Features, and Integrate Outlook and Gmail](#)

Learn how to set up your sales team for success when you optimize sales features in Lightning Experience. And help your reps work their deals from either Outlook or Gmail.

#### [Sales Cloud Einstein: A Smarter Sales Process at Every Step](#)

Einstein Lead Scoring comes to Salesforce Classic. Plus, we improved setup for Lead Scoring and give you more control over what your lead scoring model is based on. Einstein Automated Contacts gets automated and includes a new dashboard. Einstein Activity Capture has better integration with Microsoft and support for quotes and contracts. These changes apply to Lightning Experience and Salesforce Classic.

#### [Core Sales Features: Campaign Influence, Collaborative Forecasts, and Enterprise Territory Management](#)

Track the influence of multiple campaigns on an opportunity. And access more information when projecting sales. Set up Enterprise Territory Management from Lightning Experience. But that's not all!

#### [Productivity Features: Task Reminders, Enhanced List Views, and Forecasting in the Sales Console](#)

Help your reps maximize their productivity in Lightning Experience with task reminders, list view improvements, and more calendar options. Collaborative Forecasts are also now available in the Sales Console.

#### [Data Quality: Person Account Merging and Duplicate Record Sets in Lightning Experience, Third-Party Data Integration](#)

Duplicate Management now covers person accounts. Duplicate record sets are available in Lightning Experience, and what's more, in Lightning Experience only, you can use them to merge duplicates. And by using a new action on Salesforce account and contact records, your sales team can compare and integrate third-party industry data field by field.

#### [Google Integration: Flexible Record Matching, More Template Options, Two-Way Event Sync, and Required Change to Lightning Sync Setup](#)

Get your reps working their Salesforce deals in Gmail™ and Google Calendar™. Lightning for Gmail gives reps added flexibility when they're matching email recipients with relevant Salesforce records. More email template options, Einstein lead scoring, and Salesforce tasks get reps working smarter—not harder. Lightning Sync now includes two-way event sync for Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web users. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

#### [Microsoft® Integration: Task Management, Pardot Engagement, and Sync for the Masses](#)

Get your reps working their deals in Outlook email and calendars. Access to Salesforce tasks, more email template options, and even Pardot Engage features get your reps to master the sales process. What's new with Lightning Sync? Service and Force.com licenses. Read about it! These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Security: Encryption of Sales Data](#)

Protect more of your critical sales data, including customers' personally identifiable information (PII) using Shield Platform Encryption.

[Other Changes in the Sales Cloud](#)

Learn about other changes we've made to improve usability.

## Trailhead: Optimize Lightning Experience Features, and Integrate Outlook and Gmail

Learn how to set up your sales team for success when you optimize sales features in Lightning Experience. And help your reps work their deals from either Outlook or Gmail.

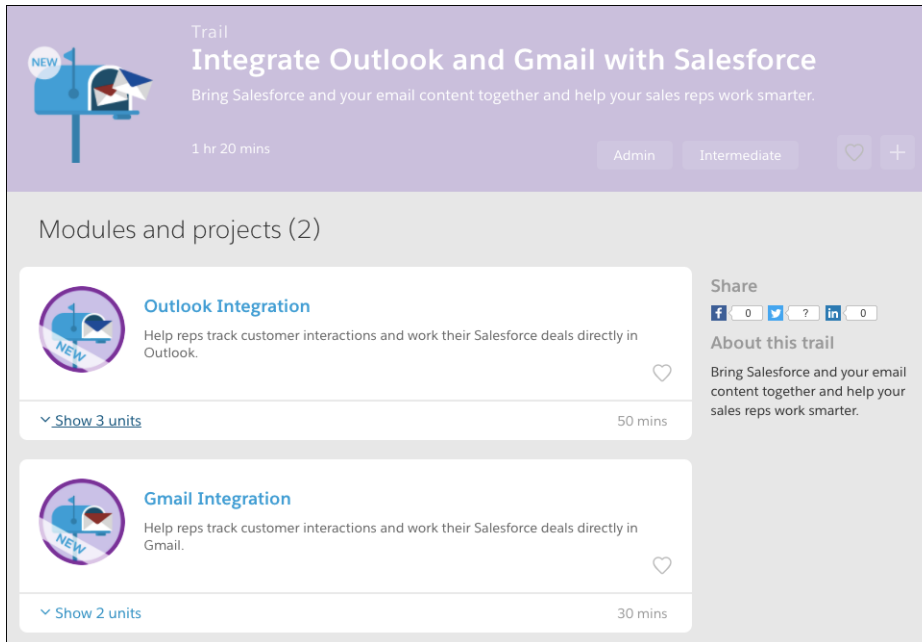
### Optimize Sales Features for Lightning Experience

Get your sales teams to improve selling relationships and close more deals. [Optimize Sales Features for Lightning Experience](#) includes modules to help you set up key features for the best selling experience.

The screenshot shows the Trailhead interface for the trail "Optimize Sales Features for Lightning Experience". The header is blue and contains a trophy icon, the trail title, a description "Help your sales teams improve selling relationships and close more deals.", a duration of "6 hrs 55 mins", and difficulty buttons for "Admin" and "Intermediate". Below the header, there's a section titled "Modules and projects (8)". It lists two modules: "Lightning Experience for Sales" (1 hr) and "Path & Workspaces" (30 mins). Each module has a description and a "Show 2 units" link. To the right of the modules, there's a "Share" section with social media icons and an "About this trail" section with a brief description.


### Integrate Outlook and Gmail with Salesforce

Make it easy for reps to focus on their sales in Outlook and Gmail. And eliminate data input redundancies when you set up your sales team to sync contacts and events. [Integrate Outlook and Gmail with Salesforce](#) gets you on the path to keeping your reps focused on their pipeline while they work in Outlook and Gmail.



## Sales Cloud Einstein: A Smarter Sales Process at Every Step

Einstein Lead Scoring comes to Salesforce Classic. Plus, we improved setup for Lead Scoring and give you more control over what your lead scoring model is based on. Einstein Automated Contacts gets automated and includes a new dashboard. Einstein Activity Capture has better integration with Microsoft and support for quotes and contracts. These changes apply to Lightning Experience and Salesforce Classic.

 **Note:** Some services and subscriptions include this feature for an extra cost. For pricing details, contact your Salesforce account executive.

### EDITIONS

Available for an extra cost in: **Professional, Enterprise, Performance, and Unlimited Editions**

### IN THIS SECTION:

[Einstein Lead Scoring: Lead Scores in Salesforce Classic, Lead Conversion Flexibility, and Detailed Enablement Status](#)

Use Einstein Lead Scoring in Salesforce Classic, set up lead scoring with more types of lead conversion, and see detailed information about issues that occur during setup. These changes apply to both Lightning Experience and Salesforce Classic.

[Einstein Automated Contacts: New Automated Options and Reporting](#)

We've put the "automated" into Einstein Automated Contacts. We also added a handy dashboard to help you track how well Einstein is doing. These changes apply to Lightning Experience only.

[Einstein Activity Capture: Support for Microsoft® Exchange and More Salesforce Records](#)

Einstein Activity Capture is now available for Microsoft Exchange 2013 and 2016 users. We also expanded Einstein Activity Capture functionality to include quotes and contracts. And, you take charge of how long Salesforce retains your Einstein Activity Capture data. These changes apply to Lightning Experience only.

[Sales Cloud Einstein Analytics: Enjoy More Dashboards and New Names](#)

We added an Analytics app for Einstein Automated Contacts, so you can track how many contacts Einstein added to Salesforce. Plus, we improved navigation by renaming a few things. These changes apply to Lightning Experience only.

### Other Changes in Sales Cloud Einstein

We changed the name of some fields and components to make things more consistent and intuitive. These changes apply to both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

[Salesforce Help: Set Up Sales Cloud Einstein \(can be outdated or unavailable during release preview\)](#)

## Einstein Lead Scoring: Lead Scores in Salesforce Classic, Lead Conversion Flexibility, and Detailed Enablement Status

Use Einstein Lead Scoring in Salesforce Classic, set up lead scoring with more types of lead conversion, and see detailed information about issues that occur during setup. These changes apply to both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

##### [Use Einstein Lead Scoring in Salesforce Classic](#)

Add the Einstein Score field to your Salesforce Classic lead page layouts so that sales reps see their leads' scores and factors that support them. This change applies to Salesforce Classic only.

##### [Use More Types of Lead Conversion with Einstein Lead Scoring](#)

Reap the advantages of lead scoring regardless of whether your business generates opportunities when converting leads. Previously, Einstein could analyze your historical leads only if sales reps had created opportunities during conversion. Now Einstein can work its magic even when leads are converted only to accounts and contacts. This change applies to both Lightning Experience and Salesforce Classic.

##### [Keep Track of and Control Einstein Lead Scoring Enablement](#)

We made setup easier by providing helpful information about issues that arise during lead scoring enablement and initial analysis. After enablement, you can now turn off lead scoring if needed. This change applies to both Lightning Experience and Salesforce Classic.

### Use Einstein Lead Scoring in Salesforce Classic

Add the Einstein Score field to your Salesforce Classic lead page layouts so that sales reps see their leads' scores and factors that support them. This change applies to Salesforce Classic only.

Adding the component in the Page Layout Editor is easy.

#### EDITIONS

Available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

#### EDITIONS

Available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

#### USER PERMISSIONS

To view Leads tab:

- Read on leads

To view leads:

- Read on leads

The screenshot shows the Salesforce Classic interface for editing a lead. In the 'Fields' list on the left, 'Einstein Score' is highlighted. In the 'Lead Information' section, the 'Einstein Score' field is also highlighted, showing a value of 36,774. The 'Lead Status' is 'Sample Lead Status'.

After you add the component to your page layouts, your Salesforce Classic users can prioritize their leads and convert more leads faster. In the component, reps see both the score and the fields affecting the score most.

The screenshot shows the 'Einstein Score' component in the lead detail view. It displays a score of 92 and a list of 'TOP 5 PREDICTIVE FACTORS':

- Lead Source is Web
- Company is Texas Instruments
- Country is valid
- Annual Revenue is valid
- Title is not CEO

Previously, only the Score field was available in Salesforce Classic, and only in list views.

## Use More Types of Lead Conversion with Einstein Lead Scoring

Reap the advantages of lead scoring regardless of whether your business generates opportunities when converting leads. Previously, Einstein could analyze your historical leads only if sales reps had created opportunities during conversion. Now Einstein can work its magic even when leads are converted only to accounts and contacts. This change applies to both Lightning Experience and Salesforce Classic.

Einstein Lead Scoring looks for the patterns in your lead conversion history and scores your leads based on how well they match your patterns. When you enable lead scoring, Setup asks you to choose the lead conversion milestone that matches your sales team's practices.

### EDITIONS

Available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

## Keep Track of and Control Einstein Lead Scoring Enablement

We made setup easier by providing helpful information about issues that arise during lead scoring enablement and initial analysis. After enablement, you can now turn off lead scoring if needed. This change applies to both Lightning Experience and Salesforce Classic.

Behind the scenes, Einstein Lead Scoring enablement includes several steps. Previously, no information about the progress of these steps was available.

1. Verifies that you satisfy the prerequisites.
2. Turns on the feature.
3. Analyzes your lead conversion history.
4. Scores your current leads.

## Einstein Automated Contacts: New Automated Options and Reporting

We've put the "automated" into Einstein Automated Contacts. We also added a handy dashboard to help you track how well Einstein is doing. These changes apply to Lightning Experience only.

### IN THIS SECTION:

#### [Say Goodbye to Contact Data Entry \(Beta\)](#)

Let Einstein add contacts and contact roles to Salesforce. It's automatic, so your sales reps stay focused on selling. These changes apply to Lightning Experience only.

#### [See How Many Contacts Einstein Added to Salesforce \(Beta\)](#)

The Einstein Automated Contacts dashboard shows you how busy Einstein was finding and adding contacts. For every contact Einstein added, your sales reps were free to do other things. This feature is new in Lightning Experience.

## Say Goodbye to Contact Data Entry (Beta)

Let Einstein add contacts and contact roles to Salesforce. It's automatic, so your sales reps stay focused on selling. These changes apply to Lightning Experience only.

### EDITIONS


Available for an extra cost in: **Enterprise, Performance,** and **Unlimited** Editions

### USER PERMISSIONS

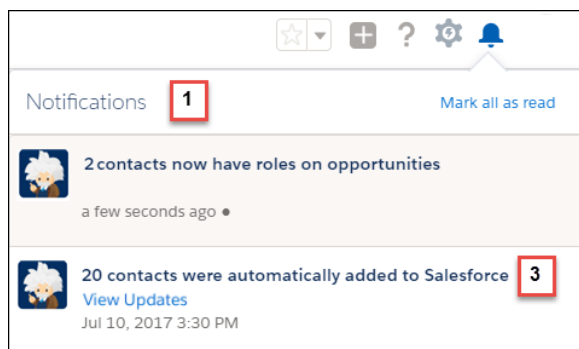
To enable Einstein Lead Scoring:

- Customize Application and Modify All Data

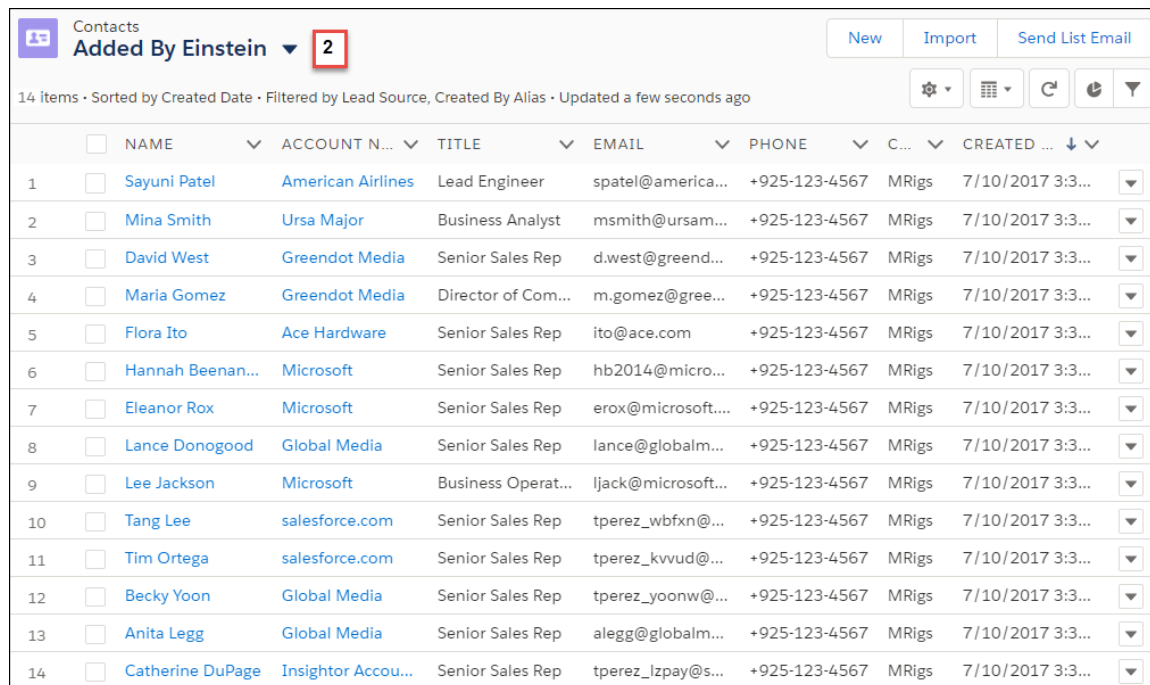


 **Note:** This release contains a beta version of the Einstein Automated Contacts automatic option, which means it's a high-quality feature with known limitations. The automatic option isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

When setting up Einstein Automatic Contacts, choose to have contacts and opportunity contact roles added to Salesforce automatically.



Reps are notified when new data is added (1).




	NAME	ACCOUNT N...	TITLE	EMAIL	PHONE	C...	CREATED ...
1	Sayuni Patel	American Airlines	Lead Engineer	spatel@america...	+925-123-4567	MRigs	7/10/2017 3:3...
2	Mina Smith	Ursa Major	Business Analyst	msmith@ursam...	+925-123-4567	MRigs	7/10/2017 3:3...
3	David West	Greendot Media	Senior Sales Rep	d.west@greend...	+925-123-4567	MRigs	7/10/2017 3:3...
4	Maria Gomez	Greendot Media	Director of Com...	m.gomez@gree...	+925-123-4567	MRigs	7/10/2017 3:3...
5	Flora Ito	Ace Hardware	Senior Sales Rep	ito@ace.com	+925-123-4567	MRigs	7/10/2017 3:3...
6	Hannah Beenan...	Microsoft	Senior Sales Rep	hb2014@micro...	+925-123-4567	MRigs	7/10/2017 3:3...
7	Eleanor Rox	Microsoft	Senior Sales Rep	erox@microsoft...	+925-123-4567	MRigs	7/10/2017 3:3...
8	Lance Donogood	Global Media	Senior Sales Rep	lance@globalm...	+925-123-4567	MRigs	7/10/2017 3:3...
9	Lee Jackson	Microsoft	Business Operat...	ljack@microsoft...	+925-123-4567	MRigs	7/10/2017 3:3...
10	Tang Lee	salesforce.com	Senior Sales Rep	tperez_wbfxn@...	+925-123-4567	MRigs	7/10/2017 3:3...
11	Tim Ortega	salesforce.com	Senior Sales Rep	tperez_kvvd@...	+925-123-4567	MRigs	7/10/2017 3:3...
12	Becky Yoon	Global Media	Senior Sales Rep	tperez_yoonw@...	+925-123-4567	MRigs	7/10/2017 3:3...
13	Anita Legg	Global Media	Senior Sales Rep	alegg@globalm...	+925-123-4567	MRigs	7/10/2017 3:3...
14	Catherine DuPage	Insightor Accou...	Senior Sales Rep	tperez_lzpay@s...	+925-123-4567	MRigs	7/10/2017 3:3...

A new list view shows reps which contacts were added by Einstein (2). They can click the notification text (3) to go to the list view. If a contact can't be added because of an error (for example, a required field is missing a default value), the contact is shown to the rep as a suggestion. The rep can then correct the errors when adding the contact.

You can still choose to have the new data shown to reps as suggestions that they take action on. But why would you want to do that?

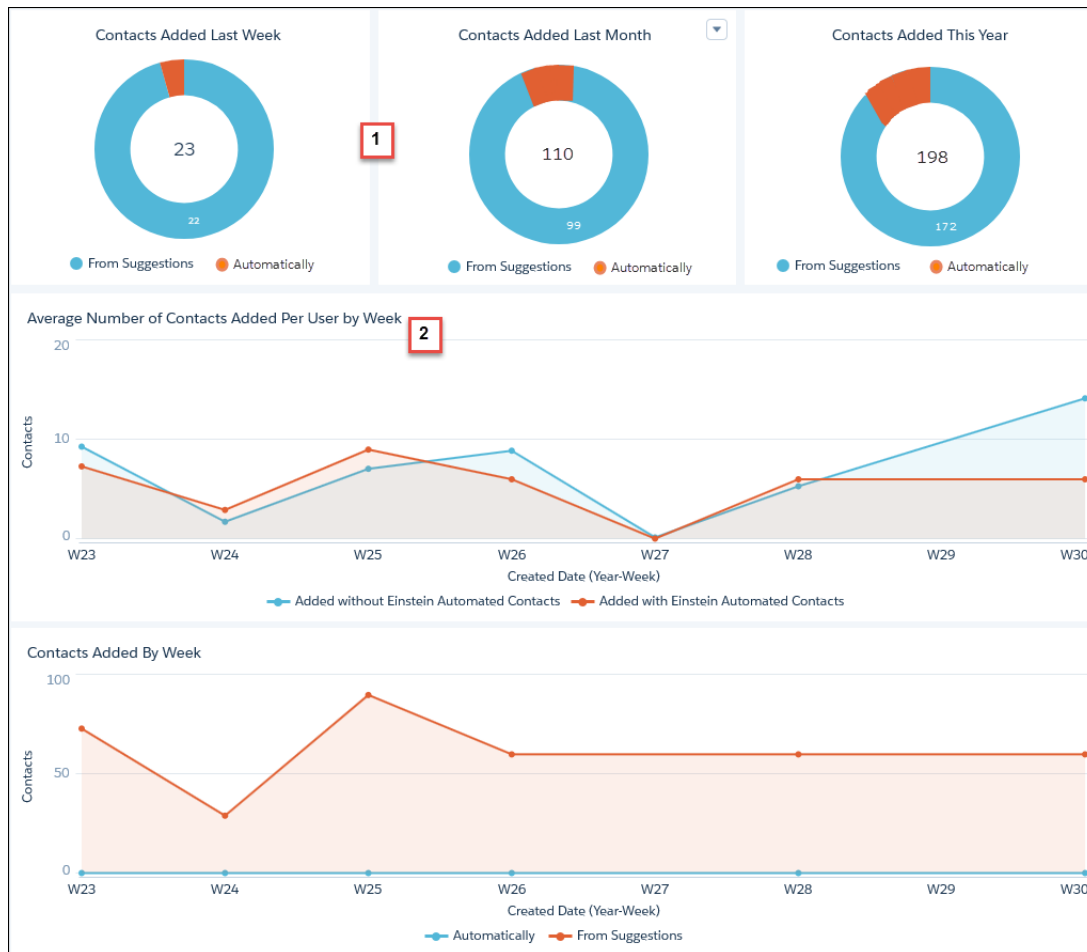
## See How Many Contacts Einstein Added to Salesforce (Beta)

The Einstein Automated Contacts dashboard shows you how busy Einstein was finding and adding contacts. For every contact Einstein added, your sales reps were free to do other things. This feature is new in Lightning Experience.

 **Note:** This release contains a beta version of the Einstein Automated Contacts dashboard, which means it's a high-quality feature with known limitations. This dashboard isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

Sales Cloud Einstein comes with five Einstein Sales Analytics licenses. When you assign them to Einstein Automated Contact users, those users can view a handy dashboard.

Click the Sales Cloud Einstein tab, and then click **Contacts**.



See how many contacts were added with the help of Einstein Automated Contacts, automatically or from suggestions. Data is broken down by week, month, and year (1).

Compare how many contacts Einstein Automated Contacts added to the number added manually. Data is broken down by average number of contacts per user by week (2).

SEE ALSO:

[Say Goodbye to Contact Data Entry \(Beta\)](#)

## Einstein Activity Capture: Support for Microsoft® Exchange and More Salesforce Records

Einstein Activity Capture is now available for Microsoft Exchange 2013 and 2016 users. We also expanded Einstein Activity Capture functionality to include quotes and contracts. And, you take charge of how long Salesforce retains your Einstein Activity Capture data. These changes apply to Lightning Experience only.

### IN THIS SECTION:

#### [Welcome Microsoft® Exchange 2013 and 2016 Accounts](#)

Reps with Microsoft Exchange 2013 and 2016 accounts can now connect their email and calendar to Salesforce. Admins can even create and save configurations for each of their Microsoft Exchange domains, so reps can connect their accounts quickly. These changes apply to Lightning Experience only.

#### [Add Activities for Quotes and Contracts](#)

Your teams can say goodbye to logging activities for even more types of records. With Einstein Activity Capture supporting quotes and contracts, events and emails are automatically added to these records and used by Einstein to generate insights. Also, the Activities app now shows activities for quotes and contracts. These changes apply to Lightning Experience only.

#### [See Automatically Captured Microsoft® Office 365® Events from Salesforce Calendar](#)

When you set up reps for Einstein Activity Capture, they see their Microsoft events from their Salesforce calendars. Events are added to a calendar called Microsoft Calendar, so reps can keep automatically added events separate from their default Salesforce calendar events. This change applies to Lightning Experience only.

#### [Decide How Long We Retain Your Data](#)

Want to have control over how long Salesforce stores your data? We get that. Contact Salesforce Customer Support to specify the number of months you want to retain Einstein Activity Capture data. Salesforce can retain your Einstein Activity Capture data up to five years, the default period being 24 months. This change applies to Lightning Experience only.

#### [Easily Manage the Excluded Addresses List](#)

To streamline the steps for excluding addresses and domains and avoid errors, we included an easy-to-use wizard interface for this process. This change applies to Lightning Experience only.

### EDITIONS

Available for an extra cost with Sales Cloud Einstein and Inbox in: **Professional, Enterprise, Performance, and Unlimited** Editions

## Welcome Microsoft® Exchange 2013 and 2016 Accounts

Reps with Microsoft Exchange 2013 and 2016 accounts can now connect their email and calendar to Salesforce. Admins can even create and save configurations for each of their Microsoft Exchange domains, so reps can connect their accounts quickly. These changes apply to Lightning Experience only.

1. From Setup, enter *Microsoft Exchange Settings* in the Quick Find box, and then click **New**.
2. Enter your Microsoft Exchange connection settings, and then click **Save**.

### USER PERMISSIONS

To set up a connection between Microsoft Exchange and Salesforce

- Administrative access to set up new connection between Microsoft Exchange connection

## Add Activities for Quotes and Contracts

Your teams can say goodbye to logging activities for even more types of records. With Einstein Activity Capture supporting quotes and contracts, events and emails are automatically added to these records and used by Einstein to generate insights. Also, the Activities app now shows activities for quotes and contracts. These changes apply to Lightning Experience only.

1. From Setup, enter *Einstein Activity Capture* in the Quick Find box, then select **Settings** under Einstein Activity Capture.
2. Click **Edit Records**.
3. Select the type of records to add activities to.
4. Click **Save**.

### USER PERMISSIONS

To add activities to quotes and contracts

- Customize Application and Modify All Data

## See Automatically Captured Microsoft® Office 365® Events from Salesforce Calendar

When you set up reps for Einstein Activity Capture, they see their Microsoft events from their Salesforce calendars. Events are added to a calendar called Microsoft Calendar, so reps can keep automatically added events separate from their default Salesforce calendar events. This change applies to Lightning Experience only.

To view Microsoft Calendar, reps select it from **My Calendars**.

## Decide How Long We Retain Your Data

Want to have control over how long Salesforce stores your data? We get that. Contact Salesforce Customer Support to specify the number of months you want to retain Einstein Activity Capture data. Salesforce can retain your Einstein Activity Capture data up to five years, the default period being 24 months. This change applies to Lightning Experience only.

It can take up to 48 hours after contacting Salesforce Customer Support for your request to take effect.



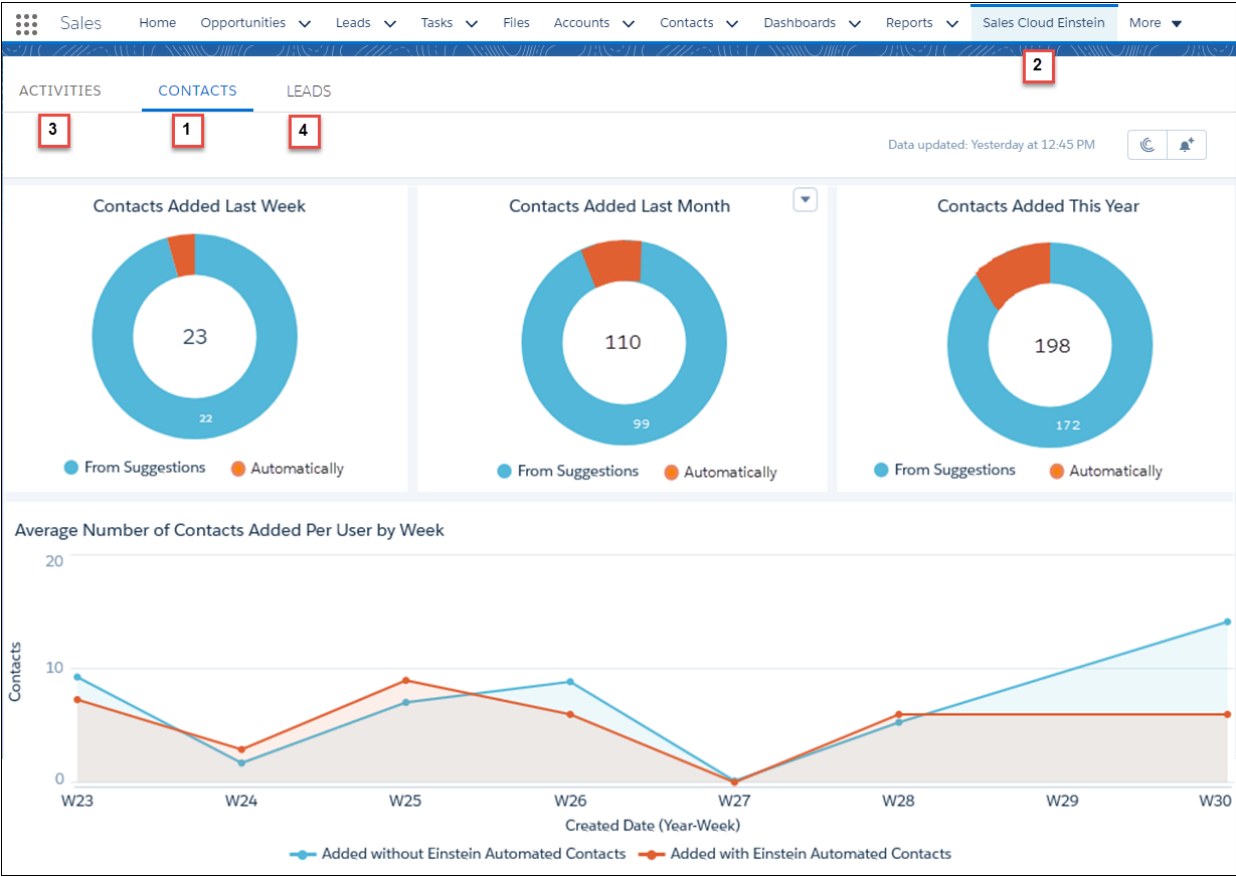
**Note:** We calculate each month as a thirty-day period.

## Easily Manage the Excluded Addresses List

To streamline the steps for excluding addresses and domains and avoid errors, we included an easy-to-use wizard interface for this process. This change applies to Lightning Experience only.

## Sales Cloud Einstein Analytics: Enjoy More Dashboards and New Names

We added an Analytics app for Einstein Automated Contacts, so you can track how many contacts Einstein added to Salesforce. Plus, we improved navigation by renaming a few things. These changes apply to Lightning Experience only.



Einstein Automated Contacts includes a new dashboard on the renamed Sales Cloud Einstein tab that shows you how busy Einstein was finding and adding contacts (1).

We renamed the Einstein Sales Analytics tab to Sales Cloud Einstein (2). It has the same great Einstein dashboards, including a dashboard for Einstein Activity Capture (3) and one for Einstein Leads Scoring (4). We also renamed the Einstein Activity Capture dashboard from Activity Metrics to Activities.

SEE ALSO:

[Einstein Automated Contacts: New Automated Options and Reporting](#)

Other Changes in Sales Cloud Einstein

We changed the name of some fields and components to make things more consistent and intuitive. These changes apply to both Lightning Experience and Salesforce Classic.

What	New Name
Einstein Lead Scoring: score field on lead records and list views	Einstein Score
Einstein Lead Scoring: Einstein component on lead records	Einstein Score

What	New Name
Einstein Lead Scoring: Einstein component in the Lightning App Builder	Einstein Lead Score
Einstein Insights: Einstein component on accounts, opportunities, Home page, and in the Lightning App Builder	Einstein Insights
Einstein Automated Contacts: Einstein component on accounts, opportunities, Home page, and in the Lightning App Builder	Einstein Insights
Opportunity Insights: Top Insights field on opportunity list views	Top Einstein Insight

## Core Sales Features: Campaign Influence, Collaborative Forecasts, and Enterprise Territory Management

Track the influence of multiple campaigns on an opportunity. And access more information when projecting sales. Set up Enterprise Territory Management from Lightning Experience. But that's not all!

### IN THIS SECTION:

#### [Leads: Speed Through Lead Conversions with Added Flexibility](#)

Your reps now save time when they convert leads. The new lead conversion process matches leads with contacts and accounts already in Salesforce. At the same time, reps create an opportunity or select one already in the works. This change applies to Lightning Experience only.

#### [Accounts: Easier Enablement Process, Support for Merging Person Accounts in Lightning Experience, and Improved Sharing Model](#)

We improved the enablement process, added the ability to merge person accounts in Lightning Experience, and given you more flexibility on how contacts are shared in orgs that use person accounts. These changes apply to Lightning Experience and Salesforce Classic.

#### [Campaigns: Multitouch Campaign Influence and Other Improvements](#)

Let your sales and marketing departments track the influence of multiple campaigns on opportunities. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

#### [Collaborative Forecasts: Do More with Sales Predictions](#)

Configure Collaborative Forecasts in Lightning Experience. Forecasts users also get more information and can do more when they're projecting sales. These changes apply to Lightning Experience only.

#### [Enterprise Territory Management: Configure and Manage Sales Territories in Lightning Experience](#)

Configure Enterprise Territory Management in Setup without switching to Salesforce Classic. And reps can now manage their sales territories in Lightning Experience. These changes apply to Lightning Experience only.

#### [Opportunities: Opportunity Teams, Opportunity Products, Contact Roles, Forecast Category](#)

Working with opportunities in Lightning Experience is more efficient than ever! Your users can now add an entire opportunity team in fewer clicks. And, increase the completeness of opportunities by prompting users to add products immediately when they create or clone an opportunity. These changes apply to Lightning Experience only.

## Leads: Speed Through Lead Conversions with Added Flexibility

Your reps now save time when they convert leads. The new lead conversion process matches leads with contacts and accounts already in Salesforce. At the same time, reps create an opportunity or select one already in the works. This change applies to Lightning Experience only.

With the new efficient conversion window, reps can quickly:

- Create an account, contact, and opportunity from the lead data with a single click
- Update the values provided from the lead for each new record
- Choose the record types
- Relate the lead to existing account, contact, and opportunity records matched to the lead using your duplicate management rules
- View details of the matched records
- Search for more records to relate to the lead
- Create a follow-up task

These features appear in separate expandable sections for accounts, contacts, and opportunities. In one convenient location, reps can convert leads however they wish.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions when using Apex Lead Convert

**Note:** To use the new lead conversion window, your org must have enabled Apex Lead Convert. Customers using the old lead convert built on PLSQL still see the same window as in previous releases. With its increased capability, flexibility, and efficiency, the arrival of the new lead convert window is a great opportunity to make the free switch to Apex Lead Convert. To enable Apex Lead Convert, see this [Knowledge article](#) and then contact Salesforce Support.

## Accounts: Easier Enablement Process, Support for Merging Person Accounts in Lightning Experience, and Improved Sharing Model

We improved the enablement process, added the ability to merge person accounts in Lightning Experience, and given you more flexibility on how contacts are shared in orgs that use person accounts. These changes apply to Lightning Experience and Salesforce Classic.

### Set Up Person Accounts with Ease

Ready to start using person accounts? You picked a great time because we streamlined the enablement process.

### Merge Person Accounts in Lightning Experience

Sales reps can now view duplicates on person accounts in Lightning Experience just as they can on business accounts, contacts, and leads. Users with permission can merge person accounts, too.

### Share Business Contacts Manually in Orgs That Use Person Accounts (Generally Available)

Orgs that use person accounts are now able to modify the Organization-Wide Sharing Default for Contacts. This allows for flexibility in how you share business contacts, including the ability to define contact sharing rules and manually share business contacts.

### Add Person Accounts to Campaigns from Account Reports

If you use person accounts, your marketing department can quickly target people by adding them to campaigns directly from account-based standard and custom reports. Previously, users could add person accounts to campaigns only from contact-based reports. This change applies to both Lightning Experience and Salesforce Classic.

## Set Up Person Accounts with Ease

Ready to start using person accounts? You picked a great time because we streamlined the enablement process. This change applies to both Lightning Experience and Salesforce Classic.

An automated process checks whether or not your org meets the requirements for using Person Accounts. The requirements are:

- At least one record type for accounts.
- Users that have read permission on accounts have read permission on contacts.
- Organization-wide default sharing is set so that Contact is **Controlled by Parent** or Account and Contact is **Private**.

From Setup, enter *Account Settings* in the Quick Find box, and then select **Allow Customer Support to enable Person Accounts**. After we confirm that your org is ready for Person Accounts, we'll send an email with additional information about logging a Support case.

#### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**



**Account Settings** [Help for this Page](#)

Use the account settings below to specify default account behavior for your organization.

**General Settings** ! = Required Information

Show View Hierarchy link on account pages in Salesforce Classic ☒

Enable News \* ☐ [i](#)

Enable Automated Account Fields \* ☐ [i](#)

Enable Account Logos \* ☐ [i](#)

**Contacts to Multiple Accounts Settings**

Allow users to relate a contact to multiple accounts ☐ [i](#)

**Person Accounts**

Allow Customer Support to enable Person Accounts ☐ [i](#)

**Save** **Cancel**

But it's not just your org that needs to be ready for Person Accounts. You need to be ready, too. Because you can't disable Person Accounts, we recommend that you create a sandbox to preview how they affect your org.

SEE ALSO:

[Salesforce Help: Enable Person Accounts \(can be outdated or unavailable during release preview\)](#)

## Add Person Accounts to Campaigns from Account Reports

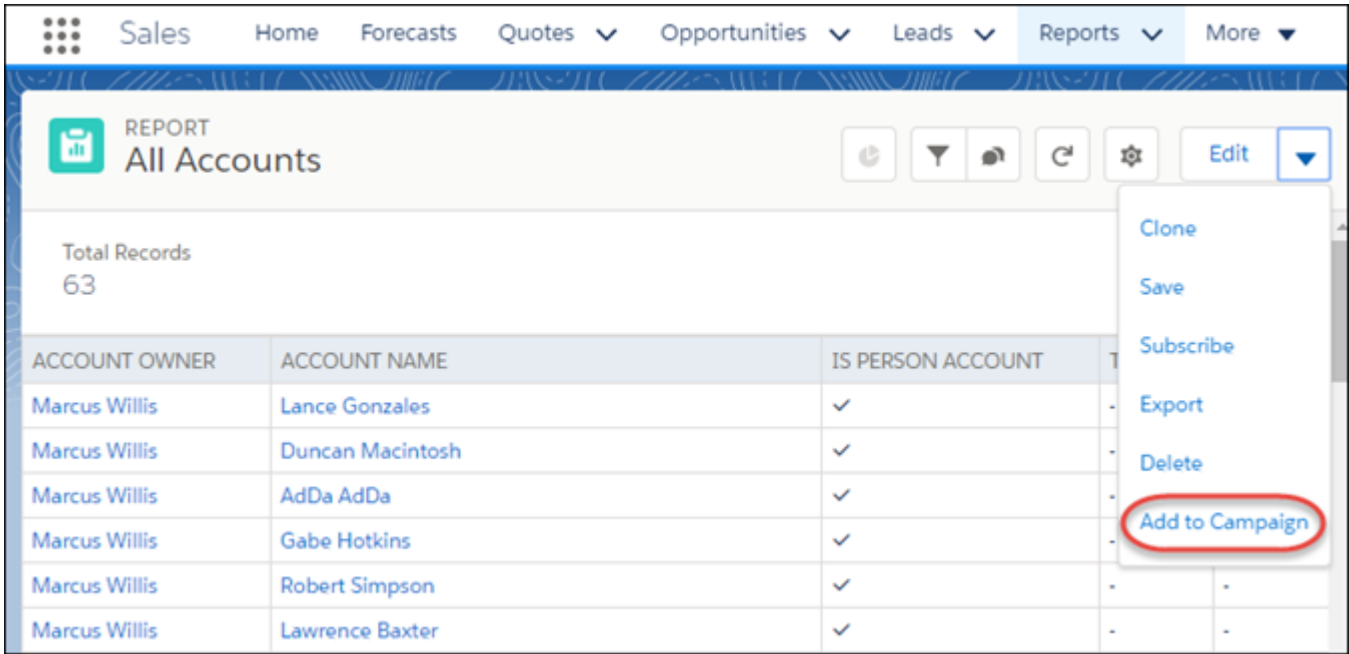
If you use person accounts, your marketing department can quickly target people by adding them to campaigns directly from account-based standard and custom reports. Previously, users could add person accounts to campaigns only from contact-based reports. This change applies to both Lightning Experience and Salesforce Classic.

Users can add up to 50,000 person account records to campaigns by clicking **Add to Campaign** from a report. To add person accounts to campaigns from reports, the report's primary object must

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

be Account.



For custom report types, the Person Account field is automatically included as an available field. Don't remove it.

## Campaigns: Multitouch Campaign Influence and Other Improvements

Let your sales and marketing departments track the influence of multiple campaigns on opportunities. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### IN THIS SECTION:

[Let Sales and Marketing Track the Influence of Multiple Campaigns on Opportunities](#)

With new Additional Campaign Influence Attribution Models, your marketing department can see the influence details they're most interested in. Separate models track the first touch, last touch, and evenly distribute revenue attribution to all the campaigns that influence an opportunity. This change applies to orgs using Customizable Campaign Influence that have also purchased Pardot.

[Other Changes Make Campaign Influence More Flexible](#)

The Customizable Campaign Influence settings are now separated into different pages, making them easier to work with. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## Let Sales and Marketing Track the Influence of Multiple Campaigns on Opportunities

With new Additional Campaign Influence Attribution Models, your marketing department can see the influence details they're most interested in. Separate models track the first touch, last touch, and evenly distribute revenue attribution to all the campaigns that influence an opportunity. This change applies to orgs using Customizable Campaign Influence that have also purchased Pardot.

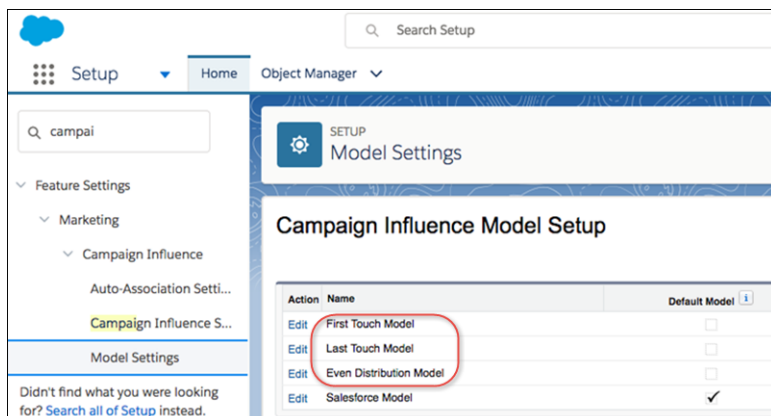
In addition to the Primary Campaign Source model, you can now enable up to three new models for Customizable Campaign Influence users in orgs that have also purchased Pardot.

- The First Touch model tracks where your brand first interacts with prospects.

### EDITIONS

Available in: **Professional, Enterprise, Performance, and Unlimited** Editions with Pardot

- The Last Touch model shows which campaigns are helping close deals.
- The Even Distribution model catches how their campaigns perform across all interactions with prospects.



Records for the model you choose as the default in Setup appear in the Campaign Influence related list on Opportunities.

Additional Campaign Influence Attribution Models is available to customers who have a Lightning Sales Cloud Professional, Enterprise or Performance Edition subscription or Lightning CRM Professional, Enterprise or Performance Edition subscription and a Pardot Pro, Pardot Enterprise, or Pardot Ultimate subscription. Reach out to your Account Executive to enable this feature if it has not yet been provisioned.

**Note:** We anticipate this feature will be generally available in the November 2017 to January 2018 time frame. Any unreleased services or features referenced in this or other public statements are not currently available and may not be delivered on time or at all. Customers who purchase salesforce.com applications should make their purchase decisions based upon features that are currently available.

SEE ALSO:

[Salesforce Help: Customizable Campaign Influence](#)

## Other Changes Make Campaign Influence More Flexible

The Customizable Campaign Influence settings are now separated into different pages, making them easier to work with. This change applies to both Lightning Experience and Salesforce Classic.

- In Setup, the Campaign Influence page is divided into three separate pages.
  - Campaign Influence Settings
  - Auto-Association Settings
  - Model Settings
- In Setup, the new **Record Preference** setting for each campaign influence model lets you choose when to create campaign influence records based on the revenue attribution for a campaign. To always create records regardless of the revenue attribution, choose **All Records**. To create records only when the revenue attribution is greater than 0%, choose **Records with >0% Attribution**. Records created by the influence model marked as the default appear in the Campaign Influence related list on campaigns and opportunities.

For example, let's say you have five campaigns related to an opportunity, and only the last campaign added to the opportunity gets any revenue attribution (100%). If you choose **Records with >0% Attribution**, you would only see that campaign in the Campaign Influence related list.

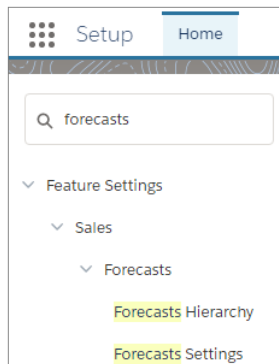
### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

The new **Record Preference** setting on each campaign influence model replaces the old **Only migrate Campaign Influence records for the primary campaign on opportunities** setting. The older setting only affected how campaign influence records were handled when upgrading from Campaign Influence 1.0 to Customizable Campaign Influence.

## Collaborative Forecasts: Do More with Sales Predictions

Configure Collaborative Forecasts in Lightning Experience. Forecasts users also get more information and can do more when they're projecting sales. These changes apply to Lightning Experience only.



### EDITIONS

Available in: **Professional** (no custom field forecasts), **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Salesforce admins can access Forecasts Hierarchy and Forecasts Settings in Setup.

Forecasts		QUOTA	CLOSED ONLY	COMMIT FORECAST	BEST CASE FORECAST
MONTHLY	SOLE HIERARCHY				
Search for other users' forecasts...					
Total: 3	▼ Elliott	\$750,000.00	\$0.00 0.0%	\$15,000.00 2.0%	\$199,000.00 26.5%
▼ July FY 2017		\$750,000.00	\$0.00 0.0%	\$0.00 0.0%	\$153,000.00 20.4%

Forecasts users can:

- Jump to the forecasts of users they have access to view (1).
- See quota attainment information (2).
- Access Collaborative Forecasts in the Lightning Sales Console.
- Adjust their own product family forecasts. This feature is unique to Lightning Experience.

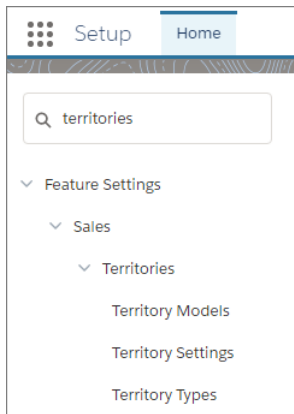
Product family forecast totals aren't available in Salesforce Classic. If users adjust their product family forecasts in Lightning Experience, not every total in the Salesforce Classic forecasts grid reflects the adjustments.

Need help getting started setting up Collaborative Forecasts for your team? Check out our new trail: [Optimize Sales Forecasts](#).

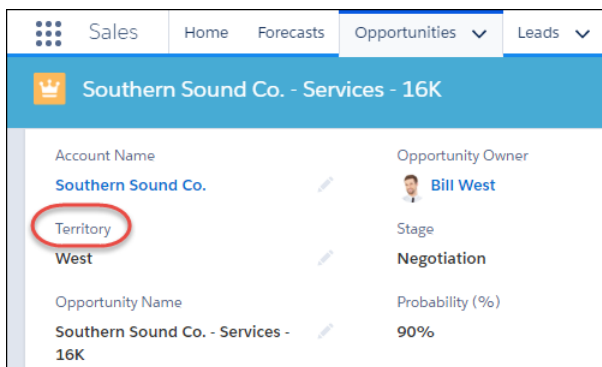
Is your sales team new to Collaborative Forecasts in Lightning Experience? Share this video to show off the latest: [Forecast Accurately with Collaborative Forecasts in Lightning Experience \(English only\)](#).

## Enterprise Territory Management: Configure and Manage Sales Territories in Lightning Experience

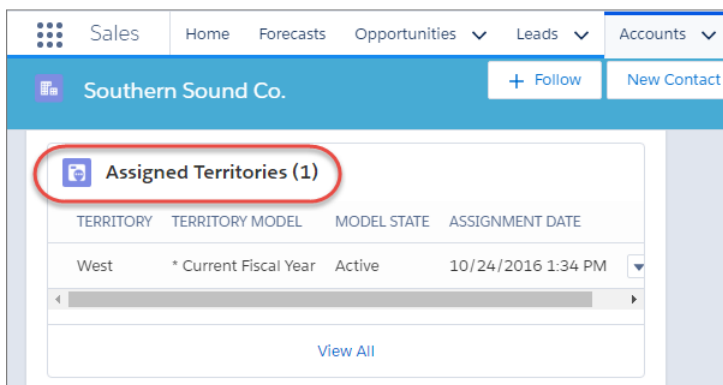
Configure Enterprise Territory Management in Setup without switching to Salesforce Classic. And reps can now manage their sales territories in Lightning Experience. These changes apply to Lightning Experience only.



Access Territory Models, Territory Settings, and Territory Types in Setup.



Reps can change the assigned territory in opportunity details.



### EDITIONS

Available in: **Developer** and **Performance** Editions and in **Enterprise** and **Unlimited** Editions with the Sales Cloud

Reps can also view the Assigned Territories related list on accounts, but this list is read only, even for users with the Manage Territories permission.

SEE ALSO:

[Manage Territories on the Go](#)

[Sales Features: Lightning Experience Considerations](#)

## Opportunities: Opportunity Teams, Opportunity Products, Contact Roles, Forecast Category

Working with opportunities in Lightning Experience is more efficient than ever! Your users can now add an entire opportunity team in fewer clicks. And, increase the completeness of opportunities by prompting users to add products immediately when they create or clone an opportunity. These changes apply to Lightning Experience only.

IN THIS SECTION:

[Add Opportunity Team Members Faster](#)

Your sales reps can add multiple members of an opportunity team on one page. These changes apply to Lightning Experience only.

[Prompt Users to Add Products to Opportunities](#)

Ensure that opportunities are more complete by having Salesforce prompt sales reps to add products to new opportunities. This change applies to Lightning Experience only.

[Create Contact Roles for Opportunities from Contacts in Lightning Experience](#)

Create an opportunity and a contact role in one fell swoop. When sales reps create an opportunity from the opportunity related list on a contact, Salesforce adds the contact in a contact role on the opportunity. These changes apply to Lightning Experience and the Salesforce app only.

[Change Opportunity Forecast Category](#)

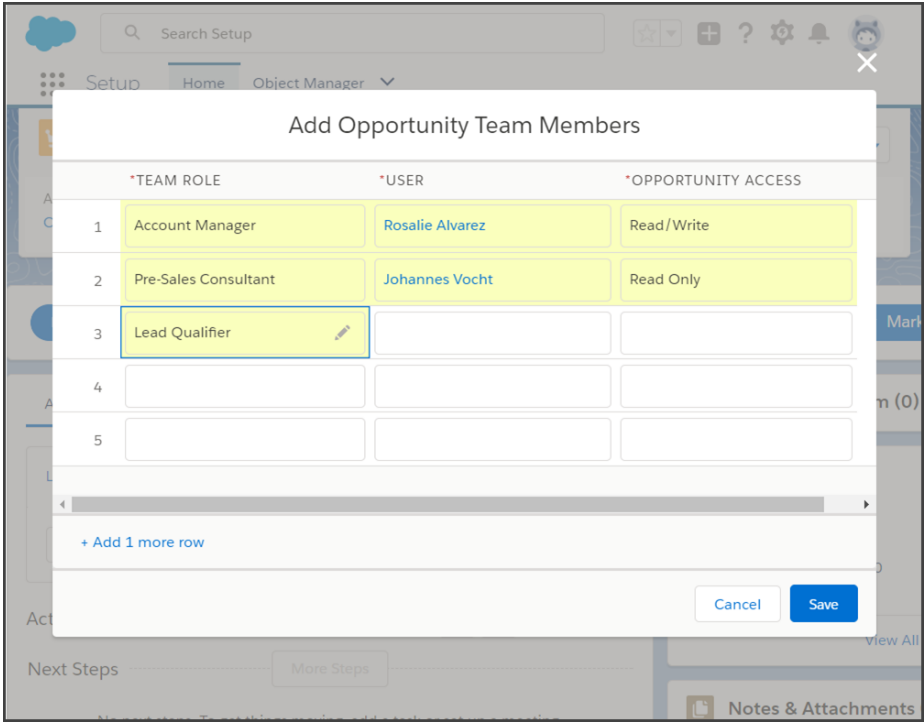
Fine-tune forecasts by changing an opportunity's forecast category regardless of its stage. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### Add Opportunity Team Members Faster

Your sales reps can add multiple members of an opportunity team on one page. These changes apply to Lightning Experience only.

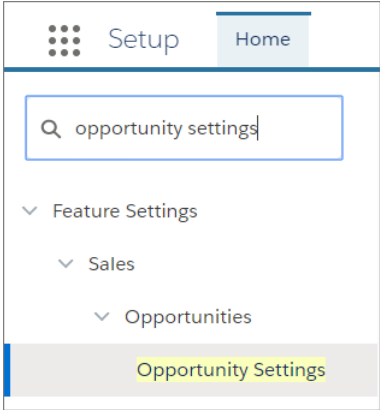
#### EDITIONS

Available in Lightning Experience in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions



Prompt Users to Add Products to Opportunities

Ensure that opportunities are more complete by having Salesforce prompt sales reps to add products to new opportunities. This change applies to Lightning Experience only.



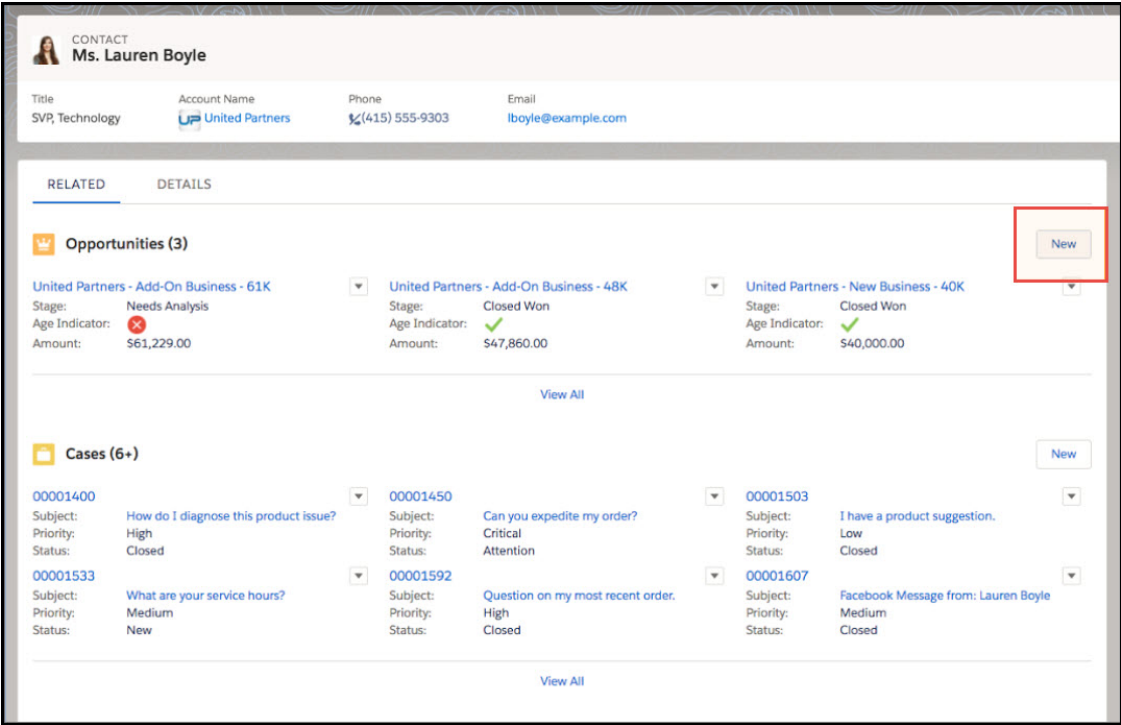
EDITIONS

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

To prompt users to add products to opportunities, from Setup, enter Opportunity Settings in the Quick Find box, then select **Opportunity Settings**. Enable **Prompt users to add products to opportunities**.

Create Contact Roles for Opportunities from Contacts in Lightning Experience

Create an opportunity and a contact role in one fell swoop. When sales reps create an opportunity from the opportunity related list on a contact, Salesforce adds the contact in a contact role on the opportunity. These changes apply to Lightning Experience and the Salesforce app only.



### Change Opportunity Forecast Category

Fine-tune forecasts by changing an opportunity's forecast category regardless of its stage. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### EDITIONS

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



The screenshot shows a mobile-style form for creating a forecast. It includes the following fields and options:

- Stage:** A dropdown menu with "Qualification" selected.
- Account Name:** A text field with "Data Mart" and a clear (X) button.
- Amount:** A text field with "\$14,000.00".
- Probability (%):** A text field with "10%".
- Forecast Category:** A dropdown menu with "Pipeline" selected.
- Type:** A section with a header bar containing up/down arrows and a "Done" button. Below the header is a list of forecast types: "Closed", "Omitted", "Pipeline" (highlighted), and "Best Case Commit".

## Productivity Features: Task Reminders, Enhanced List Views, and Forecasting in the Sales Console

Help your reps maximize their productivity in Lightning Experience with task reminders, list view improvements, and more calendar options. Collaborative Forecasts are also now available in the Sales Console.

### IN THIS SECTION:

#### [Sales Console: Welcome Forecasting to the Console](#)

You've been patiently waiting for Collaborative Forecasts to come to the Lightning Sales Console. The wait is over! Plus, we've made other great improvements to Lightning console apps, including the ability to add favorites, navigation rules to make your users' workflow more efficient, and additional keyboard shortcuts.

#### [Email: Introducing List Email](#)

Your company's marketing and sales teams can take email marketing farther with list emails. They can curate a list view of targeted contacts, leads, and person accounts. They can also send a separate, personalized email to each recipient on the list. These changes apply to Lightning Experience only.

#### [Activities: Archived and Past Activities, Activity Timeline Filters, and Task Reminders](#)

Your sales reps can harness tasks for more insight by viewing all past and archived activities. Your reps can filter the activity timeline in new ways. And they can set task reminders so no to-dos slip through the cracks. These changes apply to Lightning Experience and all versions of the Salesforce app.

#### List Views: Customizations, Mass Inline Editing, and Text Wrapping

Reps can get more done with fewer clicks when working from list views. Edit multiple records from a list view, and wrap text in columns to see more at a glance.

#### Notes: Keep Sensitive Data Private with Private Notes

Your reps rely on notes to streamline their workflow and increase productivity. With private notes, they can record sensitive information while keeping the note in context. Reps can also selectively share private notes. This change applies to Lightning Experience and all versions of the Salesforce app.

#### Calendar: More Robust Calendar Options in Lightning Experience

Collaborate more efficiently with your colleagues in Lightning Experience. Reps can share calendars and add attendees to events that are syncing with Google Calendar. These changes apply to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### Lightning Dialer: Record Custom Voicemail Greetings

Add personal flair to voicemail. Sales reps can record custom greetings on their Lightning Dialer voicemail. This change applies to Lightning Experience only.

#### Home: Tasks Component and Performance Chart Updates

The tasks component can now be filtered, and the performance chart needs to be refreshed manually. These changes apply to Lightning Experience only.

## Sales Console: Welcome Forecasting to the Console

You've been patiently waiting for Collaborative Forecasts to come to the Lightning Sales Console. The wait is over! Plus, we've made other great improvements to Lightning console apps, including the ability to add favorites, navigation rules to make your users' workflow more efficient, and additional keyboard shortcuts.



**Note:** Lightning console apps don't yet have full parity with Salesforce Classic console apps. For example, some features in Salesforce Classic console apps, such as push notifications and multi-monitor support, aren't available in Lightning console apps. [Learn more](#).

You also can't migrate Salesforce Classic console apps to Lightning Experience.

#### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions with Sales Cloud

42 Items • Updated 3 minutes ago

RECENTLY VIEWED

Salesforce.com, Inc. - 230K Negotiation

\$230,000.00

8/26/2016

Insightor Opp #QCJSr Prospecting

5/9/2017

Insightor Opp #YILEF Prospecting

5/9/2017

Pardot LLC - New Business - 83K Negotiation

\$2,000.00

1/9/2017

Insightor Opp #eRrJO Qualification

7/2/2017

Gusto Sound and Audio - Services - 18K Qualification

\$18,000.00

3/31/2017

Assurity Corporation - New Business - 110K Qualification

\$110,000.00

10/24/2016

United Partners - 100 Widgets Qualification

\$100,000.00

7/31/2017

United Partners (San Francisco) - Add-On Business - 30K Needs Analysis

\$30,000.00

11/15/2016

Ampitech Corporation - New Business - 3K Proposal/Quote

\$3,000.00

8/8/2017

Vand Enterprises, Inc. - Services - 81K Negotiation

\$81,000.00

11/23/2016

Advanced Communications - New Business - 130K Negotiation

\$0.00

9/15/2016

Forecasts

Elliot Executive

MONTHS	QUOTA	CLOSED ONLY	COMMIT FORECAST	BEST CASE FORECAST	OPEN PIPELINE
Total: 3 Months	-	\$0.00	\$15,000.00	\$199,000.00	\$380,000.00
July FY 2017	-	\$0.00	\$0.00	\$153,000.00	\$279,000.00
August FY 2017	-	\$0.00	\$15,000.00	\$46,000.00	\$101,000.00
September FY 2017	-	\$0.00	\$0.00	\$0.00	\$0.00

Elliot Executive Team • July FY 2017 • All Forecast Categories

OPPORTUNITY NAME	ACCOUNT NAME	AMOUNT	CLOSE DATE	STAGE	PROBABILITY (%)	FORECAST CATEGORY	OWNER FULL NAME	COMPETITOR
General Utilities - Ne...	General Utilities	\$12,000.00	07/08/2017	Qualification	20%	Pipeline	Central, Kasey	
Opportunity Resource...	Opportunity Resources L...	\$14,000.00	07/07/2017	Qualification	20%	Pipeline	East, Ely	
United Partners - 100 ...	United Partners	\$100,000.00	07/31/2017	Qualification	20%	Pipeline	Silver, Nate	
Insightor Opp #eRrJO	Insightor Account #Vjmb	\$0.00	07/02/2017	Qualification	20%	Pipeline	Silver, Nate	
Open Source Inc. - Ad...	Open Source Inc.	\$115,000.00	07/02/2017	Needs Analysis	20%	Best Case	Central, Cindy	
Biospan, LLC - Servic...	Biospan, LLC	\$12,000.00	07/07/2017	Needs Analysis	20%	Best Case	Central, Cindy	

Use Favorites in Console Apps

Let users have their most-visited pages and important records, lists, groups, dashboards at their fingertips. Favorites are similar to bookmarks in a web browser, providing quick access to frequently used items.

Automatically Open Related Records in Console Apps with Navigation Rules

Use navigation rules to make your console users' workflows more efficient. For example, you can configure navigation rules so that when a user clicks a contact, it opens as a subtab of that contact's related account.

Navigate More Quickly with Keyboard Shortcuts

New keyboard shortcuts allow your users to be more efficient in both console and standard navigation Lightning apps.

Work with Macros in Lightning Experience

Sales reps can use macros to automate common repetitive tasks. To let your sales reps work with macros, add the Macro utility to the Sales Console app.

SEE ALSO:

- [Collaborative Forecasts: Do More with Sales Predictions](#)
- [Salesforce Help: Lightning Experience Console Limitations \(can be outdated or unavailable during release preview\)](#)
- [Salesforce Help: What Features Are Available in Lightning Console Apps? \(can be outdated or unavailable during release preview\)](#)

Email: Introducing List Email

Your company's marketing and sales teams can take email marketing farther with list emails. They can curate a list view of targeted contacts, leads, and person accounts. They can also send a separate, personalized email to each recipient on the list. These changes apply to Lightning Experience only.

EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

## IN THIS SECTION:

[Expand Your Reps' Email Reach with List Email](#)

Take your company's email outreach efforts to the next level. Reps can send an email to recipients on contact, lead, and person account lists without worrying about blasting everyone with a Reply All response. Or, they can choose individual records on a list view. List email sends an individual email to each recipient instead of one email to the entire group. Reps can amp it up by using email templates and merge fields to customize each email. This change applies to Lightning Experience only.

[Keep Track of List Emails in the Activity Timeline](#)

For your sales reps, the activity timeline rules the screen. Now the timeline shows an activity when a list email has been sent to a lead or contact. This change applies to Lightning Experience only.

[No More Errors for Empty Email Merge Fields](#)

Emails and email templates can include merge fields to provide personalization. In Summer '17 and earlier, if a recipient's record was missing data for a merge field, an error appeared. The error is gone, and the merge field is now left blank when the email is sent. This change applies to the Send Email action and list email. This change applies to Lightning Experience only.

## Expand Your Reps' Email Reach with List Email

Take your company's email outreach efforts to the next level. Reps can send an email to recipients on contact, lead, and person account lists without worrying about blasting everyone with a Reply All response. Or, they can choose individual records on a list view. List email sends an individual email to each recipient instead of one email to the entire group. Reps can amp it up by using email templates and merge fields to customize each email. This change applies to Lightning Experience only.

List email and mass email user permissions are required to use list email.

## SEE ALSO:

[Salesforce Help: Send an Email to a Group: List Email and Mass Email \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Considerations for Sending List Email in Lightning Experience \(can be outdated or unavailable during release preview\)](#)

[IdeaExchange: Easy Way to Create Mass Email](#)

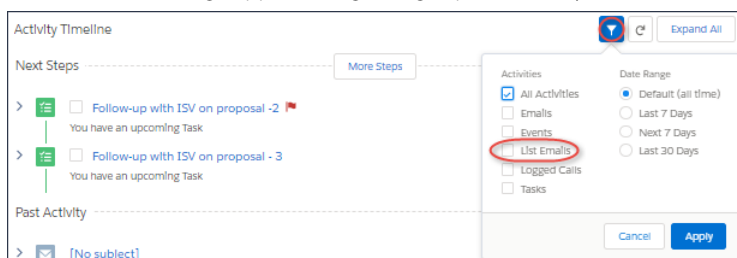
[IdeaExchange: Allow Mass Content Delivery via Email](#)

[IdeaExchange: Mass Email Directly from a List View](#)

[IdeaExchange: Ability to Mass Email Contacts within Lightning](#)


## Keep Track of List Emails in the Activity Timeline

For your sales reps, the activity timeline rules the screen. Now the timeline shows an activity when a list email has been sent to a lead or contact. This change applies to Lightning Experience only.



List email activities only appear in the activity timeline if logging list email activities is on. It is turned on by default.

Your reps can't create a list email in the Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, but you can still see the activity.

 **Note:** In Salesforce Classic, mass emails are logged as tasks, not activities. They are logged in plain text (even for HTML emails), don't include attachments, and don't display recipients.

SEE ALSO:

[Filter More Ways in the Activity Timeline](#)

[IdeaExchange: Display the Email Subject for Mass Emails in Activity History](#)

[IdeaExchange: Automatically Filter Out Mass Emails from Activity Reporting](#)

## No More Errors for Empty Email Merge Fields

Emails and email templates can include merge fields to provide personalization. In Summer '17 and earlier, if a recipient's record was missing data for a merge field, an error appeared. The error is gone, and the merge field is now left blank when the email is sent. This change applies to the Send Email action and list email. This change applies to Lightning Experience only.

SEE ALSO:

[Salesforce Help: Considerations for Using Merge Fields in Email Templates \(can be outdated or unavailable during release preview\)](#)

## Activities: Archived and Past Activities, Activity Timeline Filters, and Task Reminders

Your sales reps can harness tasks for more insight by viewing all past and archived activities. Your reps can filter the activity timeline in new ways. And they can set task reminders so no to-dos slip through the cracks. These changes apply to Lightning Experience and all versions of the Salesforce app.

### EDITIONS

Available in all editions

### IN THIS SECTION:

[Make Sure Your Reps Never Forget to Remember with Task Reminders](#)

When reps set reminders for their tasks, they don't forget their to-dos. And regardless of whether a rep is setting a deadline or a milestone check, reminders keep them on time. This change applies to Lightning Experience and all versions of the Salesforce app.

[Help Reps Stay on Task with Task Notifications](#)

Visual cues keep your reps on time and on task. Notifications, the notifications tray, and task icons remind reps that they have tasks to do. This change applies to Lightning Experience only.

[Get Your Fill of Past and Archived Activities with All Activity History](#)

It's useful for your sales reps to see activities for every account, opportunity, and contact. But what if a rep wants to see everything that's ever been done? They use the All Activity History page to get that view into the past. The view includes all past and archived activities. This change applies to Lightning Experience only.

[Filter More Ways in the Activity Timeline](#)

There's a new way for your reps to narrow what they see in the activity timeline, by filtering on list emails. This change applies to Lightning Experience only.

## Make Sure Your Reps Never Forget to Remember with Task Reminders

When reps set reminders for their tasks, they don't forget their to-dos. And regardless of whether a rep is setting a deadline or a milestone check, reminders keep them on time. This change applies to Lightning Experience and all versions of the Salesforce app.

### USER PERMISSIONS

To edit a page layout

- Customize Application

To enable task reminders for your reps, add the Reminder Set field to your Task page layouts. Put the field in the Task Detail section.

To create and edit task reminders in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web, also make sure the Show simpler New Task form setting is unchecked. From Setup, enter *Activity Settings* in the Quick Find box, then select **Activity Settings**. Deselect Show simpler New Task form.

 **Note:** Receiving reminders isn't supported in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

For your reps to receive reminders, you must enable Universal Notification Service (UNS). UNS is used for notifications in the Lightning Experience notification bell and is enabled by default.

 **Note:** The New Task global action doesn't support task reminders.

SEE ALSO:

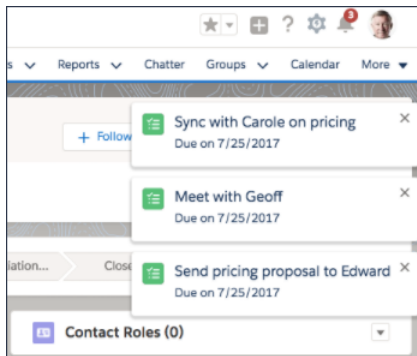
[IdeaExchange: Ability to Reposition Reminder Fields in Activity Layouts](#)

[IdeaExchange: Bring Pop Up Reminders for Tasks and Events to Lightning Experience](#)

## Help Reps Stay on Task with Task Notifications

Visual cues keep your reps on time and on task. Notifications, the notifications tray, and task icons remind reps that they have tasks to do. This change applies to Lightning Experience only.


When a reminder is due, a notification card appears in Salesforce and in the notifications tray.

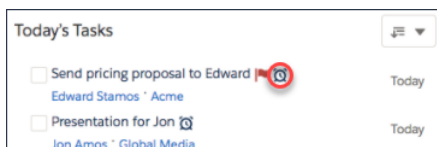


Reps can see up to three notification cards at one time. More cards appear when a rep clicks a card to go to the task or clicks the **X** to dismiss the notification.

The reminder remains in the notifications tray.

Reps can click the notifications tray icon  to see a list of notifications.

The  icon appears next to tasks with reminders, wherever reps see tasks.



Tasks Today ▾		
<input type="checkbox"/>	Reach out to Damien Global Media	Jul 14
<input type="checkbox"/>	Sync with Jon on pricing Jon Amos • Global Media	Jul 14
<input type="checkbox"/>	Send pricing proposal to Edward Edward Stamos • Acme	Today
<input type="checkbox"/>	Presentation for Jon Jon Amos • Global Media	Today



**Note:** Push notifications and reminders in the notification tray aren't supported in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

## Get Your Fill of Past and Archived Activities with All Activity History

It's useful for your sales reps to see activities for every account, opportunity, and contact. But what if a rep wants to see everything that's ever been done? They use the All Activity History page to get that view into the past. The view includes all past and archived activities. This change applies to Lightning Experience only.

Your reps can use the All Activity History tab to understand the context of customer engagement and search for keywords to find specific activities. Because all activities appear on one page, your reps don't have to navigate from page to page to find the information they need.

In the activity timeline, from the **More Past Activity** dropdown, select **View All**.

The screenshot shows the 'Activity Timeline' interface. It has a header with a dropdown arrow, a refresh icon, and an 'Expand All' button. Below the header, there are two main sections: 'Next Steps' and 'Past Activity'. The 'Next Steps' section has a 'More Steps' button and lists two upcoming tasks: 'Follow-up with ISV on proposal - 2' and 'Follow-up with ISV on proposal - 3', both due on Jul 11. The 'Past Activity' section lists various past activities, including emails, events, and tasks, with dates ranging from Jun 9 to Mar 24. At the bottom of the 'Past Activity' section, there is a 'More Past Activity' dropdown menu, and a 'View All' button is highlighted with a red circle.

SEE ALSO:

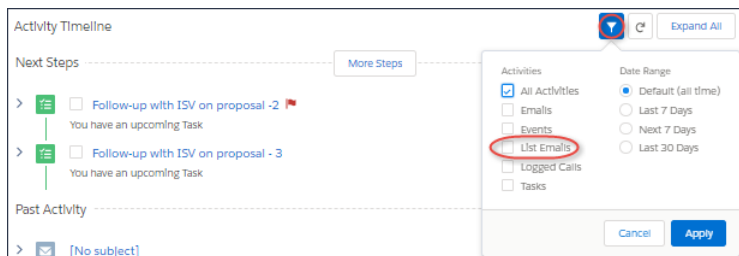
[IdeaExchange: Lightning Experience Should Display Archived Activities](#)

## Filter More Ways in the Activity Timeline

There's a new way for your reps to narrow what they see in the activity timeline, by filtering on list emails. This change applies to Lightning Experience only.

EDITIONS

Available in all editions



Navigate to the filter by clicking the funnel icon. Filter on list emails by selecting that option.

#### SEE ALSO:

[Keep Track of List Emails in the Activity Timeline](#)

[IdeaExchange: Display the Email Subject for Mass Emails in Activity History](#)

[IdeaExchange: Automatically Filter Out Mass Emails from Activity Reporting](#)

## List Views: Customizations, Mass Inline Editing, and Text Wrapping

Reps can get more done with fewer clicks when working from list views. Edit multiple records from a list view, and wrap text in columns to see more at a glance.

#### IN THIS SECTION:

[List View Column Widths Dynamically Adjust to the Content](#)

No longer experience excessive white space in columns or content that is out of view. Columns in list views, search results, related lists, and elsewhere, such as the App Manager in Setup, are now sized based on the length of the data within them. When you resize your screen, the columns adjust accordingly. This feature is disabled when you set a fixed column width. This change applies to Lightning Experience only.

[Set Custom Column Widths on More List Views](#)

Sticky column widths have arrived for Recently Viewed list views, related lists, and search results! Change your column widths, navigate away, and when you return, your custom column widths are still there. This change applies to Lightning Experience only.

[Reset Custom List View Column Widths to Their Default](#)

You can change the column widths for list views, related lists, and search results. But what if you want to revert all those changes? Just use the new Reset Column Widths setting in the list view controls to get back to the default widths. This change applies to Lightning Experience only.

[Wrap Text in List Views](#)

Tired of seeing only part of each field in a list view? We've got you covered, because now you can wrap text in list view columns. This change applies to Lightning Experience only.

[Use Clone or Save As to Make List Views Your Own](#)

Found a list view that you like, but don't have permission to edit it and save your changes? It's easy to create a list view by using Save As or Clone and then make a few tweaks. If you created list views in this way using Salesforce Classic, you can now do it in Lightning Experience. This change applies to Lightning Experience only.

[Update Record Owners from List Views](#)

You can easily change the owner of a record with the Change Owner row level action. With a picklist of edit options, users can assign different cases, accounts, and more to newly elected record owners. This change applies to Lightning Experience only.

#### EDITIONS

Available in: **Contact Manager, Personal, Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions



[Edit More Records at Once with Mass Inline Editing](#)

Your reps can now update up to 200 records without leaving a list view. This feature is new in Lightning Experience.

List View Column Widths Dynamically Adjust to the Content

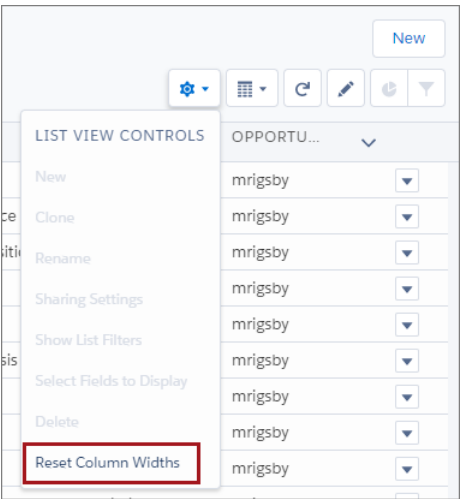
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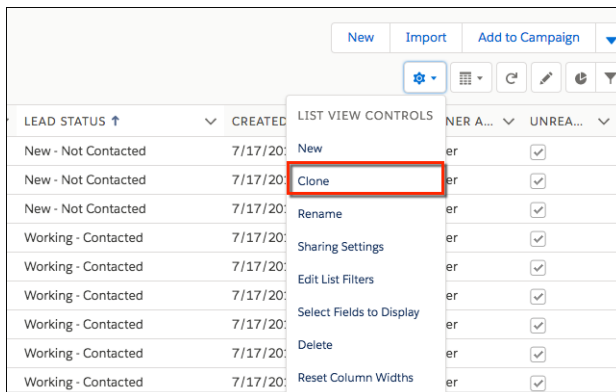
	<input type="checkbox"/> OPPORTUNITY NAME ↑	ACCOUNT N...	STAGE	CLOSE DATE	AMOUNT
1	<input type="checkbox"/> Acme	Acme Printing	Needs Analysis	✓ Wrap text Clip text	
2	<input type="checkbox"/> Acme - 1,200 Widgets	Acme	Value Proposition		\$140,000.00
3	<input type="checkbox"/> Acme - 200 Widgets	Acme	Prospecting	5/14/2015	\$20,000.00
4	<input type="checkbox"/> Acme - 600 Widgets	Acme	Needs Analysis	3/11/2015	\$70,000.00
5	<input type="checkbox"/> Global Media - 400 Widgets	Global Media	Id. Decision Makers	2/11/2015	\$40,000.00

It's easy. Select **Wrap text** or **Clip text** at the top of the list view column.

## Use Clone or Save As to Make List Views Your Own

Found a list view that you like, but don't have permission to edit it and save your changes? It's easy to create a list view by using Save As or Clone and then make a few tweaks. If you created list views in this way using Salesforce Classic, you can now do it in Lightning Experience. This change applies to Lightning Experience only.

Want to make an exact copy of that list view? Clone is your option. First, select your favorite list view. Open the List View Controls, and click **Clone**.



You can save the list view with a new name and choose whether to share it.

### Clone List View

\* List Name

Leads - Not Contacted Yet

Who sees this list view?

☐ Only I can see this list view  
☒ All users can see this list view ⓘ

Edit the filters and display options to show things your way, if needed.

Leads - Not Contacted Yet

Sorted by Lead Status - Updated a minute ago

Field: Lead Status

Operator: equals

Value: 1 option selected

Filters

Show me All leads

Matching all of these filters

New Filter\*

Add Filter

Remove All

Add Filter Logic

Click **Save**.

Cancel Save As Save

Show me All leads

Matching all of these filters

Lead Status\* equals New - Not Contacted

Add Filter

Remove All

Add Filter Logic

Did you start editing filters for an existing list view without cloning it? No worries. Just click **Save As** in the filter panel, and give the list a new name.

Cancel Save As Save

Show me All leads

Matching all of these filters

Lead Status\* equals New - Not Contacted

Add Filter

Remove All

Add Filter Logic

SEE ALSO:

[Salesforce Help: Create a List View in Lightning Experience \(can be outdated or unavailable during release preview\)](#)

## Update Record Owners from List Views

You can easily change the owner of a record with the Change Owner row level action. With a picklist of edit options, users can assign different cases, accounts, and more to newly elected record owners. This change applies to Lightning Experience only.

	SALES	Home	Lightning Page	Opportunities ▾	Cases ▾	Leads ▾	Tasks ▾	Files	Notes ▾	Accounts ▾
	Opportunities									
	All Opportunities ▾									
	9 items • Sorted by Opportunity Name • Updated a few seconds ago									
	<input type="checkbox"/>	OPPORTUNITY NAME ↑	AMOUNT	CLOSE DATE	STAGE	OPPORT...				
1	<input type="checkbox"/>	1 Million Widgets	\$125,000.00	11/28/2017	Id. Decision Makers	TUser				
2	<input type="checkbox"/>	Acme	\$500,000.00	10/18/2017	Perception Analysis	TUser				
3	<input type="checkbox"/>	Acme - 1,200 Widgets	\$225,000.00	1/31/2017	Value Proposition	TUser				
4	<input type="checkbox"/>	Acme - 200 Widgets	\$175,000.00	9/24/2017	Id. Decision Makers	TUser				
5	<input type="checkbox"/>	Acme - 600 Widgets	\$125,000.00	1/31/2017	Needs Analysis	TUser				
6	<input type="checkbox"/>	Global Media - 400 Widgets	\$125,000.00	1/31/2017	Value Proposition	TUser				
7	<input type="checkbox"/>	salesforce.com - 2,000 Widgets	\$125,000.00	1/31/2017	Closed Won	TUser				
8	<input type="checkbox"/>	salesforce.com - 500 Widgets	\$125,000.00	1/31/2017	Closed Won	TUser				
9	<input type="checkbox"/>	salesforce.com - 5000 Widgets	\$0.00	1/31/2017	Closed Won	TUser				

×

Change Opportunity Owner

Jeff Davis

×

☒ Send notification email

Jeff Davis will also become the owner of these records related to **1 Million Widgets** that are owned by you.

- Notes and attachments
- Open activities

Cancel

Submit

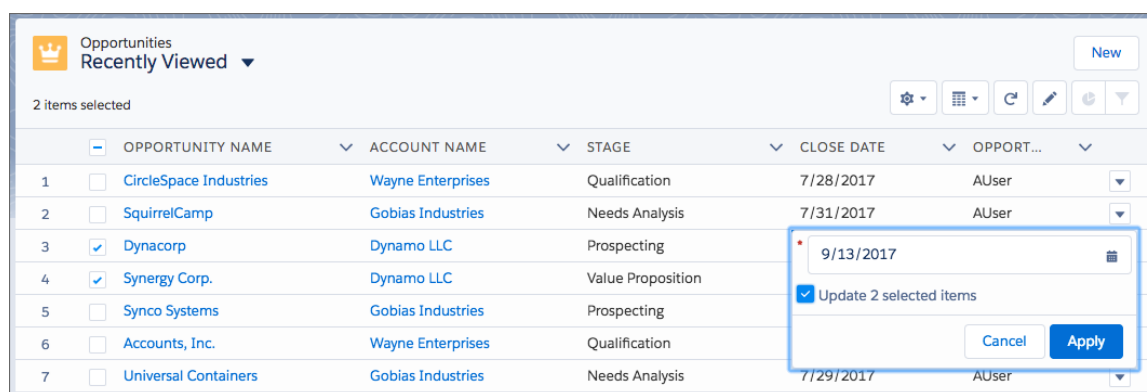
SEE ALSO:

[Salesforce Help: Considerations for Sending List Email in Lightning Experience \(can be outdated or unavailable during release preview\)](#)

## Edit More Records at Once with Mass Inline Editing

Your reps can now update up to 200 records without leaving a list view. This feature is new in Lightning Experience.

Select multiple records in a list view and then click the edit icon next to the field you want to update. Enter the new value for the field, and click **Apply** to update the selected records.



## Notes: Keep Sensitive Data Private with Private Notes

Your reps rely on notes to streamline their workflow and increase productivity. With private notes, they can record sensitive information while keeping the note in context. Reps can also selectively share private notes. This change applies to Lightning Experience and all versions of the Salesforce app.

As your reps develop business relationships with their customers, they can become privy to confidential information. They could learn about an upcoming product launch, or the timing of a new initiative. They want to record this information, but don't want everyone to be able to see it. That's when private notes come in handy.

Your reps have these sharing options for private notes.

### Visible to Records

Anyone with read access to the related record can see the note.

### Privately Shared

The note is visible only to the rep and people the rep has explicitly shared it with.

### Private

Only the owner of the note can see it.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, and Unlimited Editions**

## Calendar: More Robust Calendar Options in Lightning Experience

Collaborate more efficiently with your colleagues in Lightning Experience. Reps can share calendars and add attendees to events that are syncing with Google Calendar. These changes apply to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### EDITIONS

Available in: **Enterprise**,  
**Unlimited**, and **Developer**  
Editions

#### IN THIS SECTION:

##### [Get Event Attendee Details into Salesforce with Lightning Sync for Google](#)

Include enhanced scheduling options when you set up events to sync between Google Calendar and Salesforce. Reps can then invite contacts, leads, and other Salesforce users to attend their meetings, and all Salesforce users can see how meeting attendees responded. These changes apply to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. This feature requires that G Suite and Lightning Sync are set up with the sync direction Sync Both Ways.

##### [Share Calendars with Coworkers in Lightning Experience](#)

Looking for a rep to close a deal with that prospect you've been cultivating? When deal closers share their calendars with other reps, reps can see when deal closers are free. Then reps can hand off their prospects by adding meetings directly to the deal closer's calendar. This feature is new in Lightning Experience.

##### [Cloud Scheduler Is Retired](#)

The Cloud Scheduler is no longer available. Reps can't propose new meetings with the New Meeting Request button on events. Existing proposals indicate that the feature is no longer available and suggest that invitees contact the organizer. This change applies to Salesforce Classic only.

## Get Event Attendee Details into Salesforce with Lightning Sync for Google

Include enhanced scheduling options when you set up events to sync between Google Calendar and Salesforce. Reps can then invite contacts, leads, and other Salesforce users to attend their meetings, and all Salesforce users can see how meeting attendees responded. These changes apply to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. This feature requires that G Suite and Lightning Sync are set up with the sync direction Sync Both Ways.

Meetings scheduled from reps' Google Calendars sync to Salesforce, so your teams can access meeting data from both applications. And when you get reps' meeting data into Salesforce, you give your whole company the ability to share, track, and analyze it.

You and your reps have to meet these conditions to view, invite, and manage event attendees.

- Set up your reps for Lightning Sync using OAuth 2.0 with the Sync Both Ways sync direction, so events are syncing between Salesforce and Google Calendar.
- Add the Attendees field to the Event page layout.
- Users have to create or edit the event from Google Calendar, Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

Selecting **Sync Both Ways** limits some calendar functionality in Salesforce Classic. Check out "Lightning Sync Considerations" in Salesforce Help.


#### SEE ALSO:

[Productivity Features: Lightning Experience Considerations](#)

[Salesforce Help: Considerations for Syncing Events Both Ways \(can be outdated or unavailable during release preview\)](#)

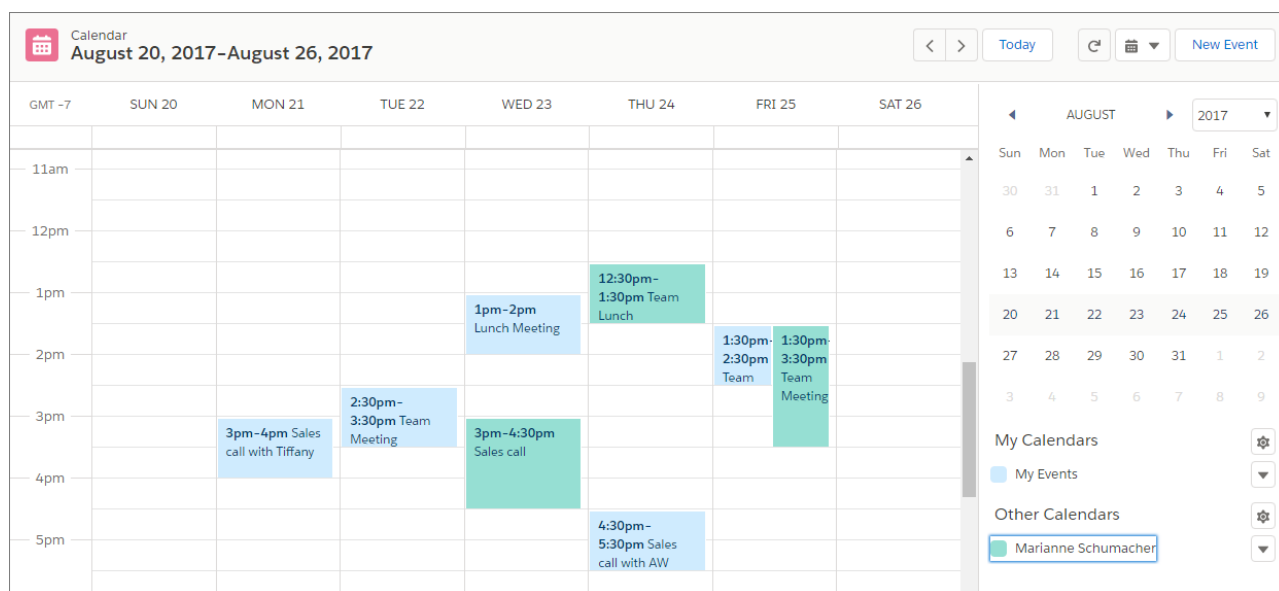
## Share Calendars with Coworkers in Lightning Experience

Looking for a rep to close a deal with that prospect you've been cultivating? When deal closers share their calendars with other reps, reps can see when deal closers are free. Then reps can hand off their prospects by adding meetings directly to the deal closer's calendar. This feature is new in Lightning Experience.

Reps can give coworkers access to their My Events calendars to share availability, meeting details, or even let coworkers add events on the reps' behalf. Reps can give access from the calendar view by clicking  next to My Events and selecting **Share Calendar**. Then reps choose a coworker to share with and select the level of access.

Coworkers can view a reps' calendar by clicking  next to Other Calendars and then selecting **Add Calendar**.

After reps select a coworker whose calendar they want to view, reps see the calendar in the Other Calendars list. Reps can toggle to show and hide events on their calendar view.



Depending on the level of access that a rep has given, coworkers can add events directly to reps' calendars and relate the event to relevant records.

If reps don't share their My Events calendars, coworkers can still view them, but see no details—only free or available blocks of time. You can increase this default access to coworkers' calendars by changing the minimum sharing access level from Sharing Settings in Setup.

## Cloud Scheduler Is Retired

The Cloud Scheduler is no longer available. Reps can't propose new meetings with the New Meeting Request button on events. Existing proposals indicate that the feature is no longer available and suggest that invitees contact the organizer. This change applies to Salesforce Classic only.

SEE ALSO:


[Knowledge Article: Cloud Scheduler Retirement](#)

### EDITIONS

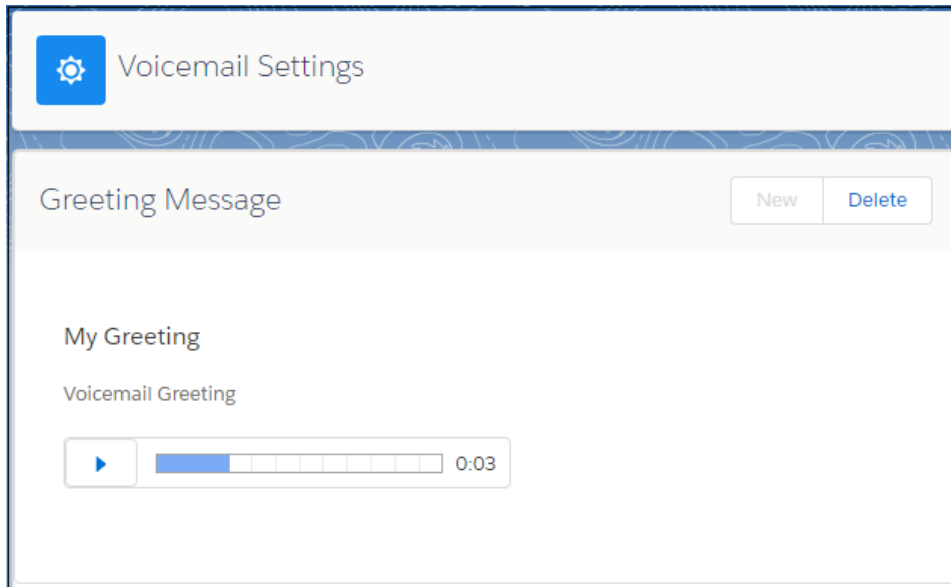
Available in: **All Editions** except **Personal Edition** and **Database.com**

## Lightning Dialer: Record Custom Voicemail Greetings

Add personal flair to voicemail. Sales reps can record custom greetings on their Lightning Dialer voicemail. This change applies to Lightning Experience only.

 **Note:** For now, we support outgoing calls only to the United States and Canada.

It's easy for reps to replace the standard voicemail greeting with a personal recording when they select **Voicemail Settings** from the call panel or their personal settings.



### EDITIONS

Dialer is available for an additional cost in **Professional, Enterprise, Performance, and Unlimited** Editions

This feature is available only to users with outbound *and* inbound calling access.

To use voicemail greetings, password protection can't be required by default for content deliveries. From Setup, enter *Content Deliveries* in the Quick Find box, then select **Content Deliveries**. Ensure that **Password protection is required** is not selected.

## Home: Tasks Component and Performance Chart Updates


The tasks component can now be filtered, and the performance chart needs to be refreshed manually. These changes apply to Lightning Experience only.

### IN THIS SECTION:

[Filter More Options in the Tasks Component](#)

Want your reps to see different views of their to-dos? Your sales team can now filter the tasks component directly on the Home page. This change applies to Lightning Experience only.

[Refresh the Performance Chart for Up-to-Date Data](#)

To improve the speed of the Home page, the performance chart no longer refreshes automatically. Click  to see your up-to-date sales performance. This change applies to Lightning Experience only.

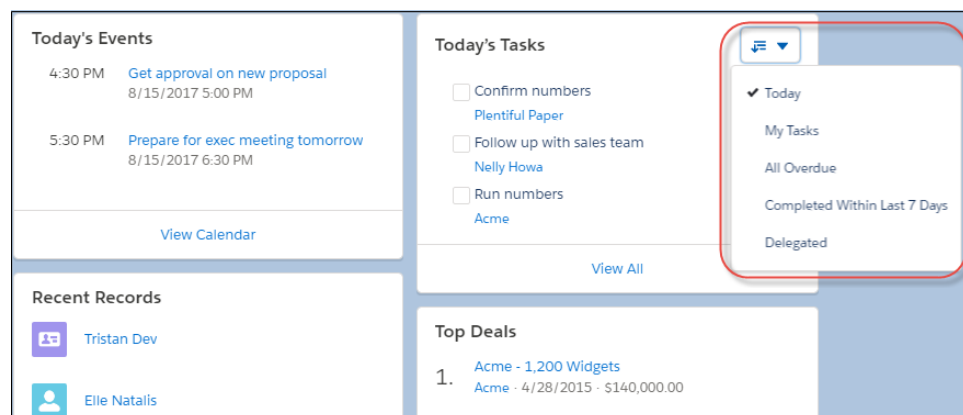
### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions




## Filter More Options in the Tasks Component

Want your reps to see different views of their to-dos? Your sales team can now filter the tasks component directly on the Home page. This change applies to Lightning Experience only.



## Refresh the Performance Chart for Up-to-Date Data

To improve the speed of the Home page, the performance chart no longer refreshes automatically. Click  to see your up-to-date sales performance. This change applies to Lightning Experience only.

## Data Quality: Person Account Merging and Duplicate Record Sets in Lightning Experience, Third-Party Data Integration

Duplicate Management now covers person accounts. Duplicate record sets are available in Lightning Experience, and what's more, in Lightning Experience only, you can use them to merge duplicates. And by using a new action on Salesforce account and contact records, your sales team can compare and integrate third-party industry data field by field.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited,** and **Developer** Editions

### IN THIS SECTION:

#### [Merge Person Accounts in Lightning Experience](#)

Sales reps can now view duplicates on person accounts in Lightning Experience just as they can on business accounts, contacts, and leads. Users with permission can merge person accounts, too. This change applies to Lightning Experience only.

#### [Wrangle Duplicates Using Duplicate Record Sets in Lightning Experience](#)

You can now use duplicate record sets in Lightning Experience. When the Report option is selected in a duplicate rule, Duplicate Management creates duplicate record sets of duplicates found by the rule. You can also create duplicate record sets, adding any records you like as duplicate record items. In Lightning Experience only, you can even use duplicate record sets to merge items on the same object.

### [Enhance Fields on Your Salesforce Records with Lightning Data](#)

Now your sales team can integrate third-party data with your Salesforce data—not just per record, but field by field. Lightning Data on AppExchange offers packages of industry data compatible with accounts, contacts, and leads. Try out package data for free using the Data Assessment app for Lightning Data. To make data available to your teams, purchase a package and activate its data integration rules. This change applies to Lightning Experience only.

#### SEE ALSO:

[Data.com Account Data Assessment Has Been Retired](#)

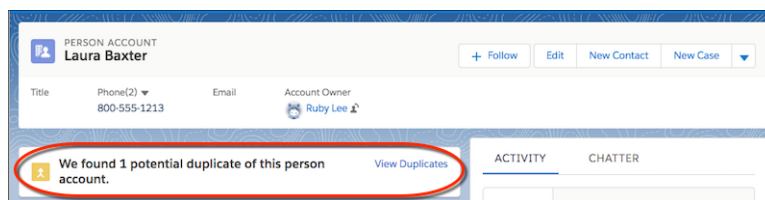
[Data.com Tab Is Available Only to Prospector Customers](#)

## Merge Person Accounts in Lightning Experience

Sales reps can now view duplicates on person accounts in Lightning Experience just as they can on business accounts, contacts, and leads. Users with permission can merge person accounts, too. This change applies to Lightning Experience only.

1. In Setup, make sure that a duplicate rule for person accounts is active.
2. Configure the Potential Duplicates component in Lightning App Builder.

Your sales team sees this alert when they view a person account with a duplicate.



#### USER PERMISSIONS

To view duplicate and matching rules:

- View Setup and Configuration

To create, edit, delete, activate, and deactivate duplicate and matching rules:

- Customize Application

To add the Potential Duplicates component:

- Customize Application

#### SEE ALSO:

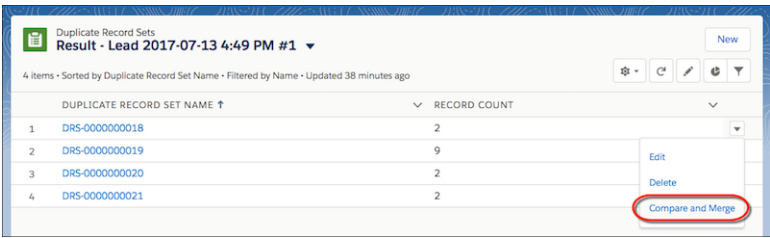
[Set Up Person Accounts with Ease](#)

[Accounts: Easier Enablement Process, Support for Merging Person Accounts in Lightning Experience, and Improved Sharing Model](#)

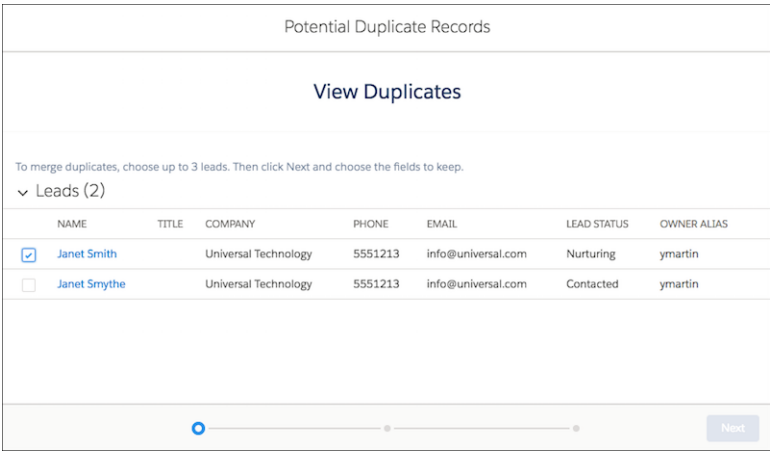
## Wrangle Duplicates Using Duplicate Record Sets in Lightning Experience

You can now use duplicate record sets in Lightning Experience. When the Report option is selected in a duplicate rule, Duplicate Management creates duplicate record sets of duplicates found by the rule. You can also create duplicate record sets, adding any records you like as duplicate record items. In Lightning Experience only, you can even use duplicate record sets to merge items on the same object.

1. Open the App Launcher and find **Duplicate Record Sets**.



2. Create a record set, add records to an existing set, or delete a set. Or compare the records in a set and merge them.



## Enhance Fields on Your Salesforce Records with Lightning Data

Now your sales team can integrate third-party data with your Salesforce data—not just per record, but field by field. Lightning Data on AppExchange offers packages of industry data compatible with accounts, contacts, and leads. Try out package data for free using the Data Assessment app for Lightning Data. To make data available to your teams, purchase a package and activate its data integration rules. This change applies to Lightning Experience only.

When you activate the data integration rule in an AppExchange data package, the **Check Integration Status** action is added to the page layout.

### EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, and **Unlimited**, and **Developer** Editions

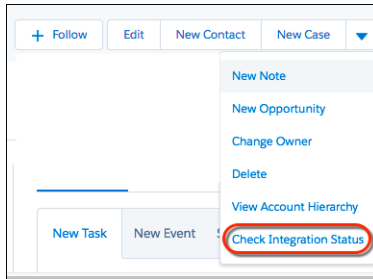
### USER PERMISSIONS

To view duplicate record items:

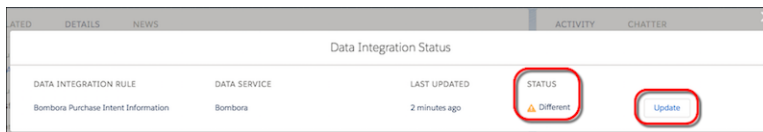
- View on accounts, contacts, or leads

To merge duplicate record items (Lightning Experience only):

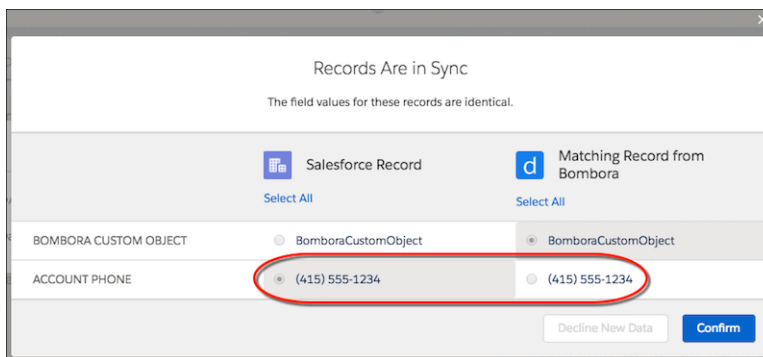
- Edit and Delete on accounts, contacts, or leads



Your sales team can use the action to view the data integration status for each rule applied to the record.



Sales reps can compare the field values on the record to the values from the data service by clicking **Update**. They can confirm the values, select different values, or decline the data from the data service altogether.



SEE ALSO:

[Salesforce Help: Data Assessment for Third-Party Data from AppExchange \(can be outdated or unavailable during release preview\)](#)

[AppExchange: Lightning Data](#)

## Google Integration: Flexible Record Matching, More Template Options, Two-Way Event Sync, and Required Change to Lightning Sync Setup

Get your reps working their Salesforce deals in Gmail™ and Google Calendar™. Lightning for Gmail gives reps added flexibility when they're matching email recipients with relevant Salesforce records. More email template options, Einstein lead scoring, and Salesforce tasks get reps working smarter—not harder. Lightning Sync now includes two-way event sync for Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web users. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

## IN THIS SECTION:

[Lightning for Gmail: Time-Saving Features and New Insights](#)

It's now possible to use Salesforce Classic templates in Lightning for Gmail. With tasks debuting in Lightning for Gmail, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails. This feature is available to be managed from both Lightning Experience and Salesforce Classic.

[Lightning Sync for Google: Required Change to Lightning Sync Setup, Two-Way Event Sync, and Support for More Licenses](#)

Make your team more productive by setting up events to sync both ways between Google Calendar™ and Salesforce. When you do, you get exclusive access to Salesforce Calendar features that are designed to work with Lightning Sync. We're also introducing support for users on Service Cloud and Force.com licenses, so you can get even more users syncing between Salesforce and Google applications. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

## Lightning for Gmail: Time-Saving Features and New Insights

It's now possible to use Salesforce Classic templates in Lightning for Gmail. With tasks debuting in Lightning for Gmail, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails. This feature is available to be managed from both Lightning Experience and Salesforce Classic.

## EDITIONS

Available to be managed from both Salesforce Classic and Lightning Experience

Available with Sales Cloud, Service Cloud, and Force.com in **All** Editions

## IN THIS SECTION:

[Enjoy More Features for Templates](#)

Deliver templates in a Lightning App Builder component that's more powerful and visually appealing. Your reps also get to use email templates created in Salesforce Classic in Gmail. This change applies to both Lightning Experience and Salesforce Classic.

[Manage Salesforce Tasks from Gmail](#)

Staying on top of email and tasks simultaneously can be tricky. Great news: Sales reps can view, edit, and create Salesforce tasks in Lightning for Gmail. No more switching to Salesforce to add or check off items on daily to-do lists. This change applies to both Lightning Experience and Salesforce Classic.

[Easily Find and Relate Items to the Right Salesforce Records](#)

To best manage their sales pipeline and be up to speed on customer communication, your reps rely on relating Gmail content to Salesforce records. Lightning for Gmail includes an enhanced search feature that shows reps more people records to relate Gmail content to. This change applies to both Lightning Experience and Salesforce Classic.

[Zero In on the Leads Most Likely to Convert](#)


Following up with the most promising leads first helps your reps win more deals. Einstein Lead Scoring in Lightning for Gmail helps reps determine what's promising! This change applies to both Lightning Experience and Salesforce Classic.

## Enjoy More Features for Templates

Deliver templates in a Lightning App Builder component that's more powerful and visually appealing. Your reps also get to use email templates created in Salesforce Classic in Gmail. This change applies to both Lightning Experience and Salesforce Classic.

Now, sales reps can pull up their Salesforce Classic templates in text, HTML, or custom formats in Lightning for Gmail. You can let reps include Salesforce records in their email messages when you add merge fields to these templates. To boost productivity even more, reps can access shared Classic template folders from Gmail.

Reps can also create their own Lightning email templates from email messages they craft.

 **Important:** If you've set up your reps with custom email application panes using App Builder, you have to add the Template component to these panes.

## Manage Salesforce Tasks from Gmail

Staying on top of email and tasks simultaneously can be tricky. Great news: Sales reps can view, edit, and create Salesforce tasks in Lightning for Gmail. No more switching to Salesforce to add or check off items on daily to-do lists. This change applies to both Lightning Experience and Salesforce Classic.

Using standard list views, reps quickly review Salesforce tasks in Gmail that are:

- Assigned to them
- Due today
- Overdue
- Delegated to team members
- Completed within the last seven days

All from Gmail! Lightning for Gmail also remembers your reps' most recent list view selection for next time. Drilling down for more details is just one click away. But, what if reps want to update their tasks as they tackle their email messages? With inline editing, reps update the status of their tasks and other details right away.

Want to help reps focus on tasks in Lightning for Gmail? That's easy. In Lightning App Builder, drag and drop the Task component so it appears at the top of the email application pane.

## Easily Find and Relate Items to the Right Salesforce Records

To best manage their sales pipeline and be up to speed on customer communication, your reps rely on relating Gmail content to Salesforce records. Lightning for Gmail includes an enhanced search feature that shows reps more people records to relate Gmail content to. This change applies to both Lightning Experience and Salesforce Classic.

Lightning for Gmail now suggests records with matching email addresses after searching standard and custom fields on contacts, leads, and users. The new interface makes it easy to identify the number of matching records, and relate email content to the Salesforce records your reps choose. Lightning for Gmail also remembers your reps' selections when suggesting people records in the future.

## Zero In on the Leads Most Likely to Convert

Following up with the most promising leads first helps your reps win more deals. Einstein Lead Scoring in Lightning for Gmail helps reps determine what's promising! This change applies to both Lightning Experience and Salesforce Classic.

If you've enabled Sales Cloud Einstein and configured Einstein Lead Scoring, Lightning for Gmail now shows scores for suggested leads. Based on these scores, your sales team can prioritize which leads to pursue for faster conversion rates. For more insights and details behind the score, reps simply hover over the score.

## Lightning Sync for Google: Required Change to Lightning Sync Setup, Two-Way Event Sync, and Support for More Licenses

Make your team more productive by setting up events to sync both ways between Google Calendar™ and Salesforce. When you do, you get exclusive access to Salesforce Calendar features that are designed to work with Lightning Sync. We're also introducing support for users on Service Cloud and Force.com licenses, so you can get even more users syncing between Salesforce and Google applications. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

### IN THIS SECTION:

#### [Changes to G Suite Setup Required to Continue Syncing Events](#)

If your users sync events, you're required to change your G Suite administrative setup to prevent sync disruptions in Winter '18.

#### [Set Up Users on Service Cloud and Force.com Licenses](#)

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their G Suite accounts and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### [Sync Events Between Google Calendar and Salesforce](#)

Save reps time and unnecessary data entry by setting up events to sync between Google Calendar and Salesforce. That way, reps can create and edit meetings from either application. And admins like you can promote Salesforce adoption by making it easy for reps to get important meetings into Salesforce. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### [Do More with Meeting Attendees on Salesforce Events](#)

When you set up our enhanced scheduling options for Salesforce Calendar, reps can see their Google Calendar™ attendee details and responses from either system. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

## Changes to G Suite Setup Required to Continue Syncing Events

If your users sync events, you're required to change your G Suite administrative setup to prevent sync disruptions in Winter '18.

Starting in Winter '18, your Google admin must authorize a new scope for calendar access from your company's G Suite account. Prior to Winter '18 the event sync scope was set to read-only. Starting in Winter '18, sync scope must be set to read-write for all customers who sync events, regardless of users' sync direction.

To update calendar scope, Google admins can log into your company's G Suite account with administrative access and set the new scope from the Google API Console.

If you're updating the scope in preparation for Winter '18, Google admins can add the new scope, `https://www.googleapis.com/auth/calendar`, to your existing configuration. If you're updating the scope after Winter '18 has been released (and event sync has stopped for your users), Google admins can add the new scope `https://www.googleapis.com/auth/calendar` and, if they wish, remove the previous scope, `https://www.googleapis.com/auth/calendar.readonly`.

### SEE ALSO:

[Salesforce Help: Prepare Your G Suite Account for Lightning Sync \(can be outdated or unavailable during release preview\)](#)

## Set Up Users on Service Cloud and Force.com Licenses

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their G Suite accounts and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### SEE ALSO:

[Salesforce Help: Lightning Sync User License Support \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: See the Big Picture for Setting Up Lightning Sync for Google \(can be outdated or unavailable during release preview\)](#)

## Sync Events Between Google Calendar and Salesforce

Save reps time and unnecessary data entry by setting up events to sync between Google Calendar and Salesforce. That way, reps can create and edit meetings from either application. And admins like you can promote Salesforce adoption by making it easy for reps to get important meetings into Salesforce. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

Your reps have to meet these conditions to sync events in both directions.

- Create or edit events outside of Salesforce using Google Calendar on your company's G Suite account.
- Create or edit Salesforce events using Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web. Events created or edited from Salesforce Classic don't sync with Google Calendar.

If that description hits home, you can start syncing your reps' events in both directions. First, work with your Google API administrator to prepare your G Suite account to sync events. Next, from reps' Lightning Sync configurations, select **Sync Both Ways** for events.

Selecting **Sync Both Ways** limits some Calendar functionality in Salesforce Classic. To learn more, see "Lightning Sync Considerations" in Salesforce Help.

### SEE ALSO:

[Productivity Features: Lightning Experience Considerations](#)

[Salesforce Help: See the Big Picture for Setting Up Lightning Sync for Google \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Considerations for Syncing Events Both Ways \(can be outdated or unavailable during release preview\)](#)

## Do More with Meeting Attendees on Salesforce Events

When you set up our enhanced scheduling options for Salesforce Calendar, reps can see their Google Calendar™ attendee details and responses from either system. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### SEE ALSO:

[Get Event Attendee Details into Salesforce with Lightning Sync for Google](#)

[Productivity Features: Lightning Experience Considerations](#)



## Microsoft® Integration: Task Management, Pardot Engagement, and Sync for the Masses

Get your reps working their deals in Outlook email and calendars. Access to Salesforce tasks, more email template options, and even Pardot Engage features get your reps to master the sales process. What's new with Lightning Sync? Service and Force.com licenses. Read about it! These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### IN THIS SECTION:

#### [Lightning for Outlook: Time-Saving Features and New Insights](#)

It's now possible to use Salesforce Classic templates in Lightning for Outlook. With tasks debuting in Lightning for Outlook, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails. This feature is available to be managed from both Lightning Experience and Salesforce Classic.

#### [Lightning Sync for Microsoft Exchange: Set Up Service Cloud and Force.com Users](#)

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### [Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available](#)

Get familiar with the required upgrade for sales reps working from Salesforce for Outlook v2.9.3 and earlier. Better yet, if you meet the system requirements for our latest Microsoft integration products, Lightning for Outlook and Lightning Sync, move your reps to that feature now. That way, you can take advantage of the latest features and avoid manual upgrades in the future. These changes apply to both Lightning Experience and Salesforce Classic.

## Lightning for Outlook: Time-Saving Features and New Insights

It's now possible to use Salesforce Classic templates in Lightning for Outlook. With tasks debuting in Lightning for Outlook, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails. This feature is available to be managed from both Lightning Experience and Salesforce Classic.

### EDITIONS

Available to be managed from both Salesforce Classic and Lightning Experience

Available with Sales Cloud, Service Cloud, and Force.com in **All** Editions

### IN THIS SECTION:

#### [Enjoy More Features for Templates](#)

Deliver templates in a Lightning App Builder component that's more powerful and visually appealing. Your reps also get to use email templates created in Salesforce Classic in Microsoft® Outlook®. This change applies to both Lightning Experience and Salesforce Classic.

#### [Manage Salesforce Tasks from Microsoft® Outlook®](#)

Staying on top of email and tasks simultaneously can be tricky. Great news: Sales reps can view, edit, and create Salesforce tasks in Lightning for Outlook. No more switching to Salesforce to add or check off items on daily to-do lists. This change applies to both Lightning Experience and Salesforce Classic.

#### [Easily Find and Relate Items to the Right Salesforce Records](#)

To best manage their sales pipeline and be up to speed on customer communication, your reps rely on relating Outlook content to Salesforce records. Lightning for Outlook includes an enhanced search feature that shows reps more people records to relate Outlook content to. This change applies to both Lightning Experience and Salesforce Classic.

#### [Zero In on the Leads Most Likely to Convert](#)

Following up with the most promising leads first helps your reps win more deals. Einstein Lead Scoring in Lightning for Outlook helps reps determine what's promising! This change applies to both Lightning Experience and Salesforce Classic.

### [Get Insights on Prospect Activity with Engage for Outlook](#)

Your sales teams want to know how successful they are at reaching their prospects with their emails. Engage for Outlook helps your reps track that. Sales reps can track which prospects are engaged, view scores, and engagement history. This change applies to both Lightning Experience and Salesforce Classic.

## Enjoy More Features for Templates

Deliver templates in a Lightning App Builder component that's more powerful and visually appealing. Your reps also get to use email templates created in Salesforce Classic in Microsoft® Outlook®. This change applies to both Lightning Experience and Salesforce Classic.

Now, sales reps can pull up their Salesforce Classic templates in text, HTML, or custom formats in Lightning for Outlook. You can let reps include Salesforce records in their email messages when you add merge fields to these templates. To boost productivity even more, reps can access shared Classic template folders from Outlook.

Reps can also create their own Lightning email templates from email messages they craft.



**Important:** If you've set up your reps with custom email application panes using App Builder, you have to add the Template component to these panes.

## Manage Salesforce Tasks from Microsoft® Outlook®

Staying on top of email and tasks simultaneously can be tricky. Great news: Sales reps can view, edit, and create Salesforce tasks in Lightning for Outlook. No more switching to Salesforce to add or check off items on daily to-do lists. This change applies to both Lightning Experience and Salesforce Classic.

Using standard list views, reps quickly review Salesforce tasks in Outlook that are:

- Assigned to them
- Due today
- Overdue
- Delegated to team members
- Completed within the last seven days

All from Outlook! Lightning for Outlook also remembers your reps' most recent list view selection for next time. Drilling down for more details is just one click away. But, what if reps want to update their tasks as they tackle their email messages? With inline editing, reps update the status of their tasks and other details right away.

Want to help reps focus on tasks in Lightning for Outlook? That's easy. In Lightning App Builder, drag and drop the Task component so it appears at the top of the email application pane.

## Easily Find and Relate Items to the Right Salesforce Records

To best manage their sales pipeline and be up to speed on customer communication, your reps rely on relating Outlook content to Salesforce records. Lightning for Outlook includes an enhanced search feature that shows reps more people records to relate Outlook content to. This change applies to both Lightning Experience and Salesforce Classic.

Lightning for Outlook now suggests records with matching email addresses after searching standard and custom fields on contacts, leads, and users. The new interface makes it easy to identify the number of matching records, and relate email content to the Salesforce records your reps choose. Lightning for Outlook also remembers your reps' selections when suggesting people records in the future.

## Zero In on the Leads Most Likely to Convert

Following up with the most promising leads first helps your reps win more deals. Einstein Lead Scoring in Lightning for Outlook helps reps determine what's promising! This change applies to both Lightning Experience and Salesforce Classic.

If you've enabled Sales Cloud Einstein and configured Einstein Lead Scoring, Lightning for Outlook now shows scores for suggested leads. Based on these scores, your sales team can prioritize which leads to pursue for faster conversion rates. For more insights and details behind the score, reps simply hover over the score.

## Get Insights on Prospect Activity with Engage for Outlook

Your sales teams want to know how successful they are at reaching their prospects with their emails. Engage for Outlook helps your reps track that. Sales reps can track which prospects are engaged, view scores, and engagement history. This change applies to both Lightning Experience and Salesforce Classic.

With a Salesforce Engage license, Lightning for Outlook shows your reps:

- Who were sent email messages and who opened them
- Pardot score and Engagement History for people on the email
- An Engage alert in Salesforce
- Email sends and opens captured in Engage Team Reports

Even without a Salesforce Engage license, your team can review the engagement history on email messages and web links from Lightning for Outlook. Just install the Pardot AppExchange package.

To let sales reps experience Engage for Outlook with Engagement History, My Domain must be enabled for your org. Then, enable **Engage for Outlook** in the **Lightning for Outlook Settings** page. And, ensure that the People component is available in Lightning for Outlook.

## Lightning Sync for Microsoft Exchange: Set Up Service Cloud and Force.com Users

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### SEE ALSO:

[Salesforce Help: See the Big Picture for Setting Up Lightning Sync for Microsoft® Exchange \(can be outdated or unavailable during release preview\)](#)

## Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available

Get familiar with the required upgrade for sales reps working from Salesforce for Outlook v2.9.3 and earlier. Better yet, if you meet the system requirements for our latest Microsoft integration products, Lightning for Outlook and Lightning Sync, move your reps to that feature now. That way, you can take advantage of the latest features and avoid manual upgrades in the future. These changes apply to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in all editions

## IN THIS SECTION:

[Critical Upgrade Required to Continue Using Salesforce for Outlook](#)

Are your reps unable to access Salesforce using Salesforce for Outlook? To get reps back in the product, new standards in web security require reps to upgrade to v3.0.0 or later. Or, to avoid manual updates altogether, have reps upgrade to our latest Microsoft integration features, Lightning for Outlook and Lightning Sync. These changes apply to both Lightning Experience and Salesforce Classic.

[Avoid Manual Upgrades](#)

Move to our next-generation Microsoft® integration products, Lightning for Outlook and Lightning Sync. Our system requirements let you know whether you're ready to make the move. These changes apply to both Lightning Experience and Salesforce Classic.

## Critical Upgrade Required to Continue Using Salesforce for Outlook

Are your reps unable to access Salesforce using Salesforce for Outlook? To get reps back in the product, new standards in web security require reps to upgrade to v3.0.0 or later. Or, to avoid manual updates altogether, have reps upgrade to our latest Microsoft integration features, Lightning for Outlook and Lightning Sync. These changes apply to both Lightning Experience and Salesforce Classic.

In addition, make sure that your reps meet all Salesforce for Outlook requirements for TLS 1.1 and 1.2 compatibility. If you're not sure which Salesforce for Outlook versions your reps are working from, check in Salesforce.

## EDITIONS

Available in all editions

## SEE ALSO:

[Knowledge Article: Prepare Your Users to Continue Using Salesforce for Outlook After TLS 1.0 Is Disabled](#)[Knowledge Article: Salesforce Disabling TLS 1.0](#)[Salesforce Help: Track the Versions of Salesforce for Outlook Your Users Run \(can be outdated or unavailable during release preview\)](#)

## Avoid Manual Upgrades

Move to our next-generation Microsoft® integration products, Lightning for Outlook and Lightning Sync. Our system requirements let you know whether you're ready to make the move. These changes apply to both Lightning Experience and Salesforce Classic.

Lightning for Outlook and Lightning Sync are just like Salesforce for Outlook. The products let your teams see, access, and update Salesforce content directly from Microsoft Outlook®. In addition, teams can sync important contacts and events that they update from both systems.

Why make the switch? The biggest difference between the features is that our cloud-based products don't require manual upgrades like Salesforce for Outlook does. Instead, we push the latest updates to you. When your reps spend less time maintaining software, they spend more time doing what's important: making your customers happy. And because Lightning for Outlook and Lightning Sync support the latest Microsoft applications, we introduce the latest innovations for those products.

Although Lightning for Outlook and Lightning Sync include a few features that require Lightning Experience, most features are available in both Salesforce Classic and Lightning Experience.

## EDITIONS

Available in all editions

Ready to get started? The first thing to do is to check the Lightning for Outlook and Lightning Sync system requirements to make sure that you meet them. If your system is all set, review our product documentation to learn about the features available for these products. Finally, take a look at our setup and migration documentation to see how to give your teams access.

SEE ALSO:

[Trailhead: Integrate Outlook and Gmail with Salesforce](#)

[Salesforce Help: Lightning for Outlook System Requirements \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Lightning Sync System Requirements \(can be outdated or unavailable during release preview\)](#)

## Security: Encryption of Sales Data

Protect more of your critical sales data, including customers' personally identifiable information (PII) using Shield Platform Encryption.

IN THIS SECTION:

[Encrypt More of Your Customers' Personally Identifying Information \(Generally Available\)](#)

Protect more of the personally identifiable information (PII) in standard fields on accounts, contacts, and leads. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encrypt the Opportunity Description and Next Steps Fields \(Beta\)](#)

You can encrypt the Opportunity Description and Next Step fields in sandbox and production environments. Contact Salesforce to activate this feature. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encrypt the Opportunity Name Field \(Pilot\)](#)

You can encrypt the Opportunity Name field in sandbox and developer edition environments only. Contact your Salesforce Account Executive or Success Manager to join this pilot. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### Encrypt More of Your Customers' Personally Identifying Information (Generally Available)

Protect more of the personally identifiable information (PII) in standard fields on accounts, contacts, and leads. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

On leads, you can encrypt

- Address (Street, City)
- Company
- Description
- Email
- Fax
- Mobile Phone
- Name (First Name, Middle Name, Last Name)
- Phone
- Title
- Website

On accounts and person accounts, you can encrypt

- Billing (Street, City)
- Shipping (Street, City)
- Site

On contacts, you can encrypt


- Assistant
- Assistant Phone
- Other Address (Street, City)
- Title


 **Note:** This also applies to Person Accounts.

To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

## Encrypt the Opportunity Description and Next Steps Fields (Beta)


You can encrypt the Opportunity Description and Next Step fields in sandbox and production environments. Contact Salesforce to activate this feature. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

 **Note:** This release contains a beta version of Encryption support for the Description and Next Step fields on Opportunities, which means it's a high-quality feature with known limitations. Encryption support for Description and Next Step isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

## Encrypt the Opportunity Name Field (Pilot)

You can encrypt the Opportunity Name field in sandbox and developer edition environments only. Contact your Salesforce Account Executive or Success Manager to join this pilot. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

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.

## Other Changes in the Sales Cloud

Learn about other changes we've made to improve usability.

### IN THIS SECTION:

#### [Salesforce Events Calendar Is Now Called My Events](#)

Everyone makes mistakes. Even us. We changed the name of your default calendar from Salesforce Events to My Events, because we don't need to tell you that you're working in Salesforce. This change applies to Lightning Experience only.

#### [Recent Calendar Changes Visible from Lightning Experience Without Browser Refresh](#)

When you leave your calendar open, it refreshes every 60 seconds. That way, when coworkers invite you to events or update events that you have access to, you can be sure you're looking at the latest information. No browser refreshing necessary. This change applies to Lightning Experience only.

#### [Data.com Account Data Assessment Has Been Retired](#)

Free account data assessments using the Company Info for Accounts data integration rule are now retired in Salesforce. You no longer have access to assessments that you ran before Winter '18. If you have a Data.com Premium Clean license, you can still use the rule to update your accounts with company information. This change applies to both Lightning Experience and Salesforce Classic.

#### [Data.com Tab Is Available Only to Prospector Customers](#)

The Data.com tab in Salesforce Classic is now available only in orgs with a Data.com Prospector license. Previously, all Salesforce customers could use the tab to search for records. This change applies to Salesforce Classic only.

#### [Pardot Available in Japanese \(Beta\)](#)

Pardot has been localized for Japan and is in beta release, available to all customers.

## Salesforce Events Calendar Is Now Called My Events

Everyone makes mistakes. Even us. We changed the name of your default calendar from Salesforce Events to My Events, because we don't need to tell you that you're working in Salesforce. This change applies to Lightning Experience only.

### EDITIONS

Available in: **All** Editions except **Group** and **Contact Manager** Editions

## Recent Calendar Changes Visible from Lightning Experience Without Browser Refresh

When you leave your calendar open, it refreshes every 60 seconds. That way, when coworkers invite you to events or update events that you have access to, you can be sure you're looking at the latest information. No browser refreshing necessary. This change applies to Lightning Experience only.

### EDITIONS

Available in: **All** Editions except **Group** and **Contact Manager** Editions

## Data.com Account Data Assessment Has Been Retired

Free account data assessments using the Company Info for Accounts data integration rule are now retired in Salesforce. You no longer have access to assessments that you ran before Winter '18. If you have a Data.com Premium Clean license, you can still use the rule to update your accounts with company information. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, and **Unlimited** Editions

## Data.com Tab Is Available Only to Prospector Customers

The Data.com tab in Salesforce Classic is now available only in orgs with a Data.com Prospector license. Previously, all Salesforce customers could use the tab to search for records. This change applies to Salesforce Classic only.

### EDITIONS

Available in: **Contact Manager, Group, Professional, Enterprise, Performance, and Unlimited** Editions

## Pardot Available in Japanese (Beta)

Pardot has been localized for Japan and is in beta release, available to all customers.



**Note:** Features marked as beta, developer preview, evaluation, limited release, non-production, pilot or pre-release (altogether "Pre-release Features") are in preview and are not considered "Services" under your master subscription agreement with Salesforce. Salesforce does not guarantee general availability of Pre-release features within any particular time frame or at all. If a Pre-release Feature is available for use after the latest general availability date that Salesforce announces for this release, then the Pre-release Feature has become generally available and is no longer considered a Pre-release Feature as of that date. You should make your purchase decisions only on the basis of generally available products and features. You may choose to try any Pre-release Feature in your sole discretion. Pre-release Features are offered as-is, are for evaluation purposes only and not for production use, are not supported, and may be subject to additional terms. Please note that all restrictions, Salesforce reservation of rights and Customer obligations concerning the Services, and use of any related Non-SFDC Applications and Content, shall apply equally to Customer's use of Pre-release Features. We may discontinue Pre-release Features at any time in our sole discretion. We will have no liability for any harm or damage arising out of or in connection with a Pre-release Feature.

### EDITIONS

Available in: **All** Pardot Editions

## Marketing: Content Sharing, Enhanced SMS and Push Messages, and Other Features

Build a single view of customer-leveraging data from any source. Plan and optimize unique customer journeys based on your company's business objectives. And deliver personalized content across every channel and device at the right time. Marketing Cloud helps marketers measure the impact of each interaction on your business to optimize your approach and deliver better results.

Learn about our latest features and enhancements in Marketing Cloud Release Notes.

- [October 2017 Release](#)
- [August 2017 Release](#)
- [July 2017 Release](#)

SEE ALSO:

[Marketing Cloud Overview](#)

[Marketing Cloud Release Notes \(all releases\)](#)



## Service: Field Service for Android, New Social Accounts, and More Lightning Experience Support

Enjoy Lightning Experience support for Live Agent, Omni-Channel, service contracts, case milestones, macros, case cloning, and more. Expand your field service operation with the Field Service Lightning mobile app for Android. Share knowledge faster by embedding videos and code blocks in Knowledge articles. And support up to 10 social accounts with the Social Customer Service Pro add-on.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

### IN THIS SECTION:

#### [Service Console: More Productivity Features, Enhanced Email Functionality, and Easy Setup](#)

You now have more Service Cloud features in the Lightning Service Console app. Your agents can use macros, Omni-Channel Supervisor, and Live Agent in the console. We also enhanced the email functionality for cases and fine-tuned some Service Setup flows. These changes apply to Lightning Experience only.

#### [Field Service: Service Crews, Product SKUs, and Improved Service Reports](#)

Your field service toolbox just keeps getting better. Create unstoppable service crews, flesh out your service reports with multiple signatures, track product SKUs, and more.

#### [Field Service Mobile: Android App Generally Available and iOS App Turns 3.0](#)

Field Service Lightning continues to take the mobile world by storm with the release of the Field Service Lightning mobile app for Android. The iOS app gets smarter product searches and product requests. And you can now add multiple signatures to service report templates, ensuring that everyone who needs to can sign off on work for iOS.

#### [Field Service Managed Package: Smarter Territory Creation, Multiday Work, and Designated Work](#)

Draw your territories right on the map, schedule work over multiple days, create appointment dependencies for complex projects, reserve time slots for work designated as urgent, and much more.

#### [Cases: Cloning Cases, Using Milestones, Enhanced Email Tools, and More](#)

Agents can do more with cases in Lightning Experience. They can clone cases, create case comments directly from the Case Comments related list, and track case milestones. Sending case emails is easier with new toolbar items. Agents can use merge fields, preview emails, and insert Salesforce Classic templates. Most of the changes apply only to Lightning Experience; but a few apply to Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### [Lightning Knowledge: Multi-language Orgs, Updated Article Actions, and Video Support](#)

Multi-language orgs can now make the move to Lightning Knowledge. When viewing a case in the console, authors can create an article from the Knowledge component. Authors also have a richer text editing experience with video, and they can see who's viewing articles with event monitoring. This change applies to Lightning Experience only.

#### [Live Agent: Web Chat for Your Support Agents in Lightning Experience](#)

Give your agents an enhanced chat experience in the Lightning Service Console. The agent chat window is more prominent in the console, and you can move it just how your agents like it. Past chats for contact records let you see a customer's previous chats with your company.

#### [Omni-Channel: Improvements in Lightning Experience and Salesforce Classic](#)

The Omni-Channel utility in the Lightning Service Console is now generally available. Use Omni-Channel Supervisor in Lightning Experience (Beta). Salesforce Classic enhancements include support for assigning agents to both queues in Omni-Channel and queues using External Routing (Beta).

### [Snap-Ins for Web: Chat with Customers in Lightning Experience, Improved Pre-Chat and Post-Chat Support](#)

Agents who chat with customers using Snap-ins Chat can use Live Agent in the Lightning Service Console. Records created with the information that your customers provide in a pre-chat form are attached to the chat transcript. Customer details are passed to your post-chat form, just like in Live Agent.

### [Entitlement Management: Service Contracts and Case Milestones in Lightning Experience](#)

Service contracts and case milestones are now available in Lightning Experience, making it easy for you to take care of all of your entitlement management to-dos in the new user interface.

### [Macros: Creating Efficient Support Agents and Happy Customers](#)

Lightning Experience macros can revolutionize the way your support agents work! Agents can send a customer email and update a case status with a single click. Macros provide the power to automate common repetitive tasks and resolve issues efficiently, so your agents can spend more time doing what they do best: focus on customer success. Add the Macro utility to your Lightning console app, such as the Service Console and Sales Console apps, and give console users the tools to quickly resolve issues. This change applies to Lightning Experience only.

### [Assets: Get a Bird's-Eye View of Asset Hierarchies](#)

Quickly view hierarchies of assets with a beautiful new tool in Lightning Experience. The tree grid view of asset hierarchies helps field service workers identify parts, assess bills of materials, and understand how assets are related to each other.

### [CTI: New Initialization Method and Click-to-Dial Component](#)

You can now use the `notifyInitializationComplete()` method in Lightning Experience. We're also introducing a click-to-dial Lightning component. These changes apply to Lightning Experience only.

### [Social Customer Service: New Service Pro Add-On and Social Business Rules Setup](#)

Add more social accounts to your org with the Service Pro add-on. Use the Social Business Rules setup page to get started with Social Customer Service in a flash. Support agents can now add image attachments to social posts.

### [Other Changes in Service Cloud](#)

Learn about other changes we've made in the Service Cloud.

## Service Console: More Productivity Features, Enhanced Email Functionality, and Easy Setup

You now have more Service Cloud features in the Lightning Service Console app. Your agents can use macros, Omni-Channel Supervisor, and Live Agent in the console. We also enhanced the email functionality for cases and fine-tuned some Service Setup flows. These changes apply to Lightning Experience only.

Available in: **Professional, Enterprise, Performance, Unlimited**, and **Developer** Editions with Service Cloud



**Note:** Lightning console apps don't yet have full parity with Salesforce Classic console apps. For example, some features in Salesforce Classic console apps, such as push notifications and multi-monitor support, aren't available in Lightning console apps. [Learn more.](#)

You also can't migrate Salesforce Classic console apps to Lightning Experience.

## IN THIS SECTION:

[Do More in Service Console with Macros, Live Agent, and Other Enhancements](#)

We added ways to increase agent productivity with macros, favorites, enhanced email capabilities, and updates to the case feed. Specify which objects open as subtabs, speeding up your service agents' workflows. Let knowledge users create articles without leaving the console. To top it off, your agents can chat with customers in the console using Live Agent. These changes apply to Lightning Experience only.

[Brand Your Community in the Lightning Service Setup Flow](#)

Want to build out your new community using drag-and-drop branding? How about adding a contact form to your community for your guests? We also added increased functionality to the Data Categories modal, and some auto-enablers for Web-to-Case and Knowledge. Your new community will be more powerful than ever! This change applies to Lightning Experience only.

[Enjoy a Streamlined Lightning Knowledge Setup Flow](#)

No more going into Settings to create page layouts or FAQs—the setup flow does it for you! Default page layouts and author permissions are now auto-enabled in the Knowledge setup flow. These enhancements make it easier for authors to view articles in your knowledge base. FAQs also have a new default page layout and record type. This change applies to Lightning Experience only.

[Get Valuable Insight into Customer Activity with Community 360 \(Generally Available\)](#)

Community 360—the Lightning App Builder component you can add to your console to see a customer's community activity—has a few surprises in store for you this release. First and foremost, the feature is taking off its pilot mantle, and coming out as generally available. Then, it's adding a whole slew of capabilities that help support agents get a holistic view of the customer. All in the name of awesome customer service. This feature is available in Salesforce Classic and Lightning Experience.

## SEE ALSO:

[Salesforce Help: Lightning Experience Console Limitations \(can be outdated or unavailable during release preview\)](#)

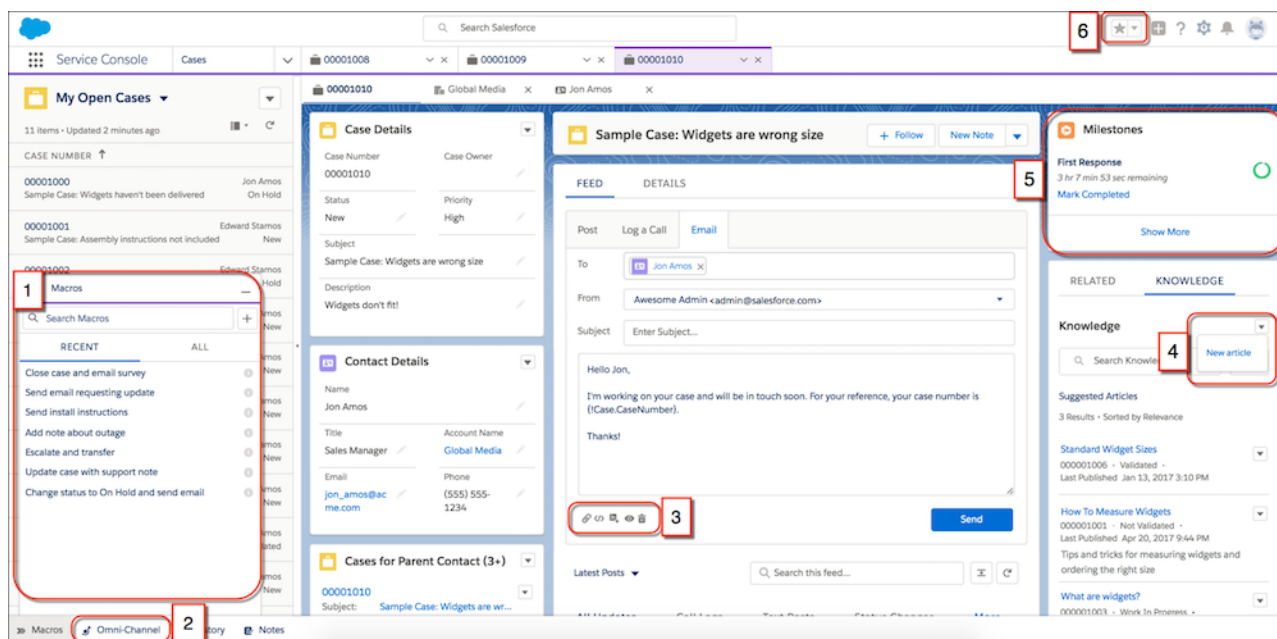
[Salesforce Help: What Features Are Available in Lightning Console Apps? \(can be outdated or unavailable during release preview\)](#)

## Do More in Service Console with Macros, Live Agent, and Other Enhancements

We added ways to increase agent productivity with macros, favorites, enhanced email capabilities, and updates to the case feed. Specify which objects open as subtabs, speeding up your service agents' workflows. Let knowledge users create articles without leaving the console. To top it off, your agents can chat with customers in the console using Live Agent. These changes apply to Lightning Experience only.



[Walk Through It: Explore Lightning Console Apps](#)



### Complete Repetitive Tasks with the Macros Utility (1)

Agents can complete repetitive tasks with a single click, such as sending an email to a customer and updating the case status.

### Route Live Agent Chats with the Omni-Channel Utility (2)

Agents can change their presence status and accept and decline work requests. You can also route chats from Live Agent.

### Save Time with the Enhanced Email Toolbar (3)

Agents can insert merge fields, preview emails, and clear emails from the email publisher for cases. They can also insert Salesforce Classic email templates, attach files, and remove attachments if they change their mind.

### Create Knowledge Articles from the Console (4)

No more leaving the console to create articles. Agents can create articles directly from the Knowledge component.

### Track Case Milestones in the Console (5)

Let your agents view active, completed, and violated milestones on the case record page and drill down to see milestone details.

### Use Favorites in Console Apps (6)

Agents can save time and keep track of their most-visited pages.

### Navigate More Quickly with Keyboard Shortcuts

Users are more efficient with new shortcuts, like a shortcut to go to the utility bar.

### Open Related Records in Console Apps with Navigation Rules

Configure navigation rules to specify which objects open as subtabs, speeding up your service agents' workflows. To customize the Service Console's navigation rules, edit the app from the App Manager page in Setup.

### View Read-Only Fields in the Related Record Component

The Related Record component now displays read-only fields. Use this component to let your Service Console users update records, create records, and link records, all without leaving the page.

SEE ALSO:

[Salesforce Help: Lightning Experience Console Limitations](#) (can be outdated or unavailable during release preview)

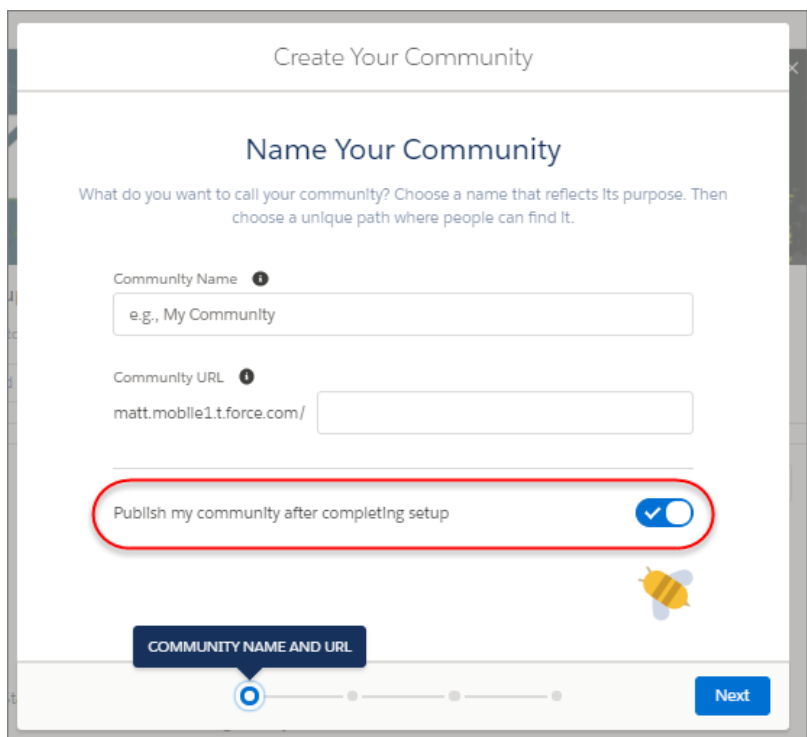
[Salesforce Help: What Features Are Available in Lightning Console Apps?](#) (can be outdated or unavailable during release preview)

## Brand Your Community in the Lightning Service Setup Flow

Want to build out your new community using drag-and-drop branding? How about adding a contact form to your community for your guests? We also added increased functionality to the Data Categories modal, and some auto-enablers for Web-to-Case and Knowledge. Your new community will be more powerful than ever! This change applies to Lightning Experience only.

## Publish Function in the Community Setup Flow

We added a **Publish my community after completing setup** toggle switch to the Community Name and URL modal.

The screenshot shows the 'Create Your Community' modal in Salesforce. The title is 'Name Your Community'. Below the title is a subtitle: 'What do you want to call your community? Choose a name that reflects its purpose. Then choose a unique path where people can find it.' There are two input fields: 'Community Name' with a placeholder 'e.g., My Community' and 'Community URL' with a placeholder 'matt.moblie1t.force.com/'. Below the URL field is a toggle switch labeled 'Publish my community after completing setup'. The toggle is currently turned on, indicated by a blue checkmark. A red circle highlights the toggle switch. At the bottom of the modal, there is a progress bar with a blue circle indicating the current step, and a 'Next' button.

Switch this on, and your new community automatically goes live when you complete the setup flow. What if you already published your community and want to make changes? Not a problem. After completing the setup flow, you can always take your community off-line, tweak the copy and settings, and then republish. Or if you'd rather publish later, leave this option disabled and proceed to the next step in the setup flow.

## Your Community

Community setup flow has a new branding modal. You can upload files or drag company logos and other branding assets directly into the setup flow.

Create Your Community

### Community Details and Branding

Upload your company logo and a header image. We'll generate a color combination for your community. Adjust the colors until you're happy with the look and feel of your brand

1. Upload a logo image (optional)  
  
[Upload Files](#)  
Or drop files
2. Upload a header image (optional)  
  
[Upload Files](#)  
Or drop files

**COMMUNITY BRANDING**

[Next](#)

And here's where the real magic comes in: Based on the colors of your logo and branding assets, Lightning Communities generates a color combination for the community. After finishing the flow, you can play with the look and feel of your palette in the Community Builder. In fewer than 10 steps, you'll have a branded community!

## Communities Data Categories with Dueling Picklists and up to 25 Featured Topics

Adding featured topics is a snap. Open the lists, and click the checkboxes of the featured topics to add. You can add up to 25 featured topics during the setup flow.

Create Your Community

## Make Your Content Pop

Featured topics point your community members to the good stuff. From the list below, select up to 25 categories you'd like to highlight as topics in the community.

Not sure how to organize your content? No problem, you can do this later.

SELECT UP TO 25      5 / 25      SELECTED TOPICS

▼ DCG

- ☒ DC1
- ☒ DC2
- ☒ DC3

▼ Big Data

- ☒ Zero
- ☒ One

Zero

One

**DC2**

DC3

DC1

TOPICS

Back      Next

To rearrange the topics, click the arrow to move them up or down. Topics are displayed in this order when you publish your community.

 **Note:** The Data Categories modal is not displayed during the Lightning Community setup flow under the following conditions:

- If you **have not enabled** Lightning Knowledge
- If you **have** enabled Lightning Knowledge, but **have not** selected Data Categories
- If more than one knowledge base has been previously enabled

## Web-to-Case Contact Form

The community setup flow ends with the option to create a Web-to-Case contact form. You can use the default fields or put extra fields on the contact form, including required fields. Web-to-Case is a great way for guests to contact you with questions or comments from your community.

Create Your Community

### Create Your Contact Form

Users can create cases in your community. What do you want to know about them? Select the fields that meet your business needs.

Input fields

SHOWN FIELDS	REQUIRED			
Contact Name	<input checked="" type="checkbox"/>	↑	↓	×
Subject	<input checked="" type="checkbox"/>	↑	↓	×
Description	<input type="checkbox"/>	↑	↓	×
Account Name	<input type="checkbox"/>	↑	↓	×
Web Email	<input type="checkbox"/>	↑	↓	×
* Status	<input checked="" type="checkbox"/>	↑	↓	×
Case Reason	<input checked="" type="checkbox"/>	↑	↓	×

\*Mandatory fields

[Add a Field](#)

**CONTACT FORM**

[Back](#) [Next](#)

Use **Add a Field** to put more information on your contact form. You can also change the order of the fields, or remove unwanted fields.

Create Your Community

### Create Your Contact Form

Users can create cases in your community. What do you want to know about them? Select the fields that meet your business needs.

Input fields

SHOWN FIELDS	REQUIRED			
Contact Name	<input checked="" type="checkbox"/>	↑	↓	×
Subject	<input checked="" type="checkbox"/>	↑	↓	×
Description	<input type="checkbox"/>	↑	↓	×
Account Name	<input type="checkbox"/>	↑	↓	×
Web Email	<input type="checkbox"/>	↑	↓	×
* Status	<input checked="" type="checkbox"/>	↑	↓	×
Case Reason	<input checked="" type="checkbox"/>	↑	↓	×

\*Mandatory fields

[Add a Field](#)

- ✓ Asset
- Case Source
- Business Hours
- Parent Case
- Web Name
- Web Phone
- Web Company

[Back](#) [Next](#)



## Auto-Enablers

In addition to all this front-end functionality, we added powerful back-end auto-enablers.



**Tip:** The Lightning Community setup flow auto-enables these features in the background.

After you complete the setup flow, Web-to-Case and Quick Action edit capabilities are enabled. After you publish your community, guests can submit cases directly from your community.

If you selected Data Categories in the setup flow, knowledge topics are auto-enabled. Community members have read-only access to those topics in the community. Topics associated with Data Categories show up in the community after completing the flow. And what's more, any new article assigned to a Data Category is assigned to the corresponding topic.

## Enjoy a Streamlined Lightning Knowledge Setup Flow

No more going into Settings to create page layouts or FAQs—the setup flow does it for you! Default page layouts and author permissions are now auto-enabled in the Knowledge setup flow. These enhancements make it easier for authors to view articles in your knowledge base. FAQs also have a new default page layout and record type. This change applies to Lightning Experience only.

### Create a Default Page Layout and Record Type

The default FAQ page layout and record type, define how articles are displayed in your layout. But if you prefer, you can still go into the object manager to create your page layouts.

### Assign Page Layouts and Record Types to Profiles from the Choose Authors Screen

When you complete the Lightning Knowledge setup flow, a summary and a body field are added to the page layout. By doing this step, you're affiliating the page layout and record types. Your chosen authors then get authoring access for those pages, which in turn auto-enables the page layouts and record types for these profiles.

### Grant Knowledge Base Access to the Guest User Profile

Knowledge auto-enables guest user permissions, allowing guests to view articles in your knowledge base.



**Tip:** The Lightning Knowledge setup flow auto-enables these features in the background.

## Get Valuable Insight into Customer Activity with Community 360 (Generally Available)

Community 360—the Lightning App Builder component you can add to your console to see a customer's community activity—has a few surprises in store for you this release. First and foremost, the feature is taking off its pilot mantle, and coming out as generally available. Then, it's adding a whole slew of capabilities that help support agents get a holistic view of the customer. All in the name of awesome customer service. This feature is available in Salesforce Classic and Lightning Experience.

For more information on how Community 360 works, see [See Your Customers' Community Activity with Community 360 \(Generally Available\)](#).

## Field Service: Service Crews, Product SKUs, and Improved Service Reports

Your field service toolbox just keeps getting better. Create unstoppable service crews, flesh out your service reports with multiple signatures, track product SKUs, and more.

### IN THIS SECTION:

#### [Simplify Scheduling with Service Crews](#)

Got a dream team of field service technicians who always work together? With service crews, you can assign predefined teams of workers to service appointments, saving time and ensuring that every appointment is handled by the right workers. This change applies to both Lightning Experience and Salesforce Classic.

#### [New Assignment Options on Service Appointments](#)

You now have the flexibility to choose how service appointments are assigned to service crews. Assign appointments to a crew or to individual crew members. This change applies to both Lightning Experience and Salesforce Classic.

#### [Assign Service Report Templates to Work Orders and Work Order Line Items](#)

Set up your service reports for success! The `Service Report Template` field on work orders and work order line items lets you select the template that's appropriate for each record's service reports. This change applies to both Lightning Experience and Salesforce Classic.

#### [Do More with Multiple Signatures on Service Reports](#)

Add multiple signature blocks to service report templates to have technicians, customers, and partners sign off on completed work. Assign each signature block a unique type so that technicians know who needs to sign a service report. This change applies to both Lightning Experience and Salesforce Classic.

#### [No More Signature Reuse on Service Reports](#)

Protect your customers' signatures! When someone signs a service report using the Field Service Lightning mobile app, the person's signature is no longer copied to future versions of the service report. This change applies to both Lightning Experience and Salesforce Classic.

#### [Track Product SKUs](#)

Keep track of the products that you offer with the new `Product SKU` field on products, which can be used with or in place of the `Product Code` field. For example, you can track the manufacturer's identifying code in the `Product Code` field and assign the product a SKU when you resell it. This change applies to both Lightning Experience and Salesforce Classic.

#### [Schedule Night Shifts with 24-Hour Time Slots](#)

Time slots on operating hours can now end at midnight, making it easier to track night-shift availability. This change applies to both Lightning Experience and Salesforce Classic.

#### [View Field Service Location Hierarchy Details and Files](#)

Locations are a central part of your field service ecosystem, and now you have more ways to track their characteristics. Assess a location's place in its hierarchy at a glance, attach files to locations, and track changes to location records. This change applies to both Lightning Experience and Salesforce Classic.

#### [Create Sharing Rules for Work Types](#)

Set up sharing rules to make different work types available to different groups of users. This change applies to both Lightning Experience and Salesforce Classic.

#### [Save Time with Field Service Flow Actions](#)

Speed up your field service processes with the Create Service Report and Generate Work Orders actions in the Cloud Flow Designer. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning standard features and managed package are available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

[Filter Work Orders by Record Type](#)

You can now view the work orders associated with each record type by modifying your list views to include record type filtering. This change applies to both Lightning Experience and Salesforce Classic.

## Simplify Scheduling with Service Crews

Got a dream team of field service technicians who always work together? With service crews, you can assign predefined teams of workers to service appointments, saving time and ensuring that every appointment is handled by the right workers. This change applies to both Lightning Experience and Salesforce Classic.

A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on service appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

To create a crew, from the Service Crews tab, click **New** and give your crew a name and size. Add service resources to the crew using the Service Crew Members related list. You can specify start and end dates for crew members and flag the crew leader.

Service Crew Members (3) <span>New</span>			
NAME	SERVICE RESOURCE	LEADER	
<a href="#">SCM-0001</a>	<a href="#">Isla Carpenter</a>	<input checked="" type="checkbox"/>	<input type="button" value="v"/>
<a href="#">SCM-0002</a>	<a href="#">Clementine Rogers</a>	<input type="checkbox"/>	<input type="button" value="v"/>
<a href="#">SCM-0003</a>	<a href="#">Marcus Ramirez</a>	<input type="checkbox"/>	<input type="button" value="v"/>

*Add members to service crews from the Service Crew Members related list.*

The crews that a service resource belongs to appear in the Service Crews related list on the service resource's detail page.



**Tip:** To change the fields that appear in the Service Crew Members related list, update the Service Crew page layout.

### What's Changing on Service Resources

The introduction of service crews includes some changes to the way service resources work in Salesforce. Previously, service resources represented users. Now, service resources can be individual users *or* service crews. Create a service resource record for every service crew so that you can assign the crew to service appointments. If you need to add or remove members, no problem! Changing a crew's members doesn't affect its service appointment assignments.

From now on, take this approach when creating service resources.

- To create a service resource that represents a user, select the user in the `User` lookup field and select `Technician` as the `Resource Type`.
- To create a service resource that represents a service crew, select the crew in the new `Service Crew` lookup field and select `Crew` as the `Resource Type`. Service resources that are crews can't be activated unless the crew has at least one active member.

SA-0001

**Assigned Resources (1)** [New](#)

SERVICE RESOURCE

Repair Crew ▼

[View All](#)

*Assign crews to service appointments from the Assigned Resources related list.*

### Important:


- The **Service Crew** field on service resources is hidden for all users by default. To use it, update its field-level security settings in Setup, and add it to your service resource page layouts.
- If your org was created before Winter '18 and you add the **Service Crew** field to your service resource page layouts, edit the page layouts so that **User** is no longer a required field. (Open the page layout, double-click the **User** field, deselect **Required**, and click **OK**.) Otherwise, you can't create service resources that represent service crews. Even though the **User** and **Service Crew** fields won't be marked required in the UI, a built-in validation ensures that service resources can't be saved unless one of the fields is filled out.

### What's Changing on Work Types

You can add service crew size requirements to work types, work orders, and work order line items. The **Recommended Crew Size** and **Minimum Crew Size** fields guide dispatchers who are assigning service appointments. Here's how these fields work.

- If you enter a recommended crew size, you must enter a minimum crew size.
- Work orders and work order line items inherit their work type's crew size values.

These two fields are hidden for all users by default. To use them, update their field-level security settings in Setup, and add them to your work type page layouts.

 **Note:** Service crews aren't available in Salesforce mobile web or Salesforce for Android and iOS. You can still view service resources of the Crew type, but an error occurs when you click the value in the **Service Crew** field.

If you're using the Field Service Lightning managed package, service crews aren't yet included in scheduling optimization and the Gantt view.

## New Assignment Options on Service Appointments

You now have the flexibility to choose how service appointments are assigned to service crews. Assign appointments to a crew or to individual crew members. This change applies to both Lightning Experience and Salesforce Classic.

With the introduction of service crews, service resources can represent individual users or groups of users (service crews). If you assign a service appointment to a service resource that represents a crew, the appointment's Assigned Resources related list just contains one assignee: the crew. But you can also choose to assign the appointment to crew members individually, thanks to the new **Service Crew** field on assigned resources. This approach lets you:

- Record each crew member's estimated and actual travel time
- See all the crew members in the Assigned Resources related list on the appointment

Here's how you assign service appointments to crew members individually.

1. In the Assigned Resources related list on the appointment, click **New**.
2. In the `Service Resource` field, select an individual service resource (with a resource type of User) that belongs to the crew.
3. In the `Service Crew` field, select the crew that the individual resource belongs to.
4. Complete the other fields as needed, and save your changes.
5. Repeat the previous steps for every crew member.

Now, technicians and dispatchers can easily see a list of the crew members in the Assigned Resources related list.

**Important:** The `Service Crew` field on assigned resources is hidden for all users by default. To use it, update its field-level security settings in Setup, and add it to your assigned resource page layouts.

## Assign Service Report Templates to Work Orders and Work Order Line Items

Set up your service reports for success! The `Service Report Template` field on work orders and work order line items lets you select the template that's appropriate for each record's service reports. This change applies to both Lightning Experience and Salesforce Classic.

If you don't specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template. The same is true for work order line items.

**Note:** The `Service Report Template` field stays blank unless you update it on the work order or work order line item. To find out which template its service reports use, check its work type.

## Do More with Multiple Signatures on Service Reports

Add multiple signature blocks to service report templates to have technicians, customers, and partners sign off on completed work. Assign each signature block a unique type so that technicians know who needs to sign a service report. This change applies to both Lightning Experience and Salesforce Classic.

The *Signature Type* field on digital signatures represents the role of the person signing the service report. It helps you ensure that your reports are signed by the proper people.

For example, suppose that when your company performs preventive maintenance on an asset, the final service report must be signed by both the customer and the technician. Those signatures tell you that everyone agrees on the work that was completed and help prevent future squabbles.

To put your requirement into action, add *Customer* and *Technician* values to the *Signature Type* picklist. Then create a service report template named *Maintenance Report*. Drag two signature blocks onto its layout: one with a signature type of *Customer* and one with a signature type of *Technician*.

**Note:** Because only one signature per type is allowed on a report, you can't drag additional signature blocks onto a template until you've defined *Signature Type* values. If you'll need multiple signatures from one type of person on a report, we recommend creating numbered type values, such as *Customer 1* and *Customer 2*. Signature blocks can't use multiple columns.

When you drag a signature block onto the layout, its display settings appear. The *Signature Type* field, which is listed in the Signature Properties window as *Type*, is required in signature blocks on service report templates. Make sure to also add the *Signature* field, which is the designated space for the signature.

**Signature Properties**

Title:

☐ Hide Title

Field Labels: ☐ Hide Field Labels

Field Alignment: ☒ Left ☐ Right

Type:

**Columns**

Select and arrange the fields that appear in the signature section. You can opt to hide the field labels on the PDF report.

Available Fields		Selected Fields	
	Add	Signature	Up Down
		Signed By	
		Date	
		Place	
		Type	
	Remove		

OK Cancel

After you add your signature block and save your template, service reports generated from the template contain two handily labeled signature blocks. No more guesswork!

Customer Signature	
Signature	Sample Signature
Signed By	Sample Signed By
Date	8/1/2017 2:05 PM
Place	Sample Place
Type	Customer

Technician Signature	
Signature	Sample Signature
Signed By	Sample Signed By
Date	8/1/2017 2:05 PM
Place	Sample Place
Type	Technician

Ready to get started?

- To add values to the `Signature Type` picklist, in Setup, enter *Digital Signatures* in the Quick Find box, then select **Fields** under Digital Signatures. The picklist comes with one value, `Default`, which you can deactivate if you like.
- To create or edit service report templates, in Setup, enter *Service Report Templates* in the Quick Find box, then select **Service Report Templates**.
- To create a service report for a service appointment, work order, or work order line item, select **Create Service Report** in the dropdown action menu on the record detail page.



**Note:** Service report templates created before Winter '18 don't include the `Signature Type` field. However, if you edit a signature block on the template, you're prompted to select a type.

## No More Signature Reuse on Service Reports

Protect your customers' signatures! When someone signs a service report using the Field Service Lightning mobile app, the person's signature is no longer copied to future versions of the service report. This change applies to both Lightning Experience and Salesforce Classic.

For example, suppose a technician generates a service report for a service appointment, and the customer signs the report. Later, the technician updates the service notes to add a recommendation. If the technician regenerates the service report, the customer's signature doesn't appear on the new report.

To continue reusing signatures across service report versions, contact Salesforce.

## Track Product SKUs

Keep track of the products that you offer with the new `Product SKU` field on products, which can be used with or in place of the `Product Code` field. For example, you can track the manufacturer's identifying code in the `Product Code` field and assign the product a SKU when you resell it. This change applies to both Lightning Experience and Salesforce Classic.

No two products can have the same SKU. The `Product SKU` field is searchable and can contain up to 180 letters and numbers. It appears on default product page layouts for orgs created after Winter '18. If your org is older, you need to add it to the page layouts. It's also available on asset page layouts and in the new asset hierarchy view: [Assets: Get a Bird's-Eye View of Asset Hierarchies](#).

### EDITIONS

Products are available in:  
**Professional, Enterprise, Performance, Unlimited,**  
and **Developer** Editions

## Schedule Night Shifts with 24-Hour Time Slots

Time slots on operating hours can now end at midnight, making it easier to track night-shift availability. This change applies to both Lightning Experience and Salesforce Classic.

Previously, time slots on operating hours couldn't end at 12:00 AM. If a service resource's operating hours began at 8:00 PM and ended at 11:59 PM, the resource was technically unavailable for the final minute of the day. This limitation made it difficult to model night-shift hours.

For example, if a worker is available from 8:00 PM to 4:00 AM, you can now create two time slots to represent those hours: one from 8:00 PM to 12:00 AM, and a second for the following day from 12:00 AM to 4:00 AM. This change also makes it easier for the scheduling optimizer, a Field Service Lightning managed package feature, to identify available technicians for service appointments.



**Note:** If you create a 24-hour time slot for a certain day, no other time slots can be created for that day.

## View Field Service Location Hierarchy Details and Files

Locations are a central part of your field service ecosystem, and now you have more ways to track their characteristics. Assess a location's place in its hierarchy at a glance, attach files to locations, and track changes to location records. This change applies to both Lightning Experience and Salesforce Classic.

Location hierarchies help you model your field service work environment more accurately. For example, to indicate that your main warehouse sits on a particular work site, you can make the warehouse's location record the child of the site location record. In Winter '18, three features join the existing `Parent Location` field on location records.

- The `Root Location` field lists the top-level location in a hierarchy of locations.
- The `Hierarchy Level` field tells you where the location sits in the hierarchy.
- The `Child Locations` related list shows all child locations.

Use feed tracking to track changes to location records. Attach files to locations in the new `Files` related list, such as warehouse blueprints, site maps, or photos.

## Create Sharing Rules for Work Types

Set up sharing rules to make different work types available to different groups of users. This change applies to both Lightning Experience and Salesforce Classic.

You can define up to 300 work type sharing rules based on the record owner. For example, set up sharing rules to make certain work types available only to users in specific countries based on public groups you've created.

To get started, navigate to the Sharing Settings page in Setup, and click **New** in the Work Type Sharing Rules related list.



**Note:** Criteria-based sharing rules aren't supported for work types.

## Save Time with Field Service Flow Actions

Speed up your field service processes with the Create Service Report and Generate Work Orders actions in the Cloud Flow Designer. This change applies to both Lightning Experience and Salesforce Classic.

### Create Service Report Action

Create a service report from a standard or custom template for a work order, work order line item, or service appointment. The inputs are:

- **Related Record**—Required. The ID of the record that the service report is being created for. You can create service reports for service appointments, work orders, and work order line items.



- Service Report Template—Required. The template used to create the service report.
- Signature—Optional. The signature to append to the service report. You can append multiple signatures to a service report.

The action has these outputs:

- Version—The content version ID of the service report.
- Service Report—The ID of the service report.

To use this action, you need the Field Service Standard user permission. Field Service Lightning must be enabled in your org.

### Generate Work Orders Action

Generate work orders for a maintenance plan. The only input is:

- Record ID—The ID of the maintenance plan from which you want to generate work orders.

To use this action, you need the Field Service Standard user permission, Read access to assets, and Create access to work orders and service appointments. Field Service Lightning must be enabled in your org.

You can generate up to 2,500 work orders at a time. To decrease the number of work orders generated, increase the frequency, decrease the generation timeframe, or decrease the number of assets related to the maintenance plan.

## Filter Work Orders by Record Type

You can now view the work orders associated with each record type by modifying your list views to include record type filtering. This change applies to both Lightning Experience and Salesforce Classic.

## Field Service Mobile: Android App Generally Available and iOS App Turns 3.0

Field Service Lightning continues to take the mobile world by storm with the release of the Field Service Lightning mobile app for Android. The iOS app gets smarter product searches and product requests. And you can now add multiple signatures to service report templates, ensuring that everyone who needs to can sign off on work for iOS.

- ❗ **Important:** Starting with the 3.0.1 release, you must have version 1.38 of the managed package for push notifications to work properly. Download the latest version here: <https://sfdc.co/MobileFieldServiceAndroidPackage>
- ❗ **Important:** Starting with the 3.0 release users must now have the RunFlow perm to be able to use flows.
- ❗ **Important:** If your implementation of the app experienced changes to the user interface (UI) branding with the 3.0 update from 10/26/17, you may be experiencing a bug. The bug results in light colored UI elements indistinguishable from light colored backgrounds. Please update your branding tokens in **Setup > Field Service Mobile Settings** by changing the setting `NAVBAR_BACKGROUND_COLOR` to have the same value as `PRIMARY_BRAND_COLOR` to resolve this issue.

### EDITIONS

Field Service Lightning standard features and managed package are available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

## IN THIS SECTION:

[Field Service Lightning Comes To Android \(Generally Available\)](#)

Field Service Lightning is now available for all your mobile devices with the release of the Android version of the Field Service Lightning mobile app. The Android app has a suite of great features designed to let technicians get the job done in a single appointment. Use flow actions, a flexible user interface, service resources geolocation, Salesforce Knowledge, and much more to deliver a world-class service experience. The Android app doesn't support all the same features as the iOS version.

[Capture Multiple Signatures on Service Reports](#)

Efficiently capture and keep track of signatures on service reports with multiple signature templates.

[Verify Service Reports with Enhanced Service Report Previews](#)

Your mobile workforce can verify service reports for completeness and accuracy more easily. However, you can't include images in rich text fields. Certain field values may be missing from the preview if they aren't contained in the page layout of the template.

[Set Background Mode Geolocation Preferences](#)

Customize the geolocation accuracy and update frequency for the Field Service Lightning mobile app when it's in background mode. Opt for more frequent updates to have more precise tracking, or conserve battery power with less frequent geolocation polling.

[Increase Usability for International Workforces with Flow Localization](#)

Tailoring the Field Service Lightning iOS app for an international workforce just got a lot easier. Flow localization lets your mobile workforce see flow screens in the language they want. And fewer flow limitations let you put more power in the hands of your mobile workforce.

[Save Time with Smarter Product Requests](#)

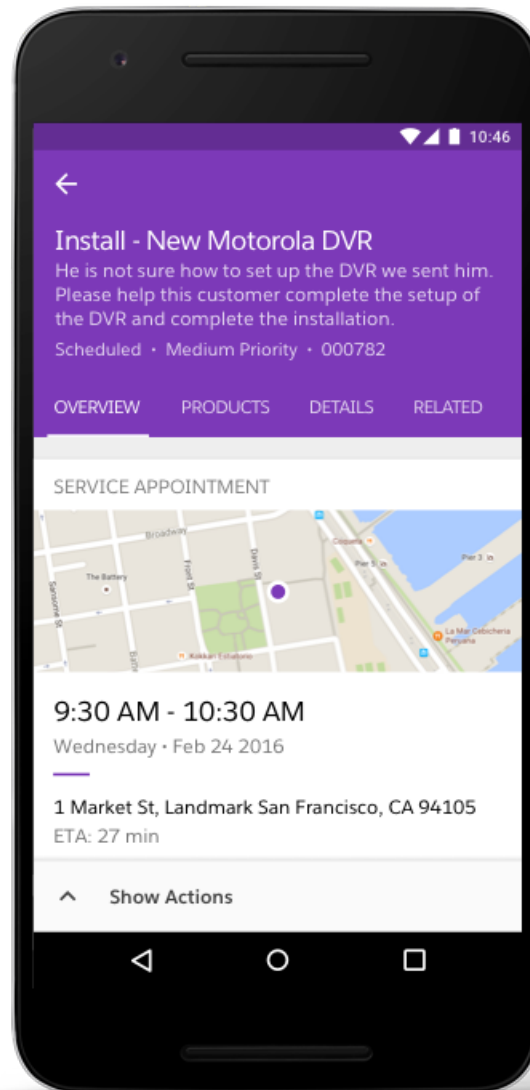
Get parts and products where they're needed. Previously, when a user created a product request record from the Field Service Lightning iOS app, the product request record wasn't automatically associated to a work order. Now when a user creates a product request, the record is associated with the work order that is open in the app.

[Get the Parts You Need with Enhanced Product Searching](#)

Finding every last part needed to complete a job can be a hassle. With improved product searching, your mobile workforce can search specific locations to see if another technician or location has the product they need. And products can now be consumed from multiple locations when completing a job, making pooling resources easier than ever before.

## Field Service Lightning Comes To Android (Generally Available)

Field Service Lightning is now available for all your mobile devices with the release of the Android version of the Field Service Lightning mobile app. The Android app has a suite of great features designed to let technicians get the job done in a single appointment. Use flow actions, a flexible user interface, service resources geolocation, Salesforce Knowledge, and much more to deliver a world-class service experience. The Android app doesn't support all the same features as the iOS version.



The Field Service Lightning Android app is an offline-capable solution designed to meet the needs of your mobile workforce. The app's suite of features and configurable options let you tailor it to have all the functionality your mobile workforce needs. All within an app that looks and feels just how you want it to.

Consult the table of main features for a look at what the Field Service Lightning Android app can do.

Feature	Description
Offline Capable	Always get the job done, even when internet connectivity is fickle. Your mobile workforce can always complete their work, even with limited or no network connectivity. Changes that are made while offline are tracked in a pending upload queue until the app regains connectivity with Salesforce.
Work Order Overview	The intuitive UI serves information in discrete cards, so your mobile workforce can quickly find the essential information to get the job done.

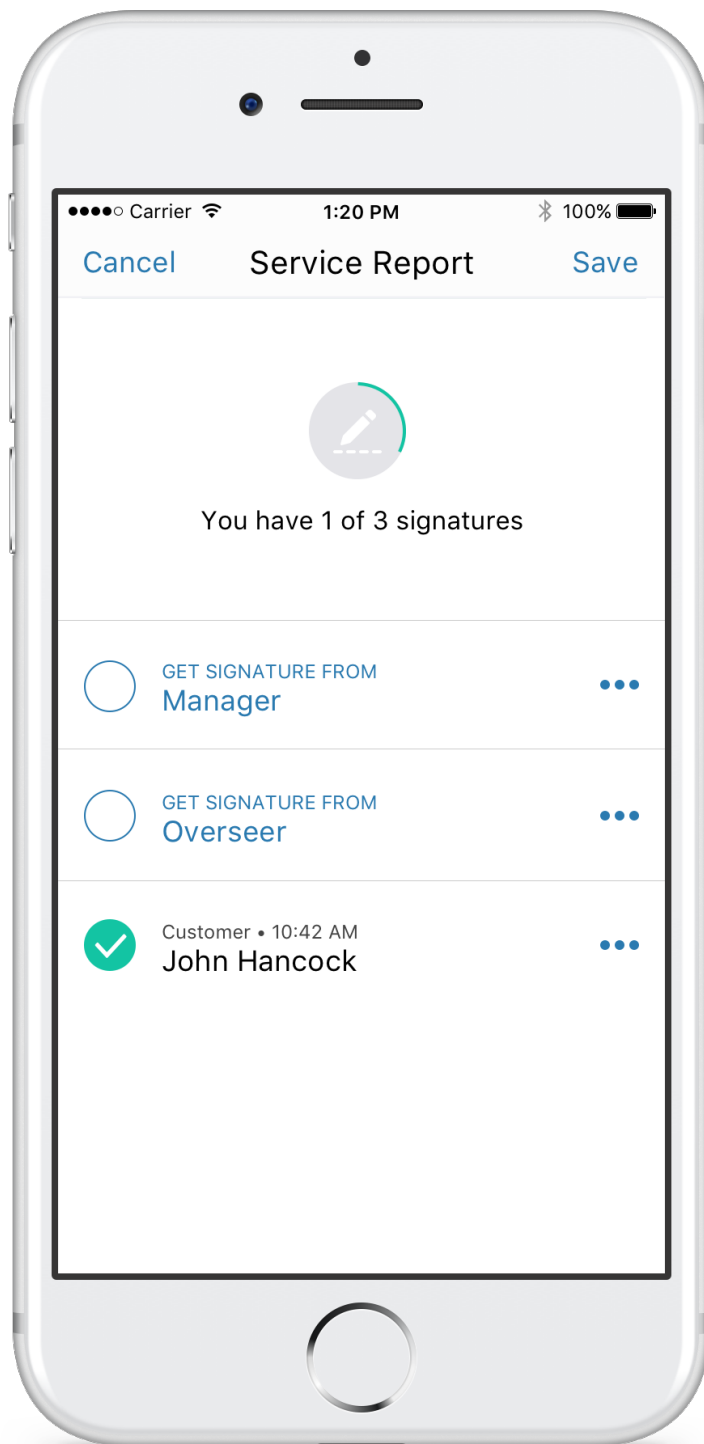
Feature	Description
Configurable Quick Actions	Configure actions to meet the unique needs of your mobile workforce. Quick Actions let users take actions such as creating or updating a record.
Field Service App Extensions	Pass record data from the Field Service Lightning Android app and connect it to other apps, such as Salesforce for Android. Only Lightning and third-party app extensions are supported.
Signature Capture and Service Report Creation	Capture signatures from customers on service reports for completed work orders.
Custom Branding	Brand the app to give it your company's look and feel.
Configurable User Interface	Choose which record information to display to your users. Prioritize information so that users can easily find what they need.
Push Notifications	Help your mobile workforce stay up to date and sure that they never miss an important update.
Flow Actions	Easily build and manage flows with Visual Workflow to guide users through screens that collect and display information, create and update records, and execute logic based on user input. Admins design and build flows using the Flow Designer's drag-and-drop user interface, then activate, manage, and maintain them. And localization support for flows lets you configure flows for an international workforce.
Asset History	Get a complete picture of the service history of an asset with the asset history card, which other work orders associated with the same asset.
Service Resource Tracking	Keep tabs on your mobile workforce with service resource geolocation tracking.
Resource Absences	Empower users to create resource absences to represent time off work.
Van Stock	Keep a comprehensive list of product items in the van stock.
Parts Consumed	Track the products and parts consumed when completing work orders.
Salesforce Knowledge	Provide useful information to your mobile workforce. Create Knowledge articles with vital information, like product manuals and step-by-step instructions.

## SEE ALSO:

[Salesforce Help: Field Service Lightning iOS App](#)(can be outdated or unavailable during release preview)

## Capture Multiple Signatures on Service Reports

Efficiently capture and keep track of signatures on service reports with multiple signature templates.



Service report templates can now contain multiple signature blocks, making it possible for service reports to be signed by everyone involved in the work. Each signature block has a unique signature type so technicians know who needs to sign. To learn more, see [Do More with Multiple Signatures on Service Reports](#).

Signature reuse across service report versions is a thing of the past. To learn more, see [No More Signature Reuse on Service Reports](#).

## Verify Service Reports with Enhanced Service Report Previews

Your mobile workforce can verify service reports for completeness and accuracy more easily. However, you can't include images in rich text fields. Certain field values may be missing from the preview if they aren't contained in the page layout of the template.

Carrier 1:20 PM 100%

Cancel Service Report Update

### SERVICE REPORT

#### Field Service Lightning

**Account & Contact Information**

Account	ACME Corporation	Contact	Brian Finch
Prepared for:		Prepared By:	
Address	567 27th St San Francisco, CA 94131	Phone	(415) 830-5543
Appointment Number	SA-17316	Owner	Dispatcher Emma
		Email	mchou@salesforce.com
		Name	Field Service Lightning
		Company Address	1 Market St San Francisco, CA 94105 US

**Appointment Information**

Subject	Install HD DVR	Description	He is not sure how to set up the DVR we sent him. Please help this customer complete the installation
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**Work Details**

Work Order Number	00017344	Start Date	3/20/2017 10:00 AM
Subject	Install HD DVR	End Date	3/20/2017 11:00 AM
Description	He is not sure how to set up the DVR we sent him. Please help this customer complete the installation		

**Asset Details**

Asset	HD DVR	Product Family	None
Product	HD DVR		

**Work Order Line Items**

Work Order Line Item Number	Status	Start Date	End Date
00000001	Completed	3/20/2017 10:00 AM	3/20/2017 11:00 AM
00000002	Completed	3/20/2017 10:00 AM	3/20/2017 11:00 AM
00000003	Scheduled	3/20/2017 10:00 AM	3/20/2017 11:00 AM
00000004	Scheduled	3/20/2017 10:00 AM	3/20/2017 11:00 AM
00000005	Scheduled	3/20/2017 10:00 AM	3/20/2017 11:00 AM
		Subtotal	\$0.00
		Discount	0.00%
		Total Price	\$0.00

The following parts and material were included above as part of this work order's line item detail. They are broken out in this section for quick reference.

**Customer Signature**

Signature

## Set Background Mode Geolocation Preferences

Customize the geolocation accuracy and update frequency for the Field Service Lightning mobile app when it's in background mode. Opt for more frequent updates to have more precise tracking, or conserve battery power with less frequent geolocation polling.

The mobile app now has the following geolocation settings:

Field Name	Description
Geolocation Update Frequency in Minutes	The minimum number of minutes that the user's geolocation is updated when the app is in foreground mode.
Geolocation Update Frequency in Minutes (Background Mode)	The minimum number of minutes that the user's geolocation is updated when the app is in background mode.
Geolocation Accuracy	The accuracy of the geolocation data. Available values are Fine, Medium, and Coarse.
Geolocation Accuracy (Background Mode)	The accuracy of the geolocation data. Available values are Medium, Coarse, and Very Coarse.

The background mode settings give you more control over the app. For example, set the geolocation accuracy to `Fine` when the app is in foreground mode. To conserve battery, set the geolocation accuracy to `Very Coarse` when the app is in background mode.

## Increase Usability for International Workforces with Flow Localization

Tailoring the Field Service Lightning iOS app for an international workforce just got a lot easier. Flow localization lets your mobile workforce see flow screens in the language they want. And fewer flow limitations let you put more power in the hands of your mobile workforce.

### SEE ALSO:

[Salesforce Help: Empower Your Mobile Workforce with Custom Tailored Workflows \(can be outdated or unavailable during release preview\)](#)

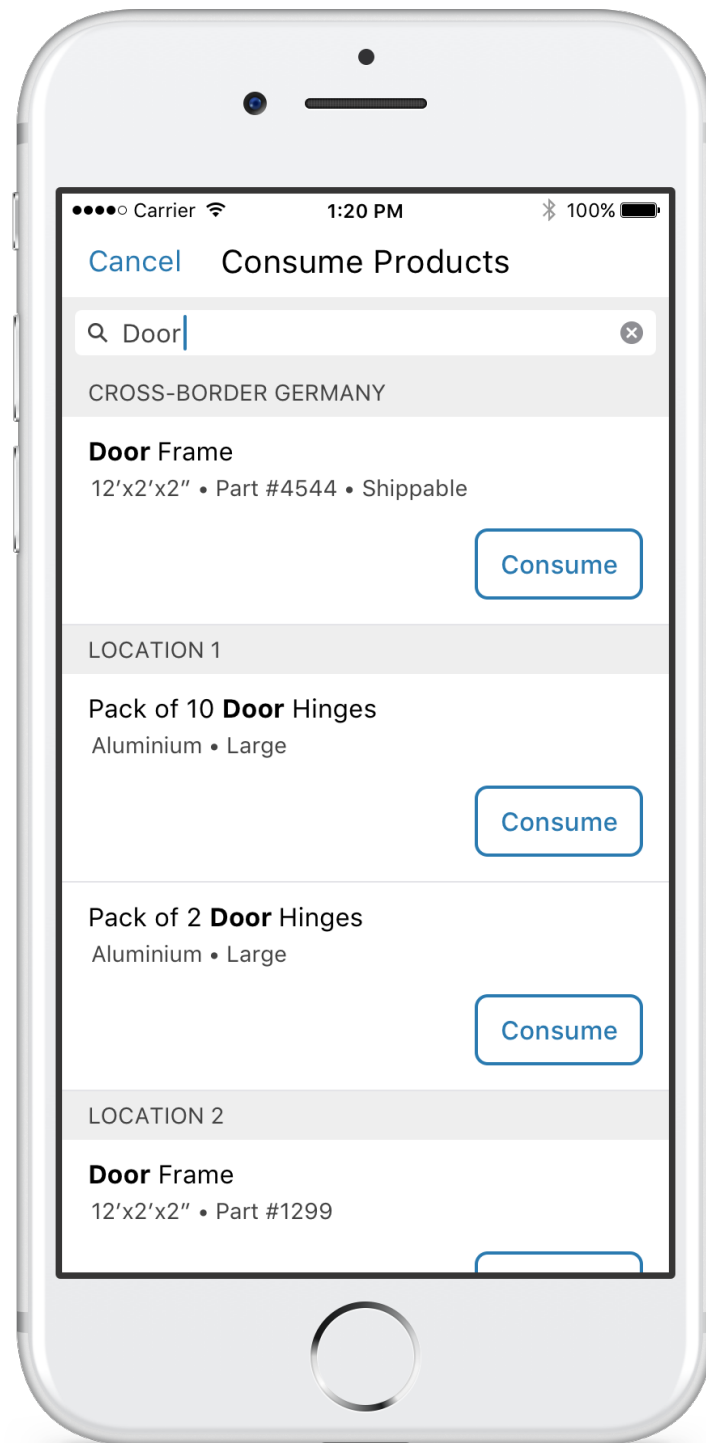
## Save Time with Smarter Product Requests

Get parts and products where they're needed. Previously, when a user created a product request record from the Field Service Lightning iOS app, the product request record wasn't automatically associated to a work order. Now when a user creates a product request, the record is associated with the work order that is open in the app.

## Get the Parts You Need with Enhanced Product Searching

Finding every last part needed to complete a job can be a hassle. With improved product searching, your mobile workforce can search specific locations to see if another technician or location has the product they need. And products can now be consumed from multiple locations when completing a job, making pooling resources easier than ever before.





## SEE ALSO:

[Salesforce Help: Search for Products in the Field Service Lightning Mobile App \(can be outdated or unavailable during release preview\)](#)

## Field Service Managed Package: Smarter Territory Creation, Multiday Work, and Designated Work

Draw your territories right on the map, schedule work over multiple days, create appointment dependencies for complex projects, reserve time slots for work designated as urgent, and much more.

## IN THIS SECTION:

### [Draw Your Territories on the Map with Map Polygons](#)

Draw your own territories directly on the map, then link them to your service territories. This change applies to both Lightning Experience and Salesforce Classic.

### [Schedule Work Over Multiple Days](#)

Rome wasn't built in a day, and neither are some work orders. You can now schedule appointments over multiple days. Multiday work has the same benefits as same day work in the dispatcher console, including scheduling quick actions and optimization. This change applies to both Lightning Experience and Salesforce Classic.

### [Schedule Work Dependencies with Complex Work](#)

Stay on top of project dependencies by scheduling time for them between appointments. New complex work Visualforce page helps define these dependencies. Schedule any size chain of appointments right from the complex work page or use the scheduling actions, dispatcher console, and optimization to schedule chains of two appointments. This change applies to both Lightning Experience and Salesforce Classic.

### [Reserve Time Slots for Designated Work](#)

Create time slots dedicated to service appointments that meet your criteria. This change applies to both Lightning Experience and Salesforce Classic.

### [Display Service Resources in All Territories](#)

You don't have to leave the resource gantt chart to view secondary service territory memberships. View your service resources in every territory that they're associated with. Previously service resources displayed only on the Gantt chart for their primary service territories. This change applies to both Lightning Experience and Salesforce Classic.

### [Control Which Absences Appear on the Resource Gantt Chart](#)

Only approved absences block your technician's availability and appear on the resource gantt chart. Unapproved resource absences are not considered in scheduling. This change applies to both Lightning Experience and Salesforce Classic.

### [Schedule High Priority Appointments over Those of Lower Urgency](#)

Specify which appointments ignore other lower priority appointments when scheduling. When a service appointment is allowed to ignore lower priority appointments, scheduling urgent appointments and rescheduling lower priority appointments, is much easier. This change applies to both Lightning Experience and Salesforce Classic.

### [Field Technicians Automatically Follow Their Appointments](#)

Technicians no longer have to click Follow on every record in their work log. Service resources automatically follow their service appointments and their parent records when the appointment is dispatched. This change applies to both Lightning Experience and Salesforce Classic.

#### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning standard features and managed package are available in: **Enterprise, Performance, Unlimited, and Developer** Editions. Work orders are also available in **Professional** Edition.

### Display Both Planned and Actual Travel Routes on the Console Map

The scheduling engine uses street-level routing to schedule technicians' day appropriately. On the day of service, the Field Service Lightning Mobile App tracks the route taken. Now you can see both routes on the resource map view. This change applies to both Lightning Experience and Salesforce Classic.

### Set Custom Permissions for Field Service Lightning Users

You can set custom user permissions to control access to actions and views. This change applies to both Lightning Experience and Salesforce Classic.

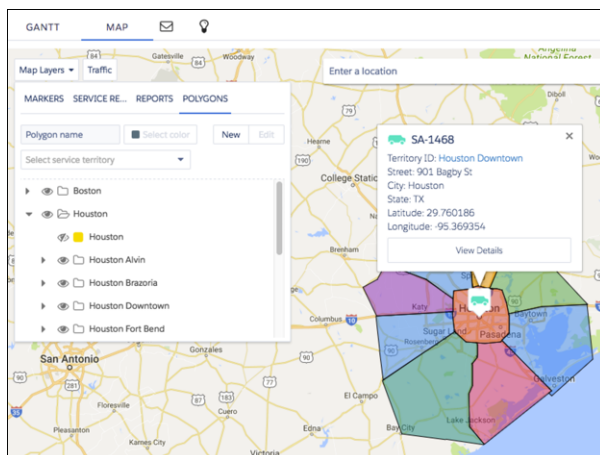
### Control Drip Feed Dispatch Setting at the Territory Level

Drip Feed Dispatch used to be set on an org-wide basis. Now you can set drip feed settings at the territory level. This change applies to both Lightning Experience and Salesforce Classic.

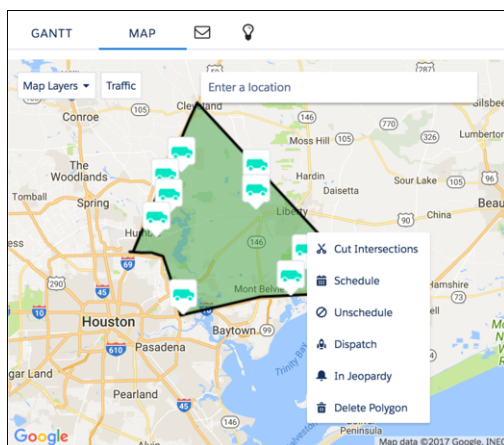
## Draw Your Territories on the Map with Map Polygons

Draw your own territories directly on the map, then link them to your service territories. This change applies to both Lightning Experience and Salesforce Classic.

Associate a service territory by drawing a polygon on the Field Service map and then selecting the relevant service territory. When a new appointment is created, the service appointment service territory field is auto populated based on the appointment's address.



You can also use map polygons to act on multiple service appointments at once with bulk actions, straight from the Field Service map view.



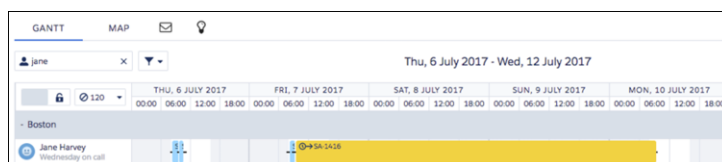
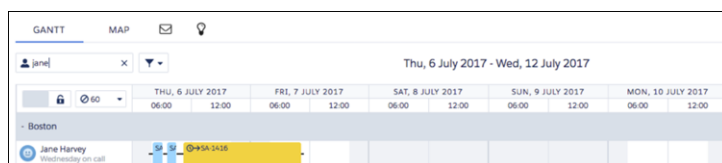
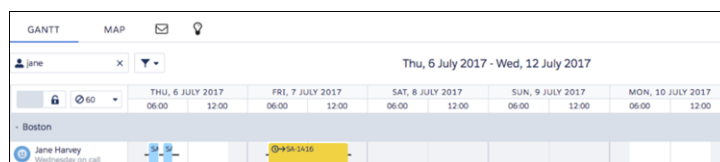
## Schedule Work Over Multiple Days

Rome wasn't built in a day, and neither are some work orders. You can now schedule appointments over multiple days. Multiday work has the same benefits as same day work in the dispatcher console, including scheduling quick actions and optimization. This change applies to both Lightning Experience and Salesforce Classic.

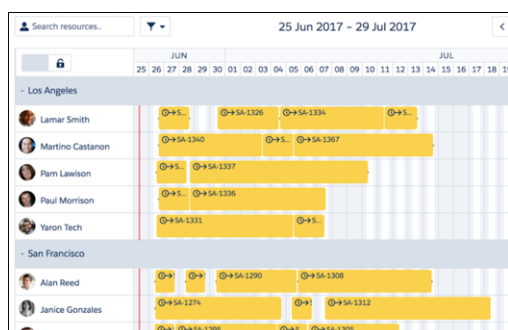
The Field Service Lightning scheduling engine calculates the appointment scheduled end time based on the scheduled start time, the duration, and the service resources operating hours and absences.



Example:



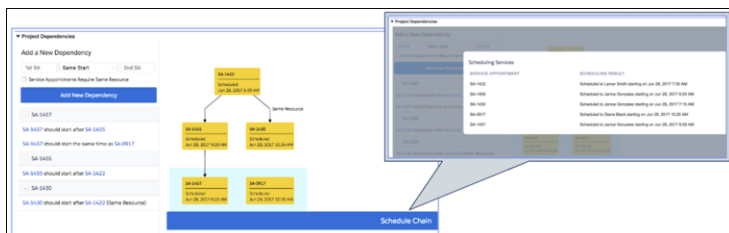
Five-week view with multiday work a month in advance.



## Schedule Work Dependencies with Complex Work

Stay on top of project dependencies by scheduling time for them between appointments. New complex work Visualforce page helps define these dependencies. Schedule any size chain of appointments right from the complex work page or use the scheduling actions, dispatcher console, and optimization to schedule chains of two appointments. This change applies to both Lightning Experience and Salesforce Classic.

To ensure that everything is ready for a complicated work order, define a chain of appointments. Time dependencies, such as appointments, can start at the same time or after the completion of another appointment.

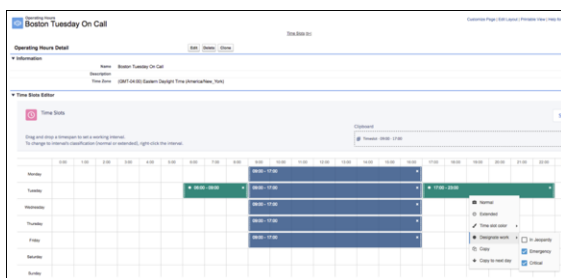


## Limitations

- Complex Work doesn't support Multiday Work. When scheduling a multiday service appointment with complex work dependencies, the multiday service appointment is scheduled without scheduling the dependent service appointments.
- Complex work isn't supported for capacity based resources, they aren't considered as candidates for appointments with dependencies.
- The related work feature, available in prior versions, isn't recommended as this feature replaces it.
- A maximum of two service appointments are scheduled at a time.

## Reserve Time Slots for Designated Work

Create time slots dedicated to service appointments that meet your criteria. This change applies to both Lightning Experience and Salesforce Classic.



You can set up designated work time slots with the new Designated Work Scheduling work rule.

New Work Rule

## Select Work Rule Record Type

Select a record type for the new work rule. To skip this page in the future, change your preferences.

### Select Work Rule Record Type

Record Type of new record

Field Service - Timeslot Designated Work

Continue Cancel

## Display Service Resources in All Territories

You don't have to leave the resource gantt chart to view secondary service territory memberships. View your service resources in every territory that they're associated with. Previously service resources displayed only on the Gantt chart for their primary service territories. This change applies to both Lightning Experience and Salesforce Classic.

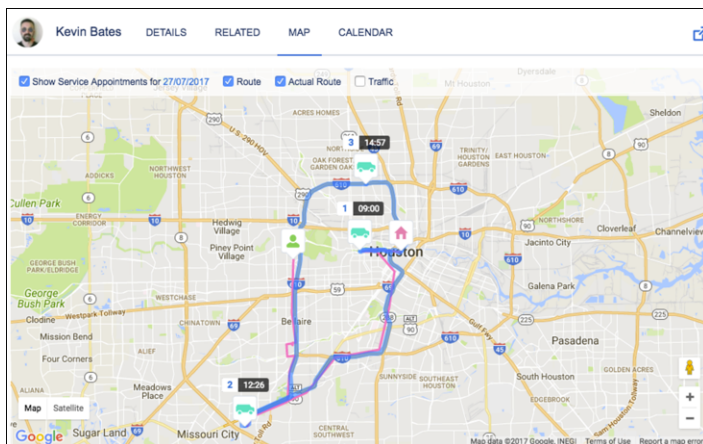


## Schedule High Priority Appointments over Those of Lower Urgency

## Field Technicians Automatically Follow Their Appointments

## Display Both Planned and Actual Travel Routes on the Console Map

The planned route is in blue and the actual route is pink. Notice the small detour, for a quick lunch break.



## Set Custom Permissions for Field Service Lightning Users

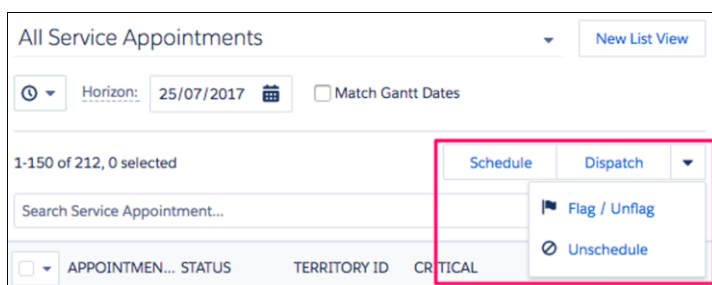
You can set custom user permissions to control access to actions and views. This change applies to both Lightning Experience and Salesforce Classic.

Custom permissions are applicable to the following features and actions

- Bulk actions such as dispatch, optimize, and schedule
- Console list views such as appointments for various statuses (canceled, flagged, scheduled, unscheduled, in jeopardy), contractors, gantt chart, and to do
- Resource scheduling actions, such as fill-in and fix gaps
- Appointment scheduling actions, such as schedule, reshuffle, and group nearby
- Gantt views, such as multiday work and month views
- Map polygon actions such as create, edit, and view
- Service territory utilization
- Creating service resource absences from the gantt chart
- Viewing secondary territory members on the gantt chart



**Example:** To control the number of optimization requests, you can lower the amount of dispatchers who can run optimizations. Remove the `FSL.Bulk Optimize` custom permission and the action is hidden from the user.



## Control Drip Feed Dispatch Setting at the Territory Level

Drip Feed Dispatch used to be set on an org-wide basis. Now you can set drip feed settings at the territory level. This change applies to both Lightning Experience and Salesforce Classic.

## Cases: Cloning Cases, Using Milestones, Enhanced Email Tools, and More

Agents can do more with cases in Lightning Experience. They can clone cases, create case comments directly from the Case Comments related list, and track case milestones. Sending case emails is easier with new toolbar items. Agents can use merge fields, preview emails, and insert Salesforce Classic templates. Most of the changes apply only to Lightning Experience; but a few apply to Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### EDITIONS

Available in: **Enterprise, Performance, Unlimited,** and **Developer** Editions

#### IN THIS SECTION:

##### [Save Time When Emailing Customers with Merge Fields and Salesforce Classic Templates](#)

Agents can insert merge fields, preview emails, and clear emails from the email publisher for cases. They can also insert Salesforce Classic email templates, attach files, and remove attachments if they change their mind. Previously, agents could only attach files and insert templates created in Lightning Experience. These changes apply to Lightning Experience only.

##### [Use Recipient Fields to Associate Emails with Case Contacts](#)

We created three new fields that you can use to customize your case emails—To Recipients, CC Recipients, and BCC Recipients. Use these fields to ensure that emails are always associated with the correct record in Salesforce. This change applies to Lightning Experience only.

##### [Use Case Milestones in Lightning Experience](#)

Your agents can now see active, completed, and violated milestones from case record pages. They can also drill down to see case milestone details. This change applies to Lightning Experience and all versions of the Salesforce app.

##### [Seamlessly Clone Cases](#)

Agents can easily log multiple issues for a customer or use information in existing cases. It's as simple as clicking the clone button, filling in the information, assigning and saving the case. Previously, case cloning was available only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce app.

##### [Add a Case Comment from a Related List](#)

Agents can now add case comments directly from the Case Comments related list with the click of a button. This change applies to Lightning Experience and all versions of the Salesforce app.

## Save Time When Emailing Customers with Merge Fields and Salesforce Classic Templates



Agents can insert merge fields, preview emails, and clear emails from the email publisher for cases. They can also insert Salesforce Classic email templates, attach files, and remove attachments if they change their mind. Previously, agents could only attach files and insert templates created in Lightning Experience. These changes apply to Lightning Experience only.

We updated the toolbar on the case email publisher.



These actions are now available in the email publisher.

Action	Description
Attach file	Updated functionality You can remove attachments before sending, even if the attachment comes from an email template.
Insert merge field	New action <b>Note:</b> Merge fields resolve only on send and preview. The field appears as plain text when inserted into the email publisher. You can insert merge fields not listed in the modal. Enter a valid merge field as plain text in your email, and then use the Preview action to review before sending.
Insert, create, or update template	Updated functionality <ul style="list-style-type: none"> <li>Insert Salesforce Classic templates (Visualforce email templates for Salesforce Classic aren't supported)</li> <li>Templates are inserted at your cursor, and no longer replace the entire body of the email</li> </ul> <b>Note:</b> When you insert a template, the subject is replaced with the template's subject.
Preview email	New action <b>Tip:</b> Preview is a great way to review an email with merge fields before sending.

Action	Description
 Clear and revert email	New action  <b>Note:</b> This action clears the email and reverts to the original values.


## SEE ALSO:

[Salesforce Help: Access and Sharing for Email Merge Fields, Templates, and Attachments in Lightning Experience \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Merge Fields for Cases \(can be outdated or unavailable during release preview\)](#)

## Use Recipient Fields to Associate Emails with Case Contacts

We created three new fields that you can use to customize your case emails—To Recipients, CC Recipients, and BCC Recipients. Use these fields to ensure that emails are always associated with the correct record in Salesforce. This change applies to Lightning Experience only.

 **Important:** In new orgs, when you enable Email-to-Case, we automatically configure the To Recipients predefined field value for you. In existing orgs, you must create the To Recipients predefined field value.

In existing orgs, by default the case email action provides a predefined field value (the case contact's email address) for the To field. Emails aren't associated with the Salesforce case contact record because the predefined field type is Text (a plain email address with no link to the case contact).

Predefined Field Values <span>New</span>				
Action	Field Name	API Name	Field Type	Value
<a href="#">Edit</a>   <a href="#">Del</a>	To Address	<a href="#">ToAddress</a>	Text	Case.ContactEmail

Here's the default email publisher.

Post
Log a Call
Email

To

jamos@email.com x

From

Awesome Admin <admin@acme.com>

Subject

Enter Subject...

To change the default experience and associate emails with Salesforce records, predefine values for the To Recipients, CC Recipients, and BCC Recipients fields. These fields use the JunctionIDList field type. To set up your new predefined fields, go to Setup and use the Object Manager to edit the Email action for the case object. Create a predefined field value for the To Recipients field. In the formula editor, use the JUNCTIONIDLIST function to specify the value. You can predefine the CC Recipients and BCC Recipients fields in the same way.

Predefined Field Values <span>New</span>				
Action	Field Name	API Name	Field Type	Value
<a href="#">Edit</a>   <a href="#">Del</a>	To Recipients	Tolds	JunctionIDList	JUNCTIONIDLIST(Case.ContactId)

**Important:** After you're done, delete the default predefined value for the To Address field. If you have predefined field values for both the To Address and To Recipients fields, only the To Address field is respected.

Here's what an email publisher looks like that uses a predefined To Recipients field. The To field pre-populates with the contact name instead of the contact's email address.

After emails are sent, agents can click an email to see the related contact information.

**Note:** You can use the To Recipients, CC Recipients, and BCC Recipients fields to send emails to multiple contacts and users. The fields work only with the email action for cases.

SEE ALSO:

[Salesforce Help: Set Predefined Field Values for Quick Action Fields](#) (can be outdated or unavailable during release preview)

[Salesforce Help: Notes on Predefined Field Values for Quick Actions](#) (can be outdated or unavailable during release preview)

## Use Case Milestones in Lightning Experience

Your agents can now see active, completed, and violated milestones from case record pages. They can also drill down to see case milestone details. This change applies to Lightning Experience and all versions of the Salesforce app.

For more information, see [Track Your Case Milestones in Lightning Experience](#).

## Seamlessly Clone Cases

Agents can easily log multiple issues for a customer or use information in existing cases. It's as simple as clicking the clone button, filling in the information, assigning and saving the case. Previously, case cloning was available only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce app.

In new orgs, the **Clone** button is available on the Cases page layout by default. In existing orgs, add the Clone quick action to the page layout.

## Add a Case Comment from a Related List

Agents can now add case comments directly from the Case Comments related list with the click of a button. This change applies to Lightning Experience and all versions of the Salesforce app.


If you already have a Case Comments related list on a record page, you don't need to do anything. Agents see the New button in the related list dropdown. To add the Case Comments related list to a page, in the Lightning App Builder add the Related List - Single component to the page.

After you update the related list, agents can click the **New** button from the related list dropdown menu. Agents are then prompted for the comment. Keep in mind that your Case Comment window can look different depending on your configuration.

 **Note:** You can still create a quick action for creating case comments.

## Lightning Knowledge: Multi-language Orgs, Updated Article Actions, and Video Support

Multi-language orgs can now make the move to Lightning Knowledge. When viewing a case in the console, authors can create an article from the Knowledge component. Authors also have a richer text editing experience with video, and they can see who's viewing articles with event monitoring. This change applies to Lightning Experience only.

 **Note:** Enabling Lightning Knowledge changes your orgs data model to use record types rather than article types. Orgs with multiple articles types require data migration to consolidate article types before enabling Lightning Knowledge.

IMPORTANT: After you enable Lightning Knowledge, you can't disable it. Test in a sandbox or trial org before enabling in production.

### IN THIS SECTION:

#### [Access Knowledge Articles in Multi-Language Orgs with Lightning Experience \(Beta\)](#)

Multi-language orgs are now supported in Lightning Knowledge! You can search and read translated articles in Lightning Knowledge. You still create and manage translated articles in Salesforce Classic. This change applies to Lightning Experience only.

#### [Create Articles from the Knowledge Component](#)

Users can create articles from the Knowledge component. This change applies to Lightning Experience only.

#### [Embed Videos and Code Blocks in Knowledge Articles](#)

Lightning Knowledge authors can create a rich article experience by embedding videos and inserting code blocks. We expanded the list of supported domains for embedding videos in both Salesforce Classic and Lightning Experience.

#### [Track Article Views with Event Monitoring](#)

Make data-driven decisions about your knowledge base content with event monitoring. We added a KnowledgeArticleView event type to the EventLogFile standard object for article views. You can see who is viewing articles to better understand how people are using Knowledge within your organization.

#### [Follow the Flow with Article Assignments](#)

Track articles that require action by reporting on assignment fields. This change applies to Lightning Experience only.

#### [Choose Your Data Categories in Lightning](#)

The data category chooser component is fully accessible in Lightning Knowledge record home. This component supports the full number of data categories you have enabled in your org.

#### [Knowledge Search: Article Result Sorting and External Documents Case Attachment](#)

Experience the improved Knowledge article search to find articles and resolve cases faster.

### EDITIONS

Available in: Salesforce Classic, Lightning Experience

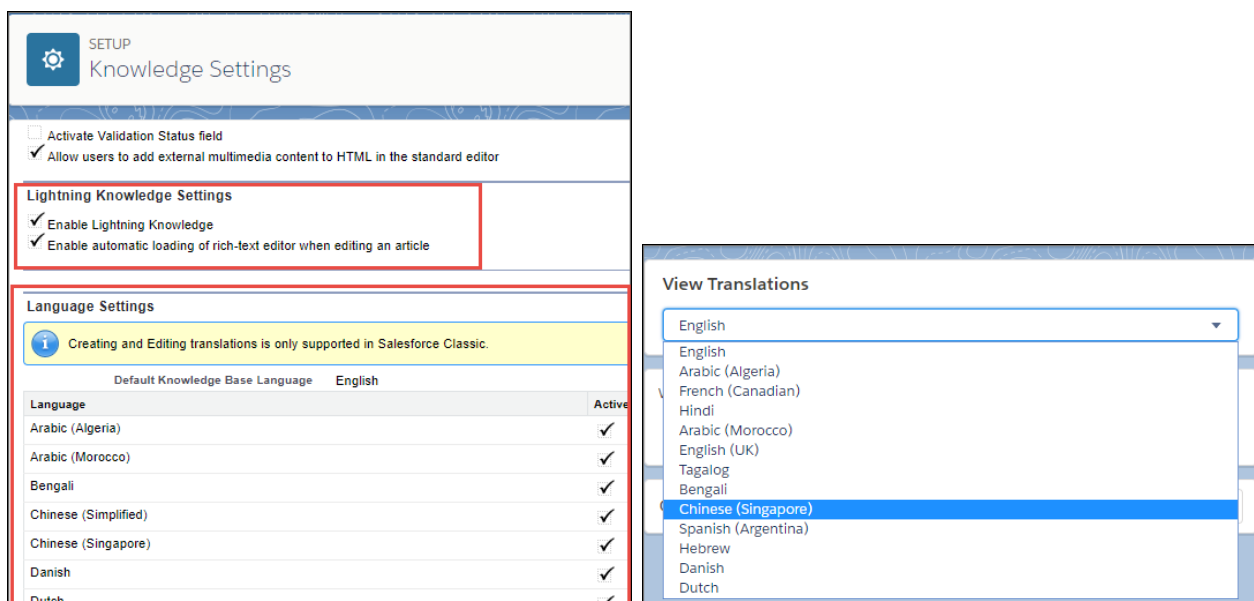
Salesforce Knowledge is available in **Performance** and **Developer** Editions and in **Unlimited** Edition with the Service Cloud.


Salesforce Knowledge is available for an additional cost in: **Professional**, **Enterprise**, and **Unlimited** Editions.

## Access Knowledge Articles in Multi-Language Orgs with Lightning Experience (Beta)

Multi-language orgs are now supported in Lightning Knowledge! You can search and read translated articles in Lightning Knowledge. You still create and manage translated articles in Salesforce Classic. This change applies to Lightning Experience only.

Multi-language orgs can enable Lightning Knowledge, and Lightning Knowledge orgs can turn on enable multi-language support. Translated articles are searchable and readable in Lightning Knowledge. However, creation and management of translated articles is only available in Classic currently. In addition, users can add language as a column in the listviews. If there are published translated versions of an article, users can easily switch to another language when viewing the Article Record Home by using the language picklist. If a translation language only has a draft version, that language won't show in the picklist until it is published.

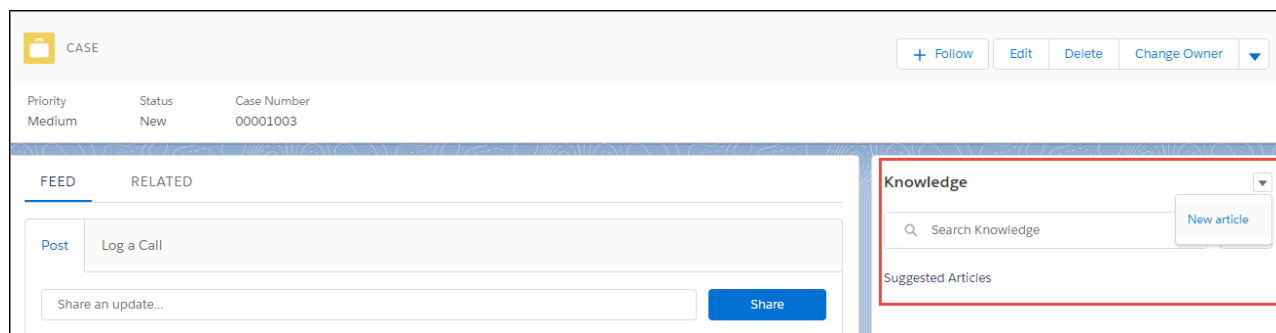


 **Note:** The Submit for Translation action is not available in Lightning Experience, but can still be used in Classic when Lightning Knowledge is enabled.

## Create Articles from the Knowledge Component

Users can create articles from the Knowledge component. This change applies to Lightning Experience only.

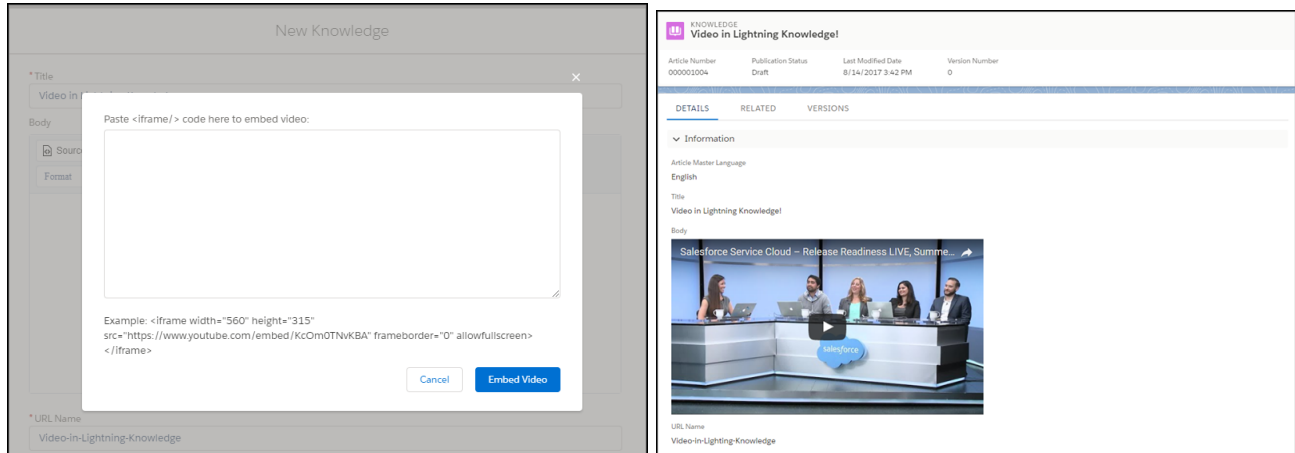
Knowledge users can easily create articles from the Knowledge component while managing a case. Creating an article directly from a case allows agents to stay in their customer support workflow, minimize unnecessary clicks, and document critical information for other agents.



## Embed Videos and Code Blocks in Knowledge Articles

Lightning Knowledge authors can create a rich article experience by embedding videos and inserting code blocks. We expanded the list of supported domains for embedding videos in both Salesforce Classic and Lightning Experience.

With the Lightning Knowledge video plugin, you can embed video into Lightning Knowledge articles. In addition, Lightning Knowledge has a code block plugin. You can embed code snippets into Lightning Knowledge articles so that they appear as content (rather than processed as code).



Supported video sources:

- [players.brightcove.net](https://players.brightcove.net)
- [dailymotion.com](https://dailymotion.com)
- [force.com](https://force.com)
- [salesforce.com](https://salesforce.com)
- [videos.sproutvideo.com](https://videos.sproutvideo.com)
- [ustream.tv](https://ustream.tv)
- [app.ustudio.com](https://app.ustudio.com)
- [play.vidyard.com](https://play.vidyard.com)
- [vimeo.com](https://vimeo.com)
- [fast.wistia.net](https://fast.wistia.net)
- [player.youku.com](https://player.youku.com)
- [youtube.com](https://youtube.com)
- [youtube-nocookie.com](https://youtube-nocookie.com)
- [youtube.ca](https://youtube.ca)
- [youtube.jp](https://youtube.jp)
- [youtube.com.br](https://youtube.com.br)
- [youtube.co.uk](https://youtube.co.uk)
- [youtube.nl](https://youtube.nl)
- [youtube.pl](https://youtube.pl)
- [youtube.es](https://youtube.es)
- [youtube.ie](https://youtube.ie)

- [youtube.fr](#)

**SEE ALSO:**

[IdeaExchange: Wistia video embedding in KB articles](#)

[IdeaExchange: Please enable embedding Youku videos to articles to serve Chinese customers](#)

## Track Article Views with Event Monitoring

Make data-driven decisions about your knowledge base content with event monitoring. We added a KnowledgeArticleView event type to the EventLogFile standard object for article views. You can see who is viewing articles to better understand how people are using Knowledge within your organization.

You can use event monitoring to track views by user and by date, giving you insight into who is consuming articles. The KnowledgeArticleView event type is available in the API, but not in the Event Monitoring Analytics app.



**Note:** Views by user and date do not include Community and custom Apex views.

**SEE ALSO:**

[Changed Objects](#)

[IdeaExchange: Track Knowledge Article Searches and / or Views by User](#)

[IdeaExchange: Knowledge Article Viewed Date / Voted Date Filter in Reports](#)

## Follow the Flow with Article Assignments

Track articles that require action by reporting on assignment fields. This change applies to Lightning Experience only.

Manage your article workflow by targeting the assignment process through your org's knowledge base. Create assignment list views that help you see article assignments that are approaching due dates, past due dates, or are assigned to someone who is out of the office.



**Note:** You can only assign draft articles in Salesforce Classic currently. Assignment fields for pre-existing draft articles don't appear in assignment field reports. However, if they are reassigned after the release, they will become available.

**SEE ALSO:**

[IdeaExchange: Knowledge Article Assignment Reporting](#)

## Choose Your Data Categories in Lightning

The data category chooser component is fully accessible in Lightning Knowledge record home. This component supports the full number of data categories you have enabled in your org.

## Knowledge Search: Article Result Sorting and External Documents Case Attachment

Experience the improved Knowledge article search to find articles and resolve cases faster.

### IN THIS SECTION:

#### [Sort Knowledge Article Search Results](#)

The search results page has an improved sorting menu, and it works for Knowledge articles, too. Users can sort by fields that the admin includes in the search results layout for Knowledge articles. This change applies to Lightning Experience only.

#### [Attach External Documents to Cases and Report on Them, Too](#)

Users can attach external documents to cases instead of just referencing them. For instance, a user can close a case with a YouTube video or a SharePoint file. Customers get immediate help, and service associates save time with a streamlined workflow. And, with reporting, admins can track it all. This change applies to Salesforce Classic only.

### EDITIONS

Salesforce Knowledge is available in **Performance** and **Developer** Editions and in **Unlimited** Edition with the Service Cloud.

Salesforce Knowledge is available for an extra cost in: **Professional**, **Enterprise**, and **Unlimited** Editions.

### Sort Knowledge Article Search Results

The search results page has an improved sorting menu, and it works for Knowledge articles, too. Users can sort by fields that the admin includes in the search results layout for Knowledge articles. This change applies to Lightning Experience only.

By default, articles are sorted by relevance. To change the field that's sorted, use the sorting link above the results. Use the **Ascending** or **Descending** link to change the sort direction.

Results that are sorted by relevance always show the most relevant results at the top.

Knowledge	
7 Results	Sorted by <a href="#">Article Title</a> ▼ <a href="#">Descending</a> ↓
<a href="#">telescopes</a> come back in style	000001157 · Not Validated · Last Modified Jan 20, 2017 1:32 PM
after signals from aliens discovered	
<a href="#">me and my refractor telescope</a>	000001160 · Not Validated · Last Modified Jan 20, 2017 1:35 PM
it has a special place in my heart, since it was my first <a href="#">telescope</a> ....My history with my refractor <a href="#">telescope</a> .	
<a href="#">How to setup a telescope</a>	000001153 · Not Validated · Last Modified May 3, 2017 2:58 PM
The details on setting up a Dobsonian <a href="#">telescope</a> .... intended to familiarize folks who are in the process of choosing a <a href="#">telescope</a> with the setup procedures	

### Attach External Documents to Cases and Report on Them, Too

Users can attach external documents to cases instead of just referencing them. For instance, a user can close a case with a YouTube video or a SharePoint file. Customers get immediate help, and service associates save time with a streamlined workflow. And, with reporting, admins can track it all. This change applies to Salesforce Classic only.

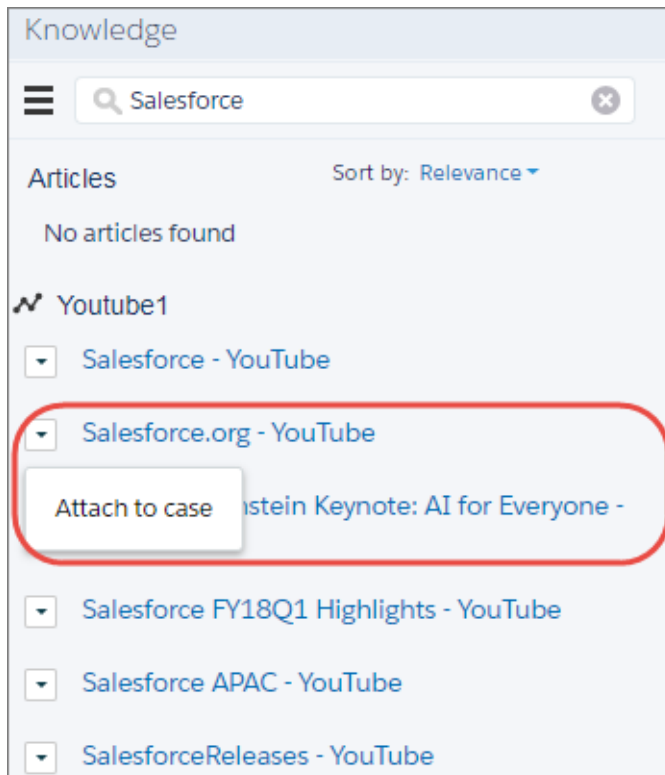
First, connect an external data source to your Salesforce org.



- Instructions to [set up and manage Federated Search](#) are available in Salesforce Help.
- Instructions to [define external data sources](#) are available in Salesforce Help.

Make sure that you [set up the Knowledge One Widget](#) for the Knowledge sidebar.

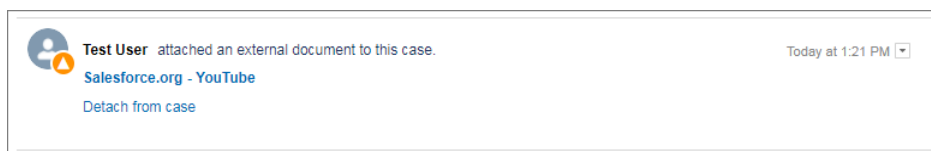
For users, the external data sources or search results appear in the Knowledge sidebar search results. Users can attach external documents to cases only if Chatter is enabled. Adding to the case takes only one click. Users see the same user interface as before, with the addition of the **Attach to Case** dropdown menu next to the external document name.



When the document is attached, it appears under the External Documents related list on the case.

External Documents			
Action	Title	Display Url	External Object
<a href="#">Detach</a>	Salesforce.org - YouTube	<a href="https://www.youtube.com/user/SalesforceFoundation">https://www.youtube.com/user/SalesforceFoundation</a>	Youtube1

A post to the case feed about the attachment is also added.



You can run reports on how many articles have external documents attached to them to identify whether service associates are using the feature. You can also monitor which external sources are making the most impact.

SEE ALSO:

[Salesforce Help: Report on External Documents Attached to Cases \(can be outdated or unavailable during release preview\)](#)

## Live Agent: Web Chat for Your Support Agents in Lightning Experience

Give your agents an enhanced chat experience in the Lightning Service Console. The agent chat window is more prominent in the console, and you can move it just how your agents like it. Past chats for contact records let you see a customer's previous chats with your company.

### IN THIS SECTION:

#### [Chat with Customers in Lightning Experience](#)

We captured the best of Live Agent and gave it a whole new look and feel in Lightning Experience. Agents get a larger chat window, so they have more room to use the chat features they know and love.

#### [Control the Placement and Height of the Agent Chat Window](#)

Whether you choose to put the agent chat window off to one side or keep it front and center, you can give your agents the productivity space of their dreams. This change applies to Lightning Experience only.

#### [Access All of Your Chat Transcripts in Lightning Experience](#)

Agents need to refer back to their work, whether they want to find information for a case they're working on or reminisce about a time that they brilliantly answered a customer's question. They can access the chat transcript object home in the Lightning Service Console by selecting Live Chat Transcripts from the item menu.

#### [Continue the Conversation with Past Chats for Repeat Customers](#)

Sometimes it takes a village to make sure that a customer is happy. Agents now have the context they need when handling recurring or follow-up issues with repeat customers using past chats. When a contact record is attached to the transcript, agents can look through previous chats. Agents can't see any records attached to the previous chats, but they can read the full transcripts. This change applies to Lightning Experience only.

#### [Help Agents Multitask with Chat Header Previews](#)

Previews give agents instant context so that they can jump in and out of their chats seamlessly. To help agents quickly differentiate between all their open chats, the first 100 characters of the customer's message appear in the chat header. This change applies to Lightning Experience only.

#### [Enhanced Toolbar for Chat Agents](#)

Some of your favorite Live Agent chat features have matured in their transition to Lightning Experience. File transfer, chat transfer, and flag raising use popovers with a slightly different process, so make sure that your support team understands what's different. These changes apply to Lightning Experience only.

#### [Feature Gaps for Live Agent in Lightning Experience](#)

The following feature gaps apply to Live Agent in Lightning Experience.

### EDITIONS

Available in: Salesforce Classic, Lightning Experience

Live Agent is available in: **Performance** Editions and in **Developer** Edition orgs that were created after June 14, 2012

Live Agent is available in: **Unlimited** Edition with the Service Cloud

Live Agent is available for an additional cost in: **Enterprise** and **Unlimited** Editions

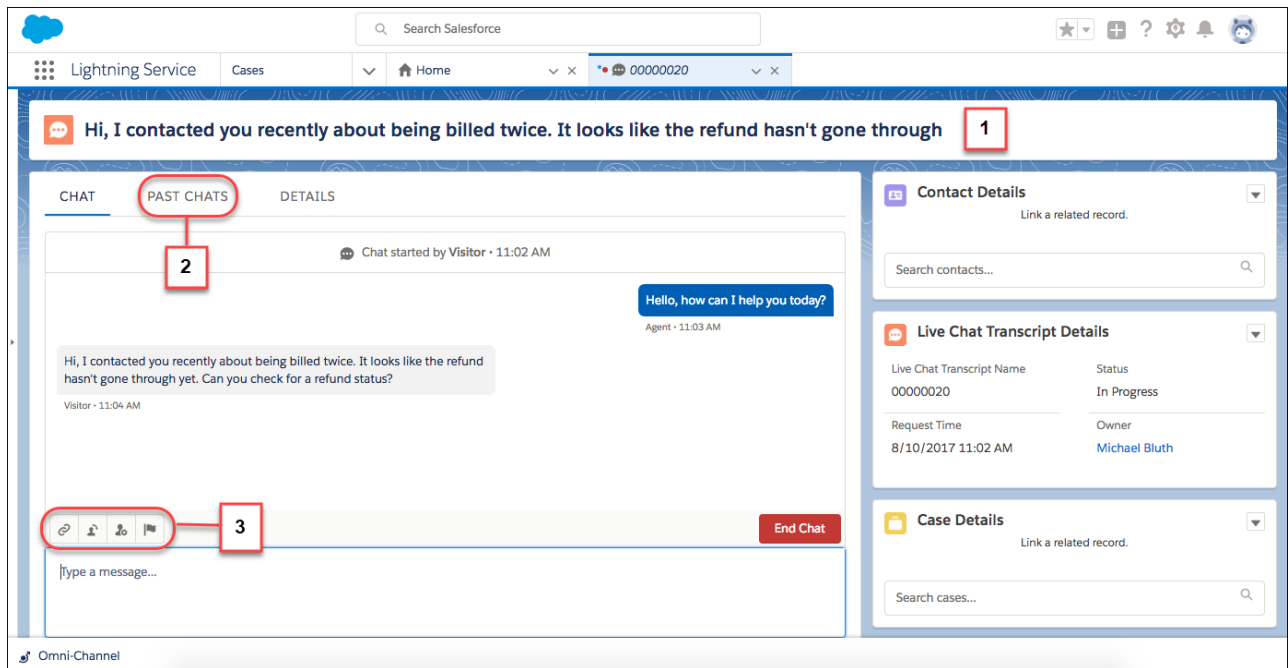
## Chat with Customers in Lightning Experience

We captured the best of Live Agent and gave it a whole new look and feel in Lightning Experience. Agents get a larger chat window, so they have more room to use the chat features they know and love.

You don't even have to regenerate your deployment code if you already use Omni-Channel routing for chats—simply head over to the Lightning App Manager and edit your Lightning console app. Add the Omni-Channel utility and then add Live Chat Transcripts to your selected items. Make sure you have a chat button that uses Omni-Channel routing, because Live Agent routing isn't supported in Lightning Experience.

## Looking Sharp in the Console

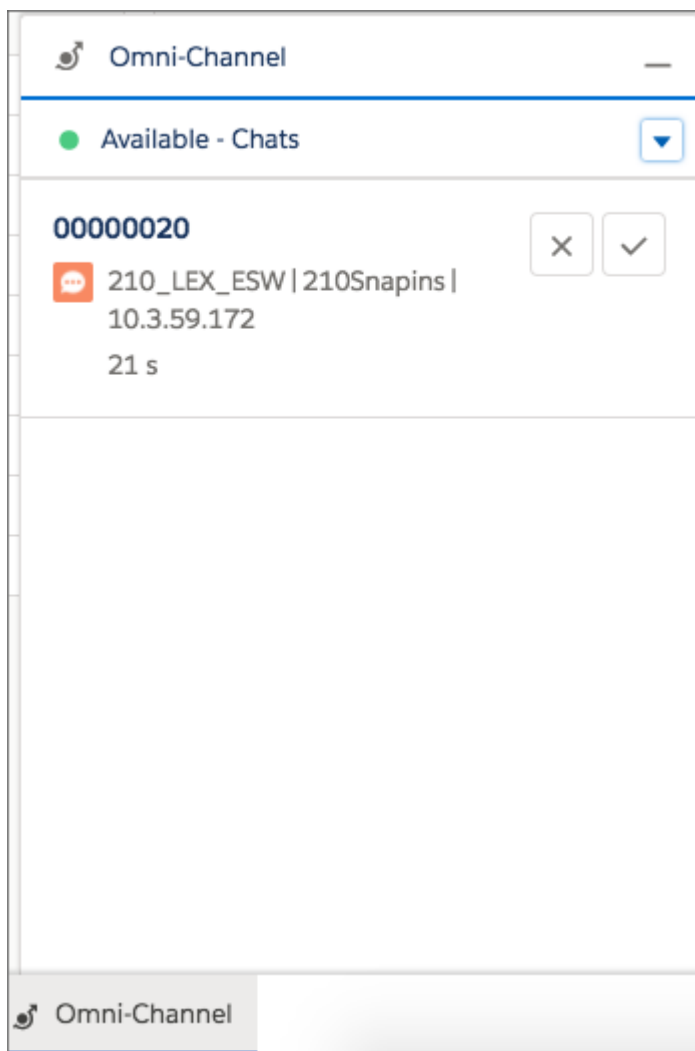
Gone are the days when chat was delegated to the top corner of the console.



By default, the agent chat window is large and in charge in the center of the agent's view, complete with a chat header to help agents differentiate between chats (1). You also get past chats, which lets your agents view previous chats with a repeat customer (2). Agents can also find their chat features above the text box, right where they should be (3).

## Ping! New Notifications and System Messages

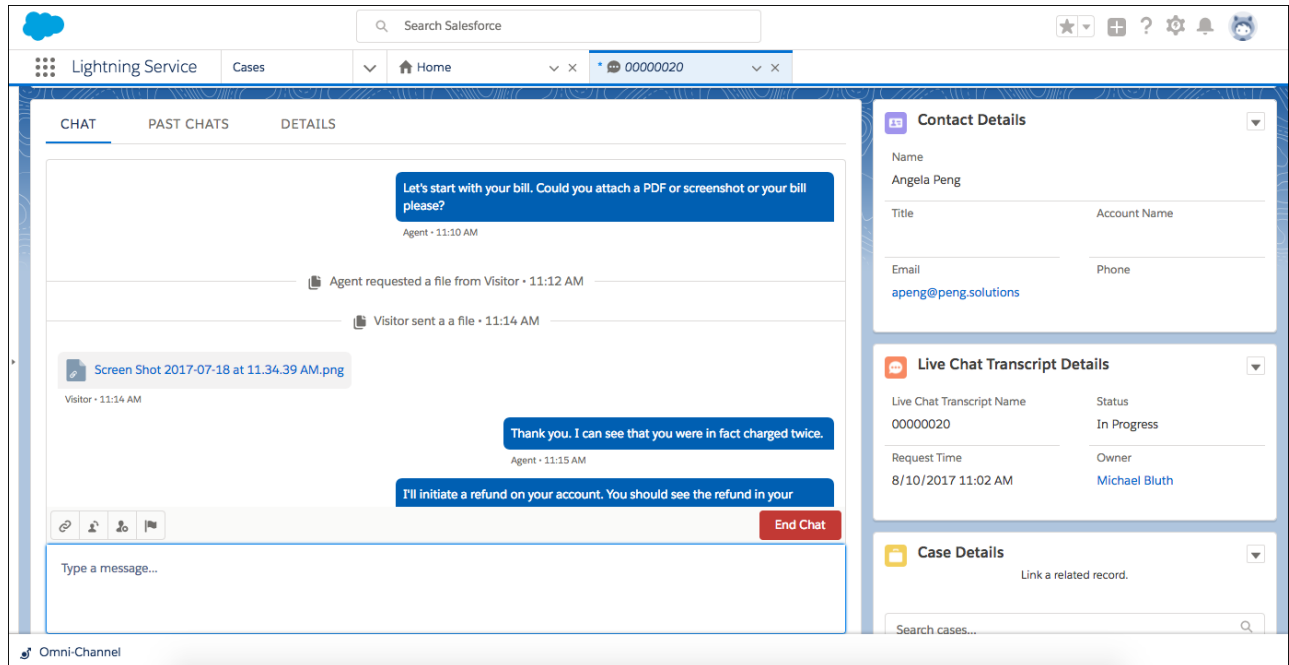
Notifications help agents multitask better in Lightning Experience, whether they're handling one chat or many. Chat requests appear in the Omni-Channel utility in the Lightning Service Console.



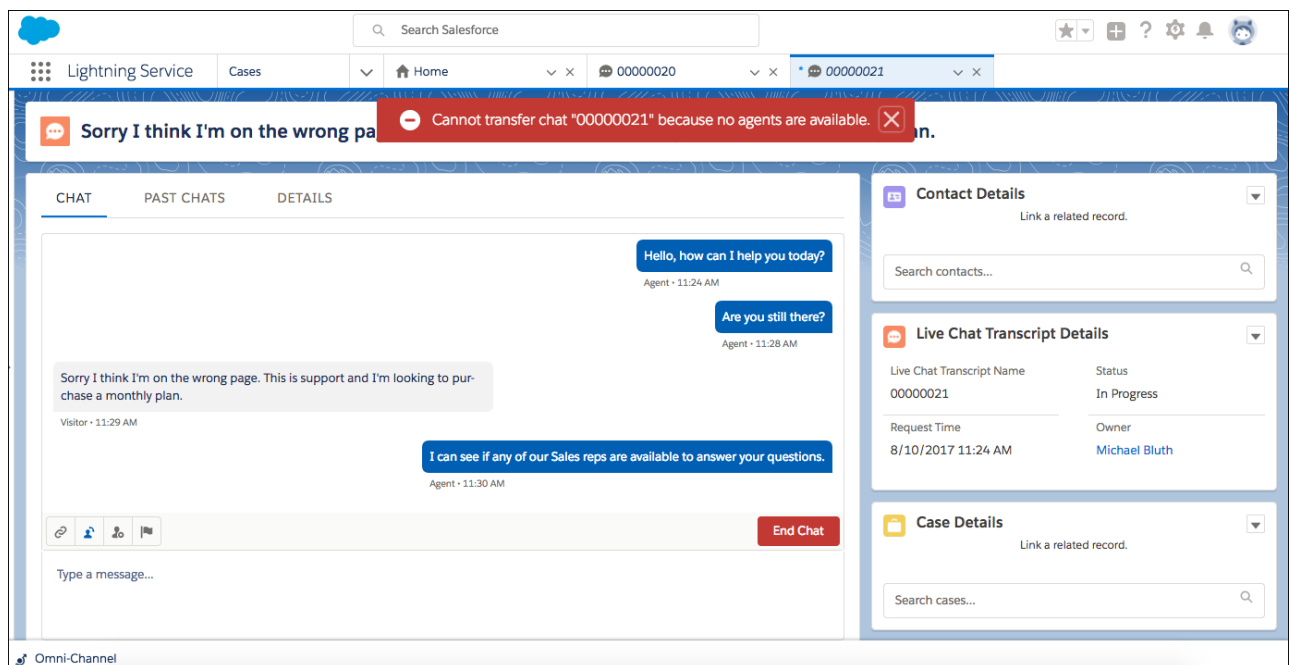
When the chat's in progress, notifications show up in the agent's console a bit differently than in Salesforce Classic. Whether a chat agent is looking at the chat tab or not, the chat tab is highlighted when there are unread chats.



System notifications appear in the chat transcript.



In-progress actions are clearly displayed by chat feature. Agents can close the popovers without canceling the action. Confirmation messages at the top of the screen let agents know exactly what's going on.



SEE ALSO:

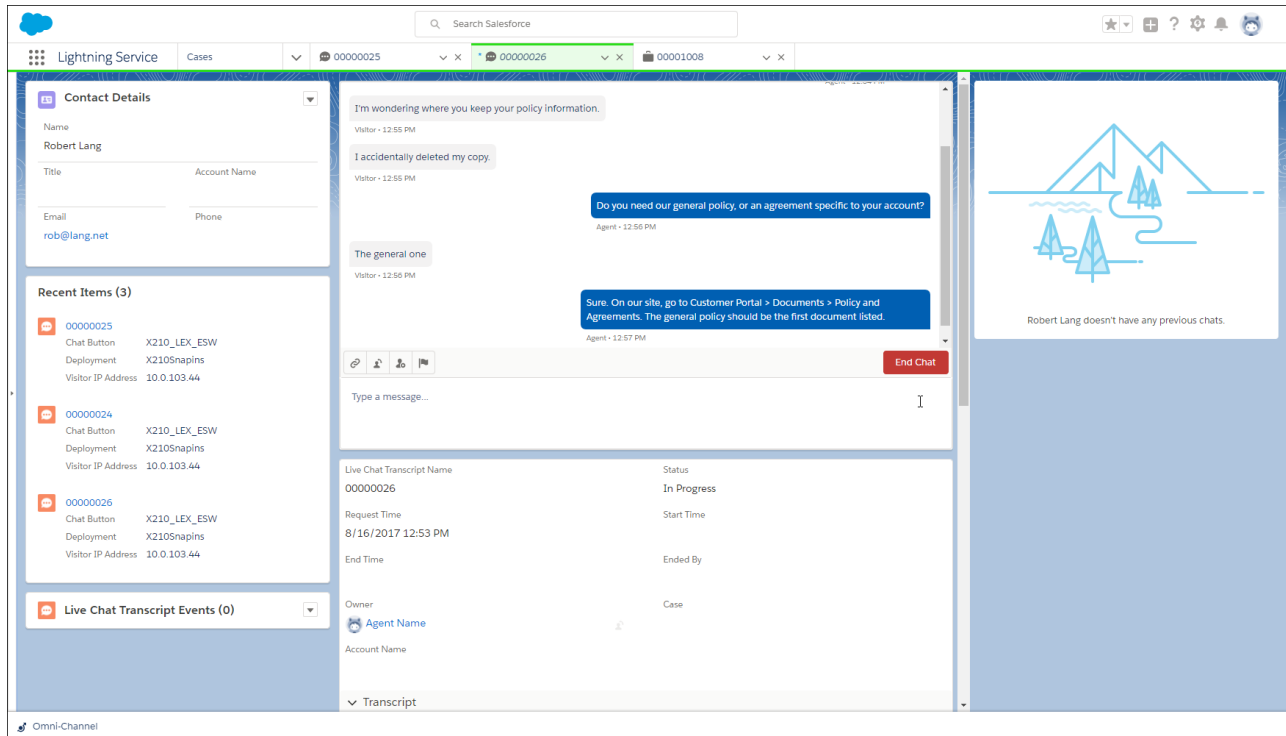
[Route Work to Agents in Lightning Experience \(Generally Available\)](#)

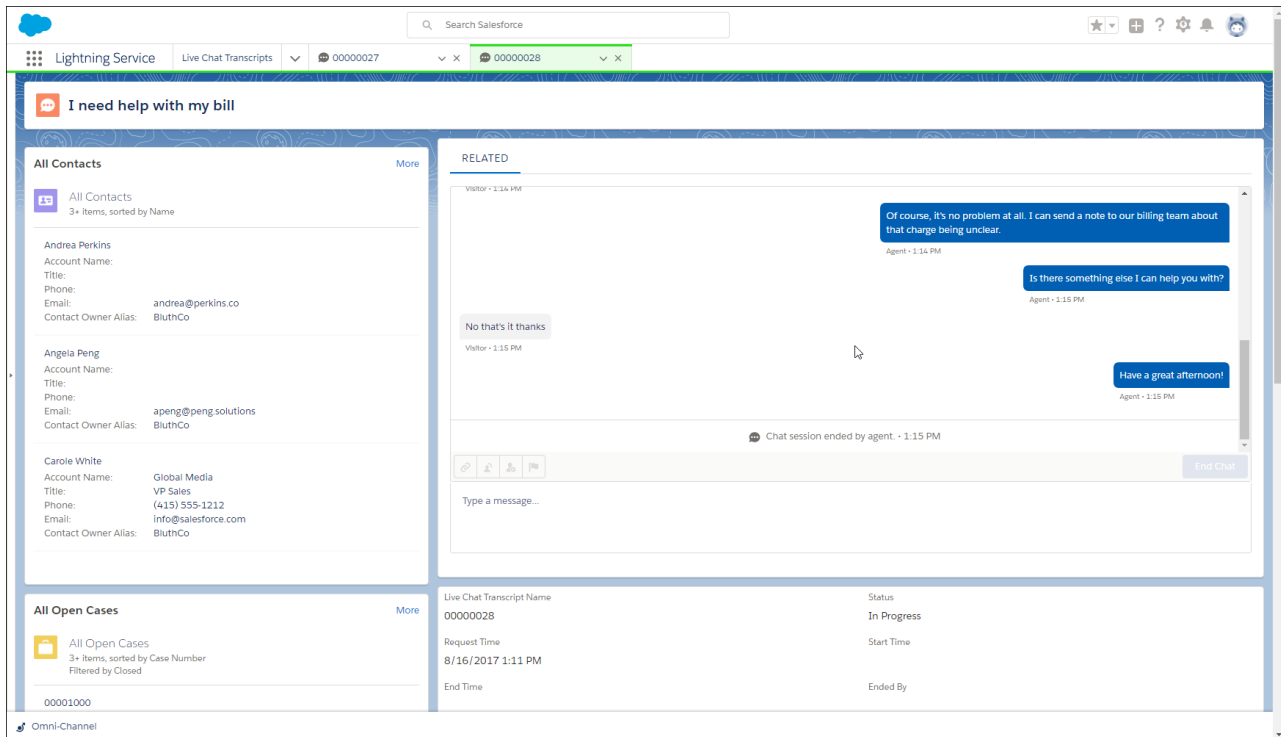
## Control the Placement and Height of the Agent Chat Window

Whether you choose to put the agent chat window off to one side or keep it front and center, you can give your agents the productivity space of their dreams. This change applies to Lightning Experience only.

Place and size the Chat Body component however you like in the console by opening a chat transcript and editing the live page. Or, you can create a new custom record page in Lightning App Builder. You can place the Chat Body component wherever you want on the page, letting you control where agents chat and what components are nearby. The default height is 500px, but you can set it to whatever will fit your agents' screens best.

Check out these examples of custom record pages using the Live Chat Transcript object.

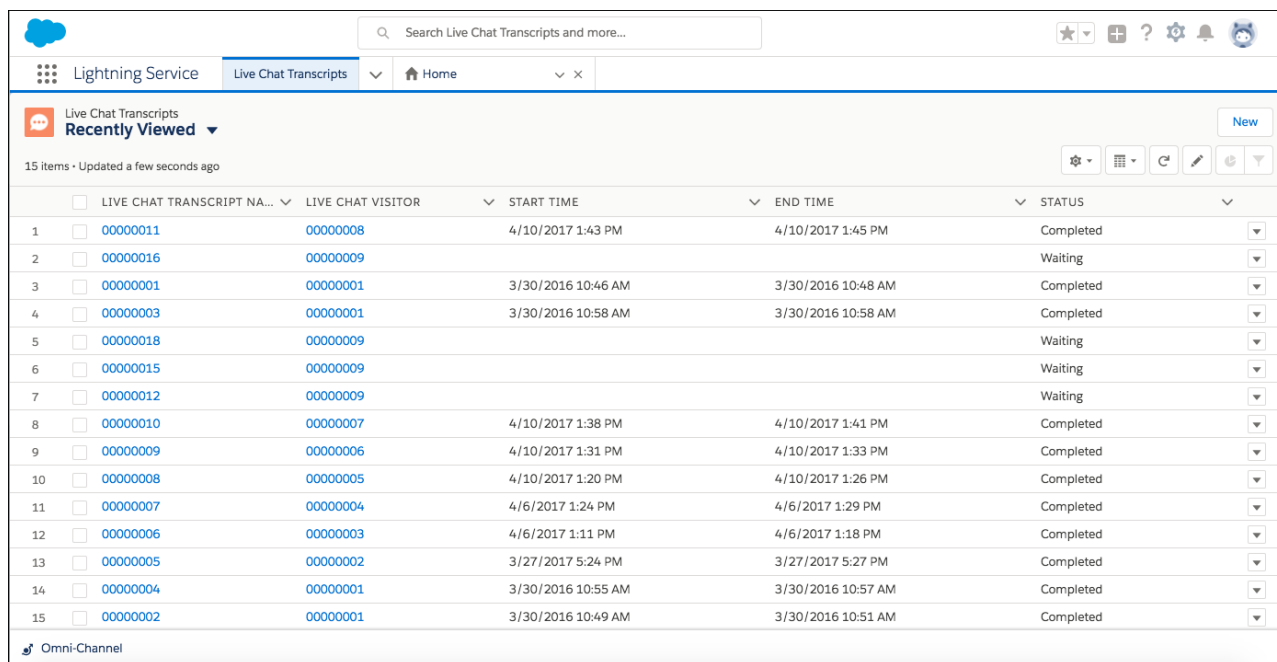




## Access All of Your Chat Transcripts in Lightning Experience

Agents need to refer back to their work, whether they want to find information for a case they're working on or reminisce about a time that they brilliantly answered a customer's question. They can access the chat transcript object home in the Lightning Service Console by selecting Live Chat Transcripts from the item menu.

The Live Chat Transcripts object home displays a list view of chat transcripts. The default view is Recently Viewed, so agents have quick access to their most recent chats.



	LIVE CHAT TRANSCRIPT NA...	LIVE CHAT VISITOR	START TIME	END TIME	STATUS
1	00000011	00000008	4/10/2017 1:43 PM	4/10/2017 1:45 PM	Completed
2	00000016	00000009			Waiting
3	00000001	00000001	3/30/2016 10:46 AM	3/30/2016 10:48 AM	Completed
4	00000003	00000001	3/30/2016 10:58 AM	3/30/2016 10:58 AM	Completed
5	00000018	00000009			Waiting
6	00000015	00000009			Waiting
7	00000012	00000009			Waiting
8	00000010	00000007	4/10/2017 1:38 PM	4/10/2017 1:41 PM	Completed
9	00000009	00000006	4/10/2017 1:31 PM	4/10/2017 1:33 PM	Completed
10	00000008	00000005	4/10/2017 1:20 PM	4/10/2017 1:26 PM	Completed
11	00000007	00000004	4/6/2017 1:24 PM	4/6/2017 1:29 PM	Completed
12	00000006	00000003	4/6/2017 1:11 PM	4/6/2017 1:18 PM	Completed
13	00000005	00000002	3/27/2017 5:24 PM	3/27/2017 5:27 PM	Completed
14	00000004	00000001	3/30/2016 10:55 AM	3/30/2016 10:57 AM	Completed
15	00000002	00000001	3/30/2016 10:49 AM	3/30/2016 10:51 AM	Completed

Omni-Channel

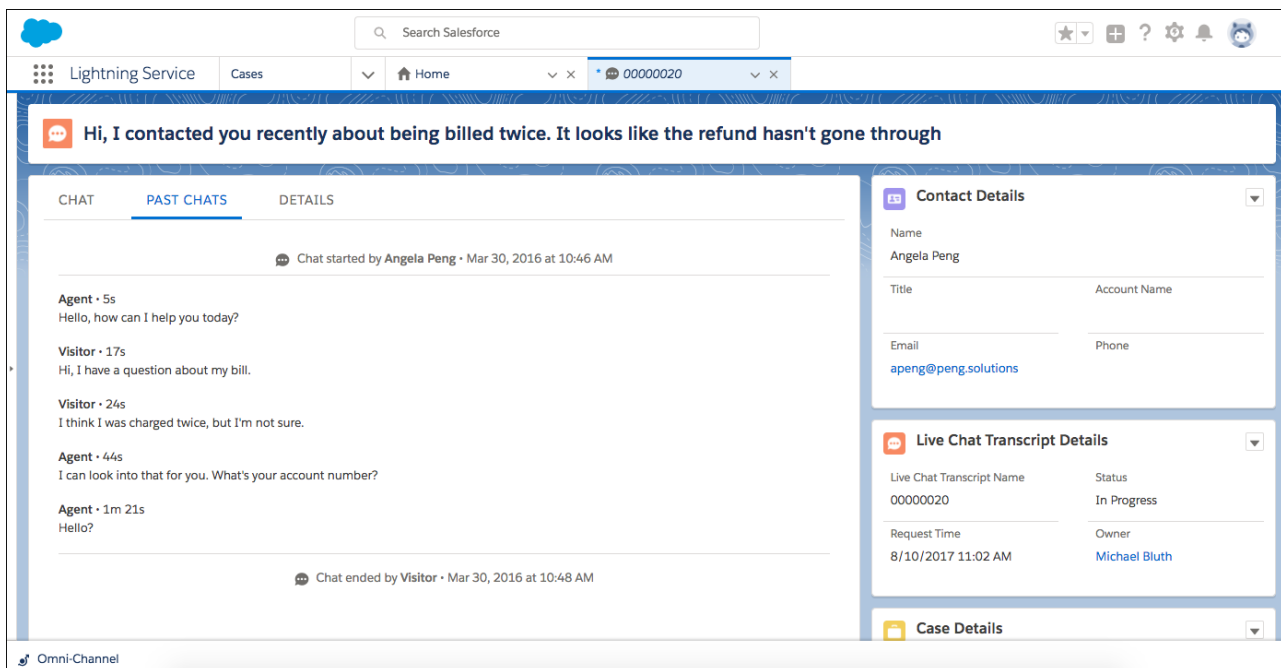
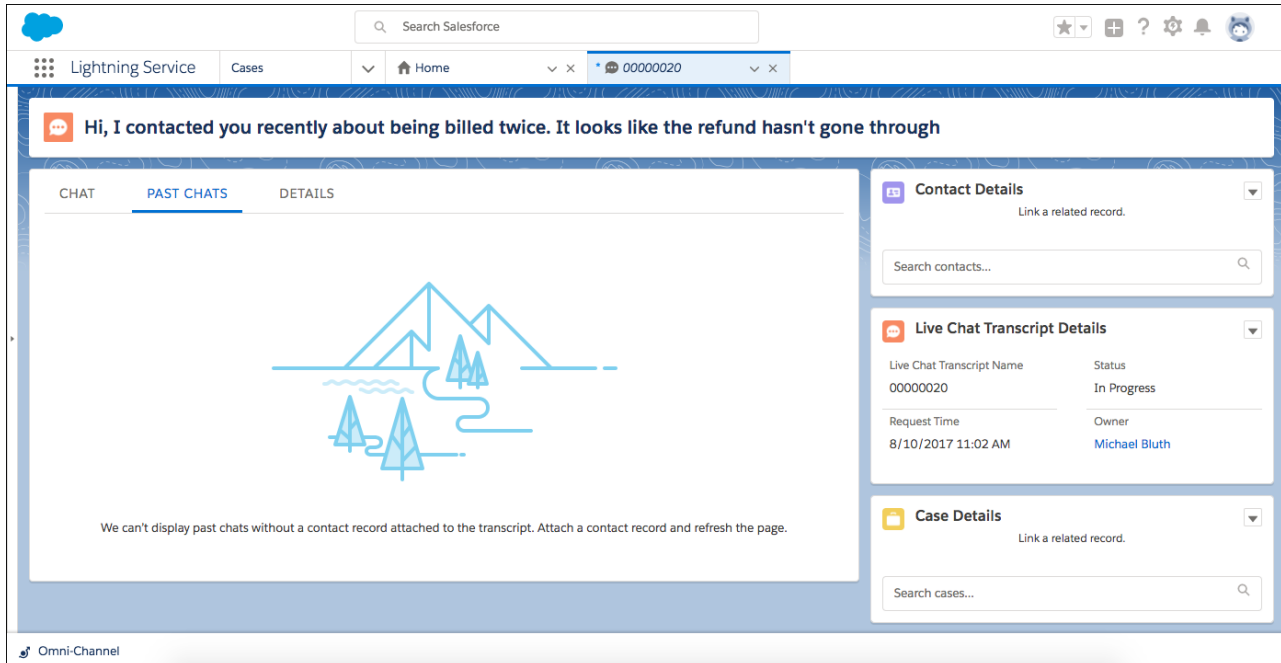
You can create more list views for agents like In Progress or Waiting. Keep in mind that agents can only see the chat transcripts that they have access to.

## Continue the Conversation with Past Chats for Repeat Customers

Sometimes it takes a village to make sure that a customer is happy. Agents now have the context they need when handling recurring or follow-up issues with repeat customers using past chats. When a contact record is attached to the transcript, agents can look through previous chats. Agents can't see any records attached to the previous chats, but they can read the full transcripts. This change applies to Lightning Experience only.

Your default transcript record home has past chats already included as a tab component with the chat body. You can easily place the component directly on the page if your agents want to keep it visible all the time.

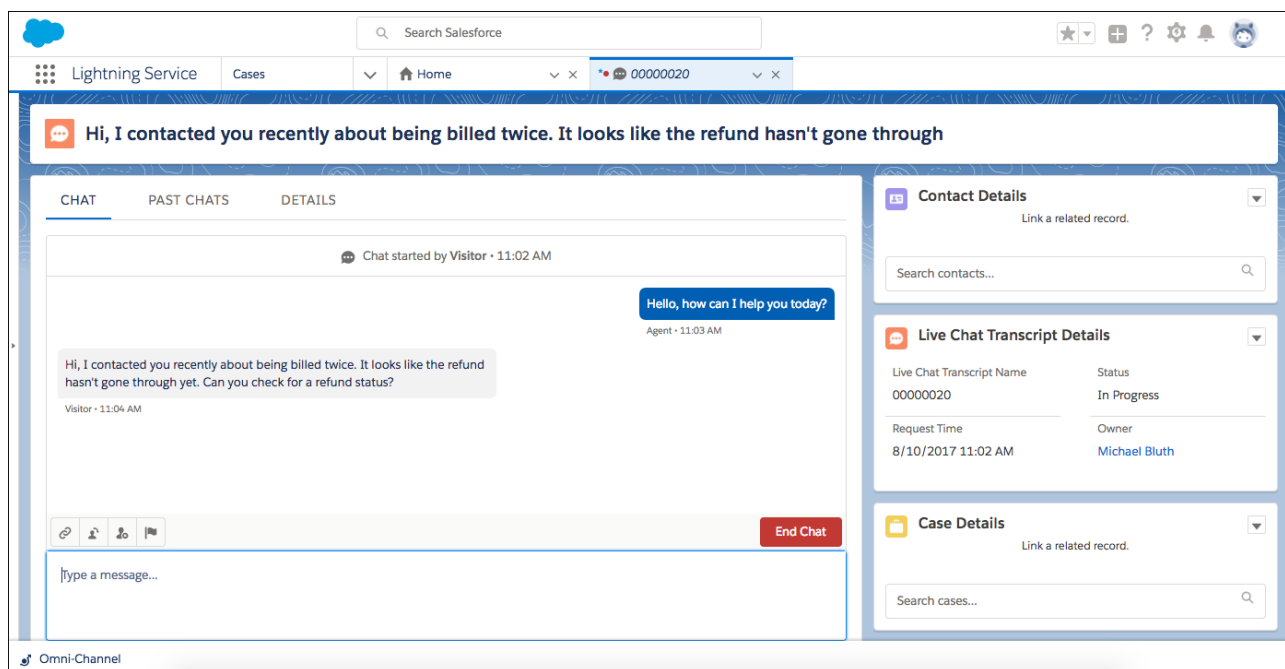
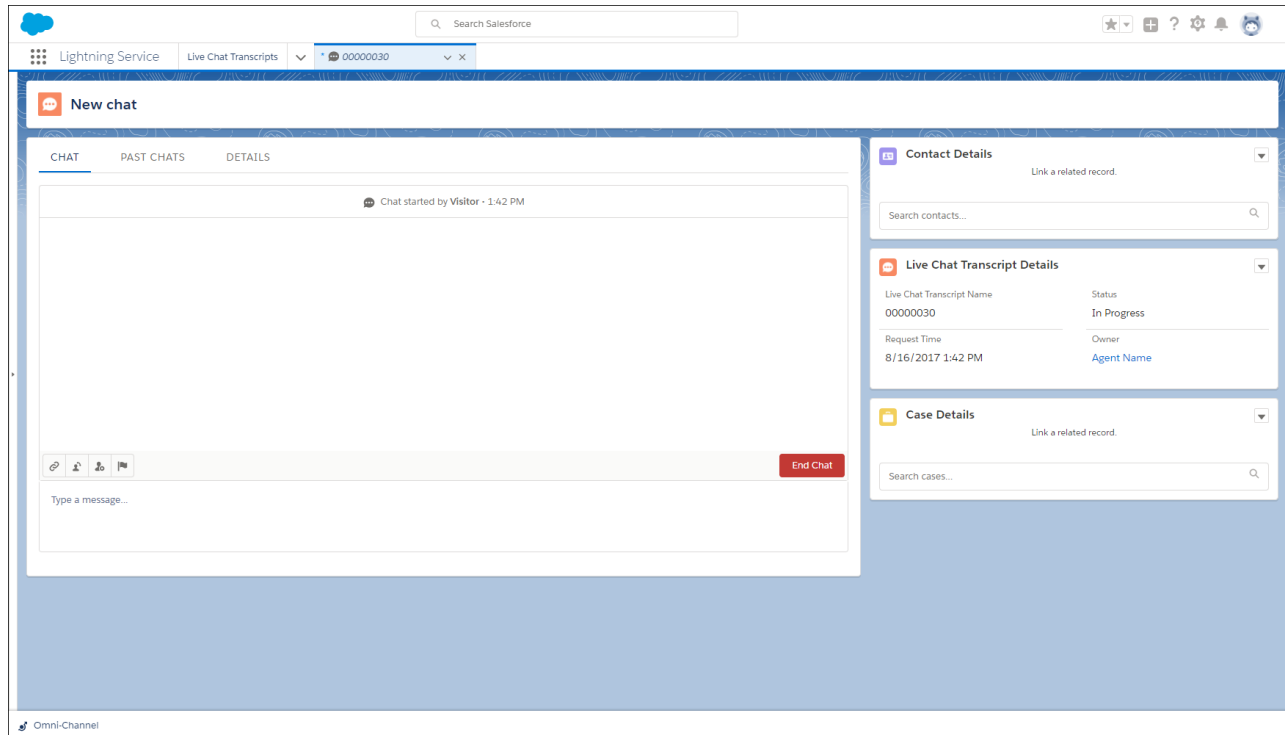




## Help Agents Multitask with Chat Header Previews

Previews give agents instant context so that they can jump in and out of their chats seamlessly. To help agents quickly differentiate between all their open chats, the first 100 characters of the customer's message appear in the chat header. This change applies to Lightning Experience only.

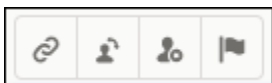
When the customer hasn't sent any messages yet, the chat header doesn't have a subject. As soon as the customer says hello, the header includes the message.



## Enhanced Toolbar for Chat Agents

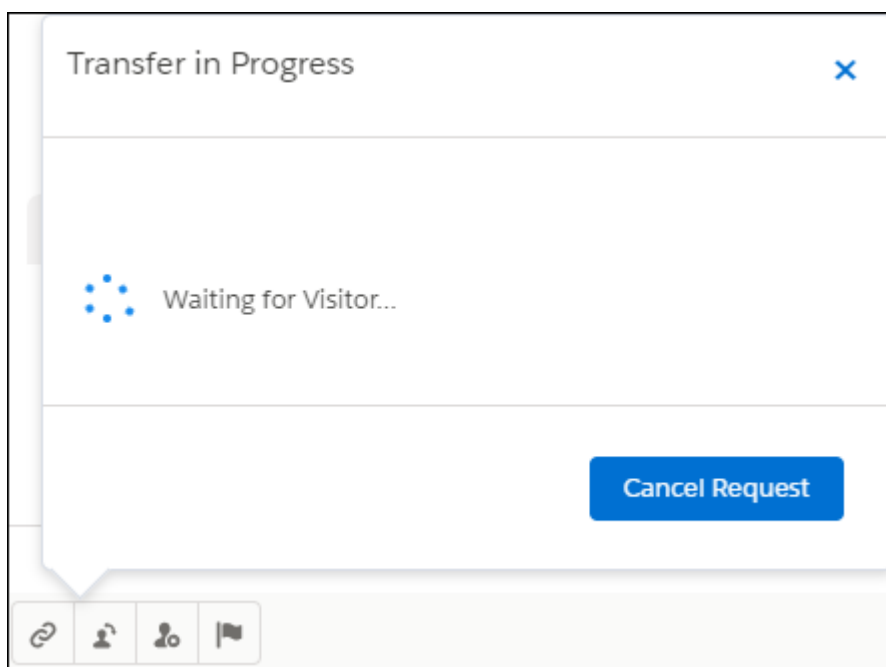
Some of your favorite Live Agent chat features have matured in their transition to Lightning Experience. File transfer, chat transfer, and flag raising use popovers with a slightly different process, so make sure that your support team understands what's different. These changes apply to Lightning Experience only.

The agent toolbar holds all the chat features your agents know and love: File transfer, chat transfer, visitor blocking, and flag raising.



### Popovers Immerse Agents in Live Agent Features

In Lightning Experience, popovers include waiting screens when the agent is waiting for the visitor or a team member to respond.

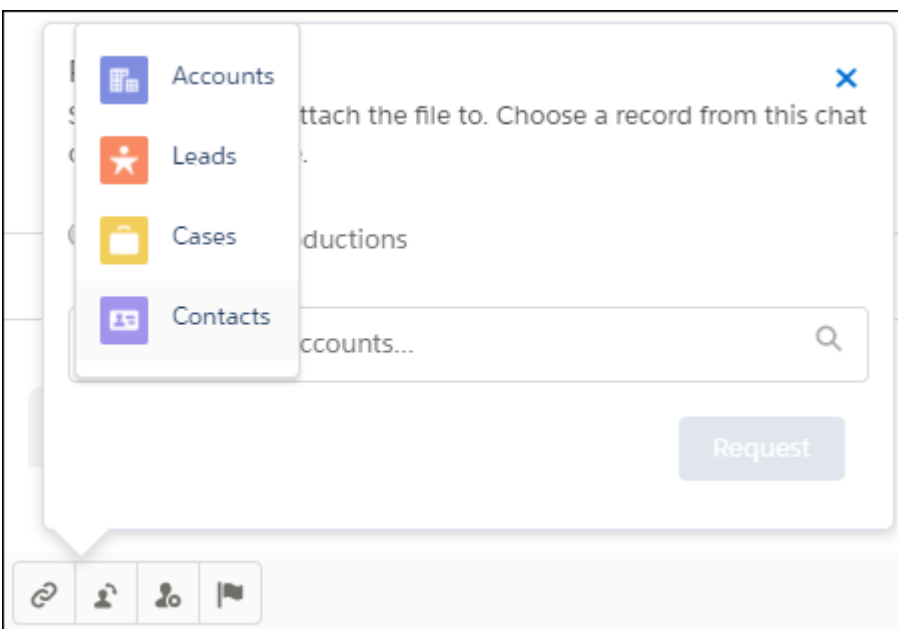
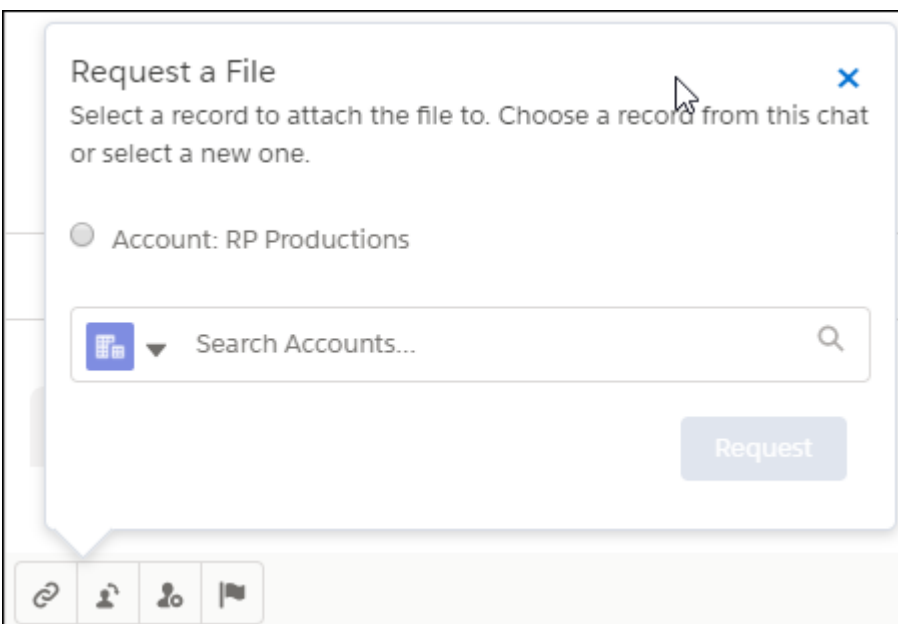


An agent can close a popover without canceling the process. Agents can use the close button or click the icon again to hide the popover. To cancel the action, they can reopen the popover and use the cancel button.

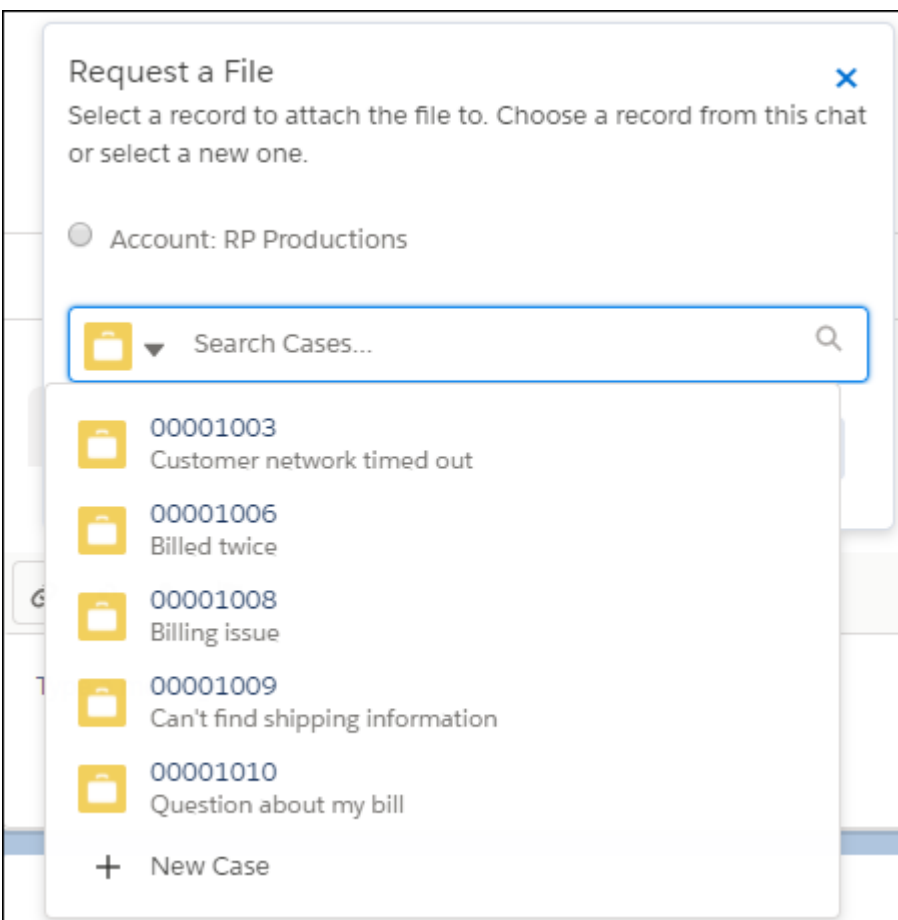
### Changes in File Transfer

When selecting or creating a record to attach to a transcript, agents use only one icon in the toolbar.

Currently attached records are displayed, or the agent can use the lookup field to find a different record. To use the lookup field, the agent selects an object type to filter the search.



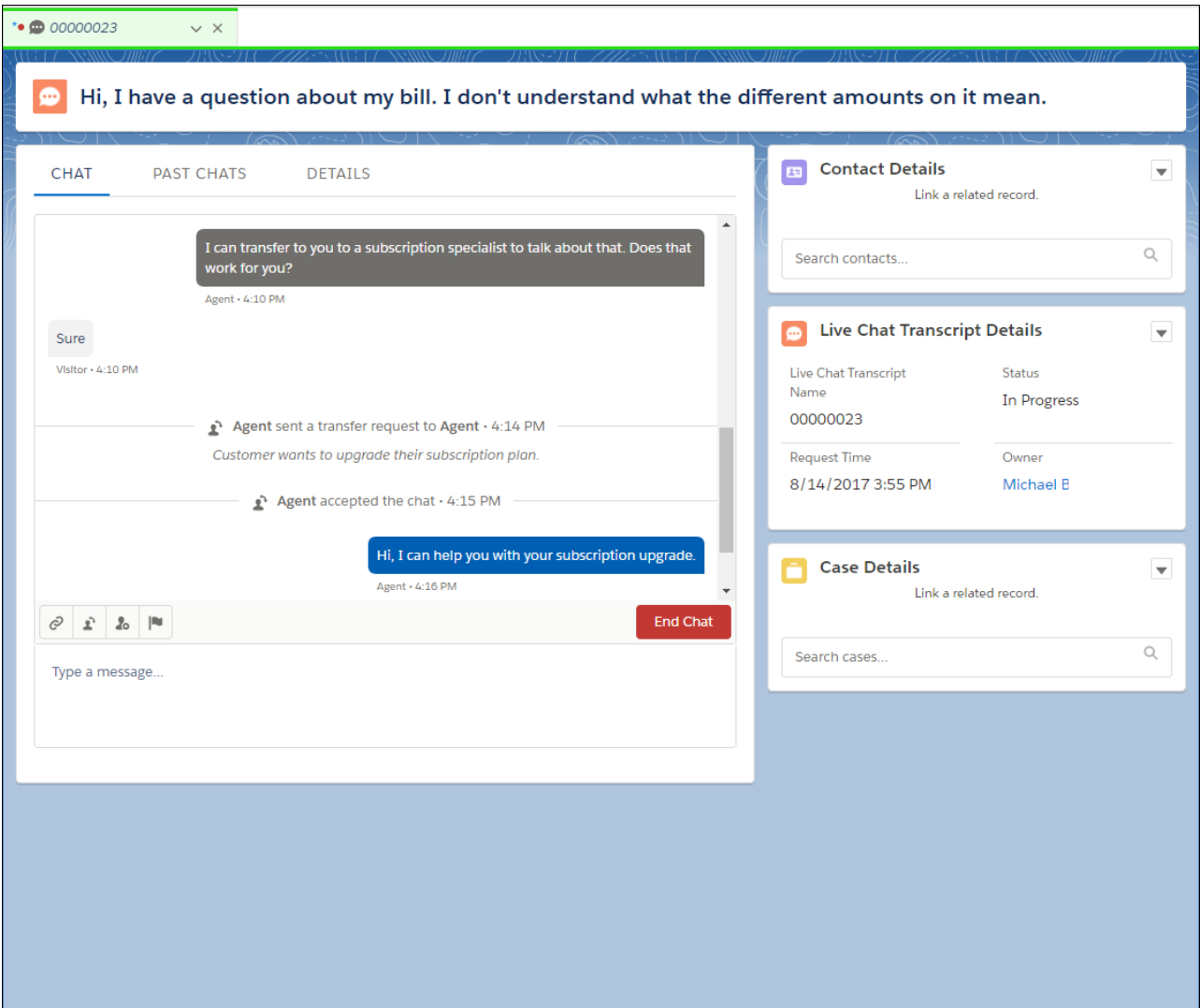
Then the agent can search for a record of that type or create a new one.



The uploaded file is displayed as a link in the chat. When the agent clicks the link, the file is downloaded based on the browser settings. Files are attached to records in the same way as in Salesforce Classic, using Attachments instead of Salesforce Files. Agents can find the file from the Files related list on the related record. File previews aren't available.

### Changes in Chat Transfer

The receiving agent can't preview the message from the first agent in Omni-Channel. Agents can view the message only after accepting the transfer. The receiving agent can see the transcript with the first agent, just like in Salesforce Classic. But, the chat bubbles from the previous agent are displayed in a different color in Lightning Experience, which helps the receiving agent navigate the chat.



## Feature Gaps for Live Agent in Lightning Experience

The following feature gaps apply to Live Agent in Lightning Experience.

- You must route chats with Omni-Channel to chat in Lightning Experience. Make sure that you have Omni-Channel ready for Lightning Experience and have set up your chat button to route with Omni-Channel. Considerations for Omni-Channel routing for chats apply.
- Live Agent settings, including enabling Live Agent and Omni-Channel routing, are available only in Salesforce Classic.
- Chat features aren't available in Omni-Channel Supervisor. Support supervisors can use Live Agent Supervisor in Salesforce Classic for chat monitoring features, even when agents are using Omni-Channel routing. Create a skill for agents handling chats routed with Omni-Channel, and their chats appear in Live Agent Supervisor alongside chats routed with Live Agent routing.
- You can use the Lightning Knowledge component only with cases, so you can't use it with Live Agent in Lightning Experience. For Knowledge integration with chats, use Salesforce Classic.
- Console methods for Live Agent aren't supported with Omni-Channel routing or with Lightning Experience.
- Quick text isn't supported for Live Agent in Lightning Experience.
- File previewing isn't available with file transfer in Lightning Experience. Instead, files are downloaded to the agent's computer.

- Agents can encounter Unsupported Item tabs when opening Live Agent records that aren't yet supported in Lightning Experience. They can view these records in Salesforce Classic.
- When chatting with customers, we recommend that you open Live Chat Transcripts as primary tabs, not subtabs. Don't set custom navigation rules for Live Chat Transcripts if you plan to chat.

## Omni-Channel: Improvements in Lightning Experience and Salesforce Classic

The Omni-Channel utility in the Lightning Service Console is now generally available. Use Omni-Channel Supervisor in Lightning Experience (Beta). Salesforce Classic enhancements include support for assigning agents to both queues in Omni-Channel and queues using External Routing (Beta).

Available in: Salesforce Classic, Lightning Experience

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Omni-Channel is available in: **Professional, Enterprise, Performance, Unlimited**, and **Developer** Editions

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### IN THIS SECTION:

#### [Route Work to Agents in Lightning Experience \(Generally Available\)](#)

Support agents can use the Omni-Channel utility in the Lightning Service Console to change their presence status and accept and decline work requests. Live Agent chats and active time tracking are now available in Lightning Experience.

#### [Route Live Agent Chats with Omni-Channel in Lightning Experience](#)

Your chat agents can join the fun in the Lightning Service Console. If you already use Omni-Channel routing for chats, head over to the Lightning App Manager and edit your Lightning Service Console app. Add the Omni-Channel utility and then add Live Chat Transcripts to your selected items. You don't need to change your deployment code as long as you already have a chat button that uses Omni-Channel routing.

#### [Monitor Your Support Center with Omni-Channel Supervisor in Lightning Experience \(Beta\)](#)

Omni-Channel Supervisor updates continuously to reflect the latest data, so you always know how your support center's doing. Information about your Omni-Channel agents, queues, and work is streamed live into the panel. Yes, you read that right: live. You see waiting times, open work, and more in real time.

#### [Let Supervisors See Only What Matters in Omni-Channel Supervisor \(Beta\)](#)

Your supervisors don't need to see every agent in the entire call center in the agent views. Get rid of the noise! Create supervisor configurations that filter the agent views to show the appropriate groups of agents for your supervisor teams. Contact Salesforce to enable supervisor configurations. This change applies to both Lightning Experience and Salesforce Classic.

#### [Use an External Routing Implementation with Omni-Channel \(Beta\)](#)

Multiple routing options, one console. You can now integrate external routing with your current Omni-Channel implementation. Previously, you couldn't assign agents to queues of both types, but now your agents can handle work from Omni-Channel and your external implementation. Contact Salesforce to enable External Routing for Omni-Channel. This change applies to Salesforce Classic only.

#### [Get More Done with Raised Limits for Omni-Channel](#)

We raised the maximum queued work items from 5,000 per hour to 15,000 per hour. Three cheers for three times the productivity! This change applies to both Lightning Experience and Salesforce Classic.

[Use Omni-Channel Methods in the Console API and a New Component in Lightning Experience \(Beta\)](#)

The console methods you already use in Salesforce Classic are available for you to use in Lightning Experience. Console events aren't available in Lightning Experience. There's also a new Lightning component `lightning:omniToolkitAPI` that provides access to the API for the Omni-Channel toolkit.

[Keep Waiting Customers at the Front of the Line with the Custom Requested Datetime Field](#)

Retain the date and time of a work item's initial request with the Custom Requested Datetime field on the new `PendingServiceRouting` object. Rerouted work items use the date and time of the initial request rather than the rerouting date and time. If the field is blank, the item is rerouted using the rerouted date and time. You can populate this field using the API. This change applies to both Lightning Experience and Salesforce Classic.

[Delete User Presence Statuses to Make More Room in Your Org](#)

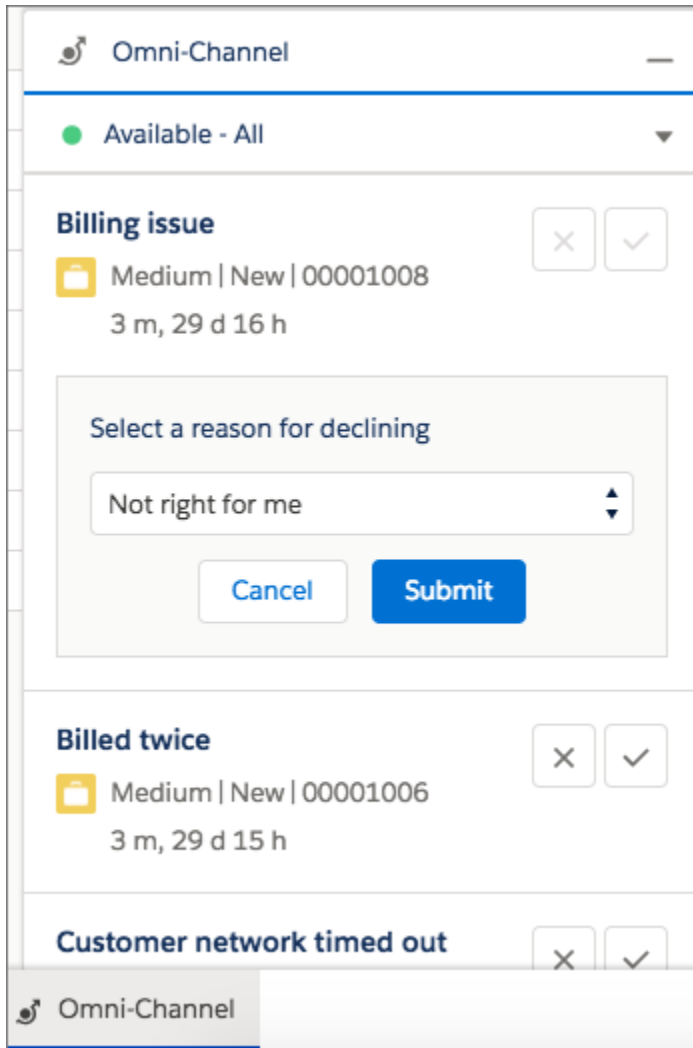
Use version 41.0 of the SOAP API to delete the user presence statuses you don't need. If you change your mind, you have 15 days to recover your deleted statuses before they're gone forever. This change applies to both Lightning Experience and Salesforce Classic.

## Route Work to Agents in Lightning Experience (Generally Available)

Support agents can use the Omni-Channel utility in the Lightning Service Console to change their presence status and accept and decline work requests. Live Agent chats and active time tracking are now available in Lightning Experience.

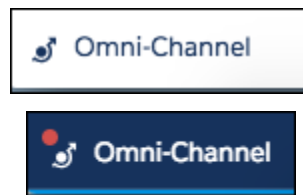
To use Omni-Channel in Lightning Experience, you must have Omni-Channel enabled in your org. Then add the Omni-Channel utility to a Lightning Service Console app using the App Manager.





Visual Omni-Channel notifications are different in Lightning Experience. The minimized utility changes color to let the agent know there's a new request. The number of requests isn't displayed in the minimized utility.

#### Omni-Channel utility with and without requests

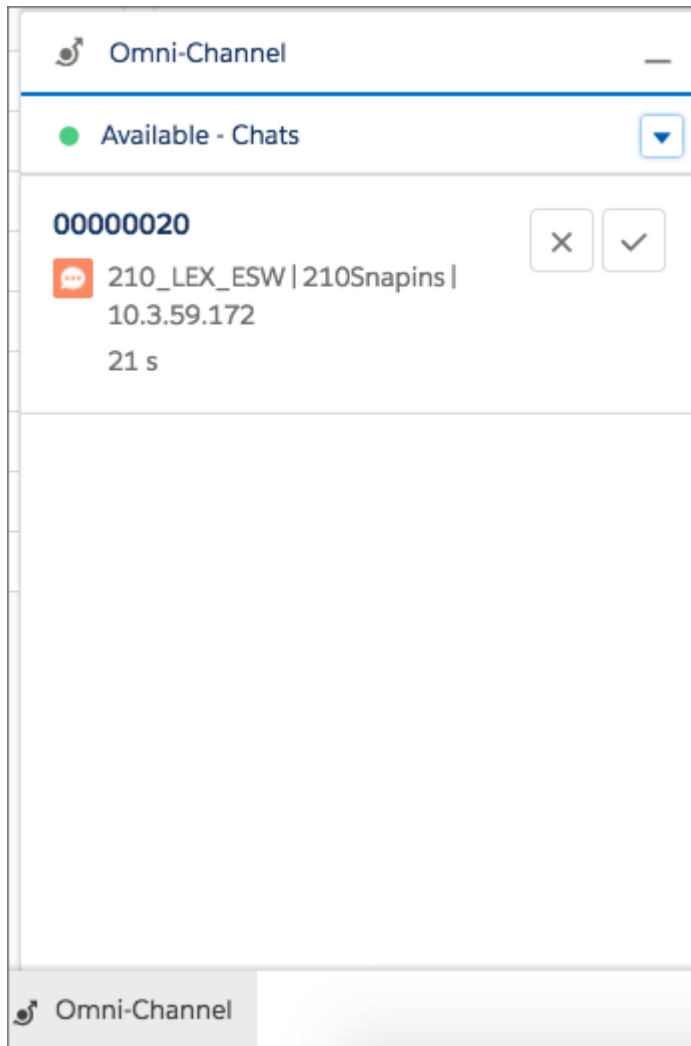


Keep the following considerations in mind when using Omni-Channel in Lightning Experience.

- Omni-Channel settings, including enabling Omni-Channel, are available only in Salesforce Classic.
- SOS isn't supported in Lightning Experience, so SOS calls can't be routed with Omni-Channel in the Lightning Service Console. Use Salesforce Classic.
- External Routing (Beta) isn't supported in Lightning Experience.

## Route Live Agent Chats with Omni-Channel in Lightning Experience

Your chat agents can join the fun in the Lightning Service Console. If you already use Omni-Channel routing for chats, head over to the Lightning App Manager and edit your Lightning Service Console app. Add the Omni-Channel utility and then add Live Chat Transcripts to your selected items. You don't need to change your deployment code as long as you already have a chat button that uses Omni-Channel routing.




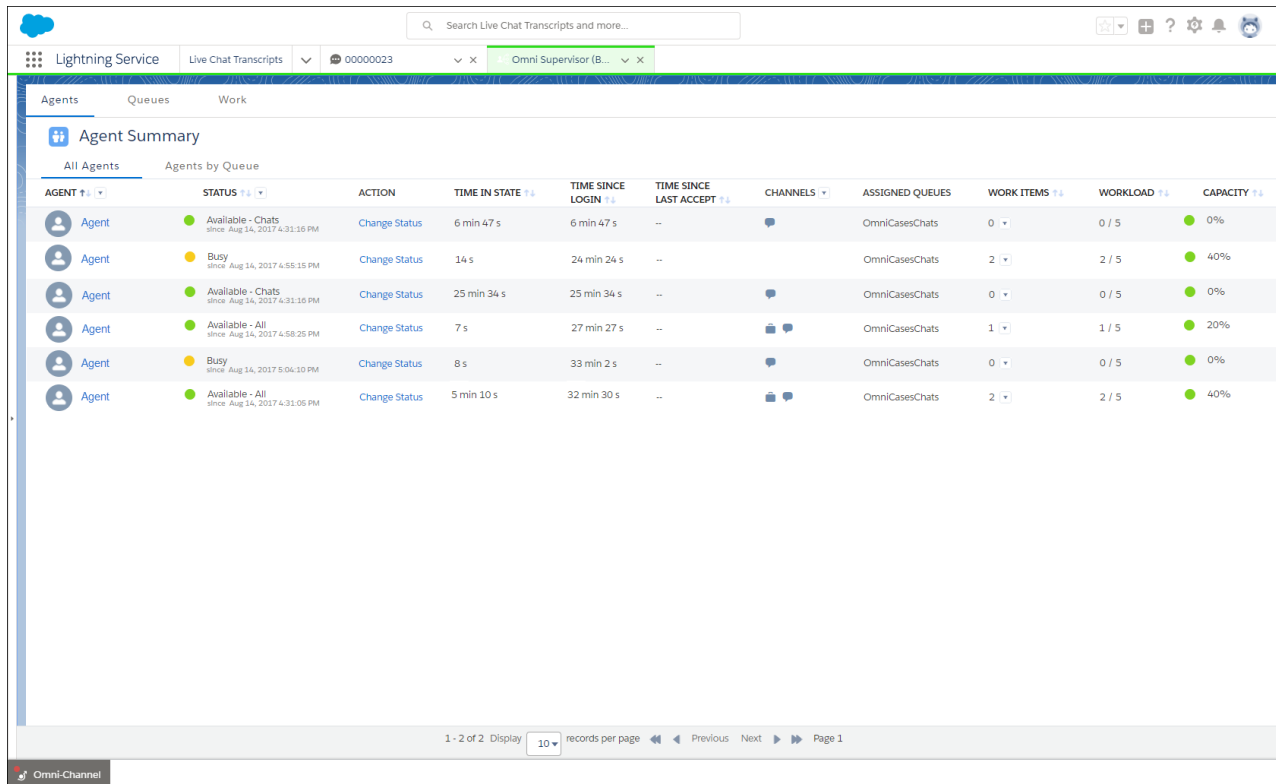
SEE ALSO:

[Chat with Customers in Lightning Experience](#)

## Monitor Your Support Center with Omni-Channel Supervisor in Lightning Experience (Beta)

Omni-Channel Supervisor updates continuously to reflect the latest data, so you always know how your support center's doing. Information about your Omni-Channel agents, queues, and work is streamed live into the panel. Yes, you read that right: live. You see waiting times, open work, and more in real time.

 **Note:** This release contains a beta version of Omni-Channel Supervisor in Lightning Experience, which means it's a high-quality feature with known limitations. Omni-Channel Supervisor in Lightning Experience isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.



The screenshot shows the Lightning Service Console interface. At the top, there's a search bar and tabs for 'Lightning Service', 'Live Chat Transcripts', and 'Omni Supervisor (Beta)'. Below the tabs, there's a navigation bar with 'Agents', 'Queues', and 'Work'. The main content area is titled 'Agent Summary' and shows a table of agent details. The table has columns for Agent, Status, Action, Time in State, Time since Login, Time since Last Accept, Channels, Assigned Queues, Work Items, Workload, and Capacity. There are 6 agents listed, each with a status indicator (green for Available, yellow for Busy) and a 'Change Status' button. The bottom of the console shows a pagination bar with '1 - 2 of 2' records and a 'Display 10 records per page' option.

AGENT	STATUS	ACTION	TIME IN STATE	TIME SINCE LOGIN	TIME SINCE LAST ACCEPT	CHANNELS	ASSIGNED QUEUES	WORK ITEMS	WORKLOAD	CAPACITY
Agent	Available - Chats	Change Status	6 min 47 s	6 min 47 s	--		OmniCasesChats	0 / 5	0 / 5	0%
Agent	Busy	Change Status	14 s	24 min 24 s	--		OmniCasesChats	2 / 5	2 / 5	40%
Agent	Available - Chats	Change Status	25 min 34 s	25 min 34 s	--		OmniCasesChats	0 / 5	0 / 5	0%
Agent	Available - All	Change Status	7 s	27 min 27 s	--		OmniCasesChats	1 / 5	1 / 5	20%
Agent	Busy	Change Status	8 s	33 min 2 s	--		OmniCasesChats	0 / 5	0 / 5	0%
Agent	Available - All	Change Status	5 min 10 s	32 min 30 s	--		OmniCasesChats	2 / 5	2 / 5	40%


To give all this insight to your supervisors, add Omni-Channel Supervisor to your Lightning Service Console as a selected item, then make sure your supervisors have access to it.

Keep the following considerations in mind when using Omni-Channel Supervisor in Lightning Experience (Beta).

- Omni-Channel settings, including settings for Omni-Channel Supervisor, are available only in Salesforce Classic.
- Hovering in the agent timeline isn't supported in Lightning Experience.
- Live Agent supervisor features aren't available in Omni-Channel Supervisor. Support supervisors can use Live Agent Supervisor in Salesforce Classic for chat monitoring features, even when agents are using Omni-Channel routing. Create a skill for agents handling chats routed with Omni-Channel. Their chats then appear in Live Agent Supervisor alongside chats routed with Live Agent routing.

## Let Supervisors See Only What Matters in Omni-Channel Supervisor (Beta)

Your supervisors don't need to see every agent in the entire call center in the agent views. Get rid of the noise! Create supervisor configurations that filter the agent views to show the appropriate groups of agents for your supervisor teams. Contact Salesforce to enable supervisor configurations. This change applies to both Lightning Experience and Salesforce Classic.

 **Note:** This release contains a beta version of Omni-Channel Supervisor configurations, which means it's a high-quality feature with known limitations. Omni-Channel Supervisor configurations aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

When Omni-Channel Supervisor configurations are enabled for your org, you can use the Omni-Channel Supervisor Configuration (Beta) page in Salesforce Classic Setup to configure supervisor filtering. Assign supervisors to the configuration by adding the correct users and profiles. Then, specify the agents they can see by adding at least one public group containing the agents. This configuration applies only to filtering the agent view. Supervisors can still see all queues and work items in your org.

## Use an External Routing Implementation with Omni-Channel (Beta)

Multiple routing options, one console. You can now integrate external routing with your current Omni-Channel implementation. Previously, you couldn't assign agents to queues of both types, but now your agents can handle work from Omni-Channel and your external implementation. Contact Salesforce to enable External Routing for Omni-Channel. This change applies to Salesforce Classic only.



**Note:** This release contains a beta version of External Routing with Omni-Channel, which means it's a high-quality feature with known limitations. External routing isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

When external routing is enabled, use the newest version (41.0) of Salesforce standard APIs and streaming APIs to connect Salesforce with an external routing implementation in your routing configuration. Then create queues that use either Omni-Channel routing or your external routing implementation, add some agents to them, and let the work roll in!

## Get More Done with Raised Limits for Omni-Channel

We raised the maximum queued work items from 5,000 per hour to 15,000 per hour. Three cheers for three times the productivity! This change applies to both Lightning Experience and Salesforce Classic.

## Use Omni-Channel Methods in the Console API and a New Component in Lightning Experience (Beta)

The console methods you already use in Salesforce Classic are available for you to use in Lightning Experience. Console events aren't available in Lightning Experience. There's also a new Lightning component `lightning:omniToolkitAPI` that provides access to the API for the Omni-Channel toolkit.



**Note:** This release contains a beta version of Omni-Channel methods for the Lightning Console JavaScript API, which means it's a high-quality feature with known limitations. The methods aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

SEE ALSO:

[Customize Console Apps with the Lightning Console JavaScript API \(Generally Available\)](#)

## Keep Waiting Customers at the Front of the Line with the Custom Requested Datetime Field

Retain the date and time of a work item's initial request with the Custom Requested Datetime field on the new `PendingServiceRouting` object. Rerouted work items use the date and time of the initial request rather than the rerouting date and time. If the field is blank, the item is rerouted using the rerouted date and time. You can populate this field using the API. This change applies to both Lightning Experience and Salesforce Classic.

SEE ALSO:

[New Objects](#)

## Delete User Presence Statuses to Make More Room in Your Org

Use version 41.0 of the SOAP API to delete the user presence statuses you don't need. If you change your mind, you have 15 days to recover your deleted statuses before they're gone forever. This change applies to both Lightning Experience and Salesforce Classic.

SEE ALSO:

[Changed Objects](#)

## Snap-Ins for Web: Chat with Customers in Lightning Experience, Improved Pre-Chat and Post-Chat Support

Agents who chat with customers using Snap-ins Chat can use Live Agent in the Lightning Service Console. Records created with the information that your customers provide in a pre-chat form are attached to the chat transcript. Customer details are passed to your post-chat form, just like in Live Agent.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

IN THIS SECTION:

### [Chat with Customers in Lightning Experience Using Snap-Ins Chat](#)

Chat agents can receive chats from Snap-ins Chat in the Lightning Service Console. Make sure that you have Omni-Channel set up in Lightning Experience and that your Live Agent chat button uses Omni-Channel routing. Feature gaps and different behavior for Live Agent in Lightning Experience apply.

### [Give Spammers the Boot with Visitor Blocking](#)

If your Snap-ins Chat agents encounter a visitor sending spam or otherwise violating your terms of service, your agents can block the IP address, just like in Live Agent. Enable visitor blocking in your Live Agent configuration. This change applies to both Lightning Experience and Salesforce Classic.

### [Pre-Chat Form Records Automatically Attach to the Chat Transcript](#)

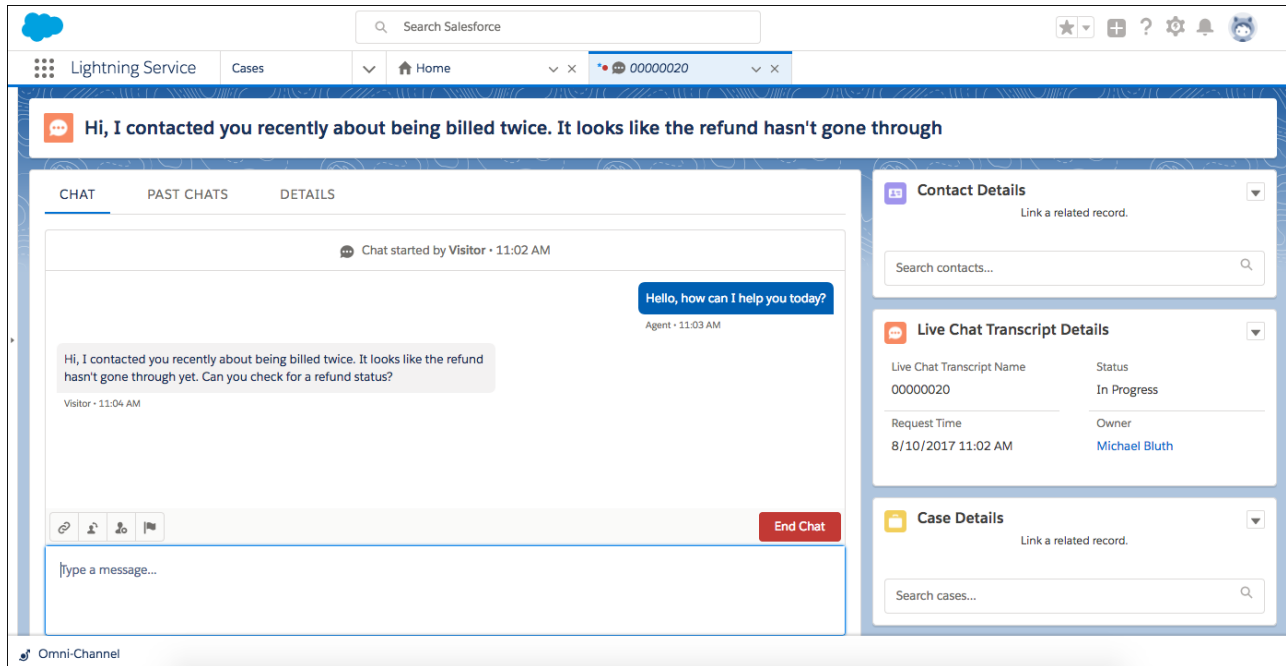
When records are created from the pre-chat form in your snap-in, they're automatically attached to the chat transcript. Previously, agents had to manually attach created records to the chat transcript. This change applies to both Lightning Experience and Salesforce Classic.

### [Pass Customer Information to Post-Chat](#)

Pass customer details, like region and attached records, to the post-chat experience, just like in Live Agent. You can pass any parameter that Live Agent supports in the post-chat API. Create a post-chat URL on the Live Agent chat button associated with your snap-in to pass information to post-chat. This change applies to both Lightning Experience and Salesforce Classic.

## Chat with Customers in Lightning Experience Using Snap-Ins Chat

Chat agents can receive chats from Snap-ins Chat in the Lightning Service Console. Make sure that you have Omni-Channel set up in Lightning Experience and that your Live Agent chat button uses Omni-Channel routing. Feature gaps and different behavior for Live Agent in Lightning Experience apply.

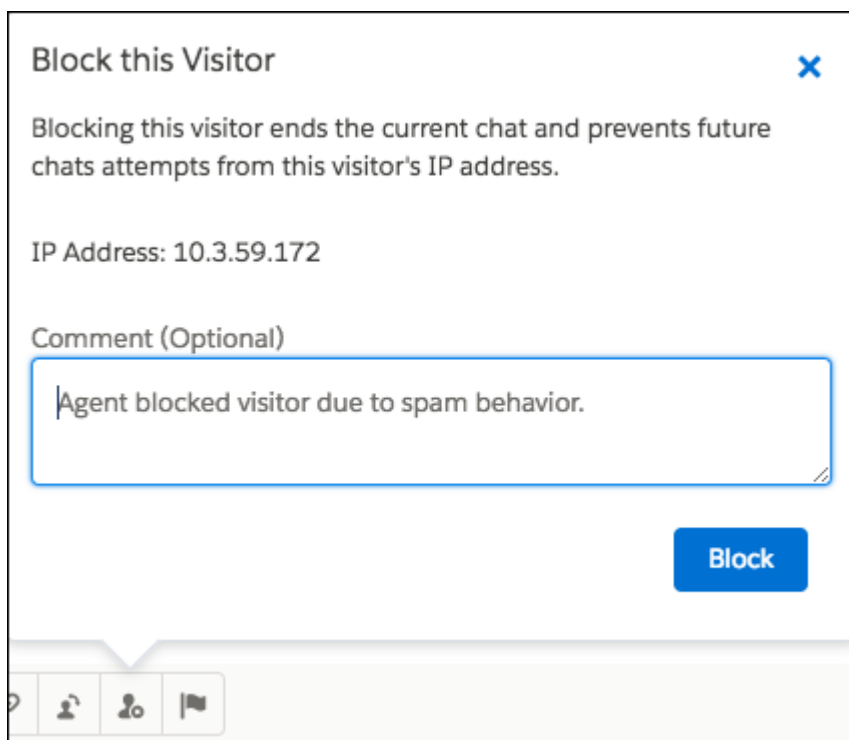


SEE ALSO:

[Chat with Customers in Lightning Experience](#)

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If your Snap-ins Chat agents encounter a visitor sending spam or otherwise violating your terms of service, your agents can block the IP address, just like in Live Agent. Enable visitor blocking in your Live Agent configuration. This change applies to both Lightning Experience and Salesforce Classic.



## Pre-Chat Form Records Automatically Attach to the Chat Transcript

When records are created from the pre-chat form in your snap-in, they're automatically attached to the chat transcript. Previously, agents had to manually attach created records to the chat transcript. This change applies to both Lightning Experience and Salesforce Classic.

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Pass customer details, like region and attached records, to the post-chat experience, just like in Live Agent. You can pass any parameter that Live Agent supports in the post-chat API. Create a post-chat URL on the Live Agent chat button associated with your snap-in to pass information to post-chat. This change applies to both Lightning Experience and Salesforce Classic.

We support all the available parameters for Live Agent. For more information, see [Post Chat Code Sample](#) in the *Live Agent Developer Guide*.

## Entitlement Management: Service Contracts and Case Milestones in Lightning Experience

Service contracts and case milestones are now available in Lightning Experience, making it easy for you to take care of all of your entitlement management to-dos in the new user interface.

### IN THIS SECTION:

#### [Manage Service Contracts in Lightning Experience \(Generally Available\)](#)

Manage your service contracts and contract line items in Lightning Experience like a pro. Service contracts in Lightning Experience come with all the familiar features of Salesforce Classic.

### EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

### Track Your Case Milestones in Lightning Experience

The wait for the case milestone tracker in Lightning Experience is over! Let your agents view active, completed, and violated milestones on the case record page and drill down for details. Previously, case milestones were available only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce app.

## Manage Service Contracts in Lightning Experience (Generally Available)

Manage your service contracts and contract line items in Lightning Experience like a pro. Service contracts in Lightning Experience come with all the familiar features of Salesforce Classic.

Here's how to add line items to a service contract in Lightning Experience.

1. From the service contract record home, click **New Line Items** on the Contract Line Items related list.
2. Select a price book if prompted.
3. Select products to add to the service contract by clicking the plus icon next to the product name. A line item will be created for each product.

PRODUCT NAME	PRODUCT CODE	LIST PRICE	PRODUCT DESCRIPTION	PRODUCT FAMILY
Bulk Freezer	296778	\$799.99		
Mini Freezer	284568	\$249.99		
Mini Refrigerator	166825	\$239.99		None
Top-Freezer Refrigerator	179425	\$499.99		

4. Click **Next**.
5. For each product, enter a quantity. Add a discount or update the sales price if needed.
6. Click **Save**.

To edit a line item on a service contract, click **Edit** in a line item's action dropdown in the Contract Line Items related list.

You can customize the fields that appear in the mass-create window. In Setup, update the search page layout for price book entries and the multi-line page layout for contract line items.

Keep the following in mind when using service contracts and contract line items in Lightning Experience.

- The **Status Icon** field isn't available.
- When you are adding multiple contract line items to a service contract, picklist fields on contract line items show all values in your org rather than only the values corresponding to the line item's record type. However, selecting a value corresponding to a different record type results in an error. This issue doesn't occur when you are editing a single line item.

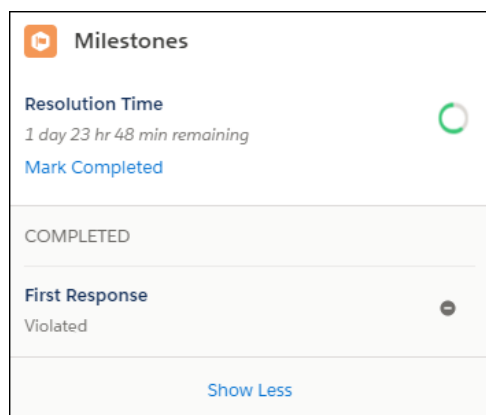


Service contracts and contract line items are also available in Salesforce mobile web and Salesforce for Android and iOS. You can edit and delete contract line items in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web, but you can't create them.

## Track Your Case Milestones in Lightning Experience

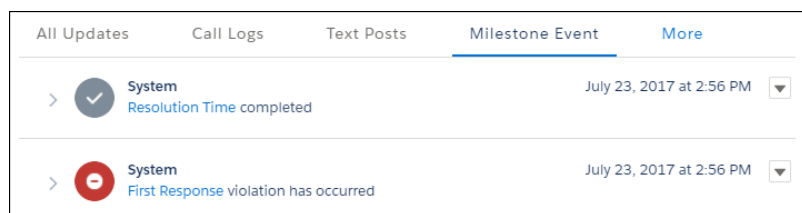
The wait for the case milestone tracker in Lightning Experience is over! Let your agents view active, completed, and violated milestones on the case record page and drill down for details. Previously, case milestones were available only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce app.

After you have your entitlements, entitlement process, and milestones set up, use Lightning App Builder to add the Milestones component to the case record page. The Milestones component supports only cases. You can't add the component to any other object page.



In Lightning Experience, you can let agents pause or stop a case by updating the Stopped field. To add the Stopped field, edit the case page layout. Then give your agents access to the field through Field Accessibility in Setup.

If you enabled milestone feed items in your org, agents can also see case milestone updates in the case feed.



From the case feed or the component, an agent can click a milestone name to open a detailed record page. We gave agents two ways to update this page—inline editing and an Edit button.

Target Date	Elapsed Time (Mins)	Completed	Violation
7/13/2017 2:23 PM	14,632	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Case 00001000	Start Date 7/13/2017 11:03 AM
Completion Date 7/23/2017 2:56 PM	Target Date 7/13/2017 2:23 PM
Violation <input checked="" type="checkbox"/>	Target Response (Mins) 200
Completed <input checked="" type="checkbox"/>	Time Remaining (Min:Sec) 00:00
Business Hours Default	Elapsed Time (Mins) 14,632

To customize the Case Milestones object, such as page layouts and validation rules, use Setup in Salesforce Classic.

In the Salesforce for Android, Salesforce for iOS, and Salesforce mobile web agents can view milestones updates in the case feed and open the case milestones record page. You can customize the compact layout for the case milestone record page from Setup in Salesforce Classic.

Keep the following things in mind when working with case milestones in Lightning Experience.

- The Milestone Name and Entitlement Process fields aren't displayed in Lightning Experience. In Salesforce Classic, these fields appear by default on the case milestone record page.
- The case milestones related list isn't supported in Lightning Experience.

SEE ALSO:

[Salesforce Help: Set Up Entitlements and Service Agreements \(can be outdated or unavailable during release preview\)](#)

## Macros: Creating Efficient Support Agents and Happy Customers

Lightning Experience macros can revolutionize the way your support agents work! Agents can send a customer email and update a case status with a single click. Macros provide the power to automate common repetitive tasks and resolve issues efficiently, so your agents can spend more time doing what they do best: focus on customer success. Add the Macro utility to your Lightning console app, such as the Service Console and Sales Console apps, and give console users the tools to quickly resolve issues. This change applies to Lightning Experience only.

Available in: **Professional, Enterprise, Performance, Unlimited**, and **Developer** Editions.



**Note:** Lightning Experience supports macros on cases, contacts, leads, and custom objects. In Lightning Experience, you can't use quick text in macros or insert email templates yet.

IN THIS SECTION:

[Build Macros and Save Time in Lightning Experience](#)

Quickly and easily edit and add instructions to macros using the new Macro Builder point-and-click interface.

### There's No Place like Macro Record Home

The Record Home page is your one-stop-shop to view and manage macros in Lightning.

### Run Your Macros from the Utility Bar

Create amazing macros in the context of your work by adding the macro utility to your Service Console utility bar.

## Build Macros and Save Time in Lightning Experience

Quickly and easily edit and add instructions to macros using the new Macro Builder point-and-click interface.

Macros streamline agent productivity by increasing efficiency and consistency when communicating with customers. With the Lightning Macro Builder, users can edit and add instructions to existing macros using a visual experience similar to the Lightning App Builder. The builder's simple point-and-click interface lets macro authors capture the quick actions and fields they want to include in the macro instructions.

On the right-hand side of the builder, the macros Instructions tab show instructions for the macro. Instructions are composed from quick actions and their corresponding fields which you can select from the page on the left.

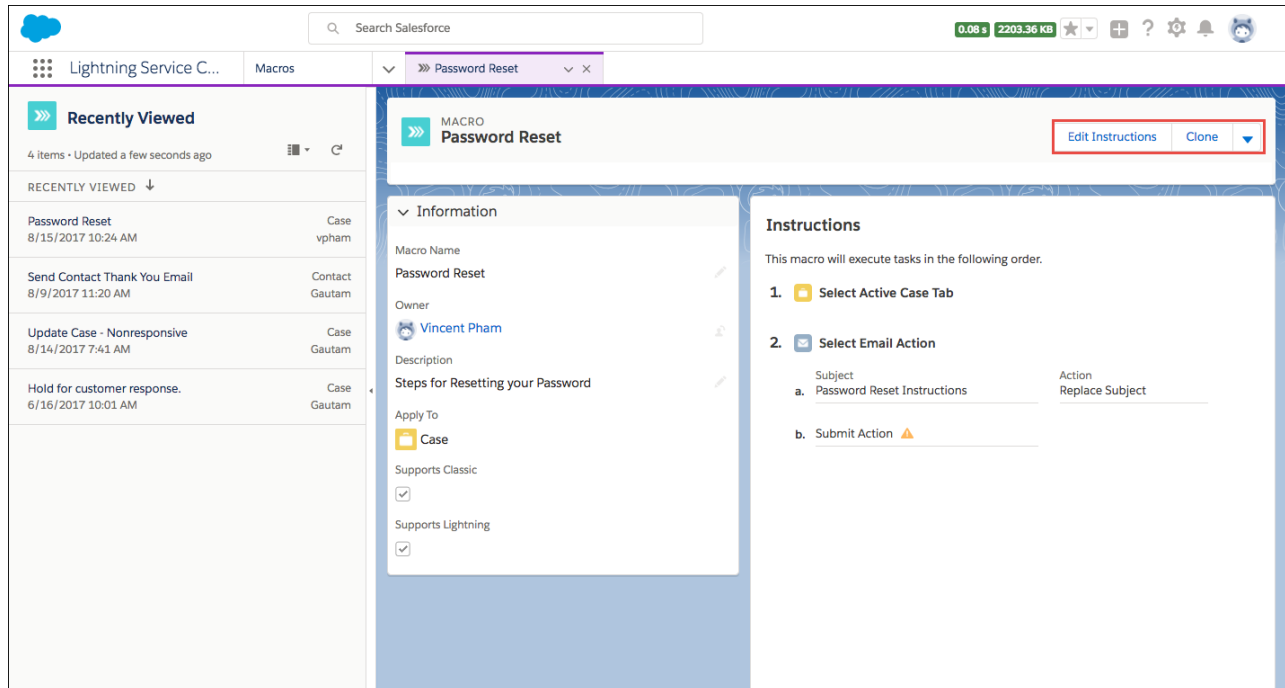


**Note:** Use keyboard shortcuts to focus on different areas of the Macro Builder. Alt+1 focuses the toolbar. Alt+2 focuses on quick actions. Alt+3 focuses on the macro instructions.

## There's No Place like Macro Record Home

The Record Home page is your one-stop-shop to view and manage macros in Lightning.

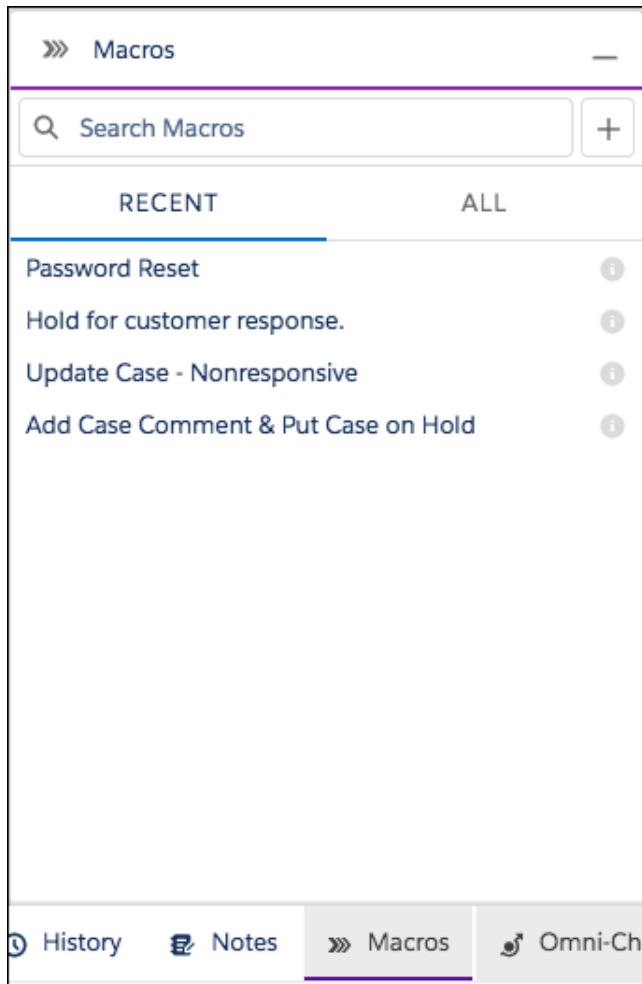
With similar functionality to other record homes in Lightning Experience, the macro record home is where users view, edit, and clone macros. You can also change the macro name and description.




## Run Your Macros from the Utility Bar

Create amazing macros in the context of your work by adding the macro utility to your Service Console utility bar.

Easily access, create, and run Macros in Lightning with the utility bar. Agents click the + or the create button to build a new Macro for the selected object. Double-click the macro name to run any macro. The tabbed design in the component enhances productivity. Commonly used macros can be accessed via the 'Recent' tab and the exhaustive list of all macros can be found in the 'All' tab. Clicking the info bubble next to a macro shows the details in a tooltip.



 **Note:** Macros you've created in Salesforce Classic may be supported in Lightning. Check the field "Supports Lightning."

#### SEE ALSO:

[Salesforce Help: Add a Utility Bar to Lightning Apps \(can be outdated or unavailable during release preview\)](#)

## Assets: Get a Bird's-Eye View of Asset Hierarchies

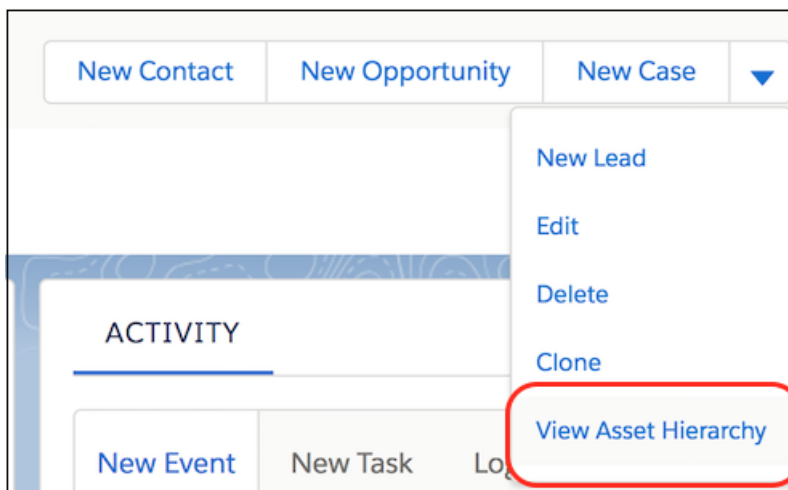
Quickly view hierarchies of assets with a beautiful new tool in Lightning Experience. The tree grid view of asset hierarchies helps field service workers identify parts, assess bills of materials, and understand how assets are related to each other.

To let users view an expanded tree grid of an asset hierarchy in Lightning Experience, update your asset page layouts. In the page layout editor, select **Mobile & Lightning Actions**, then drag the **View Asset Hierarchy** action onto the layout. The action is also available on assets in the console.

To view the tree grid, click **View Asset Hierarchy** in the dropdown action menu on an asset detail page.

#### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**



Click the caret (1) to collapse and expand a node. You can go up to 20 levels deep in a hierarchy. The asset whose hierarchy you're viewing is shown with a CURRENT stamp (2).

ASSET > BMW 528i									
Asset Hierarchy									
ASSET		STATUS	PRODUCT SKU	PRODUCT CODE	SERIAL NUMBER	LAST MODIFIED DATE	LAST MODIFIED BY	INSTALL DATE	
▼ BMW 528i	CURRENT	Registered			BM542333C	07/10/2017	Admin User	07/07/2015	
▼ Engine Compartment		Installed			BM222337	08/01/2017	Admin User	07/07/2015	
▼ Twin Turbo V4 Engine		Registered			BM2V4EA223426L	07/04/2017	Admin User	07/07/2015	
Spark Plug 24A		Installed			BM5P24A	07/04/2017	Admin User	07/10/2016	
Radiator 65M		Installed			BMRA65M23332	07/04/2017	Admin User	06/14/2017	
Battery						07/10/2017	Admin User		
▼ Cabin		Installed				08/01/2017	Admin User	07/07/2015	
▼ Passenger's Seat		Installed			BMP5	07/04/2017	Admin User	07/07/2015	
Leather 34A		Installed				07/04/2017	Admin User	07/07/2015	
▼ Driver's Seat3		Installed			BMD5	07/10/2017	Admin User	07/07/2015	
Leather 34A		Installed			BML34A	07/10/2017	Admin User	07/07/2015	
▼ Dashboard		Installed			BMDB	07/04/2017	Admin User	07/07/2015	

 **Note:** You can't customize the fields that appear in the hierarchy.

The View Asset Hierarchy action is available only for hierarchies of 500 or fewer assets. If a hierarchy contains more than 500 assets, you can still refer to each asset's Child Assets related list and `Parent Asset`, `Root Asset`, and `Asset Level` fields.

Here's what happens if you don't have access to certain elements of an asset hierarchy.

- If your field-level security settings prohibit you from accessing a particular field in the asset hierarchy view, you can see the field name in the column title, but the column is blank.
- If sharing settings prohibit you from viewing an asset that's lower in the current asset's hierarchy, the restricted asset doesn't appear in the hierarchy view for you.
- If sharing settings prohibit you from viewing an asset that's higher in the current asset's hierarchy, an error appears and you can't view the asset hierarchy. Record sharing settings also apply to child records.

You can't search or edit within the asset hierarchy view. It isn't available in Salesforce Classic, communities, Salesforce mobile web, Salesforce for Android and iOS, or the Field Service Lightning mobile app.

## CTI: New Initialization Method and Click-to-Dial Component

You can now use the `notifyInitializationComplete()` method in Lightning Experience. We're also introducing a click-to-dial Lightning component. These changes apply to Lightning Experience only.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

#### IN THIS SECTION:

##### [Create Click-to-Dial Phone Numbers with the `lightning:clickToDial` Component](#)

Developers and partners can use the Lightning component `lightning:clickToDial` in Lightning pages and apps to make calls through Open CTI, Salesforce Voice, and other CTI providers. When phone numbers appear on the page, agents can simply click to dial the number. This component is similar to the `support:clickToDial` component used in Visualforce pages. This change applies to Lightning Experience only.

##### [Open CTI `notifyInitializationComplete` Method Available in Lightning Experience](#)

The Open CTI `notifyInitializationComplete()` method was previously available only in Salesforce Classic. Keep in mind that it works a bit differently than in Salesforce Classic.

## Create Click-to-Dial Phone Numbers with the `lightning:clickToDial` Component

Developers and partners can use the Lightning component `lightning:clickToDial` in Lightning pages and apps to make calls through Open CTI, Salesforce Voice, and other CTI providers. When phone numbers appear on the page, agents can simply click to dial the number. This component is similar to the `support:clickToDial` component used in Visualforce pages. This change applies to Lightning Experience only.

Keep these things in mind when working with the component.

- The `lightning:clickToDial` component respects existing click-to-dial commands for Open CTI, such as `enableClickToDial`, `disableClickToDial`, and `onClickToDial`.
- You can add this component to any Lightning page in any Lightning Experience app.
- The component doesn't support iFrames, so you can't use it in utilities, such as a phone utility, or Lightning Out apps that are hosted on iFrames.

Here's the `lightning:clickToDial` component in action.



#### SEE ALSO:

[New and Changed Lightning Components](#)

[Lightning Components Developer Guide](#)

## Open CTI `notifyInitializationComplete` Method Available in Lightning Experience

The Open CTI `notifyInitializationComplete()` method was previously available only in Salesforce Classic. Keep in mind that it works a bit differently than in Salesforce Classic.

For more information, see [Open CTI API](#).

## Social Customer Service: New Service Pro Add-On and Social Business Rules Setup

Add more social accounts to your org with the Service Pro add-on. Use the Social Business Rules setup page to get started with Social Customer Service in a flash. Support agents can now add image attachments to social posts.

### IN THIS SECTION:

#### [Get More Social with Social Customer Service Pro Add-On](#)

Add up to 10 social accounts to your org to track, monitor, and respond to your customers' favorite social media channels. This change applies to both Lightning Experience and Salesforce Classic.

#### [Set Up Social Service Faster with Social Business Rules](#)

Now there's a simplified setup experience for Social Customer Service. Use the Social Business Rules setup page to quickly help your team become more social on channels like Twitter, Facebook, and Instagram. This change applies to Lightning Experience only.

#### [Help Your Customers by Attaching Images to Social Posts](#)

Post images to your customers on Twitter or Facebook. Add more context or pretty pictures to social media conversations. This change applies to Lightning Experience only.

#### [Preview Image Attachments in the Case Feed](#)

Preview multiple attachments on a social post within a case feed. View more information about attachments without leaving cases. This change applies to Lightning Experience only.

#### [Help Your Customers Privately by Hiding Facebook Comments and Replies](#)

Support agents can easily hide inbound comments or replies from the public while helping customers. This change applies to Lightning Experience only.

#### [Add More Fields to Social Persona to Learn About Customers](#)

See more information about customers on cases to gain deeper insights and solve issues faster. This change applies to both Lightning Experience and Salesforce Classic.

#### [Social Studio Replaces Radian6 on Buttons and Text](#)

We're using Social Studio instead of Radian6 in the user interface. For example, when enabling Social Customer Service, the button once named **Radian6 Credentials** is now named **Social Studio Credentials**. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Social Customer Service is available in API enabled **Professional** editions, **Enterprise**, **Performance**, and **Unlimited** editions.

## Get More Social with Social Customer Service Pro Add-On

Add up to 10 social accounts to your org to track, monitor, and respond to your customers' favorite social media channels. This change applies to both Lightning Experience and Salesforce Classic.

Previously, you could add up to two social accounts for Twitter and Facebook with the starter pack, but with the Social Customer Service Pro add-on, you can give support agents access to more social accounts and boost your presence on Instagram, Weibo (Pilot), and Google+ (Pilot).

Social Customer Service Pro is available for an extra cost in all editions where Social Customer Service is available. Some restrictions apply. For pricing details, contact your Salesforce account executive.

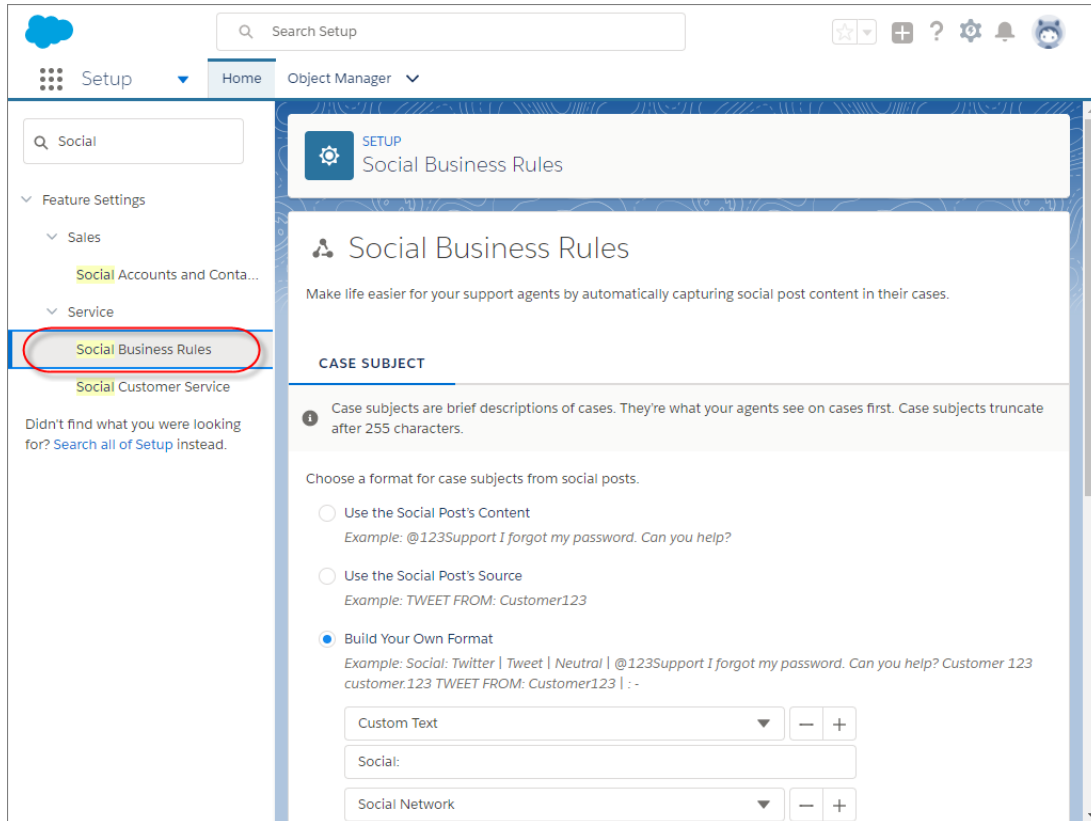
Social Customer Service Pro is available mid-October, 2017.



## Set Up Social Service Faster with Social Business Rules

Now there's a simplified setup experience for Social Customer Service. Use the Social Business Rules setup page to quickly help your team become more social on channels like Twitter, Facebook, and Instagram. This change applies to Lightning Experience only.

Social business rules automate how inbound posts from social channels are processed in Salesforce. Instead of coding with Apex, you can now click **Social Business Rules** in setup to get started.



After you enable Social Customer Service, you can choose how inbound social content is formatted into cases' **Subject** without updating the default Apex class. You can also customize the format with point-and-click tools.

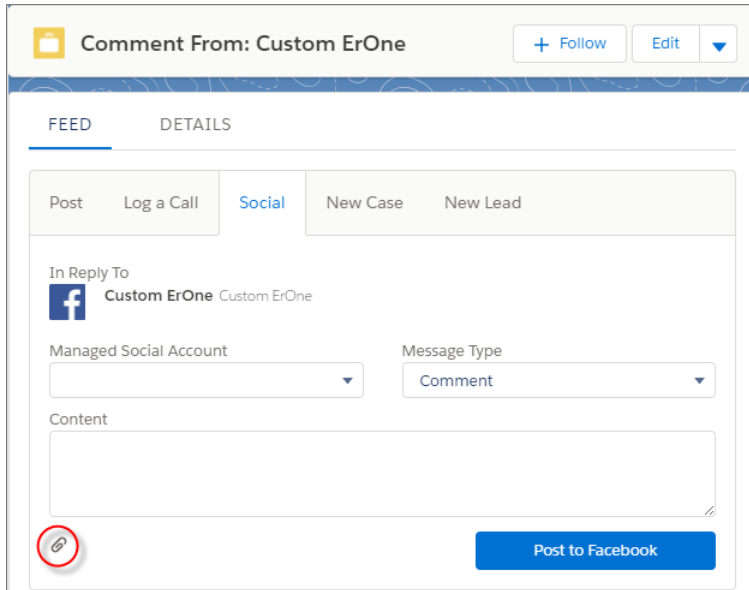
SEE ALSO:

[Salesforce Help: Format Case Content from Social Posts \(can be outdated or unavailable during release preview\)](#)

## Help Your Customers by Attaching Images to Social Posts

Post images to your customers on Twitter or Facebook. Add more context or pretty pictures to social media conversations. This change applies to Lightning Experience only.

On the Social tab of cases created from Social Customer Service, click the Attachment icon to upload images from your browser or Salesforce. Type a message and click **Tweet** or **Post to Facebook**.



You can attach files up to 5 MB. Files located in external locations, such as Google Drive or Facebook Messenger aren't available to post as attachments. Image attachments appear as previews in social posts rather than as file names or extensions. You can't attach files to social posts from Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

**Important:** To prevent agents from accidentally posting attachments from customers, make sure that agents aren't the **Run Apex As User** in the inbound settings for Social Customer Service setup. This prevents agents from seeing or selecting customers' attachments in the Select File box. See [Enable Social Customer Service](#).

SEE ALSO:

[IdeaExchange: Send Images on Outbound Social Posts](#)

## Preview Image Attachments in the Case Feed

Preview multiple attachments on a social post within a case feed. View more information about attachments without leaving cases. This change applies to Lightning Experience only.

Attachments appear as thumbnails, and you can click them to expand the attachments into a full-screen view.

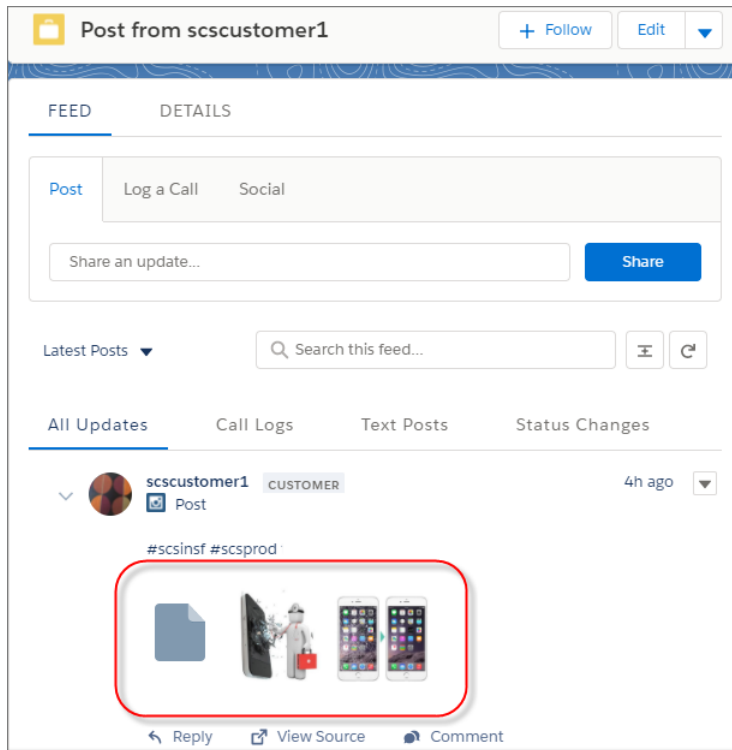


Image attachments on social posts created during Summer '17 appear in case related lists, not the thumbnail or full-screen view.

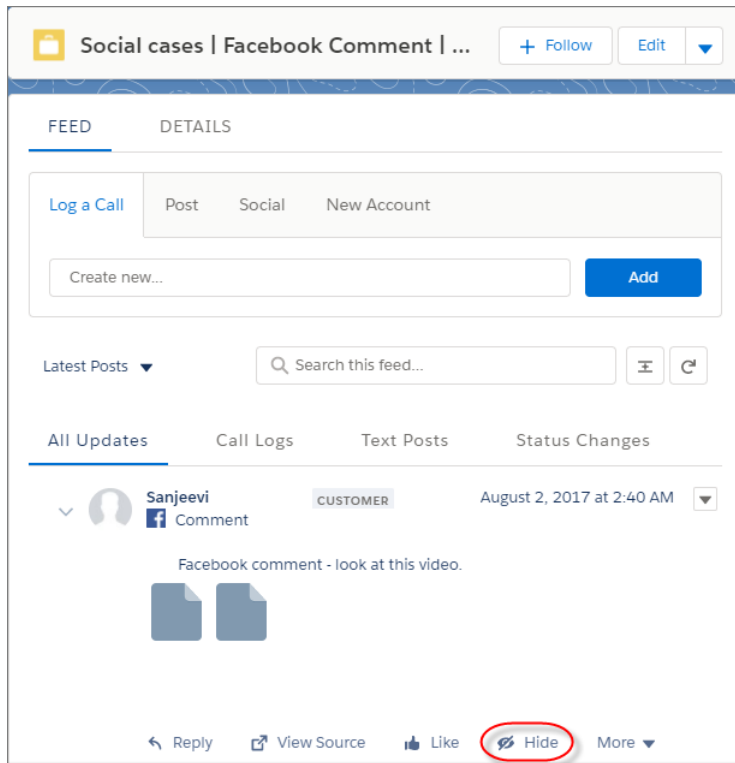


**Note:** If you use custom Apex to create records from social posts, you may have to update your Apex code to support attachments for inbound records. For a code sample, see [Knowledge Article: Multiple Attachments Not Appearing in Case Feed for Social Customer Service](#).

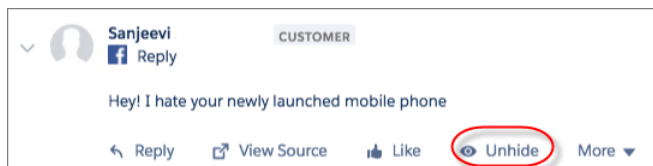
## Help Your Customers Privately by Hiding Facebook Comments and Replies

Support agents can easily hide inbound comments or replies from the public while helping customers. This change applies to Lightning Experience only.

In the feeds of cases created from Social Customer Service, click **Hide**.



While the comment or reply is hidden, you can still reply to the social post. Click **Unhide** to make the comment or reply public again.



## Add More Fields to Social Persona to Learn About Customers

See more information about customers on cases to gain deeper insights and solve issues faster. This change applies to both Lightning Experience and Salesforce Classic.

To route more customer information from social networks like Twitter or Facebook to cases, add three more fields to Social Persona page layouts:

- **Verified**
- **Influencer Score**
- **Author Labels**

SEE ALSO:

[Salesforce Help: Manage Social Personas](#) (can be outdated or unavailable during release preview)

## Social Studio Replaces Radian6 on Buttons and Text

We're using Social Studio instead of Radian6 in the user interface. For example, when enabling Social Customer Service, the button once named **Radian6 Credentials** is now named **Social Studio Credentials**. This change applies to both Lightning Experience and Salesforce Classic.

Social Studio is a platform that includes the best social media and marketing solutions from Salesforce's acquisitions of Radian6, Buddy Media, and ExactTarget.

## Other Changes in Service Cloud

Learn about other changes we've made in the Service Cloud.

### IN THIS SECTION:

#### [Chatter Answers is No Longer Supported in Spring '18](#)

In Spring '18, Salesforce will no longer support Chatter Answers. Users of Chatter Answers will be able to post, answer, comment, or view existing Chatter Answers data, but support and updates are scheduled to end. Chatter Answers is passing the torch to Chatter Questions, an eager young thing ready to take up the self-service mantle.

#### [Set Up Users on Service Cloud Licenses for Lightning Sync](#)

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® or Google applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

## Chatter Answers is No Longer Supported in Spring '18

In Spring '18, Salesforce will no longer support Chatter Answers. Users of Chatter Answers will be able to post, answer, comment, or view existing Chatter Answers data, but support and updates are scheduled to end. Chatter Answers is passing the torch to Chatter Questions, an eager young thing ready to take up the self-service mantle.

For more information, see [End of Support for Chatter Answers in Spring '18](#).

## Set Up Users on Service Cloud Licenses for Lightning Sync

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® or Google applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### SEE ALSO:

[Salesforce Help: Lightning Sync \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Lightning Sync User License Support \(can be outdated or unavailable during release preview\)](#)

## Analytics: Reports and Dashboards and Einstein Analytics

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Building reports just got fun (or more fun, depending on your perspective) with this release's introduction of the Lightning Report Builder. And Einstein Analytics (formerly Wave) adds smart features, including simplified and more intuitive app creation, chart suggestions, and the Einstein Discovery story improver.

## IN THIS SECTION:

[Reports and Dashboards: Lightning Report Builder \(Beta\), Enhanced Folder Sharing, Lightning Dashboard Tables \(Beta\)](#)

Brace yourself for future shock, because we're introducing the next generation of Salesforce reporting: Lightning Report Builder (Beta)! And there's a lot more to look forward to. Enhanced Folder Sharing, Open reports in Quip, Lightning dashboard tables (Beta), embedded dashboards, and a whole bunch of chart enhancements are all making their debuts. It's never been a better time to analyze your business in Lightning Experience.

[Einstein Analytics: Smart Explore, Global Filters, Upload Wizard](#)

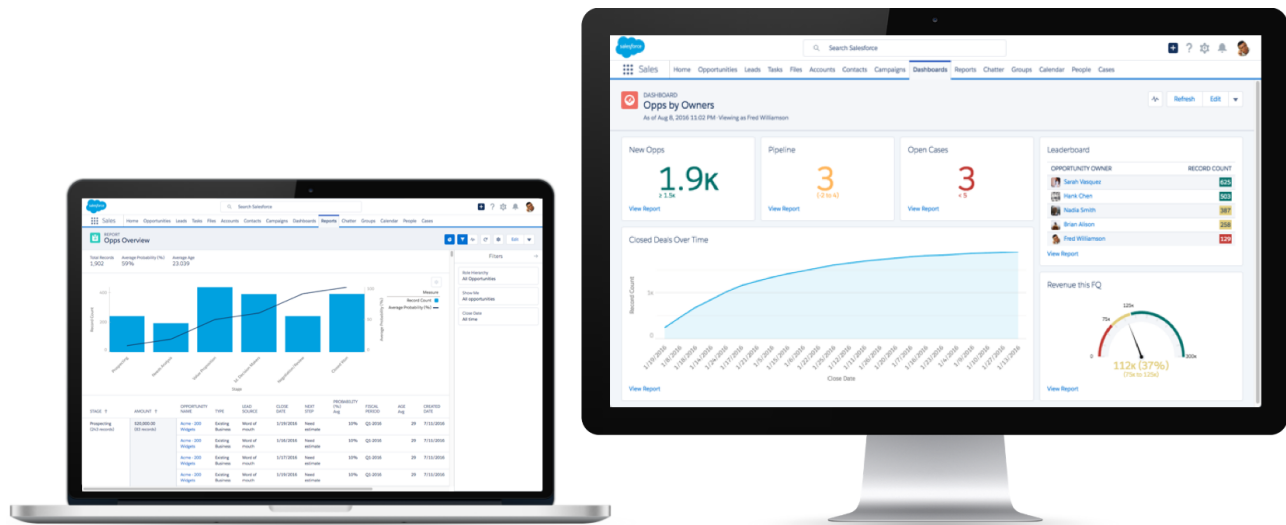
Einstein Analytics is all about facilitating the Analytics experience for business users, admins, and developers, and we packed this release with features to help you make it happen. Quickly make sense of your data and find the best visualization using the explore window's more intuitive and smart interface. Turbocharge dashboard performance by optimizing queries with global filters. Use the upload wizard to view and change file properties and field attributes before you upload data.

## Reports and Dashboards: Lightning Report Builder (Beta), Enhanced Folder Sharing, Lightning Dashboard Tables (Beta)

Brace yourself for future shock, because we're introducing the next generation of Salesforce reporting: Lightning Report Builder (Beta)! And there's a lot more to look forward to. Enhanced Folder Sharing, Open reports in Quip, Lightning dashboard tables (Beta), embedded dashboards, and a whole bunch of chart enhancements are all making their debuts. It's never been a better time to analyze your business in Lightning Experience.

## EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions



## IN THIS SECTION:

[Create Tomorrow's Reports Today with the Lightning Report Builder \(Beta\)](#)

The future is now: Turn on the Lightning report builder and give your users a powerful, intuitive tool for analyzing Salesforce data. Group, filter, and summarize records to answer business questions like "How much revenue did we generate in the South East last quarter?", "Which lead source is generating the most closed opportunities?", and "What is the average age of all open cases?" This feature is new in Lightning Experience.

### [Open Reports in Quip](#)

Take full advantage of Quip's living documents by working with connected report data in a Quip spreadsheet. Plus, work with Quip's productivity features: @Mention colleagues to discuss data through real-time discussion threads. Harness hundreds of spreadsheet functions. And add spreadsheets into other Quip docs to add data to your context, or context to your data. This feature is new in Lightning Experience.

### [Add Tables with Up to 10 Columns to Dashboards \(Beta\)](#)

The Lightning table, a new dashboard table component, shows up to 200 records and 10 columns from the fields available in a source report's report type. (So the fields need not be added to the source report as columns!) Add a Lightning table to supplement chart and metric-based overviews with record-by-record details. This feature is new in Lightning Experience.

### [Embed Dashboards on the Home Tab and in Lightning Apps](#)

Embed dashboards to surface insights right where people work. For example, add the Sales Pipeline dashboard to the Home tab to give your sales team the information they need when they log in to Salesforce. Embedded dashboards are fully functional and interactive. Refresh them, apply filters, and click chart segments to drill into filtered reports. This feature is new in Lightning Experience.

### [View Filtered Reports by Clicking Chart Segments from Dashboards](#)

Want to know more about the data shown in dashboard charts? Click a chart segment, axis label, or legend to view a filtered version of the source report. The chart segment you clicked, plus any applied dashboard filters, appear as linked filters when the report opens. For example, click the prospecting segment of an opportunity pipeline funnel chart to open and filter the source report by stage equals prospecting. This feature is new in Lightning Experience.

### [Get the Full Power of Enhanced Folder Sharing in Lightning Experience](#)

Lightning Experience now has all you need to organize and share your reports and dashboards. It's now a snap to create, share, rename, and delete folders. No more switching to Salesforce Classic! This feature is new in Lightning Experience.

### [Chart Enhancements for Reports and Dashboards in Lightning Experience](#)

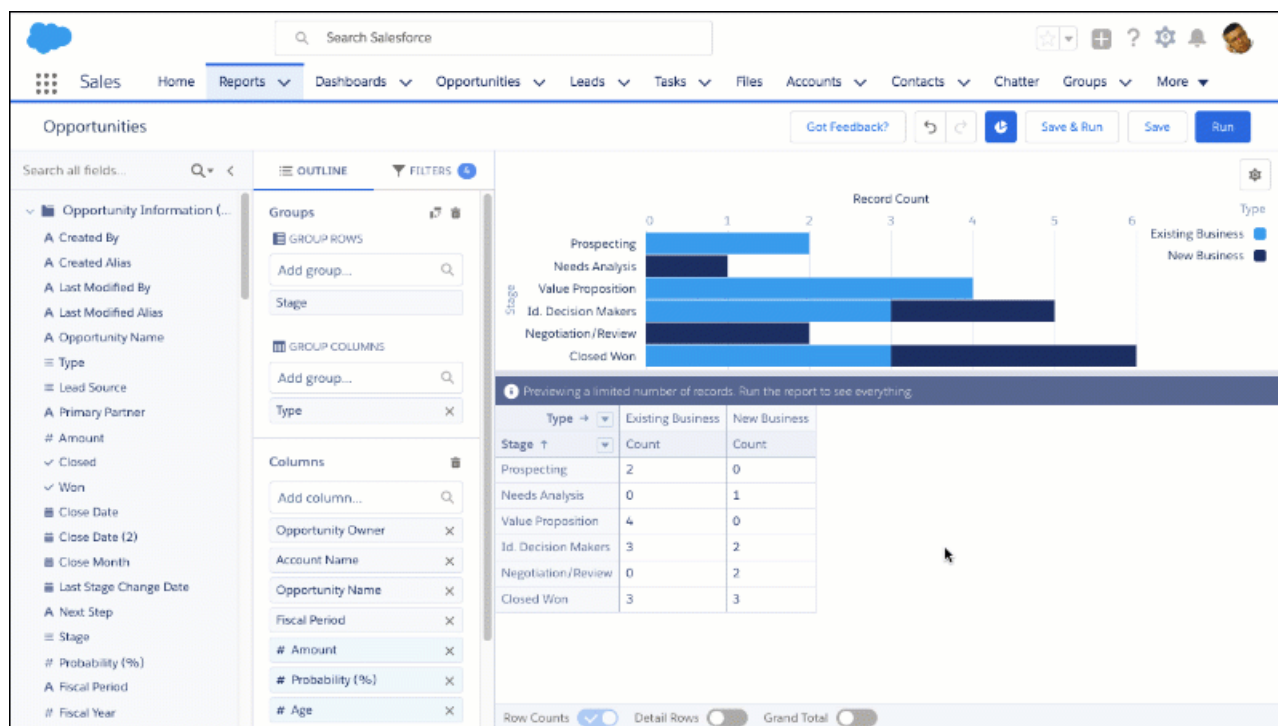
Visualizing business data is understanding business data, so we've improved charts to help you see it better. These changes apply to Lightning Experience only.

### [Other Enhancements to Reports and Dashboards in Lightning Experience](#)

In addition to this release's major features, we've made some small-but-notable improvements to reports and dashboards. These changes apply to Lightning Experience only.

## Create Tomorrow's Reports Today with the Lightning Report Builder (Beta)

The future is now: Turn on the Lightning report builder and give your users a powerful, intuitive tool for analyzing Salesforce data. Group, filter, and summarize records to answer business questions like "How much revenue did we generate in the South East last quarter?", "Which lead source is generating the most closed opportunities?", and "What is the average age of all open cases?" This feature is new in Lightning Experience.



Enable the Lightning report builder from Setup. In the Quick Find box, enter *Reports and Dashboards Settings* and click **Reports and Dashboards Settings**. Select **Enable Lightning Report Builder (Beta)**, then click **Save**. Finally, assign people the user permission Report Builder (Lightning Experience).

**Note:** Lightning report builder is only available in orgs using enhanced folder sharing. If your org was created after the Summer '13 Salesforce release, you already have enhanced folder sharing. If your org isn't already using enhanced folder sharing, see [Turn On Enhanced Sharing for Reports and Dashboards](#) in the Salesforce Help.

The Lightning report builder is only available in Lightning Experience. Your users can launch the Lightning report builder by clicking **New Report** on the Reports tab or editing an existing report. Permissions granting, users can edit reports with both report builders. To access the Salesforce Classic report builder in Lightning Experience, click **New Report (Salesforce Classic)** or **Edit (Salesforce Classic)**. You can edit all reports in both builders and view them in both Lightning Experience and Salesforce Classic.

### Differences Between the Lightning and Classic Report Builders

Take note of these differences between the Lightning and Classic report builders.

Feature	Difference
Report Formats	<p>In the Salesforce Classic report builder, you must choose a report format before grouping data.</p> <p>In the Lightning report builder, the report format automatically updates as you group report data. Tabular, summary, and matrix reports are all available, but you don't select the format before grouping the data.</p>
Charts	The Lightning report builder features the same charts as the report-view-page in Lightning Experience.



Feature	Difference
Customizing Granularity when Grouping by Date Fields	<p>When grouping records by a date field, you can't customize date granularity.</p> <p>For example, on the Opportunity report type, grouping by the Date Closed field always groups records by day, and Month Closed always groups records by month.</p>

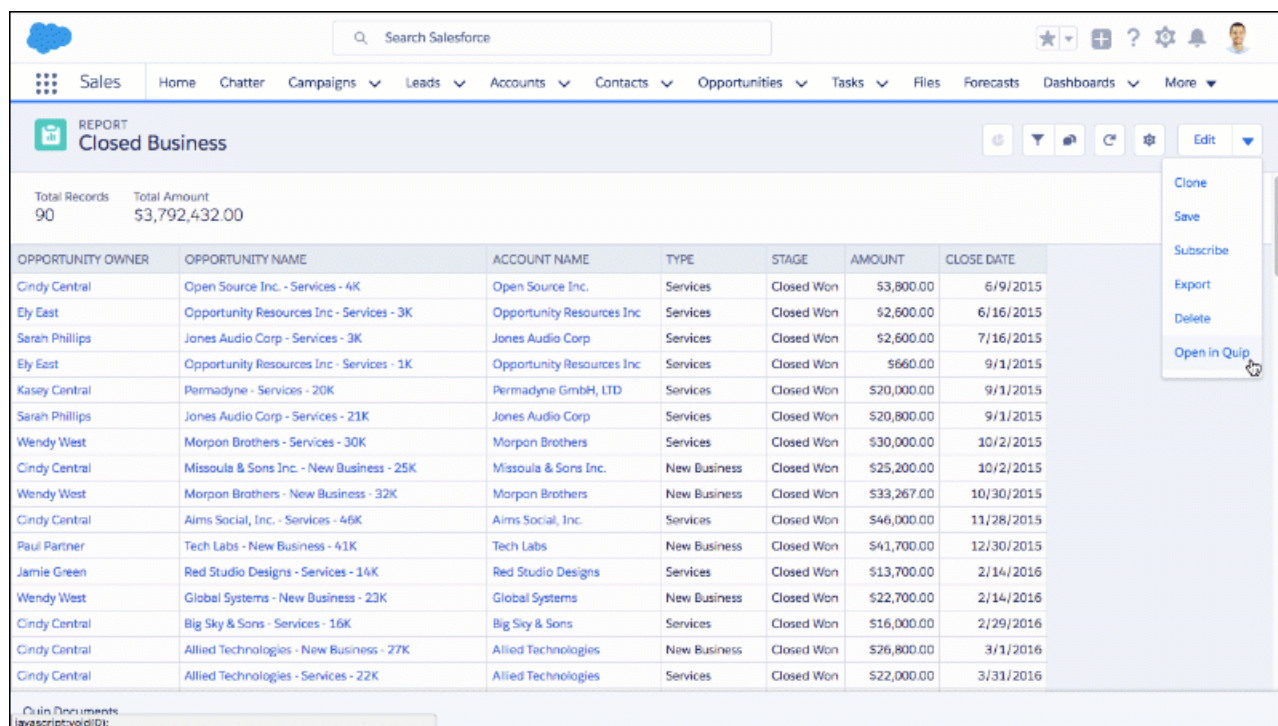
**Features Not Available in the Lightning Report Builder Beta**

These features aren't available in the beta version of the Lightning report builder, but we're working hard to implement them in a future release.

- Joined reports
- Bucketing
- Custom summary formulas
- Cross filters
- Row limit filters
- Role hierarchy filters
- Dashboard Settings menu
- Report Properties menu

**Open Reports in Quip**

Take full advantage of Quip's living documents by working with connected report data in a Quip spreadsheet. Plus, work with Quip's productivity features: @Mention colleagues to discuss data through real-time discussion threads. Harness hundreds of spreadsheet functions. And add spreadsheets into other Quip docs to add data to your context, or context to your data. This feature is new in Lightning Experience.



REPORT  
Closed Business

Total Records: 90    Total Amount: \$3,792,432.00

OPPORTUNITY OWNER	OPPORTUNITY NAME	ACCOUNT NAME	TYPE	STAGE	AMOUNT	CLOSE DATE
Cindy Central	Open Source Inc. - Services - 4K	Open Source Inc.	Services	Closed Won	\$3,800.00	6/9/2015
Ely East	Opportunity Resources Inc - Services - 3K	Opportunity Resources Inc	Services	Closed Won	\$2,600.00	6/16/2015
Sarah Phillips	Jones Audio Corp - Services - 3K	Jones Audio Corp	Services	Closed Won	\$2,600.00	7/16/2015
Ely East	Opportunity Resources Inc - Services - 1K	Opportunity Resources Inc	Services	Closed Won	\$660.00	9/1/2015
Kasey Central	Permadyne - Services - 20K	Permadyne GmbH, LTD	Services	Closed Won	\$20,000.00	9/1/2015
Sarah Phillips	Jones Audio Corp - Services - 21K	Jones Audio Corp	Services	Closed Won	\$20,800.00	9/1/2015
Wendy West	Morpon Brothers - Services - 30K	Morpon Brothers	Services	Closed Won	\$30,000.00	10/2/2015
Cindy Central	Missoula & Sons Inc. - New Business - 25K	Missoula & Sons Inc.	New Business	Closed Won	\$25,200.00	10/2/2015
Wendy West	Morpon Brothers - New Business - 32K	Morpon Brothers	New Business	Closed Won	\$33,267.00	10/30/2015
Cindy Central	Aims Social, Inc. - Services - 46K	Aims Social, Inc.	Services	Closed Won	\$46,000.00	11/28/2015
Paul Partner	Tech Labs - New Business - 41K	Tech Labs	New Business	Closed Won	\$41,700.00	12/30/2015
Jamie Green	Red Studio Designs - Services - 14K	Red Studio Designs	Services	Closed Won	\$13,700.00	2/14/2016
Wendy West	Global Systems - New Business - 23K	Global Systems	New Business	Closed Won	\$22,700.00	2/14/2016
Cindy Central	Big Sky & Sons - Services - 16K	Big Sky & Sons	Services	Closed Won	\$16,000.00	2/29/2016
Cindy Central	Allied Technologies - New Business - 27K	Allied Technologies	New Business	Closed Won	\$26,800.00	3/1/2016
Cindy Central	Allied Technologies - Services - 22K	Allied Technologies	Services	Closed Won	\$22,000.00	3/31/2016

Quip Documents  
javascript:void(0)

To work with report data in Quip, click **Open in Quip**. If prompted, sign in to Quip.

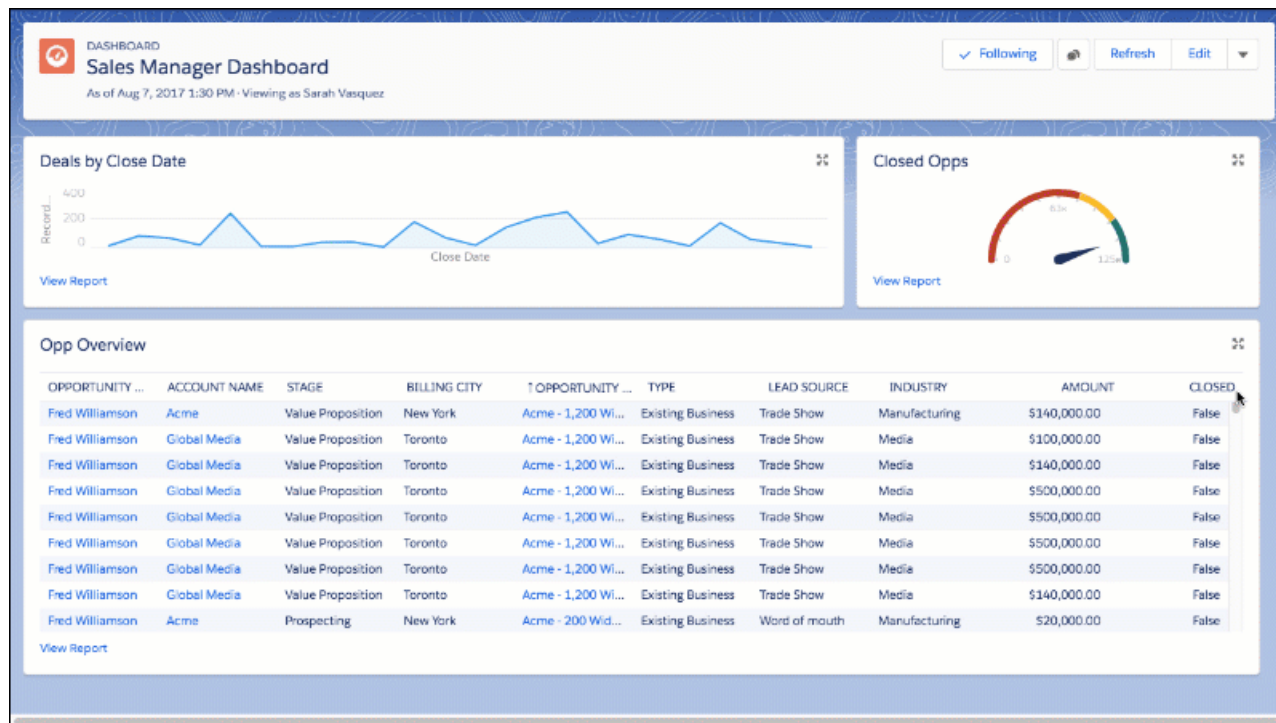
Opening a report in Quip connects the report with a Quip spreadsheet. Once connected, the spreadsheet automatically gets refreshed report data from Salesforce, and the spreadsheet links back to records in Salesforce. For example, Account Name columns link back to Account records.

Manage connected report data in the Quip spreadsheet by clicking **Live Data** and hovering over the name of the connected Salesforce report. From the Live Data menu, you can:

- Open the report in Salesforce.
- Manually refresh the report to get the latest data in Quip.
- Turn automatic report refreshes on or off. When automatic refresh is on, then Quip gets the latest refreshed report data from Salesforce whenever you open the spreadsheet.
- Delete the connection between the Salesforce report and the Quip spreadsheet. Deleting the connection doesn't delete the Salesforce report nor the Quip spreadsheet.

## Add Tables with Up to 10 Columns to Dashboards (Beta)

The Lightning table, a new dashboard table component, shows up to 200 records and 10 columns from the fields available in a source report's report type. (So the fields need not be added to the source report as columns!) Add a Lightning table to supplement chart and metric-based overviews with record-by-record details. This feature is new in Lightning Experience.



Because there are now two types of table components, we are renaming the table component “legacy table”.

Lightning tables are available in the dashboard builder by default. To turn off Lightning tables, go to the Reports and Dashboards Settings page in Setup and deselect **Enable Lightning Dashboard Tables (Beta)**.

Lightning tables aren’t available in Salesforce Classic. You can’t add them from the Classic dashboard builder, nor can you see them when you view a dashboard in Salesforce Classic.

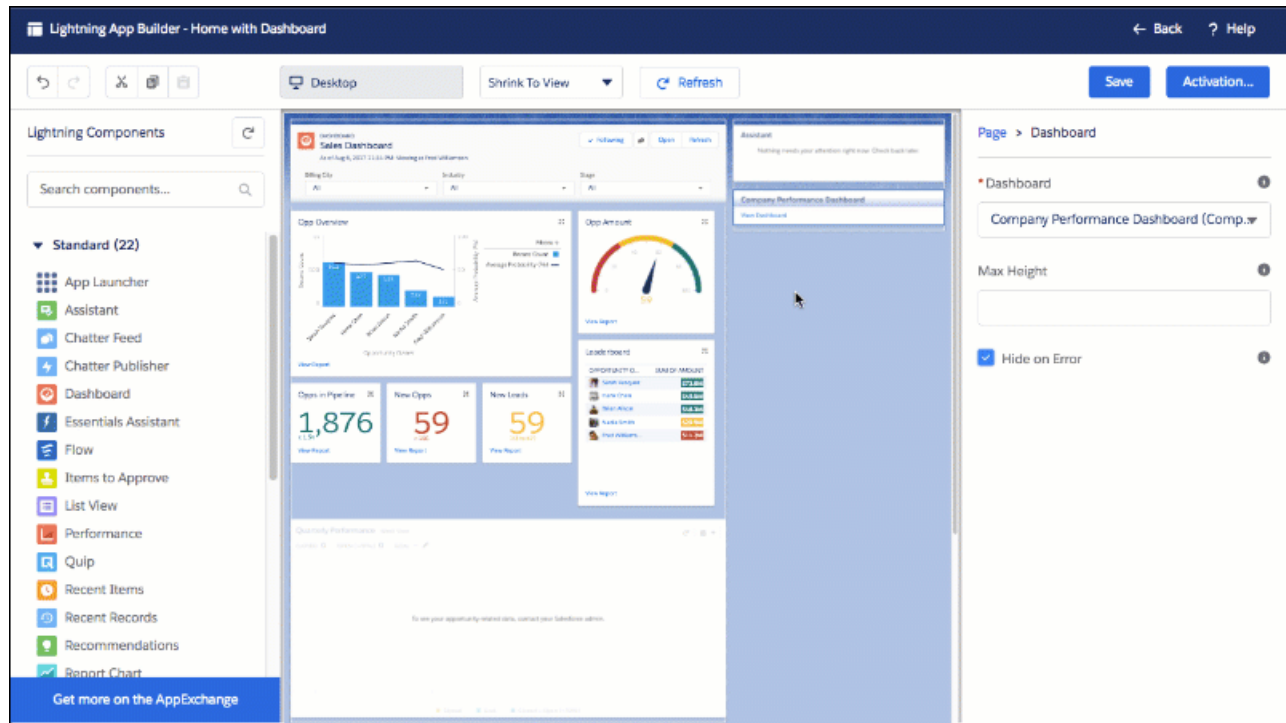
These features aren’t available in the beta version of Lightning tables, but we’re working hard to implement them in a future release.

- Chatter photos
- Conditional highlighting
- Dashboard filters aren’t applied to Lightning tables.

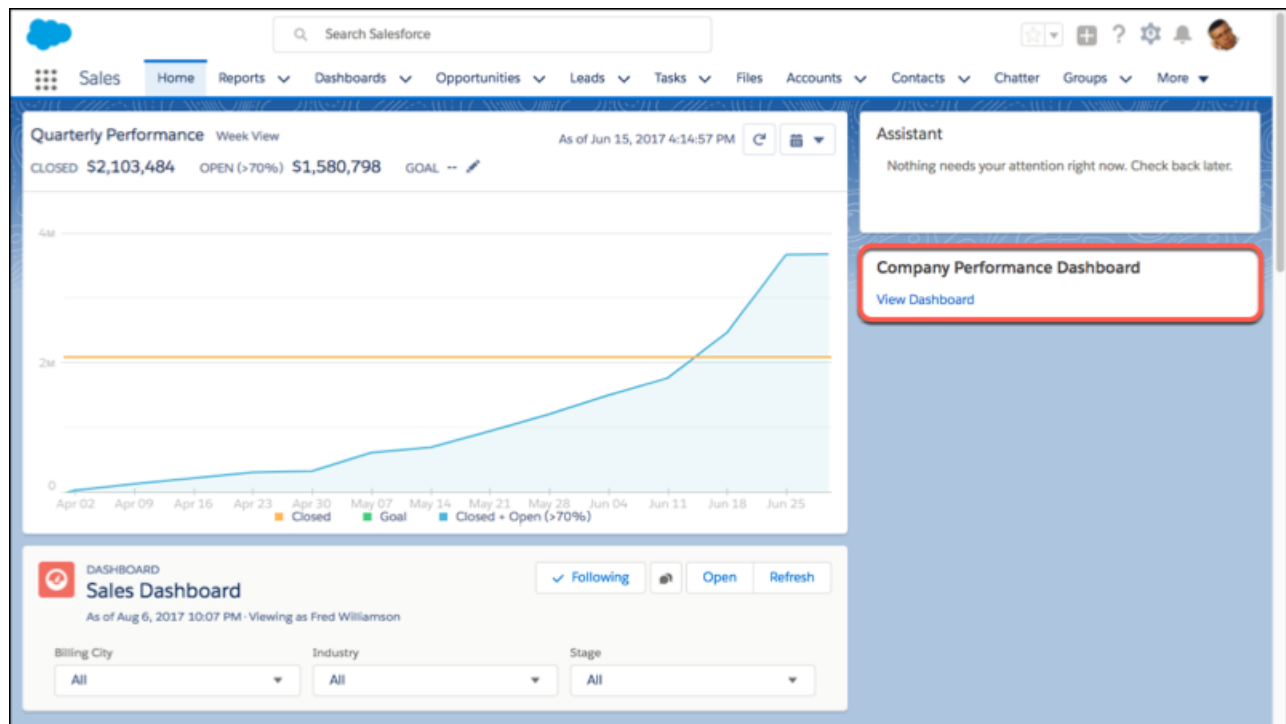
## Embed Dashboards on the Home Tab and in Lightning Apps

Embed dashboards to surface insights right where people work. For example, add the Sales Pipeline dashboard to the Home tab to give your sales team the information they need when they log in to Salesforce. Embedded dashboards are fully functional and interactive. Refresh them, apply filters, and click chart segments to drill into filtered reports. This feature is new in Lightning Experience.

Embed dashboards using the Lightning App Builder. Customize the Home tab, or create a Lightning app, then drag-and-drop a dashboard component into place. Embedded dashboards aren’t available on record pages.

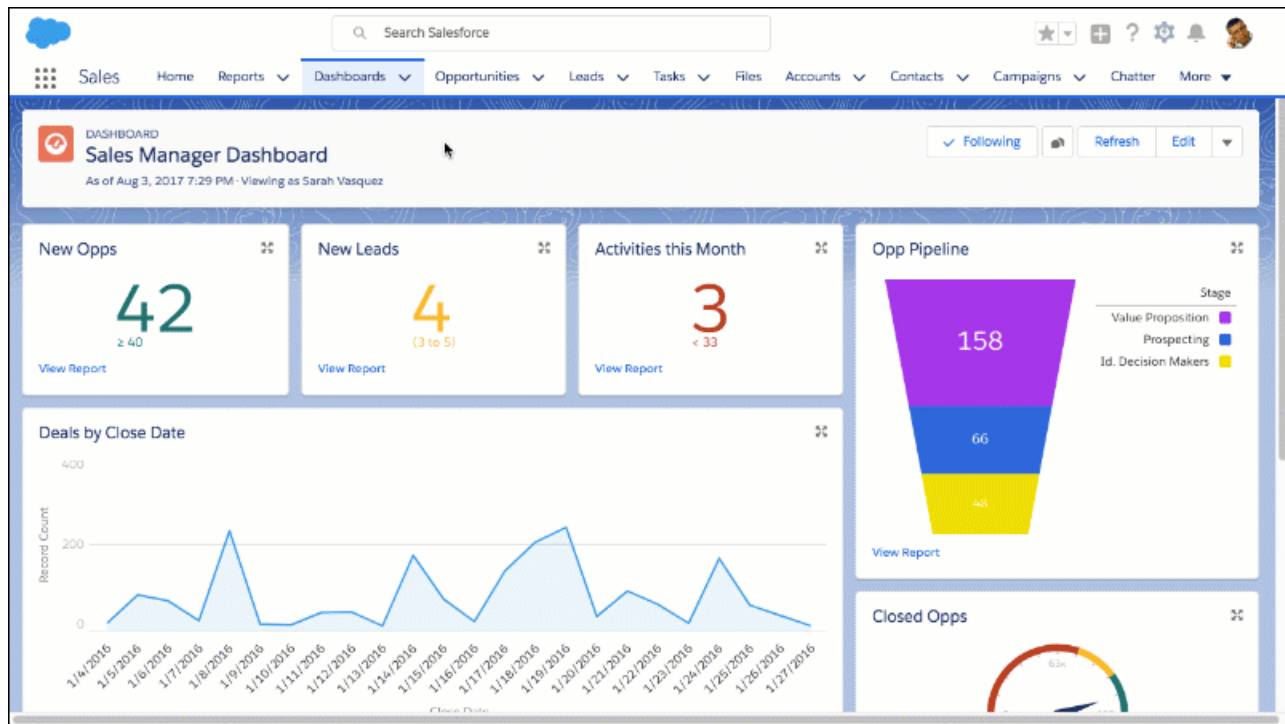


Dashboards need space to display charts and tables. If an embedded dashboard is squished into too small a space, then a collapsed version displays instead of the full dashboard. Click **View Dashboard** to open a collapsed dashboard.



## View Filtered Reports by Clicking Chart Segments from Dashboards

Want to know more about the data shown in dashboard charts? Click a chart segment, axis label, or legend to view a filtered version of the source report. The chart segment you clicked, plus any applied dashboard filters, appear as linked filters when the report opens. For example, click the prospecting segment of an opportunity pipeline funnel chart to open and filter the source report by stage equals prospecting. This feature is new in Lightning Experience.



To open the filtered source report in a new tab, hold down **CTRL** on Windows® or **Command** on MacOS® and click a chart segment.

If a chart displays one of these types of data, then the source report won't filter:

- Encrypted strings
- Dates fields with month-in-year or day-in-month granularity

## Get the Full Power of Enhanced Folder Sharing in Lightning Experience

Lightning Experience now has all you need to organize and share your reports and dashboards. It's now a snap to create, share, rename, and delete folders. No more switching to Salesforce Classic! This feature is new in Lightning Experience.

Have an org created after Summer '13? Then you're all set: enhanced folder sharing is already on by default. Have an older org? Turn on enhanced folder sharing. See [#analytics\\_sharing\\_enable\\_\\_analytics\\_sharing\\_enable](#).

Fine-grained permission controls and easy configuration make your folder life smooth and stress-free:

- Share at the user, group, or role level, or a combination thereof.
- Enjoy fine-grained access levels for each folder share.
- Everyone can see who is allowed to access particular report and dashboard folders.

And there's an access level for every need:

- Viewer. View reports or dashboards in a folder and see who has what level of access to a folder.

- Editor. All viewer access, plus ability to save a report or dashboard to a folder.
- Manager. All viewer and editor access, plus ability to rename folders, delete folders, and edit, delete, and remove shares.

## Share Folder

**Share with**

Users
▼

**Names**

Q

**Access**

Can view
▼

Share

▼
**Who can access**

Q

	<b>Fred Williamson</b> <small>Users</small>	<div style="border: 1px solid #ccc; padding: 2px 5px; display: flex; justify-content: space-between; align-items: center;"> <span>Can manage</span> <span>▼</span> </div>	<span style="font-size: 1.2em; color: #ccc;">X</span>
	<b>Manager Sales - East</b> <small>Roles</small>	<div style="border: 1px solid #ccc; padding: 2px 5px; display: flex; justify-content: space-between; align-items: center;"> <span>Can view</span> <span>▼</span> </div>	<span style="font-size: 1.2em; color: #ccc;">X</span>

But what if you have a pre Summer '13 org with legacy folder sharing and don't want to reassign reports and dashboard permissions? Not to worry. Legacy folder sharing is still available, though only in Salesforce Classic. If you're using legacy folder sharing, Salesforce determines what you can see and do with folders:

- Salesforce determines a folder's accessibility and visibility to a user as a read-only or read-write.
- Read-only: when a folder is visible to a user, the user can see and run all the reports stored in that folder.
- Read/Write: users with read-write permissions on folder can save reports to that particular folder. When you save a report, see report folders for which you have write permission.

By the way, you can now find all the help topics for report and dashboard folders in their own area within Analytics Reports and Dashboards.

## Chart Enhancements for Reports and Dashboards in Lightning Experience

Visualizing business data is understanding business data, so we've improved charts to help you see it better. These changes apply to Lightning Experience only.

### Display Up to 500 Groups in Line and Bar Charts in Dashboards

For line and bar charts, including cumulative line charts and stacked bar charts, we've upped the number of displayed groups from 200 to 500! All other chart types still show 200 groups. This change was introduced in a Summer '17 patch.

**Add Up to Four Measures to Horizontal Bar and Stacked Horizontal Bar Charts in Dashboard Components**

To display four measures, the component's source report must have four measures. Horizontal bar and stacked horizontal bar charts continue to support up to two groups or now up to two measures, but don't support both at once. If you show multiple groups, you can't display multiple measures, and vice versa.

**Add a Second Line to a Line Chart**

Line charts in dashboard components now support up to two measures. The second measure is drawn as a second line. To display two measures, the component's source report must have two measures.

**Add Chatter Photos to Legacy Tables in the Lightning Dashboard Builder**

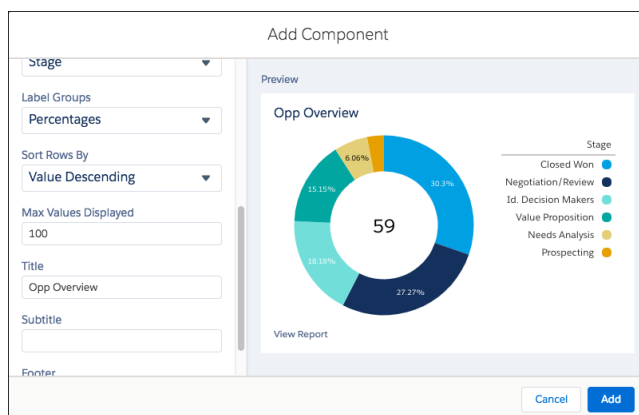
Leaderboards throughout Lightning Experience, rejoice! Dashboard editors can now create leaderboards in Lightning Experience by showing Chatter profile photos on legacy tables. Previously, legacy tables displayed Chatter photos when configured in Salesforce Classic. Now, you can configure them in Lightning Experience. Chatter photos don't show in the Add Component preview window, but they will appear after saving the dashboard.

**Add Conditional Highlighting to Legacy Tables in the Lightning Dashboard Builder**

Show conditional highlighting on legacy tables to call out the good, the bad, and the great! Previously, legacy tables displayed conditional highlighting when configured in Salesforce Classic. Now, you can configure them in Lightning Experience.

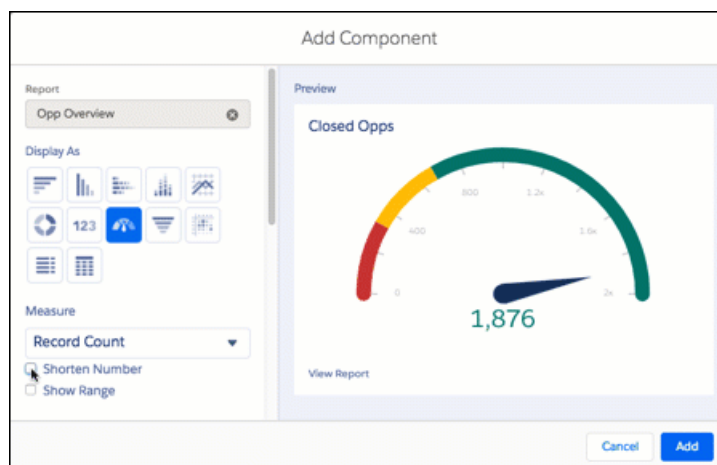
**Donut Charts Display Values or Percentages**

Label groups in donut charts with their true values or percentages.

**View Metric and Gauge Chart Numbers in Full, or Shorten Them; Show or Hide a Value Range**

Shorten numbers to see approximations that take up less space (for example, 1,876 becomes 1.9k), or view the full number for to-the-digit accuracy. Show the value range to provide more context to your data, or hide it to focus on the numbers themselves.





### Work Better with Redesigned Chart Icons

We redesigned the chart icons for adding a dashboard component or report chart. Here are the new icons in their default state (1), hover state (2), selected state (3), and unavailable state (4).



### Know When Data Limits Are Reached

Sometimes a dashboard component isn't able to display all the information in a source report, such as when the report has many groups. We made it more apparent that the chart is displaying limited data.

## Other Enhancements to Reports and Dashboards in Lightning Experience

In addition to this release's major features, we've made some small-but-notable improvements to reports and dashboards. These changes apply to Lightning Experience only.

### Dashboard Properties Menu Enhanced for Clarity

In the **View Dashboard As** section of the dashboard properties menu, we renamed the options for clarity. Previously, the options were:

- Me
- A specified user
- The logged in user
- Allow dashboard viewers to change this (dynamic dashboard)

Now, the options are:

- Me
- Another person



- The dashboard viewer
- Let dashboard viewers choose whom they view the dashboard as

### View Embedded Report Chart's Source Reports

People viewing an embedded report chart on a record page or a Lightning app can click **View Report** to open the chart's source report.

### Filter Dashboards with Relative Dates

To filter dashboard components based on values like *yesterday*, *last week*, *next fiscal quarter*, or *next 30 days*, edit a filter value and select **Relative** under Data Type.

### If a Dashboard's View As User Is Inactive, Change the Viewing As User

Previously, if the person who people viewed a dashboard as was inactive, then you could change person only in Salesforce Classic. Now, from Lightning Experience, dashboard editors can replace an inactive person with an active one.

## Einstein Analytics: Smart Explore, Global Filters, Upload Wizard

Einstein Analytics is all about facilitating the Analytics experience for business users, admins, and developers, and we packed this release with features to help you make it happen. Quickly make sense of your data and find the best visualization using the explore window's more intuitive and smart interface. Turbocharge dashboard performance by optimizing queries with global filters. Use the upload wizard to view and change file properties and field attributes before you upload data.



**Note:** The supported browsers for Einstein Analytics are Microsoft® Edge, Microsoft Internet Explorer® version 11, and the most recent stable versions of Mozilla® Firefox® and Google Chrome™. Analytics isn't supported on Apple® Safari®.

### EDITIONS

Available for an extra cost in **Enterprise, Performance, and Unlimited** Editions. Also available in **Developer** Edition.

## IN THIS SECTION:

[Einstein Analytics, the New Name for Wave Analytics](#)

The Wave Analytics brand is now Einstein Analytics. It includes multiple products: Einstein Analytics Platform, prebuilt apps, and Einstein Data Discovery, which is now Einstein Discovery. The prebuilt apps, permission set licenses, and user permissions also have modified names. Starting in Summer '17 and continuing in Winter '18, we applied the new names throughout the product and documentation.

[Analytics Prebuilt Apps: Immediate Visibility into App Creation, Einstein Integration, Flexible Setup](#)

Prebuilt apps get smarter and easier to use with every release. The creation status page for all apps now shows step-by-step progress. Sales Analytics features Sales Cloud Einstein integration, and Service Analytics setup is more flexible and reliable. Field Service Analytics added two new embeddable dashboards.

[Analytics Home: Global Search, Lightning Experience](#)

Lightning Experience in your Analytics home makes it easier to find and organize assets, as well as curate and provide insights for different teams.

[Analytics Exploration and Visualization: Table Styles, Easy Column Reordering, Dataset Field Control](#)

Quickly make sense of your data using the more intuitive explorer window, including new properties and functions for tables, visibility into dataset fields, and smart chart suggestions.

[Analytics Dashboard Design: Performance Improvement Recommendations, Pages, More Access to Steps and Filters](#)

Build faster by sharing widgets, steps, and global filters in dashboard pages. Save time by editing steps instead of re-creating them. Optimize dashboard performance by breaking dashboards into smaller pages and implementing changes recommended by the dashboard inspector.

[Analytics Data Integration: Upload Wizard, New Connectors, Data Preparation Smart Suggestions](#)

Data integration into Analytics is easier with enhancements to the dataflow editor, dataset edit page, and replication setup page. With the new upload wizard, you can view and change file properties and field attributes before you upload data. In the dataset builder, select dataflows and create new ones.

[Analytics Einstein Discovery: More Data Access, Better Stories](#)

New features in Einstein Discovery make it easier for anyone to tap into the power of data science. Statistical and predictive analytics give you answers, explanations, and recommendations.

[Analytics Mobile: More Charts, Custom Background Images, Updated Dashboards and Lenses](#)

Explore and present your favorite dashboards and lenses with beautiful charts that faithfully match Analytics on desktop.

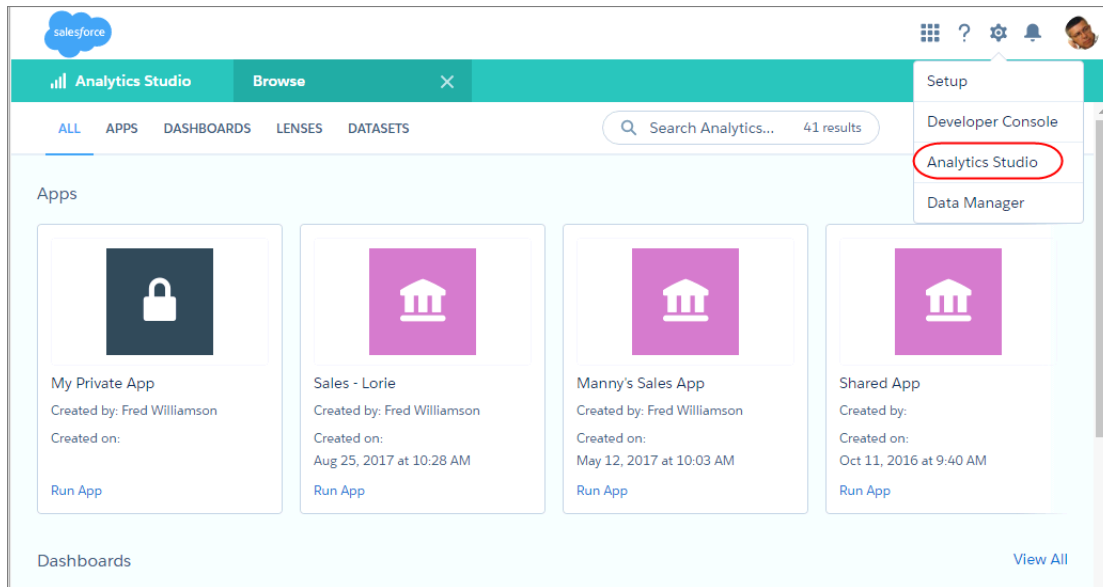
[Analytics Development and Customization: New SDK Events and SAQL Functionality, Embedded Dashboard Header Control](#)

SAQL, the REST API, and the SDK all continue to expand. New functions, new endpoints, new events. Use Apex in your dashboard. Use custom icons and connected datasets in your templates.

## Einstein Analytics, the New Name for Wave Analytics

The Wave Analytics brand is now Einstein Analytics. It includes multiple products: Einstein Analytics Platform, prebuilt apps, and Einstein Data Discovery, which is now Einstein Discovery. The prebuilt apps, permission set licenses, and user permissions also have modified names. Starting in Summer '17 and continuing in Winter '18, we applied the new names throughout the product and documentation.

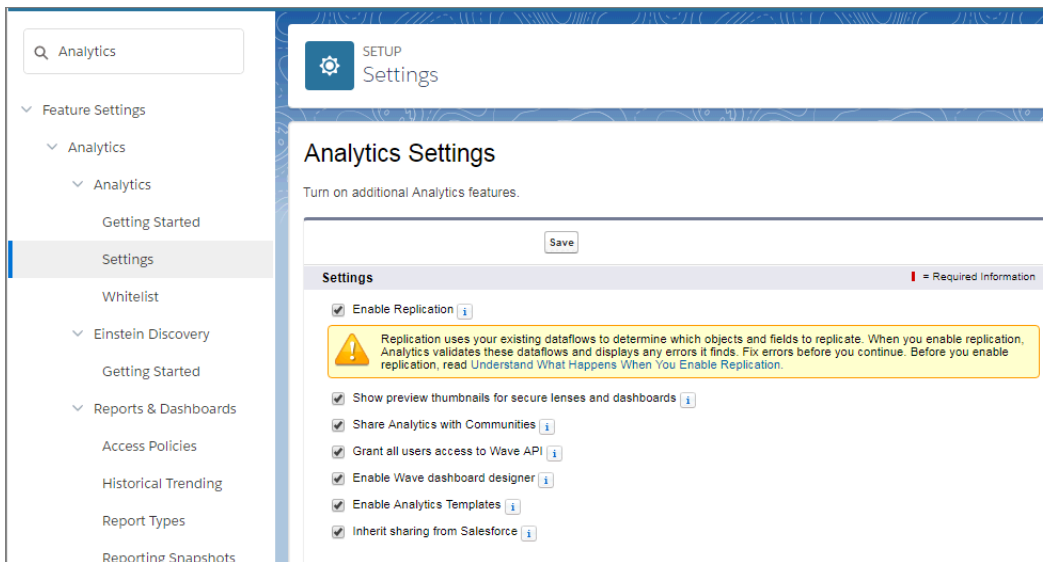
The documentation and interface refer to Einstein Analytics Platform with the shortened name Analytics. To build an Analytics app, click **Analytics Studio** in the app picker—the option is no longer Wave Analytics.



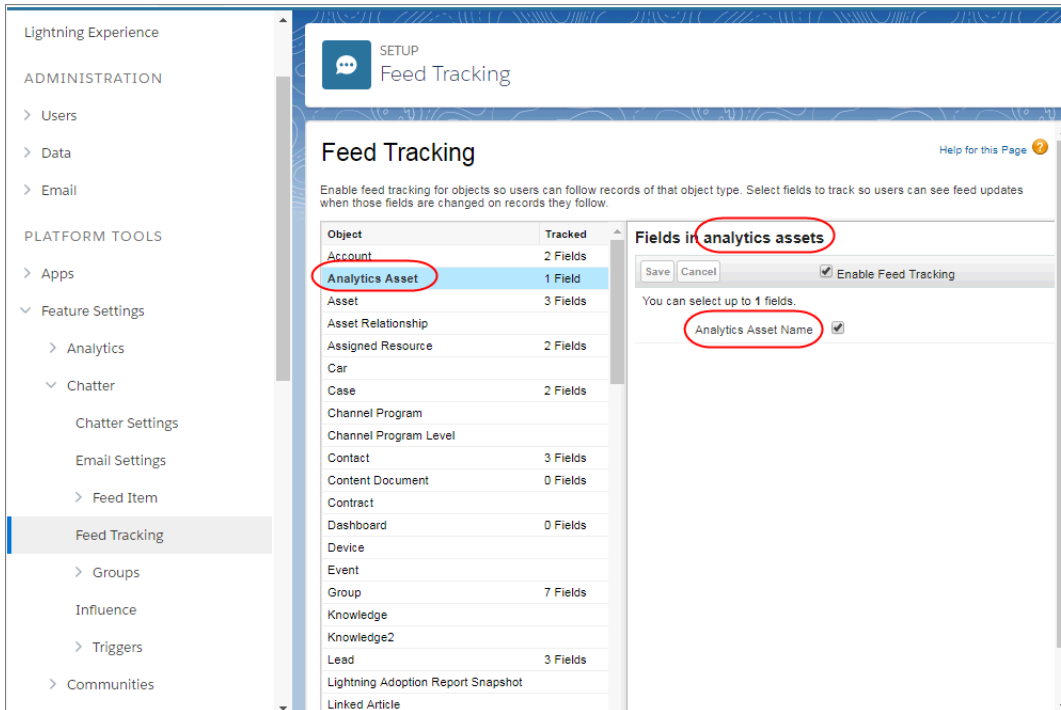
Check out the new names so that you aren't surprised when you see them.

#### Prebuilt Analytics Apps (Changed in Summer '17)

Previous Name	New Name
B2B Marketing Wave Analytics	B2B Marketing Analytics
Event Monitoring Wave	Event Monitoring Analytics
Field Service Wave Analytics	Field Service Analytics
Sales Wave Analytics	Sales Analytics
Service Wave Analytics	Service Analytics
Wave for Financial Services Cloud	Einstein Analytics for Financial Services Cloud
Wave for Health Cloud	Einstein Analytics for Health Cloud

**Analytics Setup Settings (Changed in Winter '18)**

Previous Name	New Name
Show preview thumbnails for lenses and dashboards with row-level security	Show preview thumbnails for secure lenses and dashboards
Enable Wave Analytics for Communities	Share Analytics with Communities
Enable the Wave API for all Wave users	Grant all users access to Wave API
Enable null measure handling in Wave Analytics	Allow null measure handling in datasets
Enable Wave Template Support	Enable Analytics Templates
Enable Wave Sharing Inheritance	Inherit sharing from Salesforce



Previous Name	New Name
Wave Asset	Analytics Asset

### Permission Set Licenses (Changed in Winter '18)

Previous Name	New Name
Analytics Cloud - Wave Analytics Platform	Analytics Platform
Analytics Cloud Explorer	Analytics Explorer
Analytics Cloud - Wave Community Users	Analytics for Communities
Wave Embedded App	Analytics Embedded App
Wave Template Administration	Analytics Template Administration

### User Permissions (Changed in Winter '18)

Previous Name	New Name
Access Wave Analytics SAQL Editor	Deprecated. We removed this user permission because it's no longer needed to access the SAQL editor. The editor is included as part of the explorer.
Create and Edit Wave Analytics Dashboards	Create and Edit Analytics Dashboards
Create Wave Analytics Apps	Create Analytics Apps

Previous Name	New Name
Download Wave Analytics Data	Download Data from Analytics
Edit Wave Analytics Dataflows	Edit Analytics Dataflows
Manage Wave Analytics	Manage Analytics
Manage Wave Analytics Templated Apps	Manage Analytics Templated Apps
Upload External Data to Wave Analytics	Upload External Data to Analytics
Use Wave Analytics	Use Analytics
Use Wave Analytics Templated Apps	Use Analytics Templated Apps
View Wave Analytics on Communities pages	View Analytics on Communities pages
Trend Report Data in Wave Analytics	Trend Report Data in Analytics

## Analytics Prebuilt Apps: Immediate Visibility into App Creation, Einstein Integration, Flexible Setup

Prebuilt apps get smarter and easier to use with every release. The creation status page for all apps now shows step-by-step progress. Sales Analytics features Sales Cloud Einstein integration, and Service Analytics setup is more flexible and reliable. Field Service Analytics added two new embeddable dashboards.

### IN THIS SECTION:

#### [Latest Service Analytics Version Lets You Choose Between Fast \(Basic\) and Custom Creation Options](#)

The new Service Analytics configuration wizard offers a basic app creation option that lets you get started fast and custom creation that lets you fine-tune app setup.

#### [Watch Step-by-Step Creation of Your App](#)

The app status page for all Analytics prebuilt apps now shows the success or failure of each event in the app creation process.

#### [Turn Data into Dollars with Sales Analytics, Now Powered by Einstein](#)

The latest version of Sales Analytics brings your hottest leads right to the surface with Sales Cloud Einstein integration. You can also embed powerful visualizations into the Lightning Experience home page to get immediate access to deep data insights.

#### [Service Analytics Takes the Guesswork Out of App Creation, Gives Agents Greater Insight into Their Performance](#)

The app tells you what to fix if creation fails, requires fewer wizard selections, makes it easier to use geographic data, and helps agents understand how they're doing.

#### [Get Fine-Grained Insights into Mobile Technicians and Territories with Field Service Analytics](#)

Service Resource and Service Territory dashboards—embeddable in Lightning Experience pages—give you pinpoint details about what your field technicians are up to.

### USER PERMISSIONS

To use Analytics apps:

- Use Analytics Templated Apps
- Additional permission as specified for each app

To create and manage Analytics apps:

- Manage Analytics Templated Apps
- Edit Analytics Dataflows

## Latest Service Analytics Version Lets You Choose Between Fast (Basic) and Custom Creation Options

The new Service Analytics configuration wizard offers a basic app creation option that lets you get started fast and custom creation that lets you fine-tune app setup.

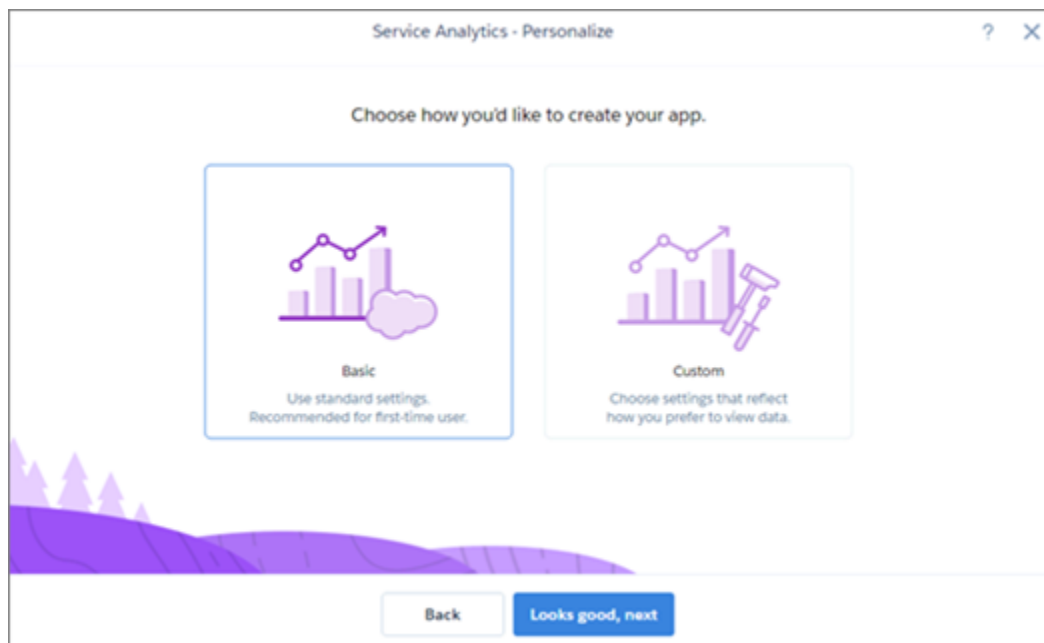
The new wizard makes it easier than ever to get actionable insights fast about your service business using the intuitive Analytics interface. You get a choice of how you create your app:

- **Basic creation.** Recommended for first-time users, the basic option lets you create Service Analytics quickly using standard, default settings. Answer a single question in the wizard, and basic creation takes care of the rest for you.
- **Custom creation.** Use the configuration wizard to fine-tune settings to reflect the way you and others on your team want to view data. The wizard asks you to choose and configure Salesforce features to add to Service Analytics. Select the ones you want based on how you use Salesforce and what data you want to see in the app. The custom wizard asks you a series of questions about how you use data in your org so you can fine-tune your version of the app.

### USER PERMISSIONS

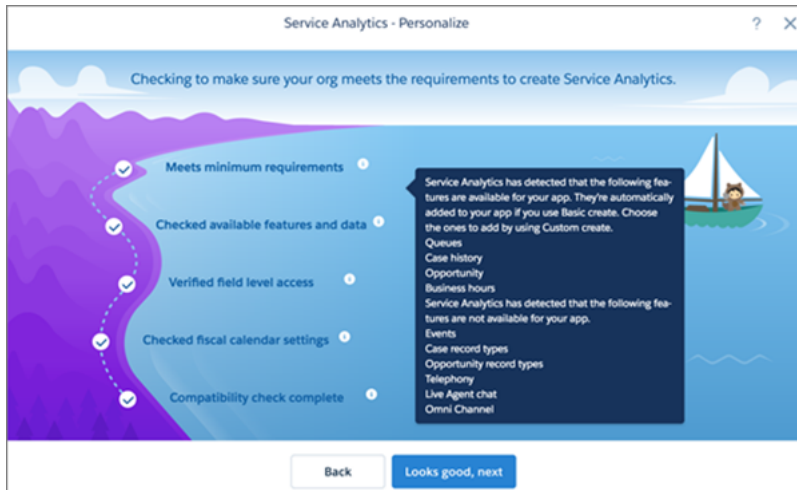
To use Service Analytics app:

- Access Service Cloud Analytics Templates and Apps



The basic create option doesn't let you add customer satisfaction and knowledge data to your app. Also, basic create defaults to standard Service Cloud fields. To use CSAT, knowledge, and custom fields, use custom create.

When you create your app, Service Analytics checks your org to be sure it has the required data to create the app's datasets and dashboards. If it doesn't, error messages tell you what you need to add to your org before creating the app. The compatibility check also determines the following:



- Default settings to use for Basic app creation.
- The objects you can add to the app and the questions you see in the configuration wizard when you use custom app creation. It checks for the following in your org, and let's you know if they're available to add to your app:
  - Case history
  - Opportunity
  - Queues
  - Events
  - Business hours
  - Case record types
  - Opportunity record types
  - Telephony
  - Live Agent chat
  - Omni-Channel
- Field-level security settings, to be sure the Analytics Integration User has access to all fields needed to create the app using the basic create option. Service Analytics tells you which fields, if any, can't be accessed by the Integration User so you can go to Salesforce Setup and adjust field-level security.
- Fiscal calendar setting.

Expanded help provides additional detail about how to create your app with the configuration wizard. Follow the help links from the

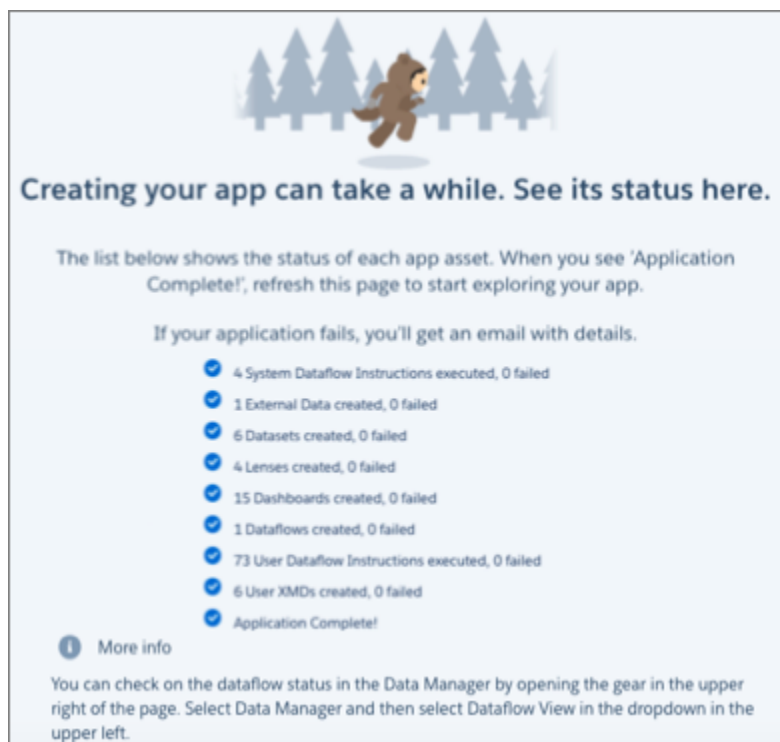


icons on each page of the wizard.

## Watch Step-by-Step Creation of Your App

The app status page for all Analytics prebuilt apps now shows the success or failure of each event in the app creation process.





Used to be that “hurry up and wait” could describe what you had to do during the creation of an Analytics prebuilt app. You’d reach the end of the configuration wizard only to be told that app creation took a while, and that you might want to grab a cup of coffee.

No longer. Now, when you name your app and click **Next** to finish app creation, you see a status page that shows the success or failure of each event in the creation process. Watch your app as it’s being created and learn right away what’s going right or wrong. After the process finishes, you get an email with more detail. And if app creation fails, you see details of what went wrong so you know what to fix.

After app creation succeeds, reload the status page to start exploring. Analytics opens your app and all its dashboards.

## Turn Data into Dollars with Sales Analytics, Now Powered by Einstein

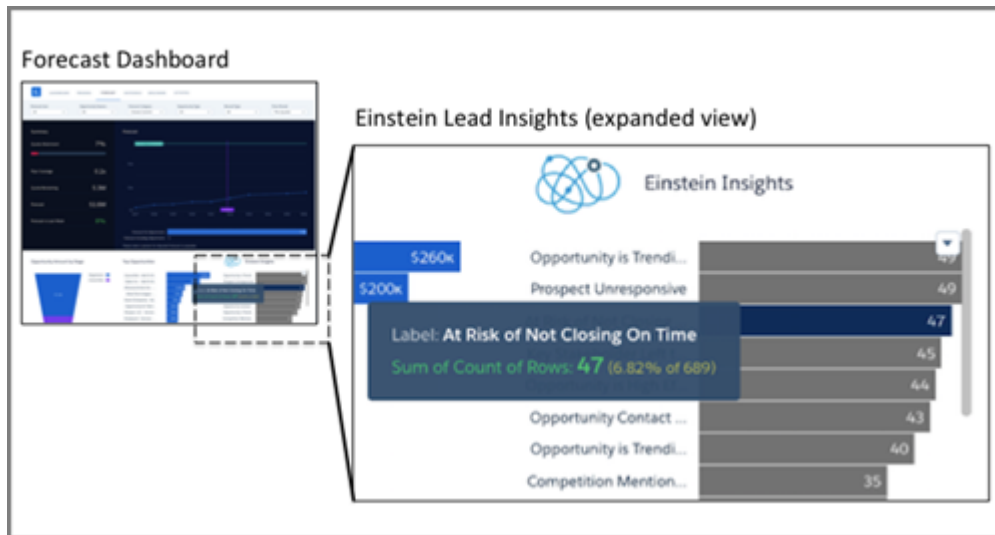
The latest version of Sales Analytics brings your hottest leads right to the surface with Sales Cloud Einstein integration. You can also embed powerful visualizations into the Lightning Experience home page to get immediate access to deep data insights.

When you create Sales Analytics, the wizard checks to see if your org uses lead scoring. If it does, dashboards show lead scores and lead insights to help you surface high-quality leads. You can quickly see if accounts and opportunities are likely to close. Then drill down to high-potential leads—or leads that are in trouble—to take immediate action.

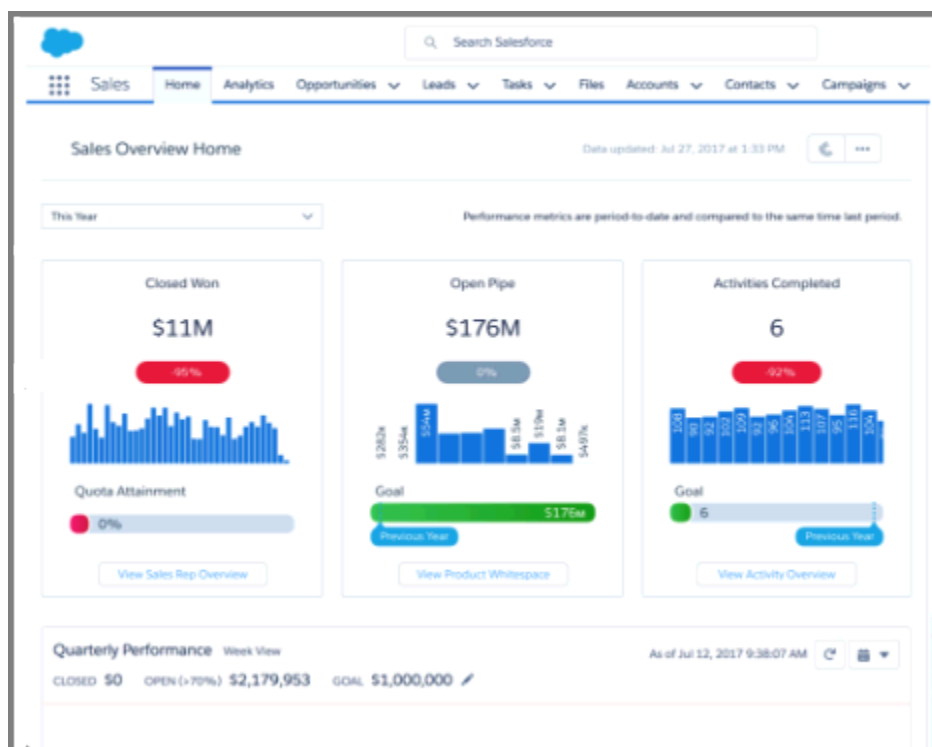
### USER PERMISSIONS

To use Sales Analytics app:

- Access Sales Cloud Analytics Templates and Apps



It's also easier to get to Sales Analytics insights fast thanks to redesigned dashboards that you can embed in Salesforce pages. Embed the new Sales Overview dashboard in the Lightning Experience home page to access the app's other dashboards from there. Or drill into KPIs directly from enhanced Opportunity and Account Summary dashboards that you can embed in Opportunity and Account record pages.



More data and more visualizations also give you more precise tools for uncovering the hidden gems in your data. On the data side, when you set up the app you can add data from custom fields tracked in Opportunity field history. Dashboards then calculate total opportunity amounts including data from those fields. For example, the Team Trending waterfall chart can now include total opportunity amounts that include data from custom fields. The latest visualizations include lenses that focus on data about opportunities, pipeline, and sales

process. Finally, on creation, the app checks whether your org uses opportunity splits. If it does, dashboards show split amounts instead of the entire opportunity, based on the team member's place in the role hierarchy.

## Service Analytics Takes the Guesswork Out of App Creation, Gives Agents Greater Insight into Their Performance

The app tells you what to fix if creation fails, requires fewer wizard selections, makes it easier to use geographic data, and helps agents understand how they're doing.

There used to be no simple way to know if your org's security settings enabled the Analytics Integration User access to all fields required to successfully create the Service Analytics App. Admins creating the app saw a failure message at the very end of the app creation process and were left in the dark about what to fix.

Now, the app's configuration wizard checks whether the Integration User can access all the fields selected in the wizard. If not, you immediately see an error message saying which fields can't be accessed. You can go to Setup, change security settings for those fields, and create the app again.

### USER PERMISSIONS

To use Service Analytics app:

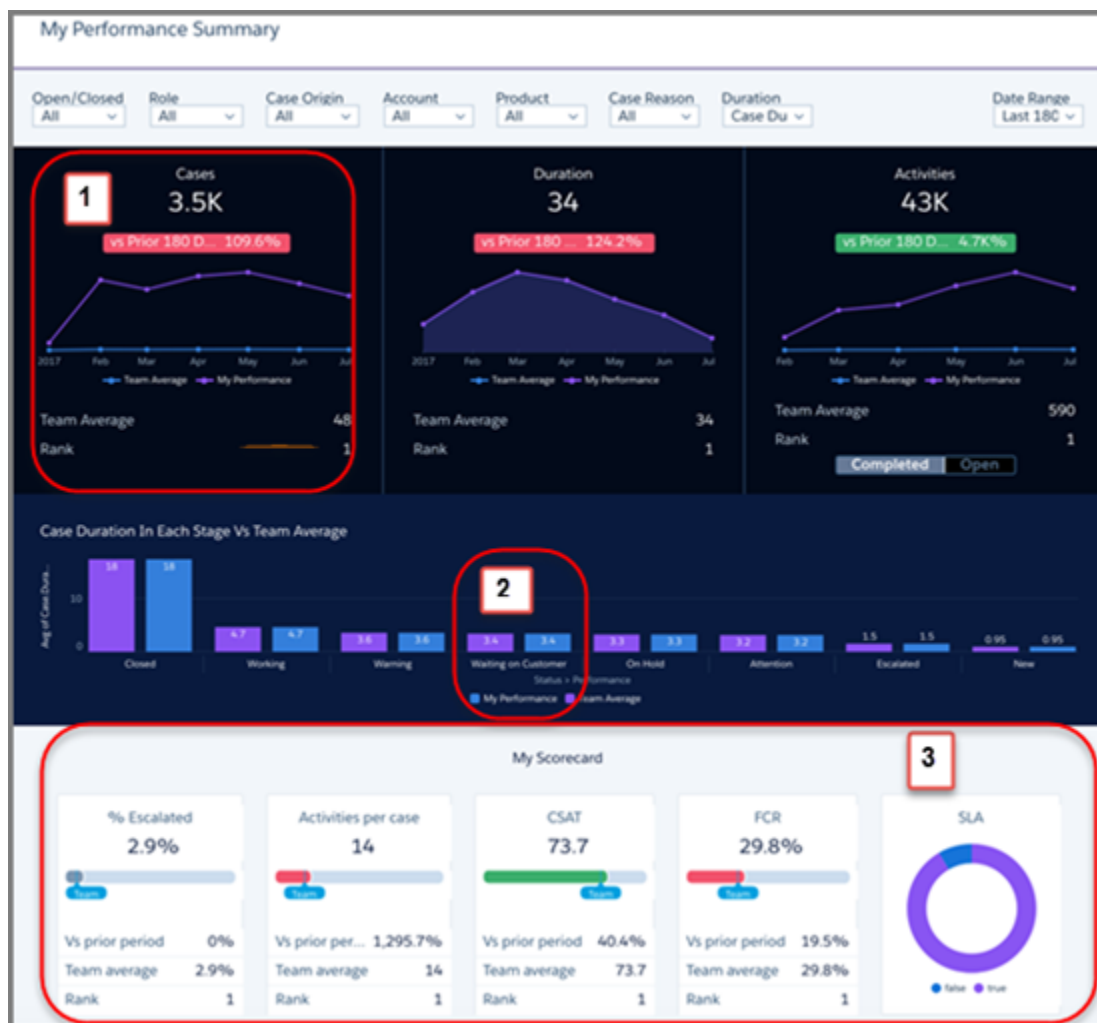
- Access Service Cloud Analytics Templates and Apps



Other wizard enhancements make app creation more flexible and more reliable. You no longer have to choose custom fields in the wizard for service level agreement, first contact resolution, and support type for app creation to succeed. Also, you can now select geography fields from the Contact objects. Previously, you could only select geography fields from Case and Account.

On the app content side, a redesigned My Performance Summary dashboard gives your agents a view into the success of their service efforts. Those insights help them stay on top of their performance, minimizes surprise during reviews, and lowers turnover resulting from poor results.

Agents can see their own performance KPIs, compare metrics to previous periods, and trend them against team averages (1). They also get insight into their average case duration benchmarked against the team average (2). Depending on your answers to wizard questions, agents can also get insights about CSAT, first-contact resolution, and chat KPIs (3). These additional metrics are presented in a modular layout to make customization easier.



## Get Fine-Grained Insights into Mobile Technicians and Territories with Field Service Analytics

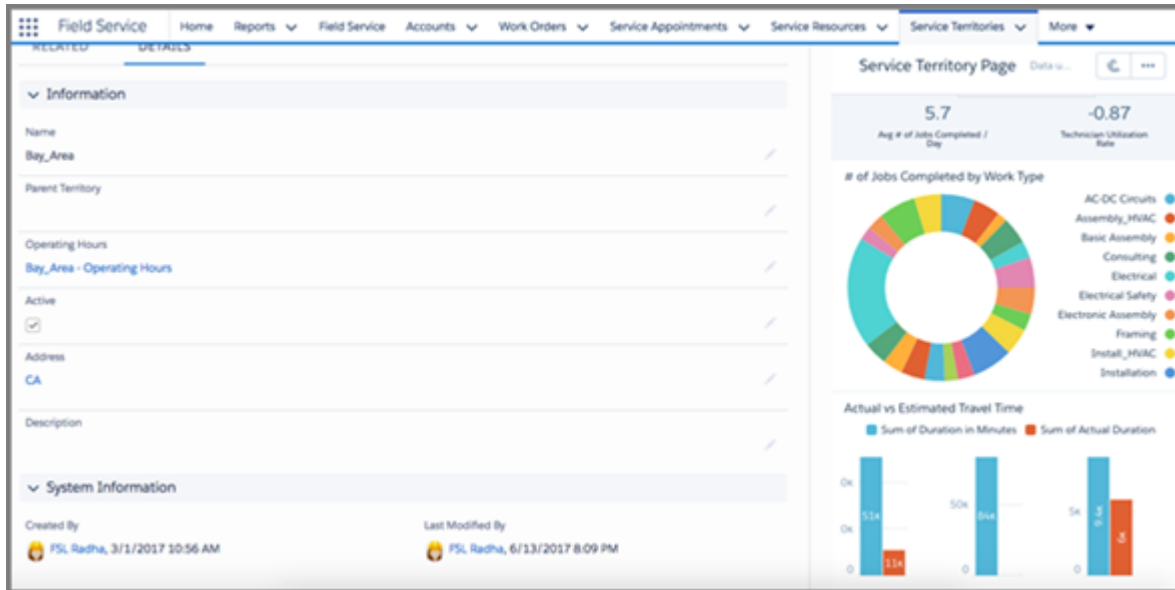
Service Resource and Service Territory dashboards—embeddable in Lightning Experience pages—give you pinpoint details about what your field technicians are up to.

With the Service Territory dashboard, field service managers can see the types of jobs completed in their territories—for example, HVAC, electrical, or plumbing—to ensure that their team members have the skills they need. They can also see the daily average number of jobs completed, technician utilization rate, and actual versus estimated technician travel times.

### USER PERMISSIONS

To use Sales Analytics app:

- Access Service Cloud Analytics Templates and Apps



The Service Resource dashboard shows the time spent by an individual technician on each type of job so that you can assess the technician's efficiency. It also shows the average number of jobs completed by the technician for a specific date range, the worker's first-time fix rate, and actual versus estimated travel times to job sites. You can embed the dashboard in each individual technician's page.

## Analytics Home: Global Search, Lightning Experience

Lightning Experience in your Analytics home makes it easier to find and organize assets, as well as curate and provide insights for different teams.

### IN THIS SECTION:

#### [Curate the Analytics Experience for Your Teams](#)

Home is where the start is. Get your users started with the right Analytics experience for their needs. For instance, business users who work in Lightning Experience or Salesforce Classic want to run curated apps, dashboards, and lenses in the Analytics tab. They gain insights by interacting with Analytics assets, but they don't need to edit the assets. On the other hand, analytics professionals want to explore datasets and create apps, lenses, and dashboards. The Analytics Studio is where they have all of the tools to produce those insight-generating Analytics assets.

#### [Amp Up Your Productivity with Lightning Experience in Your Analytics Home](#)

Analytics got Lightning Experience, and you get the benefits. Your new Analytics home has easy access to Analytics assets, new filters, redesigned tiles, and more. You have more time to get insights because it takes less time to find, browse, and run Analytics assets. The new interface appears in the Analytics Studio and in tabs in Lightning Experience and Salesforce Classic.

#### [Locate Lenses and Dashboards Lightning Fast with Lightning Experience Global Search](#)

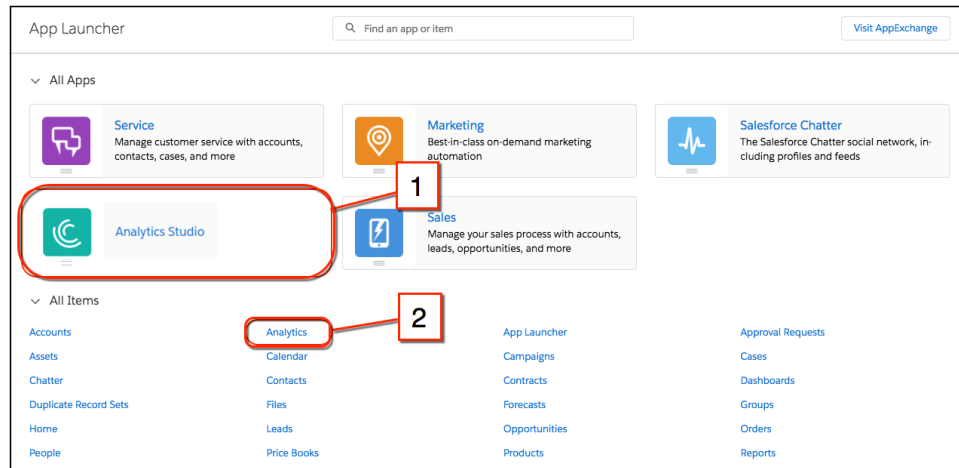
The much-loved global search box at the top of Lightning Experience has widened its search beam to include Analytics assets. Wherever you're working in Lightning Experience, type in the search box to quickly find and view lenses and dashboards.

#### [Stay Organized with the New Browse App and App Details Pages](#)

Redesigned browse and details pages help you increase productivity by reducing the time it takes to find and organize your Analytics assets. The new Browse App page is available in the Analytics Studio and in tabs in Lightning Experience and Salesforce Classic.

## Curate the Analytics Experience for Your Teams

Home is where the start is. Get your users started with the right Analytics experience for their needs. For instance, business users who work in Lightning Experience or Salesforce Classic want to run curated apps, dashboards, and lenses in the Analytics tab. They gain insights by interacting with Analytics assets, but they don't need to edit the assets. On the other hand, analytics professionals want to explore datasets and create apps, lenses, and dashboards. The Analytics Studio is where they have all of the tools to produce those insight-generating Analytics assets.

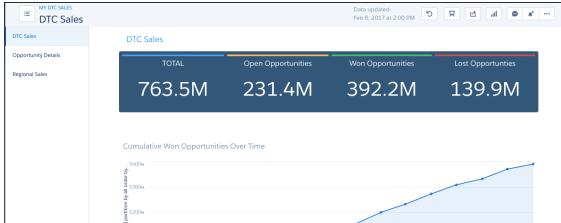
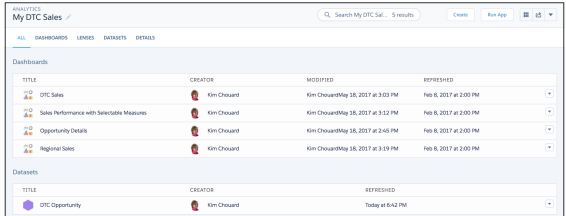
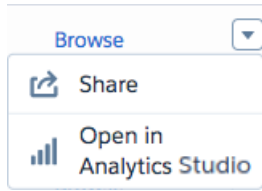
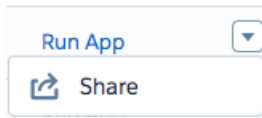
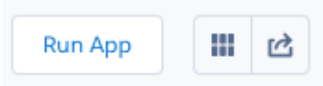
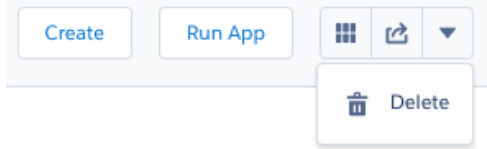

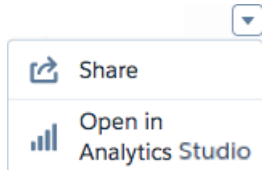
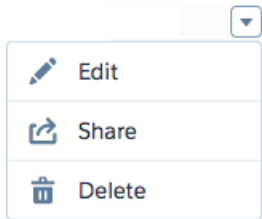



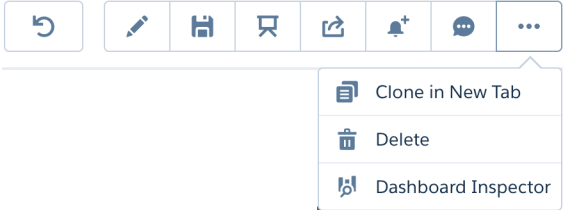
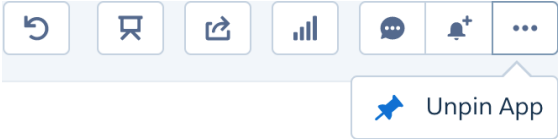


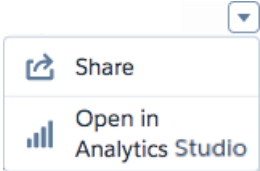
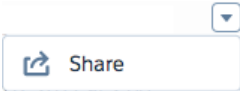

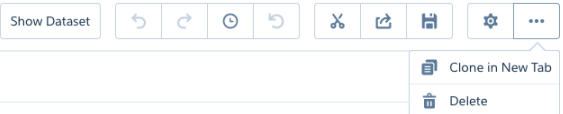
To start in the Analytics Studio, click the tile (1). To start in the Analytics tab, click the Analytics item (2). Both environments allow easy movement between tab and Studio.

This table shows the functional differences between the Analytics tab in Salesforce and the full Analytics Studio.

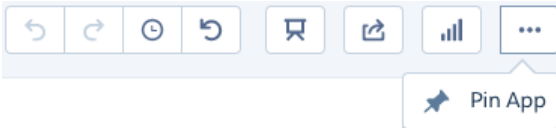
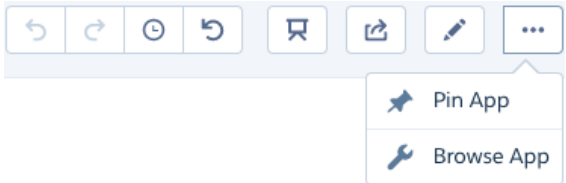

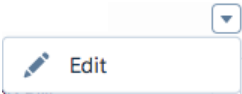
Action	Salesforce Tab (Run and Collaborate)	Analytics Studio (Browse and Build)
Create		✓
Annotate	✓	✓
Set Notification	✓	✓
Pin Apps	✓	✓
Edit		✓
Full Screen	✓	✓
Clip to Designer		✓
Clone in New Tab		✓
Save		✓
Share	✓	✓
Delete		✓

This table details the differences in behavior and functionality between the Analytics tab in Salesforce and the Analytics Studio.

Analytics Asset	Salesforce Tab	Analytics Studio
<b>Apps</b>		
What happens when you click an app name or icon on the home page	Runs app 	Browses app 
App actions on home page tile or list entry	Browse; Share; Open in Analytics Studio 	Run App; Share 
Actions on the Browse App page	Run App; Tile/List View; Share 	Create; Run App; Tile/List View; Share; Delete 
<b>Dashboards</b>		 <b>Note:</b> Actions are available depending upon user permissions and app sharing access.
Dashboard actions on home page tile or list entry	Share; Open in Analytics Studio 	Edit; Share; Delete 

Analytics Asset	Salesforce Tab	Analytics Studio
Dashboard actions when opened from home page	Follow; Open in Analytics Studio; Show Notifications 	(Dashboard designer preview mode) Follow; Reset; Edit; Save; Full Screen; Share; Show Notifications; Clone in New Tab; Delete; Dashboard Inspector 
Dashboard actions when opened in running Analytics app	Return to Initial View; Full Screen; Share; Open in Analytics Studio; Show Annotations; Show Notifications; Pin App 	Return to Initial View; Full Screen; Share; Edit; Show Annotations; Show Notifications; Pin App; Browse App 
<b>Lenses</b>		 <b>Note:</b> Actions are available depending upon user permissions and app sharing access.
Lens actions on home page tile or list entry	Share; Open in Analytics Studio 	Share 
Lens actions when opened from home page	Show Dataset; Undo; Redo; View History; Return to Initial View; Open in Analytics Studio; Properties 	(Explorer window) Show Dataset; Undo; Redo; View History; Return to Initial View; Clip to Designer; Share; Save; Properties; Clone in New Tab; Delete 



Analytics Asset	Salesforce Tab	Analytics Studio
Lens actions when opened in running Analytics app	Undo; Redo; View History; Return to Initial View; Full Screen; Share; Open in Analytics Studio; Pin App 	Undo; Redo; View History; Return to Initial View; Full Screen; Share; Edit; Pin App; Browse App 
Datasets		 <b>Note:</b> Edit is available depending upon user permissions and app sharing access.
Dataset actions on home page tile or list entry	N/A	Edit 

## Amp Up Your Productivity with Lightning Experience in Your Analytics Home

Analytics got Lightning Experience, and you get the benefits. Your new Analytics home has easy access to Analytics assets, new filters, redesigned tiles, and more. You have more time to get insights because it takes less time to find, browse, and run Analytics assets. The new interface appears in the Analytics Studio and in tabs in Lightning Experience and Salesforce Classic.

The screenshot shows the Salesforce Analytics Studio interface. The top navigation bar includes the Salesforce logo, a search bar, and user profile icons. The main header is 'Analytics Studio'. Below it, the 'ANALYTICS Recent' section shows 140 items. The left sidebar has tabs for 'Recent', 'Created by Me', 'Shared with Me', 'Pinned Apps', and 'Notifications'. The main content area has tabs for 'ALL', 'APPS', 'DASHBOARDS', 'LENSES', and 'DATASETS'. The 'APPS' tab is selected, showing a list of apps with columns: TITLE, DESCRIPTION, CREATED BY, and CREATED ON. The list includes 'My Private App', 'Service App', 'new', 'sales app 1', and 'sales test'. Each app has a 'Run App' button. Below the apps, there is a 'Dashboards' section with a 'View All' link. The dashboard list has columns: TITLE, APP, CREATED BY, LAST MODIFIED BY, and DATA REFRESHED. The first dashboard is 'Service Analytics Overview' associated with 'Service App'.

TITLE	DESCRIPTION	CREATED BY	CREATED ON
My Private App	Use this default app to store private or unfi...	Admin ...	
Service App		Admin ...	Jul 19, 2017 at ...
new		Admin ...	Jul 21, 2017 at ...
sales app 1		Admin ...	Jul 31, 2017 at ...
sales test		Admin ...	Jul 20, 2017 at ...

TITLE	APP	CREATED BY	LAST MODIFIED BY	DATA REFRESHED
Service Analytics Overview	Service App	Admin User	Admi...Jul 19, 2017 ...	Jul 19, 2017 at 5:47 ...

The Analytics tab in Lightning Experience and Salesforce Classic has greatly expanded access to apps, dashboards, and lenses.

The screenshot shows the Salesforce Lightning Experience interface. The top navigation bar includes the Salesforce logo, a search bar, and user profile icons. The main header is 'Sales'. Below it, the 'Analytics' tab is selected, showing a list of analytics items. The left sidebar has tabs for 'Recent', 'Created by Me', 'Shared with Me', 'Pinned Apps', and 'Notifications'. The main content area has tabs for 'ALL', 'APPS', 'DASHBOARDS', and 'LENSES'. The 'APPS' tab is selected, showing a list of apps with columns: TITLE, DESCRIPTION, CREATED BY, and CREATED ON. The list includes 'My Private App', 'Service App', 'new', 'sales app 1', and 'sales test'. Each app has a 'Browse' button. Below the apps, there is a 'Dashboards' section with a 'View All' link. The dashboard list has columns: TITLE, APP, CREATED BY, LAST MODIFIED BY, and DATA REFRESHED. The first dashboard is 'Service Analytics Overview' associated with 'Service App'.

TITLE	DESCRIPTION	CREATED BY	CREATED ON
My Private App	Use this default app to store private or un...	Admin ...	
Service App		Admin ...	Jul 19, 2017 at ...
new		Admin ...	Jul 21, 2017 at ...
sales app 1		Admin ...	Jul 31, 2017 at ...
sales test		Admin ...	Jul 20, 2017 at ...

TITLE	APP	CREATED BY	LAST MODIFIED BY	DATA REFRESHED
Service Analytics Overview	Service App	Admin User	Admi...Jul 19, 2017...	Jul 19, 2017 at 5:47...

The screenshot shows the Salesforce Analytics interface. The top navigation bar includes 'Home', 'Analytics', 'Chatter', 'Profile', 'Groups', 'Files', 'Leads', 'Accounts', 'Contacts', 'Opportunities', 'Reports', 'Dashboards', 'Products', and 'Forecasts'. The 'Analytics' section is active, showing 'Recent' items (140 items). A search bar 'Search Analytics...' is present. The left sidebar has a 'Recent' section with sub-items: 'Created by Me', 'Shared with Me', 'Pinned Apps', and 'Notifications'. The main content area shows a list of apps and dashboards. The 'Apps' section is selected, showing a table with columns: TITLE, DESCRIPTION, CREATED BY, and CREATED ON. The 'Dashboards' section is also visible, showing a table with columns: TITLE, APP, CREATED BY, LAST MODIFIED BY, and DATA REFRESHED.

TITLE	DESCRIPTION	CREATED BY	CREATED ON
My Private App	Use this default app to store private or un...	Admin ...	
Service App		Admin ...	Jul 19, 2017 at...
new		Admin ...	Jul 21, 2017 at...
sales app 1		Admin ...	Jul 31, 2017 at...
sales test		Admin ...	Jul 20, 2017 at...

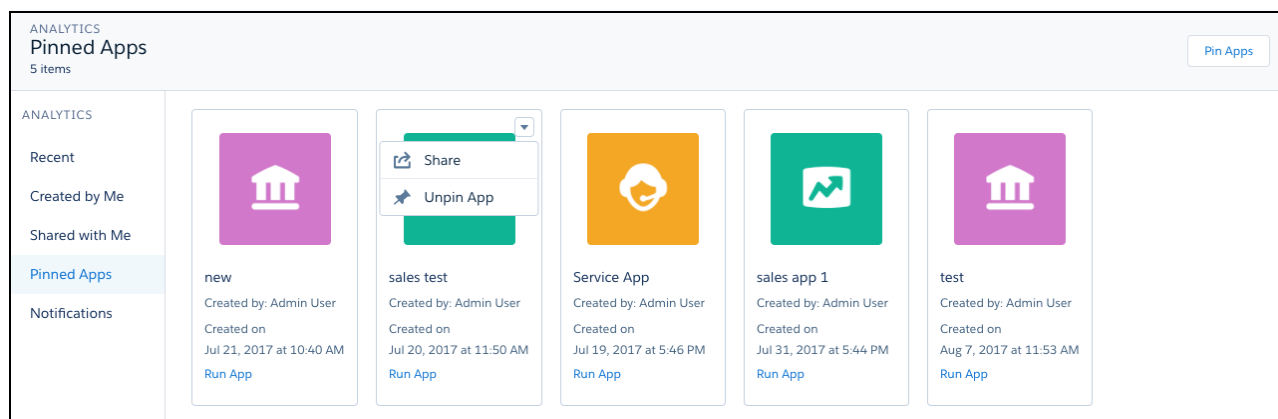
TITLE	APP	CREATED BY	LAST MODIFIED BY	DATA REFRESHED
Service Analytics Overview	Service App	Admin User	Adm... Jul 19, 2017...	Jul 19, 2017 at 5:4...

Now you can filter using **Created by Me** and **Shared with Me**, as well as the **Apps**, **Dashboards**, and **Lenses** subtabs (and the **Datasets** subtab in Analytics Studio). The count of items reflects the filters you selected (1), and the search box searches only filtered items (2).

The screenshot shows the Salesforce Analytics interface with the 'Created by Me' filter applied. The left sidebar shows 'Created by Me' selected, with a count of '13 items' highlighted by a red box and labeled '1'. The main content area shows a list of apps and dashboards. The 'Apps' section is selected, showing a table with columns: TITLE, DESCRIPTION, CREATED BY, and CREATED ON. The 'Dashboards' section is also visible, showing a table with columns: TITLE, APP, CREATED BY, LAST MODIFIED BY, and DATA REFRESHED. A search bar 'Search Apps...' is highlighted by a red box and labeled '2'.

TITLE	DESCRIPTION	CREATED BY	CREATED ON
My Private App	Use this default app to store private or ...	Admi...	
test		Admi...	Aug 7, 2017 ...
sales test		Admi...	Jul 20, 2017 ...
sales app 1		Admi...	Jul 31, 2017 ...
Service App	DESCRIPTION	Admi...	Jul 19, 2017 ...

Pinned apps and notification tracking are now separate pages reached through the left navigation panel. All views, whether tiles or list, include one-click access to both run and browse actions, as well as other actions if appropriate for the asset.



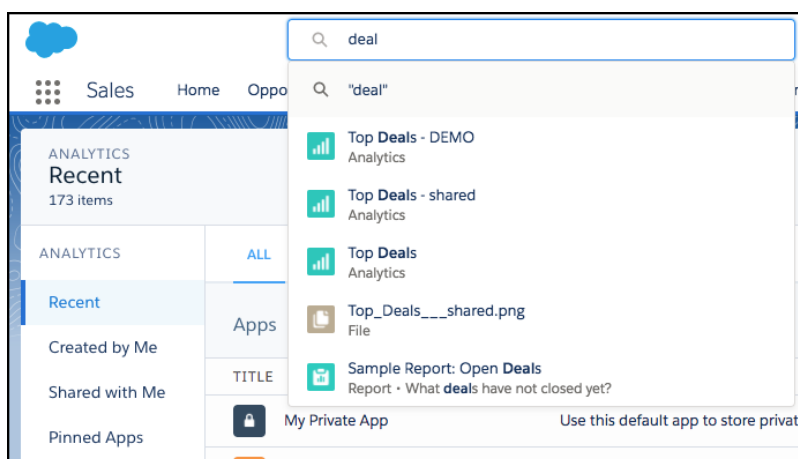
The left navigation panel remembers your last selections and reopens to them the next time you return to Analytics.

## Locate Lenses and Dashboards Lightning Fast with Lightning Experience Global Search

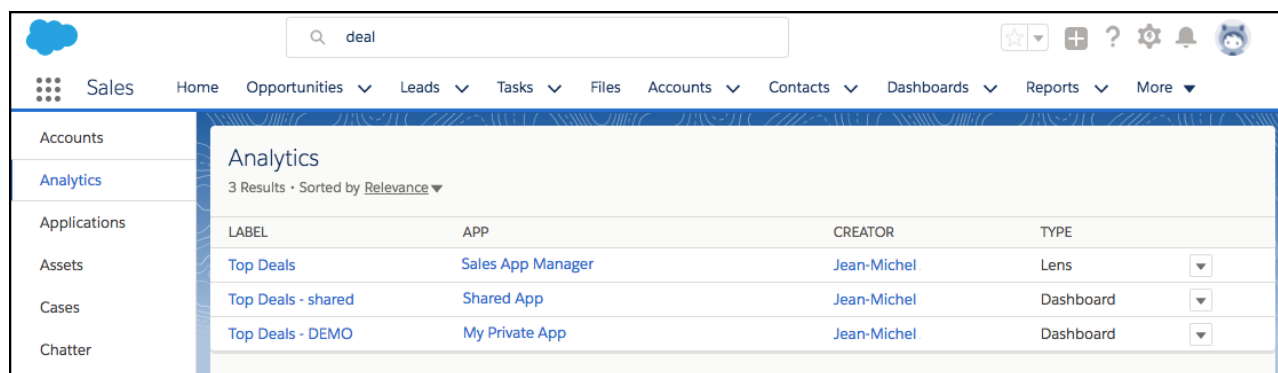
The much-loved global search box at the top of Lightning Experience has widened its search beam to include Analytics assets. Wherever you're working in Lightning Experience, type in the search box to quickly find and view lenses and dashboards.

**Note:** Global search works only with full site Lightning Experience, not Salesforce Classic Salesforce for Android, Salesforce for iOS, or Salesforce Mobile Web, and doesn't return Analytics apps or datasets.

The search box dropdown list includes Analytics assets among its suggestions. Selecting an asset from the list runs it in the Analytics tab.



Or start typing and press Enter to see a page of found resources that includes Analytics assets. To narrow the search results to only Analytics lenses and dashboards, click **Analytics** in the left panel. From the results, you can click to run either the asset or its app.

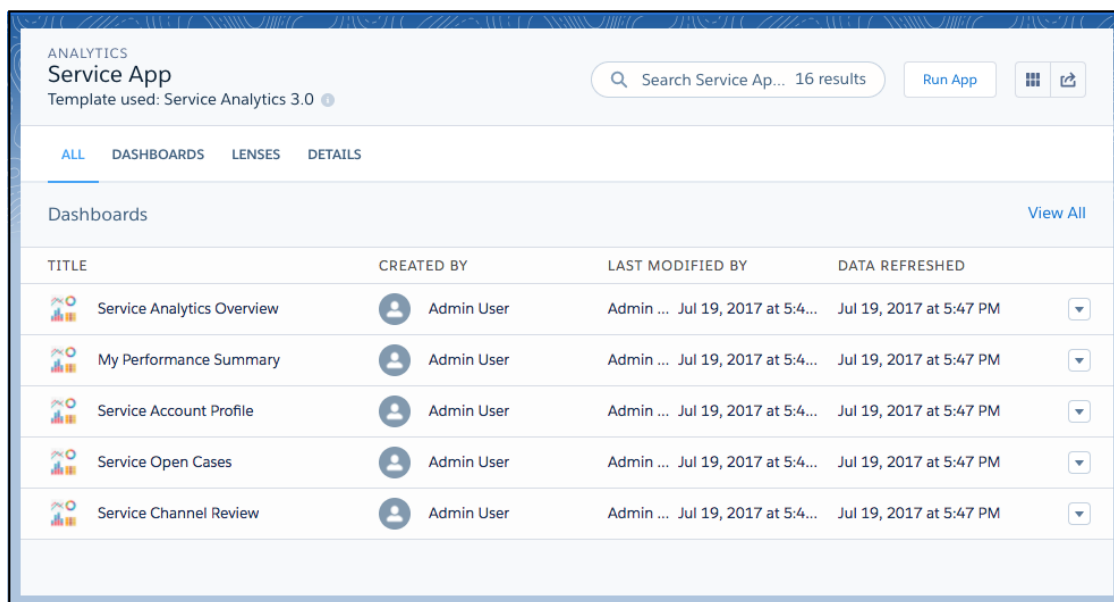


The screenshot shows the Salesforce Analytics interface. On the left is a navigation sidebar with links for Accounts, Analytics (selected), Applications, Assets, Cases, and Chatter. The main content area is titled 'Analytics' and shows '3 Results • Sorted by Relevance'. It contains a table with the following data:

LABEL	APP	CREATOR	TYPE
Top Deals	Sales App Manager	Jean-Michel	Lens
Top Deals - shared	Shared App	Jean-Michel	Dashboard
Top Deals - DEMO	My Private App	Jean-Michel	Dashboard

## Stay Organized with the New Browse App and App Details Pages

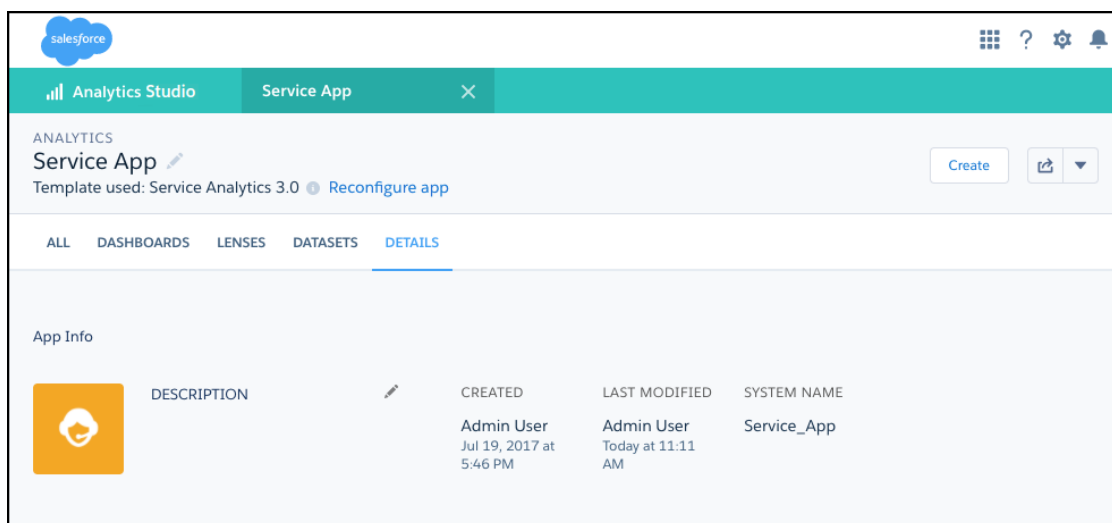
Redesigned browse and details pages help you increase productivity by reducing the time it takes to find and organize your Analytics assets. The new Browse App page is available in the Analytics Studio and in tabs in Lightning Experience and Salesforce Classic.



The screenshot shows the 'Service App' details page. At the top, it says 'ANALYTICS Service App' and 'Template used: Service Analytics 3.0'. There is a search bar with 'Search Service Ap...' and '16 results', and a 'Run App' button. Below the search bar are tabs: ALL, DASHBOARDS (selected), LENSES, and DETAILS. The 'Dashboards' tab is active, showing a list of dashboards with columns: TITLE, CREATED BY, LAST MODIFIED BY, and DATA REFRESHED. The list includes five dashboards, all created by 'Admin User' and last modified on 'Jul 19, 2017 at 5:47 PM'.

TITLE	CREATED BY	LAST MODIFIED BY	DATA REFRESHED
Service Analytics Overview	Admin User	Admin ... Jul 19, 2017 at 5:4...	Jul 19, 2017 at 5:47 PM
My Performance Summary	Admin User	Admin ... Jul 19, 2017 at 5:4...	Jul 19, 2017 at 5:47 PM
Service Account Profile	Admin User	Admin ... Jul 19, 2017 at 5:4...	Jul 19, 2017 at 5:47 PM
Service Open Cases	Admin User	Admin ... Jul 19, 2017 at 5:4...	Jul 19, 2017 at 5:47 PM
Service Channel Review	Admin User	Admin ... Jul 19, 2017 at 5:4...	Jul 19, 2017 at 5:47 PM

The action buttons have moved to the upper right, and we added **Details** to the subtabs. In addition to finding app details, the Details page is where you can add a description for the app and change its icon.



## Analytics Exploration and Visualization: Table Styles, Easy Column Reordering, Dataset Field Control

Quickly make sense of your data using the more intuitive explorer window, including new properties and functions for tables, visibility into dataset fields, and smart chart suggestions.

### IN THIS SECTION:

#### [Explore More Easily with the Enhancements to Explorer](#)

Quickly make sense of your data using a more intuitive interface.

#### [Give Your Tables Style with New Properties](#)

Tables don't have to be boring or hard to read. New table properties let you control the spacing in cells, add color to borders, apply themes, and more. Table styles are in Table Properties under the gear menu.

#### [Do More with Compare-Table Formulas and Functions \(Beta\)](#)

When writing compare-table formulas, you can reference measure and group columns by name instead of just by reference letter. You can also use SAQL percentile functions in the formula editor. Referencing measure and group columns by name lets you write more intuitive and easily understandable formulas.

#### [Get Your Focus Back](#)

Focus, which lets you display only the values you want, has returned to charts and tables. And works just the way it did before.

#### [Drag and Drop to Reorder Values Table Columns](#)

Order your values table around with ease by dragging columns to just where you want them to be.

#### [Control the Visibility of Your Dataset Fields](#)

Configure which fields are visible to others who work with your datasets so that they can avoid wading through extraneous data.

#### [Let Explorer Suggest a Chart for Your Data](#)

Wondering what the best chart is to use for visualizing your exploration? Smart suggestions are just a click away. Using a sophisticated algorithm that analyzes your lens's composition, explorer suggests chart types that can better communicate the essential message that your data is communicating.

[Visualize How Your Data Flows Using a Sankey Chart](#)

Sankey charts are especially good at visualizing how values flow between two groupings.

[Unfold Your Data with the Origami Chart](#)

Origami charts are a great way to display pop-out values in data with a single measure and grouping. You can also use them to show variability in stages whose values don't decrease sequentially.

[Customize Chart Tooltips](#)

You can customize the tooltip that appears when the pointer is hovering over a data point on any chart that has tooltips. Choose which of the chart's dimensions and measures to show in the tooltip.

[Control the Appearance of Map Charts](#)

Map charts now auto-zoom based on the selected data. You can also change the type of projection used to draw the map.

[Other Enhancements to Charts](#)

Create dashed lines, set the size of fonts used in titles and subtitles, control the size of trellised charts, and more.

## Explore More Easily with the Enhancements to Explorer

Quickly make sense of your data using a more intuitive interface.



In chart mode, the Measures panel has a larger plus button for adding measures, and we moved Delete to the context menu (1). The Group by panel has similarly changed (2). The Filter by panel has a new look, but the functionality remains the same (3).

The screenshot shows the Salesforce Einstein Analytics interface with a context menu open for measures. The menu options are:

- Sort Descending
- Sort Ascending
- Sort Within Groups (Desc)
- Sort Within Groups (Asc)
- Clear Sort
- Clone Column** (highlighted with a red box)
- Edit this Column
- Add a Filter** (highlighted with a red box)
- Show as Bars
- Show as Values
- Move Up
- Move Down
- Hide
- Delete** (highlighted with a red box)

The background shows the 'Measures' panel with 'Sum of Value' and 'Sum of Accounts' measures, and the 'Group by' panel with 'Country' selected. A table of data is visible on the right.

	Value	Sum of Accounts
China	29,754,009	2,051
Europe	61,238,042	4,668
France	28,746,829	2,303
India	32,037,499	2,721
Italy	26,340,986	1,722
Japan	36,916,012	2,872
Russian Federation	27,387,456	1,847
United States of America	87,044,191	6,527


In table mode, we made changes to the context menu for measures. There's now an **Add a Filter** command has been added, and we renamed the Add a column command to Clone Column. We moved Delete to the context menu.

The screenshot shows the Salesforce Einstein Analytics interface in table mode. The 'Measures' panel has two measures: 'Sum of Value' and 'Sum of Accounts'. The 'Accounts' filter is set to '> 999.0' and the 'Value' filter is set to '> 25,000,000.0'. The 'Group by' panel has 'Country' selected. The table displays data grouped by Country.

Country	Sum of Value	Sum of Accounts
China	29,754,009	2,051
Europe	61,238,042	4,668
France	28,746,829	2,303
India	32,037,499	2,721
Italy	26,340,986	1,722
Japan	36,916,012	2,872
Russian Federation	27,387,456	1,847
United States of America	87,044,191	6,527



If you move your exploration into table mode, filters move to the measures they affect, and you can edit them there. After this happens, you can't use the filters panel. To add new filters, use the measure context menus instead of the filters panel.

 **Note:** Existing lenses and dashboards containing multi-column steps are affected by this change.

Comments entered into the SAQL editor are preserved on run, clone, and edit.

The Euro symbol can be typed by entering alt+shift+2.

## Give Your Tables Style with New Properties

Tables don't have to be boring or hard to read. New table properties let you control the spacing in cells, add color to borders, apply themes, and more. Table styles are in Table Properties under the gear menu.

### Set a Theme

You can use one of the six packaged themes. To customize your table's style, use the panels below the Themes panel.

Columns

Country\_c...

Country

Region

Value

Accounts

Filter by

Accounts

> 999.0

Value

> 25,000,00...

#	Country_code	Country	Region	Value	Accounts
1	chn	China	East Asia	29,754,009.0	2,051.0
2	eur	Europe	Europe	61,238,042.0	4,668.0
3	fra	France	Europe	28,746,829.0	2,303.0
4	ind	India	Asia	32,037,499.0	2,721.0
5	ita	Italy	Europe	26,340,986.0	1,722.0
6	jpn	Japan	East Asia	36,916,012.0	2,872.0
7	rus	Russian Federation	East Europe	27,387,456.0	1,847.0
8	usa	United States of America	North America	87,044,191.0	6,527.0

TABLE PROPERTIES

Themes

Grass

Spacing


Header

Cells

Borders

Colors

Other

 **Note:** All existing tables will change to the Default theme. Use the Classic theme to mimic the pre-Winter '18 table style.


Control the width and height of cells and columns using the properties in the Spacing panel. In the Header and Cells panels, set text size and background color. Set borderline thickness and colors and overall table colors in the Borders and Colors panels. To show or hide the index column, click **Show Row Index Column** in the Other panel.

## Do More with Compare-Table Formulas and Functions (Beta)

When writing compare-table formulas, you can reference measure and group columns by name instead of just by reference letter. You can also use SAQL percentile functions in the formula editor. Referencing measure and group columns by name lets you write more intuitive and easily understandable formulas.

For example, let's say your compare table has income columns for first and second quarters, called amount\_1Q and amount\_2Q. You want to calculate the percentage change between those quarters. Instead of writing  $(B - A) / A * 100$ , you can use the more easily interpretable  $(\text{sum}(\text{amount\_2Q}) - \text{sum}(\text{amount\_1Q}) / \text{sum}(\text{amount\_1Q}) * 100$ .

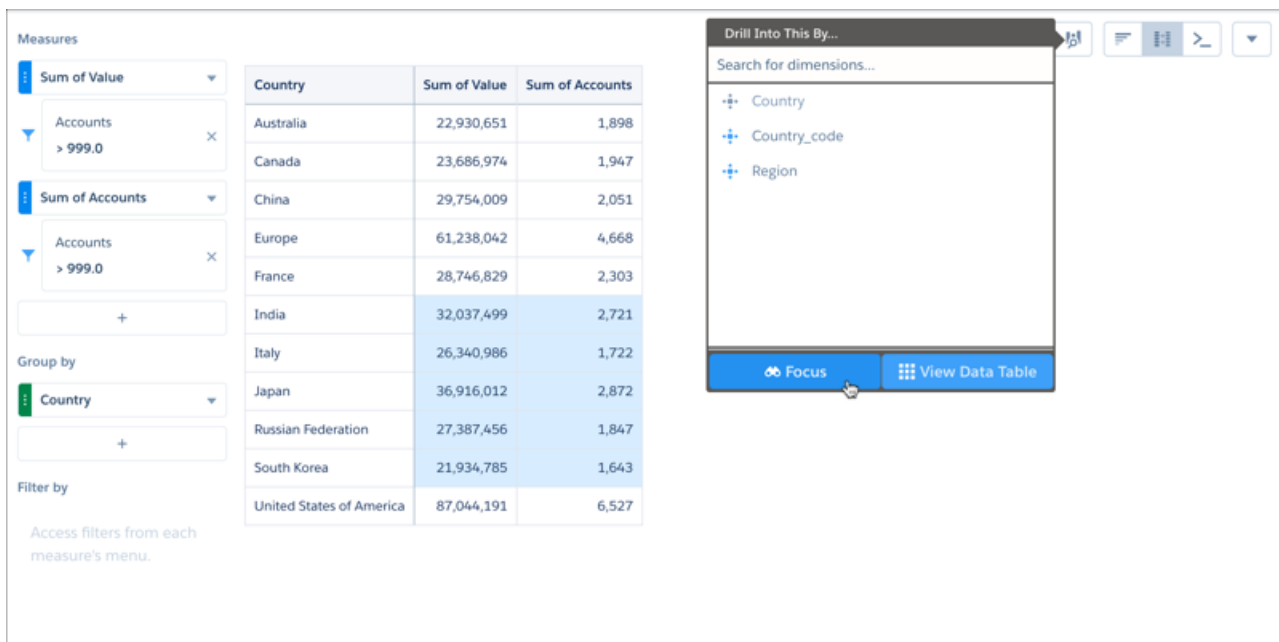
The SAQL functions `percentile_disc()` and `percentile_cont()` are available in the compare-table formula editor, as are SAQL date functions. This is a result of making access to raw column names available. See the [Analytics SAQL Reference](#) for more information.

 **Note:** This release contains a beta version of access to raw column names in the formula editor, which means it's a high-quality feature with known limitations. Access to raw column names in the formula editor isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for access to raw column names in the formula editor in IdeaExchange or the Trailblazer Community.

## Get Your Focus Back

Focus, which lets you display only the values you want, has returned to charts and tables. And works just the way it did before.

Start by selecting the data you're interested in, click the drill button, then click **Focus**.



The screenshot shows the Salesforce Analytics interface. On the left, there are filters for 'Measures' (Sum of Value, Sum of Accounts) and 'Group by' (Country). The main table displays data for various countries, with 'India' selected. A 'Drill Into This By...' dialog box is open, showing a search bar and a list of dimensions: Country, Country\_code, and Region. The 'Focus' button is highlighted in the dialog box.

Country	Sum of Value	Sum of Accounts
Australia	22,930,651	1,898
Canada	23,686,974	1,947
China	29,754,009	2,051
Europe	61,238,042	4,668
France	28,746,829	2,303
India	32,037,499	2,721
Italy	26,340,986	1,722
Japan	36,916,012	2,872
Russian Federation	27,387,456	1,847
South Korea	21,934,785	1,643
United States of America	87,044,191	6,527

Focus displays just the selected data in the same type of table or chart you selected it in.

World Wide Accounts

Show Dataset

Measures

Sum of Value

Accounts > 999.0

Country India, Italy, Japan,

Sum of Accounts

Accounts > 999.0

Country India, Italy, Japan,

Country	Sum of Value	Sum of Accounts
India	32,037,499	2,721
Italy	26,340,986	1,722
Japan	36,916,012	2,872
Russian Federation	27,387,456	1,847
South Korea	21,934,785	1,643

## Drag and Drop to Reorder Values Table Columns

Order your values table around with ease by dragging columns to just where you want them to be.

To move a measure or grouping, click and hold its tile, then drag the tile to a new position. Release the tile when the position indicator is in the correct position.

Columns

Country\_code

Region

Region

Value

Accounts

Filter by

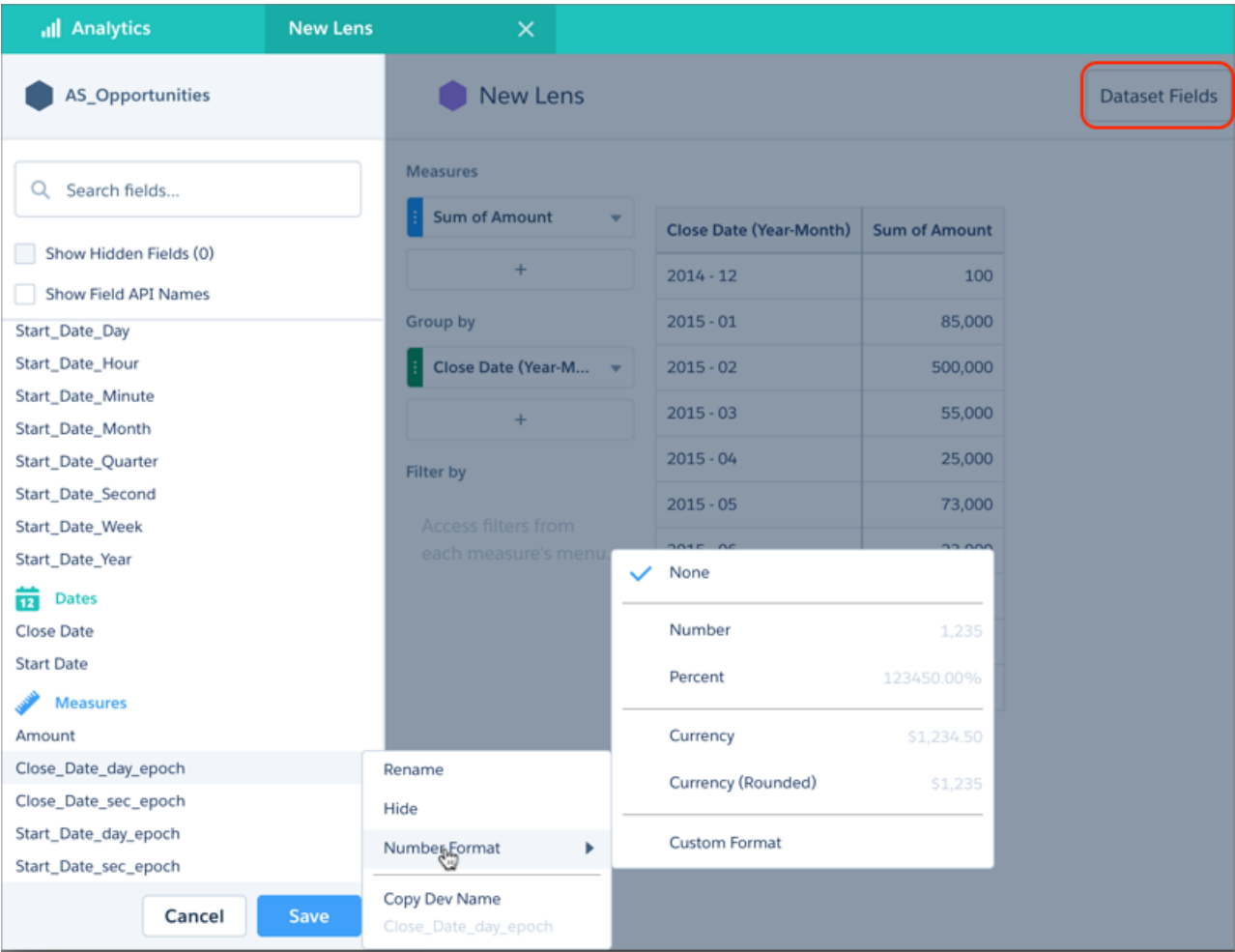
Accounts > 999.0

Value > 25,000,000.0

#	Country_code	Country	Region	Value	Accounts
1	chn	China	East Asia	29,754,009.0	2,051.0
2	eur	Europe	Europe	61,238,042.0	4,668.0
3	fra	France	Europe	28,746,829.0	2,303.0
4	ind	India	Asia	32,037,499.0	2,721.0
5	ita	Italy	Europe	26,340,986.0	1,722.0
6	jpn	Japan	East Asia	36,916,012.0	2,872.0
7	rus	Russian Federation	East Europe	27,387,456.0	1,847.0
8	usa	United States of America	North America	87,044,191.0	6,527.0

### Control the Visibility of Your Dataset Fields

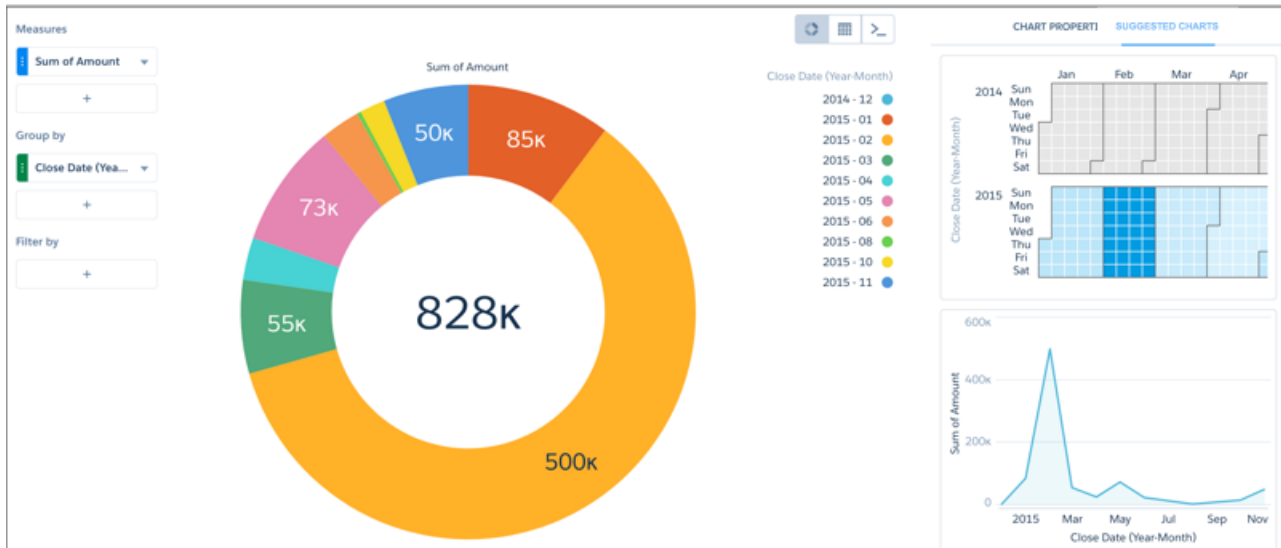
Configure which fields are visible to others who work with your datasets so that they can avoid wading through extraneous data. While exploring a dataset, click **Dataset Fields** to open a panel displaying all of the measure, data, and dimension (grouping) fields.



In the panel, hide or rename any field, set the number format of measure fields, and view field API names. Hiding a field makes the dataset less cluttered. The fields can still be accessed through JSON. Users who do not have write access to a dataset can still click **Dataset Fields** to view the fields.

### Let Explorer Suggest a Chart for Your Data

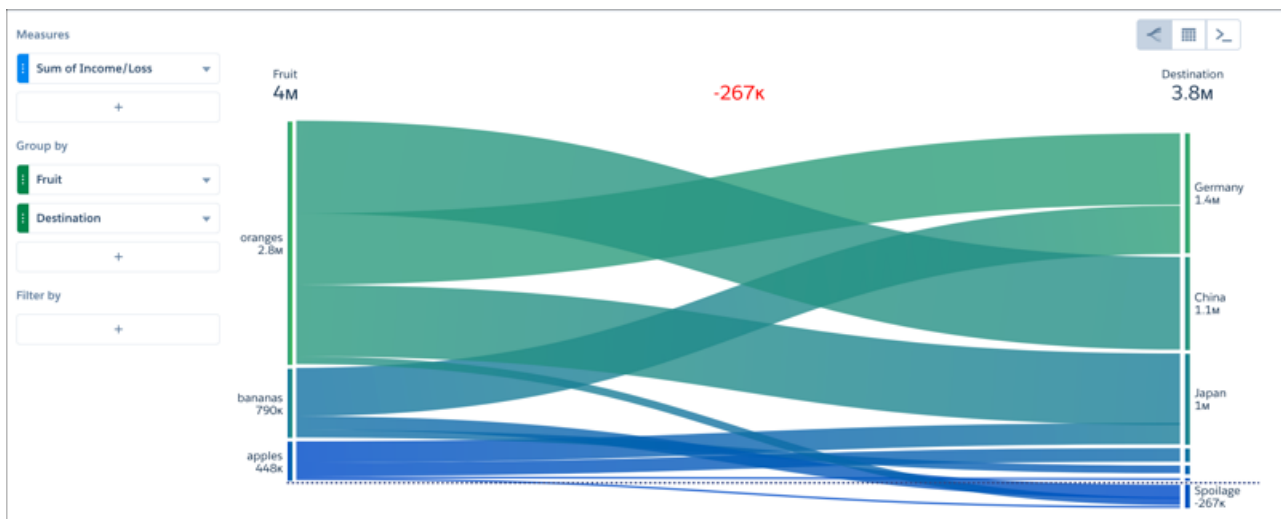
Wondering what the best chart is to use for visualizing your exploration? Smart suggestions are just a click away. Using a sophisticated algorithm that analyzes your lens's composition, explorer suggests chart types that can better communicate the essential message that your data is communicating. To view suggested charts, click the gear menu in chart mode, then click **Suggested Charts**.



## Visualize How Your Data Flows Using a Sankey Chart

Sankey charts are especially good at visualizing how values flow between two groupings.

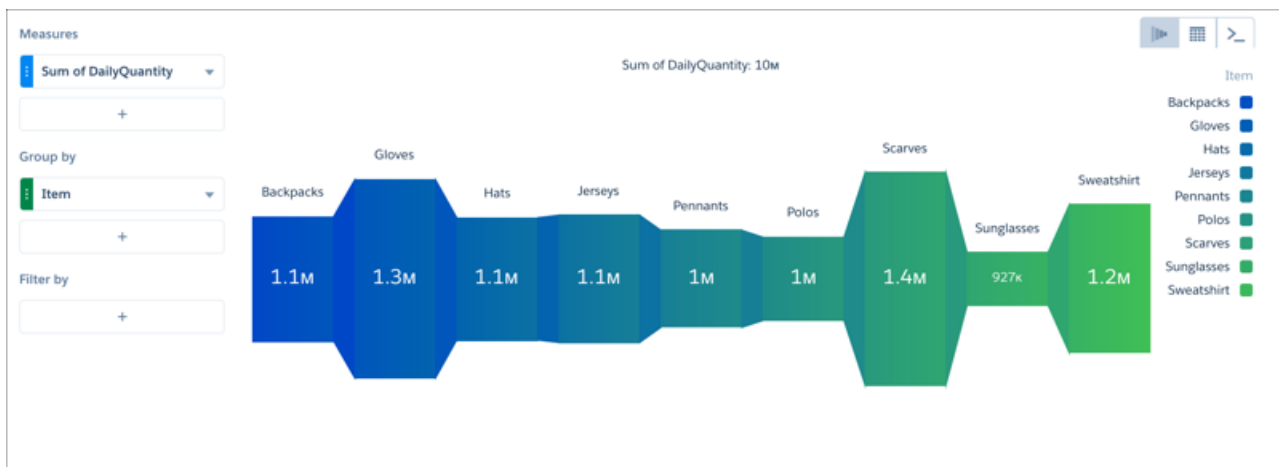
You can view how a certain business metric is distributed as it moves from one grouping to another. A Sankey chart can display negative numbers and calculate their effect on overall totals. Sankey charts can display negative numbers and calculate their effect on overall totals.



## Unfold Your Data with the Origami Chart

Origami charts are a great way to display pop-out values in data with a single measure and grouping. You can also use them to show variability in stages whose values don't decrease sequentially.

By visually popping out high values, an origami chart can make it easy to spot products that are performing well relative to other products.



## Customize Chart Tooltips

You can customize the tooltip that appears when the pointer is hovering over a data point on any chart that has tooltips. Choose which of the chart's dimensions and measures to show in the tooltip.

Open the Tooltip panel in Chart Properties, and choose groupings and measures to display. You can even display what percentage the value of the data point is out of the total for its grouping.

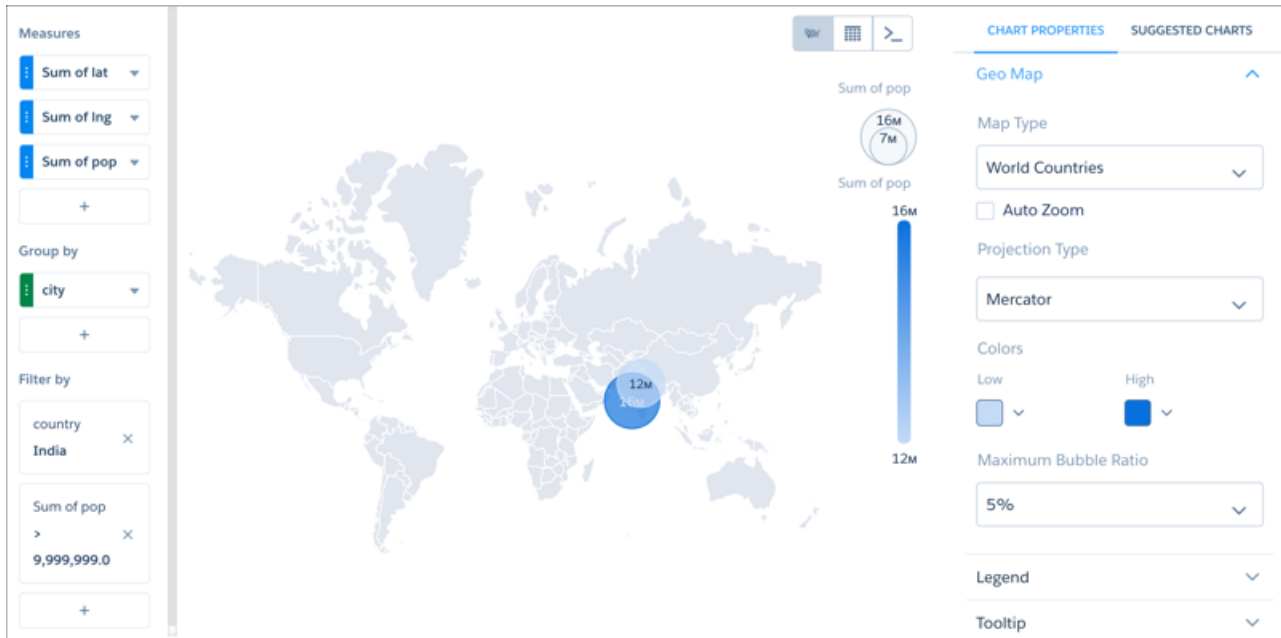


## Control the Appearance of Map Charts

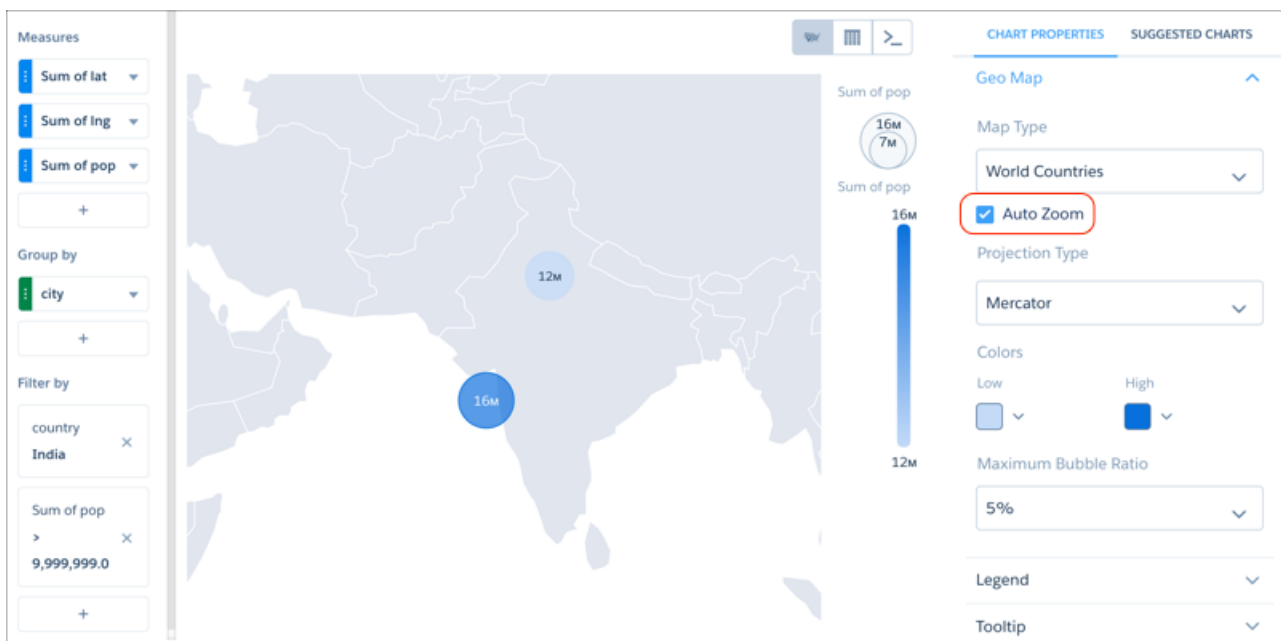
Map charts now auto-zoom based on the selected data. You can also change the type of projection used to draw the map.

## Configure Maps to Auto-Zoom on Selected Areas

When you select datapoints in a particular geographical area of your map chart, the data in that area is highlighted.



With auto-zoom, the map chart both highlights the data and zooms in the geographical area.

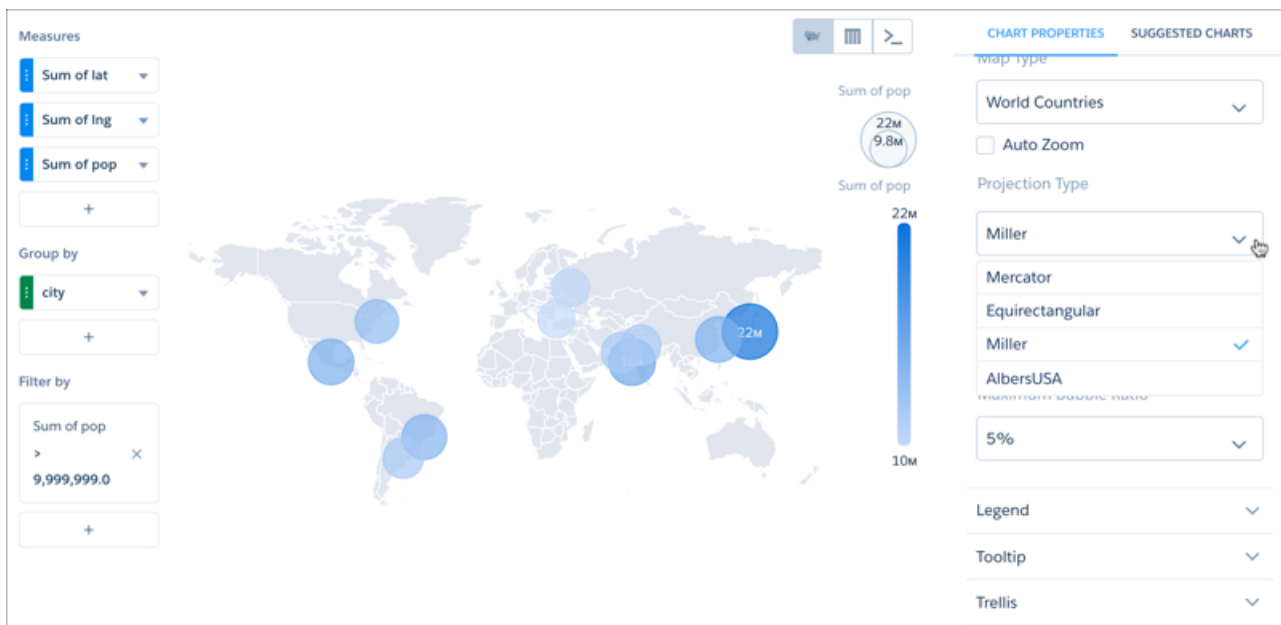


Any filtering that occurs on the visualized data can trigger auto zoom, including faceting in dashboards, so there's no limit the kinds of dynamic maps you can create.



## Set the Map Projection Type for Map Charts

A map projection is a method for representing shapes from the curved surface of the Earth (or any other curved surface) using shapes on a flat surface. Some map projection types preserve the accuracy of shape outlines while sacrificing the correct representations of area sizes, while others preserve relative size but distort the outlines. Which projection type is right for your map chart? With the new Projection Type menu, it's up to you!



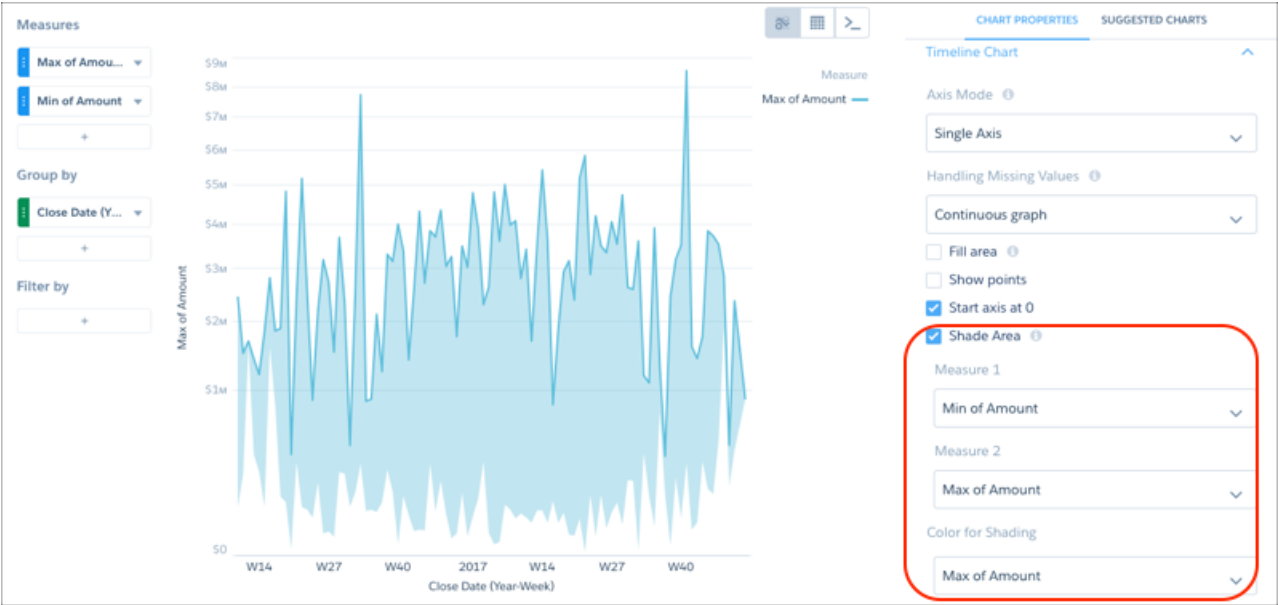
## Other Enhancements to Charts

Create dashed lines, set the size of fonts used in titles and subtitles, control the size of trellised charts, and more.



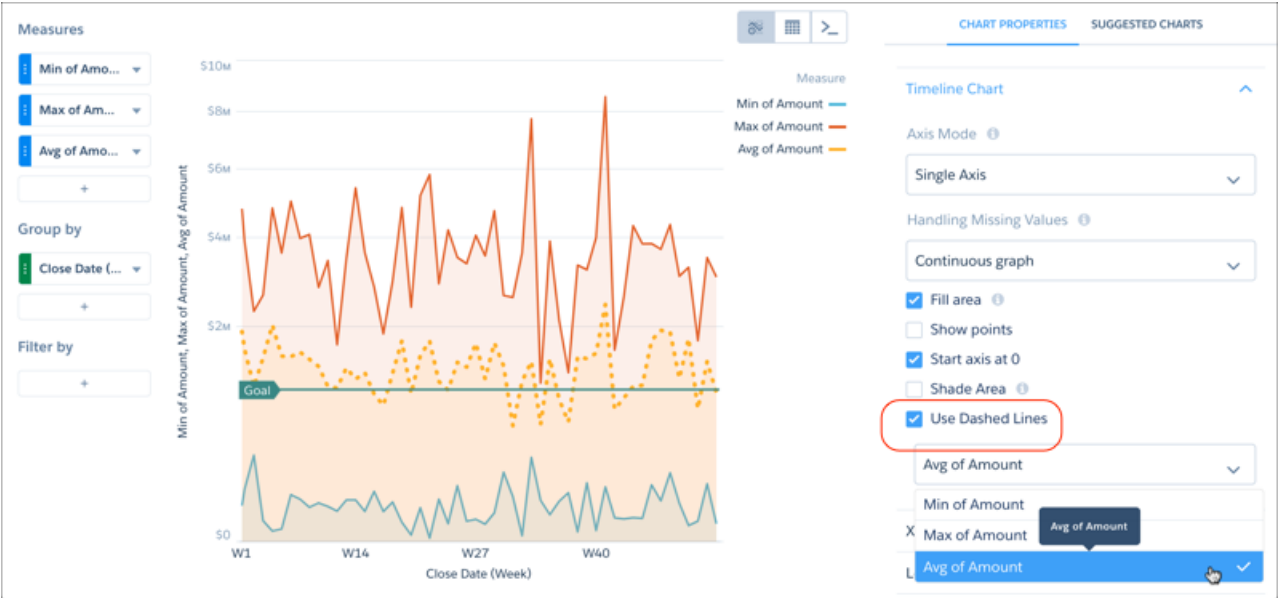
Fill the Area Between Lines

You can shade the area between lines in line and timeline charts to accentuate the spread between 2 measures. To show the spread between minimum and maximum values of closed opportunities in a timeline chart, for example, click **Shade Area**. Then choose the measures from the **Measure 1** and **Measure 2** menus, and pick a color for the shading from **Color for Shading**.



Use Dashed Lines for Effect

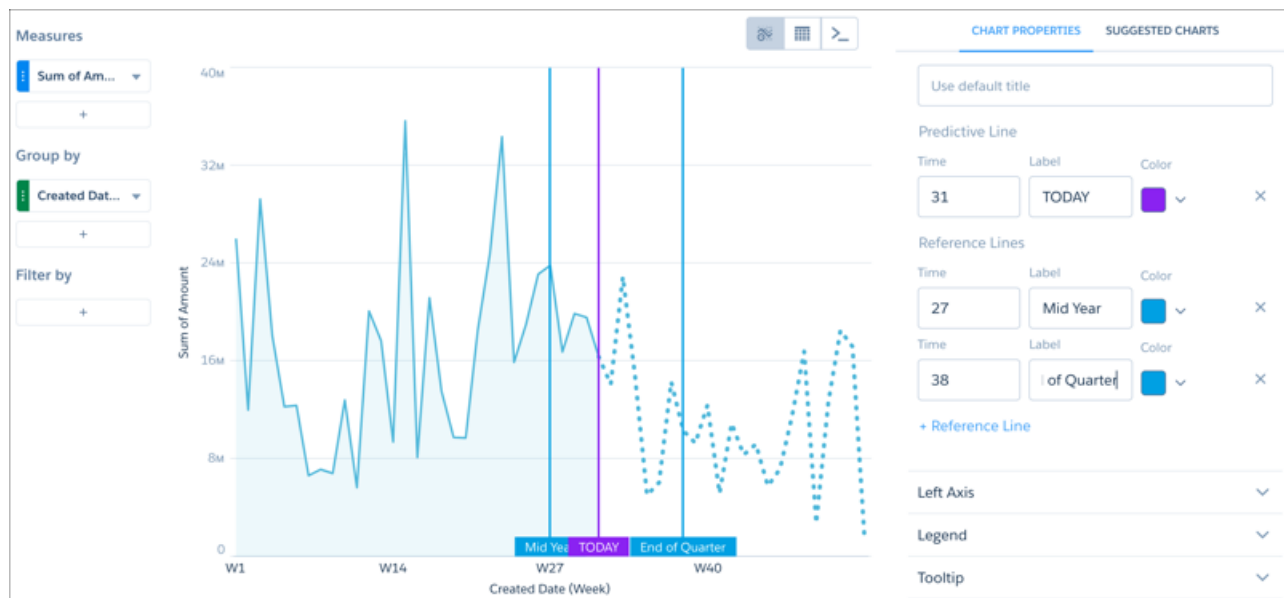
To differentiate a measure in a line or timeline chart, use a dashed line. To contrast the line representing the average between the minimum and maximum values of closed opportunities in a timeline chart, for example, click Use Dashed Lines, then choose the measure for the average from the multiselect menu below it.



To make other measure lines dashed instead of solid, select them from the same menu.

## Add Multiple Reference Lines to Charts

Charts are no longer limited to one reference line. You can now use any number of reference lines to mark up a chart, such as when you need to indicate points of reference on a timeline before and after a predictive line.



## Trellis Never Looked Better

You can control the size of trellis tiles using the **Size Ratio** menu, so your trellised charts can look good no matter which chart type you choose.

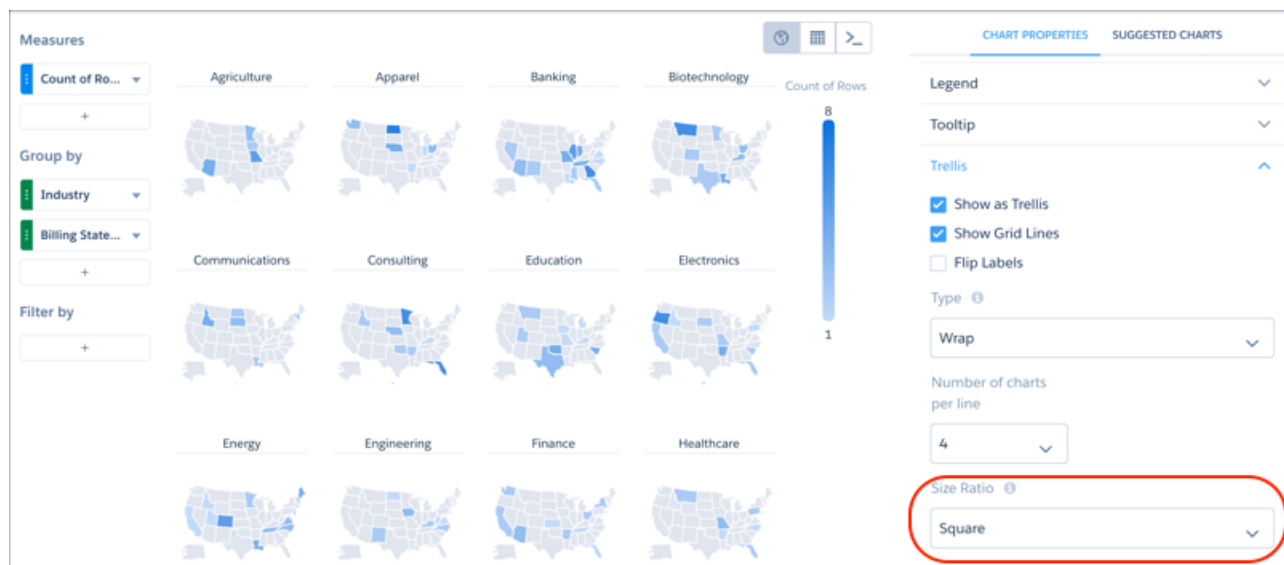
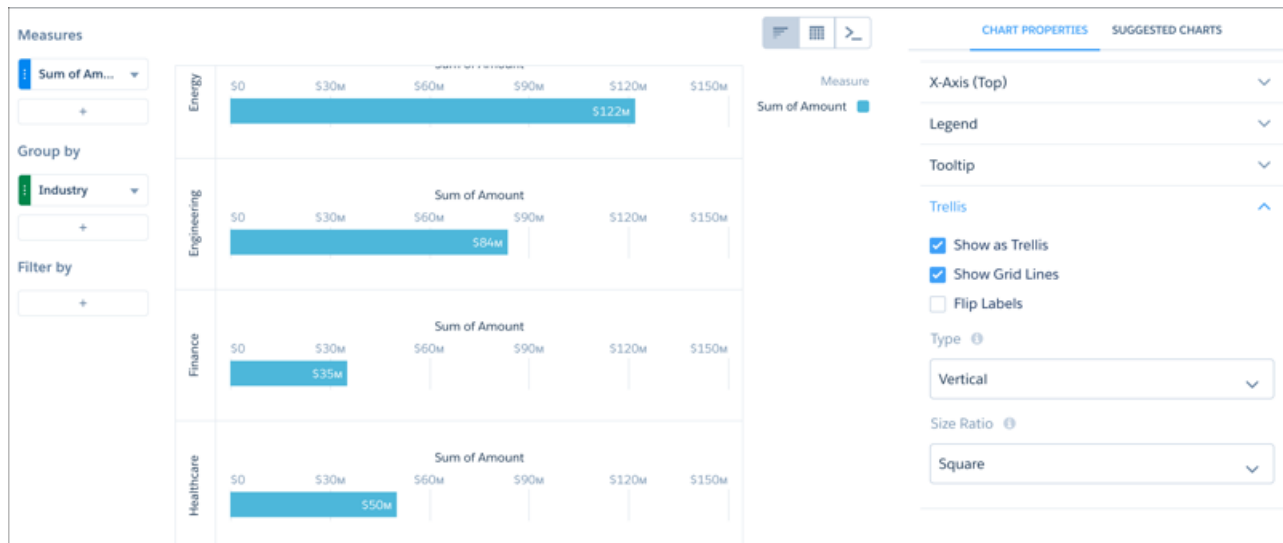
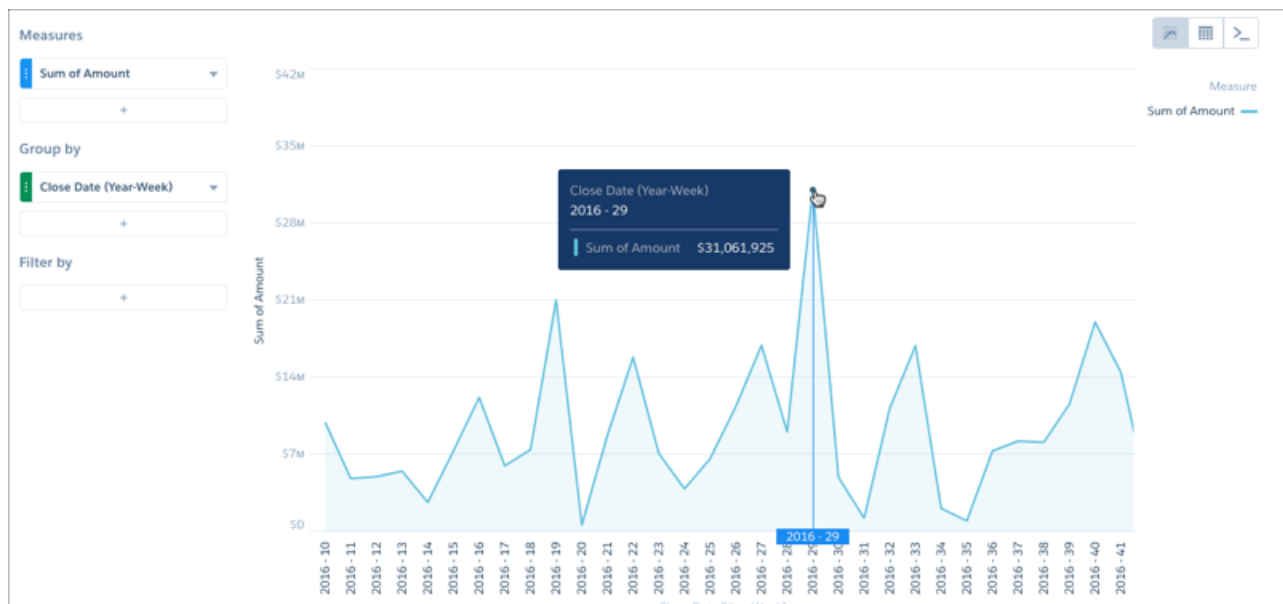


Chart domains are now uniform across the trellis so trellised charts can be compared directly.



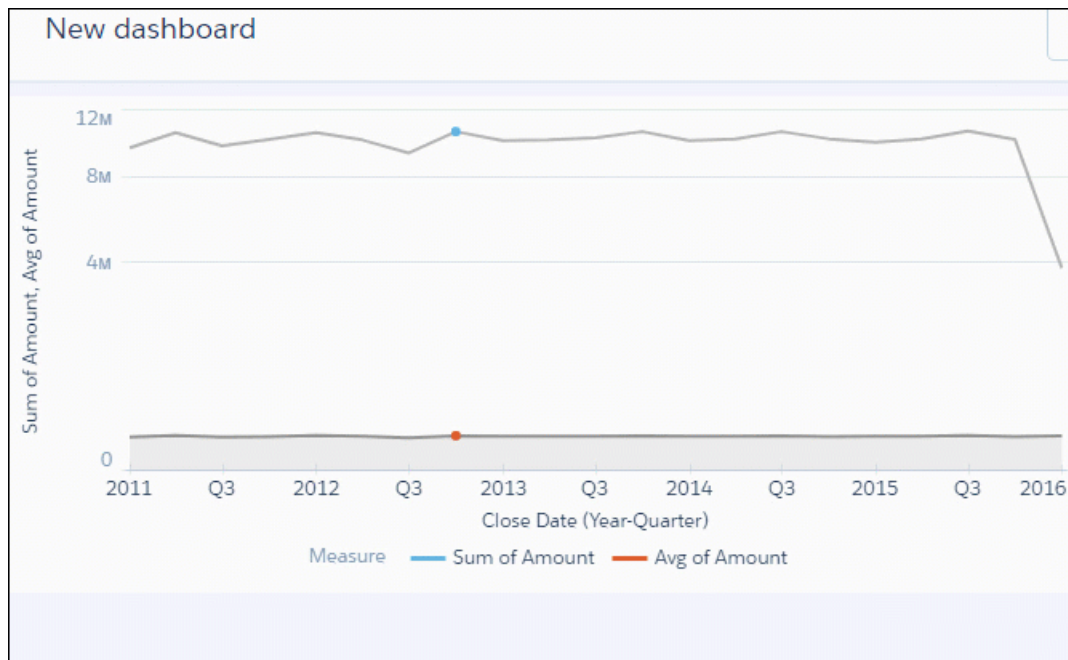
## Display Axis Labels with Connected Datapoints

When you hover over a datapoint in a line, timeline, or dot-plot chart, a line with a label appears so you can easily see the axis label for the highlighted point. This makes it easier to see the point's axis label when those labels are abbreviated on the axis itself.



## Focus on a Selected Datapoint

To make it easier to see a selection in a line or timeline chart, the entire line, except for the selected datapoint, is greyed out. For example, if you make a selection in a timeline chart with two lines, both lines are greyed out as shown below.



## Improvements to Chart Styles

You can set the font size of titles and subtitles for any chart so they can be set off from each other.



Chart domains always end on a tick mark showing a value, so it's easier to spot the value above the maximum datapoints.

Treemap charts can show up to 2 lines per label instead of just one.

## Analytics Dashboard Design: Performance Improvement Recommendations, Pages, More Access to Steps and Filters

Build faster by sharing widgets, steps, and global filters in dashboard pages. Save time by editing steps instead of re-creating them. Optimize dashboard performance by breaking dashboards into smaller pages and implementing changes recommended by the dashboard inspector.

### IN THIS SECTION:

#### [Tune Your Dashboard Based on Inspector Recommendations](#)

The dashboard inspector now provides recommendations to improve the performance of your dashboard and its steps.

#### [Break Up Monolithic Dashboards to Improve Performance \(Beta\)](#)

Improve dashboard performance and make mobile dashboards less cluttered by splitting a dashboard into multiple pages. When you view a page, Analytics calculates results for the widgets on that page only.

#### [Save Time by Editing Steps](#)

You asked. We heard you. To change a step, you no longer have to clone it—just edit it. You can change any part of a step's query, except the dataset. For example, you can change measures and groupings, add a derived measure to a compare table, or change the order of columns in a values table. Remember that changes to a step impact all widgets that use it.

#### [Find Your Step Without a Flashlight and Map](#)

Previously, you had to sift through a laundry list of steps to find the one you wanted. Not anymore. The panel now organizes steps into categories and provides a search bar to help you locate your steps faster.

#### [Control Dashboard Filters with New Faceting Behavior](#)

You now have finer control of faceting. You can specify which steps broadcast their selections to filter other faceted steps. You can also control which steps filter their results based on selections that are broadcasted as facets. Existing steps aren't impacted by this change—they retain their faceting behavior.

#### [Round Out Your Dashboard with Related Web Content](#)

Bring the outside world inside your dashboard with links to web pages. For example, if you use a dashboard as an entry page to a portal, you can create static links that point to different systems, like an issue tracking system or expense reporting system.

#### [Create Dashboard Controls Using Global Filters](#)

Global filters are now easier to create and manage. You can also enable dashboard viewers to change them.

#### [Get Familiar with Dashboard JSON Changes for Wave Designer](#)

The dashboard JSON contains new and changed parameters that impact users who create the JSON from scratch.

#### [Other Enhancements to Wave Dashboard Designer](#)

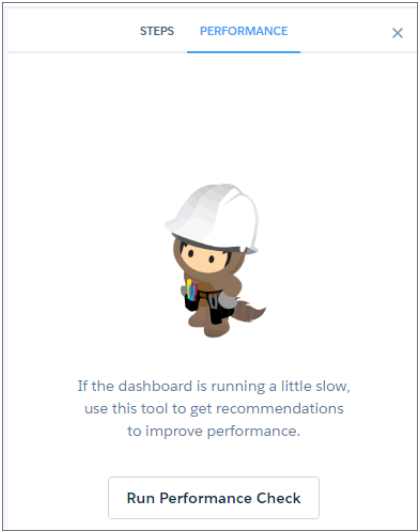
Check out these improvements to the Wave designer.

## Tune Your Dashboard Based on Inspector Recommendations

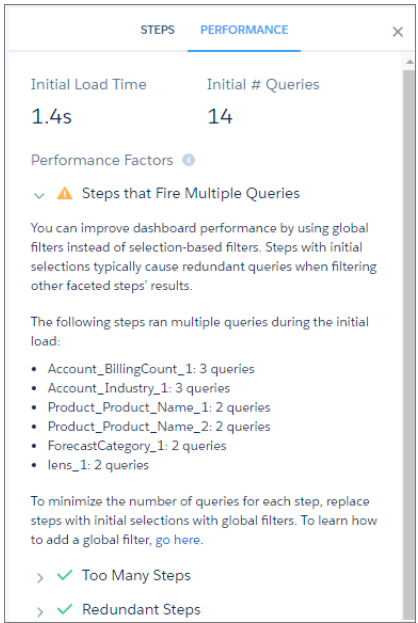
The dashboard inspector now provides recommendations to improve the performance of your dashboard and its steps.

### Dashboard Performance

To view dashboard performance, open the Performance tab in the dashboard inspector, and click **Run Performance Check**.



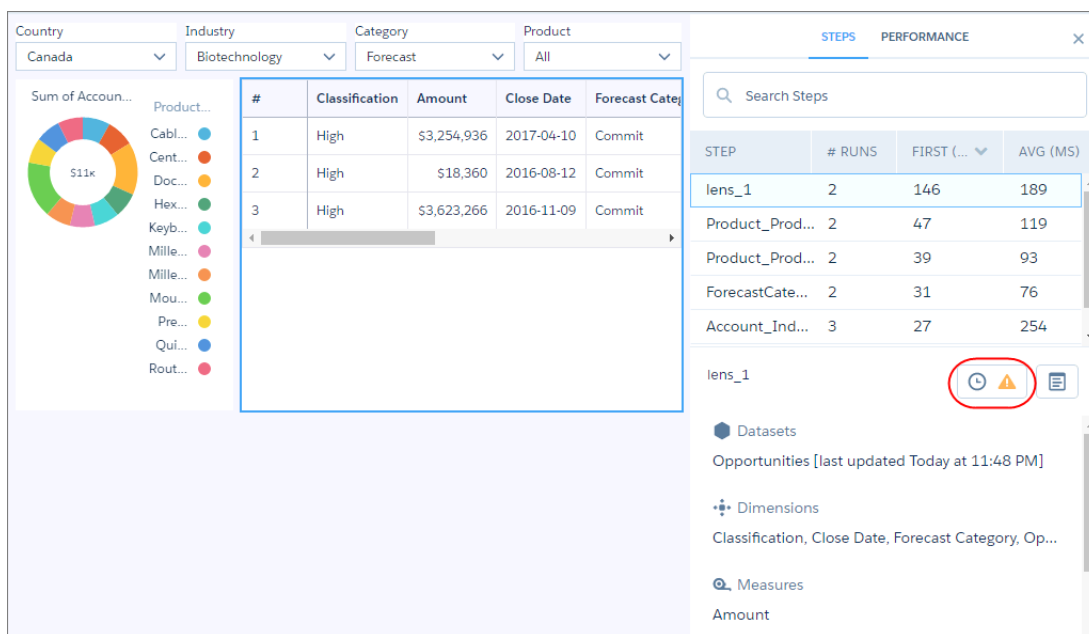
The dashboard performance results display. If your dashboard contains multiple pages, the dashboard inspector shows results for the current page being viewed.



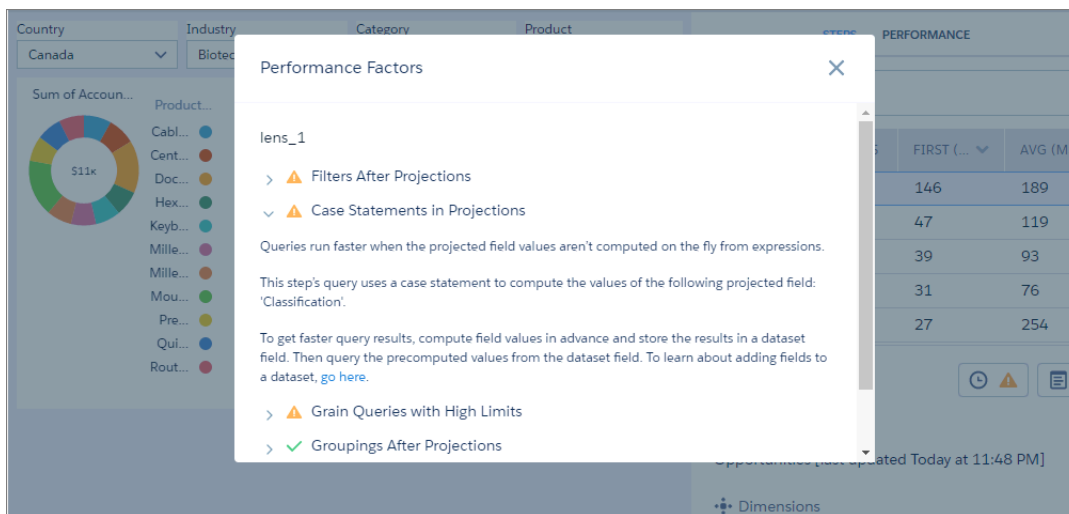
The Performance Factors section shows all factors on which the dashboard is evaluated. Ignore the factors with a green checkmark ( ✓ ) because these issues don't apply to the dashboard. If a warning icon ( ⚠ ) appears next to a factor, expand the factor to learn how to fix the issue to improve the dashboard's performance.

Step Performance

To view a step's performance, open the Steps tab in the dashboard inspector, and select a step. If you see a warning icon in the View Performance Details button, click the button to view the performance details and recommendations for improvement.



Expand each factor with a warning icon to learn how to improve the step's performance.

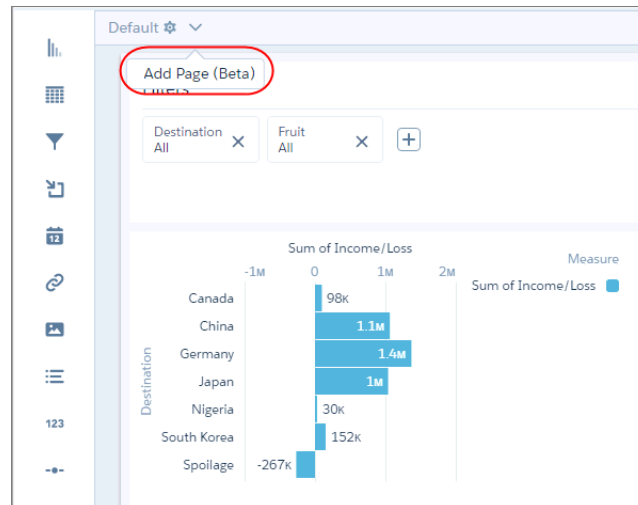


## Break Up Monolithic Dashboards to Improve Performance (Beta)

Improve dashboard performance and make mobile dashboards less cluttered by splitting a dashboard into multiple pages. When you view a page, Analytics calculates results for the widgets on that page only.

**Note:** The Winter '18 release contains a beta version of the pages feature, which means it's a high-quality feature with known limitations. This feature isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for this feature in the [IdeaExchange](#).

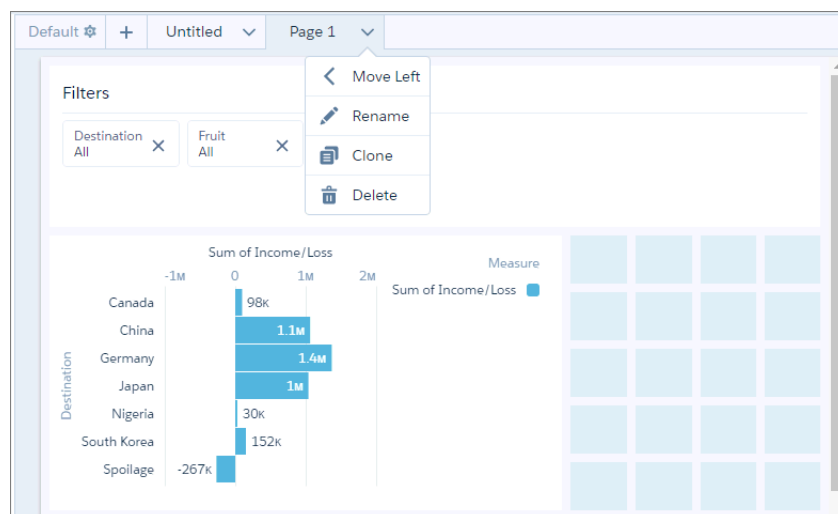
To use multiple pages for a dashboard, edit the dashboard, and then click **Add Page (Beta)** from the Layouts menu. Pages apply to the layout in which they're created. After you enable pages, you can't disable it for that dashboard layout.



Analytics adds a tab for the first page. To add more pages, click . You can add up to five pages per dashboard per layout. Each page appears as a tab while editing the dashboard. (When you preview a page, it looks just like a dashboard.) Save the dashboard to save changes to pages. Global filters and selections are shared across pages in the dashboard layout. For example, a selection in one page also filters the results of the other pages. When you create a layout, all pages in the current layout are copied to the new layout.

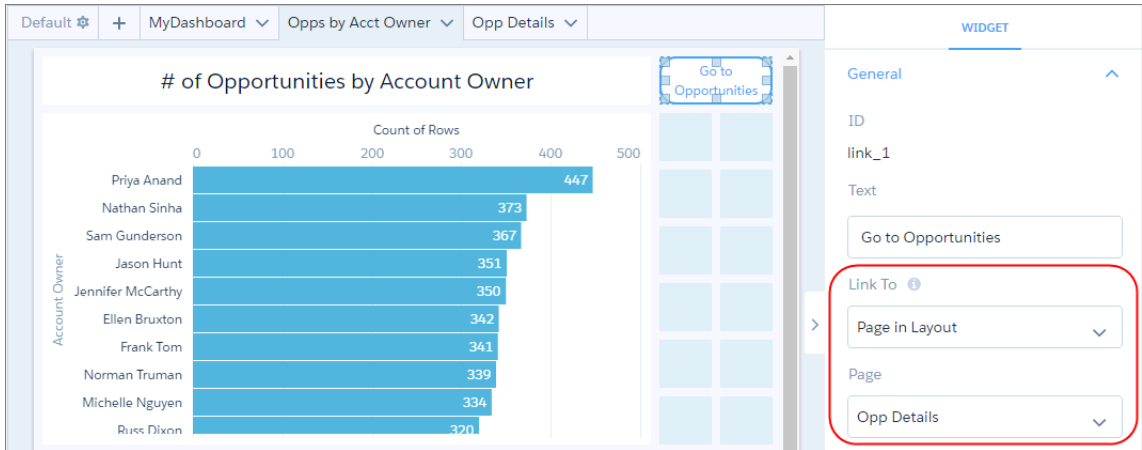
## Manage Pages

You can perform different actions on a page.



You can rename, clone, and delete a page. Use **Move Left** and **Move Right** to change the order in which the pages appear in the Analytics mobile app. Mobile dashboard viewers can swipe to navigate through the sequence of pages in the dashboard. If a user views the dashboard from a desktop browser, add link widgets to the pages to help navigate through the pages, as shown here.

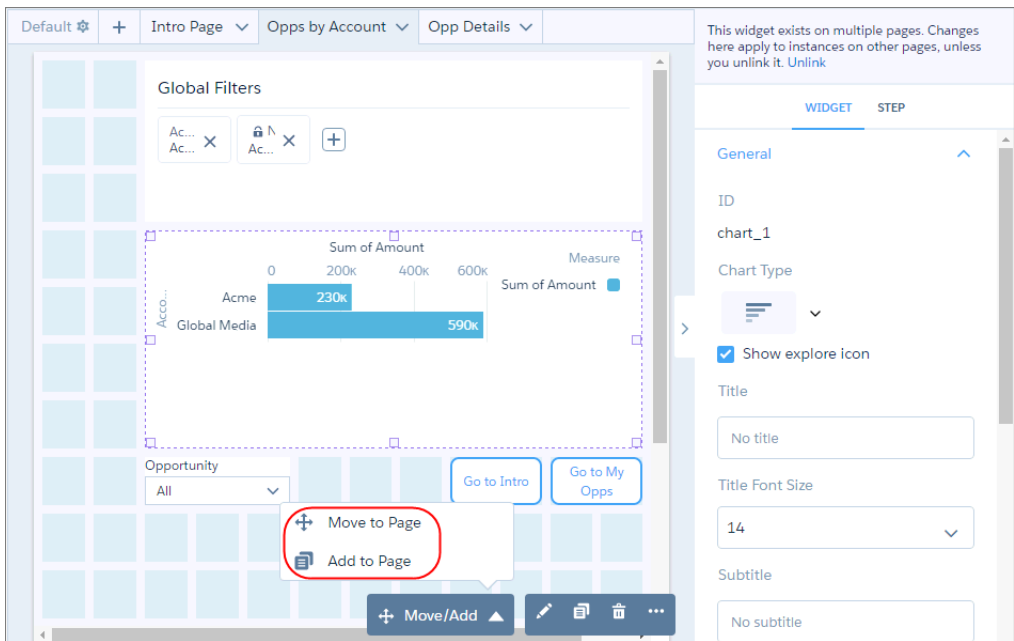




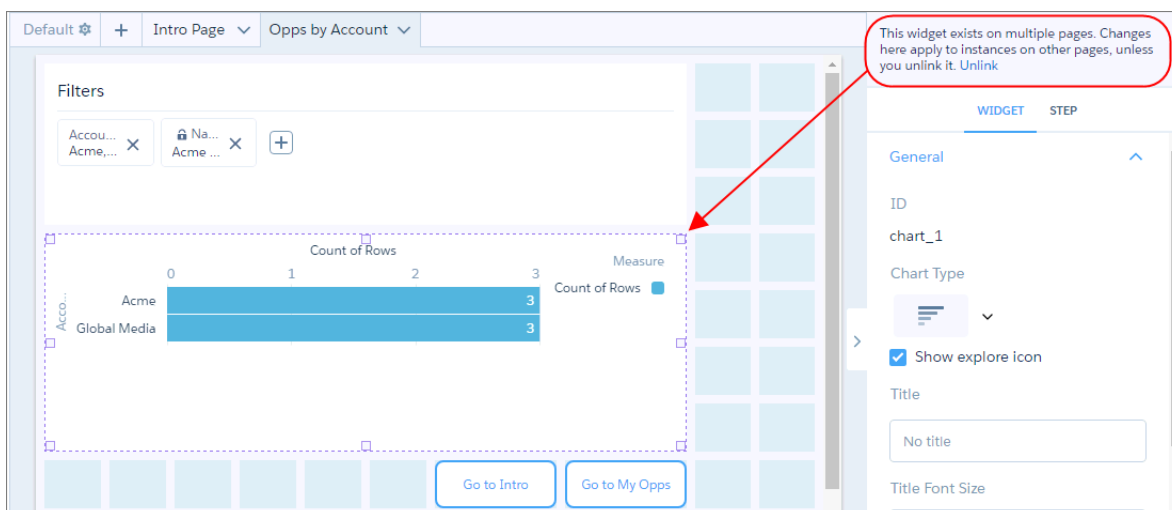
If you delete a page, Analytics also deletes its widgets from the dashboard if they aren't used in other pages or layouts. If they're used in other layouts, but not in other pages of the current layout, Analytics removes them from the current layout.

Managing Widgets in a Page

You can move or add widgets to other pages in the dashboard. To move a widget, select the widget, click **Move/Add** in the widget actions menu, and then click **Move to Page**. To add it, select **Add to Page**.



When you add a widget from one page to another, Analytics adds an instance of the same widget. If you change a widget property on one page, it affects all instances on other pages. To indicate that a widget is used in multiple pages, Wave dashboard designer highlights the widget in purple and adds a banner in the right pane when it's selected.



To make a widget work independently from other instances, select the widget, and then click **Unlink** in the banner.

If you delete a widget from a page:

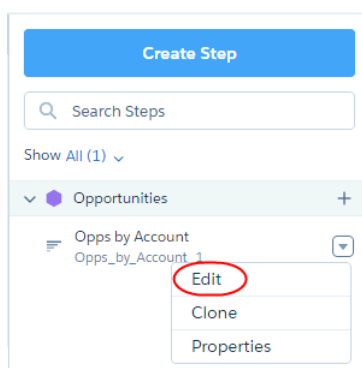
- and the widget is used in other pages, Analytics removes the widget only from the current page.
- and the widget isn't used in other pages but is used in other layouts, Analytics removes it from the page and current layout.
- and the widget isn't used in other pages or layouts, Analytics deletes it from the dashboard.


## Save Time by Editing Steps

You asked. We heard you. To change a step, you no longer have to clone it—just edit it. You can change any part of a step's query, except the dataset. For example, you can change measures and groupings, add a derived measure to a compare table, or change the order of columns in a values table. Remember that changes to a step impact all widgets that use it.

You can edit the step multiple ways. The method you use matters.

- Click the **Edit** button in the step actions menu in the steps panel. Changes using this method affect the step and all widgets that use it.



- Double-click the widget in the Wave designer dashboard or click  in the widget actions menu.



Changes using this method affect the step and, if applicable, the chart or table widget. For instance, changes to the query (like measures, groupings, and filters) affect the step. Changes to widget properties, which columns to show, and the order of columns only affect the widget. These types of changes don't impact other widgets that use this step.

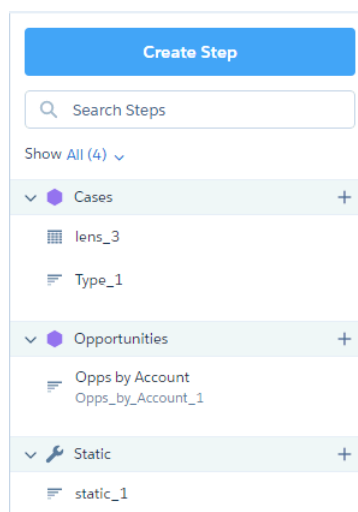
Note the following considerations when editing steps.


- You can't edit a step that contains a binding.
- You can edit steps with step types `aggregate`, `aggregateflex`, `saql`, and `grain`. If you edit an `aggregate` or `aggregateflex` step type that contains a SAQL query in the `piql` JSON attribute, Analytics converts the step type to `saql`. To learn about the implications of converting between these step types, see [Salesforce Help: Considerations When Converting an Aggregate or Aggregateflex Step Type to SAQL](#) (can be outdated or unavailable during release preview).
- You can't edit a step used in a global filter widget created before Winter '18. To edit it, first convert it to an updated global filter. (See [Create Dashboard Controls Using Global Filters](#).)

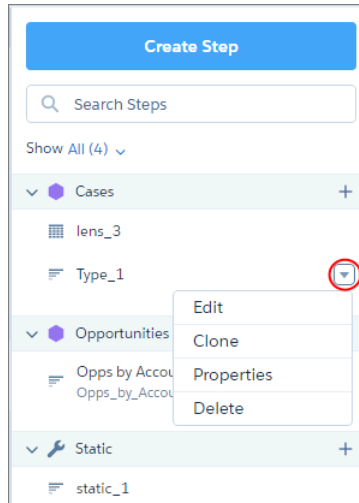
## Find Your Step Without a Flashlight and Map

Previously, you had to sift through a laundry list of steps to find the one you wanted. Not anymore. The panel now organizes steps into categories and provides a search bar to help you locate your steps faster.

The steps panel categorizes steps by dataset name and step type. It also contains a special category for erroneous steps. Categories and steps are listed in alphabetical order. You can collapse each category.



Click  next to a category to create a step of that type. This feature is available for all steps, except `apex`, `soql`, and multiple-dataset steps. To access the actions that you can perform on a step, hover over the step and click the down arrow.



## Control Dashboard Filters with New Faceting Behavior

You now have finer control of faceting. You can specify which steps broadcast their selections to filter other faceted steps. You can also control which steps filter their results based on selections that are broadcasted as facets. Existing steps aren't impacted by this change—they retain their faceting behavior.

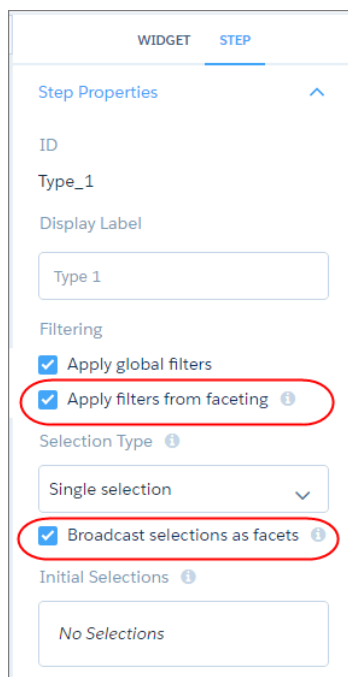
To control faceting behavior for a step, set the following options in the step properties.

### Broadcast selections as facets

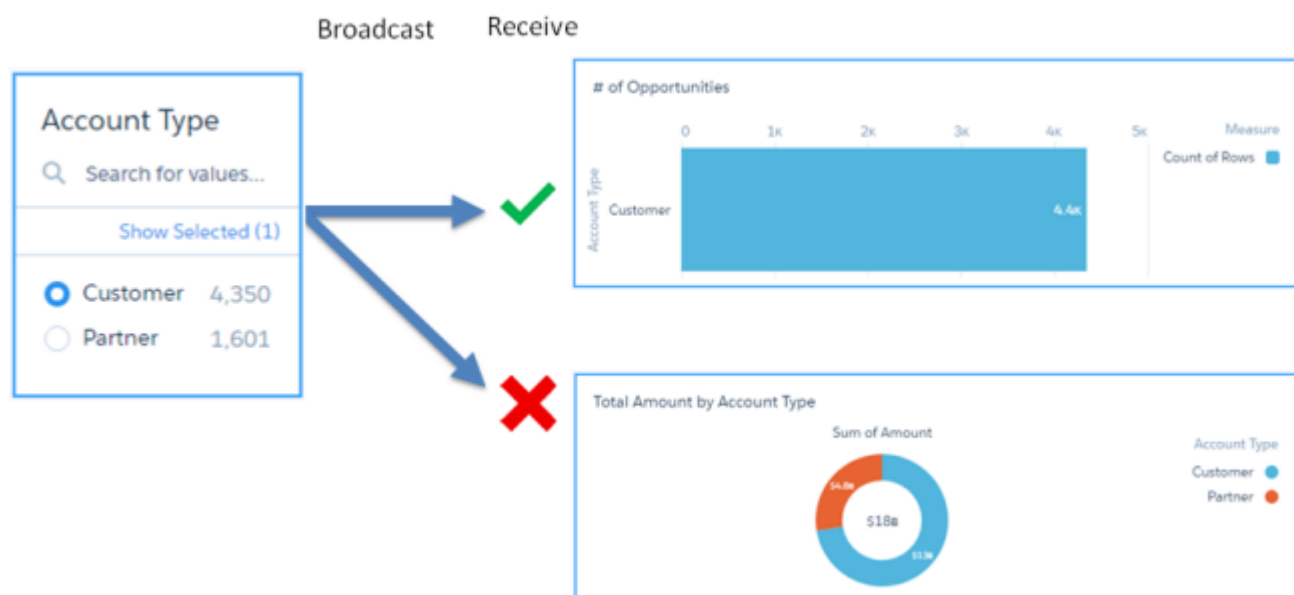
Controls whether the step's selections are broadcasted as facets, which filter other faceted steps.

### Apply filters from faceting

Controls whether the step listens for broadcasted facets and applies them as filters.



The following diagram illustrates how the two options work together to filter results. When a selection is made in the Account Type widget, Analytics broadcasts that selection to any step that receives facets. Analytics filters the “# of Opportunities” widget because Receive is enabled. The “Total Amount by Account Type” widget isn’t filtered because Receive is disabled.



You can configure **Broadcast selections as facets** and **Apply filters from faceting** for `aggregateflex`, `sql`, and `staticflex` step types. When you create one of these step types, both options are enabled, by default.

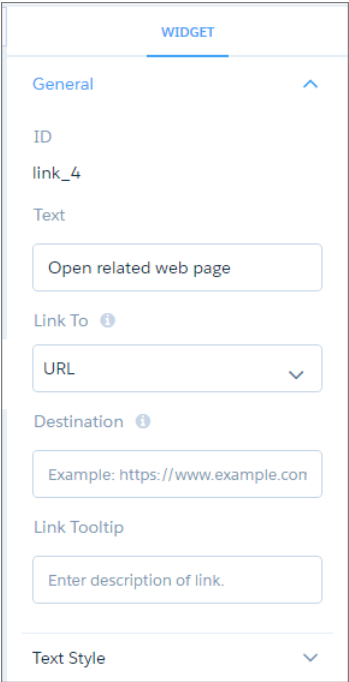
These options aren’t supported and appear as read only for the following step types.

- `apex` and `sql`. They don’t support faceting.
- `aggregate`, `grain`, and `static`. To change the faceting behavior for these step types, edit the `isFacet` property in the dashboard JSON. If you try to set the `broadcastFacet` and `receiveFacet` JSON parameters for these step types, an error occurs.

For a list of the supported faceting JSON properties for each step type, see [Get Familiar with Dashboard JSON Changes for Wave Designer](#).

## Round Out Your Dashboard with Related Web Content

Bring the outside world inside your dashboard with links to web pages. For example, if you use a dashboard as an entry page to a portal, you can create static links that point to different systems, like an issue tracking system or expense reporting system.





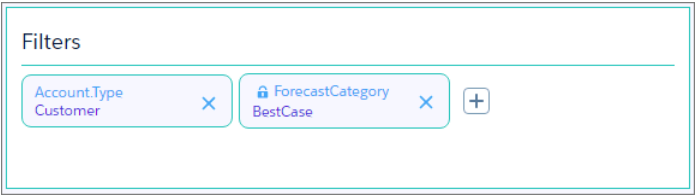
The URL field supports http or https. It doesn't support passing Salesforce parameters in the URL, like Salesforce object or Analytics dataset fields.

Create Dashboard Controls Using Global Filters

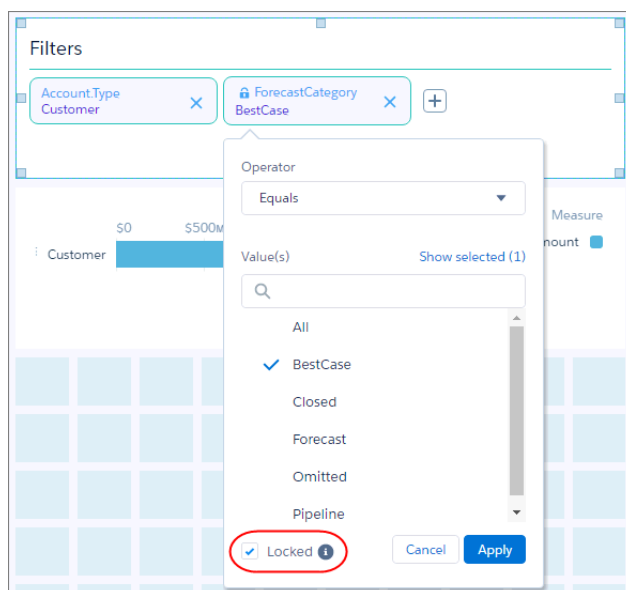
Global filters are now easier to create and manage. You can also enable dashboard viewers to change them.

Working with Global Filters

To create a global filter, drag a global filter panel widget (  ) from the widget toolbar to the dashboard, and then click  . Each filter must be based on a single field—no composite filters based on multiple fields, like Region="West" and Industry="CPG."

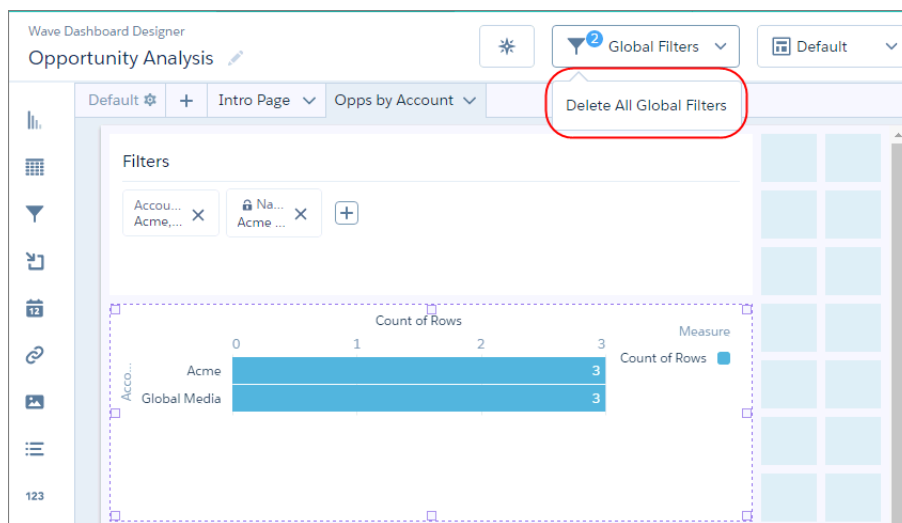


Unlike the old global filter, new global filters can be temporarily changed by a dashboard viewer—the change isn't saved. To prevent viewers from changing a global filter, click **Locked** while creating it.



Click a global filter inside the panel to change it. Click **X** to delete a global filter from the panel.

If you delete a global filter panel widget, Analytics removes the panel from the dashboard, but the global filters still apply. To delete the global filters from the dashboard, while editing the dashboard, click the down arrow inside the Global Filters button, and then click **Delete All Global Filters**.




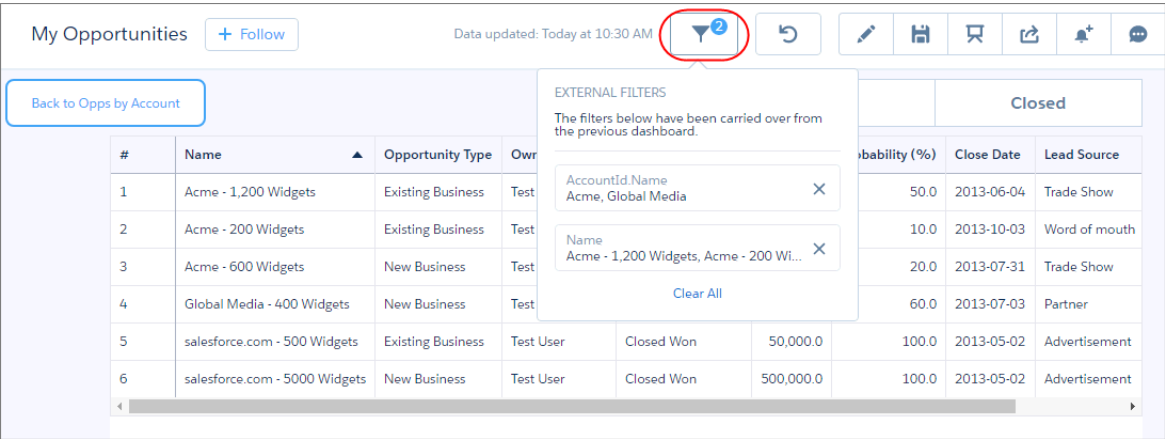
**Note:** If you open a dashboard with a global filter created before Winter '18, a pop-up message asks if you want Analytics to convert it to the new version. If you agree, Analytics converts all global filters to the new design, showing all global filters in a panel. During the conversion, unsupported global filters, like composite filters and invalid ones that reference datasets and fields that don't exist, don't appear in the new global filter panel widget. If you don't convert to the new design, you can continue to use the legacy global filter, but can't add global filters to the dashboard.

### Passing Global Filters from a Linked Dashboard

If you select **Apply Filters and Selections** in the widget properties of a link widget, Analytics passes selections in the current dashboard as selections in the linked dashboard. It also passes global filters as filters to a linked dashboard as long as the filters apply. (In the previous

release, Analytics passed global filters as selections in a linked dashboard.) Analytics ignores a global filter if the linked dashboard doesn't use the dataset on which the global filter is defined. If the source and target (linked) dashboards both have a global filter defined on the same field, Analytics ignores the source global filter if the target one is locked. If it's not locked, the source global filter overrides the target one.

When you open the linked dashboard, the passed global filters appear as external filters. To view the external filters, click  as highlighted in the screenshot. The External Filters panel shows filters passed from linked dashboards (as well as filters preconfigured in embedded dashboards). You can remove external filters while viewing the dashboard.




### Get Familiar with Dashboard JSON Changes for Wave Designer

The dashboard JSON contains new and changed parameters that impact users who create the JSON from scratch.

JSON Property	Description
<code>broadcastFacet</code> and <code>receiveFacet</code>	<p>New boolean properties. To gain finer control over faceting behavior, these two properties replace the <code>isFacet</code> and <code>autoFilter</code> properties for <code>aggregateflex</code>, <code>sql</code>, and <code>staticflex</code> step types. <code>broadcastFacet</code> controls whether the step's selections are broadcasted as facets. <code>receiveFacet</code> controls whether the step listens for broadcasted facets and applies them as filters.</p> <p>Example:</p> <pre>"Amount_1": {   "type": "aggregateflex",   "query": {     "measures": [       "sum",       "Amount"     ]   },   "useGlobal": true,   "isGlobal": false,   "broadcastFacet": true,   "receiveFacet": true,   "selectMode": "single",</pre>



JSON Property	Description																																													
	<div><pre>"visualizationParameters": {   ... }, "datasets": [   {     "id": "0FbB0000000017QxKAI",     "name": "opportunity",     "label": "Opportunities",     "url": "/services/data/v41.0/wave/datasets/0FbB0000000017QxKAI"   } ], },</pre></div> <div><div></div><div><b>Note:</b> The following table summarizes which faceting JSON properties apply to each step type.</div></div> <table><thead><tr><th>Step Type</th><th>isFacet</th><th>autoFilter</th><th>broadcastFacet</th><th>receiveFacet</th></tr></thead><tbody><tr><td>saql</td><td></td><td></td><td>✓</td><td>✓</td></tr><tr><td>aggregateflex</td><td></td><td></td><td>✓</td><td>✓</td></tr><tr><td>staticflex</td><td></td><td></td><td>✓</td><td>Appears in JSON, but always set to false because this step type can't receive facets.</td></tr><tr><td>apex</td><td></td><td></td><td>Appears in JSON, but always set to false because this step type can't broadcast facets.</td><td>Appears in JSON, but always set to false because this step type can't receive facets.</td></tr><tr><td>soql</td><td></td><td></td><td>Appears in JSON, but always set to false because this step type can't broadcast facets.</td><td>Appears in JSON, but always set to false because this step type can't receive facets.</td></tr><tr><td>aggregate</td><td>✓</td><td>✓</td><td></td><td></td></tr><tr><td>grain</td><td>✓</td><td></td><td></td><td></td></tr><tr><td>static</td><td>✓</td><td></td><td></td><td></td></tr></tbody></table>	Step Type	isFacet	autoFilter	broadcastFacet	receiveFacet	saql			✓	✓	aggregateflex			✓	✓	staticflex			✓	Appears in JSON, but always set to false because this step type can't receive facets.	apex			Appears in JSON, but always set to false because this step type can't broadcast facets.	Appears in JSON, but always set to false because this step type can't receive facets.	soql			Appears in JSON, but always set to false because this step type can't broadcast facets.	Appears in JSON, but always set to false because this step type can't receive facets.	aggregate	✓	✓			grain	✓				static	✓			
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aggregate	✓	✓																																												
grain	✓																																													
static	✓																																													
columns	(For Wave designer dashboards only.) Specifies a list of step fields to include in the widget. Use this property to include specific fields in the widget or to change the field order for the widget. This property appears when you edit a widget based an <code>aggregateflex</code> or a <code>saql</code> step type and use the explorer to reorder or hide a field. To specify the fields or change their order for widgets based on other step types, manually add and set this property in the JSON.																																													

JSON Property	Description
	<p>Example: A step returns data in the following fields: Id, Name, Amount, and Profit. To hide the Id and Profit fields from the chart widget (chart_2), set the "columns" property.</p> <pre> "chart_2": {   "parameters": {     "columns": [ "Name", "Amount" ],     "visualizationType": "hbar",     "step": "Amount_Prob_1",     ...   },   "type": "chart",   .... }</pre>
destinationType	<p>Existing property. You can now link to a dashboard page ("destinationType": "page") or a website ("destinationType": "url"). To set the URL, specify it in the url parameter. Examples:</p> <pre> "link_to_page": {   "type": "link",   "parameters": {     "destinationType": "page",     "includeState": false,     "text": "Opportunity Details",     "textColor": "#44A2F5",     "textAlignment": "center",     "fontSize": 12,     "destinationLink": {       "name": "9c29106c-ec63-45bc-b1c3-d5ceb6663e04"     }   } }  "link_to_web_site": {   "type": "link",   "parameters": {     "destinationType": "url",     "includeState": false,     "text": "Salesforce.org Website",     "textColor": "#44A2F5",     "textAlignment": "center",     "fontSize": 12,     "destinationLink": {       "url": "http://www.salesforce.org/",       "tooltip": "Learn about Salesforce's 1-1-1 model."     }   } }</pre>
mobileDisabled	<p>New boolean property. Specifies whether the dashboard can be accessed in the mobile app. Use this parameter to hide dashboards that don't perform well on mobile devices.</p>

JSON Property	Description
	<p>Example:</p> <pre>{   "label": "Opps by Account Owner",   "mobileDisabled": false,   "state": ... }</pre>
pages	<p>Existing property. Analytics now supports multiple pages. If you split a dashboard into multiple pages, each page contains a section under the <code>pages</code> property. The <code>name</code> property under <code>pages</code> is a new, required property for each page.</p> <p>Example:</p> <pre>"pages": [   {     "label": "Untitled",     "name": "126228ee-5268-454e-bc15-1c85facc3a29",     "widgets": [       {         "row": 1,         "column": 0,         "rowspan": 6,         "colspan": 10,         "name": "chart_1",         "widgetStyle": {}       },       {         "row": 0,         "column": 0,         "rowspan": 1,         "colspan": 10,         "name": "text_1",         "widgetStyle": {}       }     ]   },   {     "label": "Opps by Acct Owner",     "name": "8b51af0c-4be6-4924-b67a-5ee49bb118ed",     "widgets": [       {         "row": 1,         "column": 0,         "rowspan": 6,         "colspan": 10,         "name": "chart_1",         "widgetStyle": {}       },       {         "row": 0,         "column": 0,</pre>

JSON Property	Description
	<pre>         "rowspan": 1,         "colspan": 10,         "name": "text_1",         "widgetStyle": {}       }     ],   },   {     "label": "Opps Details",     "name": "9c29106c-ec63-45bc-b1c3-d5ceb6663e04",     "widgets": [       {         "row": 0,         "column": 0,         "rowspan": 6,         "colspan": 10,         "name": "chart_1",         "widgetStyle": {}       },       {         "row": 6,         "column": 0,         "rowspan": 4,         "colspan": 10,         "name": "table_1",         "widgetStyle": {}       }     ]   } ], </pre>
type (step)	<p>Existing property. Analytics now provides beta support for the new <code>apex</code> step type. An <code>apex</code> step can have the following properties.</p> <p><b>body</b> Optional. Blob containing the input parameters needed by the Apex controller class.</p> <p><b>path</b> Required. Specifies the class path and name of the Apex controller class.</p> <p>Example:</p> <pre> "GetStockData": {   "query": {     "body": {       "symbol": "CRM"     },     "path": "stocks"   },   "type": "apex" } </pre> <p>For more information, see <a href="#">Bring Apex Capabilities into Analytics Dashboards (Beta)</a>.</p>

JSON Property	Description
<code>type</code> (widget)	<p>Existing property. Analytics supports a new widget type, global filter panel widget (<code>"type": "filterpanel"</code>). This widget replaces the previous global filter widget type (<code>"type": "globalfilters"</code>). The global filter panel widget now supports the following parameters.</p> <p><b>itemsPerRow</b> Number of global filters to show per row in the global filter panel</p> <p><b>filterItemOptions</b> Details about each global filter shown in the panel</p> <p><b>propertyColor</b> Color of the field name</p> <p><b>valueColor</b> Color of the field value</p> <p><b>backgroundColor</b> Color of the filter background</p> <p><b>borderColor</b> Color of the filter border</p> <p><b>borderWidth</b> Width of the filter border</p> <p><b>borderRadius</b> Radius of the filter border</p> <p><b>title</b> Details about the title of the global filter panel widget</p> <p><b>visible</b> Indicates whether the title is visible when viewing the dashboard</p> <p><b>text</b> Details about the title: title (<code>label</code>), color of title (<code>color</code>), font size of title (<code>fontSize</code>), and horizontal alignment (<code>align</code>)</p> <p><b>separatorColor</b> Color of the line that separates the widget title from the global filters</p> <p>The global filters appear as an array under a new section called <code>filters</code>. Each filter consists of a field, operator, and field values, like "State contains CA." Each filter uses the following properties.</p> <p><b>label</b> Field label displayed in the global filter</p> <p><b>fields</b> API name of the field by which to filter the records</p> <p><b>operator</b> Filter operator; supported operators are <code>in</code> (equals), <code>not in</code> (doesn't equal), and <code>matches</code> (contains)</p> <p><b>locked</b> Indicates whether dashboard viewers can change the global filter</p>

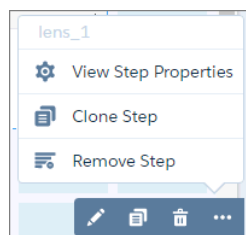
JSON Property	Description
	<p><b>dataset</b> Contains the name field, which specifies the API name of the dataset that contains the field</p> <p><b>value</b> Array of field values by which to filter the records</p> <p>Example:</p> <pre> "state": {   "steps": {},   "widgets": {     "filterpanel_1": {       "type": "filterpanel",       "parameters": {         "itemsPerRow": 5,         "filterItemOptions": {           "propertyColor": "#44A2F5",           "valueColor": "rgb(80, 27, 217)",           "backgroundColor": "#F2F6FA",           "borderColor": "#2EC2BA",           "borderWidth": 2,           "borderRadius": 8         },         "title": {           "visible": true,           "text": {             "label": "Filters",             "color": "#091A3E",             "fontSize": 18,             "align": "left"           },           "separatorColor": "#2EC2BA"         }       }     }   },   "filters": [     {       "label": "Account.Type",       "fields": [         "Account.Type"       ],       "operator": "in",       "locked": false,       "dataset": {         "name": "opportunity"       },       "value": [         "Customer"       ]     },     {       "label": "ForecastCategory", </pre>

JSON Property	Description
	<pre>       "fields": [         "ForecastCategory"       ],       "operator": "in",       "locked": true,       "dataset": {         "name": "opportunity"       },       "value": [         "BestCase"       ]     },     "gridLayouts": [       ...     ],     "dataSourceLinks": [],     "widgetStyle": {       ...     }   }, </pre>

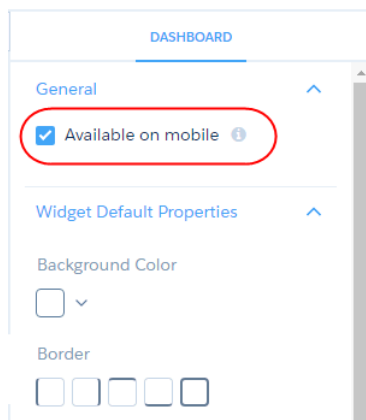
## Other Enhancements to Wave Dashboard Designer

Check out these improvements to the Wave designer.

- To prevent the loss of unsaved dashboard changes, Analytics prompts you to save when you refresh or close the browser window.
- Resaving a dashboard with the S hotkey just got quicker. Press S and you don't see the popup to set the dashboard name and app anymore.
- Widget action buttons in a Wave designer dashboard now appear as a single bar with an overflow menu.



- The default widget sizes are smaller so that they fit into smaller spaces.
- To show more accuracy, the number widget now rounds shortened numbers to the nearest tenths place. For example, when shortened, 1,111,556 appears as 1.1 M and 111,045 appears as 111.0 K. This new behavior isn't available in chart and table widgets when you set **Show Value as** widget property to Compact Number.
- To hide a dashboard from the Analytics mobile app, click **...** and then **⚙** to open the dashboard properties, and then clear **Available on mobile**. This option is selected, by default. You might hide dashboards that don't perform well on mobile devices.



- While viewing a dashboard, you can now click a column in a compare or values table to sort the results.

#	Close Date ▲	Opportunity Name	Opportunity Owner	Forecast Category	Stage
1	2016-05-17	Opportunity for Wright [2154]	Nathan Sinha	Best Case	Perception Analysis
2	2016-05-22	Opportunity for Jensen [2321]	Bill Johnson	Best Case	Perception Analysis
3	2016-06-13	Opportunity for Hunt [2117]	Jennifer McCarthy	Best Case	Id. Decision Makers
4	2016-06-14	Opportunity for Santos [2257]	Nathan Sinha	Best Case	Proposal/Price Quote
5	2016-06-21	Opportunity for Matthews [2052]	Bill Johnson	Best Case	Id. Decision Makers
6	2016-06-25	Opportunity for Steele [2290]	Sam Gunderson	Best Case	Id. Decision Makers
7	2016-06-28	Opportunity for Vasquez [2151]	Russ Dixon	Best Case	Perception Analysis
8	2016-06-29	Opportunity for Holt [2074]	Valerie Thom	Best Case	Proposal/Price Quote

- When you edit a dashboard, it returns to the last saved state. It retains the global filters and initial selections defined as part of the dashboard. But it removes user selections that were made while viewing it and external filters that were passed from a linked dashboard or preconfigured in an embedded dashboard. Previously, when you edited the dashboard, it retained selections or filters that were applied while viewing it.

## Analytics Data Integration: Upload Wizard, New Connectors, Data Preparation Smart Suggestions

Data integration into Analytics is easier with enhancements to the dataflow editor, dataset edit page, and replication setup page. With the new upload wizard, you can view and change file properties and field attributes before you upload data. In the dataset builder, select dataflows and create new ones.

### IN THIS SECTION:

#### [Stay on Top of Replication](#)

Are you buried under a mountain of replications? We refreshed the replication setup page to make it easier to find and manage them. Search and sort and collapse sections to focus on just the replications you need. Do some on-the-fly data prep when setting up replications by changing field attributes, such as label and type. And run each of your replications individually.

#### [Branch Out with New Connectors](#)

Connect to even more web-based data services with the new Microsoft Dynamics CRM and Google BigQuery connectors. Connectors give you an easy way to connect to data inside and outside of your Salesforce org and replicate it in Analytics. And now we've added two new remote ones.



### [Intelligently Prepare .csv Data When You Create Datasets](#)

Not all files are created equal. Different delimiters, encoding, number formats, and currency symbols can conspire to ensure that the .csv data you upload is never consistent. Help is at hand. Analytics now recognizes the intimate details of your files and their fields and lets you view and edit file properties and field attributes as you upload. It even recognizes non-numeric characters in number fields, so you can upload them as measures with minimum fuss. And all this wrapped up in a new wizard to gently guide you through the process.

### [Build Datasets in the Dataflow of Your Choice](#)

We've hooked up the dataset builder and the dataflow editor to turn Salesforce dataset creation into a seamless process. Now you can choose which dataflow creates the dataset, and edit this dataflow before you run it. If you're already working in the dataflow editor, open the dataset builder with the click of a button to add a new Salesforce dataset on the fly.

### [Keep Your Data Flowing with Dataflow Enhancements](#)

The dataflow editor has new buttons and extra features. Open up the dataset builder right in the editor to quickly add a new Salesforce dataset. Use SAQL expressions in computeRelative nodes. Select a sharing source in register nodes. And never have to delay your dataflow again—replication now runs automatically if needed when you start the dataflow.

### [Export Data to Einstein Discovery with the export Transformation \(Beta\)](#)

Use the new export transformation in a dataflow to make data in Analytics available for Einstein Discovery. This transformation creates a data file and a schema file from data in a specified source node in your dataflow. After the dataflow runs, Einstein Discovery users can access these files through the public API.

### [Get Straight to the Point with the Refreshed Dataset Edit Page](#)

The dataset edit page has a cleaner look to help you get to what you need. The focus here is on information, so we grouped key information up top and tucked away tasks behind buttons. We even included when the dataset was last updated.

### [Turn Back the Data Clock: Restore Datasets to Previous Versions](#)

Mistakes happen. Someone, not you obviously, replaced the data in a dataset or edited the dataflow. Lenses show the wrong data, and dashboards are broken. In you step to save day. You restore the dataset to a previous version in minutes and become everyone's Analytics hero.

### [Intelligently Prepare and Clean Your Data in Recipes with Smart Suggestions and Column Profiles](#)

Dataset recipes get a refresh and an injection of smarts. Evaluate the quality of your data with column profiles, and get smart suggestions on how to clean it.

### [Integrate Sharing Inheritance with Security Predicates](#)

Previously, security predicates and sharing inheritance were mutually exclusive. Now by working together, it's easier to provide full security coverage.

## Stay on Top of Replication

Are you buried under a mountain of replications? We refreshed the replication setup page to make it easier to find and manage them. Search and sort and collapse sections to focus on just the replications you need. Do some on-the-fly data prep when setting up replications by changing field attributes, such as label and type. And run each of your replications individually.










**Setup**  
Replicate data from a source to use in recipes and dataflows.

Search Replication... **1** **Set Up Replication**




Source Data Replications (Number of Objects: 8)

Edit Replication Schedule Run Replication Now


**Salesforce**

<b>NAME</b>  <b>2</b>	CONNECTION	FIELDS	FILTER	INCREMENTAL	MODIFIED	LAST RUN
 Account	Salesforce Local (SFDC_LOCAL)	3		✓	Admin User Jul 18, 2017 at 4:56 PM	Aug 16, 2017 at 12:46 PM 
 Lead	Salesforce Local (SFDC_LOCAL)	2		✓	Admin User Aug 7, 2017 at 2:49 PM	Aug 16, 2017 at 12:46 PM 
 Opportunity	Salesforce Local (SFDC_LOCAL)	12		✓	Admin User Aug 2, 2017 at 10:23 AM	Aug 16, 2017 at 12:46 PM 
 User	Salesforce Local (SFDC_LOCAL)	2		✓	Admin User Aug 2, 2017 at 12:27 PM	Aug 16, 2017 at 12:46 PM 

**Microsoft Dynamics**


NAME	CONNECTION	FIELDS	MODIFIED 	LAST RUN
 Account	Dynamics (Dynamics)	5	Admin User Aug 11, 2017 at 1:54 PM	Aug 16, 2017 at 12:49 PM 


**Salesforce External**

Search replications by name, connection name, label, or type (1). Start typing to narrow down the list to just the ones that match. Search is case insensitive, so no fumbling for the Shift key. Sort replications in a section by any column (2). Click a column header to sort. Click again to reverse the sort order. Collapse sections by clicking the  (3).

## View and Edit Field Attributes

When you use connectors to replicate data from different sources, there's no guarantee that field labels, types, and formats are consistent. The inconsistency can be a headache when you're combining this data in a dataflow or recipe. Now, when you set up or edit a replication, you can view and edit these field attributes as you go.

 **Note:** Field attributes for local replications are read only.

Let's look at an example. The Analytics admin at Blue Sky Solar has set up a remote connection to replicate opportunity data from their Salesforce org in the United Kingdom. The company wants to combine this data with opportunity data replicated from its local U.S. org. When previewing the UK data, the admin clicks a column header and then the edit button () to open the field attributes panel.

Preview Source Data

Replication Settings

EMEA Sales>Opportunity

A NAME	A STAGENAME	Q. VALUE	CLOSEDATE
Opportunity for Roge...	Closed Won	888500	2016-09-10T00:00:00...
Opportunity for Frazi...	Perception Analysis	164700	2017-11-13T00:00:00...
Opportunity for Phel...	Closed Won	22520	2016-07-05T00:00:00...
Opportunity for Phel...	Needs Analysis	53325	2017-10-10T00:00:00...
Opportunity for Mort...	Qualification	356880	2017-06-11T00:00:00...
Opportunity for Port...	Closed Won	2155875	2016-10-03T00:00:00...
Opportunity for McK...	Closed Lost	3626550	2016-05-10T00:00:00...
Opportunity for Clar...	Closed Lost	148440	2016-08-08T00:00:00...
Opportunity for Abb...	Closed Won	206587	2016-03-08T00:00:00...
Opportunity for West...	Closed Lost	2103270	2016-11-05T00:00:00...
Opportunity for Hort...	Closed Won	2166890	2017-02-10T00:00:00...
Opportunity for Huff...	Closed Lost	1301060	2016-05-22T00:00:00...
Opportunity for John...	Closed Won	316040	2017-03-30T00:00:00...
Opportunity for Pott...	Closed Won	333830	2017-01-26T00:00:00...
Opportunity for Jord...	Closed Won	1455310	2017-04-15T00:00:00...
Opportunity for Mos...	Closed Lost	2623525	2016-11-20T00:00:00...
Opportunity for Bow...	Qualification	125340	2017-06-06T00:00:00...
Opportunity for Ngu...	Proposal/ Price Quote	2049800	2017-09-07T00:00:00...
Opportunity for Malo...	Value Proposition	108630	2017-06-23T00:00:00...

Field Attributes

Value

API Name: Amount

Field Label

Value

Field Type\*

Numeric

Settings for Numeric Field

Default Value

Precision

18

The admin can see that the UK org uses Value as a field label in place of Amount, and that values don't display decimal places. The admin can quickly change them here.



**Note:** Only changes to the field label appear in the preview data. Other changes are applied when you run the replication.

The admin now moves on to the Close Date column. Here the UK org date values include time components that aren't present in the U.S. data. The admin removes these components from the format attribute to ensure that the date values are consistent.

**CLOSEDATE**

2016-09-10T00:00:00...  
2017-11-13T00:00:00...  
2016-07-05T00:00:00...  
2017-10-10T00:00:00...  
2017-06-11T00:00:00...  
2016-10-03T00:00:00...  
2016-05-10T00:00:00...  
2016-08-08T00:00:00...  
2016-03-08T00:00:00...  
2016-11-05T00:00:00...  
2017-02-10T00:00:00...  
2016-05-22T00:00:00...  
2017-03-30T00:00:00...  
2017-01-26T00:00:00...  
2017-04-15T00:00:00...  
2016-11-20T00:00:00...  
2017-06-06T00:00:00...  
2017-09-07T00:00:00...  
2017-06-23T00:00:00...  
2016-03-20T00:00:00...

**Field Attributes**

**CloseDate**

API Name: CloseDate

Field Label

CloseDate

Field Type\*

Date

**Settings for Date Field**

Default Value

Format

MM/dd/yyyy

**Note:** You can only change the field type to text, and only for measure and date fields. If you change a field to text and want to change it back, go back to the field selection screen. Then deselect and select the field. The original field type is restored when you continue to the preview screen.

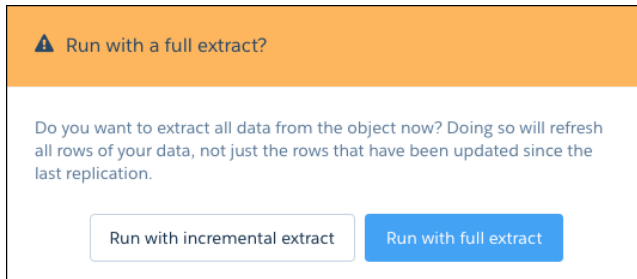
## Run Individual Replications

Previously, to run one replication you had to run them all. Consider the Analytics admin at Blue Sky Solar, who has just set up a new replication for opportunity data in the company's remote Salesforce org. The admin is eager to get the new replication ready for use in dataflows and recipes and doesn't want to wait while the other replications run. Now, the admin can go straight to the replication's action menu and run it. All by itself!

Salesforce External				
NAME	CONNECTION	FIELDS	MODIFIED ↓	LAST RUN
Opportunity	EMEA Sales (myremote)	6	Admin User Today at 9:55 AM	Never
Account	EMEA Sales (myremote)	5	Admin User Jul 26, 2017 at 5:34 PM	A

Run Replication  
Delete Replication

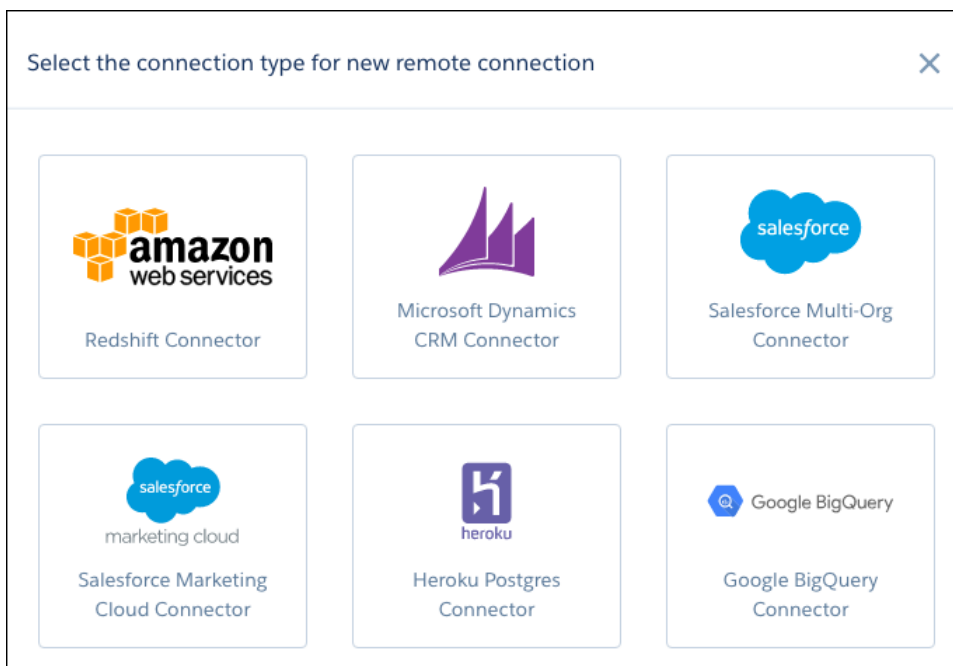
When you run a local replication, you can choose between an incremental or a full extract.



Now you can run a full extract for an incremental replication at the click of a button. No more modifying the object's `sfdcDigest` node in the dataflow!

## Branch Out with New Connectors

Connect to even more web-based data services with the new Microsoft Dynamics CRM and Google BigQuery connectors. Connectors give you an easy way to connect to data inside and outside of your Salesforce org and replicate it in Analytics. And now we've added two new remote ones.



Let's look at how an example company, Blue Sky Solar, uses these connectors. Blue Sky Solar sells and installs solar panels in California and Arizona.

### Microsoft Dynamics CRM Connector

Before migrating to Salesforce, Blue Sky Solar used Microsoft Dynamics 365 as its CRM solution. Not all data was made available in the Salesforce system, but it's not lost thanks to the new Microsoft Dynamics CRM connector. The company can now replicate this data in Analytics and make it available for use in lenses and dashboards.

## Google BigQuery Connector

Hundreds of thousands of people visit the company's website every year. Using Google Analytics, the marketing team tracks online engagement and optimizes their website content daily. This data is made available in Google BigQuery and aggregated to provide key indicators for each visitor. The company can now replicate this data in Analytics and analyze it in lenses and dashboards.

See [Create a Remote Connection](#) to learn about the properties you need to provide when you set up these connectors.



**Note:** Incremental extracts and filters aren't available for remote connections.

## Intelligently Prepare .csv Data When You Create Datasets

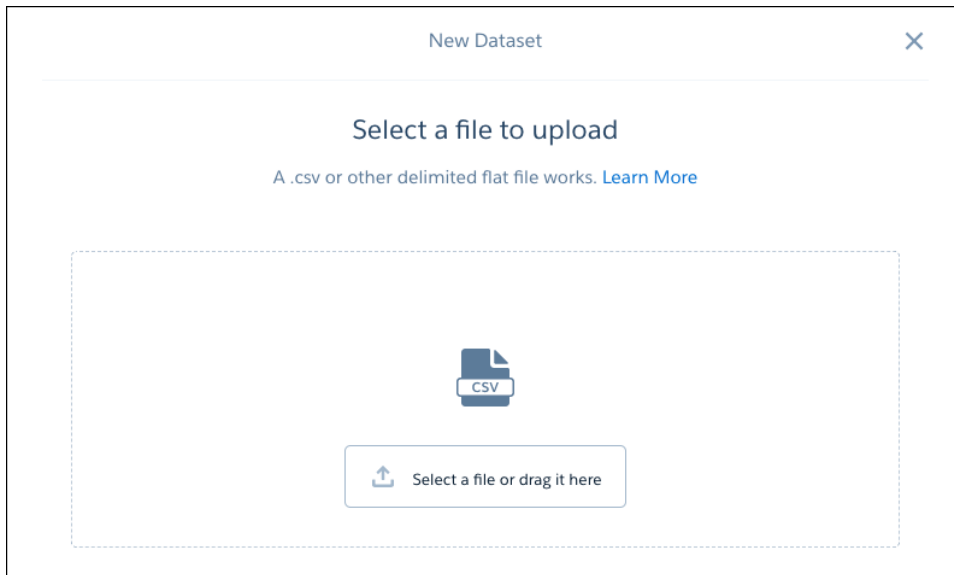
Not all files are created equal. Different delimiters, encoding, number formats, and currency symbols can conspire to ensure that the .csv data you upload is never consistent. Help is at hand. Analytics now recognizes the intimate details of your files and their fields and lets you view and edit file properties and field attributes as you upload. It even recognizes non-numeric characters in number fields, so you can upload them as measures with minimum fuss. And all this wrapped up in a new wizard to gently guide you through the process.

Let's look at an example of how the Analytics admin at Blue Sky Solar can use the new wizard to upload a .csv price list received from a colleague in the French office.

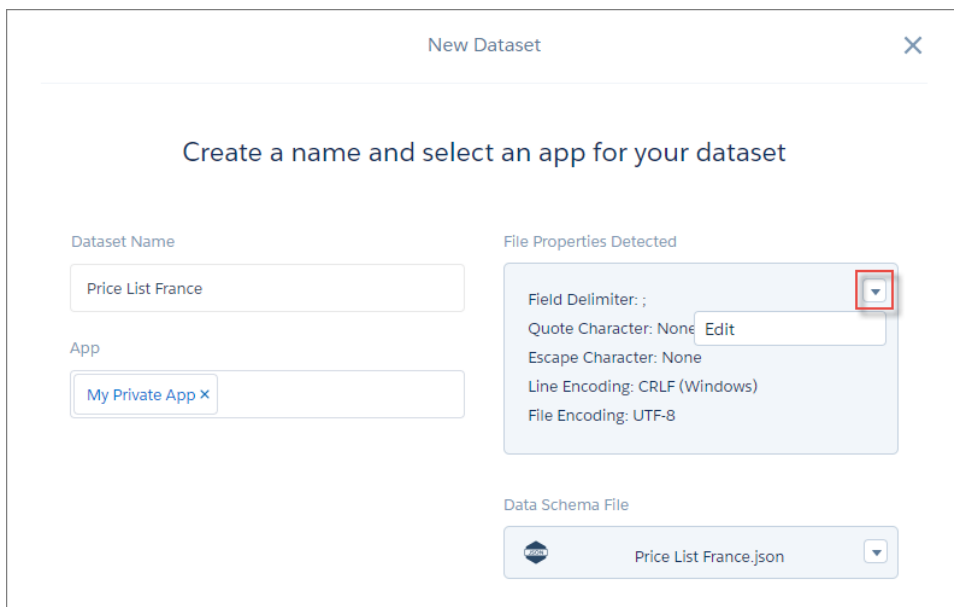
Product	Price
2 Kw Grid-Assisted System	\$ 14.793,26
3 Kw Grid-Assisted System	\$ 15.583,45
4 Kw Grid-Assisted System	\$ 16.368,72
5 Kw Grid-Assisted System	\$ 18.932,12
6 Kw Grid-Assisted System	\$ 20.792,85

The Price field in the file contains currency symbols and European formatting, with periods for thousand separators, and commas for decimal points. In the past, the admin had to edit the file to remove the symbols and commas and replace the points to ensure that the field is recognized as a measure. Now, it's not necessary.

As always, to create a dataset from a .csv file, head to Analytics home, click **Create**, and select **Dataset**. Select **CSV File** and click **Continue**. In the first step of the new wizard, select a file or drag it onto the upload area.

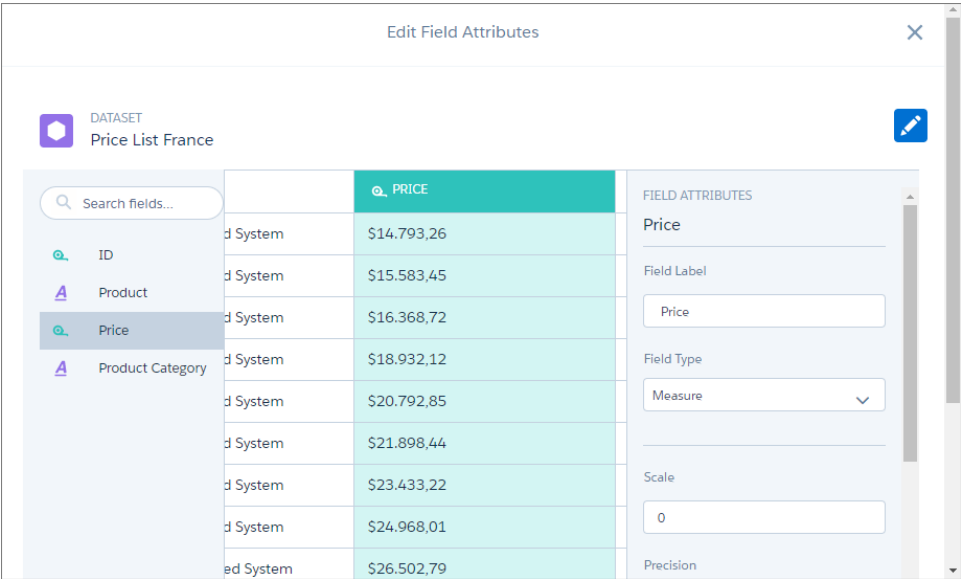


Analytics uses the file name for the dataset name and selects your private app. You can change these selections in the next step.

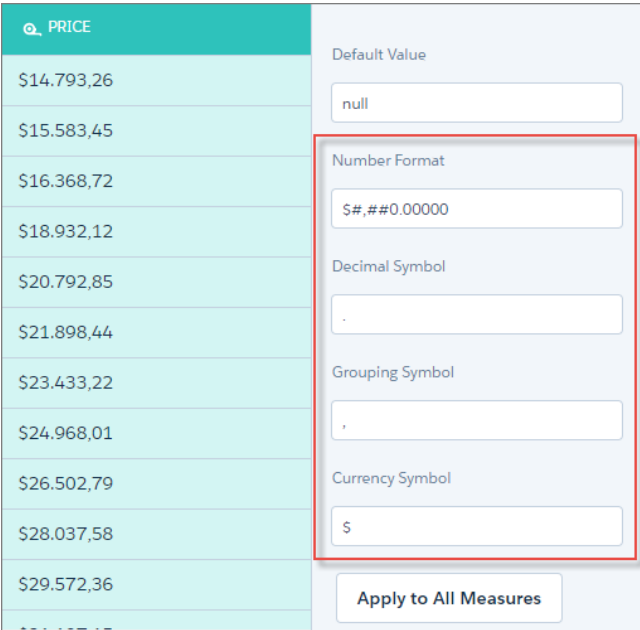


The File Properties Detected section shows you what Analytics has recognized about your file. Sometimes, Analytics doesn't get it quite right. For example, if your file is ANSI encoded and Analytics thinks it's UTF-8, you might see unusual characters in your data preview. Edit these properties here if they're not right.

The final step of the wizard is where you preview the data and review field attributes. To see a field's attributes, click the field in the list on the left, or click its column. Attributes appear in a panel on the right.



The Analytics admin at Blue Sky Solar is thrilled to see that the Price field has been recognized as a measure, despite the presence of currency symbols and commas. Analytics identifies four new attributes to help it upload numeric data into measures.



The Analytics admin at Blue Sky Solar reviews these attributes to ensure that they are correct.

**Number Format**

This attribute identifies how values are formatted in the .csv file. Here, Analytics has derived the format from the position of the decimal point. The admin changes to match the actual format in the data.

**Decimal Symbol**

This attribute identifies the symbol used as a decimal point. Analytics uses this symbol to determine where the decimal point appears in values in the dataset. The data here uses commas as decimal points, so the admin changes this attribute to a comma.



**Grouping Symbol**

This attribute identifies the symbol used to group thousands. Analytics ignores this non-numeric value when it creates the dataset. The data here uses periods, so the admin changes this attribute to a period.

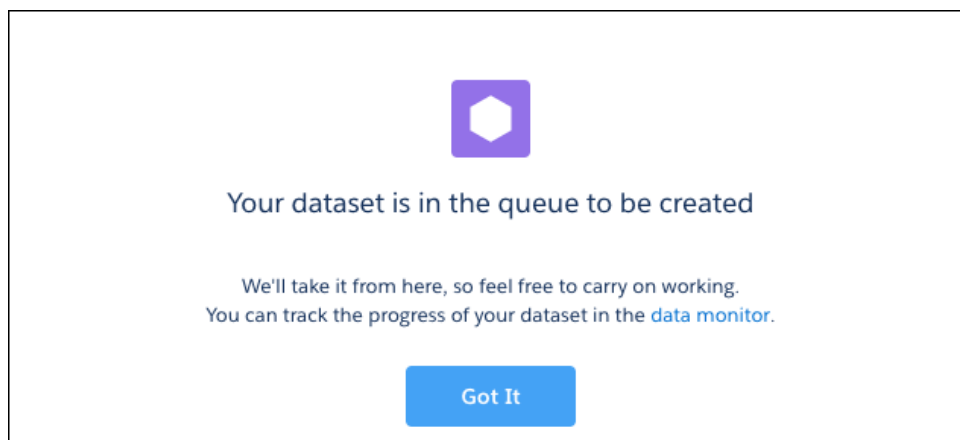
**Currency Symbol**

This attribute identifies the symbol used to denote currency. Again, Analytics ignores this non-numeric value when it creates the dataset. Here, it has correctly identified the currency symbol, so the admin leaves it as it is.





**Important:** If Analytics cannot correctly identify these non-numeric characters in measures, the dataset creation fails.

When you complete the wizard, Analytics runs a data job to create the dataset.



Click the **data monitor** link to view the progress of the job in the data manager.

The admin at Blue Sky Solar explores the new dataset to see that the price values have been correctly loaded and formatted. No time wasted editing the .csv file!

 Product	 Price
2 Kw Grid-Assisted System	14793.26
3 Kw Grid-Assisted System	15583.45
4 Kw Grid-Assisted System	16368.72
5 Kw Grid-Assisted System	18932.12
6 Kw Grid-Assisted System	20792.85

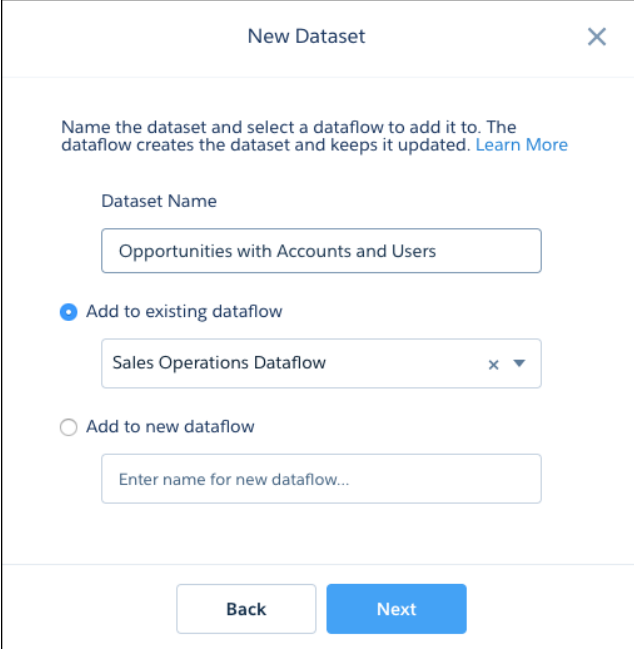
**Build Datasets in the Dataflow of Your Choice**

We've hooked up the dataset builder and the dataflow editor to turn Salesforce dataset creation into a seamless process. Now you can choose which dataflow creates the dataset, and edit this dataflow before you run it. If you're already working in the dataflow editor, open the dataset builder with the click of a button to add a new Salesforce dataset on the fly.

The dataset builder is a visual tool for creating datasets from related Salesforce objects. It generates the JSON transformations to extract and augment Salesforce object data and register the results as a new dataset. Previously, these transformations were automatically

added to the Default Salesforce Dataflow. Moving or tweaking the transformations nodes involved edit work in the dataflow before running it.

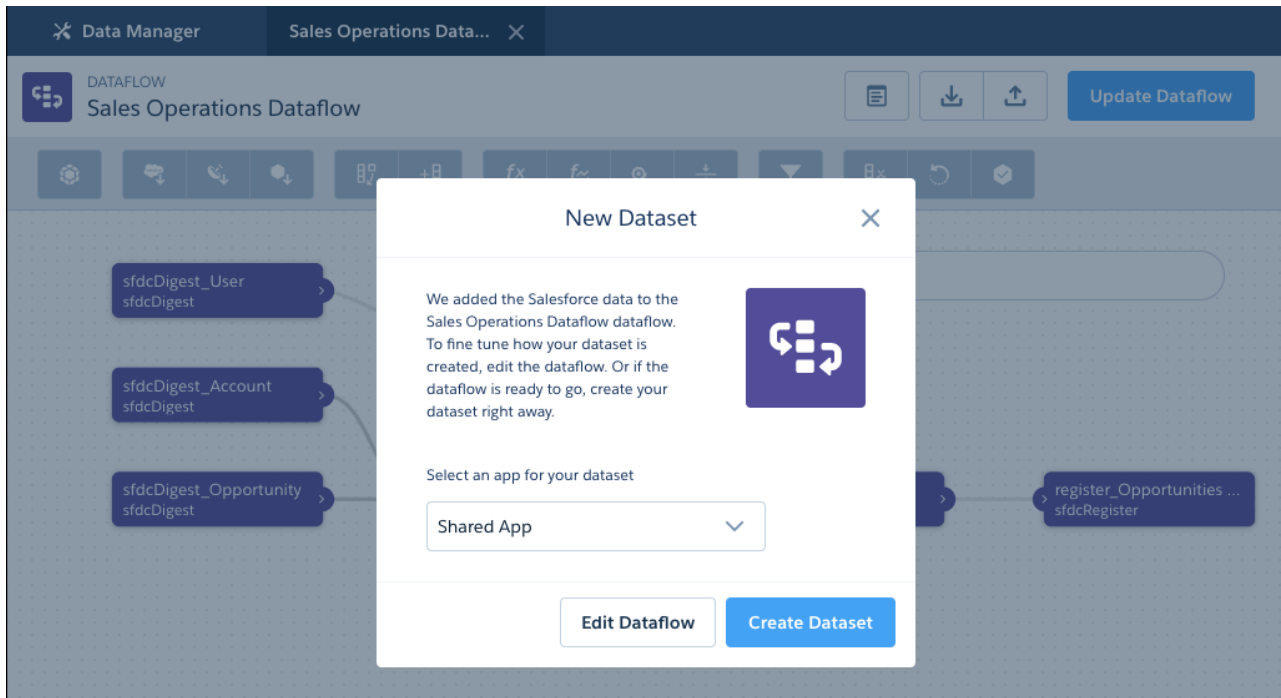
Now, when you open the dataset builder from Analytics home, you can select which dataflow the nodes are added to. Can't find a suitable dataflow? No problem. Give us a name, and we'll create one for you.



The screenshot shows a 'New Dataset' dialog box with a close button (X) in the top right corner. The main text reads: 'Name the dataset and select a dataflow to add it to. The dataflow creates the dataset and keeps it updated. [Learn More](#)'. Below this, there is a 'Dataset Name' section with a text input field containing 'Opportunities with Accounts and Users'. Underneath, there are two radio button options. The first option, 'Add to existing dataflow', is selected and followed by a dropdown menu showing 'Sales Operations Dataflow' with a close (x) and expand (v) icon. The second option is 'Add to new dataflow', which is followed by a text input field with the placeholder 'Enter name for new dataflow...'. At the bottom of the dialog, there are two buttons: 'Back' and 'Next'.


 **Note:** The option to add to a new dataflow is available if you have enabled replication.

When you've selected the Salesforce objects for your dataset, the transformations are added as new nodes in your selected dataflow.

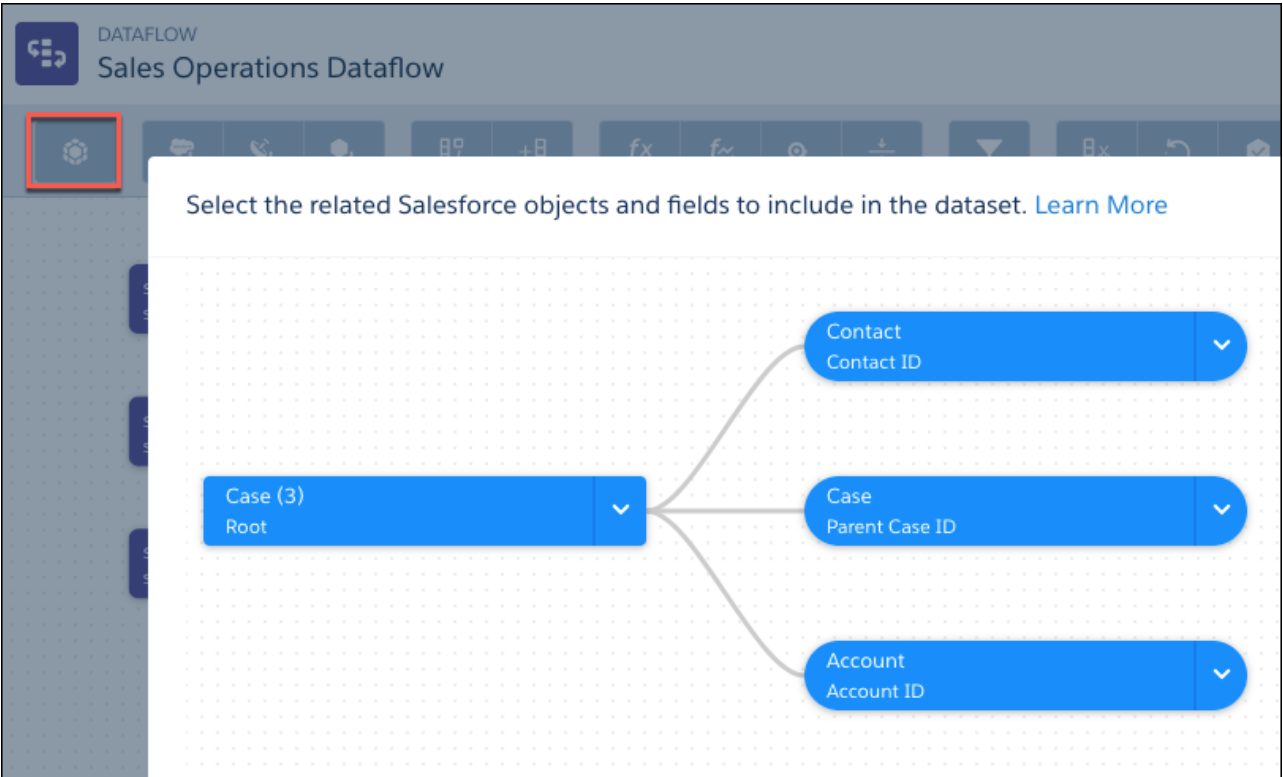


Sometimes you want to do more in the dataflow with the Salesforce data, such as add filters or calculations. Just click **Edit Dataflow** and you're dropped right into the dataflow editor. Edit away!

If no edits are needed, pick an app where the new dataset is created, and click **Create Dataset**. The dataflow is queued to run, and your new dataset is on its way.

 **Note:** To edit the dataflow, you must select the Shared App for the dataset. When the dataflow runs, the dataset is created in this app. You can edit the dataset to change its app.

What about when you're already busy working in the dataflow editor and want to bring in Salesforce data? Well, you could painstakingly add the sfcdigest, augment, and register nodes that you need. Or save your work, and go and run the dataset builder. Not anymore. We've given you a button to open up the dataset builder right inside the dataflow editor.

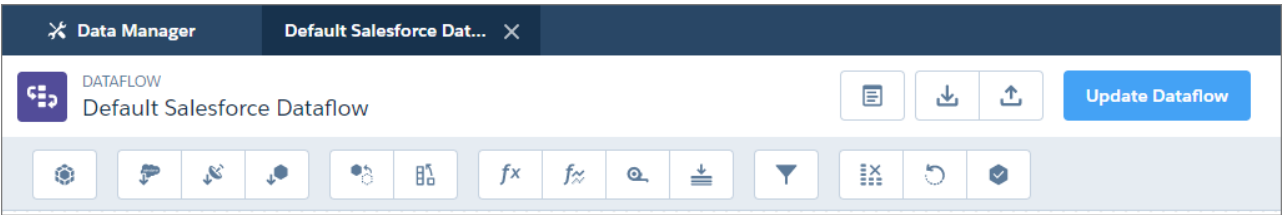


Just select your objects and fields in the builder to have them added to the dataflow.

Keep Your Data Flowing with Dataflow Enhancements

The dataflow editor has new buttons and extra features. Open up the dataset builder right in the editor to quickly add a new Salesforce dataset. Use SAQL expressions in computeRelative nodes. Select a sharing source in register nodes. And never have to delay your dataflow again—replication now runs automatically if needed when you start the dataflow.

The dataflow editor is a visual tool for creating and editing dataflows, without getting your hands dirty with JSON. We refreshed the node buttons to make it easier to select the transformations you need.

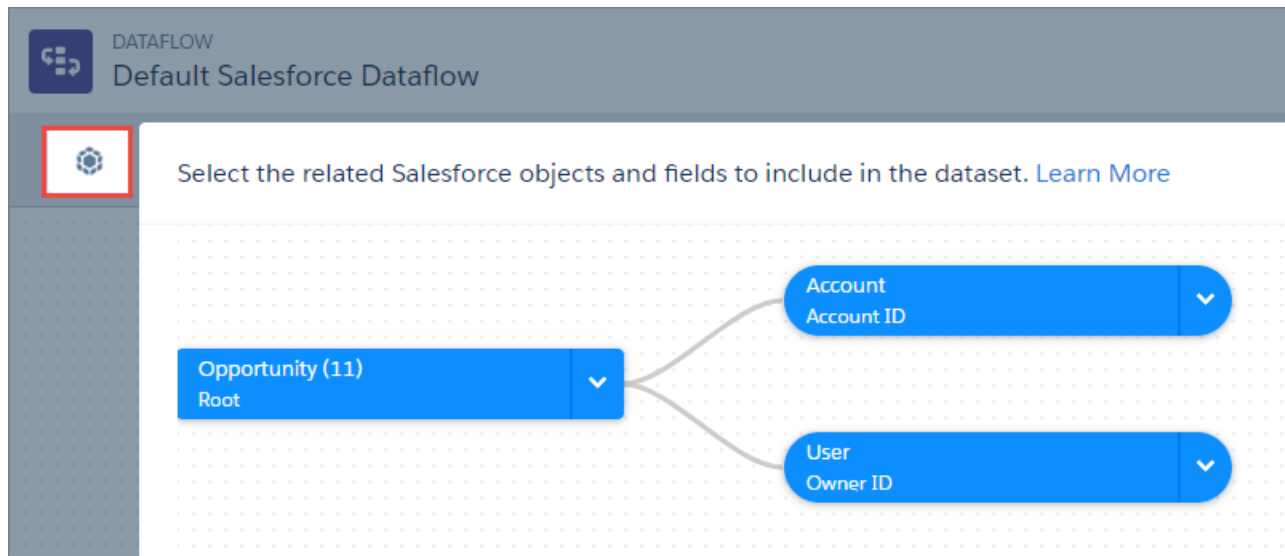


We also changed the way you interact with nodes on the canvas. Simply click a node to edit it, or hover and click the trash can to delete it.



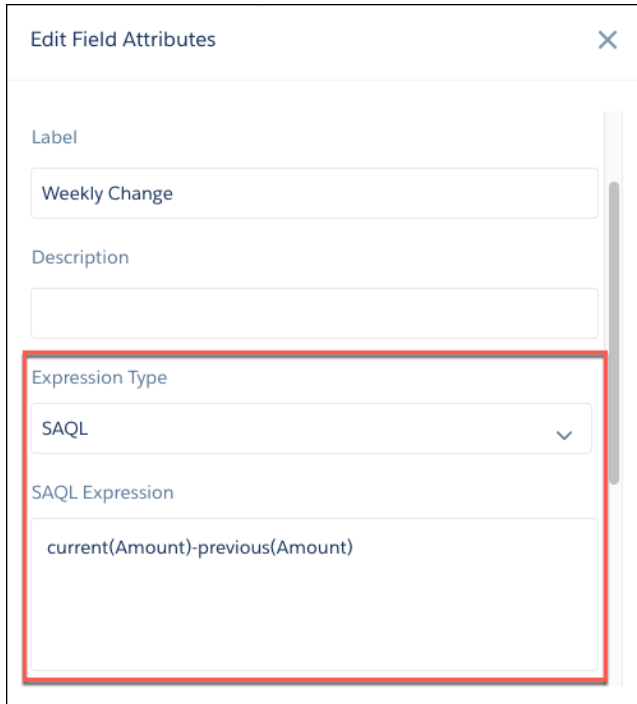
## Add Datasets on the Fly in the Dataflow Editor

Adding nodes to extract, augment, and register Salesforce data in the dataflow editor can be time consuming. To save you time, we added a button to open the dataset builder inside the editor. Select the objects and fields you need in the dataset, and Analytics adds the necessary nodes to create it in the dataflow.



## Use SAQL Expressions in computeRelative Nodes in the Dataflow Editor

The computeRelative node in the dataflow editor now has the same functionality as its JSON counterpart. When you add a field in a computeRelative node, you can select the SAQL expression type and enter a calculation using SAQL.



**Edit Field Attributes** [X]

Label

Weekly Change

Description

Expression Type

SAQL ✓

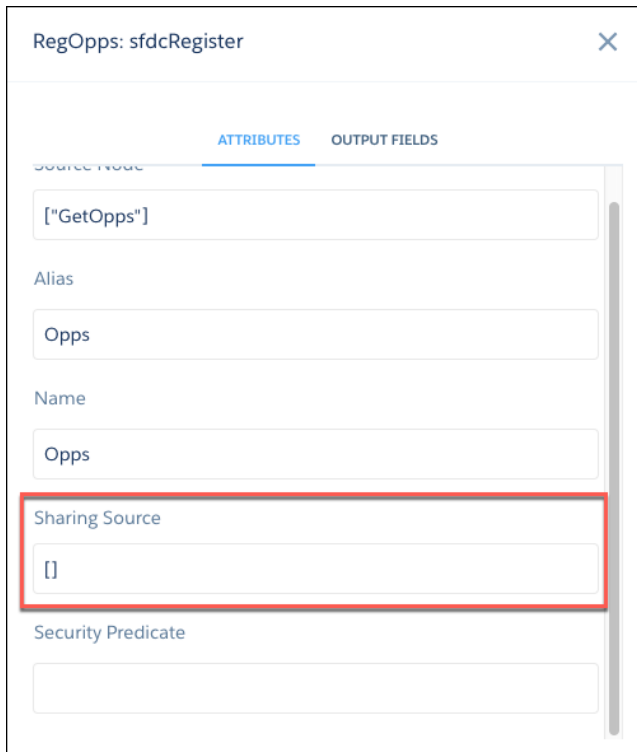
SAQL Expression

current(Amount)-previous(Amount)

This example calculates the difference between the amount value in the current and previous rows in opportunity history data.

### Select a Sharing Source in Register Nodes

If you have enabled sharing inheritance in Analytics, you can now select a sharing source in register nodes. A sharing source is a Salesforce object from which sharing is inherited in the dataset to determine what data users can see. You can only select an object that's being extracted in the dataset that you are registering.



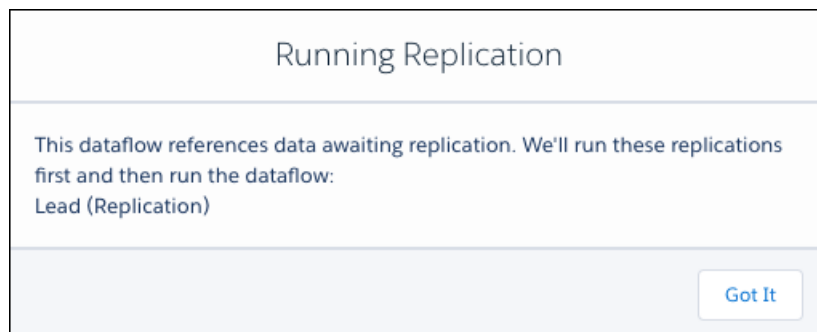
**Important:** In this release, you must also enter a security predicate when you select a sharing source. If the security predicate field is empty when you select a sharing source, Analytics enters a default value of `false`. For more information, see [Integrate Sharing Inheritance with Security Predicates](#).

### Extract Data from Salesforce Big Objects in sfdcDigest Nodes

You can now extract Salesforce Big Object data in your dataflow using the sfdcDigest node. Note that incremental extraction isn't supported and filtering is possible only on primary key fields.

### Run Replication Automatically When You Run a Dependent Dataflow

Picture the scene. You've just edited your dataflow to include the creation of a leads dataset. In your haste to run the updated dataflow, you forget to run replication for the leads data. You go get coffee, only to return to find the dataflow has failed. Well, those days are gone. Now when you start a dataflow, Analytics checks for replications that need to run first. If it finds any, it runs them for you before running the dataflow.



Enjoy your coffee!

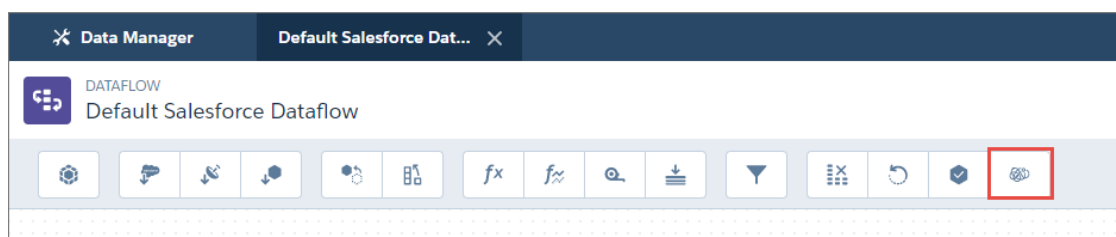
## Export Data to Einstein Discovery with the export Transformation (Beta)

Use the new export transformation in a dataflow to make data in Analytics available for Einstein Discovery. This transformation creates a data file and a schema file from data in a specified source node in your dataflow. After the dataflow runs, Einstein Discovery users can access these files through the public API.



**Note:** This release contains a beta version of the export transformation that is production quality but has known limitations. Contact Salesforce if you'd like to try it out!

You can add an export node manually in the JSON dataflow definition, or through the export button in the dataflow editor.



Here's an example. Let's say your dataflow contains the `sfdcDigest` node, `ExtractOpportunities`, which extracts all fields from the Opportunity object. To make this data available in Einstein Discovery, add an export node to the dataflow, specifying the source node and a target of `EinsteinDiscovery`. The user Id you specify determines who can access the data in Einstein Discovery.

### export Node in Dataflow JSON

```
"ExportOpportunities": {
  "action": "export",
  "parameters": {
    "source": "ExtractOpportunities",
    "target": "EinsteinDiscovery",
    "userId": "005R0000000IibgIAC"
  }
}
```

### export Node in Dataflow Editor

sdsc: export

ATTRIBUTES OUTPUT FIELDS

Source Node

["ExtractOpportunities"]

Target

Einstein Discovery

User

["005R0000000IibgIAC"]



**Note:** In this release, Einstein Discovery is the only target you can specify in an export node.

## Get Straight to the Point with the Refreshed Dataset Edit Page

The dataset edit page has a cleaner look to help you get to what you need. The focus here is on information, so we grouped key information up top and tucked away tasks behind buttons. We even included when the dataset was last updated.



**Analytics** **Dataset** X

**DATASET**  
Opportunities 3

4

API Name	Last Updated	Created By	Created
Opportunities	2 Days Ago at 3:33 PM	Admin User	2 Days Ago at 12:58 PM

**App**  
 Shared App

**Extended Metadata File**  
 Opportunities.xmd.json

**Usage** 2  
This dataset is used in these places

**Dashboards** **Lenses** **Dataflows**

Dashboard	Last Accessed
New dashboard	Today at 10:19 AM

**Security**  
**Security Predicate**  
None

5

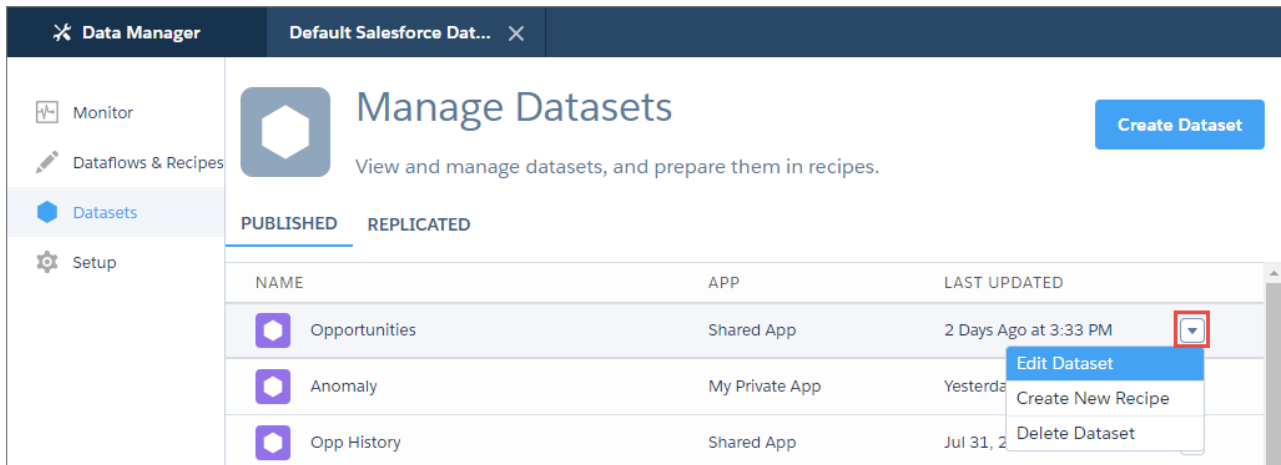
Key information has pride of place at the top of the edit page (1). Get answers to critical questions, such as how old is the dataset and how fresh is the data. If it's a stale dataset that's ripe for deletion, review the Usage section (2) to see where it's being used. And we know that you're not going to be renaming or updating things every day, so we've put certain tasks behind buttons (3) rather than splash them all over the page.

There are two new buttons here, too. Replace Data (4) starts up the new CSV upload wizard that you can use to replace the data in the dataset. Restore Dataset (5) takes your dataset back in time to undo those mistakes you just made!



**Important:** The usage information does not include recipes, or dashboards and lenses in other people's private apps. Keep this in mind when you delete a dataset.


One more thing. You no longer have to leave the data manager to edit a dataset. Just head to the Datasets tab to edit a dataset direct from its action menu.



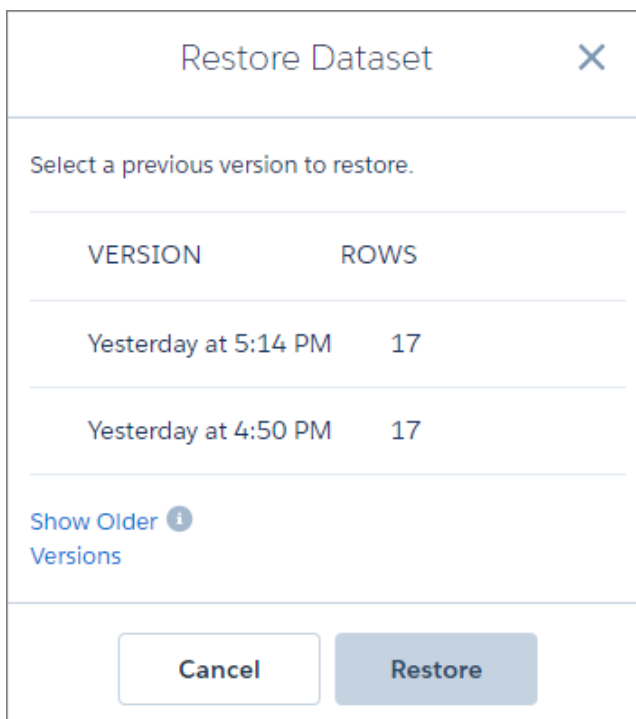
The dataset edit page opens in a new tab, right inside the data manager.

### Turn Back the Data Clock: Restore Datasets to Previous Versions

Mistakes happen. Someone, not you obviously, replaced the data in a dataset or edited the dataflow. Lenses show the wrong data, and dashboards are broken. In you step to save day. You restore the dataset to a previous version in minutes and become everyone's Analytics hero.

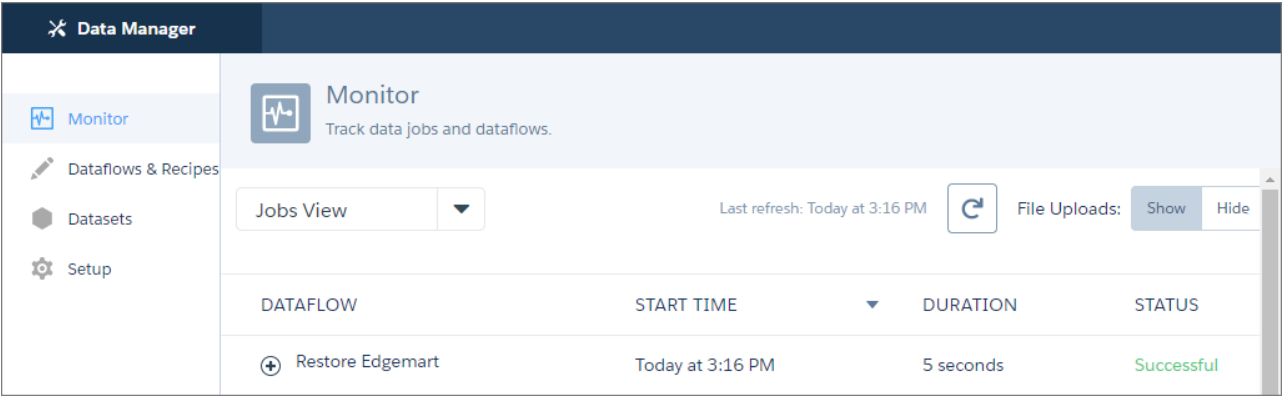
 **Note:** You can restore a dataset if you have the Manage Analytics permission.

To restore a dataset, go to its edit page and click **Restore Dataset**. You can choose from the previous two versions. Select the one you want, and click **Restore**.



If you have older versions of the dataset, click the **Show Older Versions** link. You can select older versions, but Analytics can't always restore them.

Analytics runs the restore as a data job, which you can track on the Monitor tab of the data manager.



If Analytics can't restore the dataset, the job fails. Try restoring a later version of the dataset.

**Important:** Restoring a dataset can impact the dashboards, lenses, and dataflows that use it. Refer to the usage information on the dataset's edit page to review the impacted assets before you restore.

### Intelligently Prepare and Clean Your Data in Recipes with Smart Suggestions and Column Profiles

Dataset recipes get a refresh and an injection of smarts. Evaluate the quality of your data with column profiles, and get smart suggestions on how to clean it.

Let's start with the changes we made to the recipe page.


The screenshot displays the Salesforce Einstein Analytics Data Manager interface for a dataset named 'Trade Show Leads'. The interface is divided into several sections:

- Left Panel (Recipe List):** Shows a list of recipes. The first recipe, 'Trade Show Leads', is highlighted. It includes a 'Find & Replace' transformation (Find: 'Female', Replace: 'F') and a 'Filter' transformation (Filter on 1 fields with 1 criteria).
- Central Panel (Data Preview):** Displays a table of data. The columns are 'EDUCATION LEVEL', 'CITY', 'COUNTRY', and 'TRIP'. The 'CITY' column is selected, and a dropdown menu (1) is open, showing various transformation options like 'Trim', 'Substring', 'Split', 'Uppercase', 'Lowercase', 'Dim2Mea', 'Replace', 'Filter', and 'Bucket'. Below the table, a 'Replace' transformation panel (3) is visible, showing 'Find' and 'Replace With' fields.
- Right Panel (Column Profile):** Shows the 'City' column profile (5). It includes a 'PROFILE' tab, 'ATTRIBUTES', and 'NAVIGATOR'. The profile shows 'Values from 4736 Row Sample' and a bar chart indicating '4736 valid values (100%)' and '0 null values (0%)'. It also lists 'Frequent Values' such as 'SEOUL', 'S\_o Paulo', 'Bombay', 'JAKARTA', and 'Karachi'.
- Bottom Panel (Suggestions):** A bar (2) at the bottom shows suggestions for transformations: 'Lowercase', 'Uppercase', 'Substring', and 'Bucket By Clusters'.
- Top Panel:** Includes a 'Dataset Recipe' header, a 'Recipe Preview for 10/15 Fields, 5000 Rows' indicator, and buttons for 'Save' and 'Create Dataset'. A button (4) is located near the top right.

We reduced the button clutter at the top of the page. Now a column menu (1) gives you access to the transformations available for that column. Too many to choose from? Einstein Analytics suggests transformations for you (2) based on the values in the column. When you add or edit a transformation, you do it in a new panel (3) below the preview data.

Want to check data quality? The Column Profile button (4) opens a panel of tools (5) to help you evaluate and clean the data in a column. Field attributes and the field navigator are also here in separate tabs.

As you add transformations and data in a recipe, you sometimes find that the original recipe name isn't relevant anymore. Now you can change the recipe name whenever you need to. Just click the edit button (6).

 **Note:** Changing the name of a recipe that has never run also changes the name of the target dataset. When a recipe has run, changing the name doesn't change the name of the target dataset.

#### IN THIS SECTION:

##### [Take a Hint: Get Smart Suggestions for Preparing Your Data](#)

When you select a dimension or date column, Analytics looks at the column values in the preview data to determine which transformations to suggest in the suggestions bar.

##### [Intelligently Clean Data with Column Profiles](#)

The column profile gives you key insights into the quality of your data and suggests additional transformations to help you clean it. This profile is especially useful when you are combining data from different sources, where inconsistencies are often introduced.

## Take a Hint: Get Smart Suggestions for Preparing Your Data

When you select a dimension or date column, Analytics looks at the column values in the preview data to determine which transformations to suggest in the suggestions bar.

Analytics can even suggest which transformation settings to use. For example, if the values have a potential delimiter, such as a dash, Analytics suggests the split transformation and even suggests the delimiter.

Recipe Preview for 10/15 Fields, 5000 Rows

	COUNTRY	TRADE SHOW REF	CLOSED DATE	NUMBER OF
	Norway	930-123-223	9/6/2014	
	Australia	930-123-224	1/14/2014	
	Netherlands	930-123-225	4/16/2017	
	United States	930-123-226	11/9/2016	
	New Zealand	930-123-227	9/26/2015	
	Ireland	930-123-229	9/7/2014	

Add Transformation - Trade Show Ref

Split

Split into 2 columns at  
- (dash)

Custom Delimiter

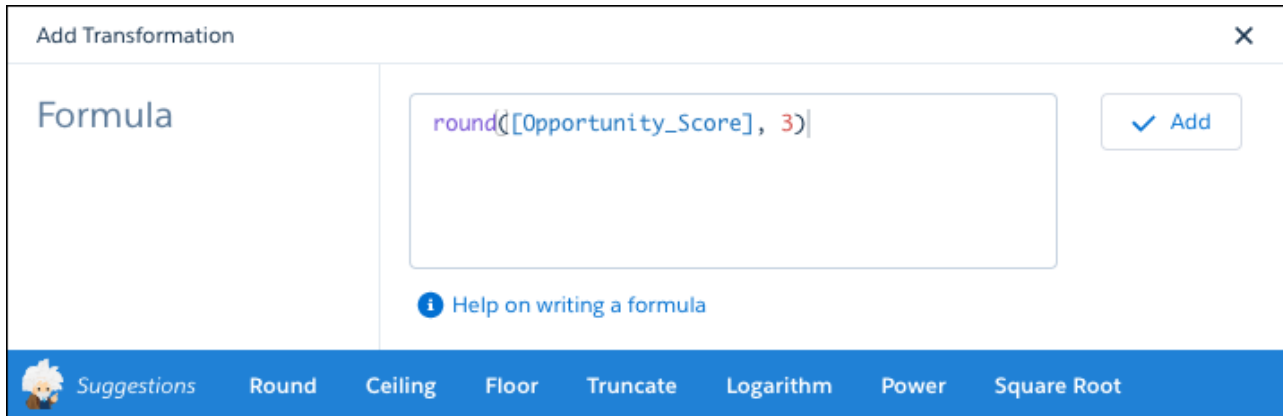
930, 123-223  
930, 123-224  
930, 123-225  
930, 123-226  
930, 123-227  
930, 123-229

Add

Suggestions Split Substring

If you don't see the transformation that you want in the suggestion bar, select it from the complete list in the column menu.

With measure columns, Analytics suggests functions to use in formulas based on the numeric values in the column. For example, if values have one or more decimal places, Analytics suggests functions such as round or truncate. When you select a suggested function, Analytics adds it to the formula in the transformation panel.





Formula

`round([Opportunity_Score], 3)`

✓ Add


[Help on writing a formula](#)

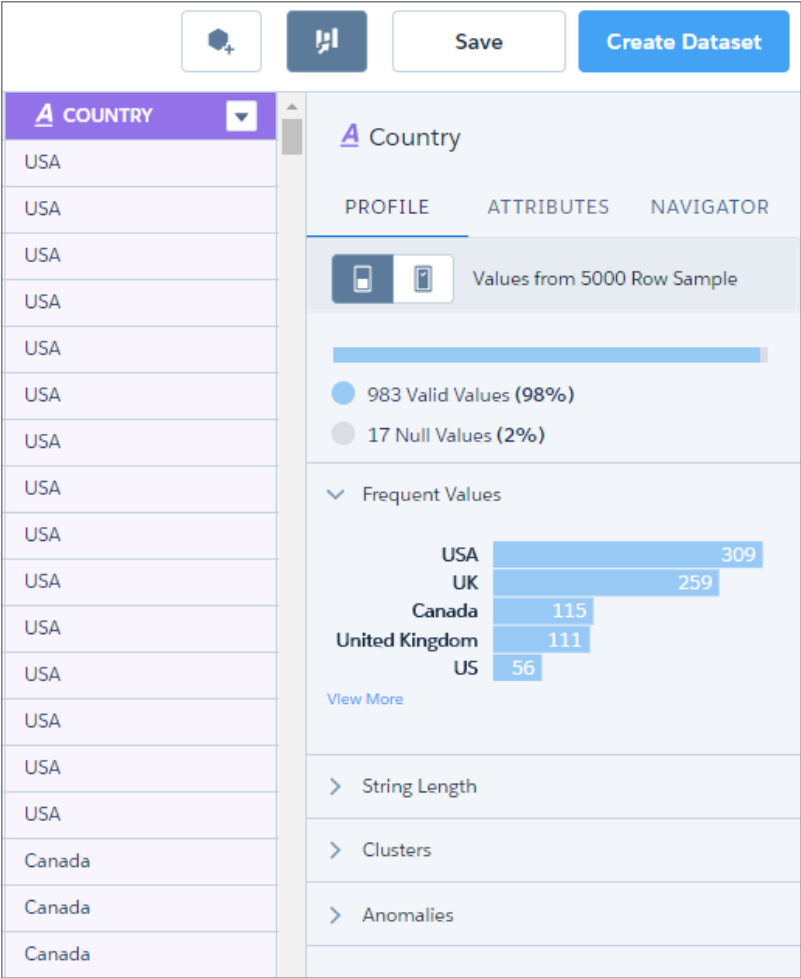
 Suggestions   Round   Ceiling   Floor   Truncate   Logarithm   Power   Square Root

 **Tip:** The suggested formula is just a starting point. You can use it as is, add to it, or start again.

### Intelligently Clean Data with Column Profiles

The column profile gives you key insights into the quality of your data and suggests additional transformations to help you clean it. This profile is especially useful when you are combining data from different sources, where inconsistencies are often introduced.

Let's look at an example of how you can use the profile to review the quality of data in a set of leads. Select the column you want to analyze and click . The column profile opens on the right of the recipe.



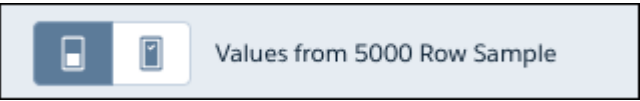
 **Note:** The sections that you see in the profile depend on the type of column.

Here’s what you see in the column profile.

**Sample Size**

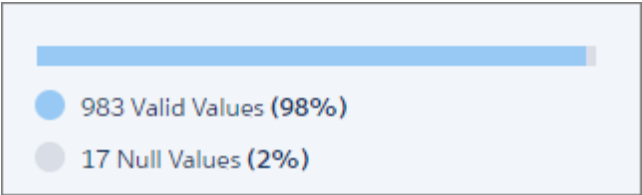
Shows the number of rows in the sample. By default, the profile includes just the rows in your recipe preview. To use a larger sample,

click .



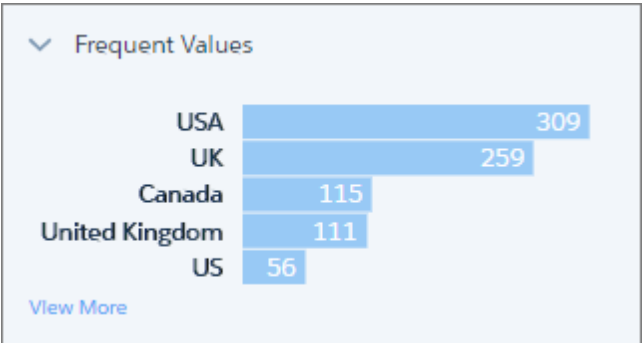
**Valid Values**

Gives you an idea of how the column is populated. A high proportion of null values can indicate lower quality data of limited usefulness in lenses and dashboards.

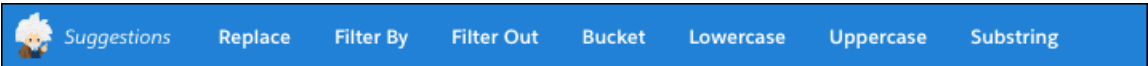


Frequent Values

Shows the count for each of the top five values in the column. To see the count for all values in the sample, click **View More**. This information gives you a quick insight into the variation in your data. This example shows different values for the same country, which can impact grouping and filtering in a lens or dashboard.

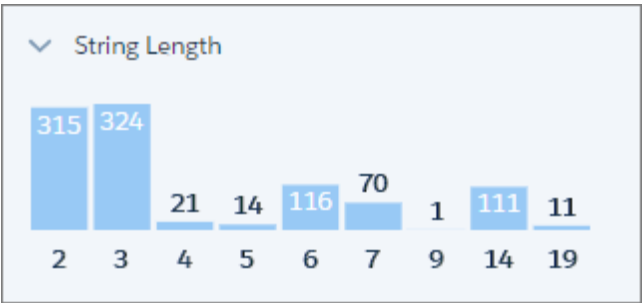


For dimension and date columns, click one or more bars to see suggested transformations for those values. In this example, if you select the US value, Analytics suggests replacing it or filtering it out.



String Length (Dimension Columns Only)

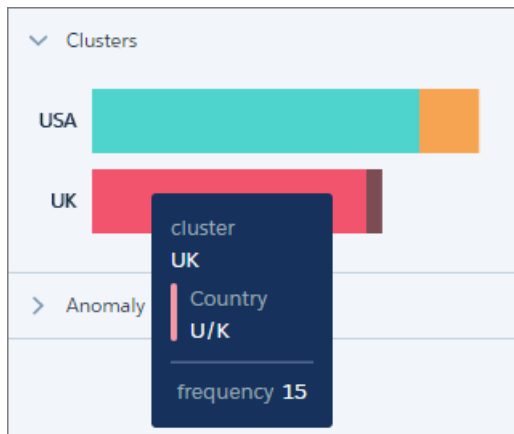
Gives you a breakdown of the number of characters in dimension values. A wider variation than expected can indicate inconsistency issues with data from mixed sources.



Clusters (Dimension Columns Only)

Clusters are groupings of similar values presented as a stacked bar. To see which value a segment represents, hover over it.





In the Country column, Analytics has found instances of “USA” and “US”, and “UK” and “U/K”. These values might be genuinely different, but they could also indicate inconsistencies in data from different sources, or simply typos.

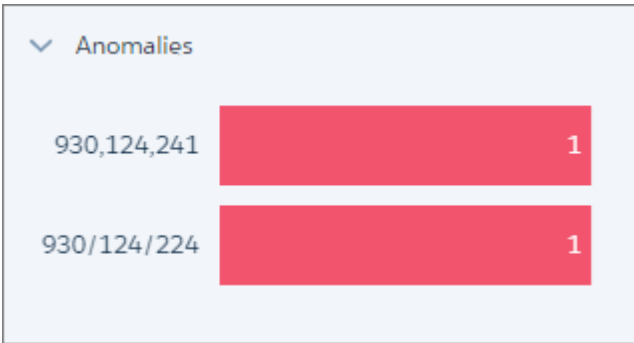
 **Note:** Clustering works best with English language values. Values in other languages can produce unexpected results.

To help you with your data cleansing, Analytics suggests the new Bucket By Cluster transformation whenever it identifies clusters. This transformation works just like regular bucketing, but gets you started by suggesting the buckets and values.

You can add the transformation as is, or add more buckets and values.

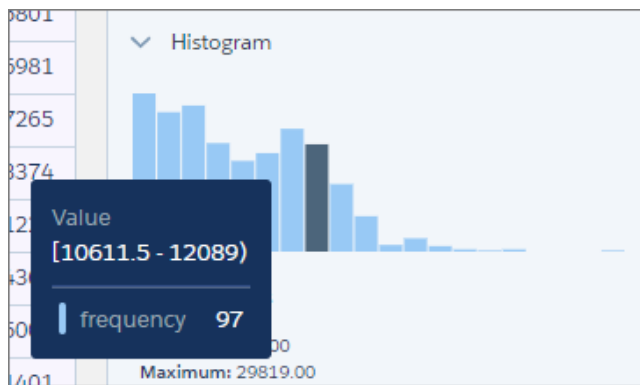
### Anomalies (Dimension Columns Only)

Displays values that are not consistent with other values in the column. In this example, Analytics has identified two values in a reference column that in which most values are in the format 123-456-789.



Again, to help you clean your data, Analytics suggests transformations when you click one or more bars. For example, you can replace the values or filter them out.

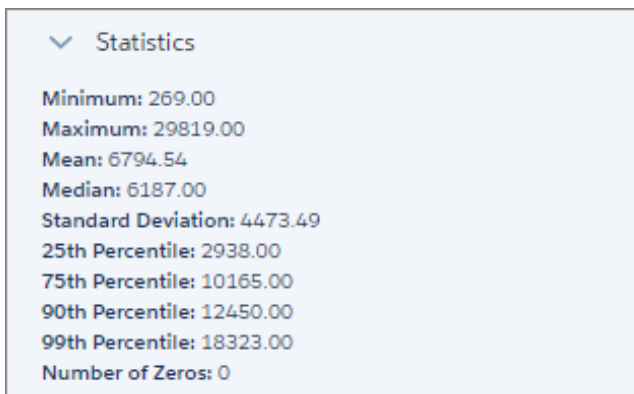
### Histogram (Measure and Date Columns Only)



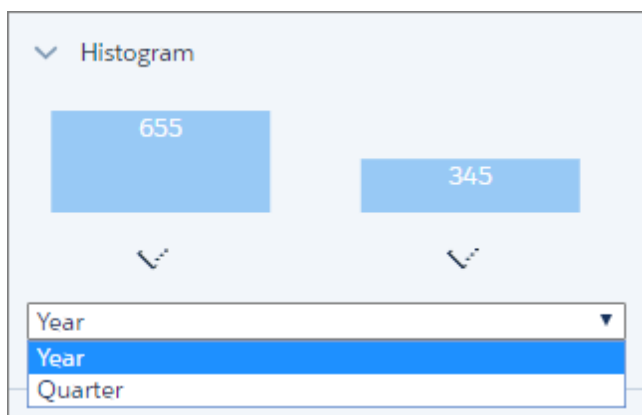
The histogram shows the distribution of values in a measure or date column. Each bar represents a predefined range, and the bar height shows the frequency of values falling within that range. Hover over a bar to see the range and frequency of the values it represents.

Use the histogram to see if the data falls within expected ranges. Low-frequency outlying values could indicate data inconsistencies or data that could impact aggregate calculations.

Measure columns also display statistical information that you can use in your data preparation.



With date columns, you can select the time frame for grouping values by year or by quarter.



## Integrate Sharing Inheritance with Security Predicates

Previously, security predicates and sharing inheritance were mutually exclusive. Now by working together, it's easier to provide full security coverage.

With the recent introduction of sharing inheritance in Analytics, many companies have applied their Salesforce sharing settings to Analytics datasets. It made life for administrators much easier.

Now you can specify a security predicate to take over for those users who fall outside the scope of sharing inheritance. You can even set the security predicate to 'false' to block all users not covered by sharing. In fact, this predicate is the default when sharing is enabled on existing datasets.

As part of the ELT (extract, load and transform) process, you specify from which of the supported source objects to inherit sharing settings. You can inherit sharing settings from only one object, regardless of how many source objects are used in creating a dataset. A user can see up to 2,000 records from any particular source object.

You specify the predicate in the dataflow editor (or the appropriate node in the ELT transformation definition) and in the edit dataset page. If you use sharing inheritance, you must set a predicate.

## Example

In this extract from a dataflow definition file, when sharing limits are exceeded, the user sees only those opportunities that the user owns.

```
"reg": {
  "action": "sfcdRegister",
  "parameters": {
    "source": "Opportunity_final",
    "name": "Opportunity w/ Account",
    "alias": "Oppty_w_Acct",
    "rowLevelSharingSource": "Opportunity",
    "rowLevelSecurityFilter": "'OwnerId' == \"\$User.Id\""
  }
},
```

For more information about sharing inheritance and security predicates, see the [Data Integration Guide](#).

## Analytics Einstein Discovery: More Data Access, Better Stories

New features in Einstein Discovery make it easier for anyone to tap into the power of data science. Statistical and predictive analytics give you answers, explanations, and recommendations.

### IN THIS SECTION:

#### [Connect to Your Salesforce Data Even More Easily with Einstein Discovery](#)

Einstein Discovery's Salesforce data connector now includes a My Organization link to connect to your Salesforce org with one click. Two-factor authentication is now supported.

#### [Display Einstein Discovery Recommendations in a Salesforce Object \(Pilot\)](#)

We are piloting native support for importing Einstein Discovery recommendations into a Salesforce object. Previously, it was necessary to install a managed package to enable the Writeback feature.

#### [Make Your Story Even Better with Story Improver](#)

Einstein Discovery identifies ways to improve your story. The story improver detects extreme values, identical values, variables with little variation, and highly correlated variables, making it easy to build your model based on best practices.

#### [Learn Which Factors Drive Changes Over Time with the Story Timeline](#)

The story timeline shows you what happened and why. You can also compare a different time period with the equivalent period in previous years. For example, comparing the fourth quarter of this year with the fourth quarter of the previous year.

#### [Keep Your Analysis Current with Story Refresh](#)

You can refresh a story to bring in updated data and then rerun the analysis. This feature is available only for stories that use Salesforce or CSV data.

#### [Create Datasets from an Einstein Analytics Dataflow \(Beta\)](#)

Use an Einstein Analytics dataflow to create an Einstein Discovery dataset based on data from Salesforce objects, replicated objects, or existing datasets.

### SEE ALSO:

[Trailhead: Einstein Discovery Data Integration](#)

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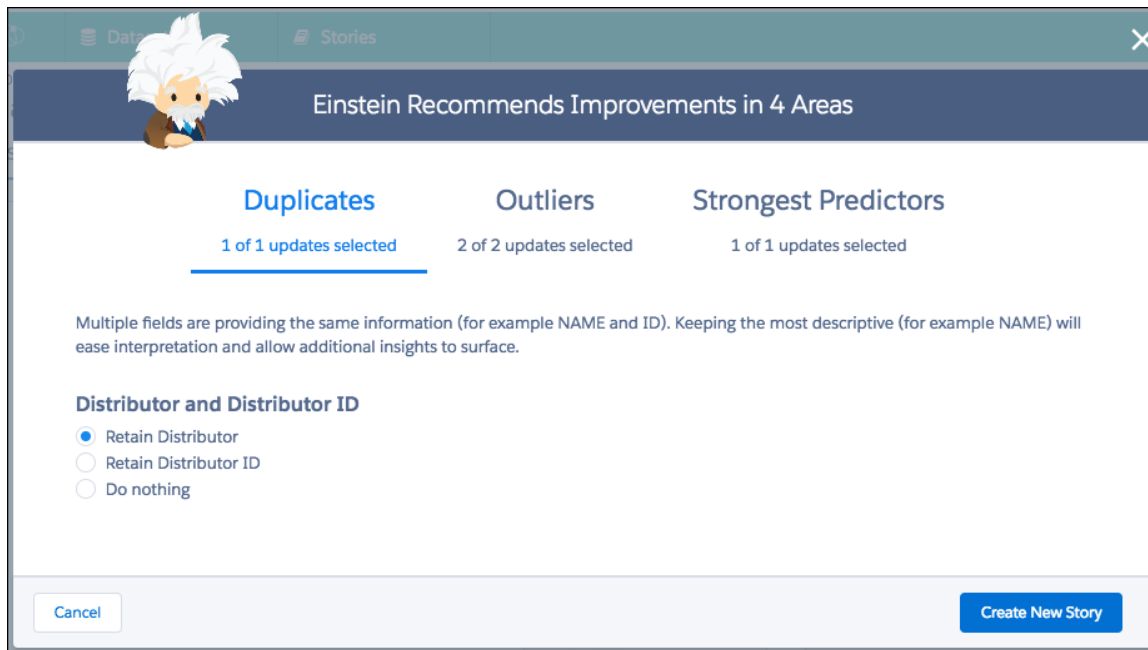
The screenshot shows the 'Connect to Salesforce' interface. On the left, under 'Saved Connections', there is a 'New Connection +' button and a 'My Organization' card with the text 'Retrieve all objects from my organization.' On the right, there are tabs for 'Details' and 'Objects'. The 'Objects' tab is active, showing a checkbox for 'Show All Salesforce Objects' which is checked. Below this, there is a section for 'Objects' with a dropdown menu 'Select an Object'. To the right of this is a section 'View field name as' with two radio buttons: 'Label' (selected) and 'Developer Name'. At the bottom, there are two buttons: 'Copy Data' and 'Direct Link'.

## Display Einstein Discovery Recommendations in a Salesforce Object (Pilot)

We are piloting native support for importing Einstein Discovery recommendations into a Salesforce object. Previously, it was necessary to install a managed package to enable the Writeback feature.

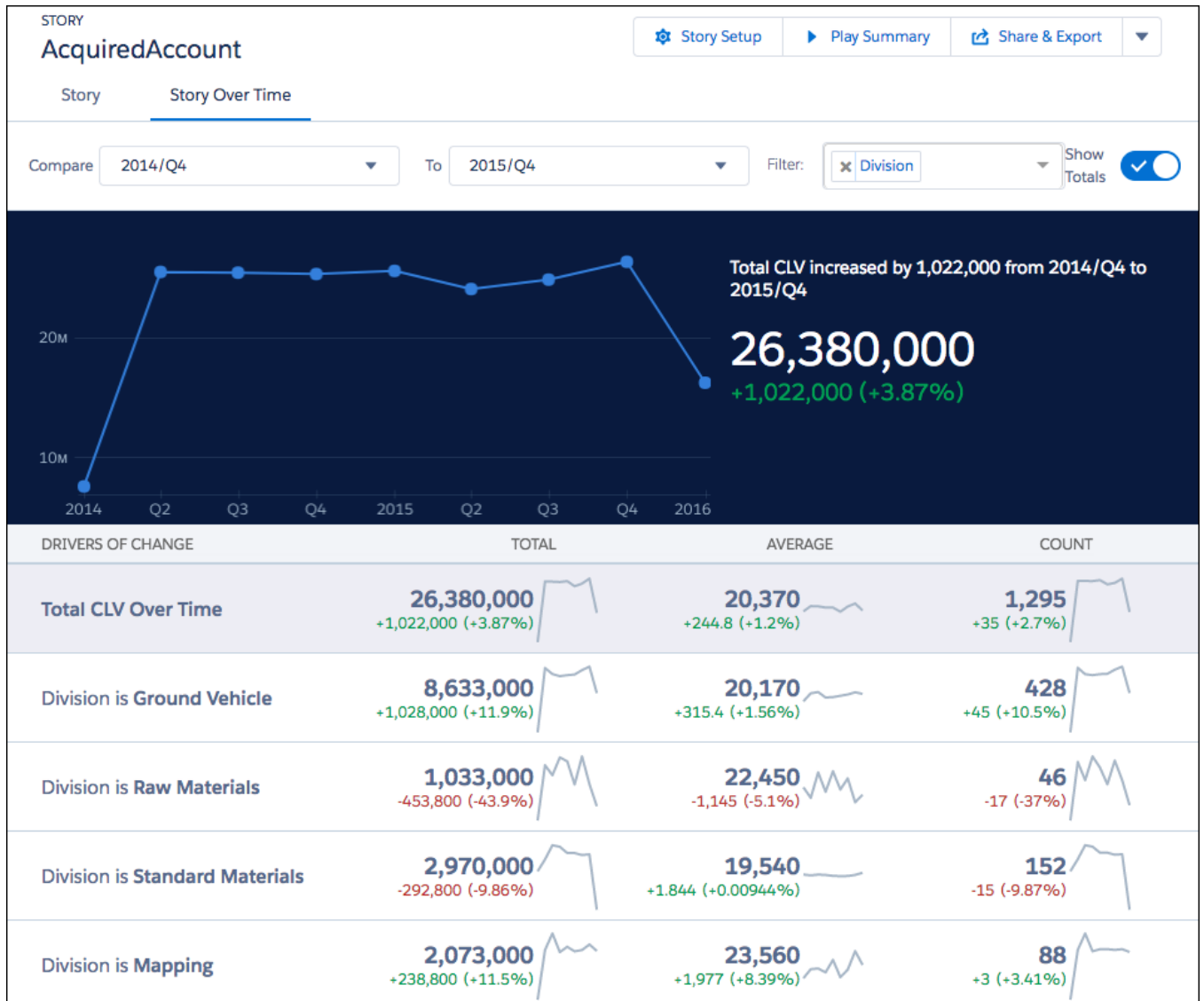
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## Analytics Mobile: More Charts, Custom Background Images, Updated Dashboards and Lenses

Explore and present your favorite dashboards and lenses with beautiful charts that faithfully match Analytics on desktop.

## IN THIS SECTION:

[Experience New Charts on iOS Devices](#)

Present impressive data analysis with the gorgeous new charts available in Analytics for iOS. In addition to the new look for standard Bar and Line charts, there are many new options, including Matrix, Treemap, and Pyramid.

[Explore the Latest Dashboards and Lenses on Android Devices](#)

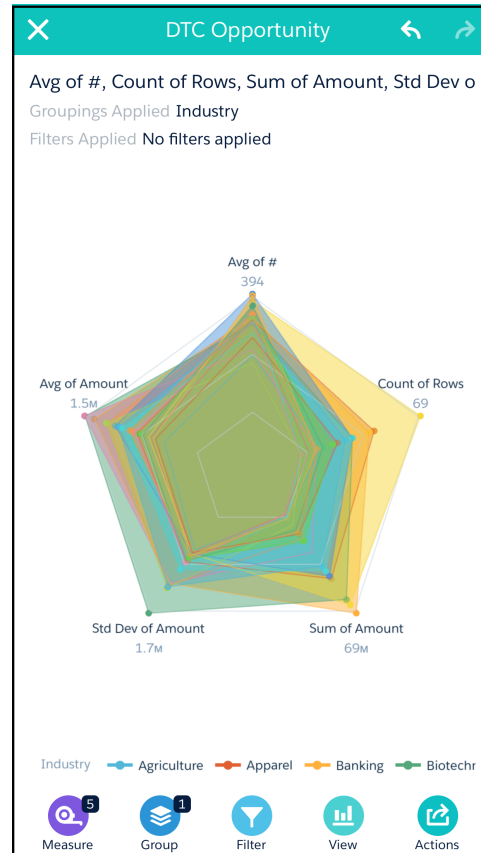
View and explore your favorite dashboards and lenses from Analytics on desktop. With this release, Analytics for Android comes into its own as the way for Android users to take analytics on the go.

## Experience New Charts on iOS Devices

Present impressive data analysis with the gorgeous new charts available in Analytics for iOS. In addition to the new look for standard Bar and Line charts, there are many new options, including Matrix, Treemap, and Pyramid.

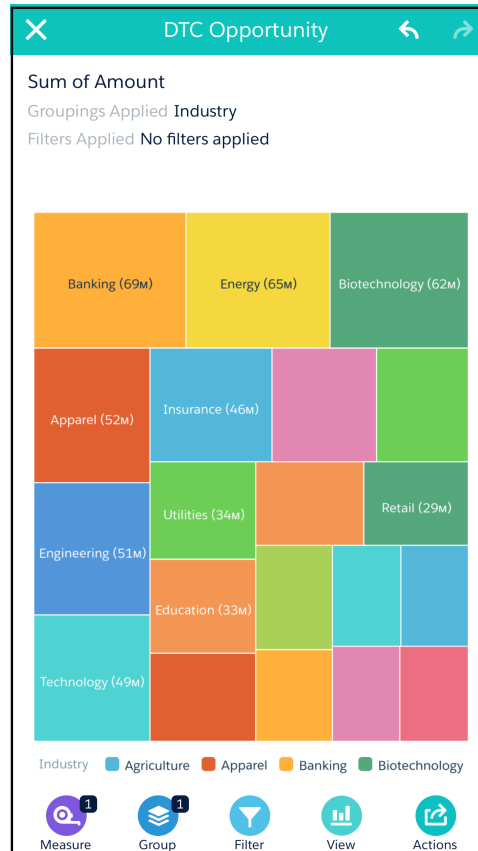
Analytics is available for devices running iOS 10 and later. For the latest enhancements, download Analytics for iOS from the App Store. Here's what's new since the last Salesforce release.

- Enliven your charts by adding faces, flags, icons, or other images next to bars or numbers.
- Take charge of dashboard filters with the new Global Filters widget.
- Use number widgets that more closely match desktop Analytics, with three available layouts.
- Link directly from third-party apps into the Einstein Analytics app, launching an asset and even applying filters and selections to dashboards.
- Employ Winter '18 dashboard features like the new faceting behavior, linking to websites, and more.
- Experience chart enhancements that let you easily compare trellised charts, auto zoom into specific geographic areas on map charts, spot and select values on line and timeline charts, use multiple reference lines, and more.
- Select multiple segments in charts.
- Create colorful webs of measures using the new Metrics Radar chart.

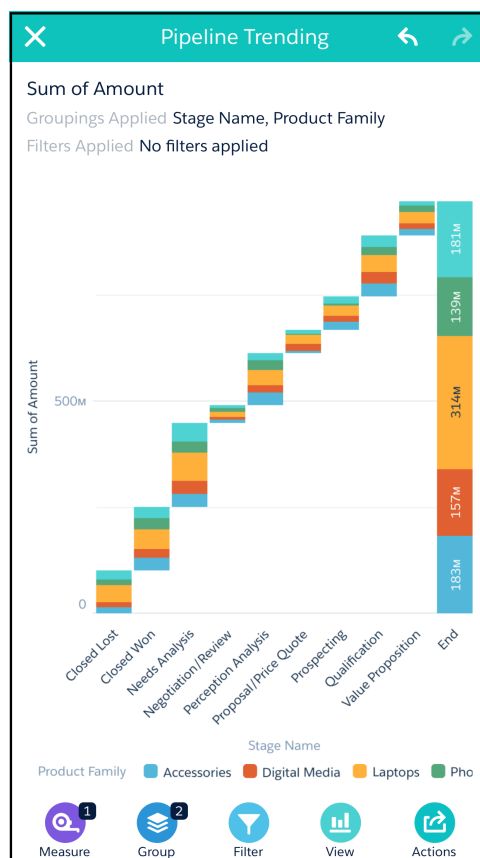


- Visualize groups of data by area with the new Treemap chart.





- Become an infographic data artist using the new Pyramid chart.
- With the improved text widget that matches Analytics on desktop, tap any wrapped text to open the widget and see the entire contents.
- View dashboards branded with your own custom background images.
- Experience Line, Donut, and Bar charts with a complete makeover! They now match what you see in Analytics on desktop, with support for Trellis, Themes, Reference Lines, and more.
- Analyze the evolution of your data over time using the new Timeline chart, now with Predictive Line support.
- Engage in richer data comparison with the Matrix chart.
- Understand cumulative changes more intelligently using the new Stacked Waterfall chart.



- Take advantage of Wave Dashboard Designer features, such as dynamic start values, user tokens in queries, and nested bindings.
- Turbocharge your data exploration with support for lenses created in the new explorer window in Analytics on desktop.
- Get insights into your Salesforce objects using SOQL steps.

## Explore the Latest Dashboards and Lenses on Android Devices

View and explore your favorite dashboards and lenses from Analytics on desktop. With this release, Analytics for Android comes into its own as the way for Android users to take analytics on the go.

Analytics is available for devices running Android 5 or later. For the latest enhancements, download Analytics for Android from Google Play™. Here's what's new since the last Salesforce release.

- View your data geographically with beautiful choropleth map visualizations.
- Open Salesforce records directly from your Einstein Analytics dashboards (requires Salesforce for Android).
- Find data hot spots using gorgeous Heat Maps.
- View all dashboard filters in the Global Filters widget.
- Use number widgets that match desktop Analytics, with three available layouts.
- Employ Winter '18 dashboard features like the new faceting behavior, linking to websites, and more.
- Experience chart enhancements that let you easily compare trellised charts, spot and select values in line and timeline charts, use multiple reference lines, and more.
- Select multiple segments in charts.
- Enjoy support for Android Oreo.

- Experience Line, Donut, and Bar charts with a complete makeover! They now match what you see in Analytics on desktop, with support for Trellis, Themes, Reference Lines, and more.



- Expand your visualization repertoire with Scatter Plots, Combination Bar-Line charts, and Waterfall charts.
- With the improved text widget that matches Analytics on desktop, tap any wrapped text to open the widget and see the entire contents.
- View dashboards branded with your own custom background images.
- Take advantage of Wave Dashboard Designer features, such as dynamic start values, user tokens in queries, and nested bindings.
- Turbocharge your data exploration with support for lenses created in the new explorer window in Analytics on desktop.
- Get insights into your Salesforce objects using SOQL steps.

## Analytics Development and Customization: New SDK Events and SAQL Functionality, Embedded Dashboard Header Control

SAQL, the REST API, and the SDK all continue to expand. New functions, new endpoints, new events. Use Apex in your dashboard. Use custom icons and connected datasets in your templates.

### IN THIS SECTION:

#### [Analytics Templates Enable More Robust Apps Functionality](#)

Templates add support for uploading custom icons, connected datasets, and broader configuration wizard features.

#### [Updates to the REST API](#)

Review the latest updates to the REST API and associated representations. There are new endpoints to find out which datasets and objects are covered by the sharing inheritance feature.

#### [Discover Dashboards with New SDK Functionality.](#)

The SDK now includes events to discover which dashboard components are available.

#### Take Advantage of New SAQL Functionality

SAQL functionality continues to expand with exciting new functions. Want to do string and number conversions similar to the `dim2mea` dataflow transformation? Now you can! Other changes include the ability to convert dates to epoch seconds, and enhancements to `min()` and `max()`.

#### Collaborate on Dashboards with Annotations in Communities

Foster an environment of open communication sparked by Analytics dashboards embedded in communities. With the annotation feature now available in Analytics for Communities, partners and customers can converse in Chatter feeds on individual dashboard widgets.

#### Control the Display and Functionality of Embedded Dashboards

With the new `Show Header` attribute, you control the visibility of the header bar on an embedded Analytics dashboard. In addition to taking less space, hiding the header also hides the `Open in Analytics` and `Filters` icon controls. The attribute is available in Visualforce, Lightning App Builder, Community Builder, Salesforce Classic Enhanced Page Layout Editor, and the Wave Dashboard component in Lightning Out.

#### Bring Apex Capabilities into Analytics Dashboards (Beta)

Using an `apex` step, developers can now include custom Apex functionality in a dashboard to access Salesforce platform features that aren't inherently supported in Analytics. For example, pull in data using any API, manipulate data using your Apex classes, or apply simple case statements or complex machine learning. You can even harness AppExchange for things like integrating Twitter with Einstein Analytics—all in a way that is familiar.

#### Package Your Recipes

You can add an Analytics recipe when you're creating a package or change set.

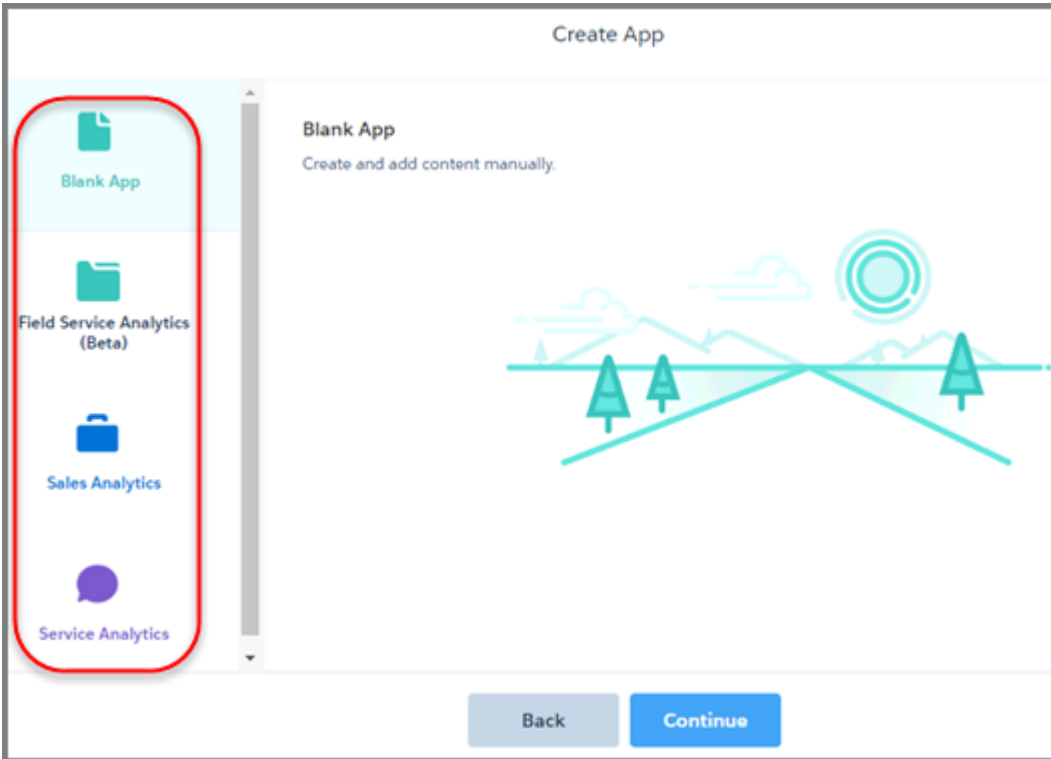
## Analytics Templates Enable More Robust Apps Functionality

Templates add support for uploading custom icons, connected datasets, and broader configuration wizard features.

Developers can create an Analytics Template for any app they build using Einstein Analytics. Their customers can create an instance of that app with just a couple of clicks. You use the template to distribute your app the same way that Salesforce markets the Sales Analytics and Service Analytics prebuilt apps.

We continually enhance Analytics Templates to support more robust app development. The latest release includes the following:

- The ability to upload custom icons, which you can use to represent your template during the app creation flow. Custom icons appear in the list of templates on the Analytics app creation page.



- Support for apps that use connected datasets.
- New events in the Visualforce pages that provide configuration wizard functionality, as follows:
  - `close`: Close the wizard.
  - `buttons`: Change the text of back and next buttons in an app wizard as well as disable or enable the buttons.
  - `create`: Create an app before the final wizard screen. Calls `POST /wave/folder` and returns results.

## Updates to the REST API

Review the latest updates to the REST API and associated representations. There are new endpoints to find out which datasets and objects are covered by the sharing inheritance feature.

### Work with Security Settings

The following new endpoints allow a developer to determine whether a source object has support for sharing inheritance, or what kind of support a dataset has for sharing inheritance.

#### **`/wave/security/coverage/objects/${objectApiName}`**

Provides information about whether an object has sharing inheritance support. Supply the `objectApiName`, and discover whether Analytics can inherit sharing settings from it, as well as the object's label, name, and namespace.

#### **`/wave/security/coverage/datasets/${datasetIdOrApiName}/versions/${versionId}`**

Provides information about the security coverage for a particular dataset version. It lists all source objects that are local to this org (no objects from other orgs or other external sources).

## General Updates

For more information about updated representations and properties, see the [Wave REST API Developer Guide](#).

## Discover Dashboards with New SDK Functionality.

The SDK now includes events to discover which dashboard components are available.

The initial release of the Analytics SDK provided events so you could dynamically set the filter on an Analytics dashboard, interact with the dashboard by dynamically changing the selection, or be notified of a selection with the associated data. Now we've added events that give more dashboard context. Use these events to discover your dashboard assets.

### wave:discoverDashboard

This event sends a global request to listening Analytics dashboard assets to respond with their identifying information via the `wave:discoverResponse` event. You can optionally include your own parameter, which is included in the response.

These events are especially useful to discover when a dashboard is being added dynamically to the page, or when there are multiple dashboards on the page.

```
({
  addDashboard: function(component, event, helper) {
    var selectCmp = component.find("idTextBox");
    component.set("v.dashboardId", selectCmp.get("v.value"));
    var config = {
      "dashboardId": selectCmp.get("v.value"),
      "showHeader": false,
      "height": 400
    };
    $A.createComponent("wave:waveDashboard", config,
      function(dashboard, status, err) {
        if (status === "SUCCESS") {
          dashboard.set("v.rendered", true);
          dashboard.set("v.showHeader", false);
          component.set("v.body", dashboard);
        } else if (status === "INCOMPLETE") {
          console.log("No response from server or client is offline.")
        } else if (status === "ERROR") {
          console.log("Error: " + err);
        }
      }
    );
  },
  discoverDashboard: function(component, event, helper) {
    $A.get("e.wave:discover").fire();
  },
  handleDiscoverResponse: function(cmp, event, helper) {
    var myText = cmp.find("outName");
    myText.set("v.value", event.getParam("id"));
  },
})
```

## wave:discoverResponse

This event is fired by listening dashboard assets in response to the `wave:discoverDashboard` event. These events work together to provide the required notifications and responses.

The payload includes the dashboard identifier, type of component, dashboard title, whether the dashboard is still loading, and the optional parameter sent with the request.

## Resources

For more information about Analytics SDK events, see the [Lightning Components Developer Guide](#) and the [Analytics SDK Developer Guide](#).

## Take Advantage of New SAQL Functionality

SAQL functionality continues to expand with exciting new functions. Want to do string and number conversions similar to the `dim2mea` dataflow transformation? Now you can! Other changes include the ability to convert dates to epoch seconds, and enhancements to `min()` and `max()`.

### SAQL String and Number Conversions

If you use the `edge-dim2mea` dataflow transformation to convert strings to numbers, you know that there is no `mea2dim` transformation. The following SAQL functions enable users to do both transformations. You can even use them instead of `edge-dim2mea`.

#### **number\_to\_string(number, number\_format)**

Function to convert a number literal to a string literal. Supported features are similar to Microsoft Excel®:

- <POSITIVE>;<NEGATIVE> format
- 0, #, decimal point (.)
- Thousands separator (,)
- Percentages (by postfixing %)
- Prefix and postfix characters (\$, +, -, (, ), :, !, ^, &, ', ~, {, })

To Display	As	Use code
1234.56	1234.6	####.#
8.9	8.900	#.000
.631	0.6	0.#
12	12.0	#.0#
1234.568	1234.57	#.0#
12000	12,000	#,###
12000	12	#,
12200000	12.2	0.0,,
12	00012	00000
0.03457	3.46%	#.00%
12.3	\$12.30	\$#.00;(\$#.00)

To Display	As	Use code
-12.3	(\$12.30)	\$#.00;(\$#.00)
32	+	+;-
-32	-	+;-

**string\_to\_number(string)**

Converts a string literal into a number literal.

**date\_to\_string(date, formatString)**

The existing toString(date, formatString) function has been renamed to date\_to\_string(date, formatString). The toString(date, formatString) function will be deprecated in a future release. However, to preserve backward compatibility, toString(date, formatString) still works.

**Epoch Conversion**

SAQL has long been able to convert from epoch (number of seconds) to a date using the toDate() function. Now you can do the reverse.

**date\_to\_epoch(date)**

Convert a date to epoch seconds, the number of seconds elapsed since January 1, 1970, 00:00:00.000 GMT. First use the toDate() function to format the date correctly.

**General Updates**

The min() and max() aggregate functions have been enhanced to accept date types. So min() returns the oldest value of a date field, while max() returns the newest (most recent) value.

First use the toDate() function to format the date correctly. For example:

```
q = load "case";
q = foreach q generate 'ClosedDate_Year' as 'year', toDate(ClosedDate_Year + "-" +
ClosedDate_Month + "-" + ClosedDate_Day, "yyyy-MM-dd") as date;
q = group q by 'year';
q = foreach q generate year, min('date') as 'mindate', max('date') as 'maxdate';
q = limit q 100;
```

For more information about updated functions, see the [Analytics SAQL Reference Guide](#).

**Collaborate on Dashboards with Annotations in Communities**


Foster an environment of open communication sparked by Analytics dashboards embedded in communities. With the annotation feature now available in Analytics for Communities, partners and customers can converse in Chatter feeds on individual dashboard widgets.

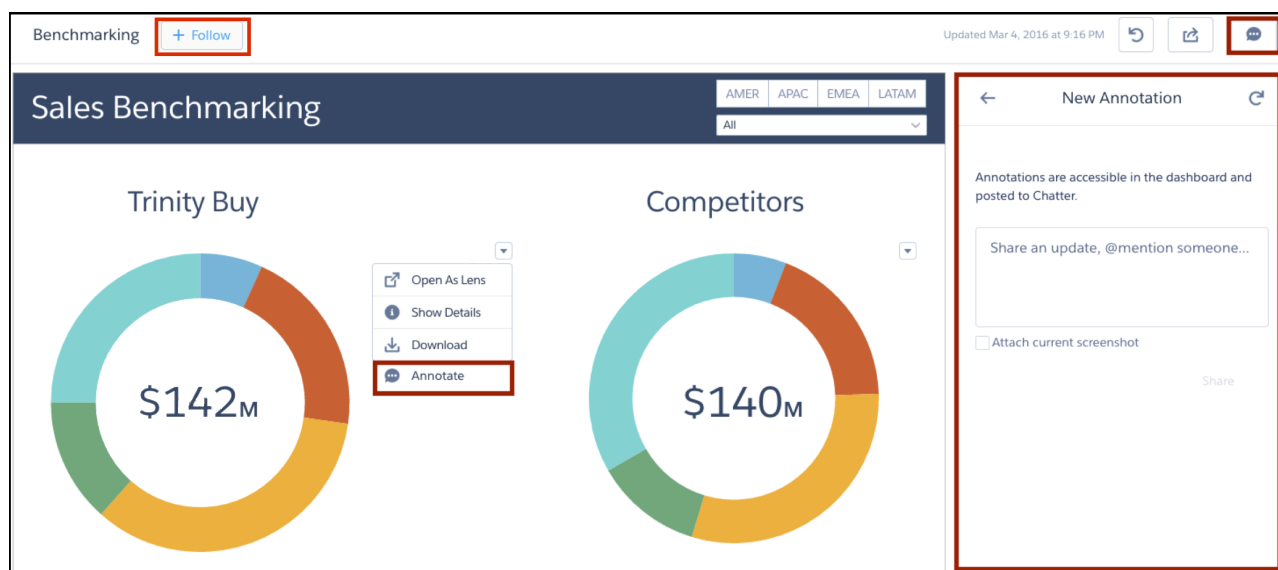


**Note:** This feature is supported in communities, but not in portals, for users with a Customer Community Plus or Partner Community license. If you don't already have Analytics for Communities, this feature requires setup. For more information, see [Share Analytics with Communities](#).

To set up the annotations feature, verify that Chatter is enabled for your community users. Also, enable feed tracking on Analytics Assets. (For details, see [Enable Annotations on Dashboard Widgets](#).) That's it!



To create annotations, click  to open your embedded dashboard in Analytics. Then select **Annotate** from the dropdown menu on a widget.



In the annotations panel, you can type messages and @mention people in your org who have access to the dashboard. You can also share screenshots of the current state of the dashboard. Analytics dashboard annotations are natively integrated with Chatter, and comments on dashboards also appear as Chatter posts. If users click the **Follow** button, they see all comments on the dashboard. From Chatter, they can click the dashboard image to navigate directly to the annotation on the dashboard in Analytics, where they can add to the conversation.

The visibility of posts depends on the type of user that makes the original post. For security, external community users can't see annotations originated by your org's internal users. But if an internal user replies on an annotation started by an external user, then all users can see all posts. For more information, see the `visibility` property in the [Chatter REST API Developer Guide](#).

#### SEE ALSO:

[Salesforce Help: Collaborate with Dashboard Annotations](#)

## Control the Display and Functionality of Embedded Dashboards

With the new `Show Header` attribute, you control the visibility of the header bar on an embedded Analytics dashboard. In addition to taking less space, hiding the header also hides the Open in Analytics and Filters icon controls. The attribute is available in Visualforce, Lightning App Builder, Community Builder, Salesforce Classic Enhanced Page Layout Editor, and the Wave Dashboard component in Lightning Out.

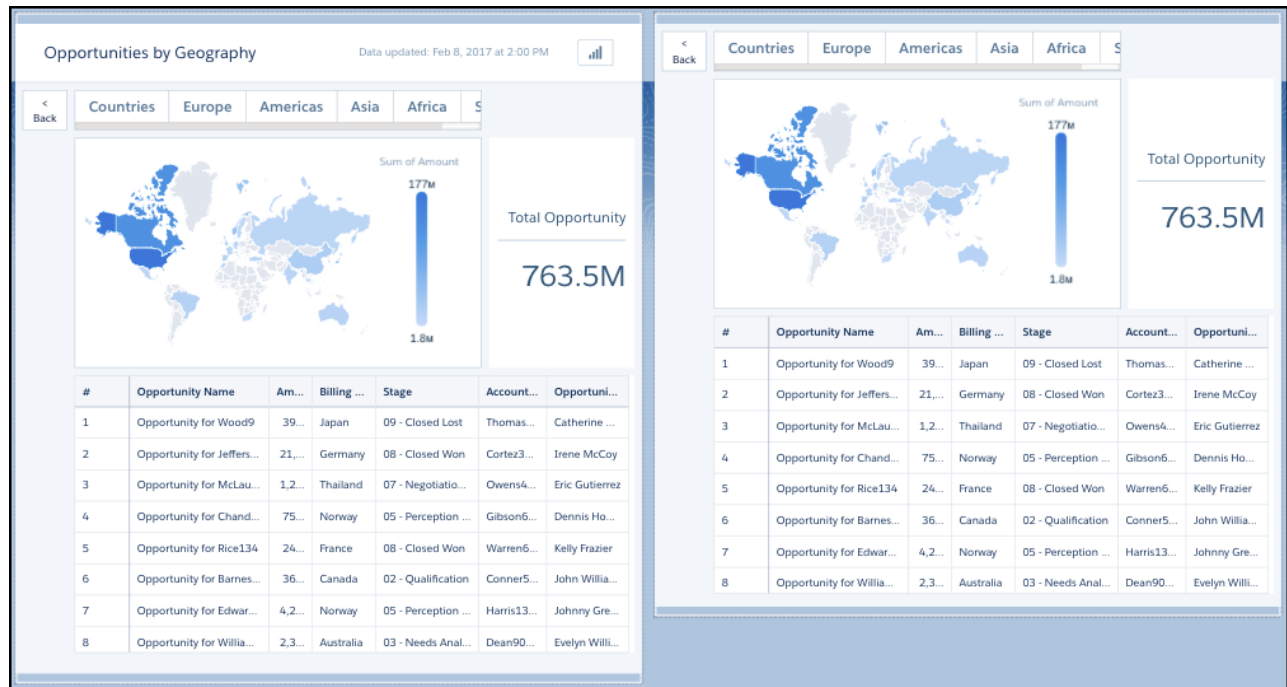
Hiding the header of an embedded dashboard comes in handy when you want to restrict control over the dashboard or access to data. For example, with the updated [Global Filters](#) feature, anyone viewing an embedded dashboard can see and remove filters. If you've set up filters according to security considerations, you don't want users to remove those filters.



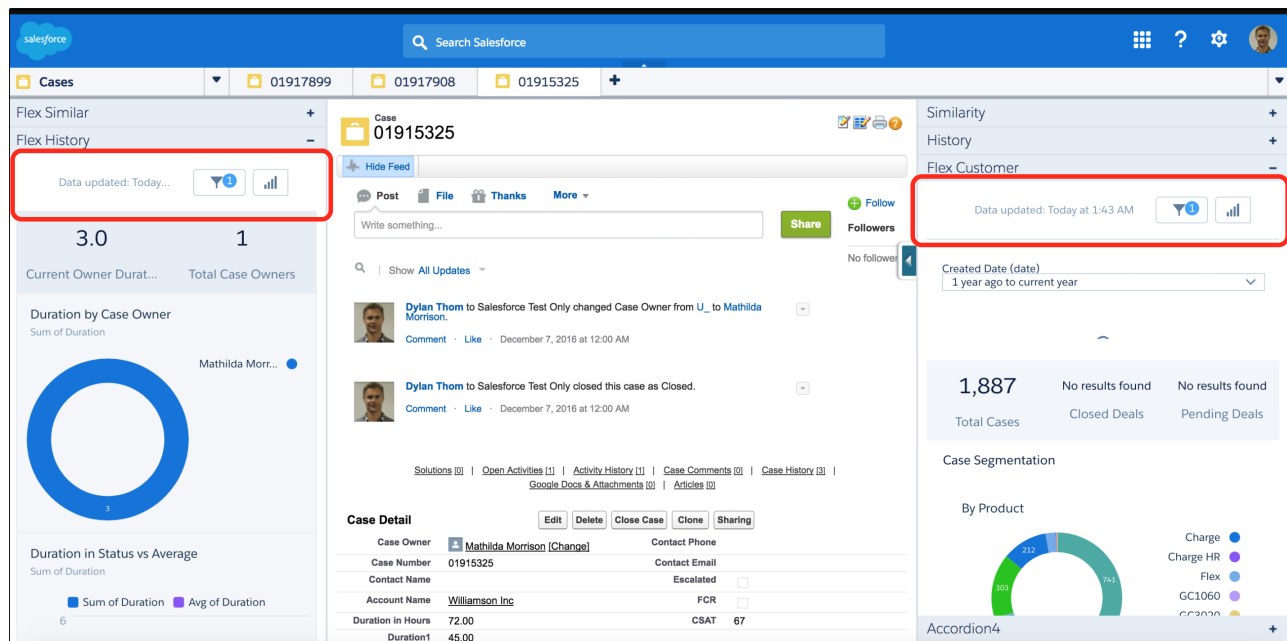
**Note:** The Dashboard Inspector is no longer available in embedded dashboard headers due to usability issues in small dashboards.

If the `showHeader` attribute is set to `true`, the dashboard is displayed with a header bar that includes dashboard information and controls. If set to `false`, the dashboard appears without a header bar. But when either the `showSharing` or `showTitle` attribute is `true`, the header bar appears.

The embedded dashboard on the left has a header bar. On the right, the dashboard's header bar is hidden.




The embedded dashboard header includes the Open in Analytics icon and the date and time that the dashboard's data was updated. Depending on the dashboard's configuration, the Filters icon can also appear. This Service Analytics page shows two embedded dashboards with Filters icons in their headers.



## Bring Apex Capabilities into Analytics Dashboards (Beta)

Using an `apex` step, developers can now include custom Apex functionality in a dashboard to access Salesforce platform features that aren't inherently supported in Analytics. For example, pull in data using any API, manipulate data using your Apex classes, or apply simple case statements or complex machine learning. You can even harness AppExchange for things like integrating Twitter with Einstein Analytics—all in a way that is familiar.

 **Note:** The Winter '18 release contains a beta version of `apex` steps, which means it's a high-quality feature with known limitations. This feature isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for this feature in the [IdeaExchange](#).

To set up an `apex` step:

1. Create an Apex class that returns data in a shape that Analytics can consume.

Like a `soql` step, the Apex controller can return tabular data. Unlike `soql` and `soql` step types, the `apex` step type doesn't define the `"strings"`, `"numbers"`, and `"groups"` arrays. The Apex class response must declare these column types.


2. Define the step with the `apex` step type in the dashboard JSON. The step calls the Apex REST endpoint to return the data from the Apex controller class.

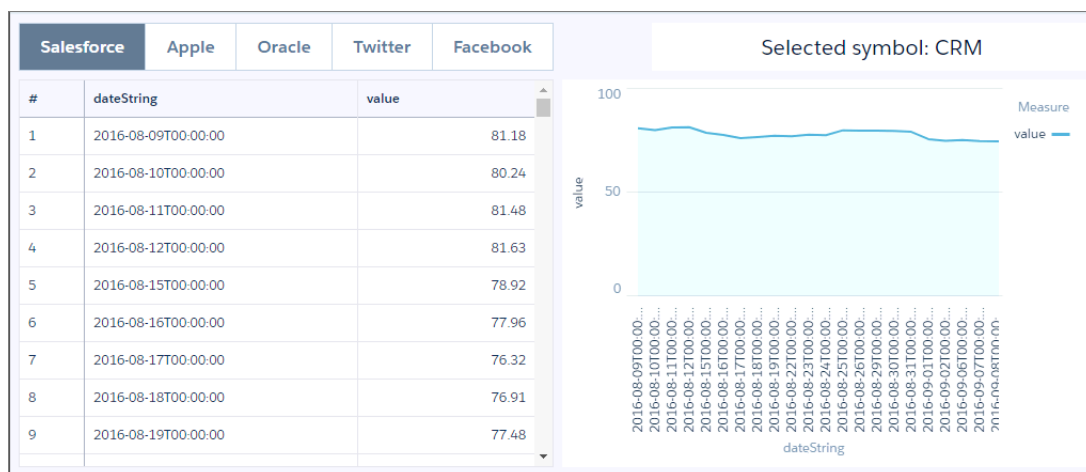
You can attach an `apex` step type to any widget that supports steps. In the explorer, you can view the step details, but you can't edit the step.

When you define an `apex` step, you can use a selection or results binding on the `body` parameter in the step JSON. You can also reference this step type in a results binding. If you run an Analytics REST API query using an `apex` step, the query runs as the logged-in user. Each REST API query counts against the org's API limits.

Note the following limitations with `apex` steps:

- If you include dashboards in a package, `apex` steps aren't included—you'll have to migrate Apex classes separately.
- The Analytics mobile app doesn't support this type of step.

 **Example:** You want to pull real-time stock data from a website and display it in your dashboard. You need to fetch the data from an external API and add logic to determine the time of day for each stock price. Here's the goal for this dashboard.



To create this dashboard, complete the following steps:

1. Create the Apex controller class that gets the data from the stock website.

2. Whitelist the stock website in Salesforce.
3. Create the apex step in addition to the other dashboard widgets.

## Create the Apex Class

Define the Apex controller class and methods that return the stock price for different companies over time.

1. From setup, enter *Apex Classes* in the Quick Find box, and select **Apex Classes**.
2. Click **New**.

The screenshot shows the Salesforce Setup page for Apex Classes. On the left, the navigation menu has 'Apex Classes' highlighted. The main content area displays the 'Apex Classes' page. At the top, there's a summary of Apex usage: 'Percent of Apex Used: 0.28%'. Below this, there's a table of existing Apex classes. The 'New' button in the top right of the table is circled in red.

Action	Name ↑	Namespace Prefix	Api Version	Status
Edit   Del   Security	CreateOpportunitiesController		39.0	Active
Edit   Del   Security	CustomBulkActionController		39.0	Active
Edit   Del   Security	DiffModifier		33.0	Active
Edit   Del   Security	SalesWaveQuotas		39.0	Active
Edit   Del   Security	WaveQuery		39.0	Active

3. Add the following code.

```
@RestResource(urlMapping='/stocks')
global with sharing class StocksRestController {

    @HttpPost
    global static String stocks(String symbol) {
        // default to CRM stock
        if (symbol == null) {
            symbol = 'CRM';
        }

        // fetch some stock data
        HttpRequest request = new HttpRequest();
        Http http = new Http();
        // make sure this domain is whitelisted in the proxy

        request.setEndpoint('http://dev.markitondemand.com/MODApis/Api/v2/InteractiveChart/json?
parameters=%7B%22Normalized%22%3Afalse%2C%22NumberOfDays%22%3A365%2C%22
DataPeriod%22%3A%22Day%22%2C%22Elements%22%3A%5B%7B%22Symbol%22%3A%22' + symbol +
```

```

'%22%2C%22Type%22%3A%22price%22%2C%22Params%22%3A%5B%22c%22%5D%7D%5D%7D');
    request.setMethod('GET');

    try {
        HTTPResponse response = http.send(request);
        JSONParser parser = JSON.createParser(response.getBody());

        while (parser.nextToken() != null) {
            // find the stock part of the response
            if (parser.getCurrentToken() == JSONToken.START_OBJECT) {
                // parse the stock response and form the response for this controller

                StockResponse responseObject =
                    (StockResponse)parser.readValueAs(StockResponse.class);

                List<ReturnItem> returnItems = new List<ReturnItem>();
                Integer i = 0;
                for (String curDate : responseObject.dates) {
                    returnItems.add(new ReturnItem(curDate,
responseObject.elements.get(0).dataSeries.close.values.get(i++)));
                }

                // return the serialized response
                return JSON.serialize(new PackagedReturnItem(returnItems));
            }
        }
    } catch (Exception exp) {
        System.debug('exception '+exp);
    }

    return '';
}

// Parse the stock response
public class StockResponse {

    public List<String> dates;
    public List<StockResponseElement> elements;

    public StockResponse(List<String> dates, List<StockResponseElement> elements)
{
        this.dates = dates;
        this.elements = elements;
    }
}

public class StockResponseElement {

    public String type;
    public StockResponseDataSeries dataSeries;

    public StockResponseElement(String type, StockResponseDataSeries dataSeries) {
        this.type = type;
        this.dataSeries = dataSeries;
    }
}

```

```

    }
}

public class StockResponseDataSeries {

    public StockResponseDataSeriesValues close;

    public StockResponseDataSeries(StockResponseDataSeriesValues close) {
        this.close = close;
    }
}

public class StockResponseDataSeriesValues {

    public List<Double> values;

    public StockResponseDataSeriesValues(List<Double> values) {
        this.values = values;
    }
}

public class ReturnItem {

    public String dateString;
    public Double value;

    public ReturnItem(String dateString, Double value) {
        this.dateString = dateString;
        this.value = value;
    }
}

public class ReturnMetadata {

    public List<String> strings;
    public List<String> numbers;
    public List<String> groups;

    public ReturnMetadata(List<String> strings, List<String> numbers, List<String>
groups) {
        this.strings = strings;
        this.numbers = numbers;
        this.groups = groups;
    }
}

public class PackagedReturnItem {

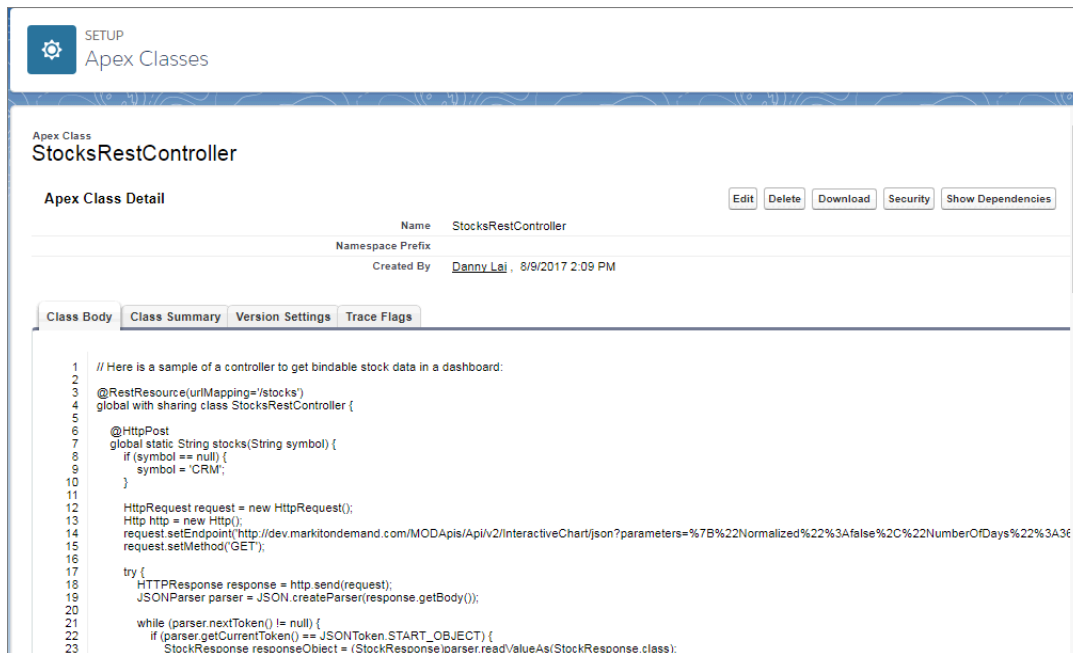
    public List<ReturnItem> data;
    public ReturnMetadata metadata;

    public PackagedReturnItem(List<ReturnItem> data) {
        this.data = data;
        this.metadata = new ReturnMetadata(new List<String>{'dateString'}, new

```

```
List<String>{'value'}, new List<String>());
    }
}
}
```

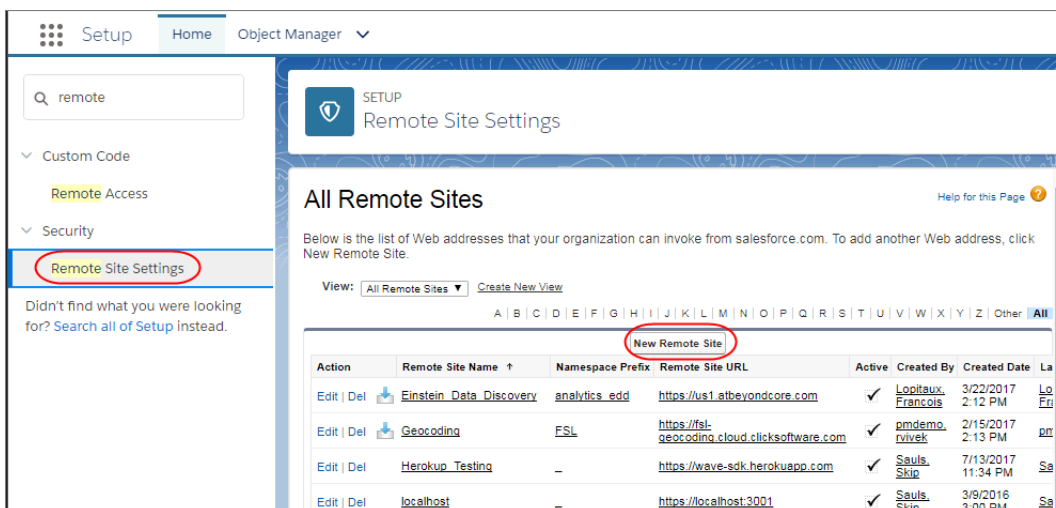
- Click **Save**.



## Whitelist the External Website

To enable Apex to query external REST endpoints, whitelist the website in Salesforce.

- From setup, enter *Remote* in the Quick Find box, and select **Remote Site Settings**.
- Click **New Remote Site**.



- Enter the remote site name and URL.

**Remote Site Edit** [Help for this Page](#)

Enter the URL for the remote site. All s-controls, JavaScript OnClick commands in custom buttons, Apex, and AJAX proxy calls can access this Web address from salesforce.com.

**Remote Site Edit**

Remote Site Name:

Remote Site URL:

Disable Protocol Security: ☐ ⓘ

Description:

Active: ☒

4. Click **Save**.

## Create the Apex Step

Manually define the apex step in the dashboard JSON to get the stock results from the Apex class that you previously created.

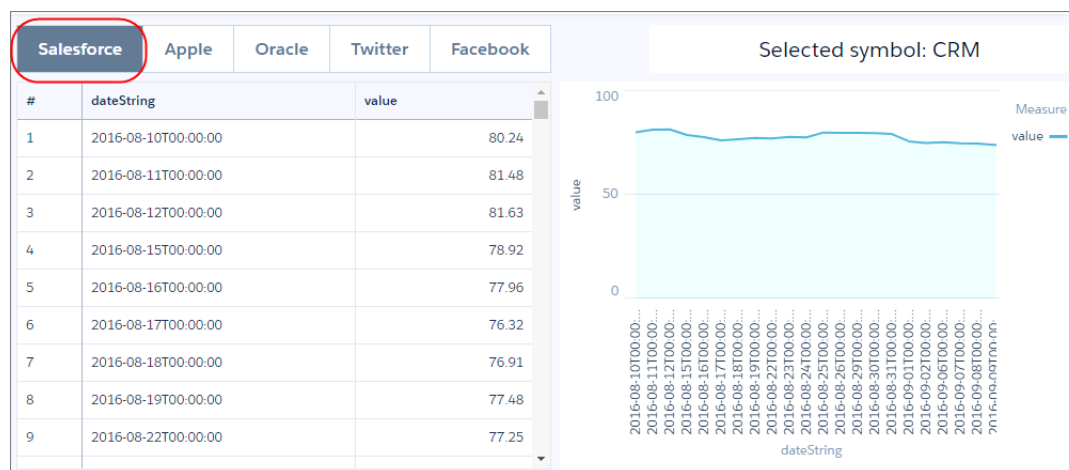
In the dashboard JSON, add the following apex step.

```
"StockData": {
  "query": {
    "body": {
      "symbol": "{{cell(CompaniesList_1.selection, 0, \"value\")}.asString()}"
    },
    "path": "stocks"
  },
  "type": "apex"
}
```

The apex step query contains the following parameters.

### body

The binding retrieves the stock symbol when a company is selected in the toggle widget.





**path**

Specifies the REST API resource path to the Apex controller, as specified in the `urlMapping` of the `RestResource` annotation on the Apex controller.

The dashboard shows four widgets. The toggle widget is based on a static step that maps predefined company names to stock symbols. The table widget and line chart use the `apex` step to retrieve the results. The text widget uses a binding to concatenate "Selected symbol:" and the stock symbol of the selected company in the toggle widget.

Here's the final dashboard JSON.

```
{
  "label": "Stock Quotes",
  "mobileDisabled": false,
  "state": {
    "dataSourceLinks": [],
    "filters": [],
    "gridLayouts": [
      {
        "name": "Default",
        "numColumns": 12,
        "pages": [
          {
            "label": "Untitled",
            "name": "b177a6e6-8ab6-4914-af36-09c7fa23e0c8",
            "widgets": [
              {
                "colspan": 6,
                "column": 0,
                "name": "pillbox_1",
                "row": 0,
                "rowspan": 1,
                "widgetStyle": {
                  "borderEdges": []
                }
              },
              {
                "colspan": 5,
                "column": 7,
                "name": "text_1",
                "row": 0,
                "rowspan": 1,
                "widgetStyle": {
                  "borderEdges": []
                }
              },
              {
                "colspan": 6,
                "column": 0,
                "name": "table_1",
                "row": 1,
                "rowspan": 7,
                "widgetStyle": {
                  "borderEdges": []
                }
              }
            ]
          }
        ]
      }
    ]
  }
}
```

```

        {
            "colspan": 6,
            "column": 6,
            "name": "chart_1",
            "row": 1,
            "rowspan": 7,
            "widgetStyle": {
                "borderEdges": []
            }
        }
    ]
}
],
"rowHeight": "normal",
"selectors": [],
"style": {
    "alignmentX": "left",
    "alignmentY": "top",
    "backgroundColor": "#F2F6FA",
    "cellSpacingX": 8,
    "cellSpacingY": 8,
    "fit": "original",
    "gutterColor": "#C5D3E0"
},
"version": 1
}
],
"layouts": [],
"steps": {
    "CompaniesList_1": {
        "datasets": [],
        "dimensions": [],
        "groups": [],
        "label": "CompaniesList",
        "numbers": [],
        "selectMode": "singlerequired",
        "strings": [],
        "type": "staticflex",
        "values": [
            {
                "display": "Salesforce",
                "value": "CRM"
            },
            {
                "display": "Apple",
                "value": "AAPL"
            },
            {
                "display": "Oracle",
                "value": "ORCL"
            },
            {
                "display": "Twitter",
                "value": "TWTR"
            }
        ]
    }
}

```

```

        },
        {
            "display": "Facebook",
            "value": "FB"
        }
    ],
    "broadcastFacet": true
},
"StockData": {
    "query": {
        "body": {
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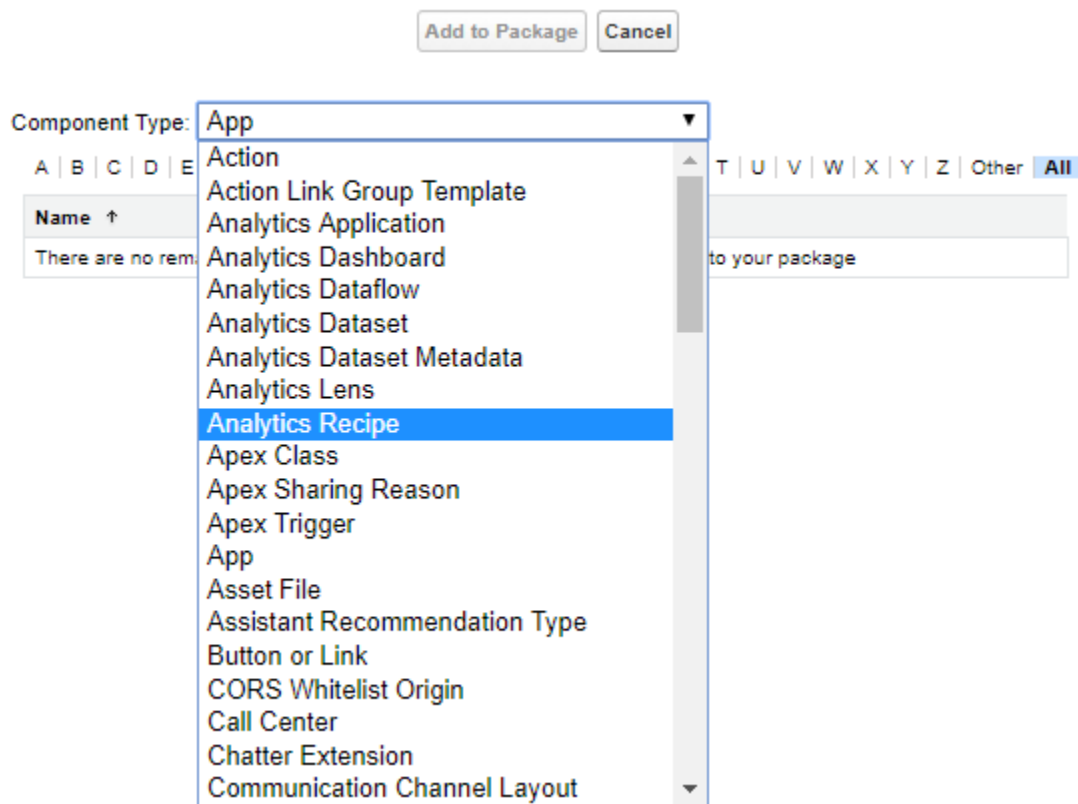
```
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## Package Your Recipes

You can add an Analytics recipe when you're creating a package or change set.

### Recipes in Packages and Change Sets

When creating your packages or change sets, select Analytics Recipe from the list of available components.



You must create a dataset with the recipe before the recipe is available for packaging.

# Communities: Customer Account Portal, Dynamic Branding, and Community Pulse

Designed with account management in mind, the Customer Account Portal gives your customers a private and secure place to access and update their account information. Branding sets partner with audience targeting, making it easy to dynamically change the appearance and style of your community based on the audience viewing the page. And Community Pulse displays your most important community metrics front and center in the Workspaces area.



**Tip:** There's lots of Lightning around Salesforce these days—Lightning Experience, Lightning Bolts, Lightning components—and it can be tricky to understand how it applies to Communities.

Just remember that Lightning Bolt solutions and Lightning templates use the same underlying technology as Lightning Experience—namely, the Lightning platform and Lightning components—but you aren't required to enable Lightning Experience to use them.

## EDITIONS

Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions

## IN THIS SECTION:

### [Lightning Templates and Bolt Solutions: New, Upgraded, and Exportable](#)

This release introduces a host of improvements in the Customer Service (Napili) and Partner Central templates. Upgrade today! Make your customers happy with a dedicated community using the Customer Account Portal template. Build your community your way with the Build Your Own template. And export any customized template as a Lightning Bolt solution.

### [Dynamic Branding: One Community, with a Different Look for Each Audience](#)

With branding sets, you can change the appearance and style of your community pages based on the audience viewing the page. No need to create individual communities for each customer or business need. Now you build your community once, and simply style it differently for each audience.

### [Audience Targeting: Sharpening Your Focus with Priority and User Criteria](#)

Focus on specific users with the new user object audience criteria, and control what people see when they belong to more than one audience.

### [CMS Connect: Support for Personalization, JSON, and More CMS Providers](#)

CMS Connect brings you even more ways to get your community connected to your content management system (CMS). If you have personalized content in Adobe Experience Manager (AEM) that you use for your website, now you can use that personalization in your community. CMS Connect now supports more providers in addition to AEM. And if your website has JSON content such as articles and blogs, you can render that content in your community with a beta version of the JSON connector. Enjoy feature-rich CMS Connect to get your community and website looking like they're in the same family.

### [Usability and Performance Improvements: Easier Page and Component Editing, CDN, Caching, and Performance Analysis](#)

Check out the major usability and performance improvements we packed into this release. On the usability side, it's easier to edit the current page in Community Builder and delete components from the Page Structure panel. Developers can launch the Developer Console directly from the Page Structure panel. On the performance side, try the new Communities Cloud Content Delivery Network (beta) to boost the page load times in your community. Client-side browser caching also delivers performance improvements. And the Community Page Optimizer is now generally available.

### [Lightning Communities: Community 360, Popular Files, and Updated and New Components](#)

Get more insight into customer activity with Customer 360, embed flows in Lightning communities, discover popular files, and find what you need in your peer-to-peer community with a new search component.

[Chatter in Lightning Communities: Rich Publisher Apps, Ask Button Enhancements, and Streams](#)

Add your own custom payloads to discussions, give your members more options with the improved Ask Button component, and create mega-feeds with streams.

[Files in Lightning Communities: External Files, Libraries in Tile View, and Folders in Libraries](#)

Access external files in your Lightning communities using Files Connect, use tile view to browse libraries, and create, move, and delete folders within libraries.

[Partner Relationship Management: Channel Programs and Levels, Partner Scorecards, and Market Development Funds](#)

Provide a stepped community experience depending on the level of expertise, monitor individuals' performances with partner scorecards (beta), and manage partner budgets with market development funds.

[Community Analytics: Community Pulse and Annotations](#)

See the community stats you care about the most at the top of Workspaces and take action, plus communicate directly on dashboards.

[Boost Engagement with Community Cloud and Marketing Cloud Integration \(Beta\)](#)

We harnessed the power of Marketing Cloud's Journey Builder to help you reach members and turn your community into a powerful marketing channel. With Journey Builder, you can create customer journeys across email, mobile, ads, and the web. With the cloud integration, community and marketing managers can place members on rich email journeys, boosting engagement and driving activity in the community. You must have both Community and Marketing Cloud licenses to use this feature.

[Moderation: Member Engagement Queue and More Workspaces](#)

Find new and improved queues to make life easier and explore a quick way to check out Workspaces.

[Other Changes in Communities](#)

Learn about smaller changes that improve your experience with Communities.

## Lightning Templates and Bolt Solutions: New, Upgraded, and Exportable

This release introduces a host of improvements in the Customer Service (Napili) and Partner Central templates. Upgrade today! Make your customers happy with a dedicated community using the Customer Account Portal template. Build your community your way with the Build Your Own template. And export any customized template as a Lightning Bolt solution.

### IN THIS SECTION:

[Update Your Customer Service \(Napili\) Community](#)

We revamped the Customer Service (Napili) community under the hood! Improvements include changes to search and navigation and more branding options (to name just a few). All future improvements to the Customer Service (Napili) template will be made on the Winter '18 version, so don't get left behind.

[Do More with the Updated Partner Central Community](#)

We enhanced the navigation, added a Resources page that includes libraries and file recommendations, and included the option to package and export the Partner Central template. All improvements to the template will be made on the Winter '18 version. Ready for an upgrade?

[Announcing Customer Account Portal, a Whole New Way to Keep Your Customers Happy](#)

Give your customers a private and secure place to access and update their account information with the out-of-the-box Customer Account Portal template from the Community Cloud. Improve customer relationships and decrease service costs by allowing customers to see and pay invoices, update their account information, and search your knowledge base for answers to their most frequent questions.



### [Developers, Build Your Community Your Way](#)


The Build Your Own template provides the basic pages every community needs: Home, Create Record, Error, Record Detail, Record List, Related Record List, Search, Check Password, Forgot Password, Login, Login Error, and Register. And you can easily add more pages and components for the experience you're building. Customize your branding and themes to refine the look of your community.

### [Lightning Bolts Know No Bounds](#)

With this release, we introduced several new and upgraded templates. To capitalize on this bounty, you can export *any* customized Lightning template as a Lightning Bolt solution, because export is no longer limited to Customer Service (Napili). Lightning Bolt makes it easy to create an industry-specific solution and then export, package, and distribute it for others to use.


## Update Your Customer Service (Napili) Community

We revamped the Customer Service (Napili) community under the hood! Improvements include changes to search and navigation and more branding options (to name just a few). All future improvements to the Customer Service (Napili) template will be made on the Winter '18 version, so don't get left behind.

 **Note:** Before updating to the Winter '18 version, make sure that you check out [Update Your Community](#), which explains how the update can affect your community. Then do a test run in a sandbox before updating it in your production org. This help topic can be outdated or unavailable during release preview, so check back to ensure that you understand the full impact of the update.


Here's a list of what to expect when update your current Customer Service (Napili) community to the Winter '18 version.

- Decoupling of the search box from the community header, making it easier to insert your own search experience within a community

 **Note:** The Search page in the Winter '18 version of the Customer Service (Napili) template doesn't include the Headline component. If your community's Search page includes the Headline component, it's removed as part of the upgrade.

- Sleeker header component improves your community's mobile experience, leaving more room to show what's important to your community
- Out-of-the-box UI enhancements, such as improved spacing in text fields and font sizing updates
- New [Global Search for Peer-to-Peer Communities](#) component
- Upgraded, high-performance navigation menu that offers more styling options and reduces the need for CSS overrides

If you have applied CSS customizations, migrate them to the upgraded navigation menu.

 **Note:** Overriding CSS isn't recommended. The best way to update the styling of your navigation menu is to use the Branding panel in Community Builder. Test your CSS customizations in a sandbox environment to ensure that they're working properly.

- Adoption of Lightning Design System principles in all content layouts
- [Two new branding options](#), one for navigation background and another for text color

Yes, we know that it's a lot of changes. That's why we're strongly urging you to test the upgrade process in a sandbox environment before publishing your community.

SEE ALSO:

[New User Profile Menu for Updated Templates](#)


## Do More with the Updated Partner Central Community

We enhanced the navigation, added a Resources page that includes libraries and file recommendations, and included the option to package and export the Partner Central template. All improvements to the template will be made on the Winter '18 version. Ready for an upgrade?

 **Note:** Before updating to the Winter '18 version, review this topic [Update Your Community](#), which explains how the update can affect your community. Then do a test run in a sandbox before updating the template in your production org.

The upgraded Partner Central community offers:

- Resources page that includes libraries and smart recommendations for files
- Path component for campaigns and custom objects, including Sales Contracts, Quotes, Price Books, Orders, Marketing Fund Allocations, Marketing Fund Requests, and Marketing Fund Claims
- High-performance navigation menu that offers more styling options and reduces the need for CSS overrides

 **Note:** Overriding CSS isn't recommended. The best way to update the styling of your navigation menu is to use the Branding panel in Community Builder. Test your CSS customizations in a sandbox environment to ensure that they're working properly.

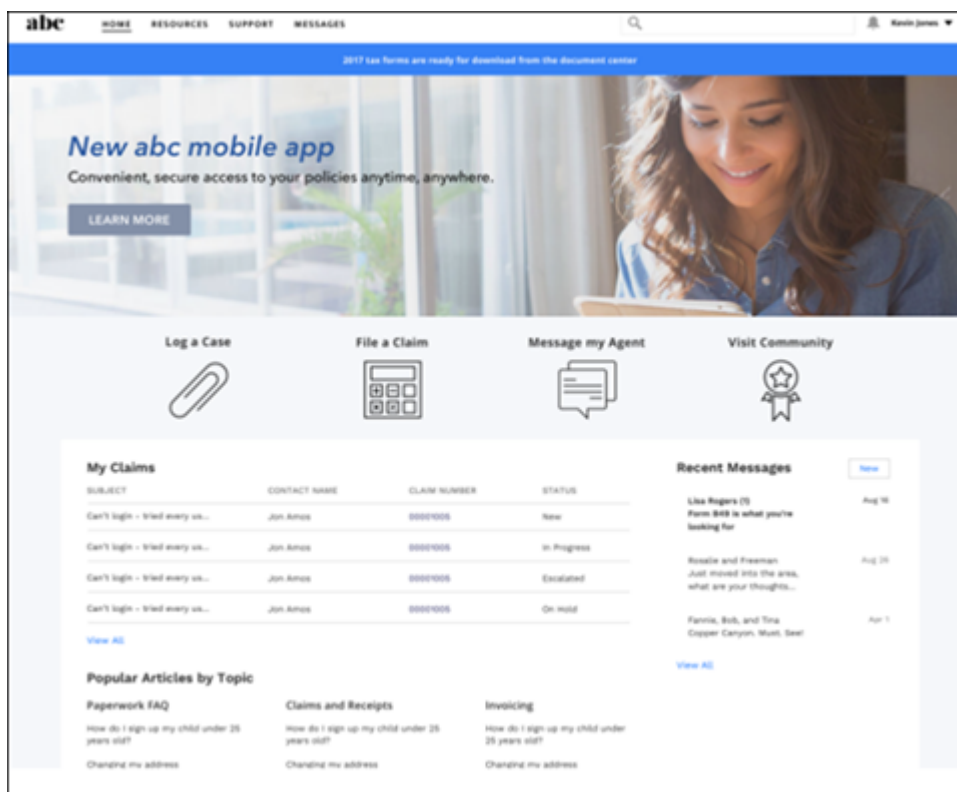
- Adoption of Lightning Design System principles in all content layouts

SEE ALSO:

[Access Libraries and More with the New Resources Page](#)

## Announcing Customer Account Portal, a Whole New Way to Keep Your Customers Happy

Give your customers a private and secure place to access and update their account information with the out-of-the-box Customer Account Portal template from the Community Cloud. Improve customer relationships and decrease service costs by allowing customers to see and pay invoices, update their account information, and search your knowledge base for answers to their most frequent questions.



Customer Account Portal is designed with account management in mind, so you can:

- Give access to customers to create and update vital information in any Salesforce record, including custom objects. Providing access means fewer calls to your call centers for easily resolved issues, like updating a phone number or address.
- Integrate and expose data and processes from third-party systems, such as ERP and e-commerce via Salesforce Connect.
- Show customers information that matters the most in their Member Profile.
- Use Salesforce Knowledge to give customers answers to their most pressing questions about your product and brand. Allow customers to upload files, such as invoices and claims.

Customer Account Portal has the same flexibility and extensibility that you're accustomed to with other Lightning communities, so you can easily:

- Build custom pages and use custom branding.
- Expose more CRM objects and data to suit your business needs.
- Use audience targeting by geolocation, and create personalized content for customers by their geographical location.

So go ahead and make that customer portal that you've been itching to launch. You're only a few clicks away from a rich, modern, and responsive experience. Dreams really do come true.

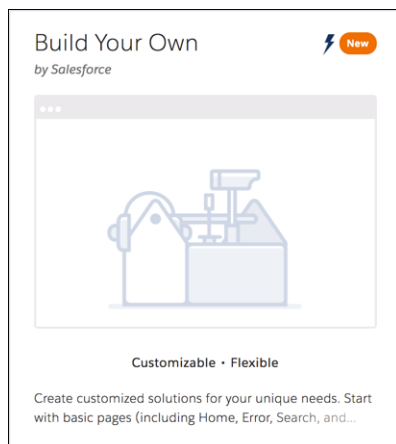
#### SEE ALSO:

[Introduce a More Intuitive Navigation Experience with the Tile Menu \(Beta\)](#)

[Give Portal Members Access to Edit Their Profiles](#)

## Developers, Build Your Community Your Way

The Build Your Own template provides the basic pages every community needs: Home, Create Record, Error, Record Detail, Record List, Related Record List, Search, Check Password, Forgot Password, Login, Login Error, and Register. And you can easily add more pages and components for the experience you're building. Customize your branding and themes to refine the look of your community.

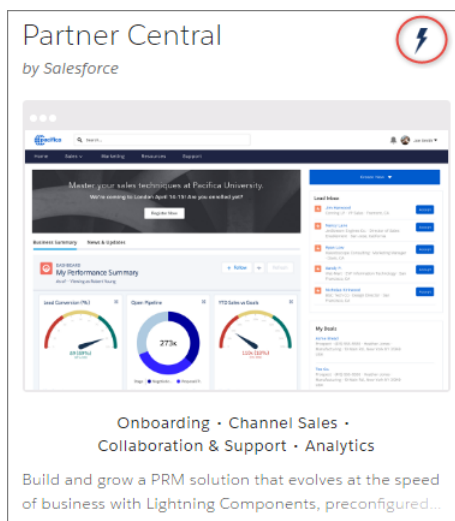


To view all components in the Components panel, select **Settings > Advanced** and click **Show All Components** in the Components Panel area.

## Lightning Bolts Know No Bounds


With this release, we introduced several new and upgraded templates. To capitalize on this bounty, you can export *any* customized Lightning template as a Lightning Bolt solution, because export is no longer limited to Customer Service (Napili). Lightning Bolt makes it easy to create an industry-specific solution and then export, package, and distribute it for others to use.

Not sure which templates are exportable? Look for the Lightning icon next to the template in the Community Creation wizard. You can export anything marked with a ⚡.



To export an existing community, you must update your template to the latest version in **Settings > Updates**.

When you export a customized Customer Account Portal template as a Lightning Bolt solution, the Tile Menu component isn't included. After you create a community from the solution, manually add the component.

 **Note:** You can't export Koa or Kokua because they're [being retired](#).

## Dynamic Branding: One Community, with a Different Look for Each Audience

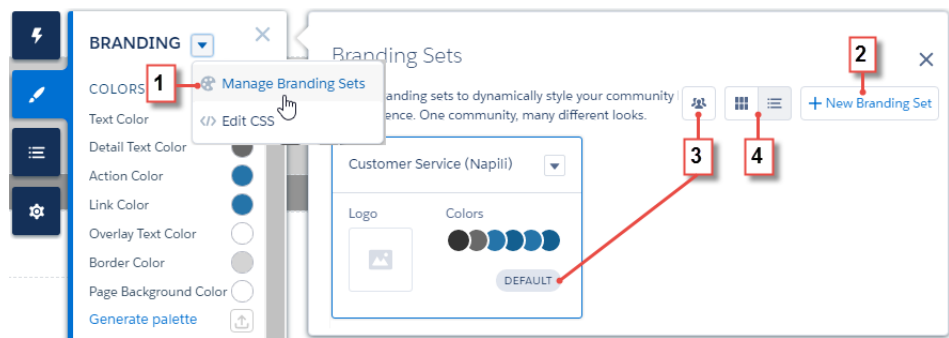
With branding sets, you can change the appearance and style of your community pages based on the audience viewing the page. No need to create individual communities for each customer or business need. Now you build your community once, and simply style it differently for each audience.



Branding sets take advantage of criteria-based audiences in the same way as page variations. Just as you can create several page variations and target them at different audiences, you can create different sets of branding properties to produce a unique look and feel for specific audiences.




 **Note:** To use branding sets, you must update your template to the latest version in **Settings > Updates**.

In Community Builder, you can:

- Manage branding sets from the Branding panel (1).
- Create a set of branding properties (2).
- Create or assign an audience to your branding set (3).
- Switch between a tile or list view of branding sets (4).



- **Note:** Each community must have a branding set that’s assigned to the default audience. It acts as your fallback branding. It’s what people who don’t belong to a specific audience see. If you export a template, only the default branding set is exported.
- **Example:** Acme Learning offers professional training courses to employees of large corporations and to the general public. They want to provide targeted branding experiences for each corporation, which combine Acme Learning’s branding with the corporation’s branding. And for non-corporate customers, they want to display their standard Acme Learning branding.  
  
Using a single community, they create a series of branding sets and create and assign audiences to each. So when Salesforce employees visit the Acme Learning community, they see pages styled with the Salesforce logo, colors, and fonts. Similarly, if employees of Northern Trail Outfitters visit the Home page, they see the same content but with different fonts, colors, and logo. And members of the general public—the default audience—see pages styled with Acme Learning’s standard branding.

Branding Sets				
Create branding sets to dynamically style your community based on the audience. One community, many different looks.				
NAME	BRANDING SET	AUDIENCE	PRIORITY	STATUS
Northern Trail Outfitters		NTO	1	Unpublished
Salesforce		Salesforce	2	Unpublished
Acme Learning		DEFAULT	—	Unpublished

# Audience Targeting: Sharpening Your Focus with Priority and User Criteria

Focus on specific users with the new user object audience criteria, and control what people see when they belong to more than one audience.

## IN THIS SECTION:

### Create Audiences Based on User Criteria

Narrow the focus of your audiences with the new user object criteria type. Target audiences based on user information, such as city, company name, or title, and fine-tune who sees what in your community.

### Prioritize What Your Audiences See

Prioritize which branding set or page variation to display when users belong to more than one audience. No more guessing about who sees what—now you get to choose which branding set or page takes precedence.

## Create Audiences Based on User Criteria

Narrow the focus of your audiences with the new user object criteria type. Target audiences based on user information, such as city, company name, or title, and fine-tune who sees what in your community.

For example, to target an audience based on country of residence, the user object's Country field provides more accurate results than the location criteria type. The location criteria type determines users' locations by their IP addresses, which vary as users travel.

Choose from several text or picklist fields on the user object when you create or edit an audience, and enter appropriate criteria.

**Edit Audience**  
Edit your audience's criteria.

Audience Name  
NTO Europe

> Profile  
System Administrator

> Location

> Domain

▼ User Object  
Set visibility based on user object fields.

User Field Country  
France × Ireland × Enter criteria...

User Field Department  
Sales × Marketing × Enter criteria...

+ Add

Audience Summary ⓘ

Profile  
System Administrator

User Object  
Country  
France, Ireland

Department  
Sales, Marketing

Cancel Save

## Prioritize What Your Audiences See

Prioritize which branding set or page variation to display when users belong to more than one audience. No more guessing about who sees what—now you get to choose which branding set or page takes precedence.



**Tip:** Not sure what a branding set is? They're yet one more arrow in the audience-targeting quiver. We'll wait here while you [find out more](#).

To prioritize what people who belong to several audiences see, drag the page variation or branding set (1) to the appropriate position to set its priority (2).

If users don't belong to a specific audience, they see the branding set or page variation that's assigned to the default audience (3). Because the default acts as the fallback branding or page, it doesn't have a priority.

To set the priority for branding sets, make sure that you're in the list view (4) of the Branding Sets area. The Priority column appears when you have two or more assigned audiences in addition to the default audience.

**Branding Sets**

Create branding sets to dynamically style your community based on the audience. One community, many different looks.

1. Add icon 2. Edit icon 3. Default button 4. New Branding Set button

NAME	BRANDING SET	AUDIENCE	PRIORITY	STATUS
Northern Trail US	[Icons]	NTO US	1	Unpublished
Northern Trail Europe	[Icons]	NTO Europe	2	Unpublished
Northern Trail Outfitters	[Icons]	DEFAULT	—	Unpublished

**Page Variations**

Page variations let you quickly create alternative versions of a page. Try out different page layouts and styles or create variations aimed at specific audience.

You can start with a blank page variation or duplicate an existing one to jump-start process.

1. Add icon 2. Edit icon 3. Default button

NAME	AUDIENCE	PRIORITY	STATUS
Home (US)	NTO US	1	Unpublished
Home (Europe)	NTO Europe	2	Unpublished
Home	DEFAULT	—	Unpublished

## CMS Connect: Support for Personalization, JSON, and More CMS Providers

CMS Connect brings you even more ways to get your community connected to your content management system (CMS). If you have personalized content in Adobe Experience Manager (AEM) that you use for your website, now you can use that personalization in your community. CMS Connect now supports more providers in addition to AEM. And if your website has JSON content such as articles and blogs, you can render that content in your community with a beta version of the JSON connector. Enjoy feature-rich CMS Connect to get your community and website looking like they're in the same family.



**Note:** This release contains beta versions of some features in CMS Connect, which means it's a high-quality feature with known limitations. CMS Connect isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for CMS Connect in the Community Cloud group in the Trailblazer Community.

### IN THIS SECTION:

#### [Personalize Your Community with CMS Connect](#)

Do you use Adobe Experience Manager with personalization to maintain your website content? CMS Connect in Communities now supports your personalized content, so you decide who sees what. If you've gone to all the work of setting up personalization in AEM, now you can leverage that effort by rendering your personalized content in your community. Display content according to different segments, based on criteria such as geolocation or language.

#### [Beef Up Your Community Pages with JSON Content \(Beta\)](#)

Make the pages in your community even meatier with JSON content from your CMS. Use CMS Connect to render your JSON content, such as articles and blogs. Use the property editor in the Community Builder to customize layouts to display your content just the way you want.

[Align Your Community and Website Content with Support for More CMS Providers \(Beta\)](#)

Good news for anyone managing their website content in Drupal, SDL, Sitecore, or WordPress. In addition to existing support for Adobe Experience Manager, CMS Connect now fully supports your content, so you can get your community and website looking like siblings without duplicating work.

[Relax While We Convert Your Relative URLs to Absolute URLs \(Beta\)](#)

Relatives don't always know when they're not wanted. Because CMS Connect allows only absolute URLs in HTML fragments, it now converts your relative URLs for you. Conversion happens invisibly, so you don't need to worry about it.

## Personalize Your Community with CMS Connect

Do you use Adobe Experience Manager with personalization to maintain your website content? CMS Connect in Communities now supports your personalized content, so you decide who sees what. If you've gone to all the work of setting up personalization in AEM, now you can leverage that effort by rendering your personalized content in your community. Display content according to different segments, based on criteria such as geolocation or language.

The screenshot shows a configuration form titled "Edit Geometrixx". It contains several fields and sections:

- Name:** A text field containing "Geometrixx".
- CMS Source:** A dropdown menu set to "AEM".
- Server URL:** A text field containing "https://www.myaemserver.com".
- HTML:** A section header with an information icon.
- Root Path:** A text field containing "content/geometrixx-outdoors/{language}".
- Use Personalization:** A checkbox that is checked.
- Connector Page Path:** A text field containing "content/sfdcConnector.html".
- Script Path:** A text field containing "etc/segmentation/geometrixx-outdoors.segment.js".
- CSS:** A section header with an information icon.
- Buttons:** "Cancel" and "Save" buttons at the bottom right.

How does it work? We'd like to tell you it's magic, but it does require some upfront effort on your part. You need to [create and install a connector JSP page](#), and expose it through an HTML page in AEM. The connector page contains the JSP with your website's personalization mapping logic. You might need to add some code, depending on how you want to run scripts. Then provide the path to this connector page in AEM when you're setting up the CMS connection in your community. In your CMS connection, you can also add a path to your JavaScript file if you want to run scripts dynamically inside the JSP file.



After you do this initial legwork, it's easy to get personalization working in your community. After enabling it in the connection, you also enable it on each CMS Connect (HTML) component in the Community Builder that you want to personalize. If you want, enable it on your header and footer in Community Builder Settings. See the CMS Connect Developer Guide for all the details.

## Beef Up Your Community Pages with JSON Content (Beta)

Make the pages in your community even meatier with JSON content from your CMS. Use CMS Connect to render your JSON content, such as articles and blogs. Use the property editor in the Community Builder to customize layouts to display your content just the way you want.

Now you can display your JSON content from WordPress and Drupal in your community. Set up a CMS connection, add a path to your JSON, and use the Community Builder to set up how you want it to display.

### Display Blog Posts and Articles

To render a blog post or other individual content item on a custom community page, set up your JSON as a Content Item. Then when you drag the CMS Connect JSON component onto a page, use the property editor to set up all its attributes. You can use JSON expressions or static values for things like title, author, and image source. We provide a built-in layout for displaying your content.



**Note:** Search engine optimization (SEO) doesn't work for CMS Connect (JSON) components supporting navigation to Content Item pages, even on pages that are made public.

### Display Lists of Content

Create a Content List component to display a list of content items in a grid layout, with each item linking to the full view. The property editor gives you control over how it displays. Use out-of-the-box layouts for your content list and the items in the list, while customizing each field with values or JSON expressions.

## Align Your Community and Website Content with Support for More CMS Providers (Beta)

Good news for anyone managing their website content in Drupal, SDL, Sitecore, or WordPress. In addition to existing support for Adobe Experience Manager, CMS Connect now fully supports your content, so you can get your community and website looking like siblings without duplicating work.

When you set up a new CMS connection, now you can choose from a list of CMS sources.

**Edit Capricorn**

**Connection Details**

\* Name ⓘ

\* CMS Source

\* Server URL

HTML ⓘ

Root Path ⓘ

☒ AEM  
☐ Drupal  
☐ Wordpress  
☐ SDL  
☐ Sitecore  
☐ Other

## Relax While We Convert Your Relative URLs to Absolute URLs (Beta)

Relatives don't always know when they're not wanted. Because CMS Connect allows only absolute URLs in HTML fragments, it now converts your relative URLs for you. Conversion happens invisibly, so you don't need to worry about it.

HTML components, such as banners, headers, and footers from your CMS, can contain relative URLs (for example, `/content/capricorn/en/rootlink`). No problem. CMS Connect converts your relative URLs to absolute URLs for the following HTML tags and attributes.

- `<img>` tag *src* attribute
- `<audio>` tag *src* attribute
- `<input>` tag
- `<button>` tag *formaction* attribute
- `<video>` tag *src* and *poster* attributes
- `<a>` and `<area>` tags *href* attribute
- `<form>` tag *action* attribute
- `<del>`, `<ins>`, `<blockquote>`, and `<q>` tags *cite* attribute
- `<script>` tag *src* attribute



**Note:** URL conversion works only on HTML fragments. Relative JavaScript or CSS URLs provided in your connection aren't converted.

## Usability and Performance Improvements: Easier Page and Component Editing, CDN, Caching, and Performance Analysis

Check out the major usability and performance improvements we packed into this release. On the usability side, it's easier to edit the current page in Community Builder and delete components from the Page Structure panel. Developers can launch the Developer Console directly from the Page Structure panel. On the performance side, try the new Communities Cloud Content Delivery Network (beta) to boost the page load times in your community. Client-side browser caching also delivers performance improvements. And the Community Page Optimizer is now generally available.

### IN THIS SECTION:

#### [Experience Faster Community Performance with Free Content Delivery Network \(Beta\)](#)

Improve the page load time of your community by setting up a free content delivery network (CDN). This feature is available in Lightning and Salesforce Tabs + Visualforce communities.

#### [Customize Navigation Background and Text Color](#)

Fine-tune the background and text colors of your community's navigation with the background color and text color settings in the Branding panel in Community Builder. These settings reduce the need to overwrite template and branding styles with your own customizations.

#### [Add a Custom Font Family More Easily](#)

Good news! The process to use your custom fonts in Community Builder involves just a simple upload. You can now specify a custom font family name to use throughout your community for your primary and header fonts.

#### [Improve Community Performance with Browser Caching](#)

If you use many components in your Lightning community, improve community performance with browser caching. Performance is about the same for the first page load, but subsequent page loads are faster. The cache is encrypted and secure.

#### [Get Performance Information with the Salesforce Community Page Optimizer \(Generally Available\)](#)

The free Salesforce Community Page Optimizer analyzes your community and identifies issues that impact performance. Use the information to refine your design and improve community performance for your members.

#### [Delete Components from the Page Structure Panel](#)

Want to delete a component and don't want to page through your community to find it? No problem. You can now quickly delete components wherever they are from the Page Structure panel.

#### [Edit Custom Components in the Developer Console](#)

You can now quickly view and edit custom components from the Page Structure panel.

#### [Edit the Current Published Page in Community Builder](#)


While viewing your published community, do you notice a change you'd like to make? Simply go to Community Builder from the community profile menu to edit the current page. Preview, and then publish your changes.

#### [See Changes by Refreshing the Current Page](#)

You can save time and forget about reloading your entire browser page when you change a page in Community Builder. Now you just refresh the current page.

## Experience Faster Community Performance with Free Content Delivery Network (Beta)

Improve the page load time of your community by setting up a free content delivery network (CDN). This feature is available in Lightning and Salesforce Tabs + Visualforce communities.

 **Note:** This release contains a beta version of the Community Cloud CDN, which means it's a high-quality feature with known limitations. The Community Cloud CDN isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

If you enable this beta feature, this domain uses Akamai, a third-party CDN service, to optimize its content delivery. All information sent to or returned by this domain, which includes data submitted to the domain, web page content returned from the domain, data tables on those pages, images, files, JavaScript code, style sheets, and static resources, are stored and transmitted by Akamai. Akamai can offer different privacy and security protections for such data than that offered by Salesforce. Salesforce is not responsible for the privacy and security of the data that is shared with Akamai as a result of your decision to enable this beta feature. Salesforce makes no representations or warranties regarding the performance of this beta feature, including and not limited to uptime and service availability. If this feature is made generally available in the future, you might need to purchase units for CDN bandwidth use in excess of documented limits at that time.

### EDITIONS

Available in: **Enterprise**, **Performance**, and **Unlimited**, Editions

To improve page load time performance, the following resources are cached on the Community Cloud CDN:

- Resources that are accessible in a public community without authentication, including HTML, JavaScript, CSS, image, and font files
- Resources that are configured as publicly cacheable, such as Salesforce static resources with the Cache Control setting configured to Public

### Get Ready

1. From Setup, enter *Communities Settings* in the Quick Find box, and then select **Communities Settings**. Click **Enable communities** and enter a domain name (for example, MyCompany.force.com).
2. Obtain a custom domain (outside of Salesforce), and add it to your org as a domain record.
3. From Setup, enter *Custom URLs* in the Quick Find box, and then select **Custom URLs**. Associate your custom domain to your community site URL.

### Provision and Activate the Community CDN

1. Edit your custom domain and select **Salesforce serves the domain over HTTPS, using a Salesforce content delivery network (CDN) partner and a shared HTTPS certificate** and click **Save**.

Akamai is the CDN partner.

The Community Cloud CDN provisioning process can take 2–6 hours. The Provisioning Status field changes from Provisioning to Awaiting Activation when complete. You receive an email when the process is complete. No downtime or disruption is expected during the provisioning process.

## 2. Activate your domain.

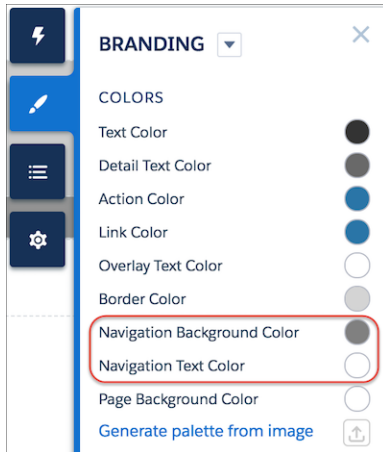
Your community can be unavailable for 10–15 minutes so provision and activate the Community Cloud CDN when your community traffic is low. The Provisioning Status field changes from Awaiting Activation to Complete.

SEE ALSO:

[Salesforce Help: Set Up a Content Delivery Network \(Beta\) \(can be outdated or unavailable during release preview\)](#)

## Customize Navigation Background and Text Color

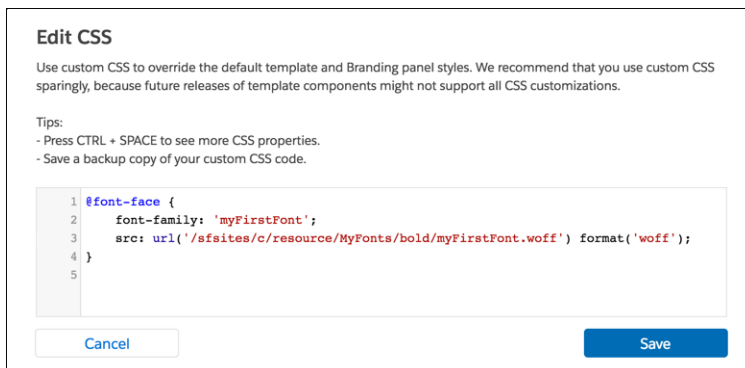
Fine-tune the background and text colors of your community's navigation with the background color and text color settings in the Branding panel in Community Builder. These settings reduce the need to overwrite template and branding styles with your own customizations.



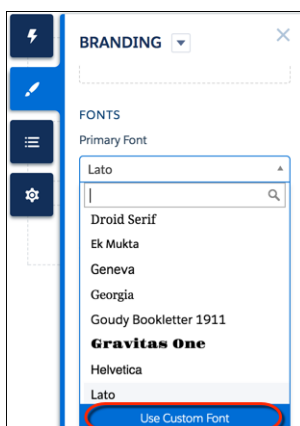
## Add a Custom Font Family More Easily

Good news! The process to use your custom fonts in Community Builder involves just a simple upload. You can now specify a custom font family name to use throughout your community for your primary and header fonts.

To add a font to the Primary Font and Header Fonts lists, upload it as a static resource and define it in the CSS Editor. If you have more than one font file to upload, use a .zip file.



In the Branding panel, under Fonts, click **Use Custom Font** and add the font family name.

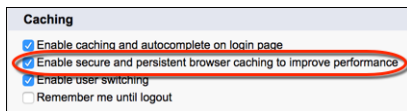


Learn More'. Below the text is a text input field containing 'myFirstFont'. At the bottom right of the dialog are two buttons: 'Cancel' and 'Save'." data-bbox="100 123 464 231"/>

## Improve Community Performance with Browser Caching

If you use many components in your Lightning community, improve community performance with browser caching. Performance is about the same for the first page load, but subsequent page loads are faster. The cache is encrypted and secure.

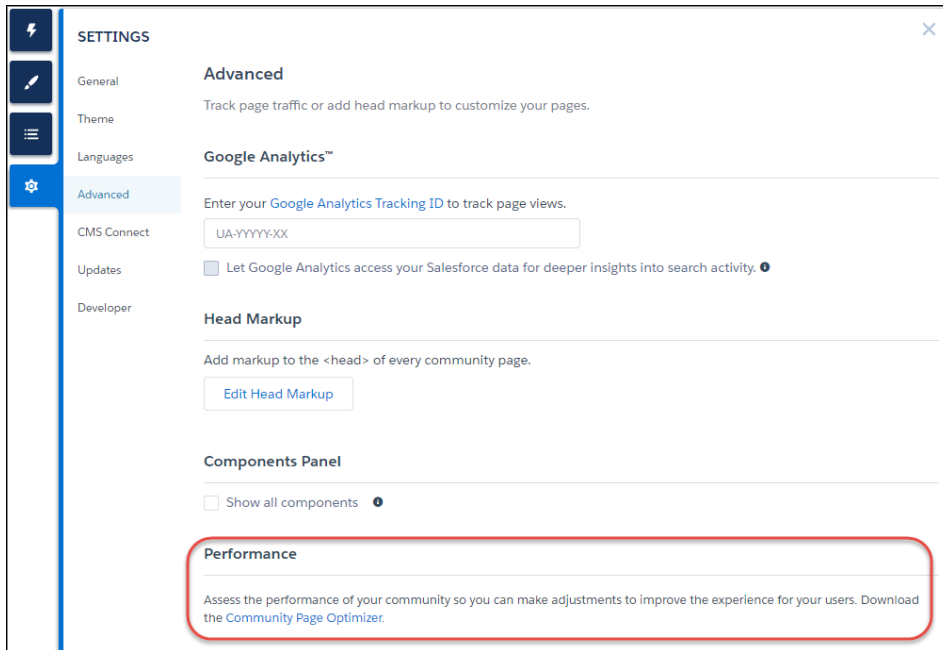
The **Enable secure and persistent browser caching to improve performance caching** setting is enabled by default. To verify that this setting is enabled, from Setup, enter *Session Settings* in the Quick Find box and then select **Session Settings**.



## Get Performance Information with the Salesforce Community Page Optimizer (Generally Available)

The free Salesforce Community Page Optimizer analyzes your community and identifies issues that impact performance. Use the information to refine your design and improve community performance for your members.

The [Salesforce Community Page Optimizer](#) is a free plug-in available from the Chrome Web Store. Download and install the plug-in as you would any Chrome extension.



SEE ALSO:

[Salesforce Help: Analyze and Improve Community Performance](#)

## Delete Components from the Page Structure Panel

Want to delete a component and don't want to page through your community to find it? No problem. You can now quickly delete components wherever they are from the Page Structure panel.



## Edit Custom Components in the Developer Console

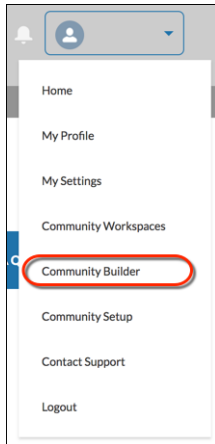
You can now quickly view and edit custom components from the Page Structure panel.





## Edit the Current Published Page in Community Builder

While viewing your published community, do you notice a change you'd like to make? Simply go to Community Builder from the community profile menu to edit the current page. Preview, and then publish your changes.



## See Changes by Refreshing the Current Page

You can save time and forget about reloading your entire browser page when you change a page in Community Builder. Now you just refresh the current page.



## Lightning Communities: Community 360, Popular Files, and Updated and New Components

Get more insight into customer activity with Customer 360, embed flows in Lightning communities, discover popular files, and find what you need in your peer-to-peer community with a new search component.

### IN THIS SECTION:

#### [Introduce a More Intuitive Navigation Experience with the Tile Menu \(Beta\)](#)

The new Tile Menu component in Community Builder gives you the option of adding an intuitive and visually stunning navigation experience in Customer Account Portals. Customers can use images to access an external site, community page, record, or global action. For example, customers can log a case or file a claim with images—a whole new concept of marrying images and actions.

#### [Give Portal Members Access to Edit Their Profiles](#)

The streamlined Member Profile component allows community members to easily edit their account information. And the best part is that a member's important information is all in one place—profile information and various settings in one handy component. What does that mean for you and your business? Fewer phone calls into your call centers for simple updates.

### [See Your Customers' Community Activity with Community 360 \(Generally Available\)](#)

Community 360—the Lightning App Builder component that you can add to your console to see a customer's community activity—has a few surprises in store for you this release. First and foremost, the feature is taking off its pilot mantle and coming out as generally available. Then, it's adding a whole slew of capabilities that help support agents get a holistic view of the customer. All in the name of great customer service. This feature is available in Salesforce Classic and Lightning Experience.

### [Find What You Need with Global Search for Peer-to-Peer Communities](#)

Global Search for Peer-to-Peer Communities is the newest search component in the Community Cloud, available for use in the Customer Service (Napli) template. This simplified version of the Search & Post Publisher allows community admins to separate the search function in the component from the publishing function. Moreover, the new component is separate and distinct from the overall header, making it easier to customize to a community's specific needs.

### [New User Profile Menu for Updated Templates](#)

The User Profile Menu component displays a user's name (or nickname) and profile picture. It also displays a dropdown from where users navigate to their profile, open a case, access their locale and email notification settings, or log out of the community. External users can also access and manage their account. If the user isn't logged in, a Login button appears in the header. This component is similar to the Profile Header component in Community Builder, but you can only use it with communities built with the Winter '18 version and later of Customer Service (Napili), Customer Account Portal, and Partner Central. Updating your community in Winter '18 automatically adds this component.

### [Access Libraries and More with the New Resources Page](#)

Libraries have moved to the new Resources page in Partner Central communities to make room for even more incredible content. In addition to Libraries, you can also access the most popular files in your community. The Resources page supports public links, so you can share it with partners.

### [Discover Popular Files](#)

Use the new Recommendations component in Partner Central communities to show members which files are popular. Popularity is determined by the number of people who have recently viewed a file and whether the file includes text and is in a library.

### [Use Path on Contracts, Orders, Quotes, and Custom Objects](#)

Path guides your users along the steps in a process, such as working an opportunity from a fresh lead to a successfully closed deal. Now you can use the Path component on contracts, orders, quotes, and custom objects in communities, in addition to its availability on leads and opportunities.

### [Embed Flows in Lightning Community Pages](#)

Flows automate business processes to collect, update, edit, and create Salesforce information. With the Flow component in Community Builder, you can now add flows to your pages. Add the Flow component to your community pages just like any other component.

### [Add Global Actions to Your Navigation Menu](#)

Add global actions as one of your menu items in your community's navigation menu. When adding a new menu item, select **Global Action** from the Type drop-down menu. Then select which existing global action in your org you want to associate to the menu item. For example, if you associate the **New Case** global action to a menu item, customers can easily create a new case from the navigation menu.

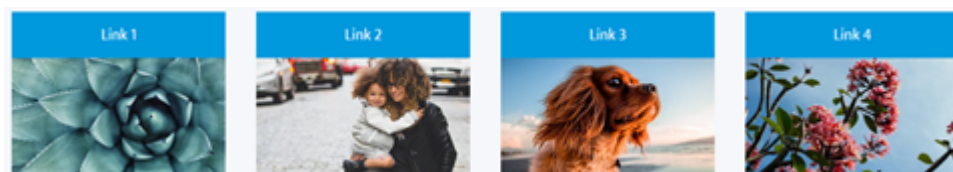
### [Koa and Kokua Templates No Longer Available for New Communities](#)

The phased retirement of the Koa and Kokua templates continues. You can no longer use these templates to create communities. Salesforce still supports existing communities that were built using Koa and Kokua. If you still wish to create a community based on Koa or Kokua, contact Salesforce Support. However, we recommend that you work with Salesforce Support on a plan to replace your existing Koa and Kokua communities. New Lightning communities provide richer support for Knowledge and case management.

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The new Tile Menu component in Community Builder gives you the option of adding an intuitive and visually stunning navigation experience in Customer Account Portals. Customers can use images to access an external site, community page, record, or global action. For example, customers can log a case or file a claim with images—a whole new concept of marrying images and actions.

This release contains a beta version of Tile Menu, which means it's a high-quality feature with known limitations. Tile Menu isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.



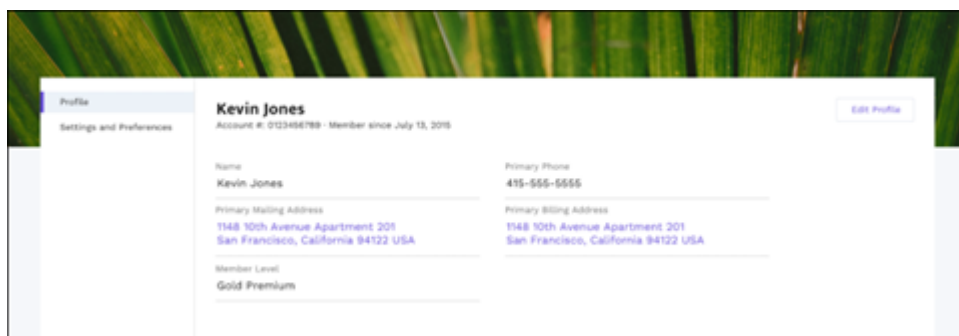
 **Note:** Tile Menu isn't available in packageable Bolt Solutions.

SEE ALSO:

[Do More with the Updated Partner Central Community](#)

## Give Portal Members Access to Edit Their Profiles

The streamlined Member Profile component allows community members to easily edit their account information. And the best part is that a member's important information is all in one place—profile information and various settings in one handy component. What does that mean for you and your business? Fewer phone calls into your call centers for simple updates.



Use the Member Profile component on the User Profile page on the new Customer Account Portal template.

The Member Profile component includes a default image in the header. You can choose to not show the default image by changing the component's properties in Community Builder.

The fields you see in the Member Profile component are set in **Setup > Users > Page Layouts > User Profile Page Layouts**.

SEE ALSO:

[Do More with the Updated Partner Central Community](#)

## See Your Customers' Community Activity with Community 360 (Generally Available)

Community 360—the Lightning App Builder component that you can add to your console to see a customer's community activity—has a few surprises in store for you this release. First and foremost, the feature is taking off its pilot mantle and coming out as generally available. Then, it's adding a whole slew of capabilities that help support agents get a holistic view of the customer. All in the name of great customer service. This feature is available in Salesforce Classic and Lightning Experience.

Using Community 360, support reps can see customers' aggregate activity in all the communities they're a member of. Reps can see up to 15 months of a customer's activity in chronological order, from newest to oldest.

If a customer is a member of more than one community in the org the support rep can choose the member's community profile from a pop-up.

Support reps access the activity on articles and cases. The activity includes viewing articles and cases, and posts or comments made in the community. For example, a field service agent who is a part of a community calls customer service, complaining about a lack of internet service on the company phone. The customer support rep notices that the field service agent has already looked at three articles about internet service, logged a case, and accessed the case to make sure the information is there correctly.

The support rep makes sure not to suggest any of those options as things to do, and tries different methods to solve the case. Less frustration + less time spent on already tried solutions = one happy customer. Thanks, Community 360.



**Note:** Activity information is available for members accessing communities with one of the following licenses:

- Partner Community
- Partner Community Login
- Gold, Silver, and Bronze Partners
- Customer Community
- High Volume Customer Portal
- Customer Portal User
- Customer Community Plus
- Customer Community Plus Login

## Find What You Need with Global Search for Peer-to-Peer Communities

Global Search for Peer-to-Peer Communities is the newest search component in the Community Cloud, available for use in the Customer Service (Napli) template. This simplified version of the Search & Post Publisher allows community admins to separate the search function in the component from the publishing function. Moreover, the new component is separate and distinct from the overall header, making it easier to customize to a community's specific needs.

The new Global Search for Peer-to-Peer communities is also different from the Search & Post Publisher component in that it includes fewer properties to configure. The Post To Publisher properties were removed in the name of simplicity.



**Note:** Search components are optimized for use in specific templates. Each community template includes an optimized search component out-of-the-box. We strongly recommend keeping the search component that your template comes with because it guarantees the best results. You can always build your own custom search component for use in your community.

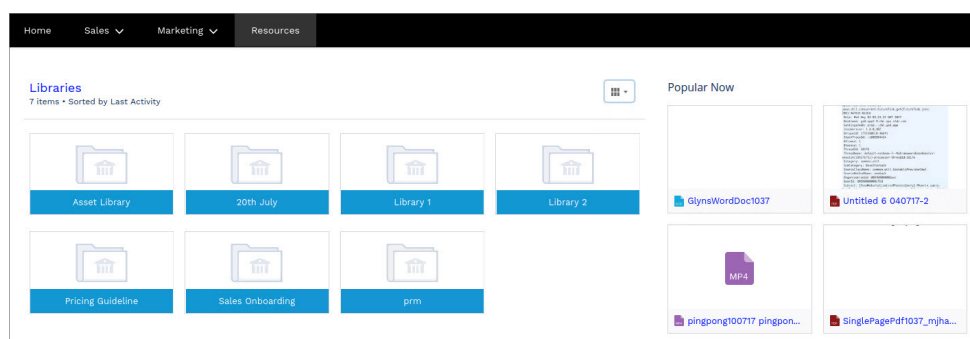
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## Access Libraries and More with the New Resources Page


Libraries have moved to the new Resources page in Partner Central communities to make room for even more incredible content. In addition to Libraries, you can also access the most popular files in your community. The Resources page supports public links, so you can share it with partners.

Content is displayed in tiles to make them easier to spot. The most frequently viewed files are filtered into the Popular Now section.




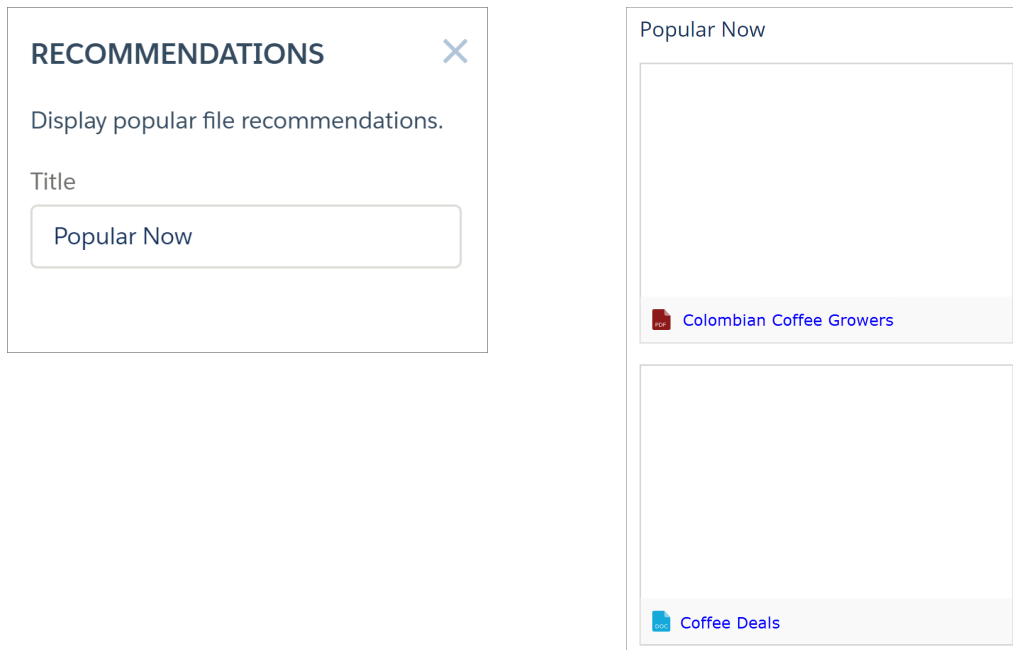
## Discover Popular Files

Use the new Recommendations component in Partner Central communities to show members which files are popular. Popularity is determined by the number of people who have recently viewed a file and whether the file includes text and is in a library.

 **Note:** We renamed the old Recommendations component to Recommendations Carousel. Recommendations Carousel continues providing your Customer Service (Napili) and Partner Central communities with custom recommendations and system-generated topic recommendations.

In Community Builder, the Recommendations component appears by default on the Resources page. You can customize the component title in the property editor.

 **Example:** Sample Recommendations component in the property editor and in the community



## Use Path on Contracts, Orders, Quotes, and Custom Objects

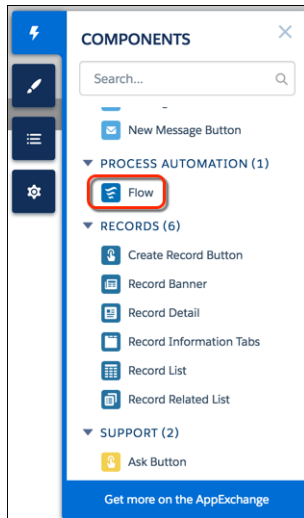
Path guides your users along the steps in a process, such as working an opportunity from a fresh lead to a successfully closed deal. Now you can use the Path component on contracts, orders, quotes, and custom objects in communities, in addition to its availability on leads and opportunities.

## Embed Flows in Lightning Community Pages

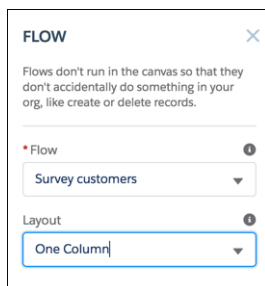
Flows automate business processes to collect, update, edit, and create Salesforce information. With the Flow component in Community Builder, you can now add flows to your pages. Add the Flow component to your community pages just like any other component.

To use a flow in your community, first define it in the Cloud Flow Designer and then activate it. Add the Flow component to a page in your community and configure it to reference the flow.

1. Drag the Flow component into position on your community page.

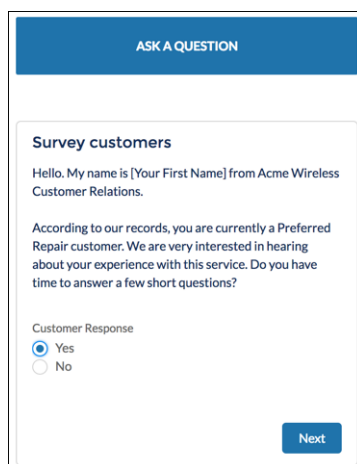


2. In the property editor, select the flow you want to use.



Your flow might need the ID of the record that it's operating on. When you configure the Flow component for a record page, you can identify to which Text variable to pass the record ID.

Here's a flow called Survey customers in a community.



Users can't resume paused flows from Lightning communities, so we recommend removing the Pause button from flows that are distributed in Lightning communities.

Flows in Lightning communities are supported only through the Lightning Flow component.

Flow creators can overwrite error messages with their own content.

SEE ALSO:

[Salesforce Help: Flow \(can be outdated or unavailable during release preview\)](#)

## Add Global Actions to Your Navigation Menu

Add global actions as one of your menu items in your community's navigation menu. When adding a new menu item, select **Global Action** from the Type drop-down menu. Then select which existing global action in your org you want to associate to the menu item. For example, if you associate the **New Case** global action to a menu item, customers can easily create a new case from the navigation menu.

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## Chatter in Lightning Communities: Rich Publisher Apps, Ask Button Enhancements, and Streams

Add your own custom payloads to discussions, give your members more options with the improved Ask Button component, and create mega-feeds with streams.

IN THIS SECTION:

[Embed Rich Publisher Apps in the Chatter Publisher \(Generally Available\)](#)

Innovation is the lifeblood of a successful organization, and customization is its tool. Now you have a way of customizing the Chatter publisher with payloads that are unique to your business process. Add a form to a post, place a useful video, add inspiration with profound quotations. With Rich Publisher Apps, the possibilities are endless. You can even package apps and upload them to AppExchange so that others can benefit from your innovations.

[Do More with the Ask Button](#)

In the Community Builder, the Ask Button component has two new options: Show topics and Show details. They give you more control over the appearance of the Ask Question dialog and give your members the best experience. This change is available in Lightning communities.

[Create Your Own Mega-Feeds with Streams](#)

Your community members can combine multiple feeds in a stream to create a single point of access to related information. Combine feeds of top contributors or discussions concerning a particular product line. Create a stream that combines feeds from discussions, groups, topics, profiles, and all kinds of objects, like cases, opportunities, and accounts. No more jumping from feed-to-feed to figure out what people are saying.

[View All Your Community Streams in Salesforce \(Pilot\)](#)

Reduce context-switching and gain seamless access to all your streams with cross-community streams. Now you have easy access to all your streams, whether internal or community-based, in your internal Salesforce org.



### [Increase the Visibility of Critical Information with Pinned Posts \(Beta\)](#)

Ensure that your most critical information gets the best exposure with post pinning. In Chatter group and topics feeds, when a member posts critical information, an authorized user can pin that post to the top of the feed. The post stays in place until an authorized user unpins it. Post pinning is available in Lightning communities.

### [Assign a Default Community to a User Profile](#)

Do you have users who access multiple communities and your internal org? When those users receive email notifications for non-networked objects, like cases, opportunities, and accounts, the new Default Community setting comes into play. Default Community controls how those notifications are branded and where notification links lead—straight to the default community. Give your record notifications context.

### [Spice Up Your Community with Emojis](#)

Emojis have arrived! Engage your audience by adding zest to your feed. When you post, comment, and add details to your questions, or when you answer questions, the emoji icon appears in the Chatter publisher. Emojis are available in Lightning communities.

### [Highlight the Best Solutions in Your Community](#)

Crowdsourcing is one of your most powerful resources. Have a question? Post it to your community and watch the information pour in. Now you can involve the entire community in estimating the value of an answer. Questions and answer enhancements are available in Lightning communities.

### [Enable Topics Suggestions Per Org and Community](#)

Topics suggestions are helpful when you want to encourage folks to add topics to their posts and questions. At the same time, having the flexibility of turning off topic suggestions is also important. We now give you the option to turn off topic suggestions for your org (contact Salesforce Customer Support) or on a community-by-community basis by enabling the **Suggest topics on new community posts** preference under **Community Name > Workspaces > Administration > Preferences**.

### [Add Topics with Hashtags in Communities](#)

You can now use hashtags to add topics in Lightning communities, rather than adding topics manually.

### [Create a Custom Report Type to See Your Top-Ranked Groups](#)

Find out which groups have the most activity in your org or communities with a new custom report type. Create the custom report type using Groups as the Primary object, and monitor your groups' rankings accordingly.

### [See How Many People Are Discussing a Topic in a Community](#)

When you add a topic to a post in a community, autocomplete results now show you how many people are discussing the topic. Enable the **Show number of people discussing suggested topics** preferences under **Community Name > Workspaces > Administration > Preferences**.

## Embed Rich Publisher Apps in the Chatter Publisher (Generally Available)

Innovation is the lifeblood of a successful organization, and customization is its tool. Now you have a way of customizing the Chatter publisher with payloads that are unique to your business process. Add a form to a post, place a useful video, add inspiration with profound quotations. With Rich Publisher Apps, the possibilities are endless. You can even package apps and upload them to AppExchange so that others can benefit from your innovations.

\* Post To  
Choose...

\* Question  
What would you like to know?

✓ Details  
If you have more to say, add details here ...

Rich Publisher Apps (circled in red)

Prime Numbers (circled in red)

Add Topic

Enter number of primes you want to attach:  Go!

Cancel Add

Cancel Ask

A community admin setting page lets you select up to five apps to show.

Administration  
Direct Messages

Settings  
Preferences  
Members  
Login & Registration  
Emails  
Pages  
Rich Publisher Apps (circled in red)

Rich Publisher Apps

Select up to five apps to extend feed capabilities in your community.

Available Apps		Selected Apps
Prime Numbers ++	>	Quotes
	<	Prime Numbers

Save

SEE ALSO:

[Metadata API Developer Guide: Integrate Your Custom Apps into the Chatter Publisher](#)

[Lightning Components Developer Guide: ChatterExtension](#)

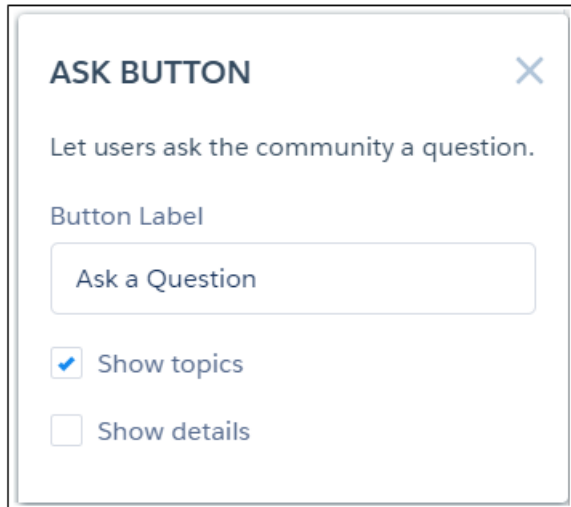
[Lightning Components Developer Guide: lightning:availableForChatterExtensionComposer](#)

[Metadata API Developer Guide: lightning:availableForChatterExtensionRenderer](#)

[Lightning Components Developer Guide: lightning:sendChatterExtensionPayload](#)

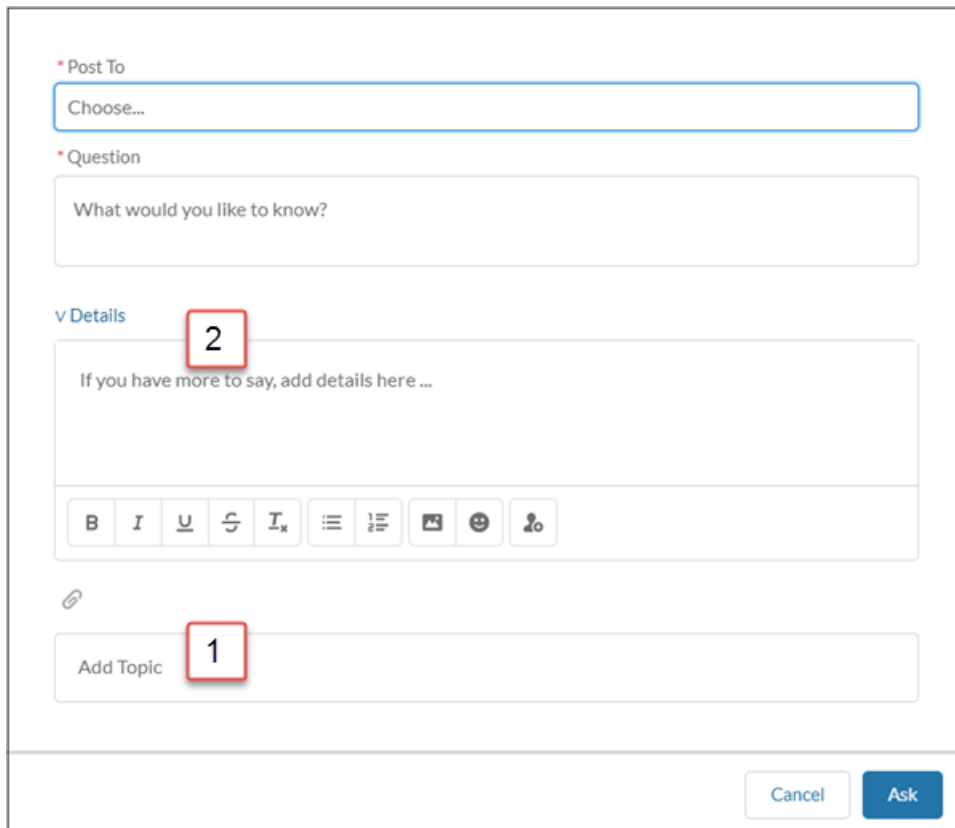
## Do More with the Ask Button

In the Community Builder, the Ask Button component has two new options: Show topics and Show details. They give you more control over the appearance of the Ask Question dialog and give your members the best experience. This change is available in Lightning communities.



The screenshot shows a configuration dialog titled "ASK BUTTON" with a close button (X) in the top right corner. Below the title is the instruction "Let users ask the community a question." followed by a "Button Label" section with a text input field containing "Ask a Question". At the bottom, there are two checkboxes: "Show topics" which is checked, and "Show details" which is unchecked.

**Show topics** controls whether the Add Topic field appears below the question's Details section (1).



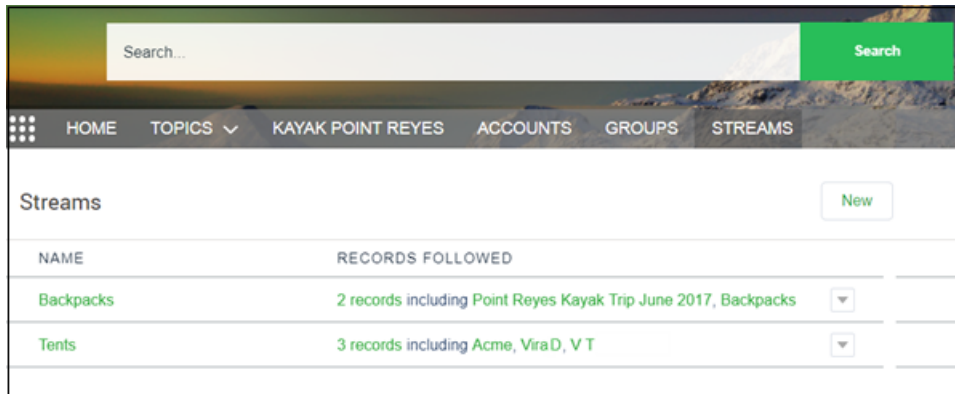
The screenshot shows the "Ask Question" dialog. It includes a "Post To" dropdown menu, a "Question" text area with the placeholder "What would you like to know?", and a "Details" section with a collapse/expand arrow and the text "If you have more to say, add details here ...". Below the details section is a rich text editor toolbar. At the bottom, there is an "Add Topic" field with a red box labeled "1" next to it, and "Cancel" and "Ask" buttons at the bottom right. A red box labeled "2" is placed over the collapse/expand arrow in the Details section.

**Show details** controls whether the dialog's Details section (2) is collapsed or expanded when the dialog opens. If you choose to collapse Details by default, your members can click the arrow to the left of Details to expand the section.

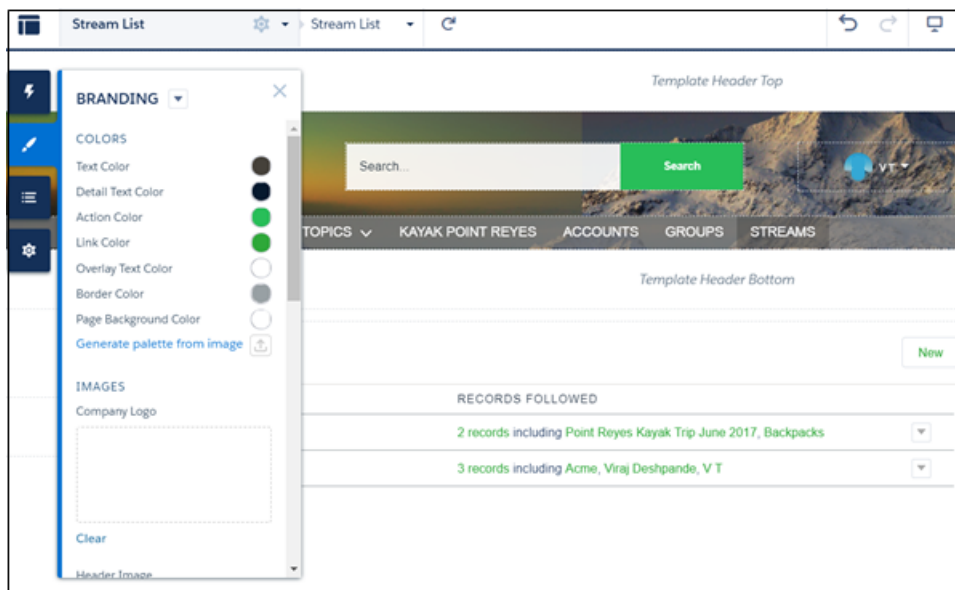
## Create Your Own Mega-Feeds with Streams

Your community members can combine multiple feeds in a stream to create a single point of access to related information. Combine feeds of top contributors or discussions concerning a particular product line. Create a stream that combines feeds from discussions, groups, topics, profiles, and all kinds of objects, like cases, opportunities, and accounts. No more jumping from feed-to-feed to figure out what people are saying.

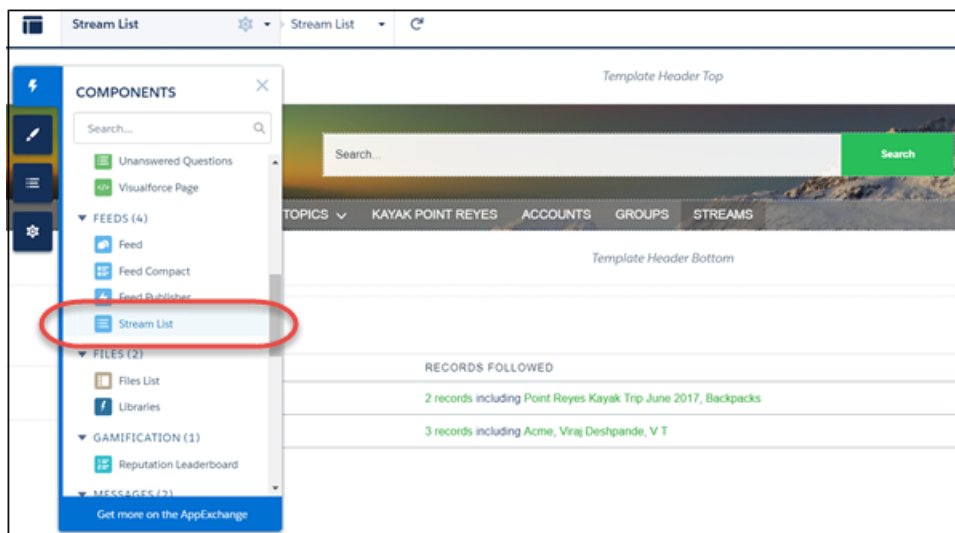
Each community member can create up to 100 streams.



Make streams available to your members by adding the Stream List page and then adding a link to it the navigation bar. You can even add your community's branding.



If you accidentally remove vital components when working with the Stream List or Stream Detail page in the Community Builder, no worries. Stream List and Stream Detail components are available in the Community Builder to back you up.



SEE ALSO:

[View All Your Community Streams in Salesforce \(Pilot\)](#)

## View All Your Community Streams in Salesforce (Pilot)

Reduce context-switching and gain seamless access to all your streams with cross-community streams. Now you have easy access to all your streams, whether internal or community-based, in your internal Salesforce org.



**Note:** We provide cross-community streams to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Cross-community streams aren't generally available unless or until Salesforce announces their general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for cross-community streams in the [Trailblazer Community](#).

## Pilot Limitations

When viewing a community stream in Salesforce, you can comment on posts, edit them, and like and unlike them. However, there are a few actions you can't take yet.

- Attach files
- Share a post
- Use up and down voting or company verifying
- Jump from an @mention to the community discussion where it appears.
- Drill to a feed item detail


[Chatter REST API](#) and [Chatter in Apex](#) support cross-community streams.

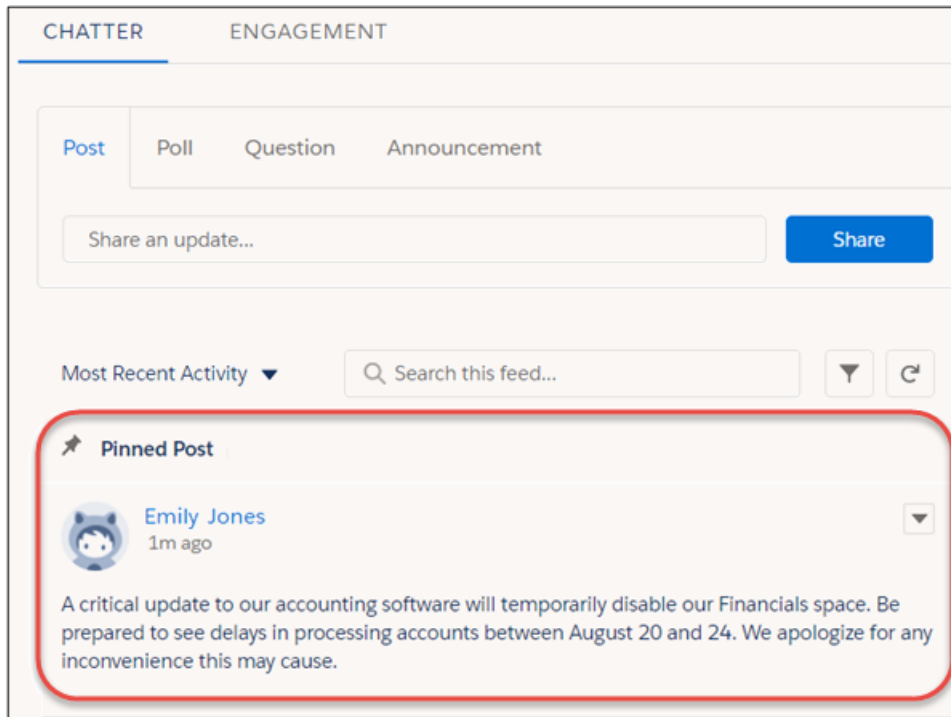
SEE ALSO:

[Create Your Own Mega-Feeds with Streams](#)

## Increase the Visibility of Critical Information with Pinned Posts (Beta)

Ensure that your most critical information gets the best exposure with post pinning. In Chatter group and topics feeds, when a member posts critical information, an authorized user can pin that post to the top of the feed. The post stays in place until an authorized user unpins it. Post pinning is available in Lightning communities.

 **Note:** This release contains a beta version of pinned posts, which means it's a high-quality feature with known limitations. Post pinning isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for pinned posts in the [Trailblazer Community](#).



Admins, community managers, and group owners or managers can pin posts. Admins can also assign pinning permission. Enable Pin Posts in Feeds for your org and then assign the Pin Posts in Feeds permission to selected users.

Pinned posts are similar to announcements with these differences.

- Announcements are available only to group feeds. Post pinning is available to group and topics feeds.
- Announcements follow a linear timeline: you post it and you let it expire; pinned posts are more flexible: you can mine your feed and pin posts from the past or the present.
- A wider range of authorized users can pin.
- You can add style to a pinned post with the rich text editor.
- An announcement expires on a set date. A pinned post stays pinned until an authorized user unpins it.

### Beta Limitations

In the beta version, there's no way to select a post to pin through the compact feed user interface.

[Chatter REST API](#) and [Chatter in Apex](#) support pinned posts.

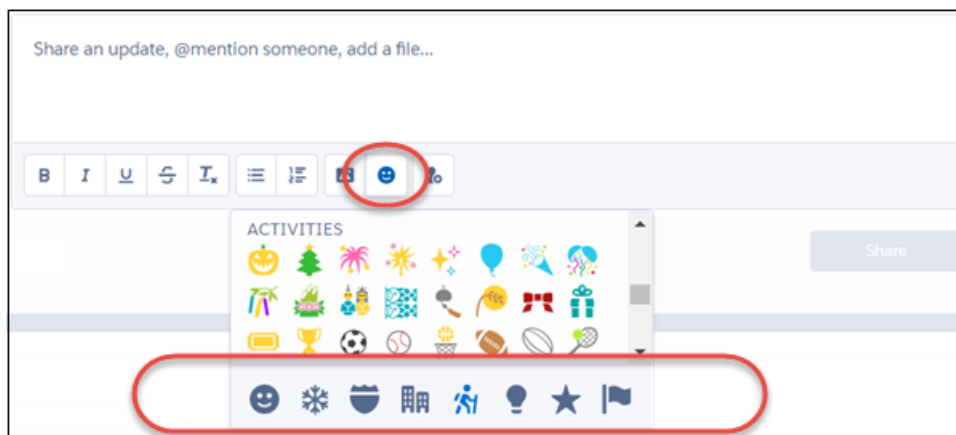
## Assign a Default Community to a User Profile

Do you have users who access multiple communities and your internal org? When those users receive email notifications for non-networked objects, like cases, opportunities, and accounts, the new Default Community setting comes into play. Default Community controls how those notifications are branded and where notification links lead—straight to the default community. Give your record notifications context.

The Default Community setting is available in Setup under User Profiles.


## Spice Up Your Community with Emojis

Emojis have arrived! Engage your audience by adding zest to your feed. When you post, comment, and add details to your questions, or when you answer questions, the emoji icon appears in the Chatter publisher. Emojis are available in Lightning communities.



Click the icons at the bottom of the emoji selector to change categories. Or, with your cursor in the selector, tab from category to category, and use your keyboard to navigate and select.

Even in business, there's a place for evil pumpkin heads!

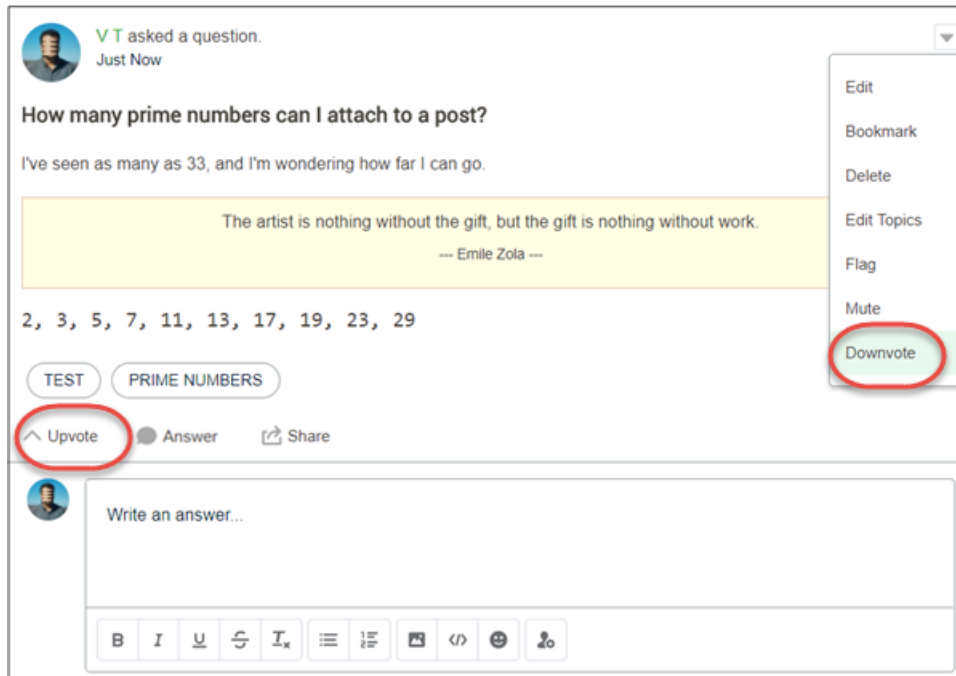
 **Note:** The emojis in your emoji selector come from your host operating system's default font. Some operating systems have paid more attention to fun than others. If you're looking at your emojis and wondering "Why so drab, my darlings?" go to [emojipedia.org](http://emojipedia.org) and check out the emojis that each OS provides.


## Highlight the Best Solutions in Your Community

Crowdsourcing is one of your most powerful resources. Have a question? Post it to your community and watch the information pour in. Now you can involve the entire community in estimating the value of an answer. Questions and answer enhancements are available in Lightning communities.

Respond to answers in three ways.

Use up and down voting instead of liking to get your community involved in estimating the worth of an answer. Anyone in the community can vote. Upvoting is available below the question or answer, while Downvote appears on the question or answer's overflow menu. Up and down voting is new in this release.



 **Note:** Unlike liking, up and downvotes don't count towards a user's leader board score.

Use Select as Best to indicate that an answer provided the solution, information, or confirmation that you needed. Only the person who posted the question, your moderator, or the Salesforce admin can select an answer as Best. And they can select only one best answer per question.

Company Verified is another new option. As an admin, you can assign permission to select members to mark the answer that best represents what your company recommends. Only members with permission can put your company's stamp of approval on an answer. Admins have this permission by default.

Answers that are company verified or selected as best rise to the top of the thread in a Top Rated Answers section.



VT asked a question.  
July 28, 2017 at 3:20 PM

**How many prime numbers can I attach to a post?**

I've seen as many as 33, and I'm wondering how far I can go.

The artist is nothing without the gift, but the gift is nothing without work.  
--- Emile Zola ---

2, 3, 5, 7, 11, 13, 17, 19, 23, 29

TEST PRIME NUMBERS

Upvote Answer Share 3 answers · 5 views

Top Rated Answers

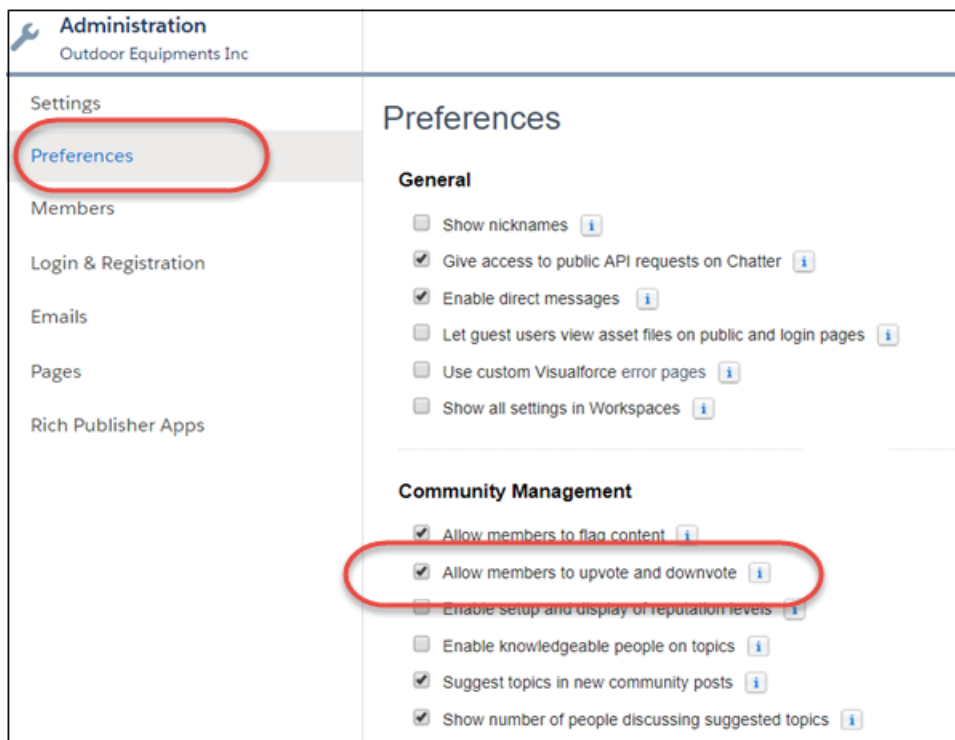
VT  
You can enter as many prime numbers as there are.  
Company Verified · Upvote · Select as Best · July 28, 2017 at 3:27 PM

VT  
For the right price, I can get you as many as you require.  
Selected as Best · Upvote · Remove as Best · July 28, 2017 at 3:30 PM

All Answers

New preferences and permissions are available for switching from liking to up-and-down voting and for giving members the ability to mark an answer as company verified.

Under your community's general preferences, select **Allow members to upvote and downvote** to replace Like.



Assign the permission **Verify Answers to Chatter Questions** to user profiles or permission sets. Then assign the profile or permission set to the members you choose.

[Chatter REST API](#) and [Chatter in Apex](#) support up and downvoting and answer verification.

## Enable Topics Suggestions Per Org and Community

Topics suggestions are helpful when you want to encourage folks to add topics to their posts and questions. At the same time, having the flexibility of turning off topic suggestions is also important. We now give you the option to turn off topic suggestions for your org (contact Salesforce Customer Support) or on a community-by-community basis by enabling the **Suggest topics on new community posts** preference under **Community Name > Workspaces > Administration > Preferences**.

## Add Topics with Hashtags in Communities

You can now use hashtags to add topics in Lightning communities, rather than adding topics manually.

## Create a Custom Report Type to See Your Top-Ranked Groups

Find out which groups have the most activity in your org or communities with a new custom report type. Create the custom report type using Groups as the Primary object, and monitor your groups' rankings accordingly.

A group's ranking is based on its posts, comments, and likes. Salesforce tallies the count once a week on Sundays and updates the rankings accordingly. Because the rankings are calculated weekly, this feature is available one week after the Winter '18 release.

## See How Many People Are Discussing a Topic in a Community

When you add a topic to a post in a community, autocomplete results now show you how many people are discussing the topic. Enable the **Show number of people discussing suggested topics** preferences under **Community Name > Workspaces > Administration > Preferences**.

## Files in Lightning Communities: External Files, Libraries in Tile View, and Folders in Libraries

Access external files in your Lightning communities using Files Connect, use tile view to browse libraries, and create, move, and delete folders within libraries.

### IN THIS SECTION:

#### [Get External Files in Communities](#)

Your external files are vital content resources, so naturally you want access to them from your community. Previously only available in Salesforce Tabs + Visualforce communities, you can now access external files in your Lightning communities using Files Connect. Access files from Quip, Google Drive, SharePoint, Box, and OneDrive for Business.

#### [Let Libraries and Folders Strut Their Stuff in Tile View \(Beta\)](#)

Your libraries are invaluable, so why not make them more dazzling? Now your users can toggle their libraries to a tile view and see their files displayed in a grid. Drill down inside libraries and folders, and your files display as thumbnails, making it easy to spot that colorful spreadsheet or perfect photo. This feature is available in Lightning communities.

#### [Organize Your Libraries in Communities](#)

In Communities, library managers can now create, rename, and delete folders in libraries, and move files between folders in a library. You can create multiple levels of subfolders. All users who have access to a library can see the folders.

#### [Let Partners Create Content Deliveries and Public Links to Files](#)

Partners can share community files with customers, leads, and colleagues using content deliveries and public links. Both tools create encrypted URLs to share web-based versions of files. Content deliveries provide additional security and tracking features.

#### [Create Custom File Preview Components](#)

A new Lightning component, Files Preview, makes it easy for your users to preview and take quick action on files. The Files Preview component displays a preview of the file with file actions clearly labeled across the top. When a file can't be previewed, the preview shows an icon of the file's type.

#### [Improve the Upload Experience with the File Upload Component](#)

The new File Upload component lets you embed the functionality of the file selector and file uploader in your custom components. Developers can display the "Upload Files or Drop Files" button and specify the file types that can be uploaded to records. Users can add multiple files at once using the upload button or drag and drop. Users can view file upload progress and get a confirmation message when all files are uploaded.

#### [Keep Files on Records Private](#)

Attach a file to a record and keep it private, or share it with select individuals or groups. Previously, all files on records were visible to everyone with access to the record. Now you can choose who sees your file.

#### [Create and Collaborate on Documents in Salesforce with Quip](#)

Quip lets you create, share, and collaborate on documents and spreadsheets in Salesforce. No need for an external file provider. In Lightning Experience, use the Quip component on records to create new Quip documents and work with existing ones. Work with Quip documents in Chatter, Files home, and Files related lists.

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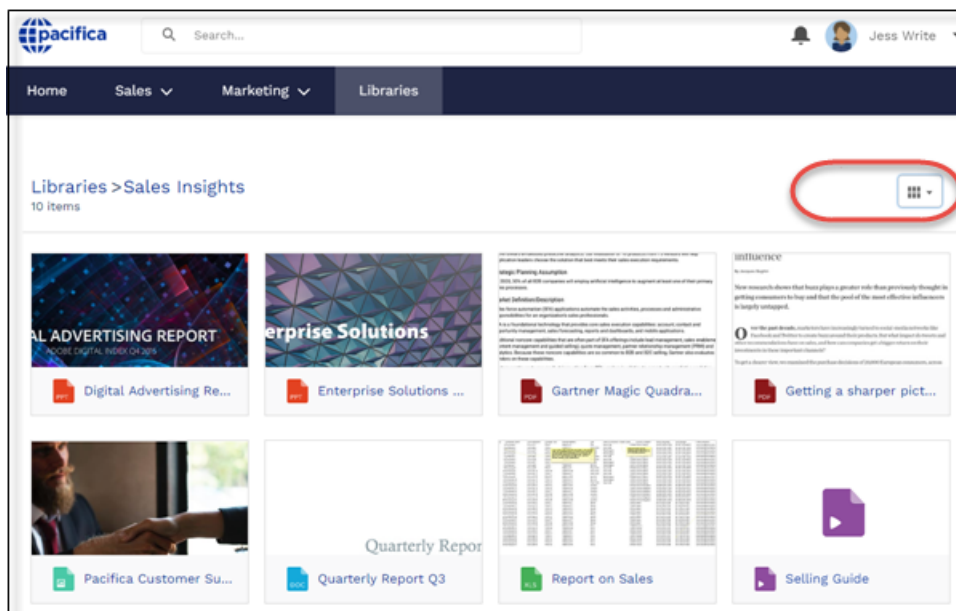
Post external file references in the Chatter feed, browse them in Files home, select them from the file selector, and see external files in search results. External files are available only to authenticated community users. Unauthenticated guest users are unable to see or access your external files, even if your system is set up to authenticate users with a named principal.

To request authentication, users can click an external source from the left, click a button to connect, and enter their login credentials.

Quip is configured with automatic domain authentication. When users click **Connect to Quip**, they're brought into the community where they can start browsing.

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Your libraries are invaluable, so why not make them more dazzling? Now your users can toggle their libraries to a tile view and see their files displayed in a grid. Drill down inside libraries and folders, and your files display as thumbnails, making it easy to spot that colorful spreadsheet or perfect photo. This feature is available in Lightning communities.



The tile view switcher is enabled by default, but you can contact Salesforce to have it disabled.



**Note:** On any page, choose the Library component or the Files list. Don't use both on the same page.



**Example:** As the manager of a partner community, you work hard to stock your community with valuable resources for your partners: the latest in presentations, marketing brochures, and product information. Now it's easier than ever for your partners to find essential resources for selling products and closing deals.

SEE ALSO:

[Analytics Einstein Discovery: More Data Access, Better Stories](#)

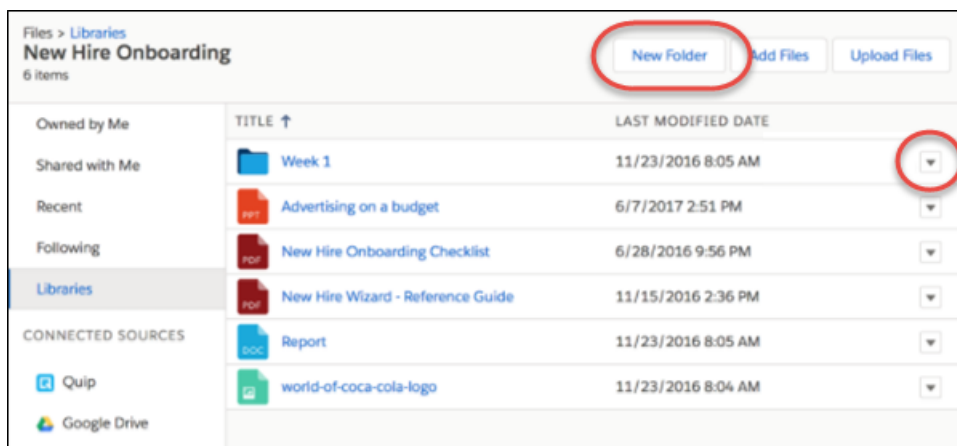
[Let Partners Create Content Deliveries and Public Links to Files](#)

[Salesforce Help: Set Up Content Deliveries \(can be outdated or unavailable during release preview\)](#)

## Organize Your Libraries in Communities

In Communities, library managers can now create, rename, and delete folders in libraries, and move files between folders in a library. You can create multiple levels of subfolders. All users who have access to a library can see the folders.

In a library, click **New Folder** to add a folder to the library or create a subfolder within a folder. To move a file among folders and subfolders within a library, click the row-level **Move** action. Depending on the size of the library, enabling folders can take a few minutes.



- In new communities, folders are enabled by default in any new libraries you create. Folders are not enabled by default in libraries in existing communities.
- You can enable folders in libraries with more than 5,000 files.

## Let Partners Create Content Deliveries and Public Links to Files

Partners can share community files with customers, leads, and colleagues using content deliveries and public links. Both tools create encrypted URLs to share web-based versions of files. Content deliveries provide additional security and tracking features.

User permissions that let partner users create content deliveries and public links are disabled by default. To enable them in profiles or create a permission set, search System Permissions for “Content Deliveries” or “Public Links”.

For partner users to create content deliveries or public links for library managed files, first search the Setup menu for “Content Deliveries and Public Links” and select **Content Deliveries and Public Links can be enabled**. Then enable **Deliver Content** for that user in the library. To let a user create public links, enable the user permissions for public links.

SEE ALSO:

[Salesforce Help: Set Up Content Deliveries \(can be outdated or unavailable during release preview\)](#)

[Salesforce Help: Share Files via Link \(can be outdated or unavailable during release preview\)](#)

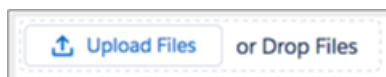
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## Improve the Upload Experience with the File Upload Component

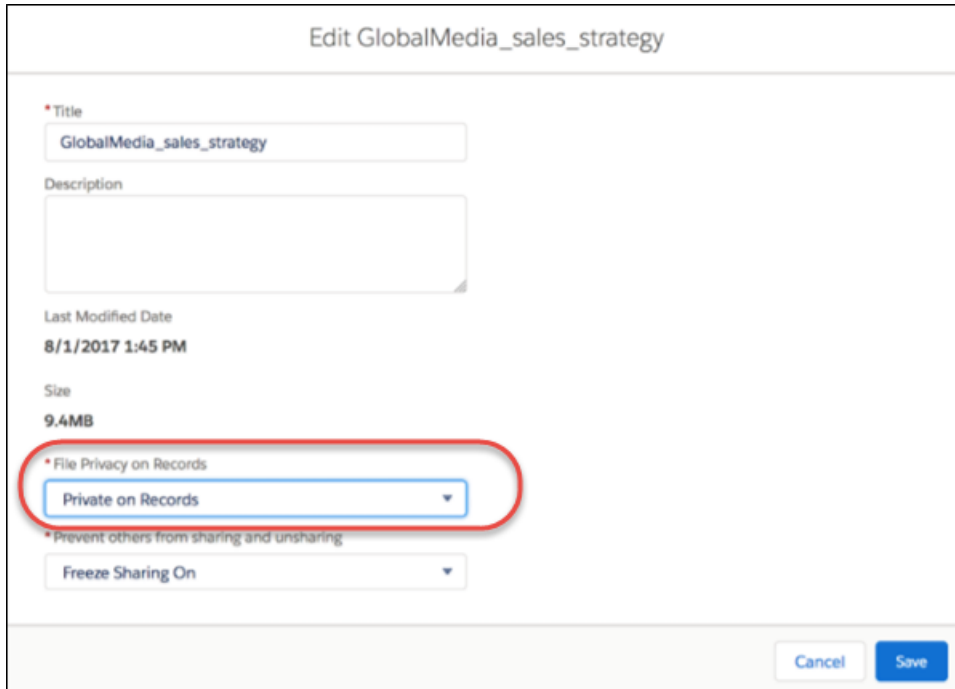
The new File Upload component lets you embed the functionality of the file selector and file uploader in your custom components. Developers can display the "Upload Files or Drop Files" button and specify the file types that can be uploaded to records. Users can add multiple files at once using the upload button or drag and drop. Users can view file upload progress and get a confirmation message when all files are uploaded.



## Keep Files on Records Private

Attach a file to a record and keep it private, or share it with select individuals or groups. Previously, all files on records were visible to everyone with access to the record. Now you can choose who sees your file.

Only file owners and administrators have the power to change the value of **File Privacy on Records**.



**Edit GlobalMedia\_sales\_strategy**

\* Title  
GlobalMedia\_sales\_strategy

Description

Last Modified Date  
8/1/2017 1:45 PM

Size  
9.4MB

\* File Privacy on Records  
Private on Records

\* Prevent others from sharing and unsharing  
Freeze Sharing On

Cancel Save

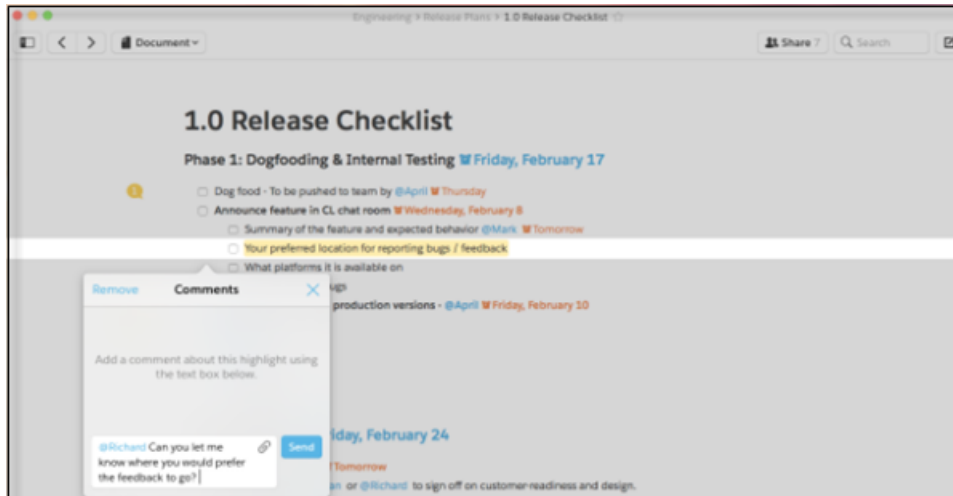
[Chatter REST API](#) supports private files on records.

SEE ALSO:

[Keep Files on Records Private](#)

## Create and Collaborate on Documents in Salesforce with Quip

Quip lets you create, share, and collaborate on documents and spreadsheets in Salesforce. No need for an external file provider. In Lightning Experience, use the Quip component on records to create new Quip documents and work with existing ones. Work with Quip documents in Chatter, Files home, and Files related lists.



SEE ALSO:

[Create and Collaborate on Quip Documents in Salesforce](#)

## Partner Relationship Management: Channel Programs and Levels, Partner Scorecards, and Market Development Funds

Provide a stepped community experience depending on the level of expertise, monitor individuals' performances with partner scorecards (beta), and manage partner budgets with market development funds.

IN THIS SECTION:

[Manage Partners with Channel Programs and Levels](#)

Are you running multiple channel programs with resellers, VARs, distributors, and MSPs that are distributed across geographies? Then take advantage of Channel Programs and Levels to organize channel partners and provide access to resources and features based on the partner's program level. Within each program, you can group partners into levels, such as bronze, silver, and gold, and promote them based on performance.

[Boost Your Partners' Exposure with Market Development Funds](#)

Drive demand for your products and provide incentives to partners by offering market development funds as part of your channel marketing program. Create marketing budgets, allocate marketing funds or co-op (accrued) funds to channel partners, streamline fund requests, and process fund claims using Market Development Fund (MDF) features. Channel account managers can get a full audit of MDF activity, including fund requests and claims approval.

[Take the Easy Path and Use Guided Setup to Configure Features](#)

Not sure how to set up features for your community? Guided setup walks you through setting up visibility, processes, workflows, record types, layouts, and assignment rules for features that optimize your partner community. From start to finish, guided setup leads you on your journey to greatness.

[Monitor Performance with Partner Scorecards \(Beta\)](#)

Empower your channel account managers (CAMs) to measure individuals' performances and establish benchmarks for their channel programs using partner scorecards. You can customize partner scorecards to display any report summary results that your CAM or executive team wants to see.



Create Partner Campaigns Using Distributed Marketing (Pilot)

Install Distributed Marketing from AppExchange and create campaigns from your Partner Central community using Journey Builder. Channel partners can preview and personalize Journey Builder email messages and add leads and contacts to their campaign journey.

Manage Partners with Channel Programs and Levels

Are you running multiple channel programs with resellers, VARs, distributors, and MSPs that are distributed across geographies? Then take advantage of Channel Programs and Levels to organize channel partners and provide access to resources and features based on the partner’s program level. Within each program, you can group partners into levels, such as bronze, silver, and gold, and promote them based on performance.

Let’s say you have a channel partner in the Pacific Northwest selling one of your products. You want to make sure that they are on top of their local market and aware of opportunities to increase brand awareness. Use Programs and Levels to manage the team. First, create a program that provides partners access to leads within their region, local marketing events, and shared resources. If more partner accounts join the team, you can add them to the channel partner program at any point.

Channel Program Members (2)	
ACCOUNT	CHANNEL PROGRAM LEVEL
Acme	
CTW Resellers	Bronze

Now that you have your users with the program, motivate them to meet KPIs. This stage is where levels come into play. You can create multiple levels within a program and assign each partner account to a level based on performance. Different levels can offer different incentives. For example, the Gold level can provide access to market development funds, which can be used to help the partner make more sales.

CHANNEL PROGRAM

North American Reseller

Category

Reseller

Active

☒

RELATED

DETAILS


Channel Program Levels (4)

New

NAME	RANK	DESCRIPTION
Bronze	1	<div></div>
Gold	2	<div></div>
Silver	2	<div></div>
Platinum	3	<div></div>

You can track individual performance within each level using partner scorecards. When a partner account exceeds the level’s KPI, you can promote the partner to the next level and provide access to new program features and benefits.

Each program level is associated with a channel group. You can automatically maintain channel group membership for partners joining or leaving the program. You can easily manage promotions or demotions within levels. You can manage access for partners in programs and levels using groups, sharing rules, public queues, list views, and folders.

 **Tip:** You can create a Channel Management app and add a channel program tab, making it easy for channel account managers to manage programs, levels, and membership. You can also add the Channel Program Member related list to your Account page layouts. Channel Program objects are available via apps in Lightning Experience.

## SEE ALSO:

[Boost Your Partners' Exposure with Market Development Funds](#)

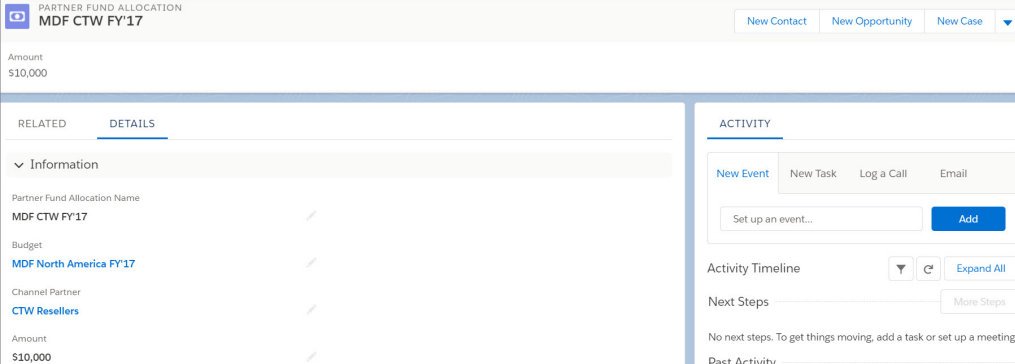
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Drive demand for your products and provide incentives to partners by offering market development funds as part of your channel marketing program. Create marketing budgets, allocate marketing funds or co-op (accrued) funds to channel partners, streamline fund requests, and process fund claims using Market Development Fund (MDF) features. Channel account managers can get a full audit of MDF activity, including fund requests and claims approval.

The MDF reports, available in the guided setup, make it easy to understand partner adoption, funds usage, and marketing ROI. MDF is available out-of-the-box for partner communities.


Channel account managers can allocate funds for promoting brand awareness and boosting sales.



Partners can request funds and submit claims. Channel account managers can efficiently process requests and claims with the help of approval workflows.

Channel account managers and finance departments can track adoption and fund usage with MDF reports.

Market Development objects are also available via apps in Lightning Experience.

 **Tip:** Need help setting up Market Development Funds? Go to **Community Workspaces > Guided Setup**, and click **Market Development Fund**. We walk you through the process.

## SEE ALSO:

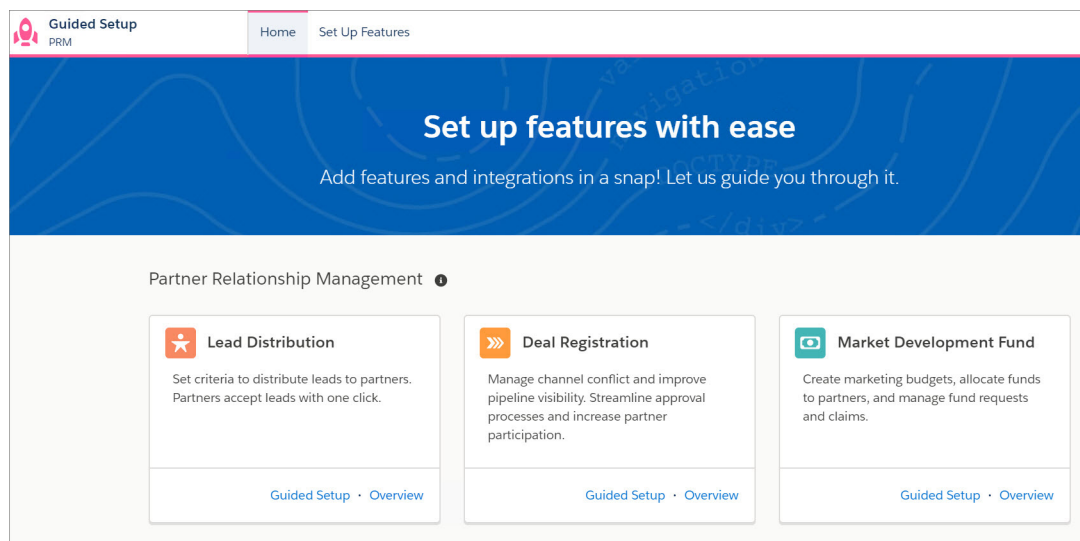
[Provide Partners with Market Development Funds](#)

[Manage Partners with Channel Programs and Levels](#)

## Take the Easy Path and Use Guided Setup to Configure Features

Not sure how to set up features for your community? Guided setup walks you through setting up visibility, processes, workflows, record types, layouts, and assignment rules for features that optimize your partner community. From start to finish, guided setup leads you on your journey to greatness.

As long as you have a Partner license, you can access Guided Setup from Community Workspaces. Click the Guided Setup tile, and select which feature you want to set up and start your stroll.



### IN THIS SECTION:

#### [Let Partners Register Their Own Deals](#)

It's quick to configure deal registration for your partners with Guided Setup. Then partners can register their own deals with the click of a button. Approval processes help channel managers approve deals in a snap and keep the sales path moving forward.

#### [Distribute Leads with Ease](#)

Make it easy for partners to accept leads from their channel account manager. And you can take it easy while setting up lead distribution. The guided setup walks you through configuring visibility, lead queues, lead processes, lead record types, assignment rules, and page layouts.

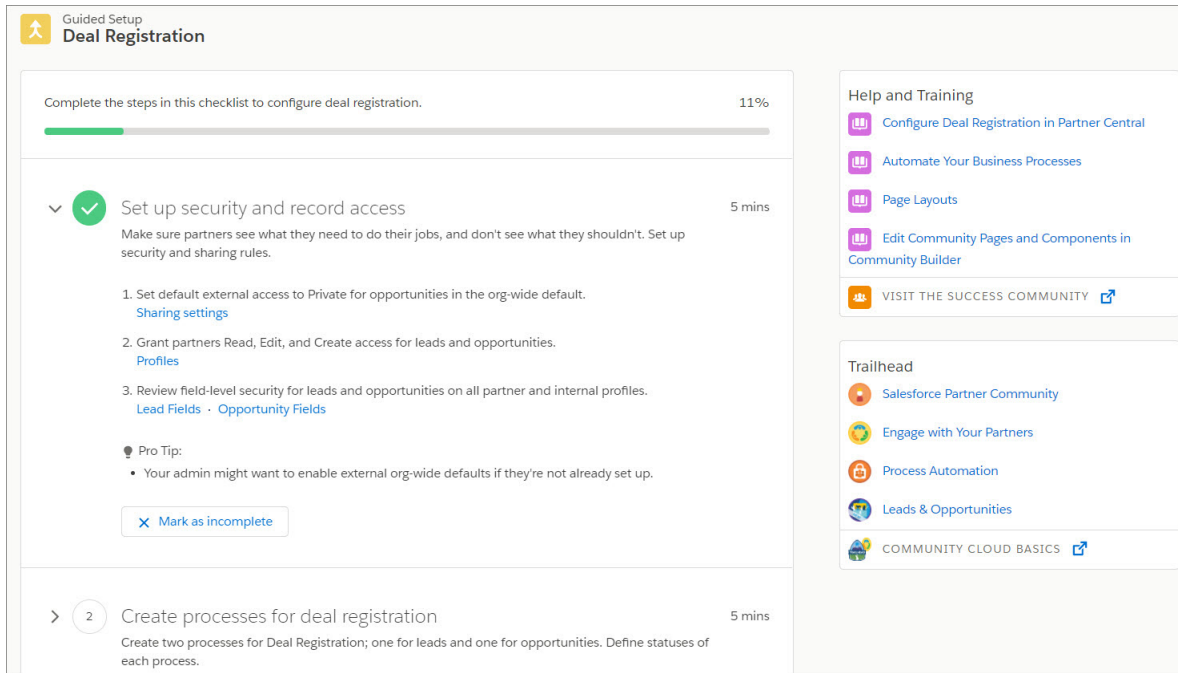
#### [Provide Partners with Market Development Funds](#)

Looking for a way to provide incentives to partners? Market Development Funds give partners financial support to run marketing campaigns that create brand awareness and drive demand for your products. With easy-to-follow steps, admins can set up permissions, optimize budget management for channel managers, and make it easy for partners to request and claim funds.

## Let Partners Register Their Own Deals

It's quick to configure deal registration for your partners with Guided Setup. Then partners can register their own deals with the click of a button. Approval processes help channel managers approve deals in a snap and keep the sales path moving forward.

Go to **Community Workspaces** > **Guided Setup**, and select **Deal Registration**. Click **Guided Setup**, and you're on your way.



After you set up deal registration, partners can register their own deals from the Deal Registration widget in their community.

## Distribute Leads with Ease

Make it easy for partners to accept leads from their channel account manager. And you can take it easy while setting up lead distribution. The guided setup walks you through configuring visibility, lead queues, lead processes, lead record types, assignment rules, and page layouts.

Go to **Community Workspaces > Guided Setup**, and select **Lead Distribution**. Click **Guided Setup**, and we guide you the rest of the way.

**Guided Setup Lead Distribution**

Configure lead distribution 13%

✓ **Set up security and visibility** 10 mins  
Make sure partners see what they need to do their jobs, and don't see what they shouldn't. Set up security and sharing rules.

1. Grant Read and Edit access to partners so that they can be assigned leads. Grant Create access as well if you want partners to create their own leads.  
[Profiles](#)
2. Review field-level security for leads for all partner and internal profiles.  
[Lead Fields](#)

[Mark as incomplete](#)

> **2 Create a lead process and set stages** 5 mins  
Create a process called Lead Distribution and define lead statuses.

> **3 Create a lead queue** 5 mins  
Use a queue to provide your partners with a shared list of leads in their lead inbox. Lead queues are

**Help and Training**

- [Configure Lead Distribution in Partner Central](#)
- [Create a Queue for Lead Distribution](#)
- [Set Up Assignment Rules](#)
- [Page Layouts](#)
- [VISIT THE SUCCESS COMMUNITY](#)

**Trailhead**

- [Engage with Your Partners](#)
- [Data Security](#)
- [Salesforce Partner Community](#)
- [Automate Your Business Processes](#)
- [COMMUNITY CLOUD BASICS](#)

After you set up lead distribution, your partners can accept leads from the lead inbox in their partner community.

## Provide Partners with Market Development Funds

Looking for a way to provide incentives to partners? Market Development Funds give partners financial support to run marketing campaigns that create brand awareness and drive demand for your products. With easy-to-follow steps, admins can set up permissions, optimize budget management for channel managers, and make it easy for partners to request and claim funds.

Go to **Community Workspaces > Guided Setup**, and select **Market Development Fund**. Click **Guided Setup**, and we take you the rest of the way.

**Guided Setup Market Development Fund**

Complete the steps in this checklist to configure market development funds. 17%

✓ **Set up your budget** 5 mins  
Give the right people access to the budget. Create workflows to streamline the approval process.

1. Create a marketing budget page layout for the channel account manager.  
[Budget Page Layouts](#)
2. Create a permission set to manage channel account manager permissions. Grant channel account managers Create, Read, and Update permissions on budgets so that they can manage budgets.  
[Permission Sets](#) · [Profiles](#)
3. Create a sharing rule that grants budget access to internal users.  
[Sharing Settings](#)
4. If an approval is required, create a workflow so that budgets can be approved by the finance department or channel manager.  
[Approval Processes](#)

**Pro Tip:**

- Use the start and end dates to define the period that the budget is active.

[Mark as incomplete](#)

> **2 Set up a fund allocation** 5 mins  
Ensure channel account managers can create and update fund allocations and have visibility into the appropriate budgets.

**Help and Training**

- [Configure Market Development Funds in Partner Central](#)
- [Automate Your Business Processes](#)
- [Profiles](#)
- [Edit Community Pages and Components in Community Builder](#)
- [VISIT THE SUCCESS COMMUNITY](#)


**Trailhead**

- [Salesforce Partner Community](#)
- [Engage with Your Partners](#)
- [Sales Guide to Working with Partners](#)
- [COMMUNITY CLOUD BASICS](#)

After you set up Market Development Funds, your channel account managers can create budgets and allocate funds. Your partners can request funds and submit claims.

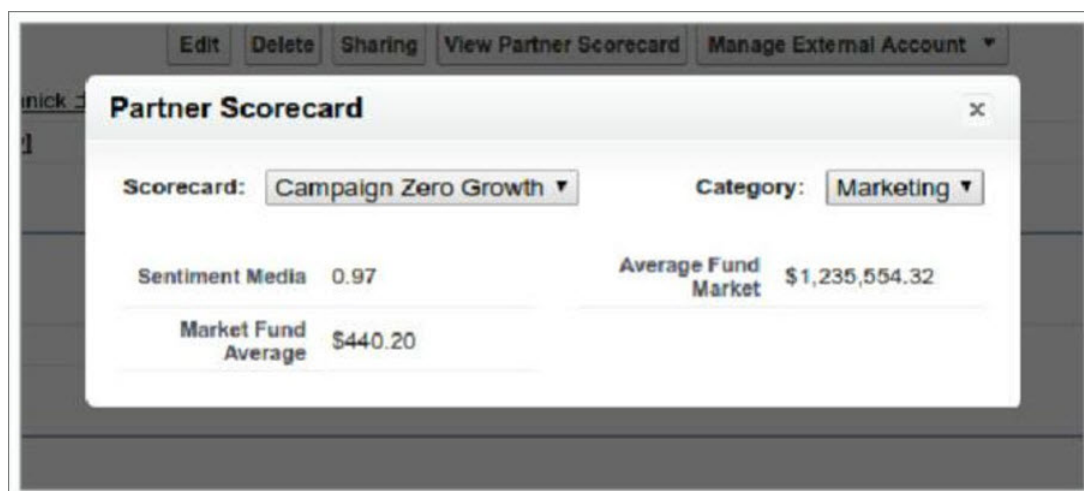
## Monitor Performance with Partner Scorecards (Beta)

Empower your channel account managers (CAMs) to measure individuals' performances and establish benchmarks for their channel programs using partner scorecards. You can customize partner scorecards to display any report summary results that your CAM or executive team wants to see.

 **Note:** This release contains a beta version of Partner Scorecards, which means it's a high-quality feature with known limitations. Partner Scorecards aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only based on generally available products and features.

Each scorecard displays admin-defined metrics that monitor partner performance based on their level within a specific program. Select which category you are tracking, and add or rearrange the metrics you want to display. Scorecards are built on top of Salesforce reports and can be added as tabs.


 **Tip:** You can use categories to group KPIs into logical buckets, like Sales, Marketing, and Field Enablement.



## Create Partner Campaigns Using Distributed Marketing (Pilot)

Install Distributed Marketing from AppExchange and create campaigns from your Partner Central community using Journey Builder. Channel partners can preview and personalize Journey Builder email messages and add leads and contacts to their campaign journey.

Let's say you've got multiple insurance brokers who are helping launch a new annuity insurance program. You want the messaging about the product to be the same for all their customers. You also want them to have some control over how messages are sent. With Distributed Marketing, you can offer a pre-configured campaign to the brokers who are marketing the new program. They have the power to personalize their messages and determine who to send them to.

 **Note:** We provide Distributed Marketing to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, so we can't guarantee acceptance. Distributed Marketing isn't generally available unless or until Salesforce announces its general availability.

in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions based on generally available products and features.

## Community Analytics: Community Pulse and Annotations

See the community stats you care about the most at the top of Workspaces and take action, plus communicate directly on dashboards.

### IN THIS SECTION:

#### [Get Your Stats Front and Center with Community Pulse](#)

You told us that you wanted to see your most important community stats in Workspaces. We heard you and present Community Pulse! Community Pulse displays up to six metrics of your choosing right at the top of Workspaces. Clicking a metric takes you to the related Moderation or Engagement report or dashboard so that you can take action or get more information.

#### [Collaborate on Analytics Dashboards with Annotations](#)

Foster an environment of open communication sparked by Analytics dashboards embedded in your community. With the annotation feature, partners and customers can converse in Chatter feeds on individual dashboard widgets.

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You told us that you wanted to see your most important community stats in Workspaces. We heard you and present Community Pulse! Community Pulse displays up to six metrics of your choosing right at the top of Workspaces. Clicking a metric takes you to the related Moderation or Engagement report or dashboard so that you can take action or get more information.

To set up Community Pulse, you must have reports and dashboards mapped to your Workspaces for a given community. You can manually create the map, but why bother? The best way to get the mapping is to install or upgrade to the Winter '18 Salesforce Community Management Package. We even include some prepopulated metrics for you to play with. The Community Management package will be available on AppExchange soon after the release.

If you have a community with Chatter, you get four Community Pulse metrics tiles with the AppExchange package: Members, New Members, Unanswered Questions, and Flagged Discussions. Click the **New Members** tile to get to the new Member Engagement queue, where you can say hello to all your new members with a few clicks.

Want to see different metrics? Community Pulse is completely customizable. No matter what kind of community you have, you can create metrics that are perfect for you. Click **Edit Metrics** to add, update, remove, and even reorder the metrics that appear in Community Pulse.

Click a Community Pulse metric to view an in-depth report or a dashboard for a broader perspective.

### SEE ALSO:


[Do It All in the Member Engagement Queue](#)

[Salesforce Help: Enable and Map Dashboards for Community Managers](#)

[Salesforce Help: Enable and Map Insights for Community Managers](#)

## Collaborate on Analytics Dashboards with Annotations

Foster an environment of open communication sparked by Analytics dashboards embedded in your community. With the annotation feature, partners and customers can converse in Chatter feeds on individual dashboard widgets.

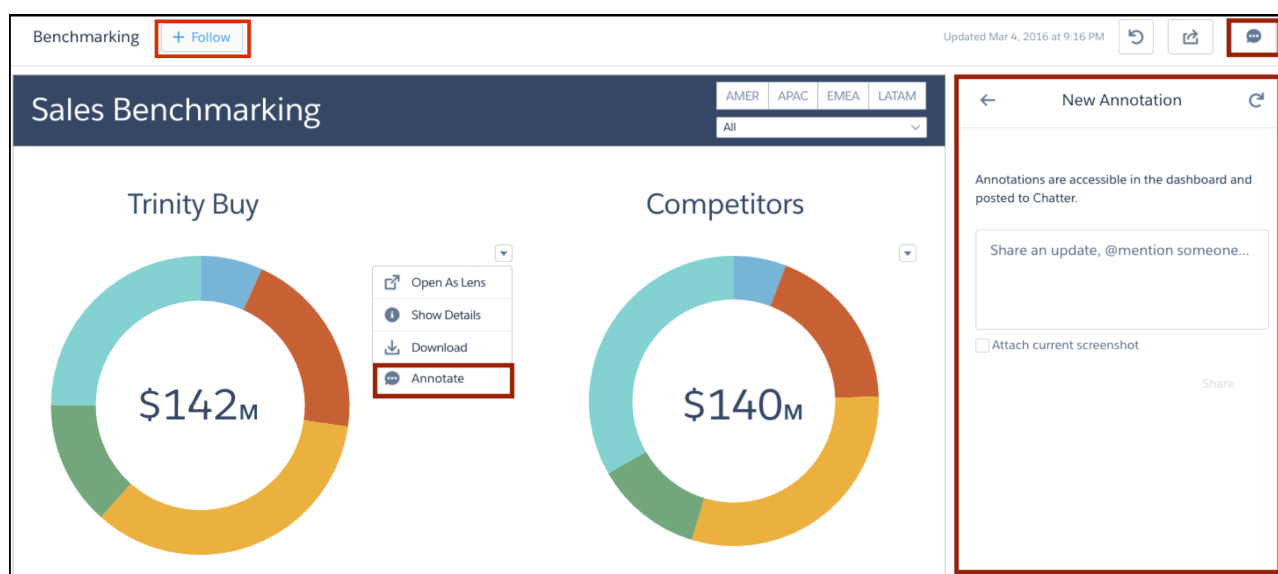
 **Note:** This feature is supported in communities, but not in portals, for users with a Customer Community Plus or Partner Community license. If you don't already have Analytics for Communities, this feature requires setup. For more information, see [Share Analytics with Communities](#).

Community users can annotate dashboard widgets with comments posted in the dashboard and in Chatter. The annotations hold users' conversations about their data and how it's visualized, with the dashboard right there for reference.

### EDITIONS

Analytics is available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

Analytics is also available in: **Developer** Edition



If users click the **Follow** button, they see all comments on the dashboard. From Chatter, they can click the dashboard image to navigate directly to the annotation on the dashboard in Analytics, where they can add to the conversation.

SEE ALSO:

[Collaborate on Dashboards with Annotations in Communities](#)

## Boost Engagement with Community Cloud and Marketing Cloud Integration (Beta)

We harnessed the power of Marketing Cloud's Journey Builder to help you reach members and turn your community into a powerful marketing channel. With Journey Builder, you can create customer journeys across email, mobile, ads, and the web. With the cloud integration, community and marketing managers can place members on rich email journeys, boosting engagement and driving activity in the community. You must have both Community and Marketing Cloud licenses to use this feature.

 **Note:** This release contains a beta version of the Community Cloud and Marketing Cloud Journey Builder Integration, which means it's a high-quality feature with known limitations. The Journey Builder Integration isn't generally available unless or until



Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Journey Builder Integration in the IdeaExchange or in the Trailblazer Community.

Let's say that you want to get new members more involved in the community. Using Journey Builder, create an onboarding journey that triggers when members join a community. It guides new members through onboarding and prompts them to become more engaged in your community by taking steps, like uploading a profile photo. And you can keep them involved by sending trending content from the community.

Are you adding lots of members, like more than 1,000? We suggest letting Journey Builder work overnight because adding members to a community is slower when triggering journeys.

You can trigger a personalized email journey with events or you can choose a specific audience. For example, you identify the community members who are not yet MVPs. Put them on a journey that invites them to become MVPs and provides the required training. Or start a journey for customers who open a case that takes them through the support process. One of the best things about a journey is that it's smart. It can look at a user's status and send appropriate emails at appropriate intervals.

To get started, make sure that you have Marketing Cloud Connect set up so that the two clouds can work together. After that, it's all Journey Builder work to create the emails and journeys and specify the events or criteria that trigger them. Check out the See Also links for specifics on how to get rolling.

### Beta Considerations

If you have Communities and Marketing Cloud, the integration is designed to work together. However, we recommend contacting us and becoming an official beta tester. The advantages are:

- We can turn on an org permission that provides additional email preference capabilities.
- We can provide advice and guidance.
- We can get your feedback and suggestions.

### SEE ALSO:

[Salesforce Help: Connect the Clouds](#)

[Salesforce Help: Journey Builder](#)

[Salesforce Help: Get Started With Journey Builder](#)

## Moderation: Member Engagement Queue and More Workspaces

Find new and improved queues to make life easier and explore a quick way to check out Workspaces.

### IN THIS SECTION:

#### [Do It All in the Member Engagement Queue](#)

You asked us for a better way to find community members and easily communicate with them. And we worked on it. With the new Member Engagement queue, you can sort your members, check out who's posting and what their reputation score is, see who has a profile photo, create filters, view member details, and more!

#### [Pending Discussion Queue Is Cleaner and More Robust](#)

We revamped the Pending Discussion Queue to make it easier to moderate communities. Its streamlined look is built on Lightning technology. But we didn't stop with pretty. We added bulk actions for discussions and new sorting capabilities. We also added a member detail panel so that you can get the information you need without leaving the page.

### [Switch to Workspaces and Do More with Communities](#)

Now when you go to the Community Management Console, a banner prompts you to switch to Workspaces. Don't give it a second thought, because everything you can do in the console you can do in Workspaces, and more. Workspaces is where all the new features are hanging out, and the only place to use them. Intrigued but not quite sure about committing? We've got you covered. You can always switch back in Community Settings.

## Do It All in the Member Engagement Queue

You asked us for a better way to find community members and easily communicate with them. And we worked on it. With the new Member Engagement queue, you can sort your members, check out who's posting and what their reputation score is, see who has a profile photo, create filters, view member details, and more!

Ever wanted to greet your new members weekly with a friendly post on their profile? This feature makes it easy to do just that. After you've narrowed down your search to a certain list of users, post directly to members' profiles or send a direct message. (Direct messaging is available only in Lightning Experience communities). Click a member's name to bring up the member details panel and create your post. With one click, your note posts on the member's page.

If your community is so big that contacting members is difficult even with the new Member Engagement queue, check out the Community Cloud and Marketing Cloud Integration and Journey Builder.

The Member Engagement queue requires the Winter '18 Salesforce Community Management Package. The Winter '18 package will be available on the AppExchange package soon after the release.

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**Note:** In Spring '18, some of you are moving to Workspaces anyway, but why wait? Check it out now.

## Other Changes in Communities

Learn about smaller changes that improve your experience with Communities.

### IN THIS SECTION:

#### [Move Communities More Easily with Enhanced Change Sets Support](#)

We improved change sets support for Communities, so there's less to configure after you move a community between orgs that have a deployment connection.

#### [Manage External Community Users in Lightning Experience](#)

No more switching between Lightning Experience and Salesforce Classic to manage external community members. From within Lightning Experience, you can create and disable partner and customer accounts and users and log in as a community user.

### [Use More Objects in Communities](#)

You can now use contracts, orders, price books, and quotes in your communities and portals.

### [Create Communities in Enterprise, Performance, and Unlimited Editions—Even Without Communities Licenses](#)

In Enterprise, Performance, and Unlimited orgs, you can create up to 100 communities using the Customer Service (Napili), Customer Account Portal, Salesforce Tabs + Visualforce, or the Aloha templates without buying communities licenses. To create communities using Partner Central, you need to purchase Partner Community licenses. To start creating your community, first enable Communities in your org. Your newly created community has limited access for guest users without licenses. Purchase Community Cloud licenses to allow members to log in, give access to Salesforce objects, or use more page views, based on your business needs.

### [SEO-Friendly URLs for Case, Dashboard, Group, and Report Detail Pages](#)

Last release, we introduced SEO-friendly URL redirects for most object detail pages, but Case, Dashboard, Group, and Report missed out on the fun. Well, their party time starts now!

### [Article URLs No Longer Include the Record ID](#)

To improve your community's SEO ranking, the record ID is no longer included in article URLs. Each time an article is republished, its record ID is also updated. By previously including the record ID in the URL, a new URL was created for the existing article whenever it was updated. To search engines, it appeared to be a new page each time, which hurt SEO ranking.

### [Customize Your Community's Login Experience Based on the User](#)

You now have more control over your users' experience when they log in to your community. Want your logo to change on the login page depending on whether the user is an employee or customer? Or how about displaying a particular self-registration page based on the user's country code. Your branding changes dynamically according to who logs in and from where.

### [Show or Hide the Title of the Top Articles by Topic Component](#)

To show or hide the title, select **Show title** in the component's property editor. Previously, the title showed only in column widths wider than 300 pixels.

### [External Community Moderators Can See Group Information](#)

Having someone outside your org moderate your community is a great way to free up resources, but not if the moderator can't see critical community reports. So we fixed that. Now external users with moderator permissions can see reports and information about the groups and communities they belong to.

### [Reports Open on the Page You're On](#)

Before, clicking a report opened a new tab and took you away from where you were working. Not anymore. Now reports open in the same page with a link to go back to the dashboard, keeping that tab count to a manageable minimum.

## Move Communities More Easily with Enhanced Change Sets Support

We improved change sets support for Communities, so there's less to configure after you move a community between orgs that have a deployment connection.

Change sets now support these additional Community Workspace (or Community Management) settings:

- All settings in the Administration workspace, apart from:
  - The Account field in the Registration section of the Login and Registration area
  - The Settings area
  - The Rich Publisher Apps area
- All settings in the Moderation workspace
- All Recommendations and Audiences settings in the Content Targeting workspace. However, recommendation images are excluded.



**Tip:** Still using Community Management instead of Community Workspaces? [Make the switch](#) and take advantage of several new features.

SEE ALSO:

[Salesforce Help: Considerations for Migrating Communities with Change Sets \(can be outdated or unavailable during release preview\)](#)

## Manage External Community Users in Lightning Experience

No more switching between Lightning Experience and Salesforce Classic to manage external community members. From within Lightning Experience, you can create and disable partner and customer accounts and users and log in as a community user.

Good news! All actions that you can take on a person account in Salesforce Classic are available in Lightning Experience.

And the fun doesn't stop there. All login actions that are available in Salesforce Classic can also be performed in Lightning Experience.

## Use More Objects in Communities

You can now use contracts, orders, price books, and quotes in your communities and portals.

## Create Communities in Enterprise, Performance, and Unlimited Editions—Even Without Communities Licenses

In Enterprise, Performance, and Unlimited orgs, you can create up to 100 communities using the Customer Service (Napili), Customer Account Portal, Salesforce Tabs + Visualforce, or the Aloha templates without buying communities licenses. To create communities using Partner Central, you need to purchase Partner Community licenses. To start creating your community, first enable Communities in your org. Your newly created community has limited access for guest users without licenses. Purchase Community Cloud licenses to allow members to log in, give access to Salesforce objects, or use more page views, based on your business needs.

## SEO-Friendly URLs for Case, Dashboard, Group, and Report Detail Pages

Last release, we introduced SEO-friendly URL redirects for most object detail pages, but Case, Dashboard, Group, and Report missed out on the fun. Well, their party time starts now!

To create a user-readable URL for an object's detail page, we append the value of the object's Name field to the URL. For example, for AW Computing's Group Detail page, we redirect `https://mycommunity.com/s/group/001R00000002NzuaIAC` to `https://mycommunity.com/s/group/001R00000002NzuaIAC/aw-computing`.

When the Name field isn't available for an object, we use the Subject or Title fields. Otherwise, we append "detail" to the URL.



**Note:** SEO-friendly URLs aren't supported for the Streams and the User Profile detail pages. No party for those guys.

## Article URLs No Longer Include the Record ID

To improve your community's SEO ranking, the record ID is no longer included in article URLs. Each time an article is republished, its record ID is also updated. By previously including the record ID in the URL, a new URL was created for the existing article whenever it was updated. To search engines, it appeared to be a new page each time, which hurt SEO ranking.

Article URLs used to redirect to `/article/:recordId/:urlName`, but we now use the format `/article/:urlName`.

For example, `https://mycommunity.com/s/article/kavB0000007qtP7KAI/some_article` redirects to `https://mycommunity.com/s/article/some_article`.

## Customize Your Community's Login Experience Based on the User

You now have more control over your users' experience when they log in to your community. Want your logo to change on the login page depending on whether the user is an employee or customer? Or how about displaying a particular self-registration page based on the user's country code. Your branding changes dynamically according to who logs in and from where.

Default and custom Visualforce login pages support dynamic logos and dynamic right-side URLs. Lightning login pages support dynamic logos. After the user logs in to the community, the branding specified in **Administration > Branding** in Workspaces or Community Management takes over.

SEE ALSO:

[Change Your Users' Login Experience with Dynamic Branding](#)

## Show or Hide the Title of the Top Articles by Topic Component

To show or hide the title, select **Show title** in the component's property editor. Previously, the title showed only in column widths wider than 300 pixels.

## External Community Moderators Can See Group Information

Having someone outside your org moderate your community is a great way to free up resources, but not if the moderator can't see critical community reports. So we fixed that. Now external users with moderator permissions can see reports and information about the groups and communities they belong to.

## Reports Open on the Page You're On

Before, clicking a report opened a new tab and took you away from where you were working. Not anymore. Now reports open in the same page with a link to go back to the dashboard, keeping that tab count to a manageable minimum.

## Chatter: Encryption for Chatter, Pinned Posts, Top Groups, and Trailhead Theme

Encryption for Chatter is generally available and includes more fields. Pin a post to the top of a group or topics feed (beta), and discover which groups have the most activity. Groups and user profiles get a new Trailhead look.

IN THIS SECTION:

[Chatter Feeds: Encryption for Chatter, Streams, and Pinned Posts](#)

Encryption for Chatter is generally available and includes more fields than ever. Discover the ease of a single point of access by viewing your community streams along with your internal streams in your Salesforce org (pilot). Pin a critical post to the top of a group or topics feed (beta).

[Groups: Top Groups and Trailhead Theme](#)

See which groups have the most activity, and get in the Trailhead spirit with a new default banner image and avatar.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, Contact Manager**, and **Developer** Editions

[User Profiles: Trailhead Theme and Enhanced Out of Office](#)

User profiles get a new look with a Trailhead-themed default banner image, Trailhead card, default Astro image in more places, and highlighted About Me section. Out of Office is enhanced and generally available.

SEE ALSO:

[Salesforce Chatter: A New Way to Work with Windows 10](#)

## Chatter Feeds: Encryption for Chatter, Streams, and Pinned Posts

Encryption for Chatter is generally available and includes more fields than ever. Discover the ease of a single point of access by viewing your community streams along with your internal streams in your Salesforce org (pilot). Pin a critical post to the top of a group or topics feed (beta).

IN THIS SECTION:

[Increase Security with Encryption for Chatter \(Generally Available\)](#)

Mass encryption and decryption of Chatter data is now generally available. With encryption for Chatter, your company can confidently comply with privacy policies, regulatory requirements, and contractual obligations for handling Chatter data. Encrypted fields work normally throughout the Salesforce user interface, business processes, and APIs. This feature is available in Lightning Experience, Lightning communities, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

[View All Your Community Streams in Salesforce \(Pilot\)](#)

Reduce context-switching and gain seamless access to all your streams with cross-community streams. Now you have easy access to all your streams, whether internal or community-based, in your internal Salesforce org. Cross-community streams are available in Lightning Experience and Lightning communities.

[Increase the Visibility of Critical Information with Pinned Posts \(Beta\)](#)

Ensure that your most critical information gets the best exposure with post pinning. In Chatter group and topics feeds, when someone posts critical information, an authorized user can pin that post to the top of the feed. The post stays in place until an authorized user unpins it. Post pinning is available in Lightning Experience and Lightning communities.

[Spice Up Your Conversations with Emojis](#)

Emojis have arrived! Engage your audience by adding zest to your feed. When you post, comment, and add details to your questions, or when you answer questions, the emoji icon appears in the Chatter publisher. Emojis are available in Lightning Experience and Lightning communities.


[Enable Topic Suggestions For Your Org](#)

Topics suggestions are helpful when you want to encourage folks to add topics to their posts and questions. At the same time, having the flexibility of turning off topic suggestions is also key. We now give you the option to turn off topic suggestions for your org. The permission is enabled by default, so contact Salesforce Customer Support to disable topic suggestions. This change applies to both Lightning Experience and Salesforce Classic.

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Mass encryption and decryption of Chatter data is now generally available. With encryption for Chatter, your company can confidently comply with privacy policies, regulatory requirements, and contractual obligations for handling Chatter data. Encrypted fields work normally throughout the Salesforce user interface, business processes, and APIs. This feature is available in Lightning Experience, Lightning communities, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

To enable encryption for Chatter, contact support. We'll help you set it up.

 **Note:** When you encrypt a field, existing values aren't encrypted immediately. Data's encrypted as it's added and used, for example, after you add or edit field content.

What's encrypted?

- Feed posts and comments
- Feed questions and answers
- Link labels and URLs
- Feed polls and poll choices
- Content from your custom Rich Publisher Apps (new with this release)

You can't filter encrypted fields.

 **Note:** If you participated in the pilot, turn encryption for Chatter off and on again to include the new fields. Contact Salesforce for assistance with encrypting all previously created data.

SEE ALSO:


[Embed Rich Publisher Apps in the Chatter Publisher \(Generally Available\)](#)

[Salesforce Help: Strengthen Your Data's Security with Shield Platform Encryption \(can be outdated or unavailable during release preview\)](#)

[Encrypt Your Data in Chatter \(Generally Available\)](#)

## View All Your Community Streams in Salesforce (Pilot)

Reduce context-switching and gain seamless access to all your streams with cross-community streams. Now you have easy access to all your streams, whether internal or community-based, in your internal Salesforce org. Cross-community streams are available in Lightning Experience and Lightning communities.

 **Note:** We provide cross-community streams to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Cross-community streams aren't generally available unless or until Salesforce announces their general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for cross-community streams in the [Trailblazer Community](#).

### Pilot Limitations

When viewing a community stream in Salesforce, you can comment on posts, edit them, and like and unlike them. However, there are a few actions you can't take yet.

- Attach files
- Share a post
- Use up and down voting or company verifying
- Jump from an @mention to the community discussion where it appears.
- Drill to a feed item detail


[Chatter REST API](#) and [Chatter in Apex](#) support cross-community streams.

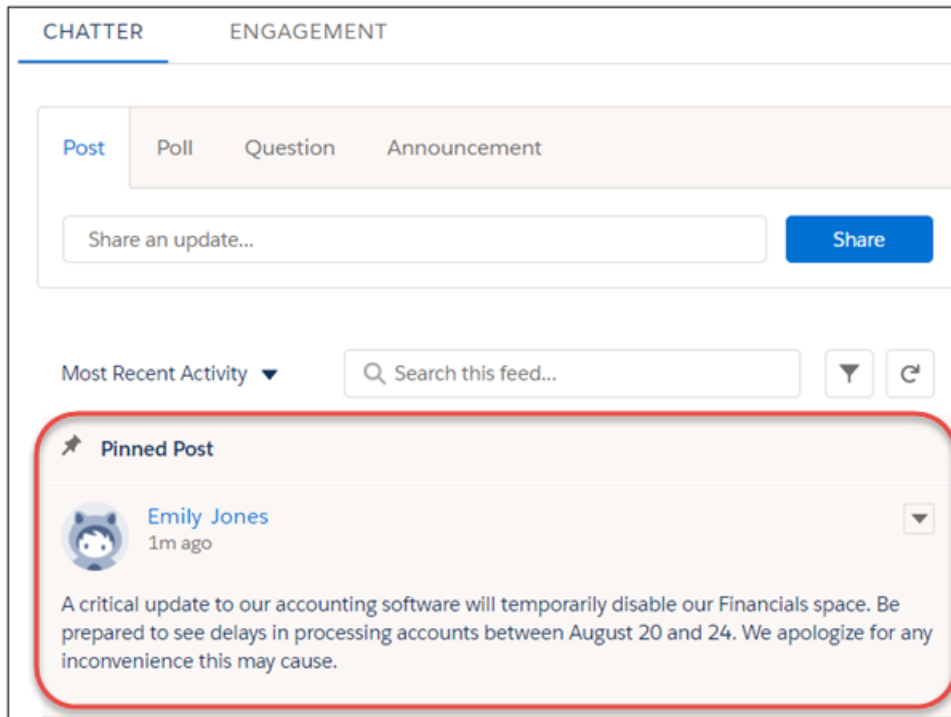
SEE ALSO:

[Create Your Own Mega-Feeds with Streams](#)

## Increase the Visibility of Critical Information with Pinned Posts (Beta)

Ensure that your most critical information gets the best exposure with post pinning. In Chatter group and topics feeds, when someone posts critical information, an authorized user can pin that post to the top of the feed. The post stays in place until an authorized user unpins it. Post pinning is available in Lightning Experience and Lightning communities.

 **Note:** This release contains a beta version of pinned posts, which means it's a high-quality feature with known limitations. Post pinning isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for pinned posts in the [Trailblazer Community](#).



Admins, community managers, and group owners or managers can pin posts. Admins can also assign pinning permission. Enable **Pin Posts in Feeds** for your org and then assign the **Pin Posts in Feeds** permission to selected users.

When you pin a post, it appears twice in the feed: where it was posted and in its pinned position at the top of the feed. You can pin only the posts that were added directly to the feed. You can't pin posts that were added through an @mention.

Pinned posts are similar to announcements with these differences.

- Announcements are available only to group feeds. Post pinning is available to group and topics feeds.
- Announcements follow a linear timeline: you post it and you let it expire; pinned posts are more flexible: you can mine your feed and pin posts from the past or the present.
- A wider range of authorized users can pin.
- You can add style to a pinned post with the rich text editor.
- An announcement expires on a set date. A pinned post stays pinned until an authorized user unpins it.

### Beta Limitations

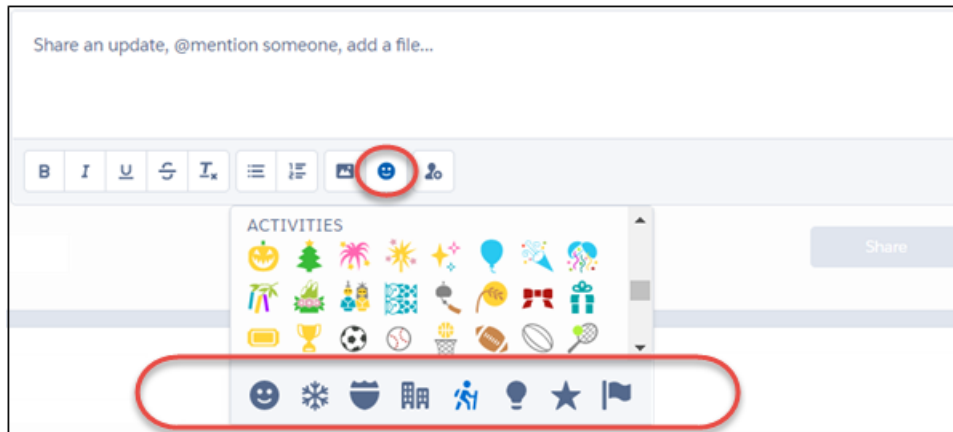
In the beta version, there's no way to select a post to pin through the compact feed user interface.



[Chatter REST API](#) and [Chatter in Apex](#) support pinned posts.

## Spice Up Your Conversations with Emojis

Emojis have arrived! Engage your audience by adding zest to your feed. When you post, comment, and add details to your questions, or when you answer questions, the emoji icon appears in the Chatter publisher. Emojis are available in Lightning Experience and Lightning communities.



Click the icons at the bottom of the emoji selector to change categories. Or, with your cursor in the selector, tab from category to category, and use your keyboard to navigate and select.

Even in business, there's a place for evil pumpkin heads!



**Note:** The emojis in your emoji selector come from your host operating system's default font. Some operating systems have paid more attention to fun than others. If you're looking at your emojis and wondering "Why so drab, my darlings?", go to [emojipedia.org](http://emojipedia.org) and check out the emojis that each OS provides.

## Enable Topic Suggestions For Your Org

Topics suggestions are helpful when you want to encourage folks to add topics to their posts and questions. At the same time, having the flexibility of turning off topic suggestions is also key. We now give you the option to turn off topic suggestions for your org. The permission is enabled by default, so contact Salesforce Customer Support to disable topic suggestions. This change applies to both Lightning Experience and Salesforce Classic.

## Groups: Top Groups and Trailhead Theme

See which groups have the most activity, and get in the Trailhead spirit with a new default banner image and avatar.

### IN THIS SECTION:

#### [Create a Custom Report Type to See Your Top Ranked Groups](#)

Find out which groups have the most activity in your org with a new custom report type. Create the custom report type using Groups as the Primary object, and monitor your groups' rankings accordingly. This feature is new in both Lightning Experience and Salesforce Classic.

#### [Groups Get a Trailhead Makeover](#)

Groups are looking a lot like Trailhead with a new default banner image and avatar. This change applies to Lightning Experience only.

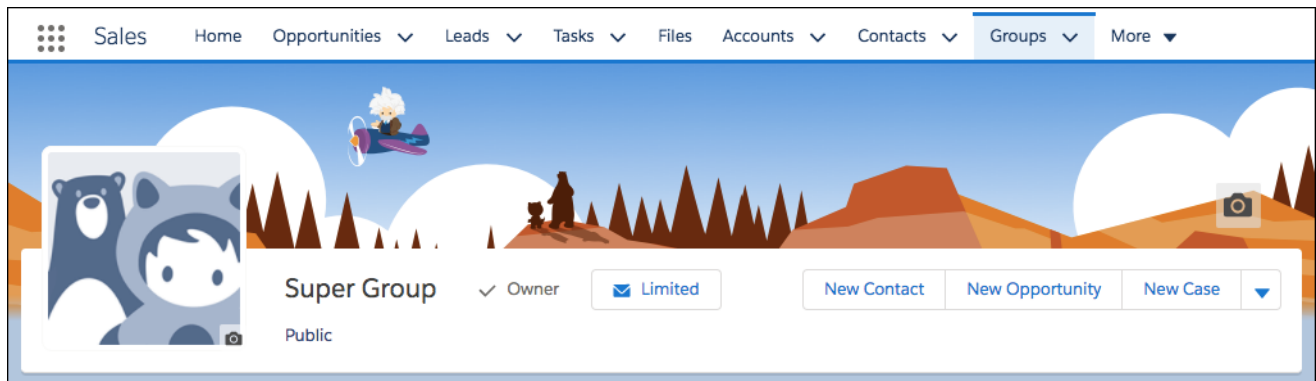
## Create a Custom Report Type to See Your Top Ranked Groups

Find out which groups have the most activity in your org with a new custom report type. Create the custom report type using Groups as the Primary object, and monitor your groups' rankings accordingly. This feature is new in both Lightning Experience and Salesforce Classic.

A group's ranking is based on its posts, comments, and likes. Salesforce tallies the count once a week on Sundays and updates the rankings accordingly. Because the rankings are calculated weekly, this feature is available one week after the Winter '18 release.

## Groups Get a Trailhead Makeover

Groups are looking a lot like Trailhead with a new default banner image and avatar. This change applies to Lightning Experience only.



The new default banner image for Groups helps get your users in the Trailhead spirit. Of course, group owners can still change it to whatever they want.

Your group page doesn't have a photo yet? Astro and Codey to the rescue! They graciously bask in the spotlight as the default group avatar while you round up your own photo.

## User Profiles: Trailhead Theme and Enhanced Out of Office

User profiles get a new look with a Trailhead-themed default banner image, Trailhead card, default Astro image in more places, and highlighted About Me section. Out of Office is enhanced and generally available.

### IN THIS SECTION:

#### [User Profiles Get a Trailhead Makeover](#)

User profiles are looking more like Trailhead with a new default banner image to showcase your adventurous spirit, and some other goodies. The Highlights Panel component on user profiles now includes About Me and a Trailhead card. This change applies to Lightning Experience only.

#### [Astro Is Your Default Avatar in More Places](#)

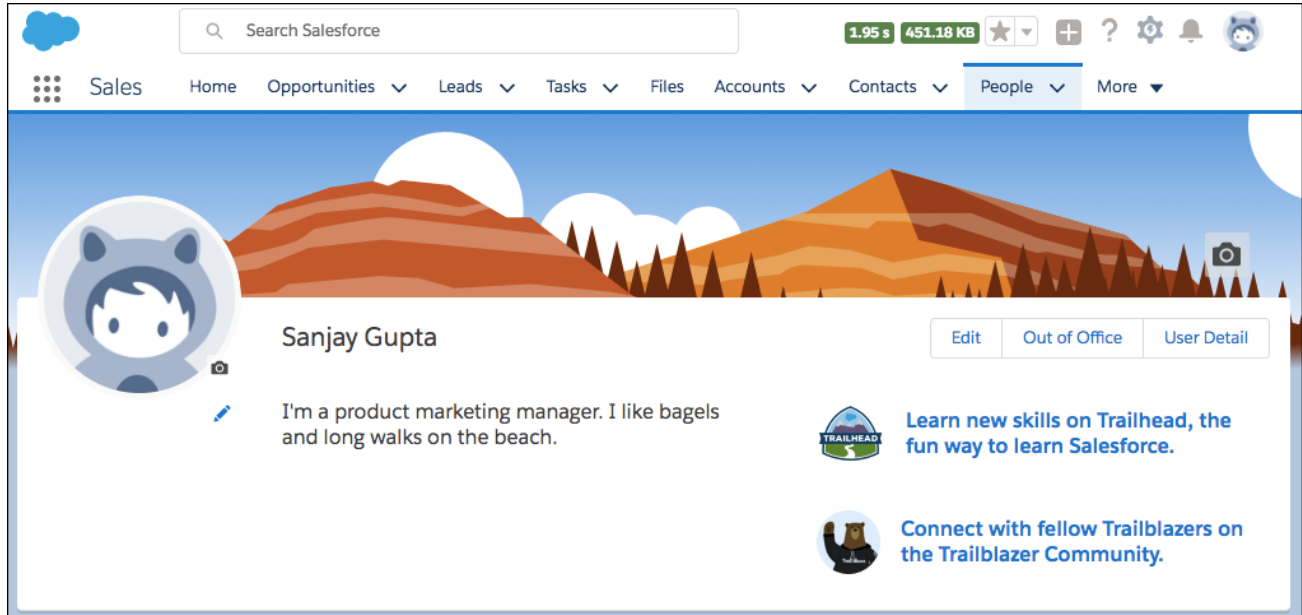
Don't have a profile photo yet? Astro's got you covered—and no longer just in your profile banner and the Salesforce header. In related lists, Chatter posts, task assignments, and pretty much anywhere your profile photo would otherwise appear, the able Astro stands in until you have a chance to upload your own dazzling likeness. This change applies to Lightning Experience only.

#### [Take a Guilt-Free Vacation with Out of Office \(Generally Available\)](#)

Taking a vacation or other leave? Want everyone to know when they should leave you alone? The newly enhanced Out of Office feature is for you. You can set the dates you're away and add a custom message. Your message and dates display prominently next to your name in Chatter, not just on your profile but almost anywhere that your name appears. This change applies to Lightning Experience only.

## User Profiles Get a Trailhead Makeover

User profiles are looking more like Trailhead with a new default banner image to showcase your adventurous spirit, and some other goodies. The Highlights Panel component on user profiles now includes About Me and a Trailhead card. This change applies to Lightning Experience only.



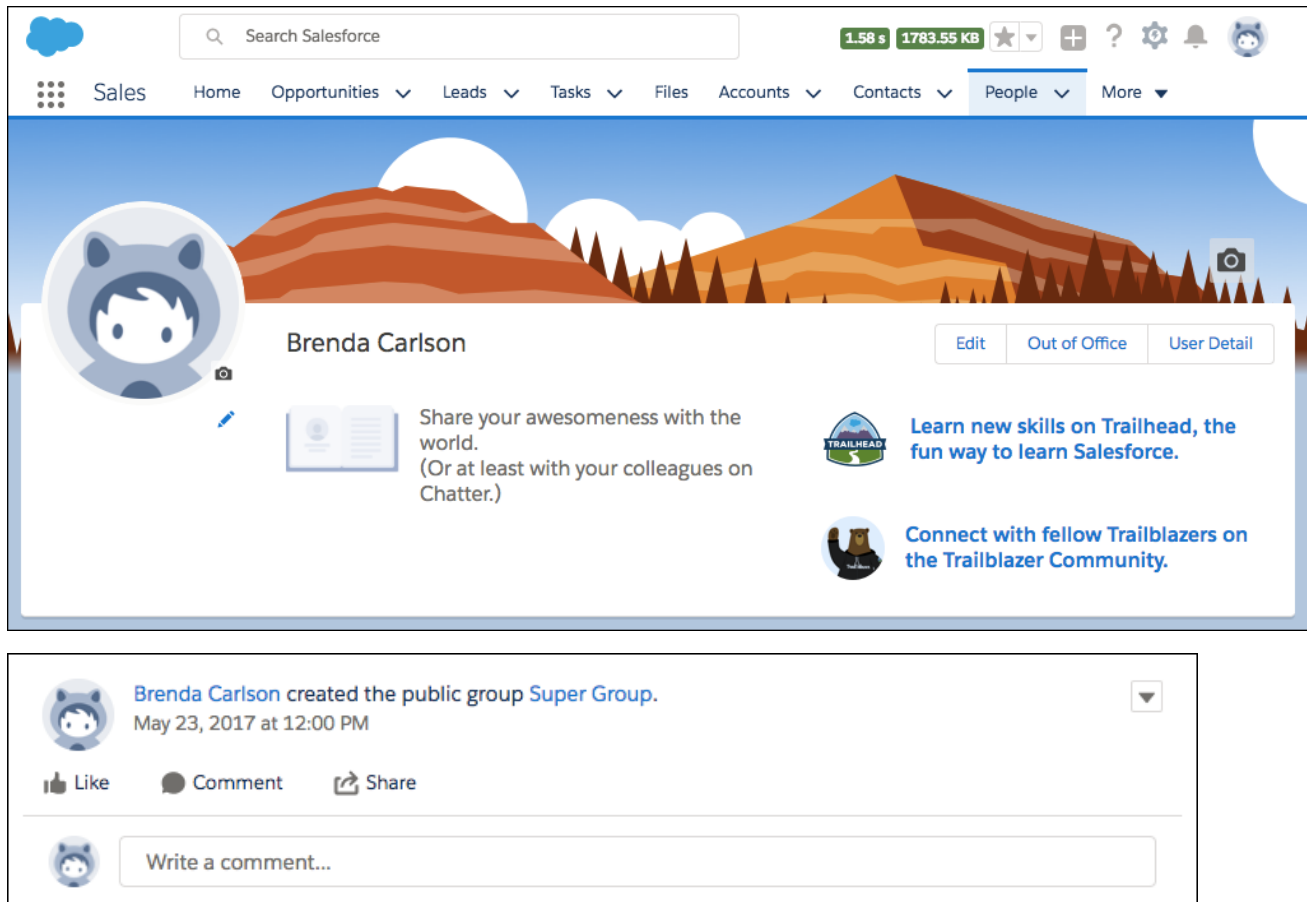
Instead of those basic blue mountains as the default banner image, user profiles now have a lively Trailhead theme. You're still free to change the banner image to make it uniquely you.

Users looking at their own profile now see a Trailhead card for quick access to learning and discussions. From their profile, users can jump directly to Trailhead and Trailblazer Community. The Trailhead card is part of the Highlights Panel Lightning component.

About Me is bumped up to the top of user profiles, right below the name. Users who haven't written anything still get fun prompt text, which only they can see. About Me is now part of the Highlights Panel component. If the User Detail section of your User Profile page layout includes About Me, be sure to remove it from that section. That way it doesn't show up in two places.

## Astro Is Your Default Avatar in More Places

Don't have a profile photo yet? Astro's got you covered—and no longer just in your profile banner and the Salesforce header. In related lists, Chatter posts, task assignments, and pretty much anywhere your profile photo would otherwise appear, the able Astro stands in until you have a chance to upload your own dazzling likeness. This change applies to Lightning Experience only.

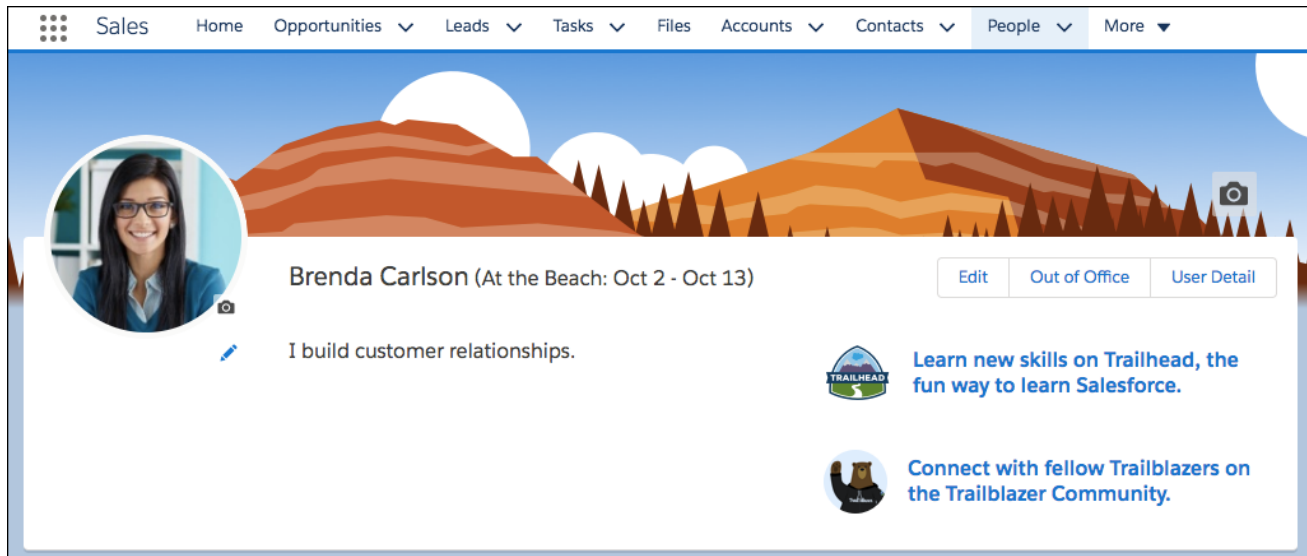


So take your time. Get your glamour headshots taken, or snap a super-chill selfie. The world can wait—with Astro holding down the fort!

## Take a Guilt-Free Vacation with Out of Office (Generally Available)

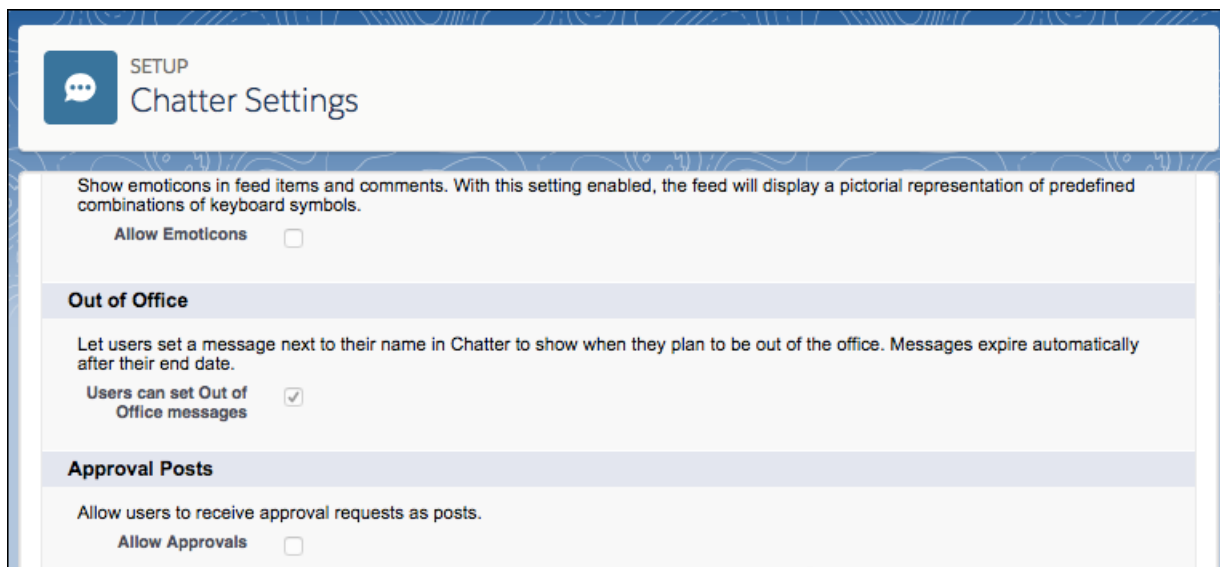
Taking a vacation or other leave? Want everyone to know when they should leave you alone? The newly enhanced Out of Office feature is for you. You can set the dates you're away and add a custom message. Your message and dates display prominently next to your name in Chatter, not just on your profile but almost anywhere that your name appears. This change applies to Lightning Experience only.

By default, the Out of Office message is "Out of Office" along with the start and end dates that you select. You can change it to something more fun, such as "At the Beach" or "Playing with Dolphins."



What's new in Out of Office since the pilot version?

- You can control whether Out of Office functionality is available to your users. Set it up in the new Out of Office section in **Setup > Chatter Settings**. This org preference is enabled by default.



- Out of Office messages expire after their end date. No need to remember to turn it off.
- The message shows up in more places. Besides displaying in the user profile header and next to @mentions in Chatter posts, it also appears next to user names in hover states on related lists, and managers names on user profiles, for example.

## Files: Quip, Private Files on Records, and Improved Search

Create, share, and collaborate on documents with Quip without an external file provider. Attach a file to a record and keep it private, or share it with the people and groups you choose. Files search results are now sortable with more fields.

### IN THIS SECTION:

#### [Create and Collaborate on Quip Documents in Salesforce](#)

Quip lets you create, share, and collaborate on documents and spreadsheets in Salesforce. No need for an external file provider. In Lightning Experience, use the Quip component on records to create new Quip documents and work with existing ones. Work with Quip documents in Chatter, Files home, and Files related lists. Quip is available in Lightning Experience, Salesforce Classic, and communities.

#### [Keep Files on Records Private](#)

Attach a file to a record and keep it private, or share it with select individuals or groups. Previously, all files on records in Lightning Experience were visible to everyone with access to the record. Now you can choose who sees your file. This feature is new in Lightning Experience and communities.

#### [Sort Your Files Search Results with New Fields](#)

You asked for improved files search functions, and here they are. Files search results are now sortable with more fields to help you find the files you're looking for faster. This feature is available in Lightning Experience and Lightning communities.

#### [Renamed Permissions for Content Deliveries Public Link Creation](#)

We've updated the names of two user permissions for clarity. The user permission **Create Content Deliveries** was formerly named "Deliver Uploaded Files and Personal Content". The user permission **Create Public Links** was formerly named "Create and Share Content Deliveries for Salesforce Files". Content Deliveries are available in Salesforce Classic. Public Links are available in Salesforce Classic and Lightning Experience.

#### [Create Custom File Preview Components](#)

Make it easy for your users to preview files and take action on them using the Files Preview component. Developers can create a custom file preview component that displays a rich preview of uploaded files. The File Preview component is available in Lightning Experience and Lightning communities.

### EDITIONS

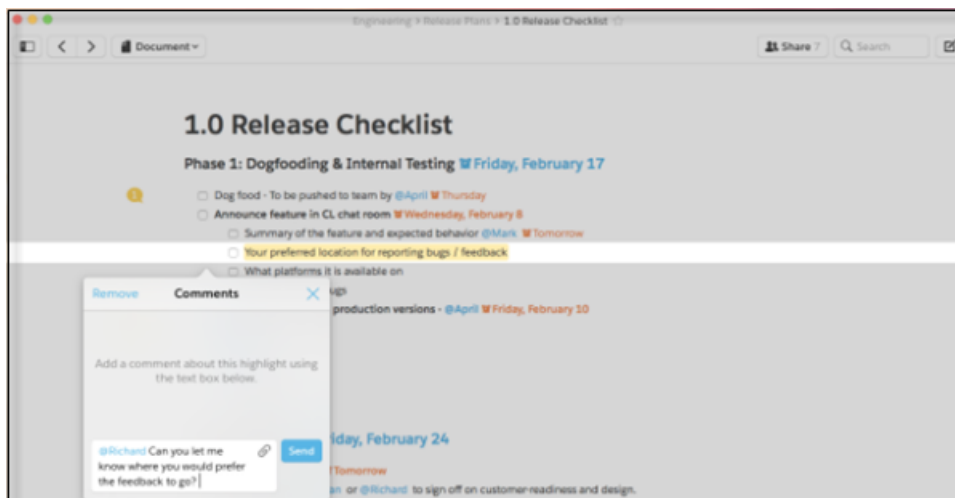
Files and Files Connect for cloud-based external data sources are available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

Files Connect for on-premises external data sources is available for an extra cost in the same editions.

## Create and Collaborate on Quip Documents in Salesforce

Quip lets you create, share, and collaborate on documents and spreadsheets in Salesforce. No need for an external file provider. In Lightning Experience, use the Quip component on records to create new Quip documents and work with existing ones. Work with Quip documents in Chatter, Files home, and Files related lists. Quip is available in Lightning Experience, Salesforce Classic, and communities.

Attach existing Quip documents and spreadsheets to records and Chatter posts, and create documents right from Salesforce. Pasting a Quip link in a Chatter post creates a Quip file reference in Salesforce. Share Quip documents and spreadsheets to records, groups, and feeds from the file selector.



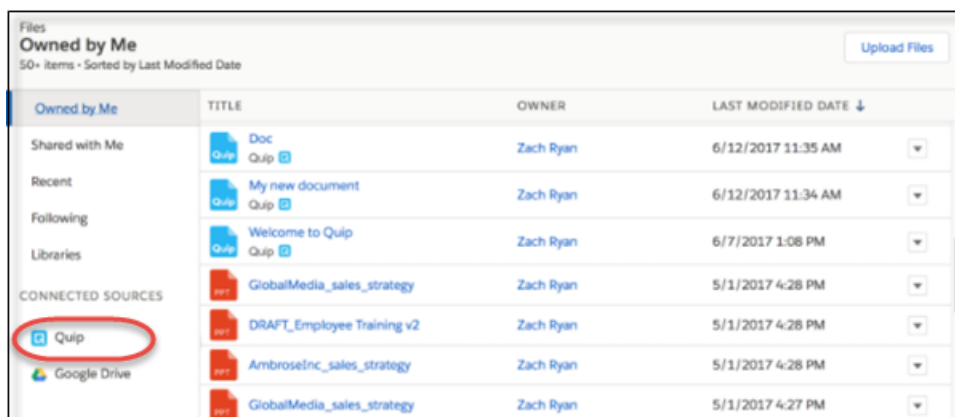
Lightning Experience offers a dedicated Quip component on records. From the component, users can see the Quip documents and sheets associated with that record and add and create Quip documents. The Quip component is supported on all standard and custom object page layouts, except User records.

**Note:** The Quip component is not available in communities. If a page layout with the Quip component is viewed in a community, the Quip card isn't visible.

You can @mention colleagues in Quip documents and bring your conversation right to where the work is happening. Highlight a word or sentence of text to target your inline comments in a document, or comment on individual cells within a spreadsheet. You can show or hide comments to see what you need or stay focused on the content. Conversations appear in the sidebar, and these comment threads can be rich and lively. They can include @mentions, files, images, link previews, emojis, and even animated gifs. The sidebar also shows revision history, so you can see all changes that have been made to the document.

Quip allows offline access—everything is available offline, with no need to mark a document available offline ahead of time. Documents sync when you come back online, incorporating changes made by other people collaborating on the document.

You can find Quip under Connected Sources on the left side of Files home.



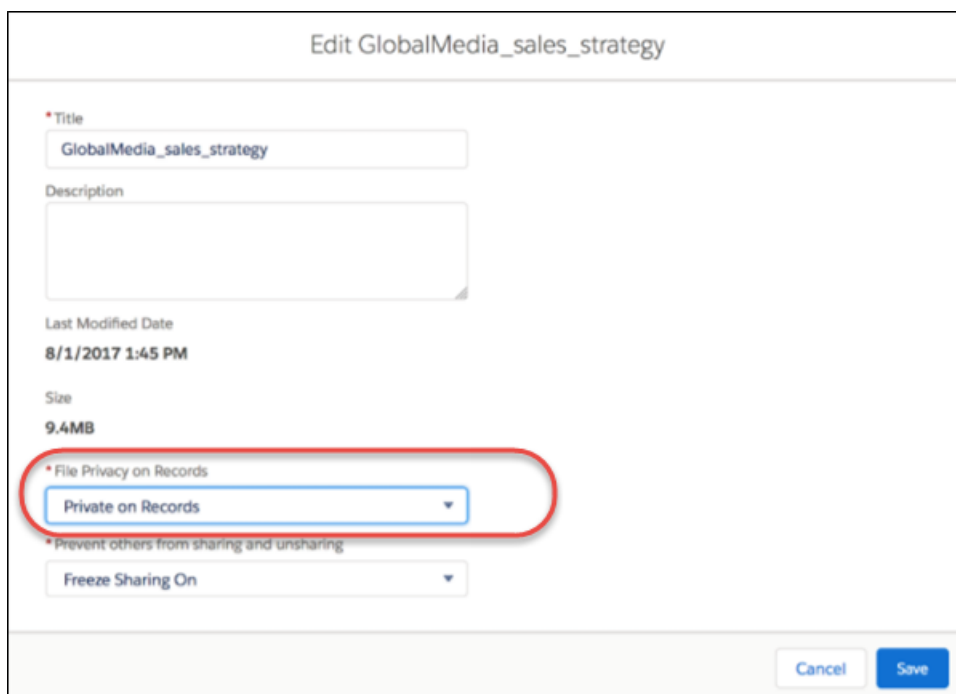
Setting up Quip as a connected file source for your org is similar to setting up Files Connect external sources—you create an authentication provider and define Quip as a data source.

**Note:** Searching finds Quip file references in Salesforce, but it doesn't find external Quip documents.

## Keep Files on Records Private

Attach a file to a record and keep it private, or share it with select individuals or groups. Previously, all files on records in Lightning Experience were visible to everyone with access to the record. Now you can choose who sees your file. This feature is new in Lightning Experience and communities.

Only file owners and administrators have the power to change the value of **File Privacy on Records**.



The screenshot shows the 'Edit GlobalMedia\_sales\_strategy' form. The fields visible are:

- Title:** GlobalMedia\_sales\_strategy
- Description:** (Empty text area)
- Last Modified Date:** 8/1/2017 1:45 PM
- Size:** 9.4MB
- \* File Privacy on Records:** A dropdown menu with 'Private on Records' selected. This field is circled in red.
- \* Prevent others from sharing and unsharing:** A dropdown menu with 'Freeze Sharing On' selected.

At the bottom right, there are 'Cancel' and 'Save' buttons.

This feature is on by default. Just add the File Privacy on Records field to the Files page layout (labeled the Content Version page layout in the Setup menu). After the field is added to the page layout, users see the file privacy field on the file's detail page and edit panel in Lightning Experience. It also appears in the content detail page and content edit dialog in Salesforce Classic. A file marked as private in Lightning Experience is also private in Salesforce Classic.

[Chatter REST API](#) supports private files on records.

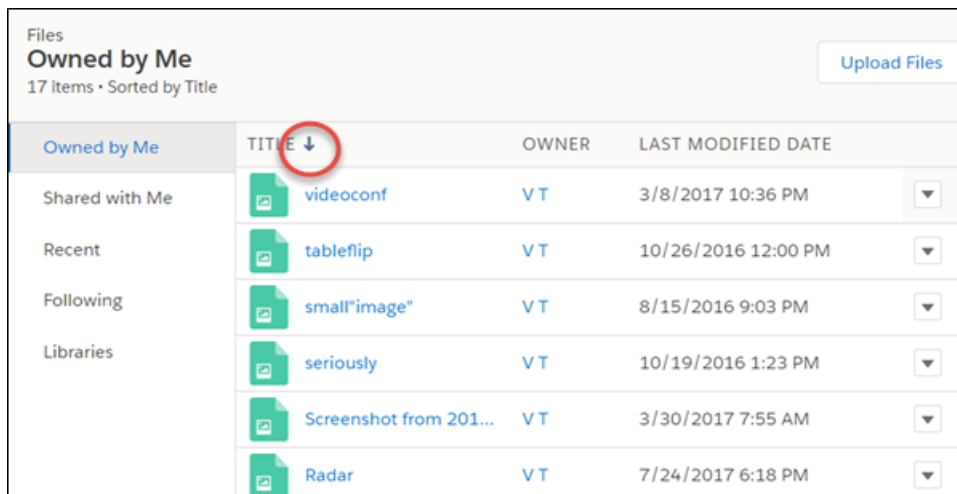
## Sort Your Files Search Results with New Fields

You asked for improved files search functions, and here they are. Files search results are now sortable with more fields to help you find the files you're looking for faster. This feature is available in Lightning Experience and Lightning communities.

New Search layouts give you better control over search results. The Files search results layout includes a new field: **Last Modified Date**. Sort results by relevance, title, size, file extension, last modified date, and owner. Although it's not added to the layout by default, you can also add **Created Date** to search on the date the file was created.

When you choose a sort order, you can toggle an arrow on the column header to sort in ascending or descending order.





Files				
Owned by Me				
17 Items • Sorted by Title				
	TITLE	OWNER	LAST MODIFIED DATE	
Shared with Me	videoconf	V T	3/8/2017 10:36 PM	
Recent	tableflip	V T	10/26/2016 12:00 PM	
Following	small"image"	V T	8/15/2016 9:03 PM	
Libraries	seriously	V T	10/19/2016 1:23 PM	
	Screenshot from 201...	V T	3/30/2017 7:55 AM	
	Radar	V T	7/24/2017 6:18 PM	

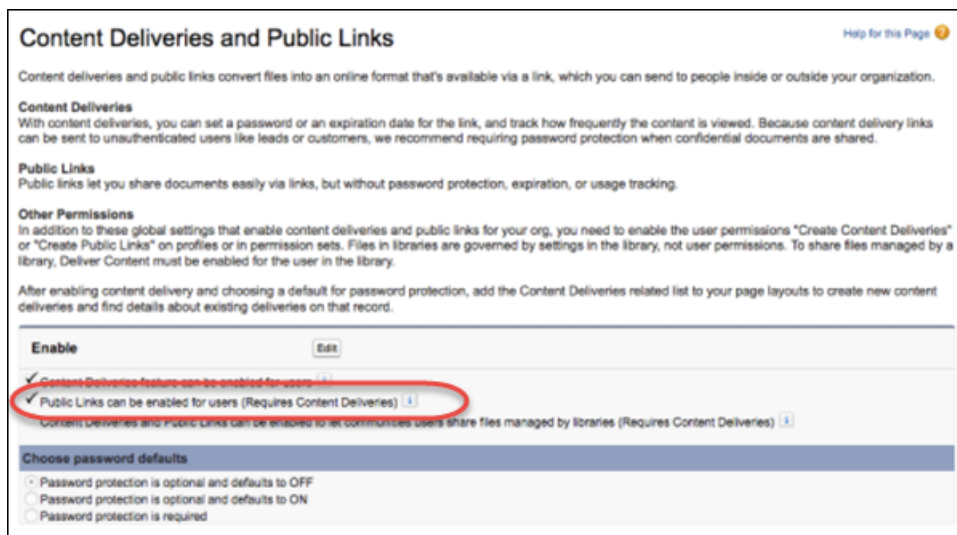
Enable and modify search layouts in Setup. The updated search fields appear automatically. In Lightning Experience, search Setup for *Object Manager*. Select **Content Version**, and choose **Page Layouts**.

## Renamed Permissions for Content Deliveries Public Link Creation

We've updated the names of two user permissions for clarity. The user permission **Create Content Deliveries** was formerly named "Deliver Uploaded Files and Personal Content". The user permission **Create Public Links** was formerly named "Create and Share Content Deliveries for Salesforce Files". Content Deliveries are available in Salesforce Classic. Public Links are available in Salesforce Classic and Lightning Experience.

Content deliveries and public links convert files into an online format that's available via a link. The link can be sent to people inside or outside your org. Content deliveries also provide security and tracking features.

If you aren't already taking advantage of these file-sharing tools, it's easy to get started. First, enable content deliveries and public links for your org. Search the Setup menu for "Content Deliveries and Public Links". Select **Content Deliveries feature can be enabled for users** to enable content deliveries. Enable public links with **Public Links can be enabled for users (Requires Content Deliveries)**.



**Content Deliveries and Public Links**

Content deliveries and public links convert files into an online format that's available via a link, which you can send to people inside or outside your organization.

**Content Deliveries**  
With content deliveries, you can set a password or an expiration date for the link, and track how frequently the content is viewed. Because content delivery links can be sent to unauthenticated users like leads or customers, we recommend requiring password protection when confidential documents are shared.

**Public Links**  
Public links let you share documents easily via links, but without password protection, expiration, or usage tracking.

**Other Permissions**  
In addition to these global settings that enable content deliveries and public links for your org, you need to enable the user permissions "Create Content Deliveries" or "Create Public Links" on profiles or in permission sets. Files in libraries are governed by settings in the library, not user permissions. To share files managed by a library, Deliver Content must be enabled for the user in the library.

After enabling content delivery and choosing a default for password protection, add the Content Deliveries related list to your page layouts to create new content deliveries and find details about existing deliveries on that record.


**Enable**

- ☒ Content Deliveries feature can be enabled for users
- ☒ Public Links can be enabled for users (Requires Content Deliveries)
- ☐ Content Deliveries and Public Links can be enabled for communities users share files managed by libraries (Requires Content Deliveries)

**Choose password defaults**

- ☐ Password protection is optional and defaults to OFF
- ☐ Password protection is optional and defaults to ON
- ☐ Password protection is required

Search System Permissions for "Content Deliveries" and "Public Links" to enable the user permissions on profiles or in permission sets.

 **Note:** Files within libraries are governed by settings within the library, so they require an extra setting in addition to the user permissions. To let a user share files managed by a library, enable **Deliver Content** for that user in the library.

## Create Custom File Preview Components

Make it easy for your users to preview files and take action on them using the Files Preview component. Developers can create a custom file preview component that displays a rich preview of uploaded files. The File Preview component is available in Lightning Experience and Lightning communities.

The Files Preview component displays a preview of the file with file actions clearly labeled across the top. When a file can't be previewed, the preview shows an icon of the file's type.



## Salesforce Integrations: Cisco Spark and Microsoft and Google Applications

Empower your sales and service pros to be more productive by connecting Salesforce to some of the industry's leading business applications.

### IN THIS SECTION:

[Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce \(Generally Available\)](#)

When reps link their Cisco Spark™ account to Salesforce, they can see who's online, initiate video meetings, and send and receive instant messages. This change applies to Lightning Experience only.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

[Google Integration: Flexible Record Matching, More Template Options, Two-Way Event Sync, and Required Change to Lightning Sync Setup](#)

Get your reps working their Salesforce deals in Gmail™ and Google Calendar™. Lightning for Gmail gives reps added flexibility when they're matching email recipients with relevant Salesforce records. More email template options, Einstein lead scoring, and Salesforce tasks get reps working smarter—not harder. Lightning Sync now includes two-way event sync for Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web users. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Skype for Salesforce: Chat and Send Instant Messages \(Generally Available\)](#)

Sales and service reps can use Skype for Salesforce to send instant messages and see who's online without leaving Salesforce. This change applies to Lightning Experience only.

[Microsoft® Integration: Task Management, Pardot Engagement, and Sync for the Masses](#)

Get your reps working their deals in Outlook email and calendars. Access to Salesforce tasks, more email template options, and even Pardot Engage features get your reps to master the sales process. What's new with Lightning Sync? Service and Force.com licenses. Read about it!

## Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce (Generally Available)

When reps link their Cisco Spark™ account to Salesforce, they can see who's online, initiate video meetings, and send and receive instant messages. This change applies to Lightning Experience only.

Cisco Spark for Salesforce is a suite of tools that includes these Lightning components.

- Cisco Spark Conversation—Lets users on a record page initiate video meetings and send instant messages directly from the record. Add this component to a Lightning record page using the Lightning App Builder.
- Cisco Spark Group Conversations—Lets users on a record page see which Cisco Spark workspaces are associated with the record, create spaces, search for spaces, and link and unlink spaces from the record. Add this component to a Lightning record page using the Lightning App Builder.
- Cisco Spark—This component works in a Lightning app's utility bar, and shows the most recent spaces and people that a user has interacted with. Add this component to an app in Setup using the App Manager.


To start letting reps communicate with Cisco Spark for Salesforce, create a permission set for Cisco Spark users and assign the permission set to them. Then, add the Lightning components we mentioned to the Lightning pages and apps that your reps use most.

Using Cisco Spark for Salesforce, reps can:

- See others' availability
- Send and receive instant messages
- Make and receive video calls
- Save transcripts of instant message conversations to Salesforce
- View recent conversations
- Create a Cisco Spark team work space for a Salesforce record
- View all Cisco Spark spaces that are linked with a Salesforce record
- Link and unlink Cisco Spark spaces with Salesforce records

## EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

 **Note:** To use Cisco Spark for Salesforce, your reps must be using the latest versions of Google Chrome or Mozilla Firefox.

SEE ALSO:

[Let Users Manage Shared Work Spaces in Cisco Spark for Salesforce](#)

[Let Users Hold Video Meetings and Send Instant Messages Right from a Record with the Cisco Spark Group Conversations Component](#)

## Google Integration: Flexible Record Matching, More Template Options, Two-Way Event Sync, and Required Change to Lightning Sync Setup

Get your reps working their Salesforce deals in Gmail™ and Google Calendar™. Lightning for Gmail gives reps added flexibility when they're matching email recipients with relevant Salesforce records. More email template options, Einstein lead scoring, and Salesforce tasks get reps working smarter—not harder. Lightning Sync now includes two-way event sync for Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web users. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### Lightning for Gmail: Time-Saving Features and New Insights

It's now possible to use Salesforce Classic templates in Lightning for Gmail. With tasks debuting in Lightning for Gmail, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails.


### Lightning Sync for Google: Required Change to Lightning Sync Setup, Two-Way Event Sync, and Support for More Licenses

Make your team more productive by setting up events to sync both ways between Google Calendar™ and Salesforce. When you do, you get exclusive access to Salesforce Calendar features that are designed to work with Lightning Sync. We're also introducing support for users on Service Cloud and Force.com licenses, so you can get even more users syncing between Salesforce and Google applications. In addition, customers syncing events from Google Calendar to Salesforce need to update their Lightning Sync setup to continue syncing events in Winter '18.

## Skype for Salesforce: Chat and Send Instant Messages (Generally Available)

Sales and service reps can use Skype for Salesforce to send instant messages and see who's online without leaving Salesforce. This change applies to Lightning Experience only.

To use Skype for Salesforce, activate a Skype for Business Online account or a Microsoft Office 365® Enterprise plan that includes Skype for Business Online.

 **Note:** Earlier beta versions of Skype for Salesforce included audio and video chat capabilities. But Microsoft currently is revising Skype audio and video calling support. So for now, the generally available version of Skype for Salesforce doesn't support audio or video calls.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

## Microsoft® Integration: Task Management, Pardot Engagement, and Sync for the Masses

Get your reps working their deals in Outlook email and calendars. Access to Salesforce tasks, more email template options, and even Pardot Engage features get your reps to master the sales process. What's new with Lightning Sync? Service and Force.com licenses. Read about it!

### Lightning for Outlook: Time-Saving Features and New Insights

It's now possible to use Salesforce Classic templates in Lightning for Outlook. With tasks debuting in Lightning for Outlook, keeping tabs on to-do lists is easier for your sales team. Get a taste of artificial intelligence with Einstein Lead Scores for leads on your emails.

### [Lightning Sync for Microsoft Exchange: Set Up Service Cloud and Force.com Users](#)

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® applications and Salesforce.

## Mobile: Do More on the Go

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Salesforce mobile apps help your users stay productive throughout their busy days, no matter where they are. So we've been hard at work adding new ways to help your users outside of the office. Salesforce offers improvements to Chatter, tasks, and many other sales features, so sales professionals can take care of even more business from their phones.

### IN THIS SECTION:

#### [Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web: Better Task Management and Revamped Chatter Experience](#)

Salesforce has your team's back. They'll never forget to complete a task ever again now that they can set reminders. Users can stay on top of things by viewing, creating and editing reminders on tasks. There's also an improved new look and feel to Chatter for Salesforce for iOS users. They can view inline images and multiple attachments, and share posts to their followers from the feed. They'll also notice lightning fast scrolling and performance and a fresh new post composer.

#### [Salesforce Authenticator: Accessibility Updates, Improved Backup and Restore Notifications](#)

Salesforce Authenticator v2.10.1 improves accessibility for iOS and Android. We've improved button and field labeling, and Salesforce Authenticator now communicates more clearly with you. We also give more time for backup and restore to sync before reminding you that backups are out-of-date.

#### [Salesforce Chatter: A New Way to Work with Windows 10](#)

Version 1.1 of Salesforce Chatter is generally available the week of August 28, 2017 from the Windows Store. This app gives Windows 10 Anniversary Edition users a new, easy to use way to access Chatter and collaborate with coworkers.

#### [Salesforce Mobile Classic App to Retire in December 2017](#)

To improve the overall mobile user, developer, and deployment experience, Salesforce is focusing mobile development on Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. As a result, we are retiring the Salesforce Mobile Classic app on December 1, 2017. Also, iOS 10 and Android 7.0 are the final mobile OS versions that we'll use for Salesforce Mobile Classic compatibility testing. We encourage you to start transitioning your mobile users to an alternative experience, such as rolling out Salesforce for iOS and Android or deploying custom mobile apps that address your current and future mobile needs.

## Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web: Better Task Management and Revamped Chatter Experience

Salesforce has your team's back. They'll never forget to complete a task ever again now that they can set reminders. Users can stay on top of things by viewing, creating and editing reminders on tasks. There's also an improved new look and feel to Chatter for Salesforce for iOS users. They can view inline images and multiple attachments, and share posts to their followers from the feed. They'll also notice lightning fast scrolling and performance and a fresh new post composer.

### EDITIONS

Available in all editions

### IN THIS SECTION:

#### [Use Salesforce on Mobile](#)

Your users have several options for accessing Salesforce on mobile devices that meet the platform requirements.

### [What's New in the Latest Version of Salesforce for Android and Salesforce for iOS](#)

The latest release of the Salesforce for Android and Salesforce for iOS is version 14.0. At a glance, here's what's new in the version 14.0 apps.

### [Everything That's New in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web](#)

Our latest round of new and improved features in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web makes it easier to access Salesforce on the go.

### [Winter '18 Features That Are Different or Not Available in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web](#)

Salesforce for Android, Salesforce for iOS, and Salesforce mobile web don't include all the functionality that's available in the full Salesforce site, whether your org is using Lightning Experience or Salesforce Classic. Learn about the Winter '18 Salesforce enhancements that either aren't available, have functional gaps from the full site, or work differently.

### [Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Development Overview](#)

Several Force.com platform enhancements support Salesforce for Android, Salesforce for iOS, and Salesforce mobile web development.

## Use Salesforce on Mobile

Your users have several options for accessing Salesforce on mobile devices that meet the platform requirements.

- Install Salesforce for Android or iOS. Users can download the app from Google Play or the App Store.
- Access Salesforce mobile web from a supported mobile browser on supported Android, iOS, and Windows devices. This option doesn't require anything to be installed.

## What's New in the Latest Version of Salesforce for Android and Salesforce for iOS

The latest release of the Salesforce for Android and Salesforce for iOS is version 14.0. At a glance, here's what's new in the version 14.0 apps.

### Salesforce for iOS, Version 14.0

Beginning the week of 10/16/17, the App Store starts serving up Salesforce for iOS, version 14.0.

Here's what's new in Salesforce for iOS:

- [Enjoy a Modern Chatter Experience in Salesforce for iOS](#)
- [Share Content with the New Chatter Post Composer](#)
- [View Inline Images and Multiple Attachments in the Chatter Feed](#)
- [Get Answers Quicker with the Updated Help in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web](#)

### Salesforce for Android, Version 14.0

Salesforce for Android, version 14.0 will be released to Google Play the week of 10/16/17 and gradually rolled out to customers over a couple of weeks.

Here's what's new in Salesforce for Android:

- [Get Answers Quicker with the Updated Help in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web](#)

## Everything That's New in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web

Our latest round of new and improved features in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web makes it easier to access Salesforce on the go.

Salesforce for Android, Salesforce for iOS, and Salesforce mobile web are available for all editions, except Database.com, without an additional license. Your org'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 user.

Enhancements and Changes	Salesforce for Android	Salesforce for iOS	Salesforce Mobile Web	Setup in the Full Site
<b>Device and Browser Support</b>				
<a href="#">Updated Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Requirements</a>	✓	✓	✓	
<b>Search</b>				
<a href="#">See More Relevant Objects in the Recent Section</a>	✓		✓	
<b>Sales Features</b>				
<a href="#">Create Contact Roles for Opportunities from Contacts in Lightning Experience</a>	✓	✓	✓	
<a href="#">Change Opportunity Forecast Category</a>	✓	✓	✓	
<a href="#">Manage Territories on the Go</a>	✓	✓	✓	
<b>Productivity Features</b>				
<a href="#">Get Event Attendee Details into Salesforce with Lightning Sync for Google</a>	✓	✓	✓	✓
<a href="#">Lightning Sync for Google: Set Up Service Cloud and Force.com Users</a>	✓	✓	✓	✓
<a href="#">Lightning Sync for Microsoft Exchange: Set Up Service Cloud and Force.com Users</a>	✓	✓	✓	✓
<a href="#">Make Sure Your Reps Never Forget to Remember with Task Reminders</a>	✓	✓	✓	✓
<a href="#">Keep Track of List Emails in the Activity Timeline</a>	✓	✓	✓	✓
<b>Customer Service Features</b>				
<a href="#">Manage Service Contracts in the Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</a>	✓	✓	✓	
<a href="#">Access Case Milestones on the Go</a>	✓	✓	✓	✓
<a href="#">Add a Case Comment from a Related List</a>	✓	✓	✓	✓
<a href="#">Seamlessly Clone Cases</a>	✓	✓	✓	✓
<b>Reports and Dashboards</b>				

Enhancements and Changes	Salesforce for Android	Salesforce for iOS	Salesforce Mobile Web	Setup in the Full Site
<a href="#">Legacy Charts in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Will Retire in Spring '18 (Phased Retirement)</a>	✓	✓	✓	✓
<b>Chatter</b>				
<a href="#">Increase Security with Encryption for Chatter (Generally Available)</a>			✓	✓
<a href="#">Highlight the Best Solutions in Your Community</a>			✓	✓
<a href="#">Increase the Visibility of Critical Information with Pinned Posts (Beta)</a>			✓	✓
<a href="#">Embed Rich Publisher Apps in the Chatter Publisher (Generally Available)</a>			✓	✓
<a href="#">Assign a Default Community to a User Profile</a>			✓	✓
<a href="#">Enjoy a Modern Chatter Experience in Salesforce for iOS</a>		✓		
<a href="#">Share Content with the New Chatter Post Composer</a>		✓		
<a href="#">View Inline Images and Multiple Attachments in the Chatter Feed</a>		✓		
<b>Business Logic and Process Automation</b>				
<a href="#">Translate Flows from the Translation Workbench</a>	✓	✓	✓	✓
<a href="#">Launch a Flow from an Object-Specific Action (Beta)</a>	✓	✓	✓	✓
<a href="#">Set More Variable Values in the Flow Component</a>	✓	✓	✓	✓
<a href="#">Access Encrypted Data in Your Flows (Generally Available)</a>	✓	✓	✓	✓
<b>Other Enhancements</b>				
<a href="#">Salesforce1 Is Now Salesforce</a>	✓	✓	✓	
<a href="#">Get Answers Quicker with the Updated Help in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web</a>	✓	✓	✓	

## See More Relevant Objects in the Recent Section

When users first start using Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, the Recent section in the navigation menu contains the same items as the Lightning Experience navigation bar. When performing a global search, users see results only for the objects that appear in the Recent section. When users start building a search history, the default list is replaced with their frequently used objects. This change applies only to Salesforce for Android and Salesforce mobile web.

If your users use Groups and People, be sure to include those objects in the menu.

If a user can't access the Lightning app that you created due to permissions, the default Recent items include the Account, Contact, Opportunity, Case, Lead, People (User), and Group objects.

SEE ALSO:

[Create Lightning Apps](#)



## Updated Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Requirements

Salesforce is available on many popular mobile platforms. Salesforce is revising the requirements for using Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Learn about the mobile platform requirements and the devices that we use for feature and performance testing as we continue improving the Salesforce experience.

### Mobile Platform Requirements

Users can run Salesforce on mobile devices that meet these mobile platform requirements.

Operating System and Version Requirements	Mobile Browser Requirements <sup>*</sup>
Android 4.4 or later	Google Chrome on Android
iOS 10.0 or later	Apple Safari on iOS
Windows 10 ( <i>Mobile web only</i> )	Microsoft Edge on Windows 10
Windows 8.1 ( <i>Mobile web only</i> )	Internet Explorer 11 on Windows 8.1 ( <i>Support ends December 17, 2017</i> )

<sup>\*</sup> The latest mobile browser version is required. Mobile browser requirements apply to Salesforce mobile web only.

To allow for innovation and to keep Salesforce current in the rapidly evolving mobile market, minimum platform requirements are subject to change at the sole discretion of Salesforce, with or without advance notice.

### Mobile Devices Used for Salesforce Testing

Salesforce performs automated and manual testing of the Salesforce for iOS and Android and Salesforce mobile web on a select set of mobile devices. For the Winter '18 release, this is the list of devices used for testing.

Platform	Phones	Tablets
<b>Android</b>	<ul style="list-style-type: none"> <li>Google Pixel XL</li> <li>Google Pixel</li> <li>Google Nexus 6P</li> <li>Samsung Galaxy S7</li> <li>Samsung Galaxy S6</li> <li>Samsung Galaxy S5</li> <li>Samsung Galaxy Note 5</li> <li>Samsung Galaxy Note 4</li> </ul>	<ul style="list-style-type: none"> <li>Samsung Galaxy Note 10.1</li> <li>Samsung Tab A 9.7</li> <li>Samsung Tab A 8.0</li> <li>Samsung Tab S2</li> </ul>
<b>iOS</b>	<ul style="list-style-type: none"> <li>iPhone 7 / 7 Plus</li> <li>iPhone 6S / 6S Plus</li> <li>iPhone 6 / 6 Plus</li> <li>iPhone 5S</li> <li>iPhone SE</li> </ul>	<ul style="list-style-type: none"> <li>iPad Pro 12.9"</li> <li>iPad Pro 9.7"</li> <li>iPad Air 2</li> <li>iPad Mini 4</li> </ul>

Platform	Phones	Tablets
<b>Windows</b> <i>(Mobile web only)</i>	<ul style="list-style-type: none"> <li>Nokia 1020 (with Windows 8.1)</li> <li>Lumia 950 (with Windows 10)</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>

Customers aren't blocked from using Salesforce on untested devices that meet current platform requirements. Salesforce may not be able to replicate some issues for customers using Salesforce on untested devices on due to manufacturer-specific customizations.

To allow for innovation and to keep Salesforce current in the rapidly evolving mobile market, the list of Salesforce-tested devices is subject to change at the sole discretion of Salesforce, with or without advance notice.

## Salesforce Updates

Customers whose devices meet current minimum platform requirements are eligible to receive Salesforce feature updates and fixes.

Our goal is to release Salesforce mobile feature and functionality updates to coincide with each Salesforce major release. This information is provided to help with your release planning, but is subject to change at Salesforce's discretion.

### Salesforce Mobile Web

Enhanced features and functionality are automatically available with each Salesforce major release.

### Salesforce for Android and Salesforce for iOS

Enhanced features and functionality are provided in major version updates. We aim to release a new major version of Salesforce for Android and Salesforce for iOS after the completion of each Salesforce major release to all production instances. The timeframe in which a new major version is released varies and can be impacted by factors outside of Salesforce's control, including new requirements from Apple or Google or changes to the iOS or Android operating systems.

Customers can install new major and bug fix versions from the App Store and Google Play as long as their mobile devices meet Salesforce's current minimum mobile operating system requirements. If a device is running an older operating system, updated versions of Salesforce don't appear in the app stores.

## Customer Support Services for Salesforce

Salesforce Customer Support uses commercially reasonable efforts to troubleshoot issues with Salesforce, provided:

- A user's device meets current minimum platform requirements
- Salesforce for iOS and Android users have the most recent version installed

When customers run Salesforce on Salesforce-tested devices, it's more efficient for us to troubleshoot issues. For customers using untested devices, even those meeting minimum platform requirements, we might not be able to replicate some issues due to device manufacturer-specific customizations.

Running Salesforce on older devices or devices with low computation and memory capabilities can adversely impact performance, as compared to performance on Salesforce-tested devices.

## Manage Territories on the Go

Mobile reps can now manage their sales territories. In Salesforce, Enterprise Territory Management users can change the assigned territory in opportunity details. Users also see a read-only Assigned Territories related list on accounts. These changes apply to Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### EDITIONS

Available in: **Developer** and **Performance** Editions and in **Enterprise** and **Unlimited** Editions with the Sales Cloud

## Manage Service Contracts in the Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web

View, create, and manage service contracts and contract line items in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Your team can quickly review or modify contract terms while visiting customers or completing field service appointments.

If entitlement management is enabled in your org, service contracts now appear in the Salesforce navigation menu.



**Note:** In Salesforce for Android, Salesforce for iOS, and Salesforce mobile web contract line items can be deleted and edited, but not created.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

### SEE ALSO:

[Manage Service Contracts in Lightning Experience \(Generally Available\)](#)

## Access Case Milestones on the Go

Agents can view case milestone updates in the case feed, open the case milestones record page, and view the Case Milestones related list in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

To use this feature, your org must set up entitlements, an entitlement process, and milestones. Then you can add the Milestones component to the case record page in Lightning App Builder. The Milestones component supports only cases. You can't add the component to any other object page.



**Note:** The Milestone component, including its tracker, isn't displayed in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

### EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud

To customize the fields displayed on the case milestone record page in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web, edit the compact layout for the Case Milestone object in Salesforce Classic Setup.

For more information, see [Track Your Case Milestones in Lightning Experience](#).

## Add a Case Comment from a Related List

Agents can now add case comments directly from the Case Comments related list with the click of a button. This change applies to Lightning Experience and all versions of the Salesforce app.

If you already have a Case Comments related list on a record page, you don't need to do anything. Agents see the New button in the related list dropdown. To add the Case Comments related list to a page, in the Lightning App Builder add the Related List - Single component to the page.

After you update the related list, agents can click the **New** button from the related list dropdown menu. Agents are then prompted for the comment. Keep in mind that your Case Comment window can look different depending on your configuration.

 **Note:** You can still create a quick action for creating case comments.

## Seamlessly Clone Cases

Agents can easily log multiple issues for a customer or use information in existing cases. It's as simple as clicking the clone button, filling in the information, assigning and saving the case. Previously, case cloning was available only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce app.

In new orgs, the **Clone** button is available on the Cases page layout by default. In existing orgs, add the Clone quick action to the page layout.


## Legacy Charts in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Will Retire in Spring '18 (Phased Retirement)

Legacy Charts have been part of the Salesforce for Android, Salesforce for iOS, and Salesforce mobile web experience for many years, but let's bid them farewell. Enhanced Charts (the mobile version of Lightning Experience charts) have replaced Legacy Charts in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Not ready to switch? Revert to Legacy Charts from Setup. But it's a good idea to familiarize yourself with Enhanced Charts now because Legacy Charts are retiring in Spring '18. This change applies to all versions of the Salesforce app.

Here's what the Legacy Charts retirement means for your org.

- In Spring '18, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web will include only Enhanced Charts, and you won't be able to switch back to Legacy Charts.
- Orgs created during or after the Summer '16 release already provide Enhanced Charts as the only charts experience for Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. For these orgs, the option to disable Enhanced Charts doesn't appear in Setup.
- Legacy Charts retirement doesn't affect charts in the full Salesforce site (Salesforce Classic and Lightning Experience).

For more information, see the [Legacy Charts Retirement \(English Only\)](#) announcement. To switch between Enhanced Charts and Legacy Charts, see [Show Enhanced Charts in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web](#) in the Salesforce Help.

 **Note:** Legacy Charts are being retired as part of a phased retirement, and the date of full retirement might be moved to a later release. We will keep the release notes and the Legacy Charts Retirement Announcement updated with information as it becomes available.

### EDITIONS

Enhanced Charts available in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions**

## Enjoy a Modern Chatter Experience in Salesforce for iOS

The new Chatter experience delights with smoother scrolling and a more intuitive user experience. We've added a Company Highlights feed and the **New Posts** button for getting the most relevant and up-to-date information in a hurry. This new experience is available in Salesforce for iOS, version 14.0 or later.

With the new Chatter feed experience, enjoy a faster and modern feed for collaborating with coworkers and customers.

### Company Highlights Feed

Use the Company Highlights feed to stay in the loop with trending conversations at your company. When you're short on time, you can still engage with top posts and make sure you're caught up with the latest company updates. Tap the top of your feed to sort and filter posts based on your priorities. Change your filters as often as you'd like and never miss another update.

Cancel

Filters

Apply

**Filter**

What I Follow

To Me

Bookmarked

Company Highlights

✓

**Sort**

Top Posts

✓

Latest Posts

Most Recent Activity

 **Note:** If you prefer the **All Company** feed, select the **Company Highlights** and **Most Recent Activity** filters for the same feed experience.

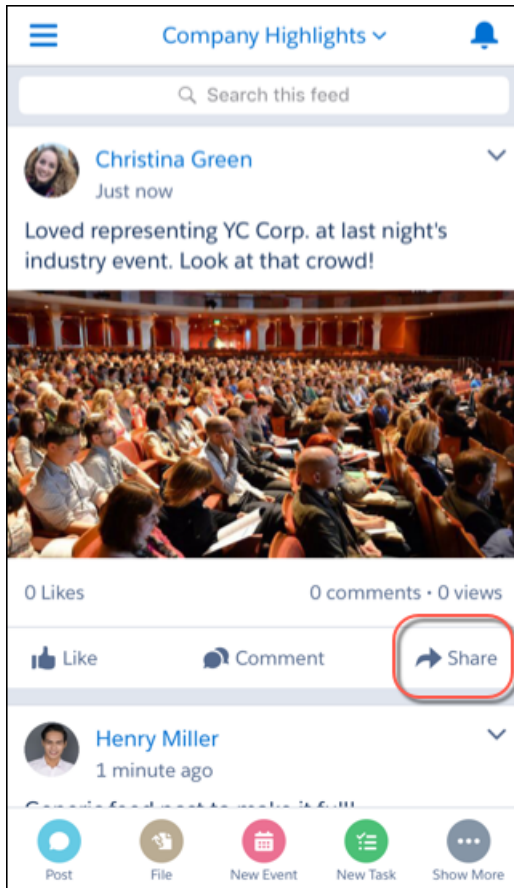
### New Posts Button

The **New Posts** button lets you know when new content is available in the feed so you never miss the latest updates. This button saves you time scrolling through your entire feed just to see the newest posts.



### Share from Your Chatter Feed

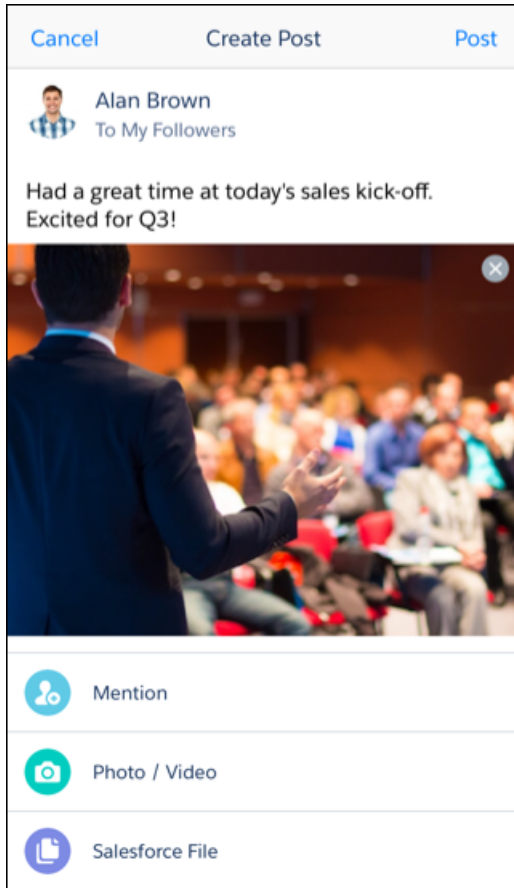
Share posts directly from the feed to followers or groups and include your own thoughts to add to the conversation. You no longer need to tap into the feed detail page to share posts with your followers or groups. Just scroll, share, and get back to work.



## Share Content with the New Chatter Post Composer

Enjoy the modern Chatter post composer when creating posts, attaching images and files, and mentioning users or groups. The new composer makes sharing updates easier and more enjoyable with a new look and full-size image preview. The new Chatter post composer is available in Salesforce for iOS, version 14.0 or later.

Full-size images and attachments show up in the composer so sharing the best photo from an event or most important slide from a presentation easily. You can quickly delete an image or file and attach a new one before or after crafting the text of your post.

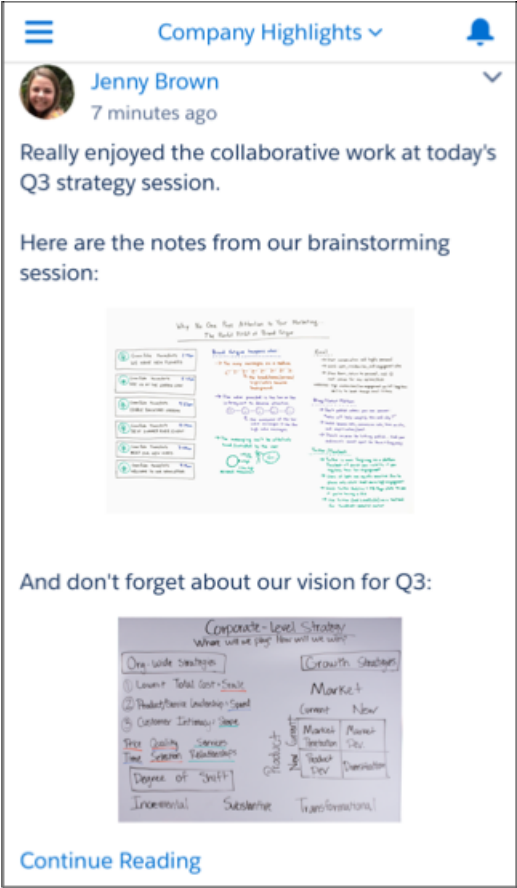


## View Inline Images and Multiple Attachments in the Chatter Feed

As part of the new Chatter experience, users can see inline images and multiple attachments in each post in the feed. Now there's no need to tap into each post to see inline images, providing more context while scrolling through the Chatter feed. This new functionality is available in the Salesforce for iOS, version 14.0 or later.

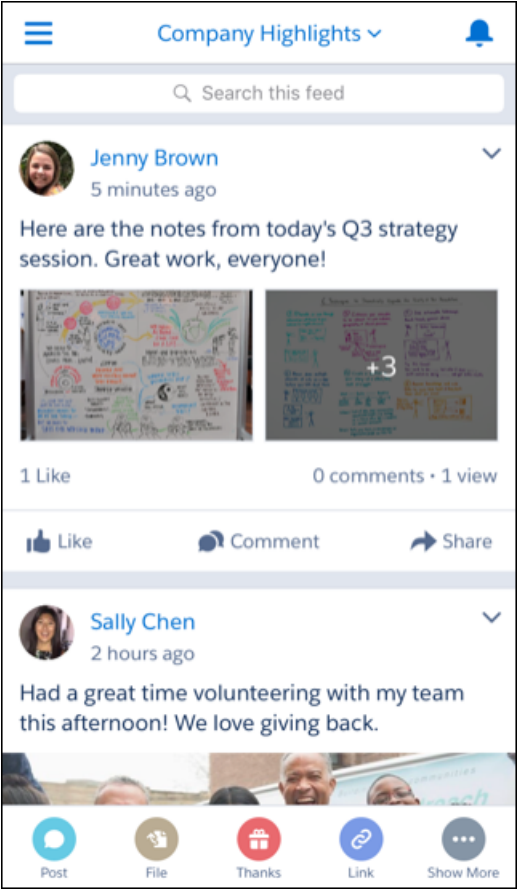
Inline images show up in the Chatter feed and feed detail page.






 **Note:** Users can view inline images, but can't post inline images from Salesforce for iOS.

Posts with multiple attachments show a side by side preview of the first two items. If there's more than two items attached, a + button let's you know to open the feed detail to see more.



 **Note:** Users can only attach one image or attachment to each post from Salesforce for iOS.

## Salesforce1 Is Now Salesforce

Salesforce1 is now simply Salesforce. With this change, it is easier than ever to find Salesforce on every device and in every app store. We made this change to streamline your Salesforce experience across all your devices. We're working to update the new name throughout the product and documentation starting in Winter '18 and continuing in Spring '19.

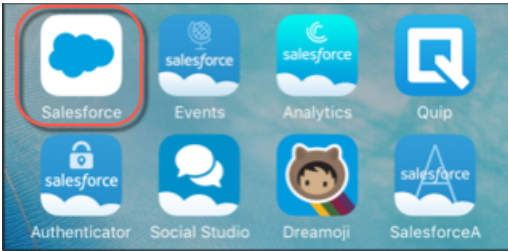
When you update to Salesforce version 14.1 you'll see the new name and refreshed branding on your mobile device. The new version of Salesforce is available starting the week of October 23, 2017.

Although we've just removed a single digit, this update makes your Salesforce experience easier across every device you use to keep your business moving. Salesforce is Salesforce no matter where or how you work. This change reflects your modern, seamless Salesforce experience.

### New Naming

Previous Name	New Name
Salesforce1 downloadable app for iOS	Salesforce for iOS
Salesforce1 downloadable app for Android	Salesforce for Android
Salesforce1 mobile browser app	Salesforce mobile web

## New Branding



## Get Answers Quicker with the Updated Help in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web

With our improved help set, users can troubleshoot more of their problems and work more efficiently on the go. Accessing the help portal is the same as always—your users just tap **Help** in the Salesforce for Android, Salesforce for iOS, or Salesforce mobile web navigation menu. This change applies to all versions of the Salesforce app.

Key changes include:

- Improved organization

- Condensed information based on real use cases
- Updated icons and feature information

## Winter '18 Features That Are Different or Not Available in Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web

Salesforce for Android, Salesforce for iOS, and Salesforce mobile web don't include all the functionality that's available in the full Salesforce site, whether your org is using Lightning Experience or Salesforce Classic. Learn about the Winter '18 Salesforce enhancements that either aren't available, have functional gaps from the full site, or work differently.



**Note:** For the complete list of differences between Salesforce for Android, Salesforce for iOS, and Salesforce mobile web, and the full Salesforce site, see [What's Different or Not Available in the Salesforce App](#) in the Salesforce Help.

### Sales Features

#### Enterprise Territory Management

- The Assigned Territories related list on accounts is read only, even for users with the Manage Territories permission.
- The Users in Assigned Territories related list on accounts isn't available.

### Productivity Features

#### Events and Calendars

- Event attendees in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web require Lightning Sync with the sync direction Sync Both Ways and an account for Microsoft® Office 365® or Google G Suite. And event organizers have to create or edit their events from Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web. Then organizers can view, invite, or remove contacts, leads, and other Salesforce users on their events from Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Event attendees can see contacts, leads, and other Salesforce users. Selecting Sync Both Ways limits some Salesforce Classic functionality. See [Lightning Sync Considerations](#) in Salesforce Help.
- To give reps access to attendees, add the Attendees field to the Event page layout for events. The Attendees field isn't supported for Compact Layouts.
- Attendees can see other attendees' responses from the Details tab in the Attendees field, but can't see responses from the related tab in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.
- Meeting attendees can't respond to event invitations from Salesforce for Android, Salesforce for iOS, or Salesforce mobile web. Users can accept or decline only from Microsoft Office 365 calendar or Google Calendar.
- Reps can't share calendars with coworkers or view coworkers' calendars from Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

#### Tasks and Activities

- The All Activity History tab is not available in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.
- Notifications for task reminders aren't delivered as push notifications in Salesforce for Android or Salesforce for iOS, so reps don't see a notification or popup on their mobile device's lock screen. Instead, reps get reminders in the notifications tray when they open Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.
- Reps can't create a task with a reminder in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web unless you turn off the **Show simpler New Task form on Mobile** setting. From Setup, enter *Activity Settings* in the Quick Find box, then select **Activity Settings**. Deselect **Show simpler New Task form on Mobile**.

## Email

- List email is not available in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. However, users can see completed list email activities in the activity timeline.

## Customer Service Features

### Case Milestones

The Milestone component, including its tracker, isn't displayed in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### Service Contracts

You can edit and delete contract line items in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web, but you can't create them.

## Search

### Default Objects in the Recent Section

When doing a global search in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, you can find records for the objects that appear only in the Recent section of the navigation menu only. In Salesforce for iOS, if you're new to Salesforce and don't yet have a history of recent objects, you can search these objects: Accounts, Cases, Contacts, Files, Leads, Opportunities. You can also search Groups and People if they appear in your Recent section. If they appear in other areas of the navigation menu, they aren't searchable. In Salesforce for Android and Salesforce mobile web, the default set of objects match the Lightning Experience Navigation Bar that the admin has configured for the Lightning App. If the user doesn't have access or permissions to the Lightning App, the default set includes Account, Contact, Opportunity, Case, Lead, People (User), and Group objects until the user's most frequently used objects are determined. As you spend time working in Salesforce for Android, Salesforce mobile web, and the full Salesforce site (Salesforce Classic and Lightning Experience), the objects that you use the most eventually replace the default ones in the Recent section and become the objects that are available for global searches.

## Salesforce for Android, Salesforce for iOS, and Salesforce Mobile Web Development Overview

Several Force.com platform enhancements support Salesforce for Android, Salesforce for iOS, and Salesforce mobile web development.

## Salesforce Authenticator: Accessibility Updates, Improved Backup and Restore Notifications

Salesforce Authenticator v2.10.1 improves accessibility for iOS and Android. We've improved button and field labeling, and Salesforce Authenticator now communicates more clearly with you. We also give more time for backup and restore to sync before reminding you that backups are out-of-date.

### IN THIS SECTION:

#### [Interact More Easily with Salesforce Authenticator Through Accessibility Updates](#)

It's important to us that Salesforce Authenticator provides a great user experience for everybody. We changed our app to improve accessibility for all of you.

#### [Get More Time Before Backup and Restore Notifications Appear](#)

When you add or change an account, Salesforce Authenticator now waits longer before notifying you of out-of-date backups.

### [Track Account Activity on Salesforce Authenticator](#)

Users can now track all details of their account activity with Salesforce Authenticator v2.11. Stay on top of each activity's full history, including the action, date, location, device, and response, by tapping the new carrot icon. Available on both Android and iOS.

### [Easily Connect to Salesforce Authenticator with a Guided Tour](#)

Connecting your Salesforce account with Salesforce Authenticator is easier as we walk you through the pairing process. You can add a Salesforce account using either a QR code or a two-word phrase. The tour is available on Android and iOS.

### [Approve and Disable Automation Services in Salesforce Authenticator](#)

Get an instant read on your automation status. If your admin has disabled automation for your org, the Authenticator notification reflects that information. If a user has disabled location services for the app, or location services are not available for Authenticator, the notification also reflects that information. When automation is enabled, the Deny functionality is disabled. Available on both Android and iOS.

## Interact More Easily with Salesforce Authenticator Through Accessibility Updates

It's important to us that Salesforce Authenticator provides a great user experience for everybody. We changed our app to improve accessibility for all of you.

- You can edit the names of your accounts and usernames on the account page, but previously the text edit boxes and the Cancel button weren't labeled. We fixed it so that they are labeled clearly for both iOS and Android.
- Salesforce Authenticator only shows one address point in Trusted Locations, and no longer names other, irrelevant points on the map. This change applies to iOS.
- The backup and restore toggle button is labeled for iOS and also indicates whether backup and restore is on or off. To turn it on or off, use a double tap.
- When a screen pops up, the text behind it is now disabled.
- When a notification is opened from the lock screen, all details of the request are now displayed.
- All buttons are now labeled for Android.

## Get More Time Before Backup and Restore Notifications Appear

When you add or change an account, Salesforce Authenticator now waits longer before notifying you of out-of-date backups.

Salesforce Authenticator syncs backups when a user adds or removes an account, turns backups on or off, or changes a passcode. If the backups are out of date, we notify you. We want you to be able to recover your accounts. If you had just added an account or changed an existing one and backups hadn't yet finished syncing, sometimes a backup out-of-date notification would appear. In 2.10.1, Salesforce Authenticator tries longer to sync your backup before bothering you with an out-of-date notification.

See Also

[Connect an Account to Salesforce Authenticator \(Version 2 or Later\)](#)

[Back Up Your Connected Accounts in the Salesforce Authenticator Mobile App](#)

[Restore Connected Accounts in the Salesforce Authenticator Mobile App](#)

Remove an Account from Salesforce Authenticator (Version 2 or Later)

SEE ALSO:

[Connect an Account to Salesforce Authenticator \(Version 2 or Later\)](#)

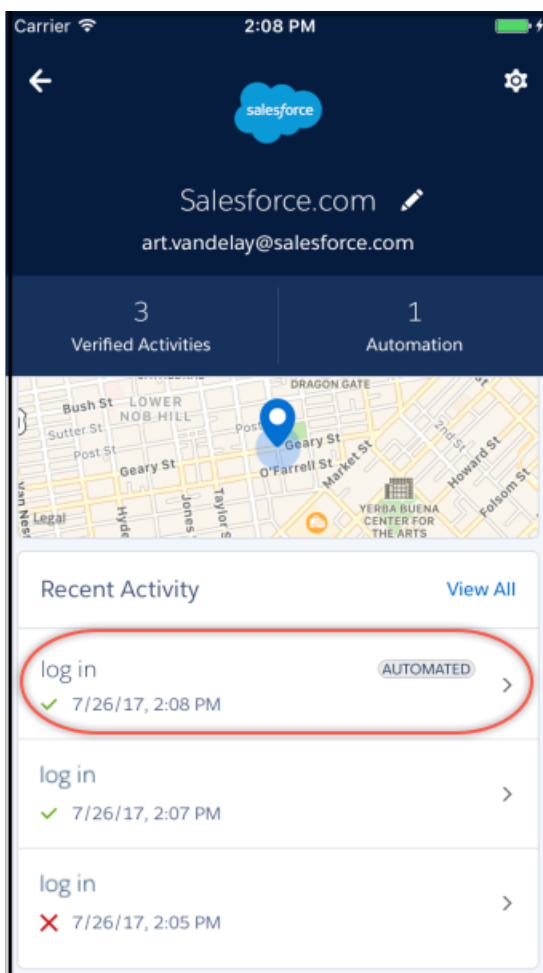
[Back Up Your Connected Accounts in the Salesforce Authenticator Mobile App](#)

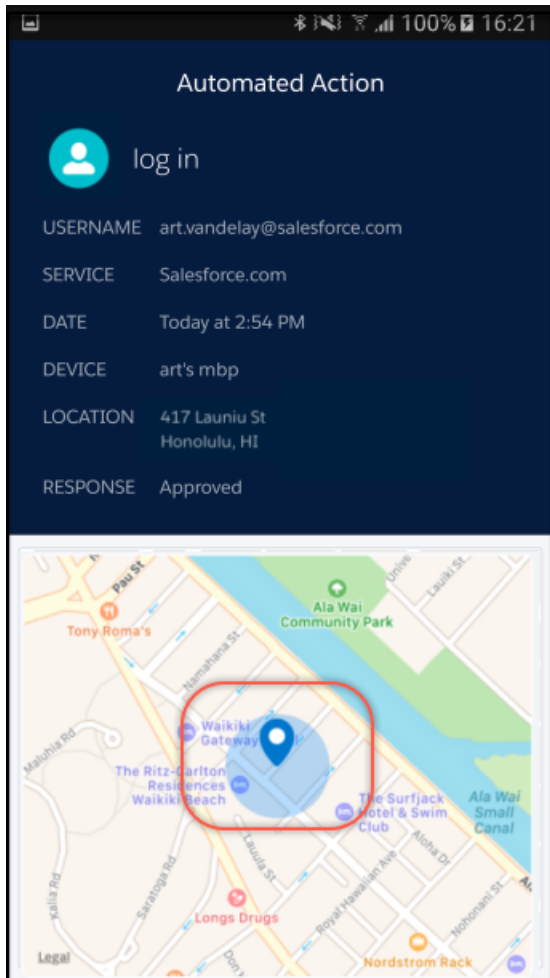
[Restore Connected Accounts in the Salesforce Authenticator Mobile App](#)

[Remove an Account from Salesforce Authenticator \(Version 2 or Later\)](#)

## Track Account Activity on Salesforce Authenticator

Users can now track all details of their account activity with Salesforce Authenticator v2.11. Stay on top of each activity's full history, including the action, date, location, device, and response, by tapping the new carrot icon. Available on both Android and iOS.

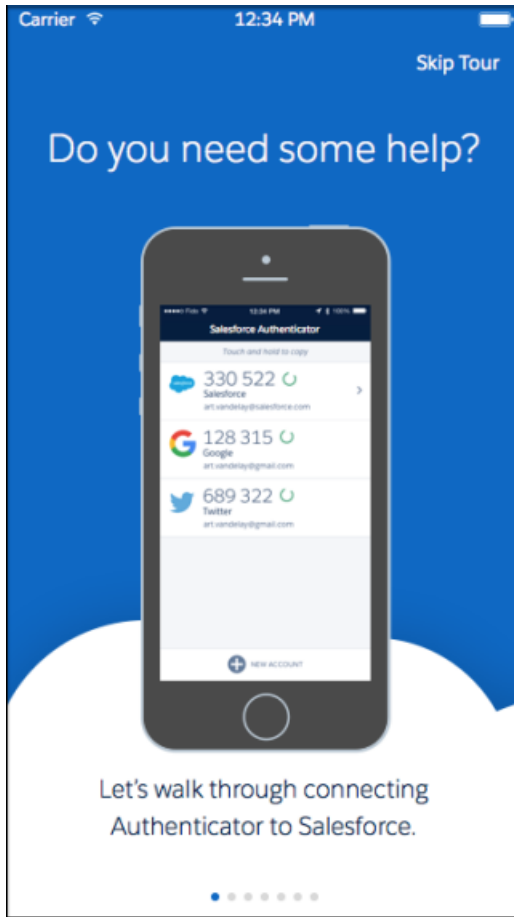




## Easily Connect to Salesforce Authenticator with a Guided Tour

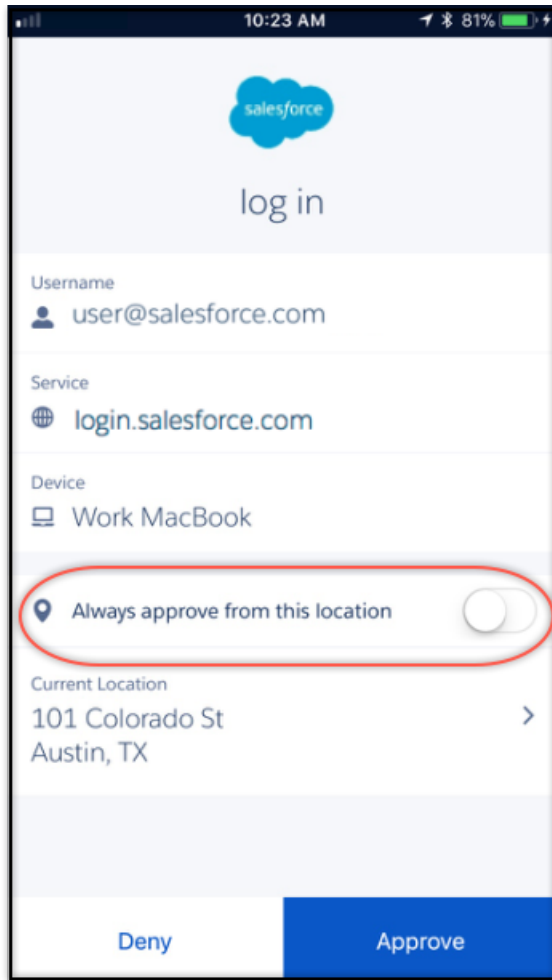
Connecting your Salesforce account with Salesforce Authenticator is easier as we walk you through the pairing process. You can add a Salesforce account using either a QR code or a two-word phrase. The tour is available on Android and iOS.

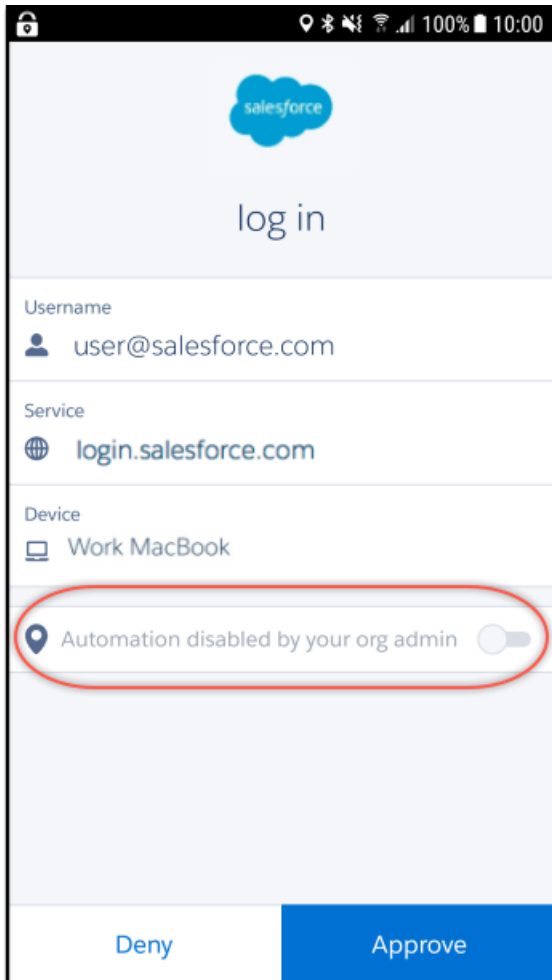




## Approve and Disable Automation Services in Salesforce Authenticator

Get an instant read on your automation status. If your admin has disabled automation for your org, the Authenticator notification reflects that information. If a user has disabled location services for the app, or location services are not available for Authenticator, the notification also reflects that information. When automation is enabled, the Deny functionality is disabled. Available on both Android and iOS.





## Salesforce Chatter: A New Way to Work with Windows 10

Version 1.1 of Salesforce Chatter is generally available the week of August 28, 2017 from the Windows Store. This app gives Windows 10 Anniversary Edition users a new, easy to use way to access Chatter and collaborate with coworkers.

Salesforce Chatter gives you an installable app for collaborating with coworkers over Chatter. You can access Chatter feeds and posting functionality with the power of a downloadable app.

You can launch the full Salesforce site directly from the app without authenticating again. Authenticating once saves valuable time so you can get back to work and access the Salesforce data you need faster.

You can also post drawings and notes made with a stylus directly to colleagues and in your Chatter feed on touch enabled Windows devices.

### IN THIS SECTION:

#### [Supported Devices and Installing Salesforce Chatter](#)

Salesforce Chatter is available for Windows 10 Anniversary Edition users from the Windows Store.

### [What's Available in Salesforce Chatter](#)

You can use Salesforce Chatter to collaborate with coworkers over Chatter in more ways than ever before. Create and post drawings, launch the full Salesforce site with just one login, and enjoy access to Chatter straight from your desktop app.

## Supported Devices and Installing Salesforce Chatter

Salesforce Chatter is available for Windows 10 Anniversary Edition users from the Windows Store.

Salesforce performs automated and manual testing of the Salesforce Chatter app on devices running the Windows 10 Anniversary Edition only.

Customers aren't blocked from using Salesforce Chatter on untested operating systems. The tested operating systems are subject to change, with or without notice.

## What's Available in Salesforce Chatter

You can use Salesforce Chatter to collaborate with coworkers over Chatter in more ways than ever before. Create and post drawings, launch the full Salesforce site with just one login, and enjoy access to Chatter straight from your desktop app.

### **Authenticate**

With the Salesforce Chatter app, you can go straight from working in the Chatter app to launching the full Salesforce site. You only have to log in once when going from the app to the full desktop Salesforce experience, saving time and making everything Salesforce available faster.

### **Notifications**

Salesforce Chatter has its own actionable push notifications. Users are notified immediately of new Chatter activity and can reply from the notification itself or easily open the post. Desktop notifications make staying in the loop on important conversations in real-time easier than ever.

### **Post**

You can attach images and files directly in the Salesforce Chatter app. Unique to Salesforce Chatter is a canvas for posting drawings made with your finger or stylus. Use this unique feature to mock up design ideas for your next project or an easy way to share hand-written meeting notes. You can draw and attach directly to your Chatter posts inside the app for easy sharing with colleagues.

Just like the Chatter experience on the full Salesforce site, you can post text comments to discussions, groups, other users, and more. You can also vote in polls and respond to Chatter Questions.

### **Feed Features**

Sort Chatter feeds so the most relevant information is always at the top. Choose to sort by What I Follow, To Me, Bookmarked, or All Company from the top of the Chatter feed. Change your preference at any time with just a few clicks.

It's also easy to search the feed for People, Groups, Accounts, Contacts, Opportunities, and more to complete important business tasks with fewer steps.

## Salesforce Mobile Classic App to Retire in December 2017

To improve the overall mobile user, developer, and deployment experience, Salesforce is focusing mobile development on Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. As a result, we are retiring the Salesforce Mobile Classic app on December 1, 2017. Also, iOS 10 and Android 7.0 are the final mobile OS versions that we'll use for Salesforce Mobile Classic compatibility testing. We encourage you to start transitioning your mobile users to an alternative experience, such as rolling out Salesforce for iOS and Android or deploying custom mobile apps that address your current and future mobile needs.

On December 1, 2017, Salesforce Mobile Classic will be removed from the App Store and Google Play, and access to currently installed Salesforce Mobile Classic apps will be immediately disabled for all users and orgs.

For more information about the retirement of Salesforce Mobile Classic and your transition options, see [Salesforce Mobile Classic App to Retire on December 1, 2017](#) and join the conversation in this [group](#) in the Trailblazer Community.

## Financial Services Cloud: Data Model Extensions and Lightning Apps for Banking, Intelligent Need-Based Referrals and Scoring, and More

Now personal bankers, as well as financial advisors, can deepen customer relationships and boost productivity with data model extensions for banking and three tailored Lightning apps for Financial Services Cloud: Retail Banking, Retail Banking Console, and Wealth Management. Intelligent Need-Based Referrals and Scoring makes it a cinch for users to create, track, and manage referrals in an easy flow. We've boosted your power to customize Financial Services Cloud with new ways to configure the Financial Account UI components and rollup summary fields. And now you can roll up a financial account balance to multiple joint owners. Plus, use new Lightning components, four new profiles, and a new permission set to jump-start your customer and partner communities. And there's more: See the full list of usability enhancements.

### EDITIONS

Financial Services Cloud is available in Lightning Experience. Available in: **Professional, Enterprise, and Unlimited Editions**

### IN THIS SECTION:

#### [Boost Productivity with the Retail Banking App and Retail Banking Console](#)

Now bankers can get a 360-degree view of their customers with Retail Banking, a Financial Services Cloud Lightning app. And it's easy to manage high-volume transactions on one screen with the Retail Banking Console. Plus, the data model extension—with new objects, fields, and record types for loans, deposits, and more—offers the information bankers need.

#### [Optimize the Financial Services Cloud Experience with Wealth Management, a New Lightning App](#)

Itching to brand your app with a custom color and logo? Or to add, delete, or customize tabs? You can do all this and more by upgrading to Wealth Management, a new Lightning app. The Wealth Management app offers all the features and functionality of the Financial Services Cloud app, plus Lightning enhancements, a referral management workflow, and customizable components to support rollups for financial accounts.

#### [Create and Manage Referrals with Intelligent Need-Based Referrals and Scoring](#)

It's simple to source referrals internally and externally across lines of business with Intelligent Need-Based Referrals and Scoring. Users can manage referrals assigned to them, and even convert more referrals faster with Einstein Lead Scoring. Automatic email notifications keep users up to date on new referral assignments. And out-of-the-box dashboards and reports make it a snap for users to strengthen referral networks, nurture relationships, and identify and reward top referrers.

#### [Supercharge Financial Accounts with Customizable Views and Rollups](#)

To provide greater insight into financial accounts, we've given you the power to configure financial accounts to display the most relevant information for your users. Plus, we redesigned the rollup by lookup framework so that an account balance now rolls up through the Financial Account role to its primary owner and all joint owners, providing greater visibility into account ownership.

#### [Jump-Start Your Customer and Partner Communities](#)

Empower customers and partners with Financial Services Cloud communities. Grant access to customer community members using a new read-only permission set and four out-of-the-box profiles that map to customer community licenses. Customer and partner community members see a more complete picture of individual financial profiles, including account information and goals, with newly accessible Lightning components. Plus, a new referral component makes it easy for customer and partner community members to create referrals.

[Usability Enhancements to Financial Services Cloud](#)

Take a look at these additional enhancements.

[Other Enhancements to Financial Services Cloud](#)[Financial Services Cloud Has New Objects and Fields](#)

Do more with new Financial Services Cloud objects and fields.

[New Financial Services Cloud Record Types](#)

## Boost Productivity with the Retail Banking App and Retail Banking Console

Now bankers can get a 360-degree view of their customers with Retail Banking, a Financial Services Cloud Lightning app. And it's easy to manage high-volume transactions on one screen with the Retail Banking Console. Plus, the data model extension—with new objects, fields, and record types for loans, deposits, and more—offers the information bankers need.

- **Get bankers up and running**—The Personal Banker profile and the Personal Banker Access permission set provide bankers with the default permissions and field-level security settings they need to get started. To set up profiles for other bank employees, modify the permissions to provide the appropriate level of access.
- **Improve efficiency with the Retail Banking Console**—The Retail Banking Console helps bankers manage high-volume transactions on one screen. And the home page, individual profile, household profile, and user profile have been tailored for personal bankers. Customize the home page with page layouts and custom components tailored for retail banking and the referral management workflow.
- **Highlight banking-specific customer details**—Bankers want to know who their customers are and what they need. New custom objects and fields offer a comprehensive view of customers, including credit rating, education, employment, branch affiliation, and communication preferences.
- **Show the full picture of a customer's financial accounts**—When integrated with your banking system, bankers drill down to see account details without leaving Financial Services Cloud.
- **Simplify the referral management workflow**—It's easy for bankers to create, accept, track, assign, and manage referrals from internal and external sources with a referral management workflow. See also [Create and Manage Referrals with Intelligent Need-Based Referrals and Scoring](#)
- **Display account information relevant for bankers**—To provide a snapshot of customers' financial account information, customize Financial Account rollups with a new set of packaged Rollup by Lookup rules and custom fields to display total deposits and total number of accounts, credit balances, and more. See also [Supercharge Financial Accounts with Customizable Views and Rollups](#)

## Optimize the Financial Services Cloud Experience with Wealth Management, a New Lightning App

Itching to brand your app with a custom color and logo? Or to add, delete, or customize tabs? You can do all this and more by upgrading to Wealth Management, a new Lightning app. The Wealth Management app offers all the features and functionality of the Financial Services Cloud app, plus Lightning enhancements, a referral management workflow, and customizable components to support rollups for financial accounts.

We know what you're thinking: Financial Services Cloud is already available in Lightning Experience. You're right about that. Although we optimized Financial Services Cloud for Lightning, the app was built in Salesforce Classic. We think it's worth your while to upgrade. But don't worry; the Financial Services Cloud app isn't going anywhere. It remains available to retain your customizations. With a simple post-upgrade step, you can port over your customizations to the Wealth Management app and enable your Financial Services Cloud (Classic) app to be visible only in Classic.

## Create and Manage Referrals with Intelligent Need-Based Referrals and Scoring

It's simple to source referrals internally and externally across lines of business with Intelligent Need-Based Referrals and Scoring. Users can manage referrals assigned to them, and even convert more referrals faster with Einstein Lead Scoring. Automatic email notifications keep users up to date on new referral assignments. And out-of-the-box dashboards and reports make it a snap for users to strengthen referral networks, nurture relationships, and identify and reward top referrers.

Using the Referral record type on the Lead object and new Lightning components, users can create and automatically route referrals based on a customer's expressed interest, from savings accounts to home loans. Plus, a new referral component makes it easy for partner and customer community members to create referrals.



**Note:** Some services and subscriptions include this feature for an extra cost: For pricing details, contact your Salesforce account executive.

## Supercharge Financial Accounts with Customizable Views and Rollups

To provide greater insight into financial accounts, we've given you the power to configure financial accounts to display the most relevant information for your users. Plus, we redesigned the rollup by lookup framework so that an account balance now rolls up through the Financial Account role to its primary owner and all joint owners, providing greater visibility into account ownership.

We've also packaged a new set of rollup by lookup rules to support rollups to multiple joint owners. Last but not least, you can customize the display with two new components: Financial Account List and Financial Account Role List.

## Jump-Start Your Customer and Partner Communities

Empower customers and partners with Financial Services Cloud communities. Grant access to customer community members using a new read-only permission set and four out-of-the-box profiles that map to customer community licenses. Customer and partner community members see a more complete picture of individual financial profiles, including account information and goals, with newly accessible Lightning components. Plus, a new referral component makes it easy for customer and partner community members to create referrals.

## Usability Enhancements to Financial Services Cloud

Take a look at these additional enhancements.

- **Support for recurring tasks and events**—Users can create recurring tasks and events related to an individual or group and view them in the activity timeline. And you can define rollups for an individual so that recurring tasks and events roll up to the Group/Household profile.
- **Account membership and household relationship deletion**—To reflect changes in family or group relationships, quickly delete household memberships and relationships from Salesforce.
- **Financial Services Cloud Components in Lightning App Builder**
  - **Contextualized display**—When customizing a home page, client page, or financial account page in Lightning App Builder, you'll see only the components that are relevant for that page.
  - **Hover views**—From the hover details, users can quickly view information about a record before clicking to view or edit it. You can manage hover details in the mini page layout for each object.
  - **Renamed components**—To more easily differentiate Financial Services Cloud Lightning components in Lightning App Builder and Community Builder, each Financial Services Cloud Lightning component has a "Financial Services Cloud" suffix.

## Other Enhancements to Financial Services Cloud

- **Localization**—Financial Services Cloud is now available in Danish, Dutch, and Italian.

## Financial Services Cloud Has New Objects and Fields

Do more with new Financial Services Cloud objects and fields.

### New Financial Services Cloud Objects

These custom objects are new.

**BillingStatement\_\_c**

Represents a billing statement for an individual's financial account.

**Card\_\_c**

Represents credit or debit card associated with this financial account.

**ChargesAndFees\_\_c**

Represents agreed-to fees and charges for servicing an individual's financial account.

**Education\_\_c**

Represents an individual's educational background.

**Employment\_\_c**

Represents information about an individual's employment history.

**FinancialAccountTransaction\_\_c**

Represents information about a single financial account transaction.

**IdentificationDocument\_\_c**

Represents information about documents used to verify an individual's identity.

### New Custom Fields for Financial Services Cloud Objects

These custom fields are new to standard and custom objects.

**Account** standard object has new custom fields.

**BankNumber\_\_c**

Identifies a financial institution for electronic purposes.

**BorrowingHistory\_\_c**

Rating of this individual's borrowing history.

**BorrowingPriorities\_\_c**

Primary goal for loan application.

**BranchCode\_\_c**

Identifies an office or building of a financial institution. Code format is based on the financial institution.

**BranchName\_\_c**

Location name for a financial institution office.

**CreditRating\_\_c**

Assessment of creditworthiness.



**CreditScore\_\_c**

Numerical rating of borrower's creditworthiness.

**CustomerID\_\_c**

Financial institution's identification number for this individual (80 characters).

**CustomerSegment\_\_c**

Individual's market segment.

**CustomerType\_\_c**

Individual's financial category.

**KYCDate\_\_c**

Date when the Know Your Customer compliance program was completed for this individual.

**LastUsedChannel\_\_c**

Most recent contact channel.

**LastTransactionDate\_\_c**

Date of the last transaction.

**LastTransactionDateJointOwner\_\_c**

Date of the last transaction - joint owner.

**LastTransactionDatePrimaryOwner\_\_c**

Date of the last transaction - primary owner.

**LengthOfRelationship\_\_c**

Individual's tenure with the financial institution.

**LifetimeValue\_\_c**

Individual's lifetime net asset value to your financial institution.

**ReferredByContact\_\_c**

External contact referring this individual.

**ReferredByUser\_\_c**

Internal Salesforce user who made the referral.

**RelationshipStartDate\_\_c**

Date this individual became a client at your company.

**BillingStatement\_\_c has new custom object fields.****BalanceTransfers\_\_c**

Balance transfer details.

**BillingPeriodEnd\_\_c**

Billing period end date.

**BillingPeriodStart\_\_c**

Billing period start date.

**CashAdvances\_\_c**

Cash advance amount for the billing period.

**Deposits\_\_c**

Deposit made to the account during the billing period.

**EndingBalance\_\_c**

Balance due on the account during the billing period.

**FeesCharged\_\_c**

Fee charged during the billing period.

**FinancialAccount\_\_c**

Financial account associated with this billing statement.

**InterestThisPeriod\_\_c**

Interest charged on the account during the billing period.

**InterestYTD\_\_c**

Interest charged year to date.

**LastPaymentDate\_\_c**

Date of the last payment made on the account.

**MinimumPaymentDue\_\_c**

Minimum payment required by the due date.

**OtherCredits\_\_c**

Other credits made during the billing period.

**PastDueAmount\_\_c**

Amount past due as of the statement date.

**PaymentDueDate\_\_c**

Date a payment is due.

**Payments\_\_c**

Payment received since the last statement.

**PreviousBalance\_\_c**

Account balance at the end of the previous billing period.

**Purchases\_\_c**

Total purchases made during the current billing period.

**SourceSystemId\_\_c**

ID that uniquely identifies the individual in an external data source.

**StatementDate\_\_c**

Date the current statement was generated.

**Withdrawals\_\_c**

Cash withdrawals made during the billing period.

**Card\_\_c has new custom object fields.****AccountHolder\_\_c**

Individual credit or debit holder associated with this card.

**Active\_\_c**

Indicates whether the account is active (true) or inactive (false). Default is true.

**BinNumber\_\_c**

Bank identification number for this account.

**FinancialAccount\_\_c**

Financial account associated with this card.

**OwnershipType\_\_c**

Type of ownership for this card.

**SourceSystemId\_\_c**

ID that uniquely identifies the financial account in an external data source.

**ValidUntil\_\_c**

Date card is no longer valid.

**ChargesAndFees\_\_c has new custom object fields.****AnnualAccountCharge\_\_c**

Annual fee for maintaining an account.

**AnnualMembershipFee\_\_c**

Annual fee for credit card membership.

**APR\_\_c**

Annual percentage rate.

**APRType\_\_c**

Annual percentage rate type

**ATMFee\_\_c**

ATM fee.

**BalanceTransferAPR\_\_c**

APR for balance transfers.

**CashAPR\_\_c**

Annual percentage rate applied to cash withdrawals.

**CashAPRType\_\_c**

APR applied to cash borrowed from a credit card account.

**CashAdvanceFee\_\_c**

Fee for withdrawing cash from a credit card account.

**ForeignTransactionFee\_\_c**

Fee for making a credit card purchase in a foreign currency.

**InsufficientFundsFee\_\_c**

Fee for attempting to make a purchase or payment from an account with insufficient funds.

**InterestRate\_\_c**

Interest rate on a loan account (APR%).

**LatePaymentFee\_\_c**

Fee for not paying the minimum payment by the due date.

**MaximumTransactionFee\_\_c**

Fee for exceeding the maximum monthly transaction limit.

**MonthlyServiceFee\_\_c**

Monthly account maintenance charge.

**OverdraftFees\_\_c**

Fee for a withdrawal that exceeds the available balance.

**ReplacementCardFee\_\_c**

Fee for debit or credit card replacement.

**ReturnedCheckFee\_\_c**

Fee for writing or receiving a check returned due to insufficient funds.

**SourceSystemId\_\_c**

ID that uniquely identifies the individual in an external data source.

**StatementFee\_\_c**

Fee for mailing an account statement.

**StopPaymentFee\_\_c**

Fee for requesting a stop payment on a check or payment that hasn't been processed yet.

**Contact standard object has new custom fields.****Affiliations\_\_c**

Memberships in clubs, organizations, and alumni associations.

**CommunicationPreferences\_\_c**

Preferred communication channel.

**ContactPreference\_\_c**

Preferred communication method.

**CustomerTimezone\_\_c**

Primary time zone.

**EmailVerified\_\_c**

Indicates that the individual's email address has been verified (true) or not (false).

**FaxVerified\_\_c**

Indicates that the individual's fax number has been verified (true) or not (false).

**HomeOwnership\_\_c**

Relationship to primary residence.

**HomePhoneVerified\_\_c**

Indicates that the home phone number has been verified (true), or not (false).

**LastFourDigitSSN\_\_c**

Last four digits of the individual's Social Security number. This field is encrypted.

**MarketingOptOut\_\_c**

Indication that the individual has opted out of receiving marketing materials (true), or not (false).

**MobileVerified\_\_c**

Indicates that the mobile phone number has been verified (true), or not (false).

**MostUsedChannel\_\_c**

Most frequent communication channel.

**MotherMaidenName\_\_c**

Maiden name of the individual's mother.

**NextLifeEvent\_\_c**

Next major life event.

**NumberOfChildren\_\_c**

Number of children.

**PrimaryCitizenship\_\_c**

Country of primary citizenship.

**ReferredByContact\_\_c**

External contact referring this individual.

**ReferredByUser\_\_c**

Internal Salesforce user who made the referral.

**ReferrerScore\_\_c**

A value of 0 to 100. A high score reflects a high rate of referral conversion.

**SecondaryCitizenship\_\_c**

Country of secondary citizenship.

**Education\_\_c has new custom object fields.****Contact\_\_c**

The individual's name.

**EducationLevel\_\_c**

Level of education.

**GraduationDate\_\_c**

Date of graduation from the corresponding education level.

**Institution\_\_c**

Name of the educational institution that awarded the degree.

**SourceSystemId\_\_c**

ID that uniquely identifies the individual in an external data source.

**Employment\_\_c has new custom object fields.****AnnualIncome\_\_c**

Gross annual income as reported on the most recent tax return.

**Contact\_\_c**

The individual's name.

**EmployerAddress\_\_c**

Address of the individual's employer.

**EmployerPhoneNumber\_\_c**

Phone number of the employer.

**EmploymentStatus\_\_c**

Employment status.

**EndDate\_\_c**

End date at former employer.

**LengthOfEmployment\_\_c**

Length of employment in years (to two decimal places).

**Occupation\_\_c**

Job category.

**Position\_\_c**

Job title.

**SourceSystemId\_\_c**

ID that uniquely identifies the individual in an external data source.

**StartDate\_\_c**

Date the individual began working for current employer.

**FinancialAccount\_\_c custom object has new fields.****APY\_\_c**

Annual percentage yield. (Can be fractional.)

**AvailableCredit\_\_c**

Total current available credit for this financial account.

**BalanceLastStatement\_\_c**

Account balance posted on last statement.

**BookedDate\_\_c**

Date charge or credit booked to account.

**CashLimit\_\_c**

Maximum cash withdrawal or advance amount.

**CollateralDesc\_\_c**

Description of collateral provided for loan.

**CurrentPostedBalance\_\_c**

Current posted balance in account.

**DailyWithdrawalLimit\_\_c**

Amount that can be withdrawn in one day.

**DrawPeriodMonths\_\_c**

Number of months an individual can withdraw funds from a credit account.

**EscrowBalance\_\_c**

Current balance in escrow account.

**ExpectedCloseDate\_\_c**

Expected date when the debit account or loan closes.

**FinancialAccountChargesAndFees\_\_c**

Reference to Charges and Fees record for the account.

**InterestRate\_\_c**

Interest rate as a percent.

**LastTransactionDate\_\_c**

Timestamp for the last transaction on the account.

**LienHolder\_\_c**

Name of lien holder on the financial account.

**LoanAmount\_\_c**

Amount of the loan.

**LoanEndDate\_\_c**

End date for the loan.

**LoanTermMonths\_\_c**

Loan term in months.

**MinimumPayment\_\_c**

Minimum monthly payment on account.

**Nickname\_\_c**

Nickname of the financial account.

**OverdraftAllowed\_\_c**

Indicates whether the account allows an overdraft (true) or not (false).

**OverdraftLinkedAccount\_\_c**

Reference to the linked overdraft account.

**PaymentAmount\_\_c**

Minimum monthly payment on the account.

**PaymentDueDate\_\_c**

Date when payment is due on the account.

**PaymentFrequency\_\_c**

Frequency of payments on the account.

**PendingDeposits\_\_c**

Deposits pending on the account.

**PendingWithdrawals\_\_c**

Withdrawals pending on the account.

**PrincipalBalance\_\_c**

Principal balance on the loan account.

**RepaymentPeriodMonths\_\_c**

Repayment period in months.

**RoutingNumber\_\_c**

Bank routing number.

**StatementFrequency\_\_c**

Frequency statements are issued.

**TotalCreditLimit\_\_c**

Total credit limit.

**Type\_\_c**

Type of account.

**FinancialAccountTransaction\_\_c** has new custom object fields.**Amount\_\_c**

Amount of the transaction.

**BillingStatement\_\_c**

Billing statement record associated with the account.

**CardAccountID\_\_c**

Card number linked to the transaction.

**Description\_\_c**

Description of the transaction.

**FinancialAccount\_\_c**

Financial account to which the transaction pertains.

**MerchantCategoryCode\_\_c**

Merchant category code.

**PostDate\_\_c**

Date the transaction posted to the account.

**RunningBalance\_\_c**

Running balance for the transaction.

**SourceSystemId\_\_c**

Record ID from an external data source.

**SourceTransactionType\_\_c**

Source transaction type from an external data source.

**TransactionDate\_\_c**

Date of the transaction.

**TransactionId\_\_c**

ID that uniquely identifies the transaction in an external data source.

**TransactionStatus\_\_c**

Status of the transaction, pending or posted.

**TransactionType\_\_c**

Type of transaction, credit or debit.

**IdentificationDocument\_\_c has new custom object fields.****Account\_\_c**

Account object related to the identification document.

**DocumentNumber\_\_c**

Number listed on the identification document.

**DocumentType\_\_c**

Type of document used to verify the person's identity.

**ExpirationDate\_\_c**

Date the document expires.

**IssueDate\_\_c**

Date the document was issued.

**IssuingCountry\_\_c**

The country in which the document was issued.

**SourceSystemId\_\_c**

ID that uniquely identifies the financial account in an external data source.

**VerifiedBy\_\_c**

Name of the person who verified the document.

**VerifiedOn\_\_c**

Date the identification document was verified.

**Lead standard object has new custom fields.****CreatedByMe\_\_c**

Indicates whether the user contact was converted from this lead.

**ExpressedInterest\_\_c**

Lead's expressed area of interest.

**Household\_\_c**

ID of the household record associated with the lead record.



**PotentialValue\_\_c**

Potential value from converting the lead.

**ReferredByContact\_\_c**

External contact who made the referral.

**ReferredByUser\_\_c**

Internal Salesforce user who made the referral.

**ReferrerScore\_\_c**

A value of 0 to 100. A high score reflects a high rate of referral conversion.

**Opportunity standard object has new custom fields.****ReferredByContact\_\_c**

External contact referring this opportunity.

**ReferredByUser\_\_c**

Internal user referring this opportunity.

**User standard object has a new custom field.****ReferrerScore\_\_c**

A value of 0 to 100. A high score reflects a high rate of referral conversion.

**WealthAppConfig\_\_c custom object has a new field.****RejectedReferralStatus\_\_c**

The lead status used to identify rejected referrals.

## New Financial Services Cloud Record Types

These objects have new record types:

- BillingStatement: Credit, Debit
- ChargesAndFees: Credit, Debit
- FinancialAccount: Auto Loan, Checking Account, Credit Card, HELOC, Loan Account, Mortgage, Savings Account
- Lead: Referral

## Health Cloud: Lightning Experience Comes to the Console, Health Cloud Empower Timeline Component, Householding Map, and More

Health Cloud has taken a huge jump forward in providing the tools that your care coordinators, caregivers, and patients need. Care coordinators will love the awesome user interface and components of Lightning Experience and the holistic view of a patient's household and relationships on the Householding map. Patients can log in to the community and see a timeline of their past, current, and future healthcare events. And there are many more features that support patient care, such as filterable timelines and support for person accounts.

### EDITIONS

Health Cloud is available in Salesforce Classic and Lightning Experience

Available in: **Enterprise**, **Performance**, and **Unlimited** Editions

**IN THIS SECTION:**[Lightning Experience Comes to the Health Cloud Console](#)

Health Cloud has delivered new console apps that give you all of the shiny bells and whistles that come with Lightning Experience. You get better support for your customizations, improved performance, and a framework that lets you incorporate other Lightning components from Salesforce and the AppExchange.

[Let Patients View the Timeline from the Community](#)

The Timeline for Health Cloud Empower component lets patients and caregivers who are logged in to the community see their past, current, and future healthcare events.

[Manage Patient Relationships with the Householding Map](#)

The householding map brings together patients, care plans, caregivers, households, businesses, and other individuals to give care coordinators a holistic view of their patients.

[Decide Which Records Appear in Health Cloud Console and Health Cloud Empower Community Timelines](#)

Now you can use filter criteria to narrow down which records appear on the timeline and then specify which timeline the configuration applies to.

[Support for Person Accounts in Health Cloud](#)

If your org uses person accounts to manage people, you can now use Health Cloud without migrating your patient data to the individual data model. While the default for new customers is to use the individual data model, we've given customers who already use person accounts access to all Health Cloud's features.

[New and Changed Health Cloud Lightning Components](#)

We added a component and made improvements to other Health Cloud components you use to create patient communities.

[Changed Health Cloud Objects](#)

This Health Cloud object has changed.

## Lightning Experience Comes to the Health Cloud Console

Health Cloud has delivered new console apps that give you all of the shiny bells and whistles that come with Lightning Experience. You get better support for your customizations, improved performance, and a framework that lets you incorporate other Lightning components from Salesforce and the AppExchange.

The Health Cloud console in Salesforce Classic is still here, and it's 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.

## Let Patients View the Timeline from the Community

The Timeline for Health Cloud Empower component lets patients and caregivers who are logged in to the community see their past, current, and future healthcare events.

Use the Timeline View Configurations tab to create filters that specify the fields that appear in the timeline from a particular record. Make sure to select **Timeline for Health Cloud Empower** as the target configuration record.

 **Example:** Sample Timeline for Health Cloud Empower (property editor and component)

TIMELINE FOR HEALTH CLOUD EMPOWER

Empty State Text

Select a care plan to view timeline €

Show past events

Show future events

Page Reload Size

50

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Daily Call-in

Due Date Only : 8/16/2017

Monitor blood pressure

Due Date Only : 8/16/2017

Walk 2 miles

Due Date Only : 8/16/2017

No more events to show.

## Manage Patient Relationships with the Householding Map

The householding map brings together patients, care plans, caregivers, households, businesses, and other individuals to give care coordinators a holistic view of their patients.

Leads

Patient Navigation

OPEN NEW TAB

Patient Details

Charles Green

Birthdate: April 19, 1967 ( 50 Years 3 Months ) Gender: Male

Patient Card

LANGUAGES: English

MEDICATIONS: BD Ultrafine Needles | Insulin | Toprol XL

IMMUNIZATIONS: Seasonal flu vaccine

ALLERGIES: Penicillin

LAST ENCOUNTER: Inpatient Full, 2017-04-26 17:46:00Z

Charles Green

Details All Care Plans Timeline Household

Create Household

Add Household

Green Family Household (1)

Charles Green Decision Maker

Add Member

Smoking Cessation (5)

Shawna Green Care Giver

Andrew Molina Primary Care Phy...

Betty Blair Psychologist

Charles Green Patient PRIMARY MEMBER

Melinda Smith Care Coordinator

Add a Care Team Member

Diabetes Type II (5)

Shawna Green Care Giver

Sasha Rybinsk Psychologist

Melinda Smith Care Coordinator

Andy Molina Primary Care Phy...

Charles Green Patient PRIMARY MEMBER

Add a Care Team Member

Related Accounts (2)

Patient Shuttle Services Transportation

Acme Medical Supply Medical Supply

Create Account

Add Account

Related Contacts (1)

Anna Jones Acupuncturist

Add Contact

Remove Relationship

A basic map is created for every patient. It shows the care plan and a branch to add related accounts and contacts. Care coordinators can add information and make the following changes to the map.

- Create a household (1) and then add it to the map (2).
- Collapse and expand (3) the items in each list for easy viewing.
- Add family members or other people to the household (4).
- Manage the care team by adding or removing members (5). Changes made from the Care Plan tab and the Household tab appear in both tabs.
- Create business accounts (6), like medical supply or patient transport companies, and add them to the map (7).
- Add people who don't live with the patient and aren't part of the care team, but still participate in the patient's healthcare (8).
- Remove people or businesses that aren't involved in the patient's healthcare (9).

## Decide Which Records Appear in Health Cloud Console and Health Cloud Empower Community Timelines

Now you can use filter criteria to narrow down which records appear on the timeline and then specify which timeline the configuration applies to.

Show only tasks with medium to high priority to zero in on important issues. Or include medications in the Health Cloud console timeline and exclude them from the Timeline for Health Cloud Empower component, whether it appears in the community, a Lightning app, account record page, or case record page.

**Timeline View Configuration**  
Prescriptions

[Edit Layout](#) | [Printable View](#) | [Help for this Page](#)

**Timeline View Configuration Detail** [Edit](#) [Delete](#) [Clone](#) [Submit for Approval](#)

Timeline View Configuration Name	Prescriptions	Owner	HealthCloud (Change)
Object Category	Medical Data	Language	English (United States)
Friendly Name	Prescriptions	Show On Load	<input checked="" type="checkbox"/>
Object Name	EhrMedicationPrescription__c	Configuration Target	Health Cloud Console App; Timeline For Health Cloud Empower
Detail Field	MedicationName__c		
Hover Field Name			
Position Field	DateWritten__c		
Graphical Icon	timeline_icon_pill.png		
Sort Order	2		
Active	<input checked="" type="checkbox"/>		
Patient Account Lookup	Account__c		
Language Code	en_US		
Filter Criterion	Current medications		
Created By	HealthCloud, 7/18/2017 4:29 PM	Last Modified By	Admin User, 7/19/2017 2:24 PM

**Timeline Filter**

1. ADD FILTERS      2. NAME THE LIST

1 EHR Medication Prescripti  Status Code  equals  current

Filter Logic

[Next](#)

Select the timelines in which to display the fields (1). You can target a timeline configuration record to appear only in the Health Cloud console, only in the Timeline for Health Cloud Empower component, or in both. Then create the filter logic for the configuration setting using the Timeline Filter component (2) at the bottom of the tab.

## Support for Person Accounts in Health Cloud

If your org uses person accounts to manage people, you can now use Health Cloud without migrating your patient data to the individual data model. While the default for new customers is to use the individual data model, we've given customers who already use person accounts access to all Health Cloud's features.

## New and Changed Health Cloud Lightning Components

We added a component and made improvements to other Health Cloud components you use to create patient communities.

The following component is new.

### Timeline for Health Cloud Empower

The Timeline for Health Cloud Empower component lets patients who are logged in to the community to see their past, present, and future healthcare events.

The following components have changed.

### Care Plan Selector for Health Cloud Empower

The following properties are new.

- **Show all care plans**—Lets a user see all the care plans that they have permission to view for that patient. This option is available only if you've enabled multiple care plans in your org.
- **Include birth year**—Shows the patient's year of birth in the picklist.
- **Show birth month as text**—Shows the patient's birth month as text, such as Jan or Feb.

### Care Team for Health Cloud Empower

The following properties are new.

- **Include care plan owner in list**—Shows the care plan owner in the list of care team members when the person is an internal user.
- **Care Plan Owner Role Name**—Lets you customize the label text for the name of the care plan owner role. For example, if a nurse practitioner creates and owns the care plan, you can show Nurse Practitioner as the role instead of the default.

## Changed Health Cloud Objects

This Health Cloud object has changed.

### TimelineViewConfiguration\_\_c

The following fields have been added.

#### Configuration\_Target\_\_c


Picklist used to select which timelines the record targets. You can create one configuration record for patient communities and one for the Health Cloud console. To show the same fields in both the Health Cloud console and the community, select both options.

#### FilterCriterion\_\_c

The name of the collection of filters that apply to this configuration.

#### Configuration\_Target\_\_c

The API name of the field that looks up to Account (Patient). The default for this field is Account\_\_c.

 **Note:** To use delivered Account lookups for standard objects like Contact or Task, you must append `Id` to the lookup field name. For example, to configure a lookup from Contact to Account, use `AccountId` in this field. Similarly, for a lookup from Task to What, use **WhatId**.

## Customization: Dynamic Lightning Pages, Translatable Flows, Custom Lightning Page Templates

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Make your Lightning pages dynamic by choosing when to display certain components. Start processes when something other than a record change happens—inside or outside of your org. And distribute the same flow to all your users, regardless of language, with Translation Workbench. If you've expanded your horizons into the world of code, check out custom Lightning page templates.

### IN THIS SECTION:

#### [Lightning App Builder: Dynamic Lightning Pages, Custom Templates, and Cloning Custom Pages](#)

Make your Lightning pages dynamic by setting rules to control when components display. Create custom Lightning page templates to fit specific business needs. And save time by cloning custom Lightning pages already in your org. The Lightning App Builder is available in both Lightning Experience and Salesforce Classic. Unless otherwise noted, the feature changes are only for Lightning Experience.

#### [Visual Workflow: Translation Support, New Wait Event Type, More Ways to Distribute Flows](#)

Translate as many flows in as many languages as you want. If you've created a platform event, configure your flows to wait for that event to occur. And take advantage of several new ways to distribute your flows: a custom object-specific action, a component in Community Builder, or a component in your custom Lightning component or app. These changes apply to both Lightning Experience and Salesforce Classic.

#### [Process Builder: Event Processes, User Selection, and Encryption Support](#)

Welcome a new type of process. An event process can start when something other than a record change occurs. For all process types, we made it easier to reference a specific user or queue. And the ability to reference encrypted data in your processes is now generally available.

#### [Globalization: Easier Multiple Currency Enablement, XLIFF Format and Flow Support in Translation Workbench](#)

If your company supports more than one currency, you can now enable the Multiple Currencies feature without contacting Customer Support. If your company supports more than one language, enjoy a new supported file type for importing and exporting translations: XLIFF. And translate your org's flows using Translation Workbench.

#### [Salesforce Connect: Batch Apex, External Object Validator, and Continued Pilot for Tracking Callouts](#)

Use batch Apex to process large sets of external object data. Use the Salesforce Connect Validator to quickly test common user and code interactions with external objects. Let us know what you think about the continued pilot for tracking external object data callouts with event log files.

#### [Fields and Picklists: Time Field Type Beta and Picklist Value Management Enhancements](#)

We added a new custom field for tracking time, and improved picklist value management.

#### [Sharing: Share Contacts Manually in Orgs That Use Person Accounts and Asynchronous Deletion of Obsolete Shares](#)

Orgs that use person accounts are now able to modify the Organization-Wide Sharing Default for Contacts. This allows for flexibility in how you share business contacts, including the ability to define contact sharing rules and manually share business contacts. Obsolete shares are removed asynchronously, so no more waiting for shares to be deleted before continuing with other operations.

#### [AppExchange: Redesigned Website, New Solution Types](#)

We redesigned the AppExchange website from top to bottom, making it easier to find secure, prebuilt Salesforce solutions. You can also tackle a wider variety of business challenges with the addition of Bolt Solutions and Lightning Data.

[General Setup: Swagger for External Services and More Hourly Workflow Time Triggers](#)

External Services gets a couple of improvements, including Swagger support. You can request a higher hourly limit for workflow time triggers per hour. And we now prevent you from deleting actions that are used in a page layout.

## Lightning App Builder: Dynamic Lightning Pages, Custom Templates, and Cloning Custom Pages

Make your Lightning pages dynamic by setting rules to control when components display. Create custom Lightning page templates to fit specific business needs. And save time by cloning custom Lightning pages already in your org. The Lightning App Builder is available in both Lightning Experience and Salesforce Classic. Unless otherwise noted, the feature changes are only for Lightning Experience.

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited,** and **Developer** Editions

#### IN THIS SECTION:

[Make Your Lightning Pages Dynamic](#)

Now you can control when a component appears on a record page by adding filter conditions and logic to its properties. No need to add anything to your custom components. It's all handled by the Lightning App Builder. For example, construct a filter that causes a rich text component on an opportunity page to display when the Amount is greater than \$1 million.

[Take Lightning Page Customization to a Whole New Level with Custom Page Templates](#)

Now you're no longer limited to the standard templates available for Lightning record, app, and Home pages. Take your business needs in hand, and create a custom page template of your own that has the structure and components that you define. Add as many regions as you need, and even custom styling. This feature is available in Lightning Experience and all versions of the Salesforce app.

[Create Custom Lightning Pages by Cloning the Ones You Already Have](#)

Why create the same page over again? Save time and effort by cloning a Lightning page from either the Lightning page list view or from a Lightning page's detail page.

[View Related List Data Quickly with Related List Quick Links](#)

Are your users tired of clicking **View All** to see all the columns in a related list? With the Related List Quick Links component, they can view multiple related lists in quick succession just by hovering over a link. And, they can complete actions right from within the hover pane.

[Let Users Hold Video Meetings and Send Instant Messages Right from a Record with the Cisco Spark Group Conversations Component](#)

As part of the new Cisco Spark for Salesforce feature, the Cisco Spark Group Conversations component is now available in the Lightning App Builder. Add it to record pages to let your users initiate video meetings and send and receive instant messages right from the record they're visiting.

[Let Users Manage Shared Work Spaces in Cisco Spark for Salesforce](#)

As part of the new Cisco Spark for Salesforce feature, the Cisco Spark Conversation component is now available in the Lightning App Builder. Add it to record pages to let your users link and unlink Cisco Spark work spaces with a record, view spaces that are associated with a record, create spaces, and search for spaces.

[Get Familiar with the Updated Filter List Component](#)

We made the Filter List component more robust and user friendly. And, in the process, we gave it a new name—List View—a new look, and a new property in the Lightning App Builder.

### [Rich Text Components Have a New Style](#)

We added an attribute to the Rich Text component that controls the background of your rich text content when it displays on a Lightning page. The attribute is enabled by default and is accessible from the property pane when you select a Rich Text component in the Lightning App Builder. When enabled, the attribute renders your rich text as a card with a white background, instead of a transparent one. This change makes the text more readable in Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### [Configure Lightning Pages with Custom Components More Easily with Fewer My Domain Restrictions](#)

We eased the My Domain restrictions related to working with Lightning pages that contain custom components. You can now save and configure Lightning pages that contain custom components both inside and outside of the Lightning App Builder, even when your org doesn't have My Domain enabled. This change doesn't apply to components configured as custom Lightning page templates.

### [Add Milestones to Case Record Pages](#)

You can now add the Milestones component to case record pages in Lightning Experience. This component lets your users see active, completed, and violated milestones for their cases. Previously, the case milestones tracker was only available in Salesforce Classic.

### [View Read-Only Fields in the Related Record Component](#)

The Related Record component, which displays details for related records, now displays read-only fields. We also added a link in Lightning App Builder that lets you access the Setup page for actions you associate with the Related Record component. These changes apply to Lightning Experience only.

### [Set More Variable Values in the Flow Component](#)

You can now set values for your picklist and multi-select picklist variables directly from the properties pane. These changes apply to both Lightning Experience and Salesforce Classic.

### [Related List Component Is Now Related List – Single](#)

To remove confusion, we appended “– Single” to the Related List component so that it's clearly distinguishable from its plural sibling, Related Lists.

### [Quarterly Performance Component Is Now Called Performance](#)

We renamed the Quarterly Performance component to Performance. Users still get the same great snapshot of their team's quarterly performance. The new name lets us use the component to show other performance measurements in the future. Did someone say “safe harbor”?

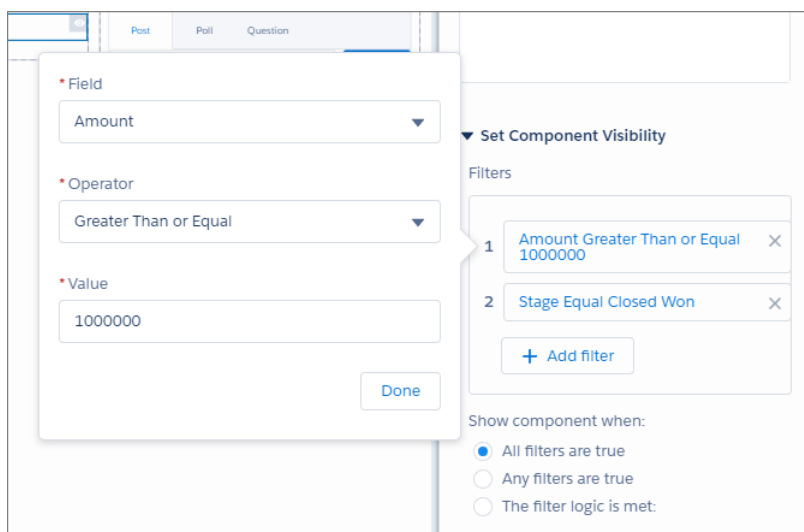
### [Custom Settings No Longer Supported for List View Component](#)

We removed CustomSettings from the list of allowed objects for the List View Lightning component. If you have a Lightning page with a List View component that points to CustomSettings, point the component to a different object or remove it from the page.

## Make Your Lightning Pages Dynamic

Now you can control when a component appears on a record page by adding filter conditions and logic to its properties. No need to add anything to your custom components. It's all handled by the Lightning App Builder. For example, construct a filter that causes a rich text component on an opportunity page to display when the Amount is greater than \$1 million.





Component visibility filters are supported for standard components, custom components, and components from AppExchange. If you don't define a filter, the component displays on the Lightning record page as usual. When you define one or more filters and set the filter logic for a component, the component is hidden until the filter logic criteria are met.

## Take Lightning Page Customization to a Whole New Level with Custom Page Templates

Now you're no longer limited to the standard templates available for Lightning record, app, and Home pages. Take your business needs in hand, and create a custom page template of your own that has the structure and components that you define. Add as many regions as you need, and even custom styling. This feature is available in Lightning Experience and all versions of the Salesforce app.

It all works by using Lightning components.

Every Lightning page includes a template component that defines the page's regions and what components it includes. Now you can create a custom Lightning page template component and make it available as a custom page template in the Lightning App Builder's new page wizard.

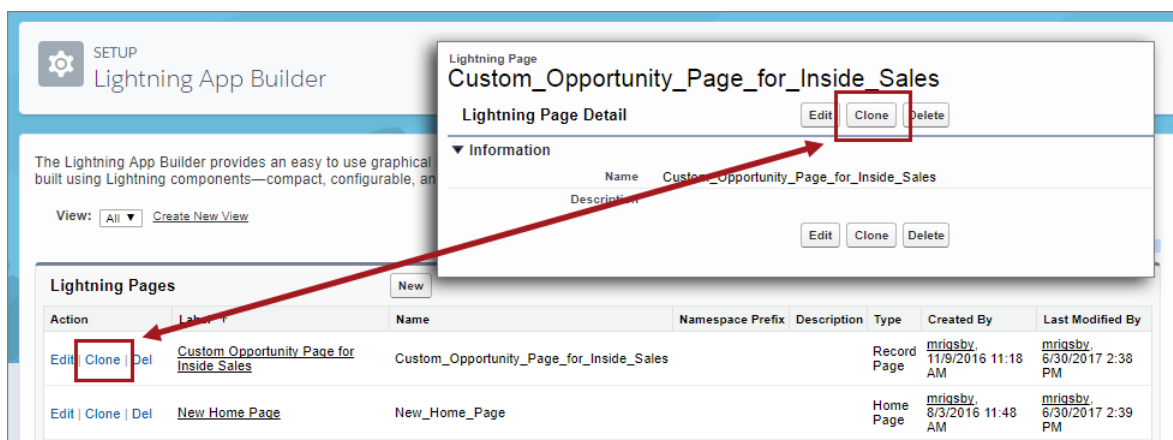
There are new interfaces and tags for the `.cmp` and `.design` files that help you define the template's structure, regions, and included components. Each page type has a different interface that the template component must implement.

- `lightning:appHomeTemplate`
- `lightning:homeTemplate`
- `lightning:recordHomeTemplate`

For instructions on creating a custom page template component, plus complete sample code, see the [Lightning Components Developer Guide](#).

## Create Custom Lightning Pages by Cloning the Ones You Already Have

Why create the same page over again? Save time and effort by cloning a Lightning page from either the Lightning page list view or from a Lightning page's detail page.

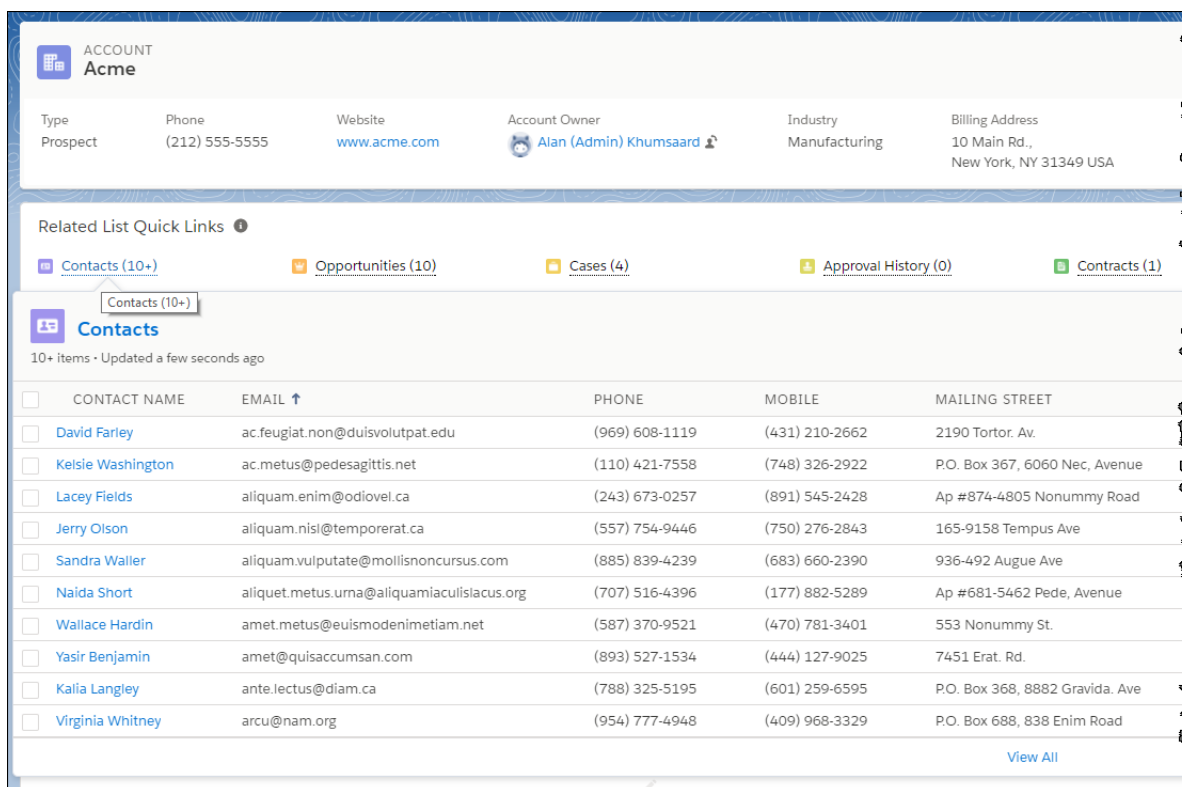


## View Related List Data Quickly with Related List Quick Links

Are your users tired of clicking **View All** to see all the columns in a related list? With the Related List Quick Links component, they can view multiple related lists in quick succession just by hovering over a link. And, they can complete actions right from within the hover pane.

The Related List Quick Links component is available for record pages only.

The component displays two rows of related list links in large or medium page regions, and six rows in small regions. Users can view the remaining related list links by clicking **Show All**, which expands the component. When a user hovers over a related list quick link, the first 10 items in the related list display.



Header actions, mass actions, row actions, and text wrapping are all available on the hover pane. Resizable columns are sticky when you drill into a related list as of Winter '18, but they're not sticky on the hover pane.

The content of this component is based on the set of related lists on the object's page layout plus the user's preferences. Users can customize the order of the quick links and exclude the ones they don't want from their personal settings by entering *Customize My Pages* in the Quick Find box, selecting **Customize My Pages**, then clicking the object.

SEE ALSO:

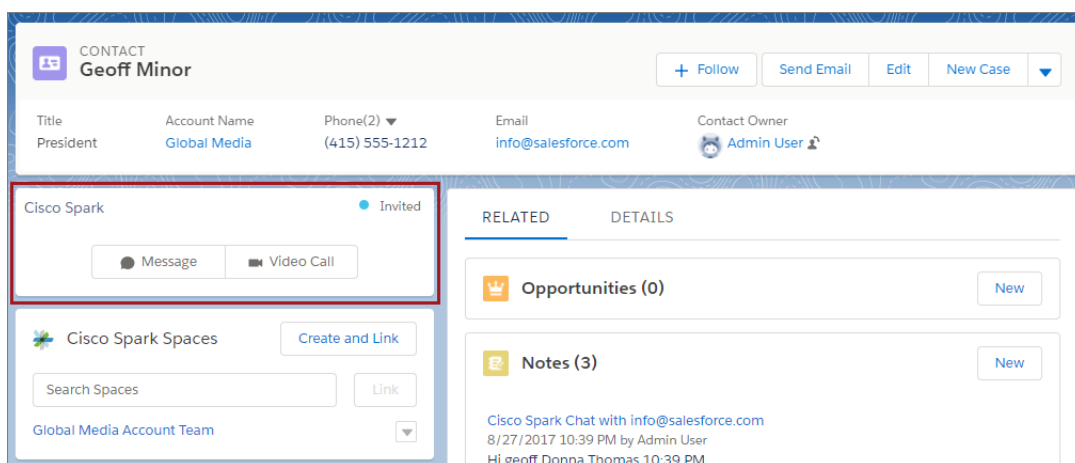
[IdeaExchange: More than 4 fields on Related List in Lightning Experience](#)

## Let Users Hold Video Meetings and Send Instant Messages Right from a Record with the Cisco Spark Group Conversations Component

As part of the new Cisco Spark for Salesforce feature, the Cisco Spark Group Conversations component is now available in the Lightning App Builder. Add it to record pages to let your users initiate video meetings and send and receive instant messages right from the record they're visiting.



**Note:** The Cisco Spark Group Conversations component displays as “Cisco Spark” when on a Lightning page.



When the Cisco Spark Group Conversations component is on a page, it adds extra information when users hover over a linked name on the page. In addition to seeing the normal hover information, users also see that person's status, such as Active or Inactive.

For people outside your org, such as customers and leads, and for free accounts, the component shows an “Out of Org” message. However the message and video button still display. If the person doesn't have a Spark account, the component shows “Invite to Spark”, and the button changes to “Invite”. When a user clicks **Invite**, the component displays a conversation window where they can type a message. The user being invited then gets an email with a message and instructions on how to create a Spark account.

The Cisco Spark Group Conversations component is available for record pages only, and works only on pages that contain an email field. While it's supported for nearly all standard and custom objects supported in Lightning Experience, this component works best on pages that represent a person, such as a contact or lead.

This component works in conjunction with the Cisco Spark component, which is available for app utility bars.

To use this component and see it in the Lightning App Builder, you must enable the Cisco Spark Messages and Meetings org preference in Setup. When you add the component to a page, you must select an email address to associate it with.

Users without the Cisco Spark user permission don't see this component on the page.

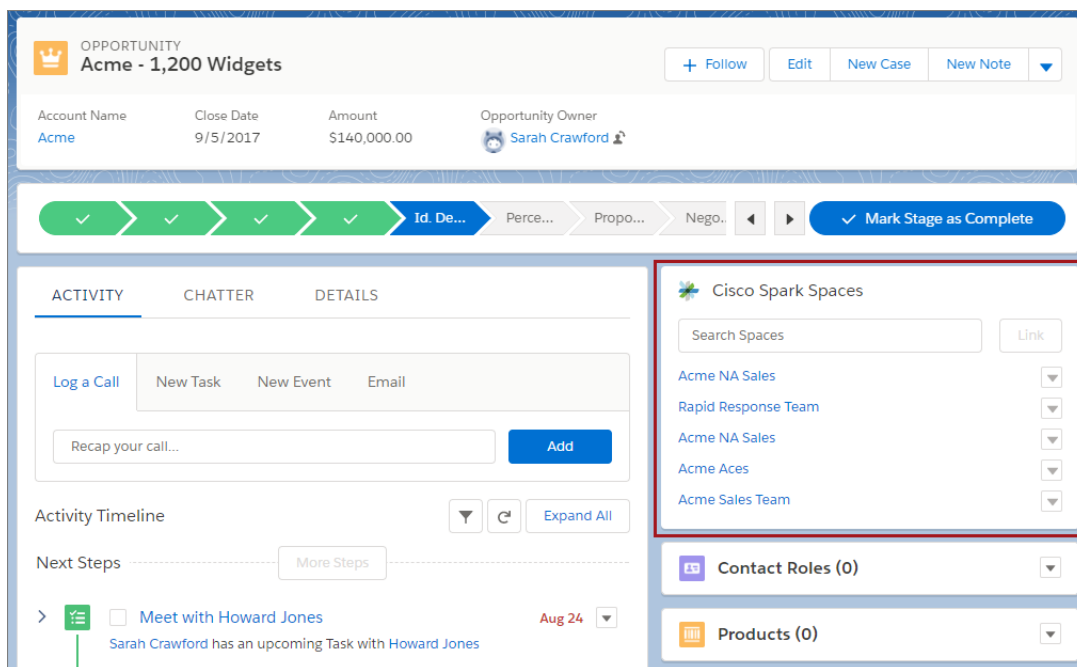
To learn more about Cisco Spark for Salesforce, see [Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce \(Generally Available\)](#).

## Let Users Manage Shared Work Spaces in Cisco Spark for Salesforce

As part of the new Cisco Spark for Salesforce feature, the Cisco Spark Conversation component is now available in the Lightning App Builder. Add it to record pages to let your users link and unlink Cisco Spark work spaces with a record, view spaces that are associated with a record, create spaces, and search for spaces.



**Note:** The Cisco Spark Conversation component displays as “Cisco Spark Spaces” on a Lightning page.



Up to five spaces can be linked with a record.

This component works with the Cisco Spark component, which is available for app utility bars. When users create a space, it's immediately available in the Cisco Spark component.

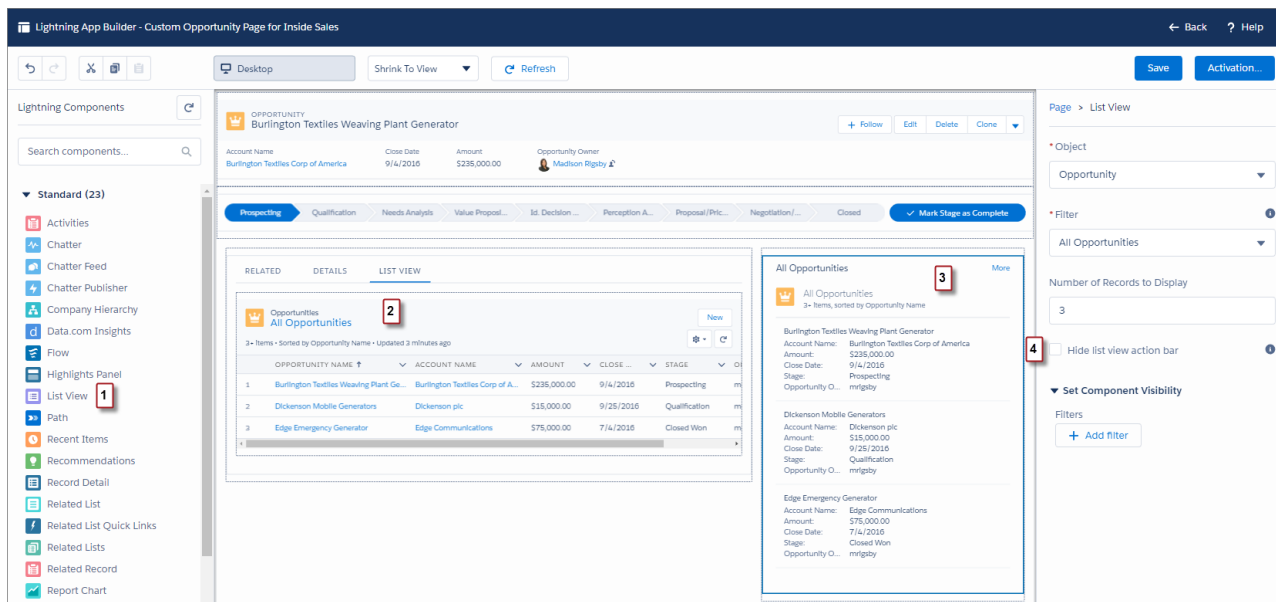
The Cisco Spark Conversation component is available for record pages only.

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To learn more about Cisco Spark for Salesforce, see [Cisco Spark for Salesforce: Connect with Customers and Reps Without Leaving Salesforce \(Generally Available\)](#).

## Get Familiar with the Updated Filter List Component

We made the Filter List component more robust and user friendly. And, in the process, we gave it a new name—List View—a new look, and a new property in the Lightning App Builder.



### New Name

To better reflect what the component really does, we renamed it to List View (1).

### New Look

In an x-large, large, or medium page region, the List View component renders as a true list view, like on an object's home page (2).

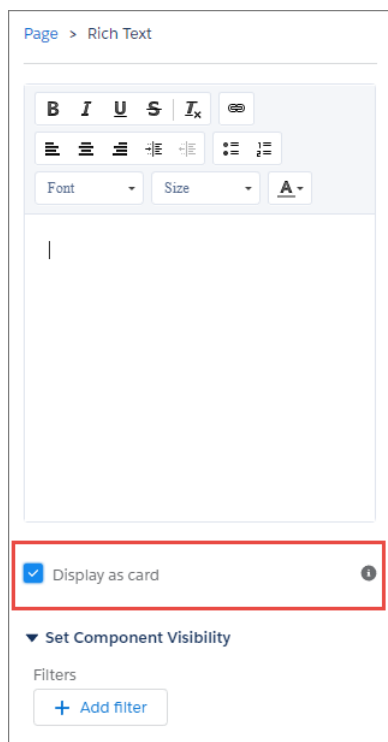
In a small region, the component renders as it did before (3).

### New Property

You can hide the action bar when the component renders as a full list view (4). This setting doesn't apply when the component renders in a small region or in Salesforce for Android, Salesforce for iOS, or Salesforce mobile web.

## Rich Text Components Have a New Style

We added an attribute to the Rich Text component that controls the background of your rich text content when it displays on a Lightning page. The attribute is enabled by default and is accessible from the property pane when you select a Rich Text component in the Lightning App Builder. When enabled, the attribute renders your rich text as a card with a white background, instead of a transparent one. This change makes the text more readable in Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.



## Configure Lightning Pages with Custom Components More Easily with Fewer My Domain Restrictions

We eased the My Domain restrictions related to working with Lightning pages that contain custom components. You can now save and configure Lightning pages that contain custom components both inside and outside of the Lightning App Builder, even when your org doesn't have My Domain enabled. This change doesn't apply to components configured as custom Lightning page templates.


If your org doesn't have My Domain enabled:

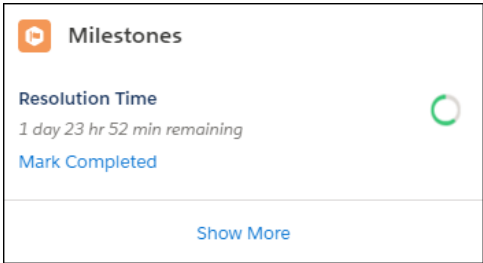
- You can now save a Lightning page that contains a custom component via the Tooling API and Metadata API.
- You can now install or upgrade a package that has a Lightning page containing a custom component.
- When you activate a Lightning page that contains a custom component, the component is dropped from the page at runtime.
- In the Lightning App Builder, custom components still aren't available in the component list in the left pane.
- Lightning pages that are installed via a package or saved via the API and contain custom components render properly in the Lightning App Builder and can be saved. When viewed on the Lightning App Builder canvas, these pages display the custom component with a placeholder message warning you that My Domain is required to use it. You can select the component on the canvas, and you can configure its properties in the properties pane.

If you own a managed package that contains a Lightning page with a custom component, you can push upgrades for the package to subscribers that don't have My Domain enabled.

## Add Milestones to Case Record Pages

You can now add the Milestones component to case record pages in Lightning Experience. This component lets your users see active, completed, and violated milestones for their cases. Previously, the case milestones tracker was only available in Salesforce Classic.

 **Note:** You can add the Milestones component to record pages only for cases. The Milestones component works in all Lightning apps—standard and console. The Milestones component doesn't have any properties to customize in the Lightning App Builder. You must configure your milestones in Setup. So make sure that your entitlements, entitlement process, and milestones are set up before adding the component in the Lightning App Builder.

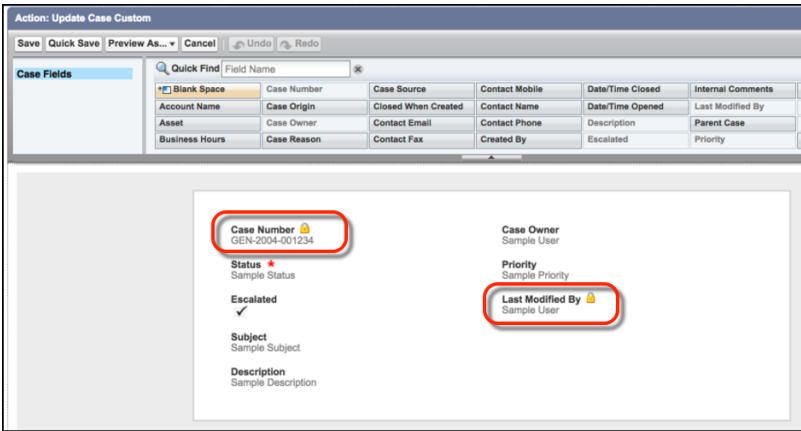
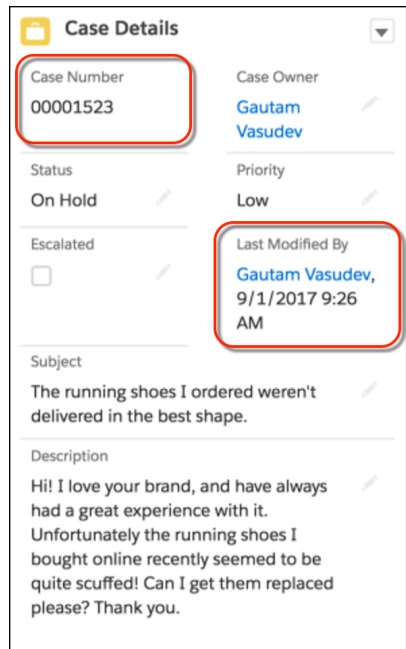


SEE ALSO:  
[Track Your Case Milestones in Lightning Experience](#)

### View Read-Only Fields in the Related Record Component

The Related Record component, which displays details for related records, now displays read-only fields. We also added a link in Lightning App Builder that lets you access the Setup page for actions you associate with the Related Record component. These changes apply to Lightning Experience only.

This component displays the read-only Case Number and Last Modified By fields. Here's the associated action layout.



In Lightning App Builder, look for the View and Edit Actions link in the component's properties. Use this link to access the Setup page for an object's quick actions. From there, you can edit actions and customize the fields displayed for that action.

Page > Related Record

Let users view a related record, edit it inline, change the linked record, and create a new related record.

Header Label ⓘ  
Enter an optional header...

\* Lookup Field ⓘ  
Use This Case ▼

\* Update Action ⓘ  
Update Case Custom ▼

Create Action ⓘ  
New Case ▼

Choose an object that has a quick action to update the record. Some lookup fields have default actions. If a default action isn't available, create one. You can also edit the layout for existing actions.

[New Update Action](#)

[New Create Action](#)

[View and Edit Actions](#)


## Set More Variable Values in the Flow Component

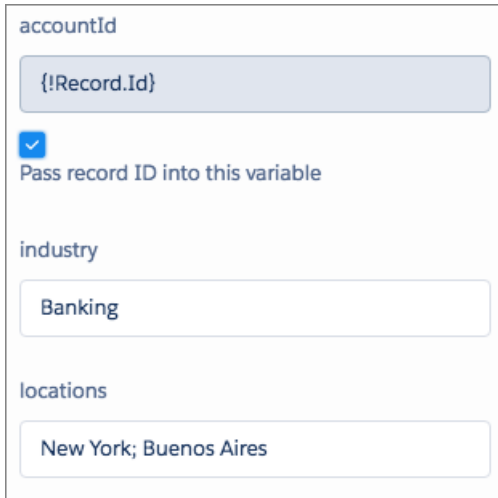
You can now set values for your picklist and multi-select picklist variables directly from the properties pane. These changes apply to both Lightning Experience and Salesforce Classic.

### EDITIONS

Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions



 **Example:** Here's a Flow component in the Lightning App Builder that sets a picklist variable (`industry`) to Banking and a multi-select picklist variable (`locations`) to New York and Buenos Aires.



SEE ALSO:

[Set Values for Picklist and Multi-Select Picklist Variables](#)

## Related List Component Is Now Related List – Single

To remove confusion, we appended “– Single” to the Related List component so that it’s clearly distinguishable from its plural sibling, Related Lists.

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We renamed the Quarterly Performance component to Performance. Users still get the same great snapshot of their team’s quarterly performance. The new name lets us use the component to show other performance measurements in the future. Did someone say “safe harbor”?

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## Visual Workflow: Translation Support, New Wait Event Type, More Ways to Distribute Flows

Translate as many flows in as many languages as you want. If you’ve created a platform event, configure your flows to wait for that event to occur. And take advantage of several new ways to distribute your flows: a custom object-specific action, a component in Community Builder, or a component in your custom Lightning component or app. These changes apply to both Lightning Experience and Salesforce Classic.

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Available in: **Enterprise**,  
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and **Developer** Editions

## IN THIS SECTION:

[Translate Flows from the Translation Workbench](#)

Are you tired of copying flows so that you can support multiple languages? You can now use the Translation Workbench to translate flows and maintain translations across flow versions. You can translate flows manually in the UI or export and import flows for bulk translations.

[Launch a Flow from an Object-Specific Action \(Beta\)](#)

Add flows to the action menu on your Lightning pages without hunting down the flow's URL. When you create a flow action, you can pick from a list of available flows rather than enter the flow URL manually. This feature is available in Lightning Experience and all versions of the Salesforce app.

[Configure a Flow to Wait for a Platform Event to Occur](#)

You can now subscribe to platform events in a flow Wait element. With platform events, a flow can wait for something to occur, inside or outside your Salesforce org. Previously, a flow could wait only for a relative or absolute date/time value. This feature is new in both Lightning Experience and Salesforce Classic.

[Add Flows Anywhere in Salesforce with the Flow Lightning Component](#)

The flow Lightning component is no longer limited to Salesforce tools, like the Lightning App Builder. Add flows to your custom components and apps by using the `lightning:flow` Lightning component. This feature is available in Lightning Experience and all versions of the Salesforce app.

[Add Flows to Lightning Communities](#)

Welcome a new component to the Community Builder. Use the Flow component to embed active flows in your Lightning community.

[Set Values for Picklist and Multi-Select Picklist Variables](#)

In Lightning runtime, you can now set values for your picklist and multi-select picklist variables directly from the URL. With this change, Lightning flow runtime has parity with Classic flow runtime, so your URLs work the same no matter which runtime experience you're using. We also added this functionality to the Flow component in the Lightning App Builder. These changes apply to both Lightning Experience and Salesforce Classic.

[Customize the Look and Feel of Flow Interviews with the REST API \(Pilot\)](#)

We're continuing to pilot REST API resources that give you full access to flows and their interviews. Use the REST API to build your own flow runtime experience. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Access Encrypted Data in Your Flows \(Generally Available\)](#)

Flows now support encrypted fields, except in filters and sorting. This change applies to both Lightning Experience and Salesforce Classic.

## Translate Flows from the Translation Workbench

Are you tired of copying flows so that you can support multiple languages? You can now use the Translation Workbench to translate flows and maintain translations across flow versions. You can translate flows manually in the UI or export and import flows for bulk translations.

You can translate these parts of a flow:

- Flow definition name
- Flow version name
- Screen-level help text and paused message
- Screen input and output fields: labels, error messages, and help text
- Choices: labels, error messages, and input labels

Select the filter criteria:

Language Spanish ▼

Setup Component Flow ▼

Flow Type Flow ▼

Flow Quick Account ▼

Flow Component Screen Field ▼

Flow Version 1 ▼

Screen New Account ▼

Aspect Field Label ▼

Master Field Label ▲	Field Label Translation
Account Name	Nombre de la cuenta
Phone Number	Número de teléfono

Cuenta rápida

Nombre de la cuenta

Número de teléfono

[Hacer una pausa](#)

Don't worry about losing your translations when you create another flow version or save as a new flow. Salesforce copies the flow translations to the new version or flow.

#### SEE ALSO:

[IdeaExchange: Visual Workflow / Flow translation for labels and fields](#)

## Launch a Flow from an Object-Specific Action (Beta)


Add flows to the action menu on your Lightning pages without hunting down the flow's URL. When you create a flow action, you can pick from a list of available flows rather than enter the flow URL manually. This feature is available in Lightning Experience and all versions of the Salesforce app.




**Note:** This release contains a beta version of flow actions, which means it's a high-quality feature with known limitations. Flow actions aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only based on generally available products and features. You can provide feedback and suggestions for flow actions in the [IdeaExchange](#).

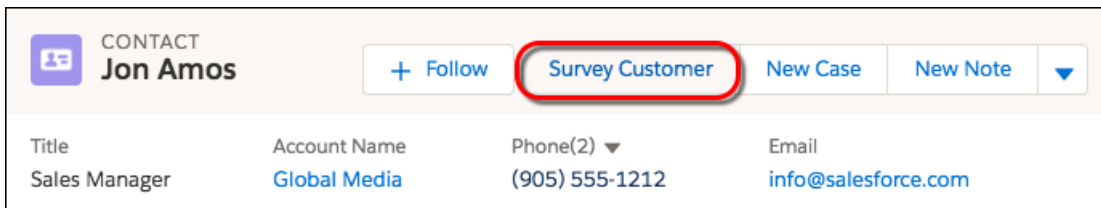
Flow actions can't call just any flow in your org. To work as a flow action, a flow must be active and have screens.

To create a flow action, select **Flow (Beta)** from the Action Type dropdown when you create an object-specific action. You can add flow actions to an object's page layout using the page layout editor. To see your org's flow actions in the page layout editor, check out the Mobile & Lightning Actions category in the palette.

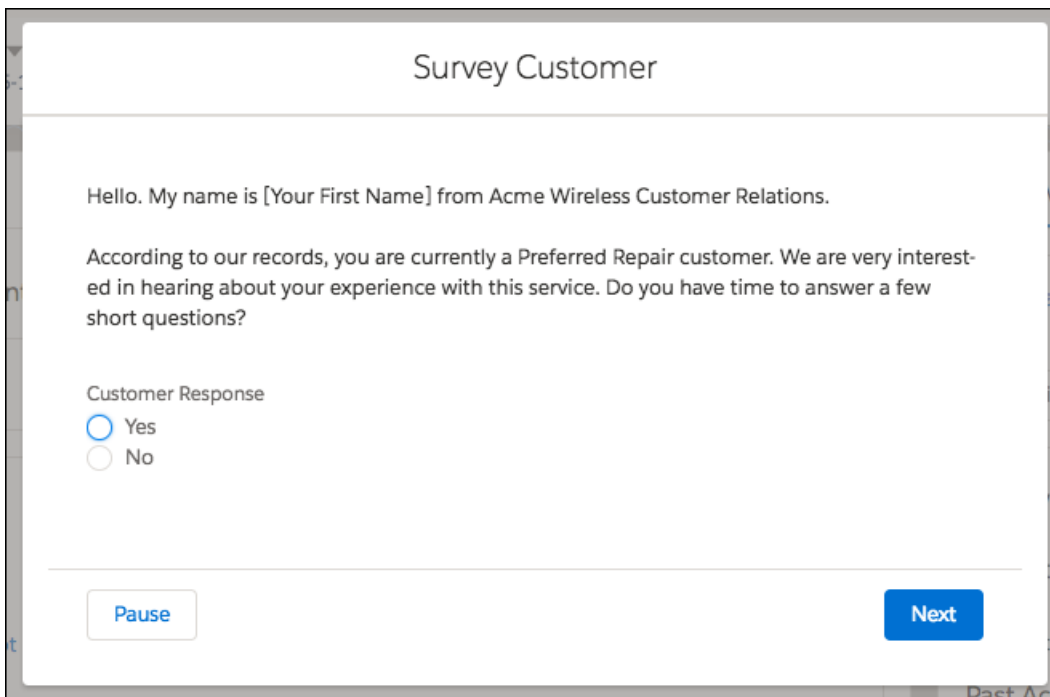
 **Tip:** If your flow needs the ID of the record that it's operating on, don't worry! Salesforce sends the record ID to the flow as long as you have a Text input variable called `recordId`.

Flow actions can't be global actions, and they can't be deployed to other orgs, such as with packaging.

 **Example:** Let's say you create a flow action for your Survey Customer flow and add it to the contact page layout. Here's how that action appears for contacts in Lightning Experience.



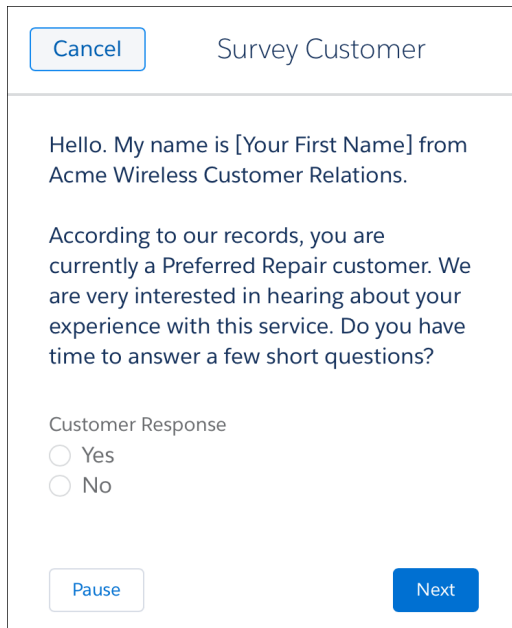
Here's how that flow appears when a user clicks the Survey Customer flow action.



Here's how that action appears in the Salesforce for Android, Salesforce for iOS, and Salesforce mobile web action bar for contacts.




Here's how that flow appears in Salesforce for Android, Salesforce for iOS, and Salesforce mobile web when a user taps the Survey Customer flow action.



A screenshot of a 'Survey Customer' dialog box. At the top left is a 'Cancel' button. The title 'Survey Customer' is at the top right. The main text reads: 'Hello. My name is [Your First Name] from Acme Wireless Customer Relations. According to our records, you are currently a Preferred Repair customer. We are very interested in hearing about your experience with this service. Do you have time to answer a few short questions?'. Below this is a section titled 'Customer Response' with two radio buttons: 'Yes' and 'No'. At the bottom left is a 'Pause' button, and at the bottom right is a 'Next' button.

## Configure a Flow to Wait for a Platform Event to Occur

You can now subscribe to platform events in a flow Wait element. With platform events, a flow can wait for something to occur, inside or outside your Salesforce org. Previously, a flow could wait only for a relative or absolute date/time value. This feature is new in both Lightning Experience and Salesforce Classic.

 **Example:** In your Order Printer Supplies flow, you submit an order for more ink or paper. When the supplies are shipped, the flow creates a task to install the supplies the day after the expected delivery date.

For this example, configure the flow to wait for a Vendor Response platform event to be published (1). The event must have the right order number and its status must be Shipped (2). Pass the event's data into an sObject variable to reference the expected delivery date in another part of the flow (3).

Name \* Order Shipped

Unique Name \* Order\_Shipped

Event Type Vendor Response **1**

▼ Event Conditions

Define the event that you want to wait for.

Field	Value
Order Number	{!orderNumber}
Order Status	Shipped

**2**

[Add Parameter](#)

► Waiting Conditions

▼ Variable Assignments

If you need to use the event's outputs in your flow, assign those outputs to variables.

Output Value	Variable
Vendor Response	{!vendorResponse}

**3**

SEE ALSO:

[Start a Process When a Platform Event Occurs](#)

## Add Flows Anywhere in Salesforce with the Flow Lightning Component

The flow Lightning component is no longer limited to Salesforce tools, like the Lightning App Builder. Add flows to your custom components and apps by using the `lightning:flow` Lightning component. This feature is available in Lightning Experience and all versions of the Salesforce app.

**Tip:** Want to display flows in Lightning runtime in a Visualforce page? You can do that now by embedding the flow Lightning component in your Visualforce page.

**Example:** This example renders the Calculate Discounts flow (from the [Build a Discount Calculator](#) Trailhead project). The `inputVariables` attribute passes `Opportunity.Id` and `Opportunity.AccountId` into the flow's input variables.

```
<aura:component>
  <aura:handler name="init" value="{!this}" action="{!c.init}"/>
  <lightning:flow aura:id="flow" onstatuschange="{!c.statusChange}"/>
</aura:component>
```

In your client-side controller, initialize the interview's input variables, start the interview, and determine what to do when the interview finishes.

```
((
  init : function (cmp) {
    var flow = cmp.find("flow");
    var inputVariables = [
      {
```

```

        name : 'OpportunityID',
        type : 'String',
        value : 'Opportunity.Id'
    },
    {
        name : 'AccountID',
        type : 'String',
        value : 'Opportunity.AccountId'
    }
];
flow.startFlow("Calculate_discounts", inputVariables);
},

statusChange : function (cmp, event) {
    if(event.getParam('status') === "FINISHED") {
        //Do something
    }
}
}
})

```

## SEE ALSO:

[IdeaExchange: Add attribute to flow:interview component to render flow in the Lightning UX](#)

[IdeaExchange: Support for Flows in Lightning and the Salesforce app](#)

## Add Flows to Lightning Communities

Welcome a new component to the Community Builder. Use the Flow component to embed active flows in your Lightning community.

## SEE ALSO:

[Embed Flows in Lightning Community Pages](#)

## Set Values for Picklist and Multi-Select Picklist Variables

In Lightning runtime, you can now set values for your picklist and multi-select picklist variables directly from the URL. With this change, Lightning flow runtime has parity with Classic flow runtime, so your URLs work the same no matter which runtime experience you're using. We also added this functionality to the Flow component in the Lightning App Builder. These changes apply to both Lightning Experience and Salesforce Classic.



**Note:** Lightning runtime and Classic runtime are available in both desktop experiences: Lightning Experience and Salesforce Classic.



**Example:** Here's a flow URL that sets a picklist variable (`industry`) to Banking and a multi-select picklist variable (`locations`) to New York and Buenos Aires.

```

/flow/flowName?accountId={!Account.Id}&industry=Banking&locations=New York; Buenos
Aires

```

And here's the same example in Lightning App Builder.

The screenshot shows a Salesforce Flow component with three variable assignment steps:

- accountId**: A text input field containing the expression `{!Record.Id}`.
- industry**: A dropdown menu with the value **Banking** selected.
- locations**: A text input field containing the value **New York; Buenos Aires**.


Below the **accountId** field, there is a checked checkbox with the label "Pass record ID into this variable".

SEE ALSO:

[Set More Variable Values in the Flow Component](#)

## Customize the Look and Feel of Flow Interviews with the REST API (Pilot)


We're continuing to pilot REST API resources that give you full access to flows and their interviews. Use the REST API to build your own flow runtime experience. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

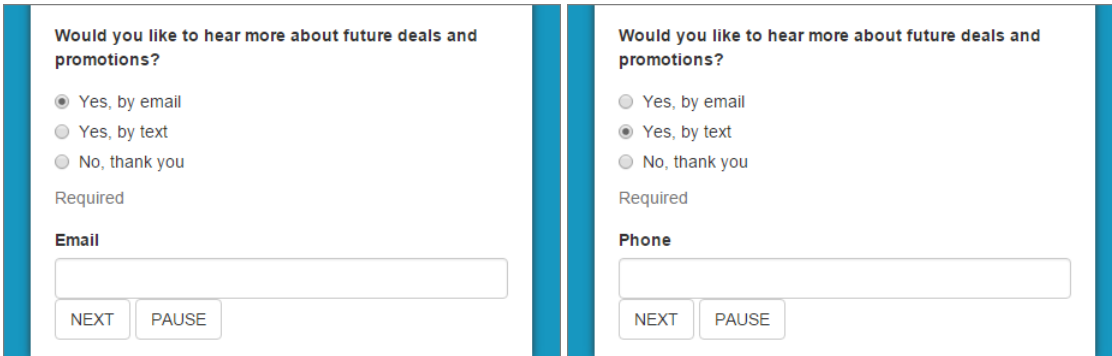
 **Note:** We provide Flow Runtime REST API to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Flow Runtime REST API isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Flow Runtime REST API in the [IdeaExchange](#).

Here are some things that you can do with this API.

- Apply your company's branding
- Create two-column layouts
- Create choice buttons, instead of requiring users to select a choice and click **Next**
- Update screens dynamically based on the user's response



 **Example:** In this screen, the text box changes based on the answer in the first field. If you select **Yes, by email**, the text box prompts you for your email address. If you select **Yes, by text**, the text box prompts you for your phone number instead.



Here's what's changed since Summer '17.

#### IN THIS SECTION:

##### [Make Flow Runtime REST API Requests in XML \(Pilot\)](#)

All resources in the Flow Runtime REST API now support XML format in addition to JSON.

##### [Request Body for New Interview Expects a Map \(Pilot\)](#)

We changed the expected request body for creating an interview. Previously, it expected a list. It now expects a map. This change applies to: `POST /services/data/vXX.X/process/interviews/FlowName`.

##### [Use Trailing Slashes in Flow Runtime REST Resources \(Pilot\)](#)


All resources in the Flow Runtime REST API now support trailing slashes for requests. So `/services/data/vXX.X/process/interviews/` works the same as `/services/data/vXX.X/process/interviews`.

#### SEE ALSO:

[New Resources: Flows and Flow Interviews \(Pilot\)](#)

## Make Flow Runtime REST API Requests in XML (Pilot)

All resources in the Flow Runtime REST API now support XML format in addition to JSON.

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 **Example:** Here's an XML response for pausing a flow interview.

```
<NavigateFlowInterviewResults xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <NavigateFlowInterviewResult>
    <availableActions>
      <id>RESUME</id>
      <label>Resume</label>
    </availableActions>
```


```

    <flowLabel/>
    <guid/>
    <helpText xsi:nil="true"/>
    <interviewStatus>WAITING</interviewStatus>
    <pausedText>This flow interview is paused. You can resume it from the Home
tab.</pausedText>
    <screenName>StartScreenName</screenName>
    <state/>
  </NavigateFlowInterviewResult>
</NavigateFlowInterviewResults>

```

## Request Body for New Interview Expects a Map (Pilot)

We changed the expected request body for creating an interview. Previously, it expected a list. It now expects a map. This change applies to: `POST /services/data/v $XX.X$ /process/interviews/flowName`.

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### **Example: Empty Request Body**

To start an interview without setting input variables, use an empty map instead of an empty list.


Summer '17 and earlier	Winter '18 and later
[ ]	{ }

### **Example: Request Body That Sets Input Variables**

Summer '17 and earlier	Winter '18 and later
<pre>[ { "inputs" : {   "accountId" : "001D000000K2Fut",   "opptyId" : "006D000000CzKuI" } } ]</pre>	<pre>{ "inputs" : {   "accountId" : "001D000000K2Fut",   "opptyId" : "006D000000CzKuI" } }</pre>

## Use Trailing Slashes in Flow Runtime REST Resources (Pilot)

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## Access Encrypted Data in Your Flows (Generally Available)

Flows now support encrypted fields, except in filters and sorting. This change applies to both Lightning Experience and Salesforce Classic.

 **Example:** If you've encrypted `Account Name`, you can update that field's value, but you can't filter or sort based on that field.

SEE ALSO:

[Access Encrypted Data with Flows and Process Builder \(Generally Available\)](#)

## Process Builder: Event Processes, User Selection, and Encryption Support

Welcome a new type of process. An event process can start when something other than a record change occurs. For all process types, we made it easier to reference a specific user or queue. And the ability to reference encrypted data in your processes is now generally available.

IN THIS SECTION:

[Start a Process When a Platform Event Occurs](#)

You already know the power of automating a business process based on record changes in your Salesforce org. But what if some of your business-critical events don't happen inside your Salesforce database? No problem. Create a process that starts when a platform event occurs. This feature is new in both Lightning Experience and Salesforce Classic.

[Quickly Reference Specific Users and Queues in Your Processes](#)

Say hello to a more intuitive way of referencing users in your processes. Instead of manually entering a user ID, simply search for that user by name. You can also search for queues. This change applies to both Lightning Experience and Salesforce Classic.

[Access Encrypted Data in Process Builder \(Generally Available\)](#)

Process Builder now supports encrypted fields, except in filters in the Update Records action. This feature is new in both Lightning Experience and Salesforce Classic.

[Formula Field References Must Match Process Trigger Objects](#)

Field references in formulas must now have the same object as the process's trigger. Previously, you could enter any object in a field reference. But at runtime, the process used the correct object—the one referenced in the trigger.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## Start a Process When a Platform Event Occurs

You already know the power of automating a business process based on record changes in your Salesforce org. But what if some of your business-critical events don't happen inside your Salesforce database? No problem. Create a process that starts when a platform event occurs. This feature is new in both Lightning Experience and Salesforce Classic.

At its most basic level, a process is similar to an if/then statement. Until now, the "if" has been some version of "if a record is created or edited and it has these values." With platform events, you have

### EDITIONS

Available in: **Enterprise, Performance, Unlimited, and Developer** Editions

full control over the “if.” You aren’t restricted to triggering a process when records are created or updated. As long as Salesforce can receive a REST call about the event, you can start the process.

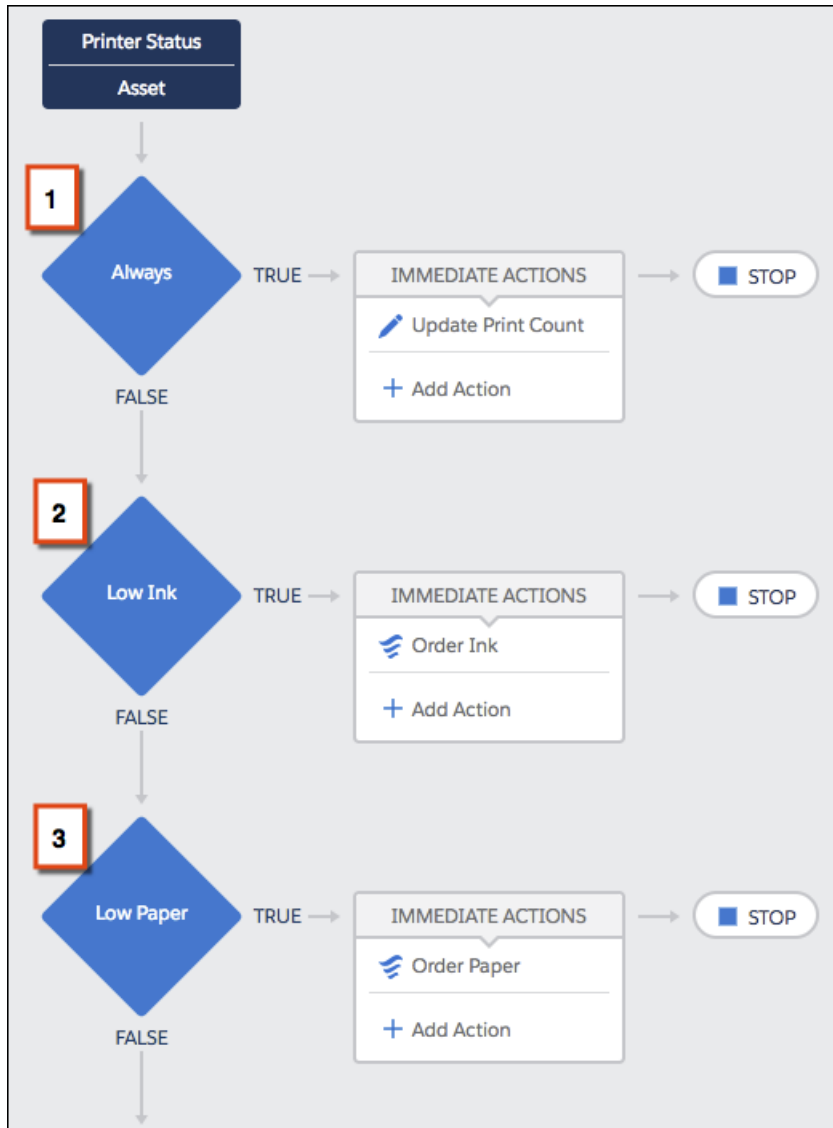
1. Create a process that starts when **A platform event occurs**.
2. For the trigger, select a platform event and match the event to a record in your org.
3. Configure the rest of the process.



**Example:** Using platform events and the Salesforce REST API, your printer publishes a Printer Status event at the end of each work day. This event notification includes the printer’s serial number, how much ink and paper it has, and how many pages it has printed in total.

When Salesforce receives the Printer Status event, your Printer Management process uses the serial number to find a matching asset in your Salesforce org. If the process finds a match, it evaluates the event’s data.

1. Always update the asset’s print count.
2. If ink is low, launch a flow that orders more ink and assigns a service technician to install the ink cartridge.
3. If paper is low, launch a flow that orders more paper and assigns a service technician to add the paper.



SEE ALSO:

[Configure a Flow to Wait for a Platform Event to Occur](#)


## Quickly Reference Specific Users and Queues in Your Processes

Say hello to a more intuitive way of referencing users in your processes. Instead of manually entering a user ID, simply search for that user by name. You can also search for queues. This change applies to both Lightning Experience and Salesforce Classic.

The ID and Reference value types didn't go anywhere. You can still enter the user or queue ID manually or reference a field value from a related record.

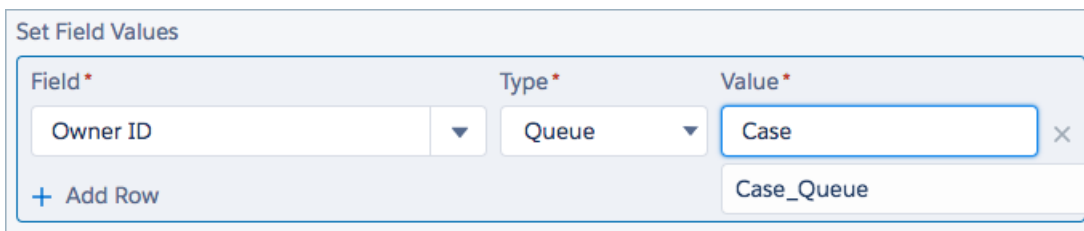


**Note:** User and Queue aren't available in criteria or action rows that were created before Winter '18. To use one of these new types in an existing process, create a new row.

 **Example:** When you configure an action to create a case, you can choose from these value types for Owner ID. We're assuming that you have at least one queue enabled for cases.

- ID
- Reference
- Global Constant
- Formula
- User
- Queue

To assign the case to a queue, choose **Queue** under Type, and start typing under Value to find the right case.




Field *	Type *	Value *
Owner ID	Queue	Case

+ Add Row

Case\_Queue

## Access Encrypted Data in Process Builder (Generally Available)

Process Builder now supports encrypted fields, except in filters in the Update Records action. This feature is new in both Lightning Experience and Salesforce Classic.

 **Example:** If you've encrypted `Account Name`, you can update that field's value, but you can't filter based on that field.


SEE ALSO:

[Access Encrypted Data with Flows and Process Builder \(Generally Available\)](#)

## Formula Field References Must Match Process Trigger Objects

Field references in formulas must now have the same object as the process's trigger. Previously, you could enter any object in a field reference. But at runtime, the process used the correct object—the one referenced in the trigger.

You can't save a process if the field references in formulas don't follow this pattern: `[Object].FieldName`. The object name is case-sensitive and is the same object referenced by the process's trigger.

 **Example:** Create a process that starts when an account is created or updated. In the criteria, use a formula to check whether the account's billing city is San Francisco. When you reference the account's Billing City field in a formula, make sure that the object in the brackets is the same as the one referenced in the trigger: `[Account]`.

```
[Account].BillingCity = "San Francisco"
```

If you enter another object (Contact) or the wrong case (account), you can't save the process.

## Globalization: Easier Multiple Currency Enablement, XLIFF Format and Flow Support in Translation Workbench

If your company supports more than one currency, you can now enable the Multiple Currencies feature without contacting Customer Support. If your company supports more than one language, enjoy a new supported file type for importing and exporting translations: XLIFF. And translate your org's flows using Translation Workbench.

### IN THIS SECTION:

#### [Turn On Multiple Currencies Without Contacting Support](#)

It's now possible to enable multiple currencies instantaneously without contacting Salesforce Customer Support, or locking your org. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

#### [Import and Export Translation Files as XLIFF](#)

Localization just got easier. When you are working with translation files using Translation Workbench you can now choose either XML Localization Interchange File Format (XLIFF) or Salesforce Translation Format (STF) as your preferred file format for translation.

#### [Translation Workbench Supports Flow](#)

Welcome a new setup component to the Translation Workbench: Flow. With it, provide translated labels for most labels in your flows.

### EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Turn On Multiple Currencies Without Contacting Support

It's now possible to enable multiple currencies instantaneously without contacting Salesforce Customer Support, or locking your org. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

To enable this feature, from Setup enter *Company Information* in the Quick Find box. Then select **Company Information** and click **Edit**. Enable **Activate Multiple Currencies**, and save your changes.



**Warning:** Turning on multiple currencies introduces permanent changes in your org. This feature can't be turned off. Review the [Implications of Enabling Multiple Currencies](#) before enabling.

## Import and Export Translation Files as XLIFF

Localization just got easier. When you are working with translation files using Translation Workbench you can now choose either XML Localization Interchange File Format (XLIFF) or Salesforce Translation Format (STF) as your preferred file format for translation.

## Translation Workbench Supports Flow

Welcome a new setup component to the Translation Workbench: Flow. With it, provide translated labels for most labels in your flows.

### SEE ALSO:

[Translate Flows from the Translation Workbench](#)

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Salesforce Connect: Batch Apex, External Object Validator, and Continued Pilot for Tracking Callouts

Use batch Apex to process large sets of external object data. Use the Salesforce Connect Validator to quickly test common user and code interactions with external objects. Let us know what you think about the continued pilot for tracking external object data callouts with event log files.

### EDITIONS

Available in: **Developer** Edition

Available for an extra cost in: **Enterprise, Performance,** and **Unlimited** Editions

### IN THIS SECTION:

#### [Process Large Sets of External Object Data Using Batch Apex](#)

You can now use `Database.QueryLocator` to access external objects from batch Apex. Previously, only `Iterable<sObject>` was supported. A `QueryLocator` object lets you use a simple query (`SELECT`) to generate the scope of objects in the batch job. Using a `QueryLocator` object also bypasses the limit for the total number of records retrieved by SOQL queries. However, some requirements and special behaviors apply with the OData adapters for Salesforce Connect. This change applies to both Lightning Experience and Salesforce Classic.

#### [Verify Access to External Object Data](#)

Expose potential problems with accessing external data before your users or code interact with new or modified external objects. Use the Salesforce Connect Validator app, available from Salesforce Labs on AppExchange, to quickly verify that your org interacts well with external object data. The tool runs common queries that test for ID uniqueness and the ability to sort and filter results. For writable external objects, the tool can test the ability to create and delete records. You can also create your own queries. This feature is available in Lightning Experience and Salesforce Classic.

#### [Track External Object Data Callouts with Event Log Files \(Pilot\)](#)

We're continuing the pilot for tracking Salesforce Connect callouts to external systems. Audit the historical activity of your org's access to external object data. For each callout, you can check whether it was a query or write operation, when the call occurred, and which user accessed the external data. Don't forget to send us your feedback!

## Process Large Sets of External Object Data Using Batch Apex

You can now use `Database.QueryLocator` to access external objects from batch Apex. Previously, only `Iterable<sObject>` was supported. A `QueryLocator` object lets you use a simple query (`SELECT`) to generate the scope of objects in the batch job. Using a `QueryLocator` object also bypasses the limit for the total number of records retrieved by SOQL queries. However, some requirements and special behaviors apply with the OData adapters for Salesforce Connect. This change applies to both Lightning Experience and Salesforce Classic.

If you use batch Apex with `Database.QueryLocator` to access external objects via an OData adapter for Salesforce Connect:

- You must enable Request Row Counts on the external data source, and each response from the external system must include the total row count of the result set.
- We recommend enabling Server Driven Pagination on the external data source and having the external system determine page sizes and batch boundaries for large result sets. Typically, server-driven paging can adjust batch boundaries to accommodate changing data sets more effectively than client-driven paging.

When Server Driven Pagination is disabled on the external data source, the OData adapter controls the paging behavior (client-driven). If external object records are added to the external system while a job runs, other records can be processed twice. If external object records are deleted from the external system while a job runs, other records can be skipped.

- When Server Driven Pagination is enabled on the external data source, the batch size at runtime is the smaller of the following:
  - Batch size specified in the `scope` parameter of `Database.executeBatch`. Default is 200 records.




- Page size returned by the external system. We recommend that you set up your external system to return page sizes of 200 or fewer records.

SEE ALSO:


[Apex Developer Guide: Using Batch Apex](#)

## Verify Access to External Object Data

Expose potential problems with accessing external data before your users or code interact with new or modified external objects. Use the Salesforce Connect Validator app, available from Salesforce Labs on AppExchange, to quickly verify that your org interacts well with external object data. The tool runs common queries that test for ID uniqueness and the ability to sort and filter results. For writable external objects, the tool can test the ability to create and delete records. You can also create your own queries. This feature is available in Lightning Experience and Salesforce Classic.

 **Warning:** To prevent unwanted data loss or creation, run the queries that create and delete external object records only against non-production external systems. If you can't avoid running them against production systems, first resolve all issues that are exposed by running them against your non-production systems.

If you use only the cross-org adapter for Salesforce Connect to access external objects, you don't need to install the Salesforce Connect Validator. The app's built-in queries always succeed for the cross-org adapter.

 **Example:** All available queries were run against the ReturnOrders external object (1). The results show which queries failed (2) and which succeeded (3).

Select the types of queries to run on ReturnOrders

1

Category	Description
<input checked="" type="checkbox"/> Select Queries	Tests the SELECT keyword
<input checked="" type="checkbox"/> Order Queries	Tests the ability to order query results in ascending and descending order
<input checked="" type="checkbox"/> Id Queries	Checks for duplicate IDs in the external data
<input checked="" type="checkbox"/> Insert/Delete Queries	Tests insertion of an object and its deletion (requires write access to external data source). TIP: Modify InsertCategory.cls to define fields and values for your objects. WARNING: This may have unwanted effects on your external data source. It is highly recommended it is used on a sandbox data source.

Run Queries

Failed Queries

2

Category	Description	Query	Error Type	Failure Cause
Order Queries	Ascending order	SELECT ExternalId FROM pies__ReturnOrders__x ORDER BY ExternalId ASC NULLS LAST LIMIT 5	Incorrect results	The expected sorted list didn't match the actual sorted list.
Order Queries	Descending order	SELECT ExternalId FROM pies__ReturnOrders__x ORDER BY ExternalId DESC NULLS LAST LIMIT 5	Incorrect results	The expected sorted list didn't match the actual sorted list.
Insert/Delete Queries	Tests insertion of an object	INSERT INTO pies__ReturnOrders__x (ExternalId) VALUES ('1000xTESTING')	Insertion error	No additional record detected. TIP: Modify InsertCategory.cls to define fields and values for your objects.

Successful Queries

3


Category	Description	Query
Select Queries	All of the fields in the selected object	SELECT Id, ExternalId, DisplayUrl, pies__OrderName__c, pies__ReturnOrderID__c, pies__ShipCountry__c FROM pies__ReturnOrders__x LIMIT 1
Select Queries	SELECT with an OR comparator	SELECT ExternalId FROM pies__ReturnOrders__x WHERE ExternalId = '10104070620602' OR ExternalId = '47' LIMIT 1
Select Queries	SELECT with an AND comparator	SELECT Id, ExternalId FROM pies__ReturnOrders__x WHERE Id = 'x0039000000CatpAAC' AND ExternalId = '10104070620602' LIMIT 1
Id Queries	Duplicate ID	SELECT ExternalId FROM pies__ReturnOrders__x WHERE ExternalId = '10104070620602' LIMIT 2

SEE ALSO:

[AppExchange: Salesforce Connect Validator](#)


## Track External Object Data Callouts with Event Log Files (Pilot)

We're continuing the pilot for tracking Salesforce Connect callouts to external systems. Audit the historical activity of your org's access to external object data. For each callout, you can check whether it was a query or write operation, when the call occurred, and which user accessed the external data. Don't forget to send us your feedback!

 **Note:** We provide Salesforce Connect Callout Event Monitoring to customers through a public pilot program. The pilot event types are available in orgs that use Salesforce Connect and Event Monitoring. If your org doesn't have these features, contact your Salesforce account executive to participate in the pilot. Salesforce Connect Callout Event Monitoring is subject to change and isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Salesforce Connect Callout Event Monitoring in the [Salesforce Connect group in the Trailblazer Community](#).

Track Salesforce Connect callouts to external systems with these event types on the EventLogFile object. These events are available in the API but not in the Event Monitoring Analytics app.

- External Cross-Org Callout—Callouts made via the cross-org adapter for Salesforce Connect
- External Custom Apex Callout—Callouts made via custom adapters for Salesforce Connect
- External OData Callout—Callouts made via the OData 2.0 and OData 4.0 adapters for Salesforce Connect

 **Example:** Suppose your Salesforce org connects to an external system via an OData adapter. When you defined the external data source in Salesforce, you selected **Named Principal** for **Identity** Type. With the named principal, the same set of credentials is always used to access the external system from your org.

To identify the users who accessed an external object's records during a specific time period, use the log data for the External OData Callout event type. Sort by **ENTITY** and **USER\_ID** to see which users accessed the external object.

In this event log file, we see that three users accessed the Product external object over 12 callouts.

EVENT_TYPE	TIMESTAMP	REQUEST_ID	ORGANIZATION_ID	USER_ID	ENTITY
ExternalODataCallout	20170330012053.7	4A13D20IGX0eAF0FKffKqk	00D0000000000123	005D0000001WIP0	Category
ExternalODataCallout	20170330012114.7	4A13E7gSW_n7fV0FKeNEp-	00D0000000000123	005D0000001WIP0	Category
ExternalODataCallout	20170330012121.3		00D0000000000123	005D0000001WQP2	Category
ExternalODataCallout	20170330012049.8	4A13Cgvio8KKs-0FKfceaV	00D0000000000123	005D0000001AIP5	Product
ExternalODataCallout	20170330012053.1	4A13CxJp_-heAF0FKffKqk	00D0000000000123	005D0000001AIP5	Product
ExternalODataCallout	20170330012055.0	4A13D78xgnKKs-0FKfceaV	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012059.3	4A13DNO6xM_Ks-0FKfceaV	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012059.6	4A13DNO6xM_Ks-0FKfceaV	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012106.7	4A13DneUIX0eAF0FKffKqk	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012107.2	4A13DneUIX0eAF0FKffKqk	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012111.7	4A13E5dBcgWksF0FKfceaV	00D0000000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012115.4	4A13EifLaE7fV0FKeNEp-	00D0000000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330012123.2		00D0000000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330041759.5	4A1CsAEVRrO7zF0FKfceaV	00D0000000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330041821.0	4A1CtdfegQTcV-0FKfdnFV	00D0000000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330012121.4		00D0000000000123	005D0000001WIP0	Supplier

SEE ALSO:

[Force.com REST API Developer Guide: Using Event Monitoring](#)

[Trailhead: Event Monitoring](#)

# Fields and Picklists: Time Field Type Beta and Picklist Value Management Enhancements

We added a new custom field for tracking time, and improved picklist value management.

## EDITIONS

Available in all editions

### IN THIS SECTION:

#### [Track Time with the Time Field Type \(Beta\)](#)

The time field type, which was a pilot release in Summer '17, is now a beta release. Use this custom field type to track time that is not specific to a single date, such as preferred contact hours. The time field type is useful for time management, event planning, and project management. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

#### [Manage Inactive Picklist Values Easier with Pagination](#)

Track your inactive picklist values better with pagination, even if you have thousands of them. And pagination also helps the pages displaying the values load faster. This feature is new in both Lightning Experience and Salesforce Classic.

### SEE ALSO:

[Managed Package Updates Preserve Deactivated and Reactivated Global Value Set Values](#)

## Track Time with the Time Field Type (Beta)

The time field type, which was a pilot release in Summer '17, is now a beta release. Use this custom field type to track time that is not specific to a single date, such as preferred contact hours. The time field type is useful for time management, event planning, and project management. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.



**Note:** This release contains a beta version of the time custom field type, which means it's a high-quality feature with known limitations. This feature appears in sandboxes and developer edition orgs. For information on enabling this feature in your production org, contact Salesforce. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for the time field type in the [Custom Time Field Trailblazer Community group](#).

## EDITIONS

Available in: **Sandboxes** and **Developer** Editions. To enable this feature in all other editions, contact Salesforce.

The time field type is a timestamp minus the date. You can select the time field type when you create a custom field.

To support using time in formulas, this beta release introduces the `TIMEVALUE` and `TIMENOW` functions, as well as new `HOUR`, `MINUTE`, `SECOND` and `MILLISECOND` functions.

### SEE ALSO:

[Time Custom Field in Salesforce Help](#)

## Manage Inactive Picklist Values Easier with Pagination

Track your inactive picklist values better with pagination, even if you have thousands of them. And pagination also helps the pages displaying the values load faster. This feature is new in both Lightning Experience and Salesforce Classic.

If you have a picklist with many inactive values, you probably have trouble finding a particular value. The list gets long, and some of them are cut off from the display.

Now, pagination occurs automatically when your inactive value list has more than 30 items, with the last modified values at the top of the list. The **Go to list** option appears at the bottom of the first 30 entries. Click it to see all your values, page by page, 30 values on each page.

<a href="#">Del</a>   <a href="#">Activate</a>	sienna	sienna	<a href="#">Admin User, 7/25/2017 7:46 PM</a>
<a href="#">Del</a>   <a href="#">Activate</a>	forest green	forest green	<a href="#">Admin User, 7/25/2017 7:45 PM</a>
<a href="#">Del</a>   <a href="#">Activate</a>	sky blue	sky blue	<a href="#">Admin User, 7/25/2017 7:46 PM</a>
<a href="#">Go to list »</a>			

## Sharing: Share Contacts Manually in Orgs That Use Person Accounts and Asynchronous Deletion of Obsolete Shares

Orgs that use person accounts are now able to modify the Organization-Wide Sharing Default for Contacts. This allows for flexibility in how you share business contacts, including the ability to define contact sharing rules and manually share business contacts. Obsolete shares are removed asynchronously, so no more waiting for shares to be deleted before continuing with other operations.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

#### IN THIS SECTION:

[Don't Wait to Perform Operations with Asynchronous Deletion of Obsolete Shares \(Generally Available\)](#)

Obsolete shares are now removed asynchronously, so you no longer have to wait for the shares to be deleted before continuing with other operations. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Share Business Contacts Manually in Orgs That Use Person Accounts \(Generally Available\)](#)

Orgs that use person accounts are now able to modify the Organization-Wide Sharing Default for Contacts. This allows for flexibility in how you share business contacts, including the ability to define contact sharing rules and manually share business contacts. This change applies to both Lightning Experience and Salesforce Classic.

## Don't Wait to Perform Operations with Asynchronous Deletion of Obsolete Shares (Generally Available)

Obsolete shares are now removed asynchronously, so you no longer have to wait for the shares to be deleted before continuing with other operations. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.



**Note:** To enable asynchronous deletion of obsolete shares, contact Salesforce Customer Support. This feature is not enabled by default.

Many sharing operations have an immediate impact on the visibility of records within the system. For example, deleting a group revokes the access granted to that group via sharing rules or manual shares. Members of the following groups lose access to records immediately. Users above these members in the role hierarchy also lose access to the records.

- Public groups
- Queues
- Roles
- Territories

When deleting a group, the shares to the group also become obsolete. Obsolete shares are deleted asynchronously during off-peak hours to minimize your waiting time during this operation.

When deactivating a user, the manual and team shares associated with that user are deleted asynchronously. A user higher in the role hierarchy retains access to the records associated with these shares until the obsolete shares are deleted. If that visibility is a concern, remove any record access granted to the user before you deactivate the account. All other user-related share types are immediately deleted when the user is deactivated.

## Share Business Contacts Manually in Orgs That Use Person Accounts (Generally Available)

Orgs that use person accounts are now able to modify the Organization-Wide Sharing Default for Contacts. This allows for flexibility in how you share business contacts, including the ability to define contact sharing rules and manually share business contacts. This change applies to both Lightning Experience and Salesforce Classic.



**Note:** If you enabled person accounts before the Winter '18 release, contact Salesforce Customer Support to enable business contact sharing. This feature is now enabled by default as of Winter '18 when customers enable person accounts.

Manually sharing contacts applies only to the business accounts because person accounts don't have contacts. To share information about a person account, you must share the entire account.

To use this feature, edit your Sharing Settings.

1. From Setup, enter *Sharing Settings* in the Quick Find box.
2. For Account and Contract, select **Private**.
3. For Contact, select **Private**.

**Organization-Wide Sharing Defaults Edit**

Edit your organization-wide sharing defaults below. Changing these defaults will cause all sharing time depending on the amount of data in your organization. Setting an object to Private makes re access can be extended using sharing rules.

Object	Default Internal Access	Default External Access
Lead	Public Read/Write/Transfer	Public Read/Write/Transfer
Account and Contract	Private	Private
Order	Controlled by Parent	Controlled by Parent
Contact	Private	Private

## AppExchange: Redesigned Website, New Solution Types

We redesigned the AppExchange website from top to bottom, making it easier to find secure, prebuilt Salesforce solutions. You can also tackle a wider variety of business challenges with the addition of Bolt Solutions and Lightning Data.

### IN THIS SECTION:

#### [Find the Perfect Solution Faster in the New, Intelligent AppExchange](#)

Introducing the new AppExchange, your store for everything Salesforce. A reimagined interface inspired by Trailhead and Lightning Experience makes browsing more efficient. Behind the fresh look, AppExchange is more intelligent, with an improved search experience and suggestions that are tailored to how you use Salesforce. We're also turning the spotlight on the people who make AppExchange awesome with a new area dedicated to Salesforce community members like you.

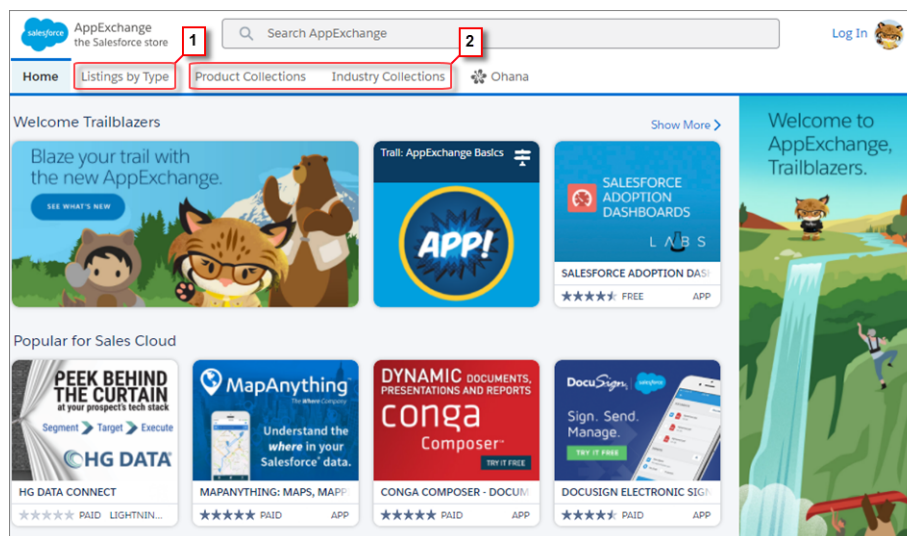
### Bolt Solutions and Lightning Data Now Available on AppExchange

We're welcoming Bolt Solutions and Lightning Data to AppExchange, giving you new ways to solve business problems with ready-to-go offerings from Salesforce partners. Bolt Solutions help you launch your community or portal faster with templates that are customized for your industry. Lightning Data solutions let you compare and validate your CRM data against trusted, third-party data sources.

## Find the Perfect Solution Faster in the New, Intelligent AppExchange

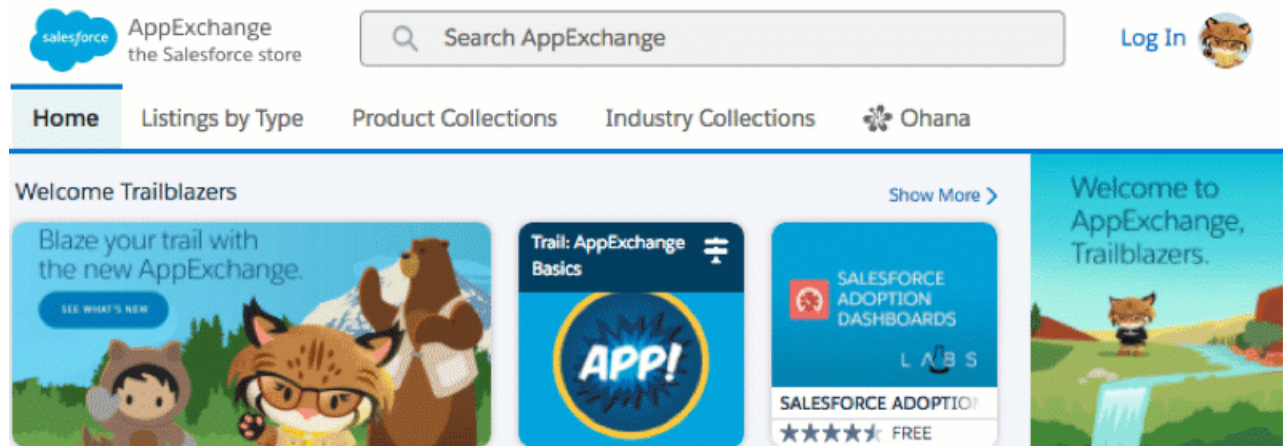
Introducing the new AppExchange, your store for everything Salesforce. A reimagined interface inspired by Trailhead and Lightning Experience makes browsing more efficient. Behind the fresh look, AppExchange is more intelligent, with an improved search experience and suggestions that are tailored to how you use Salesforce. We're also turning the spotlight on the people who make AppExchange awesome with a new area dedicated to Salesforce community members like you.

AppExchange's reimagined interface starts with a new way to navigate. Use the Listings by Type category (1) to browse by the solution that you're looking for, like apps or Lightning components. Collections (2) are listings curated by AppExchange experts and are handy for quickly zeroing in on top picks for your Salesforce product or industry.

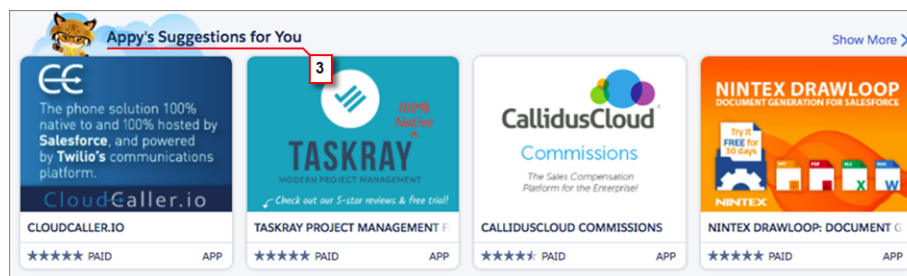


The AppExchange search experience gets an upgrade, too. When you begin typing in the search box, we suggest queries based on the keywords you're entering, along with listings you viewed recently. After you kick off your search, our new search engine does a better job of finding relevant listings.

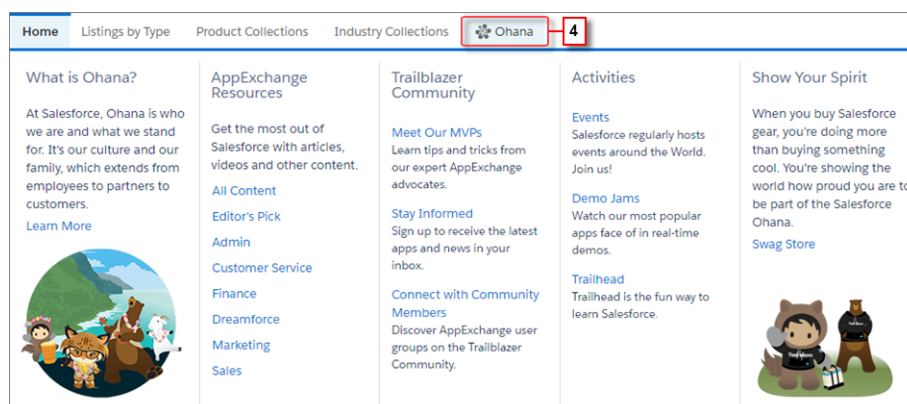




We're also bringing intelligence to the authenticated AppExchange experience. After you log in, you get personalized listings (3) from Appy, your expert AppExchange guide. Appy's suggestions are based on your role, the industry you work in, and other aspects of your Salesforce experience. The more you use AppExchange, the better the suggestions get.



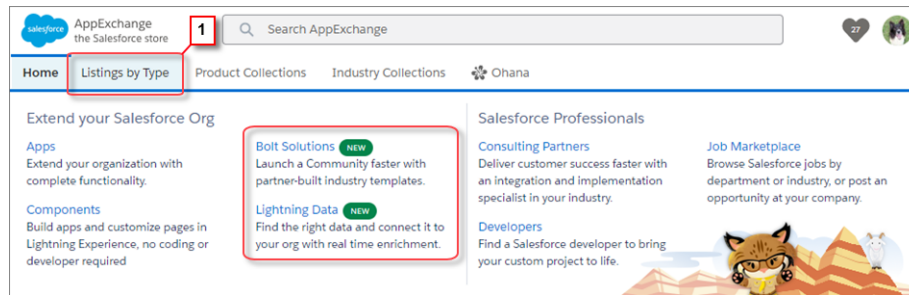
And check out the new Ohana section (4) for community members. Ohana is all about the conversations, events, and other activities happening among AppExchange's Trailblazers. The Ohana section is also where to get tips, videos, and other content from our team of AppExchange experts.



## Bolt Solutions and Lightning Data Now Available on AppExchange

We're welcoming Bolt Solutions and Lightning Data to AppExchange, giving you new ways to solve business problems with ready-to-go offerings from Salesforce partners. Bolt Solutions help you launch your community or portal faster with templates that are customized for your industry. Lightning Data solutions let you compare and validate your CRM data against trusted, third-party data sources.

To view Bolt Solutions and Lightning Data offerings, go to the Listings by Type category (1) on AppExchange.



## General Setup: Swagger for External Services and More Hourly Workflow Time Triggers

External Services gets a couple of improvements, including Swagger support. You can request a higher hourly limit for workflow time triggers per hour. And we now prevent you from deleting actions that are used in a page layout.

### IN THIS SECTION:

#### [Swagger Is Supported in External Services \(Beta\)](#)

If you checked out External Services, you know that you can use the Interagent hyper-schema in your service. Now External Services supports [Swagger / Open API 2.0](#) as well. In addition, mapping now occurs for all definitions, including ones with error messages. Previously, a response had to match the response in the schema provided. This change applies to Lightning Experience only.

#### [Run More Workflow Time Triggers Per Hour](#)

We're upping the ante for orgs created in Winter '18 or later. By default, new orgs get up to 1,000 workflow time triggers per hour. To increase your hourly time trigger limit, ask your Salesforce representative to change it.

#### [Block Execution of JavaScript in the HYPERLINK Function To Be Enforced \(Critical Update\)](#)

Blocking execution of JavaScript in the HYPERLINK function was a critical update in Summer '17 and will be activated automatically for all orgs on October 30, 2017. This change was phased in over several releases. It addresses a security vulnerability that arises when you use JavaScript in the URL argument of a HYPERLINK function. The JavaScript can include cross-site scripting and make the URL execute on behalf of users.

#### [View Read-Only and Formula Fields on Update a Record Quick Actions](#)

Previously, when you added formula and read-only fields to the layout for an Update a Record quick action, the fields didn't display on the edit screen when a user launched the action. Now they do! You can give users more information about the action as they populate the fields by including read-only and formula fields on the action layout. Users can't edit the data, but they can refer to the fields as they populate other information on the record. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.



### Actions Included on a Page Layout Are No Longer Deletable

Deleting an action that is included on a page layout can break the publisher, the other actions on the page, or the entire page. To avoid mistakes, you can no longer delete actions that are used on a page layout. This change applies to both Lightning Experience and Salesforce Classic.

### Rapidly Clicking a Custom Action No Longer Launches Multiple Instances

Previously, Visualforce and Lightning component actions could fire multiple times when clicked repeatedly. This behavior has been fixed. This change applies to Lightning Experience only.

### "Make Sure Records that Are Submitted Behind the Scenes Are Routed to the Right Approval Process" Critical Update Postponed

This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Winter '19.

### Set Up Users on Force.com Licenses for Lightning Sync

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® or Google applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### Control Action Visibility on Record Pages with a System Permission

The new Allow WebLink Access via the Tooling API permission enhances security in Lightning Experience and Salesforce mobile web by controlling whether users see customized actions from an object's page layout when they view record pages. This change applies to Lightning Experience and Salesforce mobile web.

## Swagger Is Supported in External Services (Beta)

If you checked out External Services, you know that you can use the Interagent hyper-schema in your service. Now External Services supports [Swagger / Open API 2.0](#) as well. In addition, mapping now occurs for all definitions, including ones with error messages. Previously, a response had to match the response in the schema provided. This change applies to Lightning Experience only.

### EDITIONS

Available in: **Enterprise, Performance, Unlimited,** and **Developer** Editions

## Run More Workflow Time Triggers Per Hour

We're upping the ante for orgs created in Winter '18 or later. By default, new orgs get up to 1,000 workflow time triggers per hour. To increase your hourly time trigger limit, ask your Salesforce representative to change it.

### EDITIONS

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## Block Execution of JavaScript in the HYPERLINK Function To Be Enforced (Critical Update)

Blocking execution of JavaScript in the HYPERLINK function was a critical update in Summer '17 and will be activated automatically for all orgs on October 30, 2017. This change was phased in over several releases. It addresses a security vulnerability that arises when you use JavaScript in the URL argument of a HYPERLINK function. The JavaScript can include cross-site scripting and make the URL execute on behalf of users.

After the critical update is enforced, you can't add or execute JavaScript in the URL of a HYPERLINK function. However, you can edit the function to remove the JavaScript from the URL and substitute a URL that doesn't contain JavaScript.

### EDITIONS

Available in: **Personal, Group, Professional, Enterprise, Performance, Unlimited, Developer, Contact Manager,** and **Database.com** Editions

Before this critical update is enforced, review the use of JavaScript in HYPERLINK functions in your Salesforce org and migrate to an alternative solution. Here are some possible workarounds.

- Custom button or link to execute onClick JavaScript. See [Custom Buttons or Links](#). Supported only in Salesforce Classic.
- Lightning Experience Quick Action button. Create JavaScript in a Lightning Experience component executed through a Quick Action button. Supported only in Lightning Experience.
- Custom Visualforce page with an Apex controller to redirect to the correct URL. Take this approach if you can execute client-side conditional logic to redirect the user to where you want. Create an empty Visualforce page and an Apex controller. Pass the required values from the link to the controller. Then execute the logic in the controller method to determine the URL and perform the redirect.

We recommend that you test this update in a sandbox or Developer Edition org. Check the behavior of the HYPERLINK function in formula fields. This critical update is enabled for all orgs on the auto-activation date.

For information on how to locate formula fields impacted by the critical update, see [Using Apex Code in Workbench to Find JavaScript](#).

#### SEE ALSO:

[Salesforce Help: Tips for Using Text Formula Fields](#)(can be outdated or unavailable during release preview)

[Salesforce Help: Formula Operators and Functions A-H](#)(can be outdated or unavailable during release preview)

## View Read-Only and Formula Fields on Update a Record Quick Actions

Previously, when you added formula and read-only fields to the layout for an Update a Record quick action, the fields didn't display on the edit screen when a user launched the action. Now they do! You can give users more information about the action as they populate the fields by including read-only and formula fields on the action layout. Users can't edit the data, but they can refer to the fields as they populate other information on the record. This change applies to Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

#### EDITIONS

Quick actions are available in: **Group, Professional, Enterprise, Performance, Unlimited, Contact Manager, Database.com,** and **Developer** Editions

## Actions Included on a Page Layout Are No Longer Deletable

Deleting an action that is included on a page layout can break the publisher, the other actions on the page, or the entire page. To avoid mistakes, you can no longer delete actions that are used on a page layout. This change applies to both Lightning Experience and Salesforce Classic.

#### EDITIONS

Quick actions available in: **Group, Professional, Enterprise, Performance, Unlimited, Contact Manager, Database.com,** and **Developer** Editions

Custom canvas actions available in: **Professional** (with Force.com Canvas enabled), **Enterprise, Performance, Unlimited,** and **Developer** Editions

## Rapidly Clicking a Custom Action No Longer Launches Multiple Instances

Previously, Visualforce and Lightning component actions could fire multiple times when clicked repeatedly. This behavior has been fixed. This change applies to Lightning Experience only.

### EDITIONS

Quick actions available in:  
**Group, Professional, Enterprise, Performance, Unlimited, Contact Manager, Database.com,** and **Developer** Editions

## “Make Sure Records that Are Submitted Behind the Scenes Are Routd to the Right Approval Process” Critical Update Postponed

This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Winter '19.

### SEE ALSO:

[Summer '16 Release Notes: Make Sure Records That Are Submitted Behind the Scenes Are Routd to the Right Approval Process \(Critical Update\)](#)  
[Critical Updates](#)

### EDITIONS

Available in: **Enterprise, Unlimited,** and **Developer** Editions

## Set Up Users on Force.com Licenses for Lightning Sync

Lightning Sync is available for Service Cloud and Force.com user licenses. Depending on which objects are available through the license, reps can sync contacts, events, or both between their Microsoft® or Google applications and Salesforce. This change applies to Lightning Experience, Salesforce Classic, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web.

### SEE ALSO:

[Salesforce Help: Lightning Sync \(can be outdated or unavailable during release preview\)](#)  
[Salesforce Help: Lightning Sync User License Support \(can be outdated or unavailable during release preview\)](#)

## Control Action Visibility on Record Pages with a System Permission

The new Allow WebLink Access via the Tooling API permission enhances security in Lightning Experience and Salesforce mobile web by controlling whether users see customized actions from an object's page layout when they view record pages. This change applies to Lightning Experience and Salesforce mobile web.

The Allow WebLink Access via the Tooling API permission is enabled by default for all profiles except Chatter Free User, Chatter External User, Cloud Integration User, and custom profiles cloned from them.

If the following two conditions are true for a profile, the profile users see a set of system-defined default actions on object record pages in Lightning Experience and Salesforce mobile web. They don't see customized actions from the object's page layout when:

- The Allow WebLink Access via the Tooling API permission is disabled

### EDITIONS

Available in: **Group, Professional, Enterprise, Performance, Unlimited, Contact Manager,** and **Developer** Editions

- The admin permissions View All Data, Modify All Data, and View Setup and Configuration are disabled

If a profile has the admin permissions enabled, users see customized actions from the object's page layout even when the Allow WebLink Access via the Tooling API permission is disabled.

SEE ALSO:

[Salesforce Help: How Predefined Actions Are Ordered in the Salesforce App Action Bar and List Item Actions](#)(can be outdated or unavailable during release preview)

## Security and Identity: Single Logout, Branded Login Pages, and Chatter Encryption

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With single logout, users can log out of multiple applications at once when Salesforce is the identity provider or service provider. You can brand your login page at runtime based on who logs in and from where, and adopt the Lightning look in your login flows. And you can encrypt even more data, including your Chatter feeds.

IN THIS SECTION:

[Authentication and Identity: Dynamic Branding, Single Logout, Named Credentials, and Login Flows](#)

With dynamic branding for communities, you can customize login pages for specific users. Speed up logouts from multiple applications with the now GA single logout. Set Apex callout options for named credentials through the API, and display your login flows in Lightning Experience or Salesforce Classic, regardless of how they were created or invoked. Also, we retired our proxy certificate for SAML single sign-on.

[Salesforce Shield: More Encryption, More Events to Monitor](#)

Encrypt more fields and control your encryption strategy more closely. Get visibility into more user activities, such as searches and knowledge article views.

[Other Security Changes: Hacker-Resistant Security Headers and Default Baselines in Health Check](#)

You can now choose a default baseline and edit some fields in Security Health Check, and we made a small change to the baseline import process. We added settings that impact security, such as cross-site scripting protection for the headers in your Visualforce, site, and community pages.

## Authentication and Identity: Dynamic Branding, Single Logout, Named Credentials, and Login Flows

With dynamic branding for communities, you can customize login pages for specific users. Speed up logouts from multiple applications with the now GA single logout. Set Apex callout options for named credentials through the API, and display your login flows in Lightning Experience or Salesforce Classic, regardless of how they were created or invoked. Also, we retired our proxy certificate for SAML single sign-on.

## IN THIS SECTION:

[Change Your Users' Login Experience with Dynamic Branding](#)

External Identity partners and customers, you now have more control over your community's login experience—the experience users embark on when they log in to your site. Want your logo to change on the login page depending on whether the user is an employee or customer? Or how about displaying a particular self-registration page based on the user's country code. Your branding changes dynamically according to who logs in and from where. This change applies to both Lightning Experience and Salesforce Classic.

[Let Users Log Out of All Apps at Once with Single Logout \(Generally Available\)](#)

With single logout (SLO), your users are logged out from all connected apps (service providers or relying parties) when they log out of the identity provider. Likewise, when your users log out from a connected app, they are logged out of the identity provider and all registered connected apps. To use this feature, the identity provider and all connected apps must be configured for single sign-on and registered for SLO. SLO can improve security and usability. Previously, your users had to remember to log out of each app separately.

[Make Your Login Flows New Fashioned](#)

Now that you've worked in Lightning Experience for a while, the login flows that you created in Salesforce Classic seem so last century. Wouldn't it be nice if your login flows had the clean look of Lightning Experience? Well, they can. You can now control whether users see a login flow that resembles Lightning Experience or Salesforce Classic UI. This change applies to both Lightning Experience and Salesforce Classic.

[SAML Signing Certificate Has Been Retired](#)

As previously communicated in [Default Certificate to Retire on August 7, 2017](#), the proxy.salesforce.com default certificate has been retired due to its expiration and for security best practices. If your Salesforce org uses this certificate (the "Default Certificate") for a SAML single sign-on (SSO) configuration, act now to prevent a possible interruption of service.

[Named Credentials: More Deployment Options, URL Scheme Enforcement](#)

Deploy callout options via change sets, packages, or Metadata API. Named credentials that are set up to authenticate to external systems now require URLs that begin with `https://`.

[Update Your Facebook Authentication Provider to Get User Information](#)

Due to recent changes in the Facebook API, we updated Salesforce's default authentication provider for Facebook social sign-on. It now includes the user's email address, first and last name, locale, and link to the user's Facebook profile. Previously, the authentication provider returned only the user's ID and full name. This change applies to both Lightning Experience and Salesforce Classic.

[Get Updated Email\\_Verified Value in UserInfo Endpoint and Identity URL Response](#)

The `email_verified` attribute in the UserInfo endpoint and identity URL now reflects whether users successfully verified their email address after clicking a link in an email confirmation message. Previously, it reflected only whether the org had email verification enabled.

## Change Your Users' Login Experience with Dynamic Branding

External Identity partners and customers, you now have more control over your community's login experience—the experience users embark on when they log in to your site. Want your logo to change on the login page depending on whether the user is an employee or customer? Or how about displaying a particular self-registration page based on the user's country code. Your branding changes dynamically according to who logs in and from where. This change applies to both Lightning Experience and Salesforce Classic.



**Note:** This feature continues the work begun in Salesforce Summer '17 to support dynamic branding for login pages. In Summer '17, you could create URLs with dynamic parameters

### EDITIONS

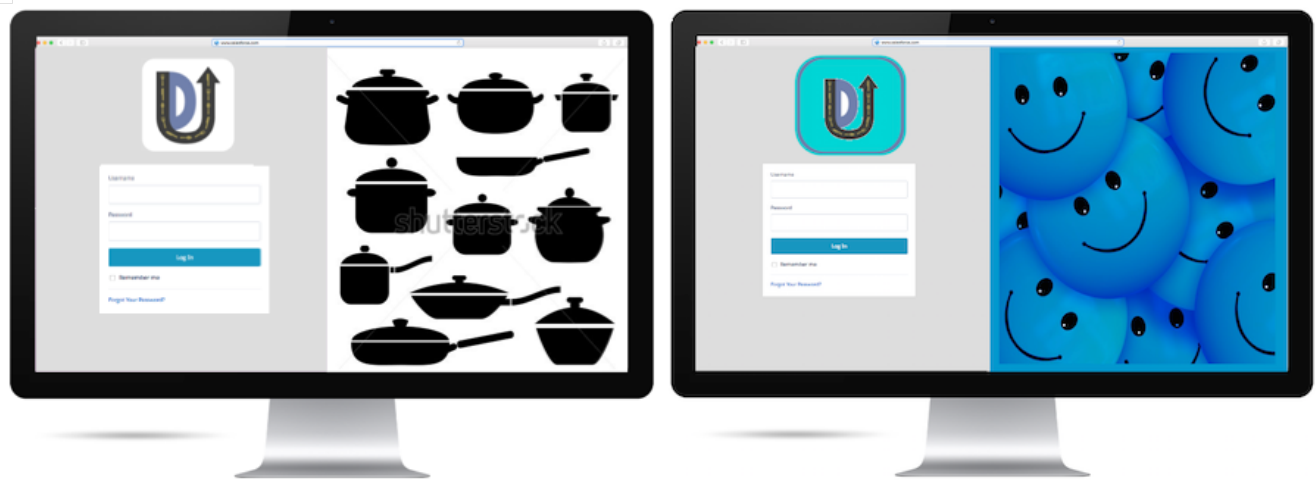
Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions

programmatically. Now you can also set dynamic parameters from the UI on the Community Workspaces Administration | Login & Registration setup page.

We often use “login experience” instead of “login page” to refer to the complete login exchange. A login experience refers to the initial login page plus any secondary pages that you add to customize login. For example, you can add 2FA authentication, Terms & Conditions, or a login flow.

What’s dynamic branding? You’ve been able to modify the login page’s branding options: logo, background color, and right-frame URL. Now you can customize the branding *dynamically* depending on certain conditions like who the user is or where the user is logging in from.

For example, the Universal Distributing company admin wants to brand the login page depending on whether the user is an internal employee or external customer or partner. The login page for each type of user has a different logo and right-frame URL. Both groups are served from the same Visualforce login page.



If you use the default login page, you can supply different logos and right-frame URLs dynamically. If you have a custom login page, you use Visualforce and Apex controllers to implement any dynamic login experience, including setting logos, right-frame URLs, and background colors.

When users log in, the URL contains the experience ID parameter `{expid}`. The Experience ID value stored in a browser cookie determines what the user experiences. For example, this logo contains the `{expid}` parameter, `https://universaldistributing.com/{expid}_logo.png`.

If the value of the experience ID is internal, `{expid}` becomes `internal_logo.png` at runtime.

`https://universaldistributing.com/internal_logo.png`



If the value of the experience ID is external, `{expid}` becomes `external_logo.png`.



For the default login page, you specify the experience ID parameter to your URLs from the Community Workspaces or Community Management Administration | Login & Registration page.

For the dynamic custom login page, you use Visualforce and the Apex `System.Site` class methods `getExperienceId` and `setExperienceId`.

You can also set extend the following endpoints with the `expid` value.

- `community-url/services/oauth2/authorize/expid_value`
- `community-url/idp/endpoint/HttpPost/expid_value`
- `community-url/idp/endpoint/HttpRedirect/expid_value`
- `community-url_login_page?expid={value}`
- `community-url/CommunitiesSelfReg?expid={value}`
- `secur/forgotpassword.jsp?expid={value}`

This dynamic branding feature applies to all login pages. A default login page supports dynamic logos and right-side URLs. A Lightning login page supports dynamic logos. With a custom login page, you can implement whatever dynamic experience you choose.

SEE ALSO:

[Salesforce External Identity Implementation Guide](#)

## Let Users Log Out of All Apps at Once with Single Logout (Generally Available)

With single logout (SLO), your users are logged out from all connected apps (service providers or relying parties) when they log out of the identity provider. Likewise, when your users log out from a connected app, they are logged out of the identity provider and all registered connected apps. To use this feature, the identity provider and all connected apps must be configured for single sign-on and registered for SLO. SLO can improve security and usability. Previously, your users had to remember to log out of each app separately.

Available in: both Salesforce Classic and Lightning Experience

Single Logout can be created in: **Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions

Salesforce supports front-channel SLO, meaning your users are only logged out of their registered apps if they explicitly log out of one using their browsers. Having a session expire doesn't cause them to be logged out of the other apps registered for SLO.

Previously, Salesforce only supported front-channel SAML SLO for which Salesforce was the identity provider. Now we support OpenID Connect and SAML SLO, regardless of the identity provider, service provider, or relying party, including for the following SLO scenarios.

- SAML SLO for which Salesforce is the identity provider, and registered connected apps are service providers
- SAML SLO when Salesforce is the service provider connected to an external SAML identity provider
- OpenID Connect SLO for which Salesforce is the identity provider, and registered connected apps are service providers
- OpenID Connect SLO when Salesforce is the relying party connected to an external OpenID Connect provider

**SAML Service Provider Settings**

Entity Id:

Subject Type:

Verify Request Signatures: ☐

**Enable Single Logout**: ☒

Single Logout URL:

Single Logout Binding: ☒ HTTP Redirect ☐ HTTP POST

If you select **Enable LogoutEventStream** under Session Settings, you can configure an Apex trigger that fires when Salesforce publishes logout events.



**Example:** You're logged in to Salesforce, Gmail, and Facebook, and all are configured for SLO. Your boss calls you into a meeting immediately and you log out of Salesforce, but forget to log out of the connected apps. To make matters worse, you sprint to the conference room and forget to lock your screen. Panic? Not now. Because your org has SLO configured, you were automatically logged out of all three apps when you logged out of one.

SEE ALSO:

[Salesforce Help: Single Logout](#)

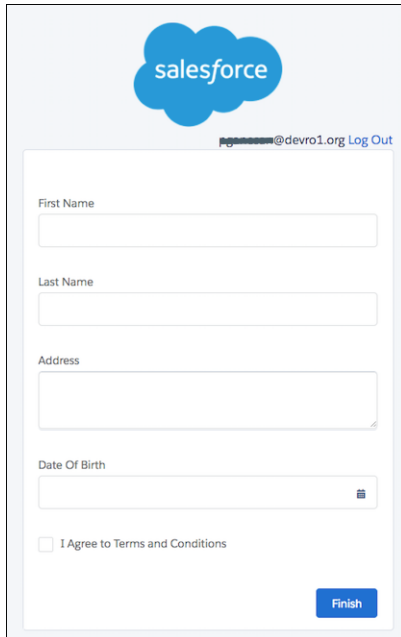


## Make Your Login Flows New Fashioned

Now that you've worked in Lightning Experience for a while, the login flows that you created in Salesforce Classic seem so last century. Wouldn't it be nice if your login flows had the clean look of Lightning Experience? Well, they can. You can now control whether users see a login flow that resembles Lightning Experience or Salesforce Classic UI. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

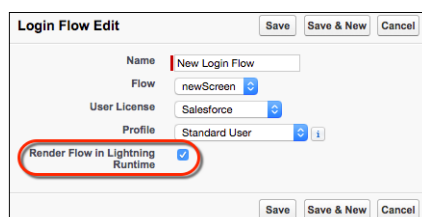
Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions



Use a login flow to introduce business processes during login. For example, use a login flow to prompt for a second factor of authentication, accept terms of services, or collect information from users. After users complete the login flow, they're logged in to Salesforce.



**Note:** A login flow is independent of which UI users use: Lightning Experience or Salesforce Classic. You can set a login flow to resemble Lightning Experience even if users log in to Salesforce Classic. Likewise, you can set a login flow to Salesforce Classic even if users log in to Lightning Experience.



To control in which UI the login flow appears:

1. Enter *Login Flows* in the Quick Find box, and select **Login Flows**.
2. Click **Edit** next to the login flow that you want to change.
3. To display the login flow in the Lightning Experience UI, select **Render in Lightning Runtime**. If you don't select this option, the login flow displays in the Salesforce Classic UI.

## SAML Signing Certificate Has Been Retired

As previously communicated in [Default Certificate to Retire on August 7, 2017](#), the proxy.salesforce.com default certificate has been retired due to its expiration and for security best practices. If your Salesforce org uses this certificate (the "Default Certificate") for a SAML single sign-on (SSO) configuration, act now to prevent a possible interruption of service.

### EDITIONS

Available in all editions

### What has changed?

Beginning with the Winter '18 release, Salesforce is switching away from the default proxy certificate even if you are still using it. Before the Winter '18 release, manually migrate to a self-signed certificate and update identity providers to prevent an interruption in service. We recommend switching from the default certificate even if your identity provider doesn't validate signatures in SAML requests.

### How do I know if I'm impacted?

If your org uses SP-initiated SAML login to Salesforce and your identity provider (IdP) validates signatures in SAML requests, this change impacts you. If you do not act before the Winter '18 release, your users can't log in via single sign-on to Salesforce.

Also, this change can impact you now or in the future, even if you only use:

- SAML for single sign-on.
- SP-initiated SAML single sign-on, and don't use your IdP to validate SAML request signatures.

### What do I do?

If your org uses SP-initiated SAML login to Salesforce, and your IdP validates signatures in SAML requests, act now to prevent disruption to your Salesforce service. Switch to a self-managed client certificate before the Winter '18 release.

If your org uses SP-initiated SAML login to Salesforce without IdP validation of signatures in SAML requests, Salesforce recommends switching to a self-managed client certificate to prevent future issues.

If your organization uses multiple SAML configurations, change the request signing certificate from the default certificate to a self-managed certificate. Upload the new certificate to your IdP for use in validation of SAML requests.

If your organization doesn't use multiple SAML configurations, migrate to multiple SAML configurations by clicking **Enable Multiple Configs** under Single Sign-On Settings. Make sure to read and understand the information on the migration page before doing so. After migration, update your IdP to change the Assertion Consumer Service URL and upload the new certificate for use in validation of SAML requests.

### Where can I get more information?

For more information on configuring SAML for single sign-on and on replacing the default certificate, review the linked help topic. Participate in the [Official: Salesforce Infrastructure](#) group in the Trailblazer Community to follow the latest updates and discussion on this impact.

If you have more questions, contact Salesforce Customer Support.

## Named Credentials: More Deployment Options, URL Scheme Enforcement

Deploy callout options via change sets, packages, or Metadata API. Named credentials that are set up to authenticate to external systems now require URLs that begin with `https://`.

### EDITIONS

Available in all editions

### IN THIS SECTION:

#### [Deploy Named Credential Callout Options via Change Sets, Packages, or Metadata API](#)

When defining a named credential, you can specify whether to customize headers and bodies of Apex callouts that use the named credential. Previously, those callout options were set only via the user interface. Now they can be deployed via change sets, packages, or Metadata API, so you don't need to manually configure the callout options after deployment. This change applies to both Lightning Experience and Salesforce Classic.

### [Avoid Incorrect Schemes in Named Credential URLs](#)

When you set up a named credential to authenticate to an external system, you must enter a URL that begins with `https://`. Ensure that all your existing named credentials meet this requirement before Winter '18 goes live in your org. This change applies to both Lightning Experience and Salesforce Classic.

## Deploy Named Credential Callout Options via Change Sets, Packages, or Metadata API

When defining a named credential, you can specify whether to customize headers and bodies of Apex callouts that use the named credential. Previously, those callout options were set only via the user interface. Now they can be deployed via change sets, packages, or Metadata API, so you don't need to manually configure the callout options after deployment. This change applies to both Lightning Experience and Salesforce Classic.

These fields for named credentials can now be deployed via change sets, packages, or Metadata API.

- Generate Authorization Header
- Allow Merge Fields in HTTP Header
- Allow Merge Fields in HTTP Body

SEE ALSO:

[Salesforce Help: Define a Named Credential](#)

## Avoid Incorrect Schemes in Named Credential URLs

When you set up a named credential to authenticate to an external system, you must enter a URL that begins with `https://`. Ensure that all your existing named credentials meet this requirement before Winter '18 goes live in your org. This change applies to both Lightning Experience and Salesforce Classic.

If a named credential's identity type is set to **Anonymous**, the URL can begin with `http://`. Otherwise, the URL must begin with `https://`.

SEE ALSO:

[Salesforce Help: Define a Named Credential](#)

## Update Your Facebook Authentication Provider to Get User Information

Due to recent changes in the Facebook API, we updated Salesforce's default authentication provider for Facebook social sign-on. It now includes the user's email address, first and last name, locale, and link to the user's Facebook profile. Previously, the authentication provider returned only the user's ID and full name. This change applies to both Lightning Experience and Salesforce Classic.

The authentication provider gives your users the option to log in to your org using other login credentials, such as with their Facebook account. If you created your own authentication provider to enable social sign-on from Facebook, make sure that you use the following Facebook API URL for your custom userinfo endpoint:

`https://graph.facebook.com/me?fields=email,id,name,first_name,last_name,link,locale`

SEE ALSO:

[Salesforce Help: UserInfo Endpoint](#)

[Salesforce Help: Use Salesforce-Managed Values in the Auth. Provider Setup Page](#)

### EDITIONS

Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions

## Get Updated Email\_Verified Value in UserInfo Endpoint and Identity URL Response

The `email_verified` attribute in the UserInfo endpoint and identity URL now reflects whether users successfully verified their email address after clicking a link in an email confirmation message. Previously, it reflected only whether the org had email verification enabled.

The `email_verified` attribute's value is set to `true` when org and community users click a link in the email they receive after:

- They change their email address
- They change their password, or a Salesforce admin resets their password
- They verify their identity, such as in two-factor authentication
- A Salesforce admin creates them as a new user

For example, a Salesforce admin creates the user Roberta Smith. Roberta receives a "Welcome to Salesforce" email message with a link to verify her account. After she clicks the link, the `email_verified` value is set to `true`.

### EDITIONS

Available in all editions

#### SEE ALSO:

[Salesforce Help: UserInfo Endpoint](#)

[Salesforce Help: Identity URLs](#)

## Salesforce Shield: More Encryption, More Events to Monitor

Encrypt more fields and control your encryption strategy more closely. Get visibility into more user activities, such as searches and knowledge article views.

#### IN THIS SECTION:

[Platform Encryption: Filter Encrypted Data \(Pilot\), Monitor Key Events, Use Skinny Tables](#)

Shield Platform Encryption customers have more ways to access and interact with encrypted data. We offer compatibility with skinny tables, Chatter, flows and processes, and a boat load of new standard fields. New features include two-factor authentication for key management tasks, key usage tracking with the Event Monitoring service, and a statistics dashboard for your encrypted data. You can even opt into our new filter-friendly encryption scheme.

[Event Monitoring: New Event Types for Search, Knowledge Articles, and Platform Encryption](#)

Use the new event types to track what your users searched for in your Salesforce org, which knowledge articles your users viewed the most, and details about keys and tenant secrets used to access data.

## Platform Encryption: Filter Encrypted Data (Pilot), Monitor Key Events, Use Skinny Tables

Shield Platform Encryption customers have more ways to access and interact with encrypted data. We offer compatibility with skinny tables, Chatter, flows and processes, and a boat load of new standard fields. New features include two-factor authentication for key management tasks, key usage tracking with the Event Monitoring service, and a statistics dashboard for your encrypted data. You can even opt into our new filter-friendly encryption scheme.

## IN THIS SECTION:

[Filter Encrypted Data with Deterministic Encryption \(Pilot\)](#)

Shield Platform Encryption has always used strong symmetric encryption to give your data an added layer of protection. Our new deterministic encryption scheme combines the strength of the Shield Platform Encryption service with the flexibility you need to filter your data. This scheme lets you filter encrypted data in reports, list views, and WHERE clauses in SOQL queries. It's also compatible with `Unique` and `External ID` fields and custom indexes. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Extend Platform Encryption and Key Management to Public Cloud \(Generally Available\)](#)

Shield Platform Encryption extends to data stored in Canadian and Australian AWS data centers. We replaced our hardware security module (HSM) with AWS CloudHSM key management machinery to help you meet your compliance needs.

[Encrypt Your Data in Chatter \(Generally Available\)](#)

Shield Platform Encryption continues to provide that extra bit of security to data posted to your Chatter feed. To enable encryption for Chatter, contact support. We'll help you set it up. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Check Your Encryption Coverage with Encryption Statistics \(Beta\)](#)

The Encryption Statistics feature shows Shield Platform Encryption customers how much of their data is encrypted with an active tenant secret. Get key statistics for maintaining compliance, stay on top of your key rotation obligations, and streamline the mass encryption process. To enable this feature, contact Salesforce Support. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Access Encrypted Data with Flows and Process Builder \(Generally Available\)](#)

Shield Platform Encryption support for flows and processes is now available for all Shield Platform Encryption customers. Access encrypted data from most elements in flows and processes, except when filtering or sorting records. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Require High-Assurance Session for Key Management Tasks \(Beta\)](#)

Shield Platform Encryption provides trusted encryption services for your data. Now you can apply two-factor authentication to key management tasks like generating, rotating, or uploading keys and certificates. When admins try to complete one of these tasks, they must use a second form of authentication such as the Salesforce Authenticator app or a U2F security key. Breathe easy knowing that the security administrator handling your keys is actually the person you hired (and trust) to do the job. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encrypt More PII Fields on Accounts, Person Accounts, Contacts, and Leads \(Generally Available\)](#)

You can now protect more of the personally identifiable information (PII) in standard fields on accounts, contacts, and leads. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encrypt Opportunity Description and Next Step Fields \(Beta\)](#)

You can encrypt the Opportunity Description and Next Step fields in sandbox and production environments. Contact Salesforce to activate this feature. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encrypt the Opportunity Name Field \(Pilot\)](#)

You can encrypt the Opportunity Name field in sandbox and developer edition environments only. Contact your Salesforce Account Executive or Success Manager to join this pilot. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

[Encryption Compatibility with Skinny Tables \(Beta\)](#)

If your org uses "skinny tables" to optimize performance for features such as Reports, List Views, and SOQL queries, those tables can now include encrypted fields. Contact Salesforce to enable this feature.

[Last Reminder: Turn Off Masking for Encrypted Data Critical Update to Auto Activate](#)


On November 29, 2017, the Turn Off Masking for Encrypted Data critical update will be applied to all orgs that use Shield Platform Encryption. This critical update gives you access to new and updated Shield Platform Encryption features. It also gives users a more consistent experience when they access encrypted data, and reduces confusion between data that's masked and data that's encrypted. If you haven't already activated this critical update, we urge you to do it now.

[Track Encryption Key Management Usage in Event Monitoring Logs](#)

We know you're on top of your key management obligations, but sometimes you have to provide evidence. You can now use PlatformEncryption event data type to meet key usage auditing, compliance, and security obligations. Access granular information about key usage with the Event Monitoring service. This supplements the major key life-cycle events information you've always been able to access through Setup Audit Trail.

## Filter Encrypted Data with Deterministic Encryption (Pilot)

Shield Platform Encryption has always used strong symmetric encryption to give your data an added layer of protection. Our new deterministic encryption scheme combines the strength of the Shield Platform Encryption service with the flexibility you need to filter your data. This scheme lets you filter encrypted data in reports, list views, and WHERE clauses in SOQL queries. It's also compatible with `Unique` and `External ID` fields and custom indexes. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **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 join this pilot, contact your Salesforce Account Executive or Success Manager.


When you encrypt a standard or custom field, we secure the data using a *probabilistic encryption* scheme. Probabilistic encryption turns your data into a fully unique ciphertext string every time it's encrypted. Because the same data looks different in the database every time it's encrypted, filtering encrypted data is a unique mathematical challenge.

*Deterministic encryption* overcomes this challenge by using a static initialization vector (IV). The static IV allows you to identify encrypted (and unreadable) data as belonging to a particular field value. The IV is unique for a given field in a given org and can only be decrypted with your org-specific encryption keys.

Applying deterministic encryption to a field is as easy as enabling encryption. Enable encryption for that field, and select **Deterministic** from the list.



To apply this encryption scheme to data that's already encrypted, contact Support for help.

 **Note:** To use this feature, you must activate the "Turn Off Masking for Encrypted Data" critical update.

## Extend Platform Encryption and Key Management to Public Cloud (Generally Available)

Shield Platform Encryption extends to data stored in Canadian and Australian AWS data centers. We replaced our hardware security module (HSM) with AWS CloudHSM key management machinery to help you meet your compliance needs.

SEE ALSO:

[Salesforce Public Cloud Announcement](#)

## Encrypt Your Data in Chatter (Generally Available)

Shield Platform Encryption continues to provide that extra bit of security to data posted to your Chatter feed. To enable encryption for Chatter, contact support. We'll help you set it up. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

You can provide feedback and suggestions for encryption for Chatter in the [Chatter Product group](#) in the Trailblazer Community.



**Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

SEE ALSO:

[Increase Security with Encryption for Chatter \(Generally Available\)](#)

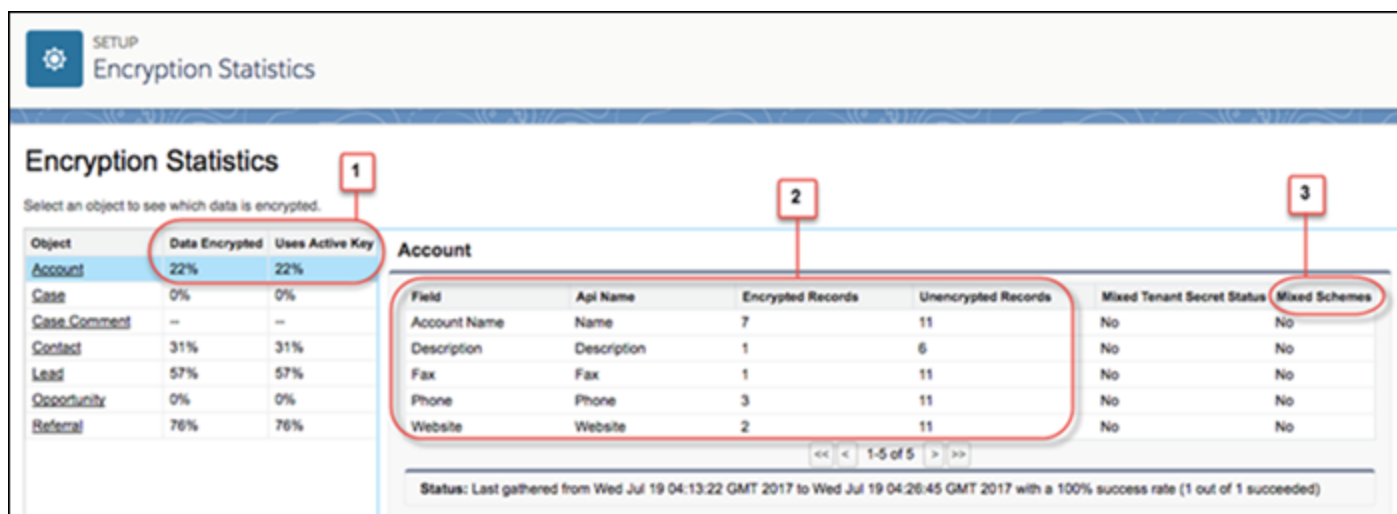
## Check Your Encryption Coverage with Encryption Statistics (Beta)

The Encryption Statistics feature shows Shield Platform Encryption customers how much of their data is encrypted with an active tenant secret. Get key statistics for maintaining compliance, stay on top of your key rotation obligations, and streamline the mass encryption process. To enable this feature, contact Salesforce Support. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.



**Note:** This release contains a beta version of Encryption Statistics, which means it's a high-quality feature with known limitations. Encryption Statistics isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

The Encryption Statistics page is a one-stop portal for information about your encrypted data. You can see how much of an object's data is encrypted and uses an active key (1), and which fields contain encrypted data (2). Deterministic Encryption pilot customers can also see which fields use a mixture of encryption schemes (3).



Let's look at how you can use this data in a common scenario: planning to apply an active tenant secret to older data.

### Example

You recently generated a new tenant secret, but you're not sure if a teammate has applied it to all your data. If it hasn't been applied, you need to contact Salesforce to mass-encrypt your existing data. You visit the Encryption Statistics to get an overview of your encrypted data.

Object	Data Encrypted	Uses Active Key
<u>Account</u>	22%	22%
<u>Case</u>	0%	0%
<u>Case Comment</u>	--	--
<u>Contact</u>	31%	31%
<u>Lead</u>	57%	57%
<u>Opportunity</u>	0%	0%
<u>Referral</u>	76%	76%

When both columns in the left pane show the same percentage, all your encrypted data uses your active tenant secret. Looks like most of your objects are up to date. What about Case Comment? The dash means that you haven't gathered any statistics for that object yet. You select **Case Comment** and click **Gather Statistics** to get information about the encrypted data on that object.

If the Uses Active Key percentage is lower than the Data Encrypted data percentage, contact Salesforce to encrypt the data on that object. You could drill into that object to see exactly which fields contain data that uses an archived key. You then pass that information to Salesforce. Salesforce targets mass encryption efforts in these areas to make the process as efficient as possible.




**Note:** To use this feature, you must activate the "Turn Off Masking for Encrypted Data" critical update.

### Access Encrypted Data with Flows and Process Builder (Generally Available)

Shield Platform Encryption support for flows and processes is now available for all Shield Platform Encryption customers. Access encrypted data from most elements in flows and processes, except when filtering or sorting records. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.



You can update the value for an encrypted field or reference an encrypted field in logic, but you can't look up records based on a specific value in an encrypted field.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.


SEE ALSO:

[Access Encrypted Data in Your Flows \(Generally Available\)](#)


[Access Encrypted Data in Process Builder \(Generally Available\)](#)

## Require High-Assurance Session for Key Management Tasks (Beta)

Shield Platform Encryption provides trusted encryption services for your data. Now you can apply two-factor authentication to key management tasks like generating, rotating, or uploading keys and certificates. When admins try to complete one of these tasks, they must use a second form of authentication such as the Salesforce Authenticator app or a U2F security key. Breathe easy knowing that the security administrator handling your keys is actually the person you hired (and trust) to do the job. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **Note:** This release contains a beta version of two-factor authentication for key management, which means it's a high-quality feature with known limitations. Two-factor authentication for key management isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

Enable two-factor authentication in your org, assign the appropriate admins the Manage Encryption Keys permission, and then contact Salesforce to enable this feature. We'll turn it on in sandbox orgs first, and you can roll it out to your production orgs when you're ready.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

SEE ALSO:

[Salesforce Help: Set Up Two-Factor Authentication](#)

[Salesforce Help: Connect an Account to Salesforce Authenticator \(Version 2 or Later\)](#)

## Encrypt More PII Fields on Accounts, Person Accounts, Contacts, and Leads (Generally Available)

You can now protect more of the personally identifiable information (PII) in standard fields on accounts, contacts, and leads. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

On leads, you can encrypt

- Address (Street, City)
- Company
- Description
- Email
- Fax
- Mobile Phone
- Name (First Name, Middle Name, Last Name)
- Phone
- Title


- Website

On accounts and person accounts, you can encrypt

- Billing (Street, City)
- Shipping (Street, City)
- Site

On contacts, you can encrypt


- Assistant
- Assistant Phone
- Other Address (Street, City)
- Title


 **Note:** This also applies to Person Accounts.

To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

## Encrypt Opportunity Description and Next Step Fields (Beta)


You can encrypt the Opportunity Description and Next Step fields in sandbox and production environments. Contact Salesforce to activate this feature. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

 **Note:** This release contains a beta version of Encryption support for the Description and Next Step fields on Opportunities, which means it's a high-quality feature with known limitations. Encryption support for Description and Next Step isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

## Encrypt the Opportunity Name Field (Pilot)


You can encrypt the Opportunity Name field in sandbox and developer edition environments only. Contact your Salesforce Account Executive or Success Manager to join this pilot. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

 **Note:** To use this feature, you must activate the “Turn Off Masking for Encrypted Data” critical update.

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.

## Encryption Compatibility with Skinny Tables (Beta)

If your org uses "skinny tables" to optimize performance for features such as Reports, List Views, and SOQL queries, those tables can now include encrypted fields. Contact Salesforce to enable this feature.

 **Note:** This release contains a beta version of Encryption support for skinny tables, which means it's a high-quality feature with known limitations. Filtering on encrypted skinny fields, and advanced features such as hash partitioning and native skinny indexes,

aren't fully supported. Encryption support for skinny tables isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.



**Note:** To use this feature, you must activate the "Turn Off Masking for Encrypted Data" critical update.

#### SEE ALSO:

[Best Practices for Deployments with Large Data Volumes](#)

[Long- and Short-Term Approaches for Tuning Force.com Performance](#)

## Last Reminder: Turn Off Masking for Encrypted Data Critical Update to Auto Activate

On November 29, 2017, the Turn Off Masking for Encrypted Data critical update will be applied to all orgs that use Shield Platform Encryption. This critical update gives you access to new and updated Shield Platform Encryption features. It also gives users a more consistent experience when they access encrypted data, and reduces confusion between data that's masked and data that's encrypted. If you haven't already activated this critical update, we urge you to do it now.

When you activate this critical update, encrypted data is visible on-screen. That is, encrypted data isn't hidden by masking characters. To hide data from unauthorized users, you must use field-level and object-level security, regardless of whether the data is encrypted.

Because we introduced this critical update in Winter '17, some customer orgs don't need to receive this update. If you started generating tenant secrets in the Spring '17 release or later, the View Encrypted Data permission is automatically decoupled from masking when you generate your first tenant secret. Automatic activation only applies to customers who haven't already activated the update.

To activate the critical update, from Setup, enter *Critical Updates* in the Quick Find box, then click **Critical Updates**. Click **Activate** next to the Turn Off Masking for Encrypted Data update.

After you've activated this critical update, the View Encrypted Data permission applies only to Classic Encryption.

## Track Encryption Key Management Usage in Event Monitoring Logs

We know you're on top of your key management obligations, but sometimes you have to provide evidence. You can now use PlatformEncryption event data type to meet key usage auditing, compliance, and security obligations. Access granular information about key usage with the Event Monitoring service. This supplements the major key life-cycle events information you've always been able to access through Setup Audit Trail.

The PlatformEncryption event type in the EventLogFile object offers a host of details about key-related events. These events cover core key usage tasks for Salesforce-generated and customer-supplied tenant secrets, as well as information about derived encryption keys.

### Example

You're a member of a financial organization's security admin team in charge of maintaining the company's encryption keys. Your manager tells you the company is being audited to ensure that you're in compliance with industry-wide information security regulations. You've been asked to provide a trail of all internal key usage and correlate it to the data that was accessed. Using the Event Monitoring service, you access event log files and correlate your key usage events with the logs that show which data was accessed. Now you can prepare a thorough and accurate report for your security and regulatory needs.

#### SEE ALSO:

[Event Monitoring](#)

[Changed Objects](#)

## Event Monitoring: New Event Types for Search, Knowledge Articles, and Platform Encryption

Use the new event types to track what your users searched for in your Salesforce org, which knowledge articles your users viewed the most, and details about keys and tenant secrets used to access data.

### IN THIS SECTION:

#### [Track User Searches and Clicks with Event Log Files](#)

We added event types to the EventLogFile standard object for search queries. Now you can audit which search terms users are using and what individual users click. For each query, you can check the search term and prefixes. For results tracking, learn the record that users clicked and the rank in search results, even in Salesforce Communities. Drive adoption of Salesforce Knowledge by monitoring the service associates who are searching for and viewing articles. Learn which articles are most helpful for the support, training, and onboarding team. These events are available in the API, but not in the Event Monitoring Analytics app.

#### [Track Knowledge Article Views with Event Log Files](#)

Make data-based decisions about your Knowledge Base content with Event Monitoring. We added a KnowledgeArticleView event type to the EventLogFile standard object for article views. You can see who is viewing articles to better understand how people are using Knowledge within your organization. This event type is available in the API, but not in the Event Monitoring Analytics app.

#### [Gain Visibility into Tenant Secret Usage with Event Log Files](#)

We know you're on top of your key management obligations, but sometimes you have to provide evidence. Event logs now contain details about key-related events that let you monitor usage activity for Salesforce-generated and customer-supplied tenant secrets, as well as derived encryption keys. These events are available in the API, but not in the Event Monitoring Analytics app.

#### [Client IP Field Now Contains a String Value](#)

We changed the `CLIENT_IP` field's data type from IP to String. Also, we now use the value Salesforce.com IP to represent a Salesforce internal IP, such as a login from Salesforce Workbench or AppExchange.

#### [New Names but Same Great Data in the Event Monitoring Analytics App](#)

In Summer '17, the Event Monitoring Wave app was renamed Event Monitoring Analytics. Now the Analytics name appears on all app-related pages, including the configuration wizard, standard permission sets, permission set license, and prebuilt dashboards. The Wave Change, Wave Interaction, and Wave Performance event type names are unchanged.

#### [UI Tracking Event Type Is Retired](#)

As previously communicated in [New Event Types for Shield Monitoring](#), we removed the UI Tracking event type. For data on web clicks, performance, and errors in Lightning Experience Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, use the Lightning Experience event types instead.

#### [Track More Types of Time-Based Workflow Events](#)

You can track why entries in the time-based workflow queue were deleted with the `Type` field. We added a new type, `ERRDEL`, which indicates that there was an error when reading the record that triggered the workflow rule.

## Track User Searches and Clicks with Event Log Files

We added event types to the EventLogFile standard object for search queries. Now you can audit which search terms users are using and what individual users click. For each query, you can check the search term and prefixes. For results tracking, learn the record that users clicked and the rank in search results, even in Salesforce Communities. Drive adoption of Salesforce Knowledge by monitoring the service associates who are searching for and viewing articles. Learn which articles are most helpful for the support, training, and onboarding team. These events are available in the API, but not in the Event Monitoring Analytics app.

### EDITIONS

Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions

Together this information, we added two event types to the EventFileLog object.

- Search—Details about the search query
- SearchClick—Details about the search results

SEE ALSO:

[Changed Objects](#)

## Track Knowledge Article Views with Event Log Files

Make data-based decisions about your Knowledge Base content with Event Monitoring. We added a KnowledgeArticleView event type to the EventLogFile standard object for article views. You can see who is viewing articles to better understand how people are using Knowledge within your organization. This event type is available in the API, but not in the Event Monitoring Analytics app.

SEE ALSO:

[Changed Objects](#)

*IdeaExchange:* Track Knowledge Article Searches and / or Views by User

*IdeaExchange:* Knowledge Article Viewed Date / Voted Date Filter in Reports

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Gain Visibility into Tenant Secret Usage with Event Log Files

We know you're on top of your key management obligations, but sometimes you have to provide evidence. Event logs now contain details about key-related events that let you monitor usage activity for Salesforce-generated and customer-supplied tenant secrets, as well as derived encryption keys. These events are available in the API, but not in the Event Monitoring Analytics app.

We added the Platform Encryption event type to the EventLogFile object. Let's look at how you can use this event type to meet key usage auditing, compliance, and security obligations.



**Example:** You're a member of a financial organization's security admin team in charge of maintaining the company's encryption keys. Your manager tells you the company is being audited to ensure that you're in compliance with industry-wide information security regulations. You've been asked to provide a trail of all internal key usage and correlate it to the data that was accessed. Using Event Monitoring, you download event log files and correlate your key usage events with the logs that show which data was accessed. Now you can prepare a thorough and accurate report for your security and regulatory needs.

SEE ALSO:

[Changed Objects](#)

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Client IP Field Now Contains a String Value

We changed the CLIENT\_IP field's data type from IP to String. Also, we now use the value Salesforce.com IP to represent a Salesforce internal IP, such as a login from Salesforce Workbench or AppExchange.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

	A	B	C	D	E	F	G
1	EVENT_TYPE	TIMESTAMP	USER_ID	CLIENT_IP	URI_ID_DERIVED	REPORT_ID_DERIVED	
2	Report	2.01501E+13	001xx0000000use	Salesforce.com IP	005B0000000GSwOIAW	001xx0000000repAAA	
3	Report	2.01501E+13	001xx0000000use	Salesforce.com IP	005B0000000GSwOIAD	001xx0000000repAAA	
4	Report	2.01501E+13	001xx0000000use	127.0.0.1	005B0000000GSwOIXX	001xx0000000repAAA	

This change affects all event types that contain CLIENT\_IP:

- Apex Callout
- Apex Execution
- Apex SOAP
- Apex Trigger
- API
- Asynchronous Report Run
- Bulk API
- Change Set Operation
- Console
- Dashboard
- Lightning Error
- Lightning Interaction
- Lightning Page View
- Lightning Performance
- Login
- Login As
- Logout
- Metadata API Operation
- Multiblock Report
- Package Install
- Queued Execution
- Report
- Report Export
- REST API
- Sites
- Transaction Security
- URI
- Visualforce Request
- Wave Change
- Wave Interaction
- Wave Performance

SEE ALSO:

[Changed Objects](#)

## New Names but Same Great Data in the Event Monitoring Analytics App

In Summer '17, the Event Monitoring Wave app was renamed Event Monitoring Analytics. Now the Analytics name appears on all app-related pages, including the configuration wizard, standard permission sets, permission set license, and prebuilt dashboards. The Wave Change, Wave Interaction, and Wave Performance event type names are unchanged.

For example, here's what the configuration wizard looks like with the new name.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Event Monitoring Analytics App Personalize

Personalize Event Monitoring Analytics App Step 1 of 5

**Include Apex Execution Dataset? \***  
Dataset for tracking adoption and performance of Apex class executions.

Yes

**How many days of Apex Execution data do you want to store in Analytics? \***  
You can store from 1 to 30 days of data.

7

**Include API Dataset? \***  
Dataset for tracking API integration activity.

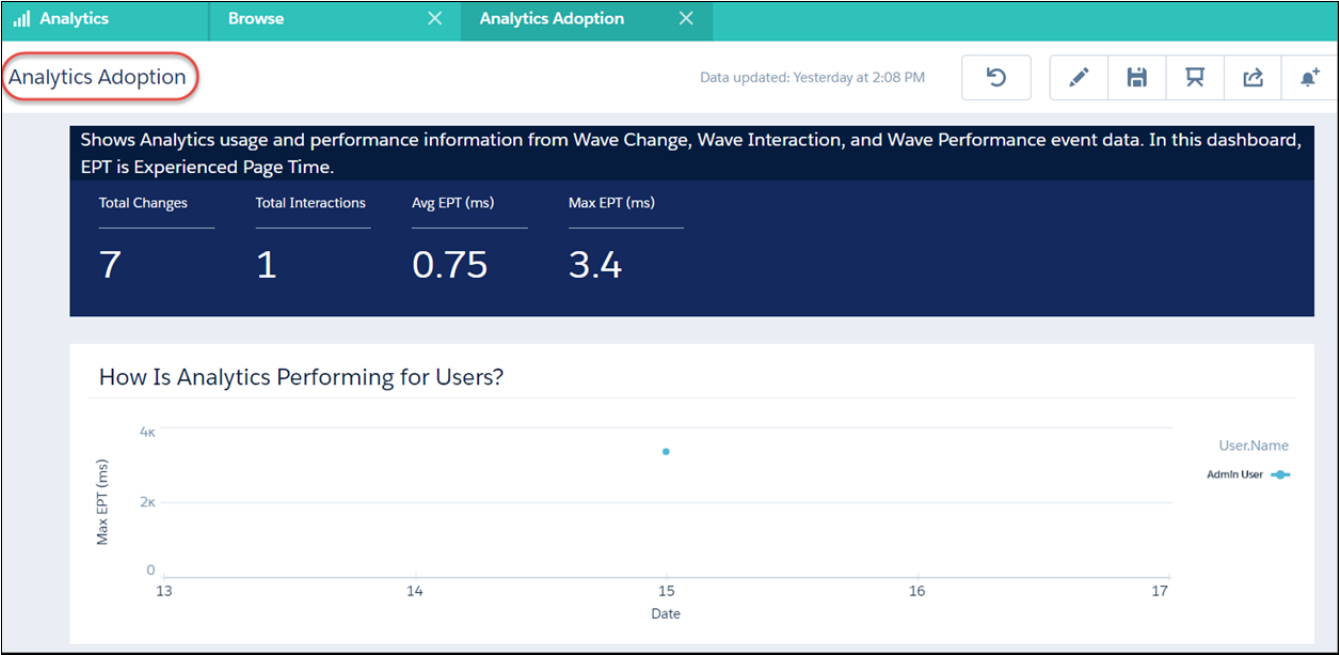
Yes

**How many days of API data do you want to store in Analytics? \***  
You can store from 1 to 30 days of data.

7

Back Looks good, next

And here's what the former Wave Adoption prebuilt dashboard looks like after the name change.



SEE ALSO:

[Salesforce Einstein: The World’s Smartest CRM with Artificial Intelligence \(AI\) for Everyone](#)

UI Tracking Event Type Is Retired

As previously communicated in [New Event Types for Shield Monitoring](#), we removed the UI Tracking event type. For data on web clicks, performance, and errors in Lightning Experience Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, use the Lightning Experience event types instead.

To prepare for this change:

- If you pull event log files into a database (for example, Apache HBase) for storage and querying, see the new Lightning Experience event types for Lightning UI and mobile UI events.
- If you use a prebuilt, third-party integration for Event Monitoring data visualization, Salesforce is working with these partners to update their applications.
- If you built custom visualizations, update your integration to pull in the new Lightning Experience event types. For details about event monitoring, see the [Trailhead Event Monitoring module](#) or [Force.com REST API Developer’s Guide](#).

EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

SEE ALSO:

[Knowledge Article: New Event Types for Shield Monitoring](#)



## Track More Types of Time-Based Workflow Events

You can track why entries in the time-based workflow queue were deleted with the `Type` field. We added a new type, `ERRDEL`, which indicates that there was an error when reading the record that triggered the workflow rule.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Other Security Changes: Hacker-Resistant Security Headers and Default Baselines in Health Check

You can now choose a default baseline and edit some fields in Security Health Check, and we made a small change to the baseline import process. We added settings that impact security, such as cross-site scripting protection for the headers in your Visualforce, site, and community pages.

### IN THIS SECTION:

#### [Improved Browser Protection for Visualforce Pages, Sites, and Communities](#)

New settings improve browser security and protect against cross-site scripting and malicious files on Visualforce pages, Force.com sites, and communities.

#### [HSTS \(HTTP Strict Transport Security\) Redirects Browsers to Use HTTPS](#)

HSTS is enabled on all Visualforce pages and can't be disabled. You can choose to enable HSTS on communities and Force.com sites. When you enable HSTS on a subdomain, it's also applied to the communities or Force.com sites that share the subdomain.

#### [Health Check: Choose a Default Baseline and Rename Baselines as Needed](#)

You can now set a default baseline that Security Health Check opens upon page load. You can change the baseline name, API name, and default baseline using the Edit feature in the Baseline Controls menu. These changes apply to both Lightning Experience and Salesforce Classic.

## Improved Browser Protection for Visualforce Pages, Sites, and Communities

New settings improve browser security and protect against cross-site scripting and malicious files on Visualforce pages, Force.com sites, and communities.

### Content Sniffing Protection

Prevents the browser from inferring the MIME type from the document content. It also prevents malicious files from being executed as dynamic content (JavaScript, stylesheet).

### Cross-Site Scripting Protection

If a reflected cross-site scripting attack is detected, the browser renders a blank page with no content.

### Referrer URL Protection

When loading pages, the referrer header shows only Salesforce.com rather than the entire URL. This feature eliminates the potential for a referrer header to reveal sensitive information that could be present in a full URL, such as an org ID. This feature is supported only for Chrome and Firefox.

To enable these security features:

### Visualforce

Visualforce and Salesforce share these security settings. Enabling these security features applies to both Visualforce and Salesforce.com. From Setup, enter *Session Settings* in the Quick Find box. Select the security setting you want to enable.

### Force.com Sites

From Setup, enter *Sites* in the Quick Find box. Click **Edit** on the Force.com site, and select the security setting you want to enable.

### Lightning Communities

From the Site.com tab in the Site.com app, launch Site.com Studio. Select **Site Configuration**, and then select the security setting you want to enable.

## HSTS (HTTP Strict Transport Security) Redirects Browsers to Use HTTPS

HSTS is enabled on all Visualforce pages and can't be disabled. You can choose to enable HSTS on communities and Force.com sites. When you enable HSTS on a subdomain, it's also applied to the communities or Force.com sites that share the subdomain.

After you enable HSTS, the browser caches that only HTTPS can be used on the domain. During the rollout of HSTS, the cache expiration increases to and then remains at one year.

### HSTS Rollout on Sandbox

Date	Cache Expiration
9/9	One hour
9/16	One day
9/30	One year

### HSTS Rollout on Production

Date	Cache Expiration
10/14	One hour
10/21	One day
10/28	One year

## Enabling HSTS

### Lightning Communities

1. From Setup, enter *Session Settings* in the Quick Find box, then select **Session Settings**.
2. Select **HSTS for Sites and Communities**, and click **Save**.
3. On the Site.com tab in the Site.com app, launch Site.com Studio.
4. Select **Site Configuration**, and then select **Require Secure Connections (HTTPS)**, and click **Save**.

### Force.com Sites

1. From Setup, enter *Session Settings* in the Quick Find box, then select **Session Settings**.
2. Select **HSTS for Sites and Communities**, and click **Save**.
3. From Setup, enter *Sites* in the Quick Find box, then select **Sites**.
4. On the Force.com site, select **Edit**, and then select **Require Secure Connections (HTTPS)**, and click **Save**.

### Communities and Force.com Sites Using a Custom Domain

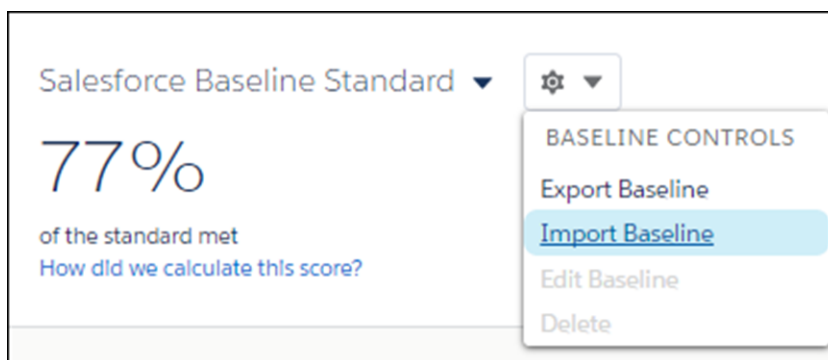
1. From Setup, enter *Session Settings* in the Quick Find box, then select **Session Settings**.

2. Select **HSTS for Sites and Communities**, and click **Save**.
3. For a Lightning community custom domain:
  - a. On the Site.com tab in the Site.com app, launch Site.com Studio.
  - b. Select **Site Configuration**, and then select **Require Secure Connections (HTTPS)**, and click **Save**.
4. For a Force.com site custom domain:
  - a. From Setup, enter *Sites* in the Quick Find box, then select **Sites**.
  - b. Click **Edit** on the Force.com site and select **Require Secure Connections (HTTPS)** and **Save**.
5. From Setup, enter *Domains* in the Quick Find box, then select **Domains**.
6. On the domain, click **Edit**. Select **Enable Strict Transport Security headers**, and click **Save**.

## Health Check: Choose a Default Baseline and Rename Baselines as Needed

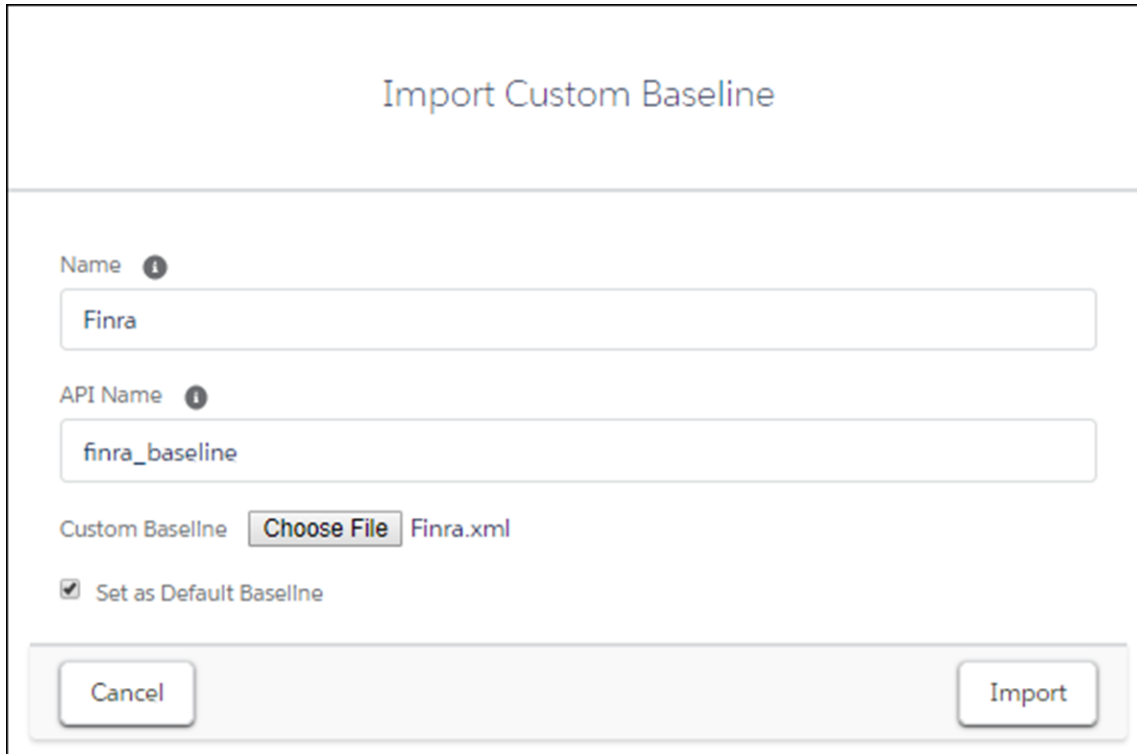
You can now set a default baseline that Security Health Check opens upon page load. You can change the baseline name, API name, and default baseline using the Edit feature in the Baseline Controls menu. These changes apply to both Lightning Experience and Salesforce Classic.

When importing an XML file to use as a custom baseline, you are now prompted to enter a baseline name and a unique API name. Previously, you included that information in your XML file.



### EDITIONS

Available in: **Professional**,  
**Enterprise**, **Performance**,  
**Unlimited**, and **Developer**  
Editions



The image shows a dialog box titled "Import Custom Baseline". It contains the following fields and controls:

- Name:** A text input field containing "Finra".
- API Name:** A text input field containing "finra\_baseline".
- Custom Baseline:** A section with a "Choose File" button and the filename "Finra.xml".
- Set as Default Baseline:** A checkbox that is checked.
- Buttons:** "Cancel" and "Import" buttons at the bottom.

## Salesforce IoT

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Use Salesforce IoT Explorer Edition to process events from connected devices in near real time and create meaningful interactions with your customers.

### IN THIS SECTION:

#### [Turn Event Data into Engaging Customer Experiences with Salesforce IoT Explorer Edition](#)

Use Salesforce IoT Explorer Edition to process events from connected devices in near real time and create meaningful interactions with your customers. Explorer offers built-in integration with Salesforce data and lets you leverage your Customer Relationship Management (CRM) investments in Salesforce. Analyze and combine event data with Salesforce data, and carry out actions for proactive service, sales opportunities, and personalized marketing.

## Turn Event Data into Engaging Customer Experiences with Salesforce IoT Explorer Edition

Use Salesforce IoT Explorer Edition to process events from connected devices in near real time and create meaningful interactions with your customers. Explorer offers built-in integration with Salesforce data and lets you leverage your Customer Relationship Management (CRM) investments in Salesforce. Analyze and combine event data with Salesforce data, and carry out actions for proactive service, sales opportunities, and personalized marketing.

A connected device or machine that can make API calls over the internet can send event messages to Salesforce IoT Explorer Edition. Explorer can receive event data from various sources (things), such as robots, HVAC systems, factory equipment, internet routers, and solar panels, to name a few. For example, after receiving and processing events from solar panels, Explorer can know that a panel is down. It can then determine whether a panel needs repair or replacement and create a case to request maintenance or an opportunity for the panel sales team.

### EDITIONS

Available in: Lightning Experience

Available in: **Developer Edition**

Available for an extra cost in: **Enterprise, Performance, and Unlimited Editions**

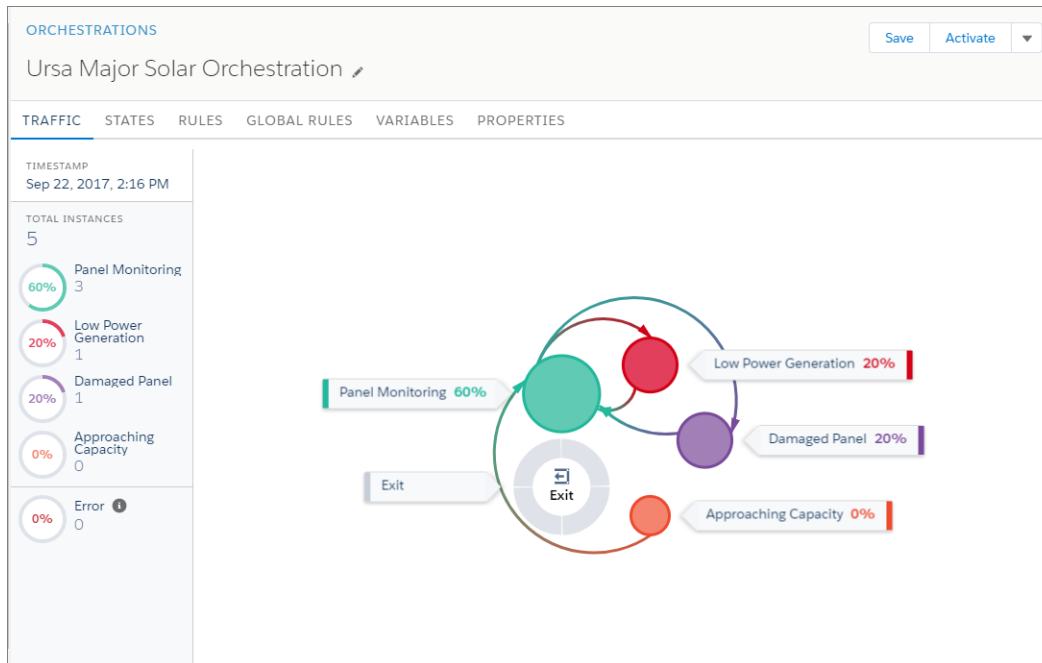
## Orchestrations

Salesforce IoT Explorer Edition executes orchestrations that you build. An orchestration contains the processing logic that can trigger the appropriate actions, creating relevant, proactive service opportunities, and delightful experiences for your customers.

Each orchestration represents a state machine. A state machine is a nonlinear workflow engine that manages the transitions of things from one defined state to another. You don't have to predefine all possible logical paths and combinations of conditions and outcomes that a workflow can take. You define the states and the set of rules for each state. When an orchestration instance transitions to another state, the set of rules for the new state apply. The definition of orchestration logic is more compact and efficient than the definition of if-then-else conditions.

Each state is a set of rules that are evaluated for an event message. Define rules to trigger actions and create or manipulate records in Salesforce. For example, when an event message is received for a solar panel with a particular serial number for the first time, an orchestration instance is started. A rule in the instance listens to this event and checks the event's power output field. If the power output is too low, the orchestration instance transitions to a new state that handles low power. A rule in the new state creates a case record and a Chatter post.

This image shows the traffic view of a sample orchestration that processes solar panel events. The traffic view shows the percentage of orchestration instances in each state.



## Platform Events

Salesforce IoT Explorer Edition uses platform events. Customize your event schema by defining a platform event, similar to how you define a custom object. Publish platform events through the API or Apex. For instance, the definition of a solar panel platform event contains custom fields that specify the type of data that the event contains. Examples of data sent in a solar panel event are the panel's serial number, the power output, and the number of active cells.

## Contexts

Associate an orchestration with a Salesforce object and one or more platform events through a context. By associating a Salesforce object to a context, the orchestration can access both event data and Salesforce object data. Use the combined event and object data in your event processing logic. In the solar panel example, event data in a solar panel event message can be enriched with information from an Asset record. The orchestration uses a key field, such as the panel serial number, to associate each event message and object record to a solar panel's orchestration instance.

**SETUP**  
Contexts

**Ursa Major Solar Context**

◀ Back to List: Contexts

Platform Events (1)

**Context Detail** [Edit] [Delete] [Clone]

Context Name	Ursa Major Solar Context
Description	Context for the Ursa Major Solar orchestration.
Key Type	String
Salesforce Object	Asset
Object Key	SN__c
Created By	Admin User, 9/20/2017 11:33 AM
Last Modified By	Admin User, 9/20/2017 12:45 PM

[Edit] [Delete] [Clone]

**Platform Events** [Add]

Action	Platform Event	Key
Delete	Solar Panel Event	Serial_Number__c

◀ Back To Top

Always show me ▾ more records per related list

## SEE ALSO:

[Trailhead: IoT Basics](#)[Salesforce Help: Salesforce IoT Explorer Edition](#)[Trailhead: Platform Events Basics](#)

## Deployment: Changing a Field Type Between Master-Detail and Lookup Is Not Supported for Test Deployments

If you change a field type from Master-Detail to Lookup or vice versa, the change isn't supported when running a test deployment (validation) to avoid data loss or corruption. If a change that isn't supported for test deployments is included in a deployment package, the test deployment fails and issues an error. If your deployment package changes a field type from Master-Detail to Lookup or vice versa, you can still validate the changes before deploying to production. Perform a full deployment to another test sandbox. A full deployment includes a validation of the changes as part of the deployment process.

## Development: Create Your Own Salesforce App

Salesforce DX is the new frontier for Salesforce app development, and provides both individual developers and development teams with an integrated, end-to-end life cycle designed for high-performance agile development. Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to other organizations.

## IN THIS SECTION:

[Salesforce DX: The New Frontier for Salesforce App Development](#)

With a focus on source-driven development, the new features of Salesforce Developer Experience (Salesforce DX) make it easier for developers to build together and continuously deliver. Use these features with open and standard tools, including Git, Selenium, VS Code, and Eclipse.

### Einstein Platform Services: Image Recognition and Natural Language Processing

Not a data scientist or machine-learning expert, but still want to integrate AI into your apps? Use the Einstein Platform Services APIs to easily AI-enable your apps with image recognition and natural language processing. Using the Einstein Vision APIs, you can leverage pre-trained classifiers or train your own custom classifiers to solve a vast array of specialized image recognition use cases. With the Einstein Language (Beta) APIs, you can harness the power of natural language processing to analyze text and infer the sentiment or intent behind that text. Make your apps smarter and look like a genius at the same time.

### Lightning Components: Security, Developer Productivity, and UI Power and Flexibility

The Lightning Component framework powers Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Use the framework to build mobile apps and pages in Salesforce for Android, Salesforce for iOS, Salesforce mobile web, Lightning Experience, Salesforce Classic, and Communities.

### Visualforce: Lightning Experience Readiness and Styling

Use Visualforce to develop custom pages for your org. In this release, changes are focused on making it easier to use Visualforce pages seamlessly in Lightning Experience. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### Apex

Apex is a programming language that uses Java-like syntax and acts like database stored procedures. Apex enables developers to add business logic to system events, such as button clicks, updates of related records, and Visualforce pages.

### ISVforce: Faster Onboarding, Easier Business Planning, and Packaging Enhancements

Navigate the partner journey more quickly with the AppExchange Trailblazer Checklist. Manage business plans for apps where you're accustomed to managing other listing details: the AppExchange publishing console. Control subscribers' access to individual features with feature parameters. We also enhanced managed package behavior in subscriber orgs.

### Debugging: Standardized Debug Log Retention

Debug logs are now deleted on a more predictable schedule, and we let you store more of them. We also added several new debug log events. This change applies to both Lightning Experience and Salesforce Classic.

### API

Access more metadata types and data objects in API version 41.0. Improve your searches using new features in SOSL and Data Services. Create native mobile apps and custom web apps with the User Interface API. Process large amounts of records with a simplified interface using Bulk API 2.0.

## Salesforce DX: The New Frontier for Salesforce App Development

With a focus on source-driven development, the new features of Salesforce Developer Experience (Salesforce DX) make it easier for developers to build together and continuously deliver. Use these features with open and standard tools, including Git, Selenium, VS Code, and Eclipse.

These core principles drive the open and integrated experience for developing on the Salesforce Platform.

- Source code is king.
- Metadata and code are modular.
- Environments are easily created and disposable.
- Development is organized around team collaboration.
- Development is based on open standards and extensibility.
- Flexible packaging supports an agile distribution model.
- Processes and tools facilitate continuous integration and continuous delivery.

### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Dev Hub available in: **Enterprise, Performance, and Unlimited** Editions

Scratch orgs available in: **Developer, Enterprise, Group, and Professional** Editions



Whether you're an individual developer or working as part of a large team, Salesforce DX provides an integrated, end-to-end life cycle designed for high-performance agile development. And best of all, it's open and flexible so that you can build using the tools and practices you know and love.

#### IN THIS SECTION:

##### [Explore Salesforce DX](#)

You can learn all about the new Salesforce DX features and tools in several ways.

##### [Be More Productive with the Salesforce CLI \(Generally Available\)](#)

The Salesforce command-line interface (CLI) combines many capabilities from across several Salesforce APIs. It also incorporates the functionality of other Salesforce tools, such as the Force.com Migration Tool and Salesforce workbench. All in one place. Easily create environments for development and testing, synchronize source code, create and run tests, and control the full application life cycle. And like all CLIs, it's scriptable. The Salesforce CLI will be generally available in mid-October 2017.

##### [Shorten the Dev Life Cycle with Scratch Orgs \(Generally Available\)](#)

A scratch org is your own personal development environment: a source-driven and disposable runtime for Salesforce code and metadata. A scratch org is fully configurable, so developers can emulate different editions with different features and preferences. Salesforce DX scratch orgs will be generally available in mid-October 2017.

##### [Manage Your Scratch Orgs with Developer Hub \(Generally Available\)](#)

Use the Developer Hub (Dev Hub) to create, delete, and manage your Salesforce scratch orgs. After you set up your project on your local computer, authorize the Dev Hub org using the Salesforce CLI. Dev Hub will be generally available in mid-October 2017.

##### [Track and Sync Your Source \(Generally Available\)](#)

Salesforce DX supports tracking and synchronizing source between your Salesforce DX project and scratch orgs.

##### [Build Faster with Salesforce Developer Tools for Visual Studio Code \(Generally Available\)](#)

Salesforce Developer Tools for Visual Studio Code is an open-source extension pack that includes tools for developing on the Salesforce Platform. Use the extension pack to employ the source-driven Salesforce DX development flow in the lightweight, extensible VS Code editor. These extensions provide features for working with scratch orgs, Apex, Lightning components, and Visualforce. Salesforce Developer Tools for Visual Studio Code will be generally available in mid-October 2017, with added features such as the Apex Debugger.

##### [Imagine What You Can Do with Second-Generation Packaging \(Beta\)](#)

Second-generation packaging ushers in a new way for partners and enterprise customers to develop, distribute, and manage their apps and metadata. If you want more agile app development with source-driven packages that are not org-based, meet the new kid on the block. We welcome you to join the second-generation packaging beta.

##### [Get Your Scratch Orgs in Shape \(Pilot\)](#)

In Winter '18, Salesforce DX is introducing a pilot to bring a production org's "shape" into a scratch org. Do you ever wonder which features and preferences to specify in the scratch org definition file? Or wish a scratch org could magically be created with the features, limits, and preferences of your production org? This feature allows you to quickly create scratch orgs with the shape of another org.

## Explore Salesforce DX

You can learn all about the new Salesforce DX features and tools in several ways.

### Salesforce DX on Trailhead

Like to earn badges? Check out the [Get Started with Salesforce DX](#) trail on Trailhead. Complete this trail and become a Salesforce DX virtuoso by earning all four badges.

### Salesforce DX Development Model

Learn how source-driven development changes the development paradigm from org-based to artifact-based.

### App Development with Salesforce DX

Get ready to get your fingernails dirty. Use the Salesforce command-line interface to create and deploy apps.

### Continuous Integration Using Salesforce DX

See how you can use Git and Travis CI to provide a quick and easy continuous integration solution.

### Git and GitHub Basics

Many of our examples use Git and GitHub. Learn about version control systems and how Git and GitHub fit in to the development life cycle.

## Salesforce DX Documentation

Learn about Salesforce DX the traditional way: Read all about it.

### Salesforce DX Setup Guide

This guide is your first stop in your Salesforce DX journey. It provides all the details to set up your environment.

### Salesforce CLI Command Reference

This guide provides comprehensive descriptions of each Salesforce CLI command.

### Salesforce DX Developer Guide

This guide walks you through the basic scenarios for using Salesforce DX in the development life cycle. It highlights many of the Salesforce CLI commands you'll use every day.

### Salesforce Development Tools for Visual Studio Code

The docs for the Visual Studio Code extension pack for Salesforce DX live right in the Visual Studio Code Marketplace. Feel like you could improve them? File a GitHub issue, then submit a pull request to modify the `README.md` files on [GitHub](#).

## Be More Productive with the Salesforce CLI (Generally Available)

The Salesforce command-line interface (CLI) combines many capabilities from across several Salesforce APIs. It also incorporates the functionality of other Salesforce tools, such as the Force.com Migration Tool and Salesforce workbench. All in one place. Easily create environments for development and testing, synchronize source code, create and run tests, and control the full application life cycle. And like all CLIs, it's scriptable. The Salesforce CLI will be generally available in mid-October 2017.

Changes to the Salesforce CLI are released regularly. [Read the weekly release notes to learn about the new and changed features in recent updates.](#)

These commands and parameters have changed in version 41 of the Salesforce CLI or during weekly updates after we published [version 40 of the Salesforce CLI Command Reference \(Beta\)](#). For more information, see [version 41 of the Salesforce CLI Command Reference](#).

## System Requirement Changes

If you are running the CLI on Windows, Powershell is no longer required.

## Deprecated Environment Variables

We are deprecating `SFDX_DISABLE_ENCRYPTION` in Spring '18. You can continue to use this environment variable in Winter '18 but will see a deprecation warning when you run CLI commands. Before you start using Spring '18, we strongly recommend that you unset this variable, and then reauthorize all your orgs.

## New Commands

**lightning:test:install**

Installs a Lightning Testing Service (LTS) unmanaged package into your org.

**mdapi:deploy:report**

Checks the status of an asynchronous metadata deployment.

**mdapi:retrieve:report**

Checks the status of an asynchronous metadata retrieval.

**org:shape:create (pilot)**

Available to participants in an invitation-only pilot program. Creates a snapshot of org edition, features, and licenses to use for scratch org creation, allowing your scratch org to look like another org for testing.

**org:shape:delete (pilot)**

Available to participants in an invitation-only pilot program. Deletes all org shapes that you've created for an org using the Salesforce CLI.

**org:shape:list (pilot)**

Available to participants in an invitation-only pilot program. Lists all org shapes that you've created using the Salesforce CLI.

**package:installed:list**

Lists all packages installed in the target org.

**package:uninstall**

Uninstalls a second-generation package in the target org.

**package:uninstall:get**

Retrieves the status of a package uninstall request.

**package2:update (beta)**

Updates a second-generation package.

**user:create**

Creates a user for a scratch org.

**user:display**

Displays information about a user of a scratch org that the Salesforce CLI has created or authenticated.

**user:list**

Lists all users of a scratch org that the Salesforce CLI has created or authenticated.

## Removed Pilot Commands

**package2:installed:list**

You can now use the `package:installed:list` command with second-generation packages.

**package2:manifest:create****package2:members:list****package2:version:install**

You can now use the `package:install` command with second-generation packages.

**package2:version:uninstall**

You can now use the `package:uninstall` command with second-generation packages.

## New Parameters

### **apex:test:run: -y | --synchronous**

Optional. Runs test methods from a single Apex class synchronously. If you don't specify this flag, tests are run asynchronously.

### **data:record:create: -t | --usetoolingapi**

Optional. Creates a record of a Tooling API object.

### **data:record:delete: -t | --usetoolingapi**

Optional. Deletes a record of a Tooling API object.

### **data:record:get: -t | --usetoolingapi**

Optional. Retrieves a record of a Tooling API object.

### **data:record:update: -t | --usetoolingapi**

Optional. Updates a record of a Tooling API object.

### **data:record:update: -v | --targetdevhubusername**

Optional. A username for the target Dev Hub org. Overrides the default Dev Hub org.

### **mdapi:deploy**

#### **-o | --ignoreerrors**

Optional. Ignores the deploy errors, and continues with the deploy operation. The default is `false`. Keep this parameter set to `false` when deploying to a production org. If set to `true`, components without errors are deployed, and components with errors are skipped.

#### **-g | --ignorewarnings**

Optional. If a warning occurs and `ignoreWarnings` is set to `true`, the `success` field in `DeployMessage` is `true`. When `ignoreWarnings` is set to `false`, `success` is set to `false`, and the warning is treated like an error.

### **org:create**

#### **-c | --noancestors**

Optional. Prevents the inclusion of second-generation package ancestors in the scratch org.

#### **-d | --durationdays**

Optional. Sets the duration of the scratch org, in days. Valid values are 1–30. The default is seven days.

### **package:install: -p | --publishwait**

Optional. Maximum number of minutes to wait for the Subscriber Package Version ID to replicate to the target org before canceling the install request. The default is 0.

### **package2:create (beta): -o | --containeroptions**

Optional. Determines the upgrade and editability rules for the second-generation package.

### **package2:version:create (beta): -k | --installationkey**

Optional. Installation key for creating the key-protected package. The default is null.

### **package2:version:update (beta): -k | --installationkey**

Optional. Installation key for the key-protected package. The default is null.

### **user:password:generate: -o | --onbehalfof**

Optional. A comma-separated list of usernames for which to generate passwords.

### **user:permset:assign: -o | --onbehalfof**

Optional. Comma-separated list of usernames to assign the permission set to.

## Changed Parameters

**package2:version:create (beta): -d | --directory**

Changed from required to optional. The path to the directory that contains the contents of the package2 version.

## Shorten the Dev Life Cycle with Scratch Orgs (Generally Available)

A scratch org is your own personal development environment: a source-driven and disposable runtime for Salesforce code and metadata. A scratch org is fully configurable, so developers can emulate different editions with different features and preferences. Salesforce DX scratch orgs will be generally available in mid-October 2017.



**Note:** Some Salesforce DX features, specifically Developer Hub and scratch orgs, are not available to Government cloud and public cloud customers in Winter '18.

## Create More Scratch Orgs: Active and Daily Allocations Increase

Edition	Daily Scratch Org Allocation	Active Scratch Org Allocation
Enterprise Edition	80	40
Unlimited Edition	200	100
Performance Edition	200	100
Dev Hub trial	40	20

## Specify Scratch Org Duration

You asked, and we listened! You can specify the scratch org's duration, which indicates when a scratch org expires. By default, a scratch org expires in 7 days.

## Scratch Orgs Still Taste Great but Are Less Filling

By default, a scratch org is empty. It's not cluttered with extraneous sample data, dashboards, reports, workflows, and other metadata. The features and org preferences you indicate in the scratch org definition file dictate what you see in your scratch org.

However, if you prefer to create a scratch org with the sample data and metadata typically included when you sign up for an org, no problem. Just add the `hasSampleData` option in the scratch org definition file.

```
{
  "orgName": "Acme",
  "country": "US",
  "edition": "Enterprise",
  "features": ["MultiCurrency;AuthorApex"],
  "hasSampleData": "true",
  "orgPreferences": {
    "enabled": ["S1DesktopEnabled", "ChatterEnabled"],
    "disabled": ["SelfSetPasswordInApi"]
  }
}
```

## Use the Salesforce CLI to List Scratch Org Allocation Information

Run `sfdx force:limits:api:display -u <Dev Hub username or alias>` to list how many scratch orgs you have allocated and how many you have remaining.

## SControls No Longer Supported in Scratch Orgs

We have removed support for the SControls feature in scratch orgs.

## Manage Your Scratch Orgs with Developer Hub (Generally Available)

Use the Developer Hub (Dev Hub) to create, delete, and manage your Salesforce scratch orgs. After you set up your project on your local computer, authorize the Dev Hub org using the Salesforce CLI. Dev Hub will be generally available in mid-October 2017.

To get started creating scratch orgs, choose any paid org to function as your Dev Hub. If you want to try Dev Hub and experiment outside of your production org, sign up for a [Dev Hub trial org](#). Dev Hub trial orgs expire after 30 days, but that gives you plenty of time to complete the [Get Started with Salesforce DX](#) trail.

Starting with Winter '18, you can enable Dev Hub in a Performance Edition org.

## Track and Sync Your Source (Generally Available)

Salesforce DX supports tracking and synchronizing source between your Salesforce DX project and scratch orgs.

## Expanded Support for Metadata API Types

For source tracking and synchronization between your Salesforce DX project and scratch orgs, we support many more Metadata API types.

## MIME Extensions Used for Static Resources

Traditionally, static resources are stored on the file system as binary objects with a `.resource` extension. Salesforce DX handles static resources differently by supporting content MIME types. For example, `.gif` files are stored as a `.gif` instead of a `.resource` file. By storing files with their MIME extensions, you can manage and edit your files using the associated editor on your system.

## Improved Server-Side Tracking for Metadata Source

Children of custom objects and Aura bundles are tracked individually on the server side. Previously, they were tracked with the change to the part object or the parent Aura bundle.

SEE ALSO:

[Salesforce DX Developer Guide: Supported Metadata API Types](#)

[Salesforce DX Developer Guide: Salesforce DX Project Structure and Source File Format](#)

## Build Faster with Salesforce Developer Tools for Visual Studio Code (Generally Available)

Salesforce Developer Tools for Visual Studio Code is an open-source extension pack that includes tools for developing on the Salesforce Platform. Use the extension pack to employ the source-driven Salesforce DX development flow in the lightweight, extensible VS Code editor. These extensions provide features for working with scratch orgs, Apex, Lightning components, and Visualforce. Salesforce Developer Tools for Visual Studio Code will be generally available in mid-October 2017, with added features such as the Apex Debugger.

To use Salesforce Development Tools for Visual Studio Code, install the [salesforcedx-vscode](#) extension pack, which installs all the extensions you need.

The extensions in the [salesforcedx-vscode](#) extension pack include:

**[salesforcedx-vscode-core](#)**

This extension interacts with the Salesforce CLI to provide basic Salesforce DX functionality.

**[salesforcedx-vscode-apex](#)**

This extension uses the Apex Language Server to provide features such as syntax highlighting and code completion.

**[salesforcedx-vscode-apex](#)**

This extension lets you use your Apex Debugger licenses to interactively debug issues in your scratch orgs.

**[salesforcedx-vscode-lightning](#)**

This extension supports Lightning component bundles. It uses the HTML language server from VS Code.

**[salesforcedx-vscode-visualforce](#)**

This extension supports Visualforce pages and components. It uses the HTML language server from VS Code.

For information about Salesforce Development Tools for Visual Studio Code and how to get started, check out the [Visual Studio Code Marketplace](#).

To peruse the source code for the extension bundle, report issues, or submit contributions, visit [GitHub](#).

Salesforce Developer Tools for Visual Studio Code is released regularly. For information about the changes in these ongoing releases, check out the extension pack's [change log](#).

## Imagine What You Can Do with Second-Generation Packaging (Beta)

Second-generation packaging ushers in a new way for partners and enterprise customers to develop, distribute, and manage their apps and metadata. If you want more agile app development with source-driven packages that are not org-based, meet the new kid on the block. We welcome you to join the second-generation packaging beta.



**Note:** This release contains a beta version of Second-Generation Packaging, which means it's a high-quality feature with known limitations. Second-Generation Packaging isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions based on generally available products and features.

We provide new developer-controlled packages in two different flavors: locked and unlocked. These package types are available as pilot features. You can install these package types only in scratch and sandbox orgs. All commands, parameters, and other attributes of these package types are subject to change or deprecation at any time, with or without notice. Don't implement functionality developed using these package types in any production orgs.

Do you already use packaging to release and distribute your apps on AppExchange? Are you a customer who wants to manage custom apps more easily? Whether you're new to packaging or a seasoned ISV, we have good news. With the Salesforce DX development model, you can use second-generation packaging to organize your source, integrate with your VCS, and better utilize your custom Apex code.

Second-generation packaging is a game-changer. Here are some benefits for enterprise customers.

- Use the power of the Salesforce DX command-line interface (CLI) for source-driven development.
- Install packages in scratch orgs
- Organize and deploy metadata and apps using developer-controlled packages.

ISVs can harness these benefits as well.

- Implement feature branch development and testing.
- Use a CLI to enable fully API-driven development.

- Develop packages that are source-driven, not org-based.
- Use public Apex classes to share code across packages rather than using global Apex classes.
- Easily develop and distribute dependent packages.
- Define multiple packages within a single namespace.

## New Features for Beta

If you participated in the pilot for second-generation packaging, these features are making their debut in beta.

### Install and View Second-Generation Packages in the UI

You can now handle many CLI options in the Salesforce UI. Install, view, and uninstall second-generation packages all with the click of your mouse.

### Package More Metadata Types

The beta release supports more metadata types, like Workflow, Flow, Dashboard, and Article Type. Add these types to your second-generation packages.

### Explore More Manageability Options (Pilot)

We introduced two new flavors of second-generation packages, locked and unlocked. These package types are available for pilot release. You can install them in any scratch or sandbox org but not in a production org.

## Important Information for Pilot Participants

If you explored second-generation packaging during the pilot, be aware of this important information before you get started with the beta release.

### Get a New Dev Hub Org

The Dev Hub org you received during the pilot has expired. You can use any Dev Hub org starting in Winter '18. When you enable the Dev Hub in that org, also enable Second-Generation Packaging to participate in the beta. You can use the same namespace you used during the pilot, or you can acquire a new namespace for the beta from a Developer Edition org.

### Install the New CLI

Before using the beta, uninstall your Salesforce CLI. Then install the CLI as described in the *Salesforce DX Setup Guide*.

### Put Your Package Descriptors in `sfdx-project.json`

We removed the `package2-descriptor.json` file. You now specify all your project configuration details, including the package descriptors, in the `sfdx-project.json` file.

### Catch Up on the New and Changed CLI Commands

Be aware of these differences if you are familiar with the commands available during the pilot.

- Instead of `force:package2:version:install`, you now use `force:package:install`. Similarly:
  - For `force:package2:install:get`, now use `force:package:install:get`.
  - For `force:package2:installed:list`, now use `force:package:installed:list`.
  - For `force:package2:uninstall`, now use `force:package:uninstall`.
- You no longer need to create a package manifest, so the CLI no longer contains the `force:package2:manifest:create` command.
- We removed the `force:package2:member:list` command. Instead, view package members in a subscriber org using the Installed Packages option from the Salesforce Setup menu.



## Considerations for Second-Generation Packaging

Here are some considerations to be aware of when using second-generation packaging.

### API Version Must be 41.0 or Later

**Description:** API versions before 41.0 aren't supported for second-generation packages.

**Workaround:** Before you create a second-generation package, verify that you've set the `sourceApiVersion` in `sfdx-project.json` to 41.0 or later.

### Unlocked and Locked Packages Can Only be Installed in Scratch or Sandbox Orgs

**Description:** You can create three types of second-generation packages. You can install managed second-generation packages in any org. Locked and unlocked packages are pilot features that you can install only in a sandbox or scratch org.

**Workaround:** None.

### Unable to Specify a Patch Version

**Description:** The four-part package version number includes a patch segment, defined as `major.minor.patch.build`. However, you can't create a patch for a second-generation package. Package creation fails if you set a patch number in the package descriptor. Stay tuned for patch versions in an upcoming release.

**Workaround:** Always set the patch segment of the version number, to 0. For example, 1.2.0.1 is valid but 1.2.1.1 is not.


### Protected Custom Metadata and Custom Settings are Visible to Developers in a Scratch Org If Installed Packages Share a Namespace

**Description:** Use caution when you store secrets in your second-generation packages using protected custom metadata or protected custom settings. You can create multiple second-generation packages with the same namespace. However, when you install these packages in a scratch org, these secrets are visible to any of your developers that are working in a scratch org with a shared namespace. In the future, we might add a "package-protected" keyword to prevent access to package secrets in these situations.

**Workaround:** None.

## Get Your Scratch Orgs in Shape (Pilot)

In Winter '18, Salesforce DX is introducing a pilot to bring a production org's "shape" into a scratch org. Do you ever wonder which features and preferences to specify in the scratch org definition file? Or wish a scratch org could magically be created with the features, limits, and preferences of your production org? This feature allows you to quickly create scratch orgs with the shape of another org.

 **Important:** We provide the Salesforce DX Org Shape feature to selected customers through a pilot program that requires agreement to specific terms and conditions. The Org Shape feature is subject to change and isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. All commands, parameters, and other features are subject to change or deprecation at any time, with or without notice. Don't implement functionality developed with these commands or tools.

This pilot is ideal for customers who are actively using Salesforce DX and are willing to provide us constructive feedback. We plan to roll out this feature to a small set of customers and expand the audience over time. If you are interested in having early access, fill out this form, one for each team: <https://goo.gl/forms/IJGjXwU5wSYunp7q1>.

## Einstein Platform Services: Image Recognition and Natural Language Processing

Not a data scientist or machine-learning expert, but still want to integrate AI into your apps? Use the Einstein Platform Services APIs to easily AI-enable your apps with image recognition and natural language processing. Using the Einstein Vision APIs, you can leverage pre-trained classifiers or train your own custom classifiers to solve a vast array of specialized image recognition use cases. With the Einstein Language (Beta) APIs, you can harness the power of natural language processing to analyze text and infer the sentiment or intent behind that text. Make your apps smarter and look like a genius at the same time.

### IN THIS SECTION:

#### [Einstein Language \(Beta\): Build Natural Language Processing into Your Apps](#)

Use the Einstein Language APIs to build natural language processing into your apps and unlock powerful insights within text. The language APIs include the Einstein Intent API and the Einstein Sentiment API.

#### [Einstein Vision: Multi-Label Models, Model Feedback, and Global Datasets](#)

Einstein Vision Version 2.0 has been released. With this version, Einstein Vision is now the umbrella term for all image recognition APIs. The Einstein Vision API is now called the Image Classification API. The Image Classification API new features include multi-label models, the ability to add feedback to your models, and global datasets.

## Einstein Language (Beta): Build Natural Language Processing into Your Apps

Use the Einstein Language APIs to build natural language processing into your apps and unlock powerful insights within text. The language APIs include the Einstein Intent API and the Einstein Sentiment API.



**Note:** This release contains a beta version of Einstein Language, which means it's a high-quality feature with known limitations. Einstein Language isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Einstein Language on the [IdeaExchange](#) in the Trailblazer Community.

The Einstein Intent API categorizes unstructured text into user-defined labels to better understand what users are trying to accomplish. Use this API to analyze text from emails, chats, or web forms to:

- Determine which products prospects are interested in, and send customer inquiries to the appropriate sales person.
- Route service cases to the correct agents or departments, or provide self-service options.
- Understand customer posts to provide personalized self-service in your communities.

The Einstein Sentiment API classifies text into positive, negative, and neutral classes to understand the feeling behind text. Use this API to analyze emails, social media, and text from chat to:

- Identify the sentiment of a prospect's emails to trend a lead or opportunity up or down.
- Provide proactive service by helping dissatisfied customers first or extending promotional offers to satisfied customers.
- Monitor the perception of your brand across social media channels, identify brand evangelists, and note customer satisfaction.

### SEE ALSO:

[Einstein Platform Services Developer Guide: Introduction to Salesforce Einstein Language \(Beta\)](#)

## Einstein Vision: Multi-Label Models, Model Feedback, and Global Datasets

Einstein Vision Version 2.0 has been released. With this version, Einstein Vision is now the umbrella term for all image recognition APIs. The Einstein Vision API is now called the Image Classification API. The Image Classification API new features include multi-label models, the ability to add feedback to your models, and global datasets.

### IN THIS SECTION:

#### [Switch to the New API Endpoint](#)

There's a new API endpoint in town! The APIs now use the `https://api.einstein.ai` endpoint. When you access the Einstein Platform Services APIs, you use this new endpoint. The old `api.metamind.io` endpoint still works for now; but update your code to use the new endpoint because the old endpoint will be deprecated.

#### [Use Feedback to Optimize Your Model](#)

If a model misclassifies an image, you can add that image to the correct label in the dataset. Then you can train the dataset and update the model. This feedback cycle improves the model by adding new data.

#### [Identify Multiple Objects with a Multi-Label Model](#)

You can use the Image Classification API to create a multi-label model. A multi-label model predicts multiple classes for a single image. Let's say you have a multi-label model for sports equipment, and you classify an image that contains a baseball glove and bat. The prediction response contains high probabilities for the classes baseball-bat and baseball-glove.

#### [Classify Images with Prebuilt Models](#)

Einstein Vision provides two prebuilt models to help you start making predictions right away.

#### [Add Data to a Model with Global Datasets](#)

A global dataset is a public dataset that contains data that you can add to a custom model. When you train a dataset to create a model, you can include data from a global dataset. Consider using a global dataset to create a negative or "other" class in your model. A negative class is returned in a prediction when the image doesn't match any other class.

#### [Creating a Dataset Requires a Dataset Type](#)

When you train a dataset and create a model, the model type is inherited from the dataset type. The type of model you need depends on the images that you send into the model and what you want the model to identify in those images.

#### [Deprecated Einstein Image Classification API Calls](#)

These calls have been deprecated in Einstein Image Classification API version 2.0.

#### [Locate Image Objects with Einstein Object Detection \(Beta\)](#)

Train deep-learning models to recognize and count multiple distinct objects within an image using the Einstein Object Detection API. The API identifies objects within an image and provides details like the size and location of each object.

### SEE ALSO:

[Einstein Platform Services Developer Guide](#)

## Switch to the New API Endpoint

There's a new API endpoint in town! The APIs now use the `https://api.einstein.ai` endpoint. When you access the Einstein Platform Services APIs, you use this new endpoint. The old `api.metamind.io` endpoint still works for now; but update your code to use the new endpoint because the old endpoint will be deprecated.

For example, the endpoint to get a dataset is `https://api.einstein.ai/v2/vision/datasets/<DATASET_ID>`.

## Use Feedback to Optimize Your Model

If a model misclassifies an image, you can add that image to the correct label in the dataset. Then you can train the dataset and update the model. This feedback cycle improves the model by adding new data.

With the feedback API calls, you can:

- Add a misclassified image to a dataset with the correct label.
- Get a list of images that were added as feedback to a dataset.
- Create a model or update an existing one using feedback images.

Let's say you have a model that classifies beaches and mountains. You send in the image `alps.jpg` to the model to get a prediction. The model responds with a high probability that the image is a beach (in the Beaches class). However, you were expecting a high probability that the image is a mountain (in the Mountains class). The image was misclassified. Use one of the feedback API calls to add the misclassified image with the correct label to the dataset from which the model was created.

This cURL call adds `alps.jpg` as a new example to the dataset. The request parameter `expectedLabel=Mountains` specifies that the image is added to the correct class in the dataset.

```
curl-X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type: multipart/form-data" -F "modelId=3CMCRC572BD3OZTQSTTUU4733Y" -F "data=@c:\data\alps.jpg" -F "expectedLabel=Mountains" https://api.einstein.ai/v2/vision/feedback
```

After you add feedback images to the dataset, you can retrain the dataset and update the model.

SEE ALSO:

[Einstein Platform Services Developer Guide: Add Feedback to a Dataset](#)

## Identify Multiple Objects with a Multi-Label Model

You can use the Image Classification API to create a multi-label model. A multi-label model predicts multiple classes for a single image. Let's say you have a multi-label model for sports equipment, and you classify an image that contains a baseball glove and bat. The prediction response contains high probabilities for the classes `baseball-bat` and `baseball-glove`.

### Start with the Dataset

To create a multi-label model, you start with the dataset. When you create the dataset, specify a type of `image-multi-label`. This cURL call creates a dataset.

```
curl-X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type: multipart/form-data" -F "path=http://einstein.ai/images/sports.zip" -F "type=image-multi-label" https://api.einstein.ai/v2/vision/datasets/upload
```

To create a multi-label model, train the multi-label dataset using the same endpoint as a standard classification model: `https://api.einstein.ai/v2/vision/train`.

### Get Model Metrics

After you create a multi-label model, you can get the model metrics to understand the model accuracy and how well the model performs. You get metrics for a multi-label model the same way you get metrics for a standard classification model; however, the response format is different. This cURL gets the model metrics.

```
curl-X GET -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" https://api.einstein.ai/v2/vision/models/<MODEL_ID>
```

## Classify an Image

Classifying an image uses the same call as for a standard image classification model, but the response is different.

```
curl -X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H
"Content-Type: multipart/form-data" -F "modelId=<YOUR_MODEL_ID>" -F
"sampleLocation=http://web.yoursite.com/<IMAGE_FILE>.png"
https://api.einstein.ai/v2/vision/predict
```

The response returns all classes in the model. Each probability has a value from 0 up to 1, and the classes with the highest probability are at the top. Here's an example of a response from the sports multi-label model.

```
{
  "probabilities": [
    {
      "label": "baseball-bat",
      "probability": 0.7356758
    },
    {
      "label": "baseball-glove",
      "probability": 0.74909562
    },
    {
      "label": "basketball-hoop",
      "probability": 0.112600096
    },
    {
      "label": "tennis-ball",
      "probability": 0.088070825
    },
    {
      "label": "tennis-racket",
      "probability": 0.0854089
    },
    {
      "label": "tennis-court",
      "probability": 0.0007318517
    }
  ],
  "object": "predictresponse"
}
```

### SEE ALSO:

[Einstein Platform Services Developer Guide: Determine the Model Type You Need](#)

[Einstein Platform Services Developer Guide: Create a Dataset From a Zip File Asynchronously](#)

[Einstein Platform Services Developer Guide: Train a Dataset](#)

[Einstein Platform Services Developer Guide: Get Multi-Label Model Metrics](#)

## Classify Images with Prebuilt Models

Einstein Vision provides two prebuilt models to help you start making predictions right away.

- **Multi-Label Image Model**—Classifies images that contain various objects. When you classify an image using this model, it returns a prediction for every class in the model and a probability for each class. This model detects multiple objects in an image, so the probabilities don't add up to 1.
- **Scene Image Model**—Classifies images of indoor and outdoor scenes. The model returns the top five classes with the highest probability first. The scene image model is a standard classification model, so all probabilities add up to 1.

This cURL command makes a prediction against the scene image model.

```
curl-X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type: multipart/form-data" -F "sampleLocation=http://einstein.ai/images/gym.jpg" -F "modelId=SceneClassifier" https://api.einstein.ai/v2/vision/predict
```

The model returns a response similar to this JSON.

```
{
  "probabilities": [
    {
      "label": "Gym interior",
      "probability": 0.996387
    },
    {
      "label": "Airport terminal",
      "probability": 0.0025247275
    },
    {
      "label": "Office or Cubicles",
      "probability": 0.00049142947
    },
    {
      "label": "Bus or train interior",
      "probability": 0.00019321487
    },
    {
      "label": "Restaurant patio",
      "probability": 0.000069430374
    }
  ],
  "object": "predictresponse"
}
```

#### SEE ALSO:

[Einstein Platform Services Developer Guide: Use the Prebuilt Models](#)

[Einstein Platform Services Developer Guide: Scene Image Model Class List](#)

[Einstein Platform Services Developer Guide: Multi-Label Image Model Class List](#)

## Add Data to a Model with Global Datasets

A global dataset is a public dataset that contains data that you can add to a custom model. When you train a dataset to create a model, you can include data from a global dataset. Consider using a global dataset to create a negative or “other” class in your model. A negative class is returned in a prediction when the image doesn't match any other class.

When training a dataset, specify the ID of the global dataset to include its data in the model created by the training process. This cURL command specifies `withGlobalDatasetId` in the `trainParams` request parameter.

```
curl -X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H
"Content-Type: multipart/form-data" -F "name=Beaches and Mountains w/Global Other Dataset"
-F "datasetId=<DATASET_ID>" -F "trainParams={\"withGlobalDatasetId\" : 1005161}"
https://api.einstein.ai/v2/vision/train
```

When you send an image for classification and it doesn't match a class in your dataset, the result looks like this JSON.

```
{
  "probabilities": [
    {
      "label": "other",
      "probability": 0.99999857
    },
    {
      "label": "Beaches",
      "probability": 8.929781e-7
    },
    {
      "label": "Mountains",
      "probability": 5.91046e-7
    }
  ],
  "object": "predictresponse"
}
```

SEE ALSO:

[Einstein Platform Services Developer Guide: Use Global Datasets](#)

## Creating a Dataset Requires a Dataset Type

When you train a dataset and create a model, the model type is inherited from the dataset type. The type of model you need depends on the images that you send into the model and what you want the model to identify in those images.

For Einstein Image Classification API version 2.0, the `type` parameter is now required when you create a dataset. Valid values are:

- `image`—Standard classification dataset. Models created from this type of dataset classify an image into a single class.
- `image-multi-label`—Multi-label classification dataset. Models created from this type of dataset classify an image into multiple classes.

SEE ALSO:

[Einstein Platform Services Developer Guide: Determine the Model Type You Need](#)

[Einstein Platform Services Developer Guide: Create a Dataset From a Zip File Asynchronously](#)

[Einstein Platform Services Developer Guide: Create a Dataset From a Zip File Synchronously](#)

## Deprecated Einstein Image Classification API Calls

These calls have been deprecated in Einstein Image Classification API version 2.0.

**/vision/datasets/<DATASET\_ID>/labels**

Create a label. You must now pass in the labels when you create the dataset.

**/vision/datasets/<DATASET\_ID>/labels/<LABEL\_ID>**

Get a label.

**/vision/datasets/<DATASET\_ID>/examples/<EXAMPLE\_ID>**

Get an example.

**/vision/datasets/<DATASET\_ID>/examples/<EXAMPLE\_ID>**

Delete an example.

## Locate Image Objects with Einstein Object Detection (Beta)

Train deep-learning models to recognize and count multiple distinct objects within an image using the Einstein Object Detection API. The API identifies objects within an image and provides details like the size and location of each object.



**Note:** This release contains a beta version of Einstein Object Detection, which means it's a high-quality feature with known limitations. Einstein Object Detection isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Einstein Object Detection on the [IdeaExchange](#) in the Trailblazer Community.

For each object or set of objects identified in an image, the API returns the coordinates for the object's bounding box and a class label. It also returns the probability of the object matching the class label. Some scenarios for using the Object Detection API include locating product logos in images or counting products on shelves.

Einstein Object Detection is part of Einstein Vision, so the calls that you make are similar to the calls for image and multi-label models. But an object detection model is different from a multi-label model. A multi-label model returns the probability that particular objects are in an image. In contrast, an object detection model identifies the location of specific objects within an image.

### Start with the Dataset

To create a detection model, you start with the dataset. When you create the dataset, specify `image-detection` as the type. This cURL call creates a dataset.

```
curl -X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type: multipart/form-data" -F "path=http://<DATA_URL>/products.zip" -F "type=image-detection" https://api.einstein.ai/v2/vision/datasets/upload
```

To create the model, train the detection dataset using the same endpoint as a standard classification model:  
<https://api.einstein.ai/v2/vision/train>.

### Classify an Image

Classifying an image uses the new `/detect` endpoint. The image you pass in can be on a local drive or referenced by a URL.

```
curl -X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type: multipart/form-data" -F "modelId=<YOUR_MODEL_ID>" -F "sampleLocation=http://web.yoursite.com/<IMAGE_FILE>.png" https://api.einstein.ai/v2/vision/detect
```



Let's say that a company is using the API to detect products on store shelves. After you send an image in for detection, you receive a response that looks like this JSON. The labels that you see vary depending on the labels in your model. The response returns a label, a probability, and coordinates for a bounding box. These coordinates specify where the item was detected in the image.

```
{
  "probabilities": [
    {
      "label": "Bran Cereal",
      "probability": 0.9994634,
      "boundingBox": {
        "minX": 325,
        "minY": 300,
        "maxX": 483,
        "maxY": 402
      }
    },
    {
      "label": "Out of Stock",
      "probability": 0.99834275,
      "boundingBox": {
        "minX": 536,
        "minY": 322,
        "maxX": 647,
        "maxY": 385
      }
    },
    {
      "label": "Oat Cereal",
      "probability": 0.9977386,
      "boundingBox": {
        "minX": 697,
        "minY": 356,
        "maxX": 789,
        "maxY": 395
      }
    },
    {
      "label": "Protein Mix",
      "probability": 0.99745244,
      "boundingBox": {
        "minX": 40,
        "minY": 289,
        "maxX": 150,
        "maxY": 332
      }
    },
    {
      "label": "Corn Flakes",
      "probability": 0.9832312,
      "boundingBox": {
        "minX": 390,
        "minY": 101,
        "maxX": 431,
        "maxY": 134
      }
    }
  ]
}
```

```

    },
    {
      "label": "Other",
      "probability": 0.94256777,
      "boundingBox": {
        "minX": 368,
        "minY": 350,
        "maxX": 447,
        "maxY": 408
      }
    }
  ] }

```

## SEE ALSO:

[Einstein Platform Services Developer Guide: Determine the Model Type You Need](#)

[Einstein Platform Services Developer Guide: Create a Dataset From a Zip File Asynchronously](#)

## Lightning Components: Security, Developer Productivity, and UI Power and Flexibility

The Lightning Component framework powers Lightning Experience, Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Use the framework to build mobile apps and pages in Salesforce for Android, Salesforce for iOS, Salesforce mobile web, Lightning Experience, 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.

AppExchange lets you install components created by Salesforce partners or publish your own components.

For more information, refer to the [Lightning Components Developer Guide](#).

## IN THIS SECTION:

### [Critical Updates for Stricter CSP Restrictions](#)

Stricter Content Security Policy (CSP) restrictions have been decoupled from LockerService and aren't enforced in production orgs in Winter '18. Instead, to give you more time to update your code to work with stricter CSP, the stricter CSP changes are available in two critical updates that affect only sandbox and Developer Edition orgs.

### [Build Exciting User Interfaces with New Base Lightning Components](#)

Accelerate your development with a fresh medley of 30 new built-in Lightning components. The new components cover a broad range of user interface elements and give you a whole new toolbag for your development.

### [Meet the New Component Library \(Beta\)](#)

Find components more easily with the searchable component library. Preview the look and feel of components with interactive examples.

## EDITIONS

Available in: Salesforce Classic and Lightning Experience

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.

### [Meet the Refreshed LockerService API Viewer](#)

The LockerService API Viewer has a streamlined user interface and visual design based on the Salesforce Lightning Design System. The API viewer lets you explore properties available on the secure versions of essential JavaScript DOM APIs, such as `window`. Use the API viewer to compare browser-supported objects to their secure versions—for example, `window` and `SecureWindow`—to uncover compatibility considerations.

### [Component Code Validation Occurs Automatically When You Save](#)

Lightning component JavaScript code is validated when you save it. Validation ensures that your components are written using best practices and avoid common pitfalls that can make them incompatible with LockerService. Validation happens automatically when you save Lightning component resources in the Developer Console, in your favorite IDE, and via API.

### [Changes to `\$Label` Expression Processing](#)

Expressions in JavaScript strings are no longer automatically dereferenced (evaluated and resolved). This primarily impacts the use of the `$Label` global value provider. If you've been using label expressions like `{!$Label.c.someLabel}` in JavaScript strings, you'll find that they no longer resolve to the actual custom label text. Instead you'll see the label expression itself.

### [Create Custom Page Templates with Lightning Components](#)

Now you're no longer limited to the standard templates available for Lightning record, app, and Home pages. Take your business needs in hand, and create a custom page template of your own that has the structure and components that you define. Add as many regions as you need, and even custom styling.

### [Use Apex Services in `lightning:container` \(Generally Available\)](#)

The Lightning container component allows you to specify the Content Security Policy (CSP) of your iframed content. Previously, you could set a CSP of `minimum`, `Lightning`, or `custom`, with a default of `Lightning`. Now you can set a CSP level of `low`, `high`, or `custom`, with a default of `low`. This change applies to Lightning Experience only.

### [Use Lightning Data Service to Perform Record Operations Without Apex Code \(Generally Available\)](#)

Use Lightning Data Service to load, create, edit, or delete a record in your component, without using Apex code. Lightning Data Service improves performance and data consistency across your components.

### [Return a Result from `aura:method`](#)

We made it easier to return a result from `aura:method`, which is used to communicate from a parent component to a child component that it contains. Use the `return` statement to return a value from synchronous JavaScript code.

### [Client Payload Data Limit Increased to 4 MB](#)

The framework batches server-side actions in the queue into one server request. The request payload includes all of the actions and their data serialized into JSON. The request payload limit has been increased to 4 MB. Previously, it was 1 MB.

### [Translate Lightning Component Tabs](#)

Translation Workbench supports translating the names of Lightning component tabs just like other tabs. Translate the names of your Lightning component tabs for all languages that your org or component supports so your users and customers can work in their preferred language. If a translated version is available, Lightning component tab names display in the language of the current user.

### [Wildcard Matching in `aura:dependency` Is Deprecated](#)

Wildcard matching can cause save validation errors when no resources match. Wildcard matching can also slow page load time because it sends more definitions than needed to the client. Instead, add an `<aura:dependency>` tag for each resource that's not directly referenced in the component's markup.

### [New and Changed Lightning Components](#)

Build user interfaces quickly with a bevy of new components.

### [New and Changed Lightning Events](#)

Lightning events facilitate communication between components and increase interactivity in your apps.

[New and Changed Lightning Interfaces](#)

Lightning interfaces enable a component to be used in different contexts or to receive extra context data.

## Critical Updates for Stricter CSP Restrictions

Stricter Content Security Policy (CSP) restrictions have been decoupled from LockerService and aren't enforced in production orgs in Winter '18. Instead, to give you more time to update your code to work with stricter CSP, the stricter CSP changes are available in two critical updates that affect only sandbox and Developer Edition orgs.

The two critical updates—one for Communities and one for other contexts—are called:

- Enable Stricter Content Security Policy for Lightning Components
- Enable Stricter Content Security Policy for Lightning Components in Communities

The Lightning Component framework already uses CSP, which is a W3C standard, to control the source of content that can be loaded on a page. These critical updates tighten CSP to mitigate the risk of cross-site scripting attacks.

Stricter CSP might sound familiar to you. In the Spring '17 LockerService critical update, we introduced stricter CSP to disallow the `unsafe-inline` and `unsafe-eval` keywords for inline scripts (`script-src`). These CSP changes were enforced only in sandboxes and Developer Edition orgs.

## Critical Update Timeline

Stricter CSP will gradually be available in more orgs. Here's the planned timeline but the schedule might change for future releases.

	Critical Update	Summer '17	Winter '18	Spring '18 (Feb 2018)	Summer '18	Winter '19 (Oct 2018)
Sandbox and DE orgs	Enable Stricter CSP for Lightning Components	OFF by default unless LockerService was activated in Spring '17				Activated for all orgs
	Enable Stricter CSP for Lightning Components in Communities	OFF by default				
Production orgs	Enable Stricter CSP for Lightning Components	N/A		ON by default		
	Enable Stricter CSP for Lightning Components in Communities	N/A		OFF by default		

### Winter '18

The critical updates are available only in sandboxes and Developer Edition orgs. Stricter CSP is not enforced in production orgs for this release.

### Spring '18 (future plans)

The critical updates will be extended to all orgs, including production orgs.

- "Enable Stricter Content Security Policy for Lightning Components" will be enabled by default
- "Enable Stricter Content Security Policy for Lightning Components in Communities" will be disabled by default

You can activate and deactivate both critical updates as often as needed for testing purposes.

### Winter '19 (future plans)

Both critical updates will be automatically activated for all orgs when the critical updates expire.

## Activate “Enable Stricter Content Security Policy for Lightning Components”

Stricter CSP is enabled by default for sandboxes and Developer Edition orgs that have previously enabled the “Enable Lightning LockerService Security” critical update. For all other sandboxes and Developer Edition orgs, stricter CSP is disabled by default.

To enable stricter CSP:

1. From Setup, enter *Critical Updates* in the *Quick Find* box, and then select **Critical Updates**.
2. For “Enable Stricter Content Security Policy for Lightning Components”, click **Activate**.
3. Refresh your browser page to proceed with stricter CSP enabled.

### What Does This Critical Update Affect?

This critical update enables stricter CSP in sandboxes and Developer Edition orgs for:

- Lightning Experience
- The Salesforce app
- Standalone apps that you create (for example, `myApp.apex`)

The critical update doesn't affect:

- Salesforce Classic
- Any apps for Salesforce Classic, such as Salesforce Console in Salesforce Classic
- Lightning Out, which allows you to run Lightning components in a container outside of Lightning apps, such as Lightning components in Visualforce and Visualforce-based Communities. The container defines the CSP rules.

## Activate “Enable Stricter Content Security Policy for Lightning Components in Communities”

Stricter CSP is disabled by default for sandboxes and Developer Edition orgs.

In addition to affecting custom Lightning components, stricter CSP also affects the markup used in the `<head>` of your community's pages when enabled. Inline scripts aren't permitted and a warning appears when you enter unsupported markup tags in **Settings > Advanced** in Community Builder.

To enable stricter CSP for Communities:

1. From Setup, enter *Critical Updates* in the *Quick Find* box, and then select **Critical Updates**.
2. For “Enable Stricter Content Security Policy for Lightning Components in Communities”, click **Activate**.
3. Refresh your browser page to proceed with stricter CSP enabled.

### What Does This Critical Update Affect?

This critical update enables stricter CSP in sandboxes and Developer Edition orgs **for Communities only**.

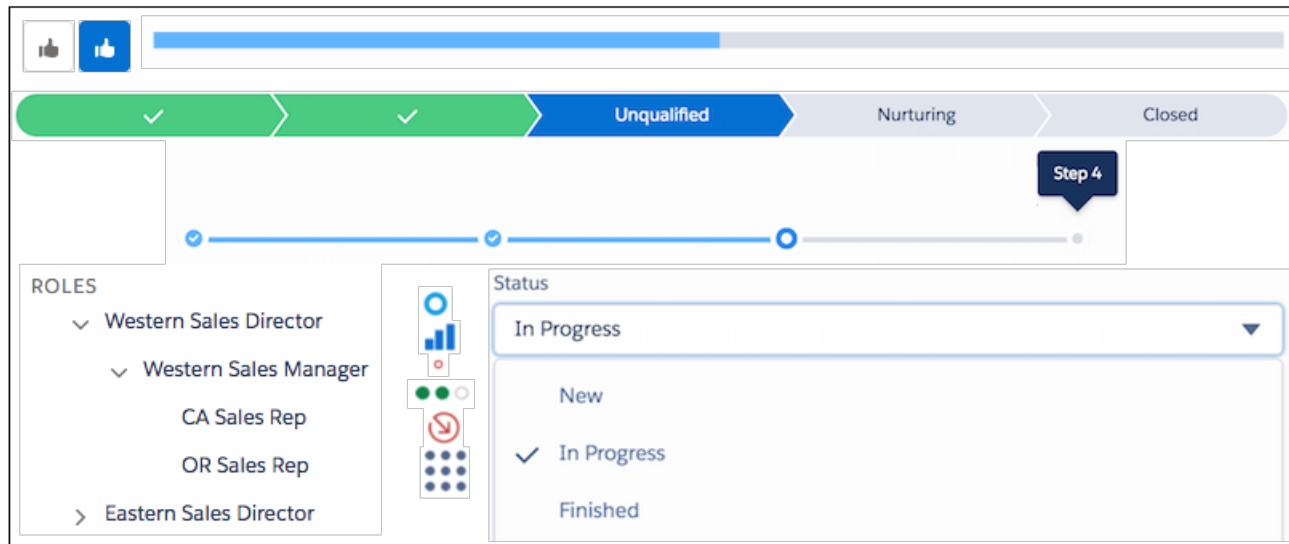
The critical update doesn't affect:

- Salesforce Classic
- Any apps for Salesforce Classic, such as Salesforce Console in Salesforce Classic
- Lightning Out, which allows you to run Lightning components in a container outside of Lightning apps, such as Lightning components in Visualforce and Visualforce-based Communities. The container defines the CSP rules.

## Build Exciting User Interfaces with New Base Lightning Components

Accelerate your development with a fresh medley of 30 new built-in Lightning components. The new components cover a broad range of user interface elements and give you a whole new toolbox for your development.

We are working to reach parity with the Lightning Design System components, and this release brings us closer to that goal. Here's a visual summary of what we have in store for you.



If this screenshot doesn't do them justice, head over to [New and Changed Lightning Components](#) for a lot more detail, including many more screenshots.

SEE ALSO:

[Lightning Components Developer Guide: Component Reference](#)

## Meet the New Component Library (Beta)

Find components more easily with the searchable component library. Preview the look and feel of components with interactive examples.

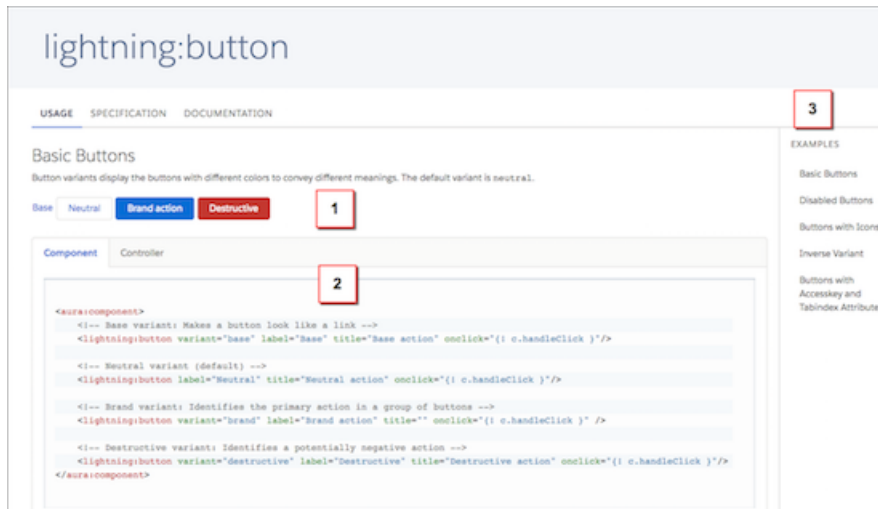
To explore the new component library, go to

`https://<myDomain>.lightning.force.com/componentReference/suite.app` where `<myDomain>` is the name of your custom Salesforce domain. You can also continue to use `/auradocs/reference.app` in your org. And the Component Reference section in the Lightning Components Developer Guide continues to be available to you.



**Note:** This release contains a beta version of the Component Library, which means it's a high-quality feature with known limitations. The Component Library isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

Let's look at some of the highlights. Gone are the days when you had to imagine how a Lightning component renders and behaves in your browser. Many components now have interactive examples (1) and source code (2) for common patterns. You can also learn about how a component is used through a list of examples (3).



We're making it easier for you to find the component you're looking for. Now you can search across component names and descriptions.



## Usage Considerations

The Component Library comes with the following limitations.

- You must be logged in to view the Component Library as it's only available as an authenticated experience.
- The JavaScript API documentation is not available.
- Interfaces and events provide only attribute names and descriptions. The Lightning Components Developer Guide provides detailed information on interfaces and events.

## Meet the Refreshed LockerService API Viewer

The LockerService API Viewer has a streamlined user interface and visual design based on the Salesforce Lightning Design System. The API viewer lets you explore properties available on the secure versions of essential JavaScript DOM APIs, such as `window`. Use the API viewer to compare browser-supported objects to their secure versions—for example, `window` and `SecureWindow`—to uncover compatibility considerations.

Secure Window   Secure Document   Secure Element		
Window vs SecureWindow Compatibility Table		
METHOD	BROWSER API (ACTUAL)	LOCKER API (ACTUAL)
<b>Proto: EventTargetPrototype</b>		
<code>addEventListener</code>	Function	Function
<code>constructor</code>	Function	Null
<code>dispatchEvent</code>	Function	Function
<code>removeEventListener</code>	Function	Function
<b>Proto: Object</b>		
<code>__defineGetter__</code>	Function	Function
<code>__defineSetter__</code>	Function	Function
<code>__lookupGetter__</code>	Function	Function
<code>__lookupSetter__</code>	Function	Function
<code>__proto__</code>	WindowPrototype	Object
<code>constructor</code>	Function	Null
<code>hasOwnProperty</code>	Function	Function
<code>isPrototypeOf</code>	Function	Function
<code>propertyIsEnumerable</code>	Function	Function
<code>toLocaleString</code>	Function	Function
<code>toString</code>	Function	Function
<code>valueOf</code>	Function	Function
<b>Proto: Window</b>		
<code>\$\$safe-eval\$\$</code>	Function	Undefined
<code>\$\$safe-eval-compat\$\$</code>	Function	Undefined
<code>\$A</code>	Object	Object

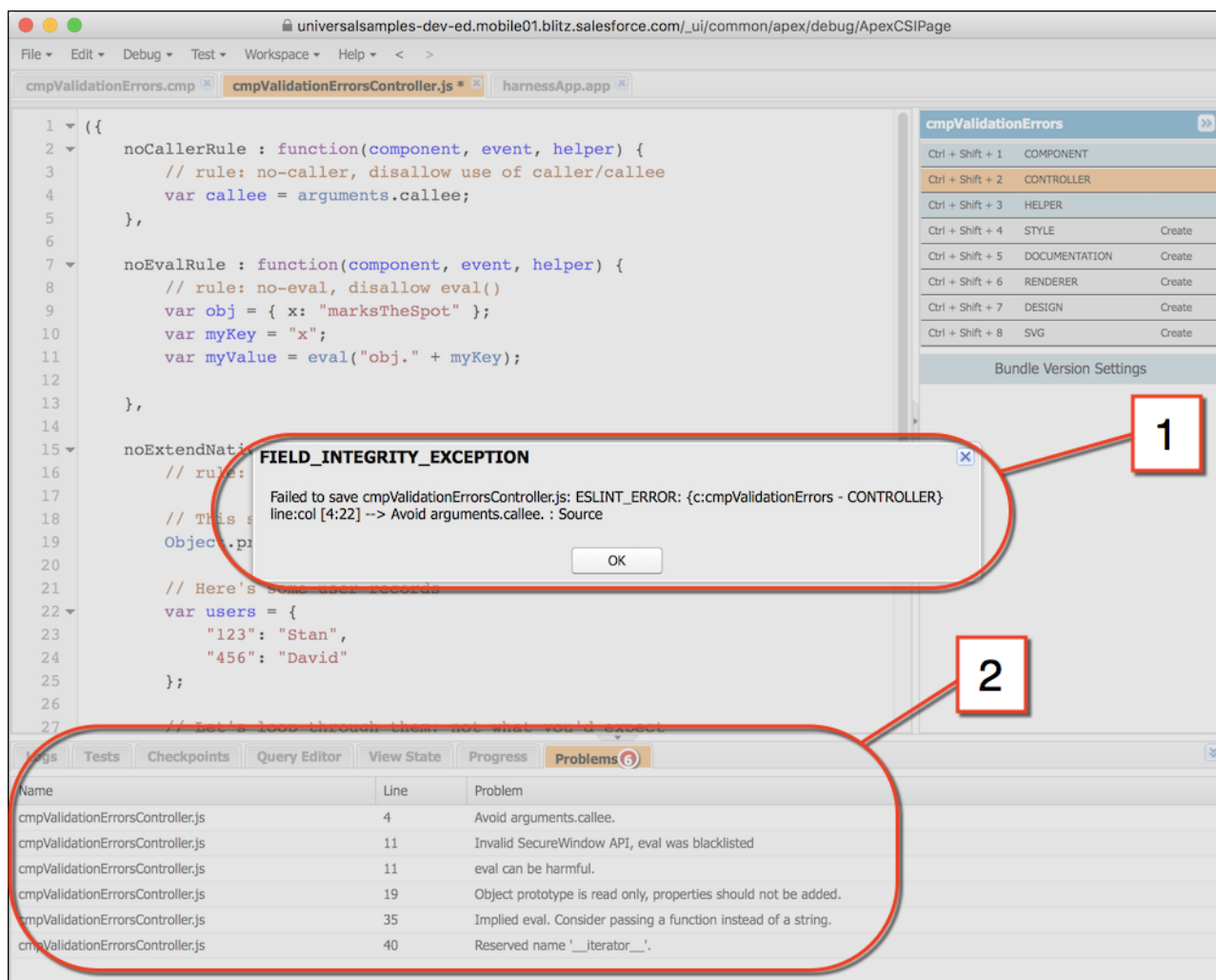
Access the LockerService API Viewer at the open source Aura Framework documentation site, <http://documentation.auraframework.org>.

## Component Code Validation Occurs Automatically When You Save

Lightning component JavaScript code is validated when you save it. Validation ensures that your components are written using best practices and avoid common pitfalls that can make them incompatible with LockerService. Validation happens automatically when you save Lightning component resources in the Developer Console, in your favorite IDE, and via API.


Validation failures are treated as errors and block changes from being saved. Error messages explain the failures. Depending on the tool you're using, these errors are presented in different ways. For example, the Developer Console shows an alert for the first error it encounters (1), and lists all of the validation errors discovered in the **Problems** tab (2).





Validations are applied only to components set to API version 41.0 and later. If the validation service prevents you from saving important changes, set the component version to API 40.0 or earlier to disable validations temporarily. When you've corrected the coding errors, return your component to API 41.0 or later to save it with passing validations.

The validation service is implemented using an open source JavaScript *linting* tool, [ESLint](#). ESLint can check code for dozens of different errors and poor practices. To keep the focus on LockerService compatibility, the Lightning component validation service adopts **only a few** of these rules, such as checking to ensure that your code doesn't call `eval()`. We also added a few custom rules specific to LockerService, such as checking to ensure that your code calls only public APIs. For a complete list of the rules enforced by the validation service, see the *Lightning Components Developer Guide*.

 **Note:** The Lightning component validation service and the Salesforce DX command line tool (`force:lightning:lint`) both use ESLint to perform a static analysis of your code. However, the two tools use different rules. The validation service uses a small subset of the CLI tool's rules, and all failures are treated as errors. The CLI tool offers a more comprehensive analysis, but failures don't prevent your code from being saved.

This new validation service is an important tool in adopting the coding best practices required to work with LockerService. Validations help you catch violations before you've invested heavily in a particular design or implementation. However, the validation service enforces

only a tight, focused set of rules, and doesn't prevent bugs or poor software design. Treat the validation service as a **starting point** for ensuring that your code is well written, not proof that you've achieved that goal.

SEE ALSO:

[Lightning Components Developer Guide: Validations for Lightning Component Code](#)

## Changes to `$Label` Expression Processing

Expressions in JavaScript strings are no longer automatically dereferenced (evaluated and resolved). This primarily impacts the use of the `$Label` global value provider. If you've been using label expressions like `"${$Label.c.someLabel}"` in JavaScript strings, you'll find that they no longer resolve to the actual custom label text. Instead you'll see the label expression itself.

In prior releases, undocumented methods for evaluating labels often worked. With this release label expression evaluation behaves only as documented. Stricter expression evaluation is a security enhancement and eliminates some anti-patterns for working with labels.



**Note:** You can still use label expressions statically in component markup in the `.cmp` resource. That is, `{!$Label.c.someLabel}` still works just fine in `.cmp` and `.app` markup.

The correct way to resolve a label reference in JavaScript is to use the `$A.get(labelReference)` utility function.

**Correct:** `cmp.set("v.myLabel", $A.get("$Label.c.someLabel"));`

**Incorrect:** `cmp.set("v.myLabel", "${$Label.c.someLabel}");`

`$A.get()` normally requires the label reference to be static, that is, known at compile time. For example, you can't construct a label reference at runtime using string concatenation. If the specific custom label to reference can't be known until runtime, there are two ways to look up a label dynamically. One of these techniques is also affected by this change.

- Use the `$A.getReference("$Label.c." + labelKey)` utility function to allow the framework to retrieve the label. This technique is unchanged from prior releases.

The value returned is a reference, not a string or expression. See "Getting Labels in JavaScript" in the *Lightning Components Developer Guide* for details of using a reference to set UI labels.

- Call your own Apex controller method to look up and return labels using `System.Label`. Depending on how you implement this technique it's possible the behavior is changed in this release.

With this technique your controller method must resolve the label value on the server in Apex, and return a string to your client code. This value should be the actual label string; you can't return an expression in string format.

**Correct:**

```
String theLabel = System.Label.someLabel;
return theLabel;
```

**Incorrect:**

```
String theLabel = "${$Label.c.someLabel}";
return theLabel;
```

The correct methods for accessing custom labels in JavaScript and Apex haven't changed, and are documented in the *Lightning Components Developer Guide*. You must update your code to use the correct method for referencing custom labels.

## Create Custom Page Templates with Lightning Components

Now you're no longer limited to the standard templates available for Lightning record, app, and Home pages. Take your business needs in hand, and create a custom page template of your own that has the structure and components that you define. Add as many regions as you need, and even custom styling.

See [Take Lightning Page Customization to a Whole New Level with Custom Page Templates](#) for details.

## Use Apex Services in `lightning:container` (Generally Available)

The Lightning container component allows you to specify the Content Security Policy (CSP) of your iframed content. Previously, you could set a CSP of `minimum`, `Lightning`, or `custom`, with a default of `Lightning`. Now you can set a CSP level of `low`, `high`, or `custom`, with a default of `low`. This change applies to Lightning Experience only.

The Lightning container component allows you to use third-party frameworks in an iframe within a Lightning page.

A CSP level of `high` allows frame ancestors only from the Lightning domain, while a CSP level of `low` allows content from other origins. A CSP level of `custom` allows you to define your own CSP header.

With a CSP level of `low`, you can access the Streaming API and call Apex methods from within a Lightning container component.

## Use Lightning Data Service to Perform Record Operations Without Apex Code (Generally Available)

Use Lightning Data Service to load, create, edit, or delete a record in your component, without using Apex code. Lightning Data Service improves performance and data consistency across your components.

Lightning Data Service (LDS) is the Lightning Components counterpart to the Visualforce standard controller, providing access to the data displayed on a page. Without LDS, each component within an app makes independent server calls to perform CRUD operations on a record, even if all the components app pull from the same record data. Each redundant server call reduces performance and potentially leads to inconsistencies, creating situations where a server call refreshes one component, leaving the other components out of date.

LDS identifies and eliminates requests that involve the same record data, sending a single shared data request that updates all relevant components. Not only does this eliminate situations where components can have inconsistent data, but it also acts as a publisher hub that notifies components of data changes.

LDS supports custom objects and the following objects.

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• Account</li> <li>• AccountTeamMember</li> <li>• Asset</li> <li>• AssetRelationship</li> <li>• AssignedResource</li> <li>• AttachedContentNote</li> <li>• BusinessAccount</li> <li>• Campaign</li> <li>• CampaignMember</li> <li>• Case</li> <li>• Contact</li> </ul> | <ul style="list-style-type: none"> <li>• MarketingAction</li> <li>• MarketingResource</li> <li>• Note</li> <li>• OperatingHours</li> <li>• Opportunity</li> <li>• OpportunityLineItem</li> <li>• OpportunityTeamMember</li> <li>• Order</li> <li>• OrderItem</li> <li>• PersonAccount</li> <li>• Pricebook2</li> </ul> | <ul style="list-style-type: none"> <li>• ServiceResourceSkill</li> <li>• ServiceTerritory</li> <li>• ServiceTerritoryLocation</li> <li>• ServiceTerritoryMember</li> <li>• Shipment</li> <li>• SkillRequirement</li> <li>• SocialPost</li> <li>• Tenant</li> <li>• TimeSheet</li> <li>• TimeSheetEntry</li> <li>• TimeSlot</li> </ul> |
|---|--|---|

<ul style="list-style-type: none"> <li>• ContentDocument</li> <li>• ContentNote</li> <li>• ContentVersion</li> <li>• ContentWorkspace</li> <li>• Contract</li> <li>• ContractContactRole</li> <li>• ContractLineItem</li> <li>• Entitlement</li> <li>• EnvironmentHubMember</li> <li>• Lead</li> <li>• LicensingRequest</li> <li>• MaintenanceAsset</li> <li>• MaintenancePlan</li> </ul>	<ul style="list-style-type: none"> <li>• PricebookEntry</li> <li>• ProcessInstanceHistory</li> <li>• Product2</li> <li>• Quote</li> <li>• QuoteDocument</li> <li>• QuoteLineItem</li> <li>• ResourceAbsence</li> <li>• ServiceAppointment</li> <li>• ServiceContract</li> <li>• ServiceCrew</li> <li>• ServiceCrewMember</li> <li>• ServiceResource</li> <li>• ServiceResourceCapacity</li> </ul>	<ul style="list-style-type: none"> <li>• UsageEntitlement</li> <li>• UsageEntitlementPeriod</li> <li>• User</li> <li>• WorkOrder</li> <li>• WorkOrderLineItem</li> <li>• WorkType</li> </ul>
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## Return a Result from `aura:method`

We made it easier to return a result from `aura:method`, which is used to communicate from a parent component to a child component that it contains. Use the `return` statement to return a value from synchronous JavaScript code.

`aura:method` executes synchronously. Synchronous code finishes executing before it returns.

JavaScript code that calls a server-side action is asynchronous. Asynchronous code can continue to execute after it returns.

You can't use the `return` statement to return the result of an asynchronous call because `aura:method` returns before the asynchronous code completes. For asynchronous code, use a callback instead of a `return` statement.

For code examples, see the Winter '18 version of the [Lightning Components Developer Guide](#).

## Client Payload Data Limit Increased to 4 MB

The framework batches server-side actions in the queue into one server request. The request payload includes all of the actions and their data serialized into JSON. The request payload limit has been increased to 4 MB. Previously, it was 1 MB.

Use `action.setParams()` in JavaScript to set data for an action to be passed to a server-side controller.

SEE ALSO:

[Lightning Components Developer Guide: Calling a Server-Side Action](#)

## Translate Lightning Component Tabs

Translation Workbench supports translating the names of Lightning component tabs just like other tabs. Translate the names of your Lightning component tabs for all languages that your org or component supports so your users and customers can work in their preferred language. If a translated version is available, Lightning component tab names display in the language of the current user.

To translate individual tabs, use **Translation Workbench > Translate**. First select a language, and then choose **Web Tab** for the Setup Component. Lightning component tabs available to translate are displayed in a list.

To send out many tab names for translation, use **Translation Workbench > Export**, along with the corresponding import function. When exporting, choose **Bilingual** to ensure that your Lightning component tabs are included in the translation file. Lightning component tabs are listed in the WebTab section of the file.

SEE ALSO:

[Salesforce Help: Translatable Customizations](#)

[Salesforce Help: Translation Files](#)

## Wildcard Matching in `aura:dependency` Is Deprecated

Wildcard matching can cause save validation errors when no resources match. Wildcard matching can also slow page load time because it sends more definitions than needed to the client. Instead, add an `<aura:dependency>` tag for each resource that's not directly referenced in the component's markup.

The framework tracks dependencies between definitions, such as components, defined in markup. This tracking enables the framework to send the definitions to the browser. However, if a component's JavaScript code dynamically instantiates another component or fires an event that isn't directly referenced in the component's markup, use `<aura:dependency>` in the component's markup to explicitly tell the framework about the dependency.

## New and Changed Lightning Components

Build user interfaces quickly with a bevy of new components.

### New Components

The following components are new and require API version 41.0 and later.

 **Note:** For more information about setting your API version in the Developer Console, see [Update Your Components to the Latest API Version to Use New lightning: Components](#).

#### **lightning:accordion**

Displays a collection of vertically stacked sections with multiple content areas, only one of which is expanded at a time. When you select a section, it's expanded or collapsed. Each section can hold one or more Lightning components.

This component is used together with the following sub-component.

- `lightning:accordionSection`—Keeps related content in a single container.

✓ Accordion Title A

This is the content area for section A.

> Accordion Title B

> Accordion Title C

#### **lightning:buttonIconStateful**

An icon-only button that retains state. The state changes when you press the button.



**lightning:checkboxGroup**

A checkbox group that enables selection of single or multiple checkboxes.

**lightning:clickToDial**

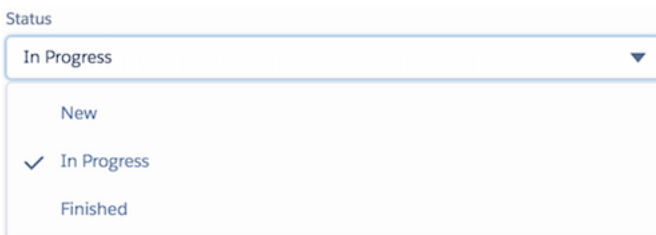
A component that renders a valid phone number as click-to-dial enabled for Open CTI or Salesforce Call Center. This field respects existing click-to-dial commands for computer-telephony integrations (CTI) with Salesforce.



For more information, see [Create Click-to-Dial Phone Numbers with the lightning:clickToDial Component](#).

**lightning:combobox**

A read-only input field that contains a dropdown list of selectable options. Multiple selection is currently not supported.

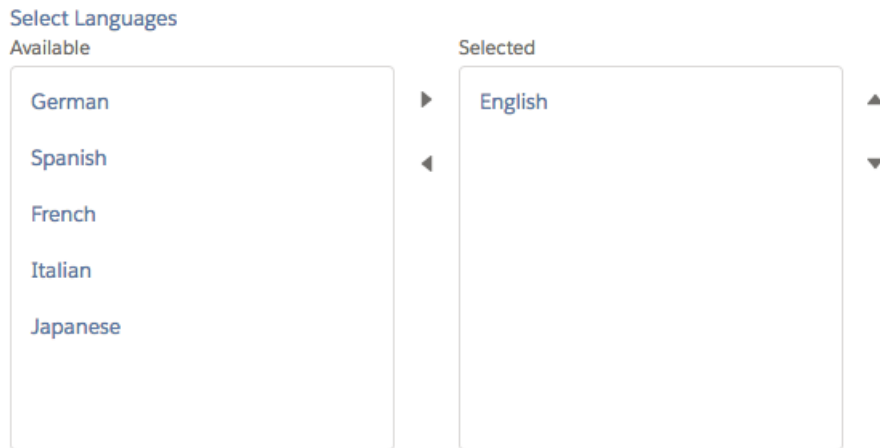
**lightning:datatable**

A table that displays columns of data, formatted according to type.

OPPORTUNITY ...	ACCOUNT NAME	CLOSE DATE	CONFIDENCE	AMOUNT
Schimmel, Schim...	Myra	7/23/2017	93%	€73,640.00
McKenzie, McKen...	Kaley	7/18/2017	29%	€29,027.00
Bartoletti-Bartoletti	Letitia	7/15/2017	80%	€13,000.00
Pagac-Pagac	Beryl	7/17/2017	37%	€70,094.00
Emard LLC	Myron	7/23/2017	35%	€90,457.00

**lightning:dualListbox**

Represents two side-by-side list boxes. Select one or more options in the list on the left. Move selected options to the list on the right. The order of the selected options is maintained, and you can reorder options. You can also specify required options.

**lightning:dynamicIcon**

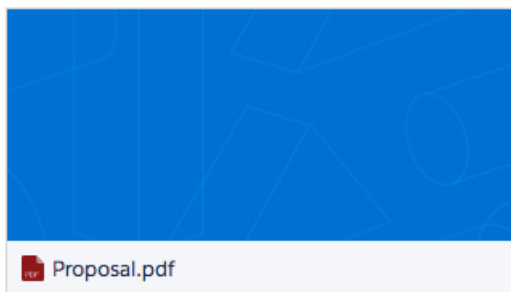
Represents various dynamic icons with different states. For example, you can use this component to visually display an event that's in progress, such as a graph that's loading. The following options are available.



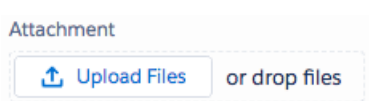
- Ellie: A pulsing blue circle, which pulses and stops after one animation cycle
- EQ: An animated graph with three bars that rise and fall randomly
- Score: A green filled circle or a red unfilled circle
- Strength: Three animated horizontal circles that are colored green or red
- Trend: Animated arrows that point up, down, or straight
- Waffle: A square made up of a 3x3 grid of circles, which animates on hover

**lightning:fileCard**

Displays a representation of content uploaded as an attachment.

**lightning:fileUpload (Beta)**

Enables multiple files to be uploaded to a record. The file uploader includes drag-and-drop functionality and filtering by file types.

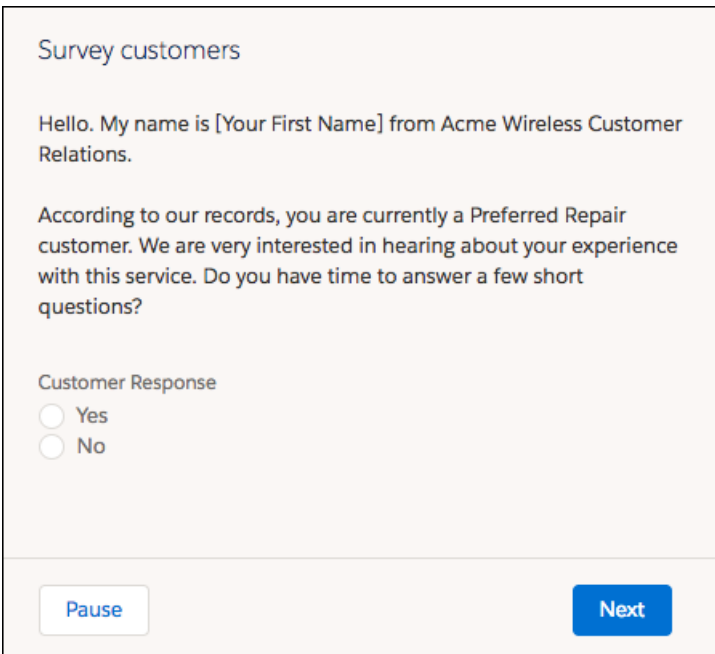


**lightning:flexipageRegionInfo**

A sub-component that provides Lightning page region width information to the component that contains it. See [Make Your Lightning Page Components Width-Aware with lightning:flexipageRegionInfo](#).

**lightning:flow**

Represents a flow interview in Lightning runtime.

**lightning:formattedEmail**

Displays an email address as a hyperlink with the `mailto:` URL scheme.

✉ [email@example.com](mailto:email@example.com)  
✉ [example email](#)

**lightning:formattedLocation**

Displays a geolocation in decimal degrees using the format [latitude, longitude].

[22, 122.2222](#)

**lightning:formattedPhone**

Displays a formatted phone number as a hyperlink with the `tel:` URL scheme. Only North American phone numbers are currently supported.

[+14254443333](tel:+14254443333)  
[\(425\) 333-4444](tel:(425)333-4444)



**lightning:formattedRichText**

Displays rich text that's formatted with whitelisted tags and attributes. Other tags and attributes are removed and only their text content is displayed.

*This is some simple rich text. Hello!*

**lightning:formattedText**

Displays text, replaces newlines with line breaks, and creates hyperlinks within a text block.

I love [salesforce.com](#)

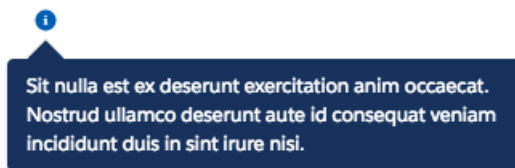
**lightning:formattedUrl**

Displays a URL as a hyperlink.

<http://www.salesforce.com>  
My Cool Website

**lightning:helpText**

An icon with a text popover. The popover is displayed when you hover or focus on the icon that's attached to it. Manual positioning of the popover is currently not supported.

**lightning:inputLocation**

Represents a geolocation compound field that accepts a latitude and longitude value.

**TRAILHEAD COORDINATES**

Latitude

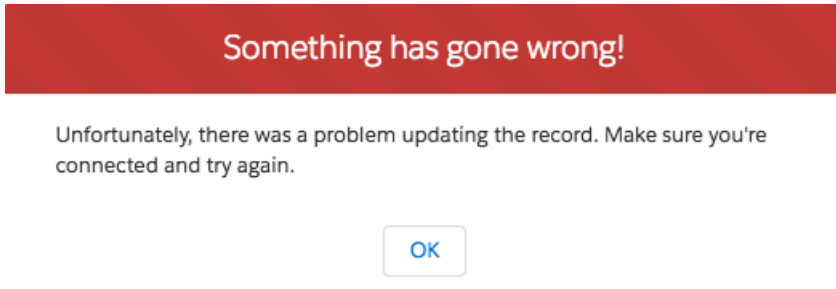
37.783103

Longitude

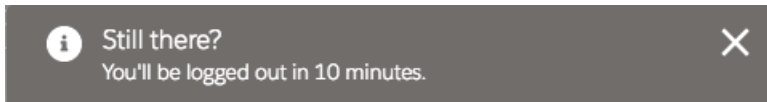
-122.404059

**lightning:notificationsLibrary**

Provides messaging functionality via notices and toasts. Notices alert users to system-related issues and updates.



Toasts enable you to provide feedback and serve as a confirmation mechanism after the user takes an action.

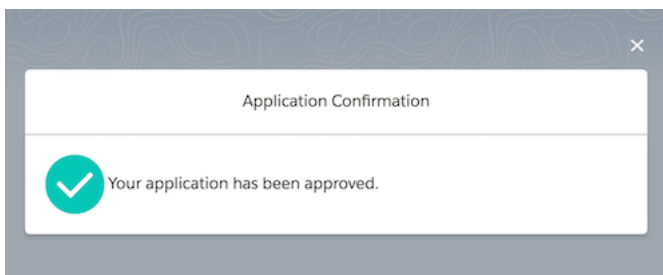


### **lightning:omniToolkitAPI (Beta)**

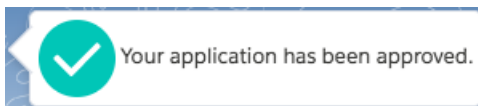
Provides methods that can be used from Lightning components in the utility bar for Omni-Channel. The component doesn't affect the UI.

### **lightning:overlayLibrary**

Messages can be displayed in modals and popovers. Modals display a dialog in the foreground of the app, interrupting a user's workflow and drawing attention to the message.

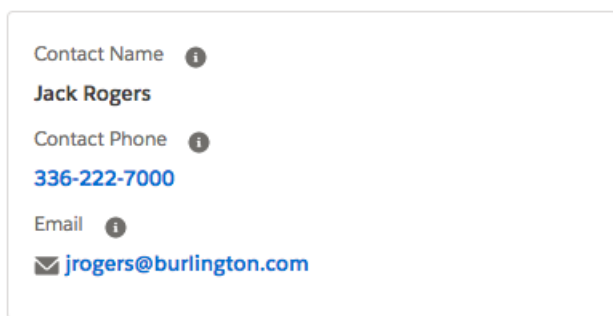


Popovers display relevant information when you hover over a reference element.



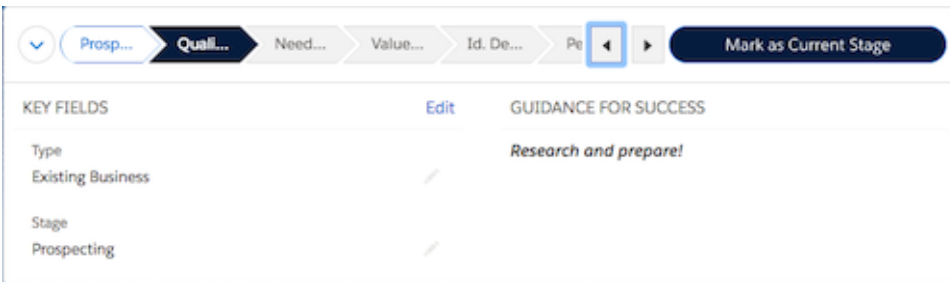
### **lightning:outputField**

Represents a read-only display of a label, help text, and value for a field on a Salesforce object. You must provide the record ID in the wrapper `lightning:recordViewForm` component.



**lightning:path (Beta)**

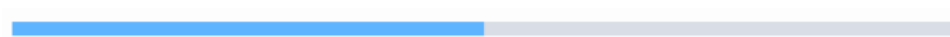
A Path derived from a picklist that is specified by an admin in setup. Includes Key Fields and Guidance, and a Mark Complete action button.

**lightning:picklistPath (Beta)**

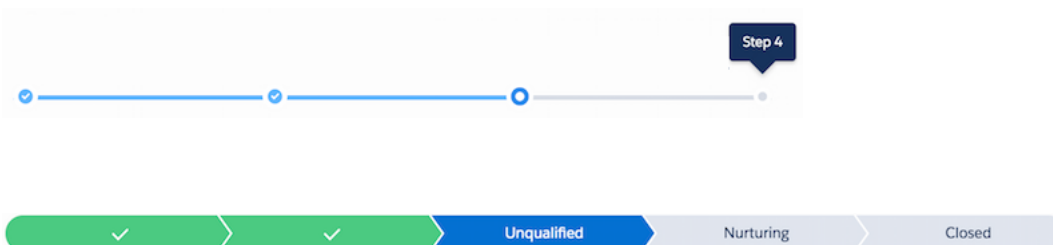
A Path derived from a picklist, which is specified by the `picklistFieldApiName` attribute and does not have Key Fields, Guidance, or action buttons.

**lightning:progressBar**

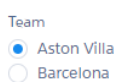
A horizontal progress bar that indicates the progress of an operation from left to right, such as for a file download or upload.

**lightning:progressIndicator (Beta)**

Provides a visual indication on the progress of a particular process. You can create two types of indicators: `base` (default) or `path`.

**lightning:radioGroup**

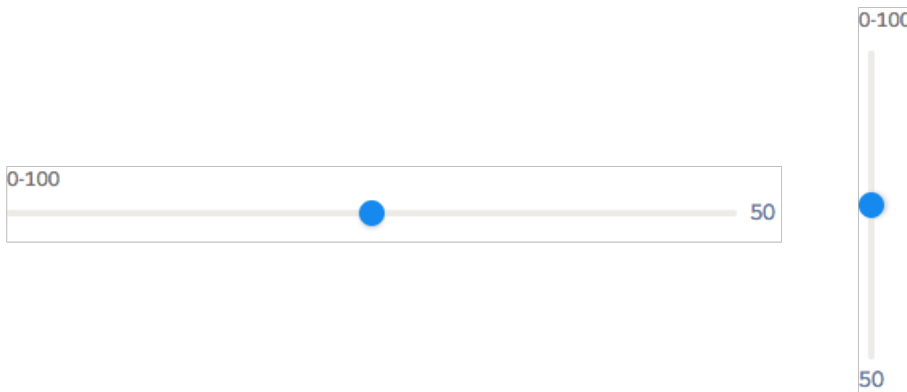
A set of radio buttons that can have a single option selected.

**lightning:recordViewForm**

Represents a record view that displays one or more fields based on their field types, provided by `lightning:outputField`.

**lightning:slider**

A slider that enables numerical input between two specified numbers.

**lightning:tree**

Provides visualization of a structure hierarchy. Tree items, also known as branches, can be expanded or collapsed.

**ROLES**

- ▼ Western Sales Director
  - ▼ Western Sales Manager
    - CA Sales Rep
    - OR Sales Rep
  - > Eastern Sales Director

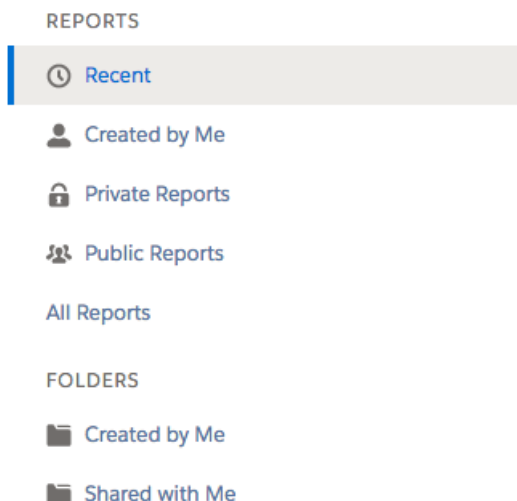
**lightning:verticalNavigation**

A vertical list of links that takes the user to another page or parts of the page that the user is on.

This component is used with the following sub-components.

- `lightning:verticalNavigationItem`—A text-only link within `lightning:verticalNavigationSection` or `lightning:verticalNavigationOverflow`.
- `lightning:verticalNavigationItemBadge`—A link and badge within `lightning:verticalNavigationSection` or `lightning:verticalNavigationOverflow`.
- `lightning:verticalNavigationItemIcon`—A link and icon within `lightning:verticalNavigationSection` or `lightning:verticalNavigationOverflow`.
- `lightning:verticalNavigationOverflow`—An overflow of items that can be expanded and collapsed. The overflow section does not adjust automatically based on the view port.
- `lightning:verticalNavigationSection`—A section within `lightning:verticalNavigation`.

This example shows a `lightning:verticalNavigation` component with a Reports and Folders sections.



## Changed Components

The following components have changed.

### **forceCommunity:waveDashboard**

The following attribute is new.

- `showHeader`—Controls the visibility of the header of an embedded Analytics dashboard. If true, the dashboard is displayed with a header bar that includes dashboard information and controls. If false, the dashboard appears without a header bar. Note that the header bar automatically appears when either `showSharing` or `showTitle` is true.

### **lightning:button**

The following attribute has changed.

- `variant`—The `success` variant has been added. This variant creates a green button.

### **lightning:buttonStateful**

The following attribute has changed.

- `variant`—The `destructive` and `success` variants have been added.

### **lightning:datatable**

The following attribute has changed.

- `columns`—The `cellAttributes` property name has been changed to `typeAttributes`.

### **lightning:formattedDateTime (Beta)**

The following attribute has changed.

- `value`—ISO 8601 date formats are now supported. You no longer have to convert your ISO string to a `Date` object or timestamp when working with date fields in Salesforce records.

### **lightning:input (Beta)**

The following type is new.

- `checkbox-button`—Enables you to select one or more options with an alternative visual design.

### **lightning:tabset (Beta)**

The following variant is new.

- `vertical`—Displays tabs vertically to the left of the content area.

**lightning:utilityBarAPI**

This component has moved from the `force` namespace to the `lightning` namespace.

**lightning:verticalNavigation**

The following attribute is new.

- `onbeforeselect`—Action fired before an item is selected. The event parameters include the `name` of the selected item. To prevent the `onselect` handler from running, call `event.preventDefault()` in the `onbeforeselect` handler.

**lightning:workspaceAPI**

This component has moved from the `force` namespace to the `lightning` namespace.

**ui:outputNumber**

`ui:outputNumber` ignores non-number values and doesn't output anything. Previously, `ui:outputNumber` displayed an error that was hard to debug for non-number values, such as: `<ui:outputNumber value="abc" />`.

**wave:waveDashboard**

The following attribute is new.

- `showHeader`—Controls the visibility of the header of an embedded Analytics dashboard. If true, the dashboard is displayed with a header bar that includes dashboard information and controls. If false, the dashboard appears without a header bar. Note that the header bar automatically appears when either `showSharing` or `showTitle` is true.

**IN THIS SECTION:**

[Update Your Components to the Latest API Version to Use New lightning: Components](#)


Lightning components added in this release require components that use them to be set to API version 41.0 or later.

[Make Your Lightning Page Components Width-Aware with lightning:flexipageRegionInfo](#)

When you add a component to a region on a page in the Lightning App Builder, the `lightning:flexipageRegionInfo` sub-component passes the width of that region to its parent component. With `lightning:flexipageRegionInfo` and some strategic CSS, you can tell the parent component to render in different ways in different regions at runtime.

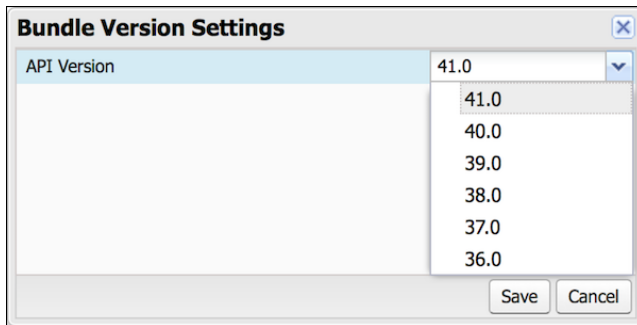
## Update Your Components to the Latest API Version to Use New **lightning:** Components

Lightning components added in this release require components that use them to be set to API version 41.0 or later.

 **Important:** Custom components set to API version 40.0 or later run with LockerService active. Be sure to test your components for LockerService compatibility before updating their API version to gain access to the new components.

The minimum API version required to use a built-in component is listed on the component's reference page in the *Lightning Components Developer Guide*. Components that don't specify a minimum API version are usable with any API version supported for Lightning components.

Set the API version for your component in the Developer Console, the Force.com IDE, or via API.



SEE ALSO:

[Lightning Components Developer Guide: Components with Minimum API Version Requirements](#)

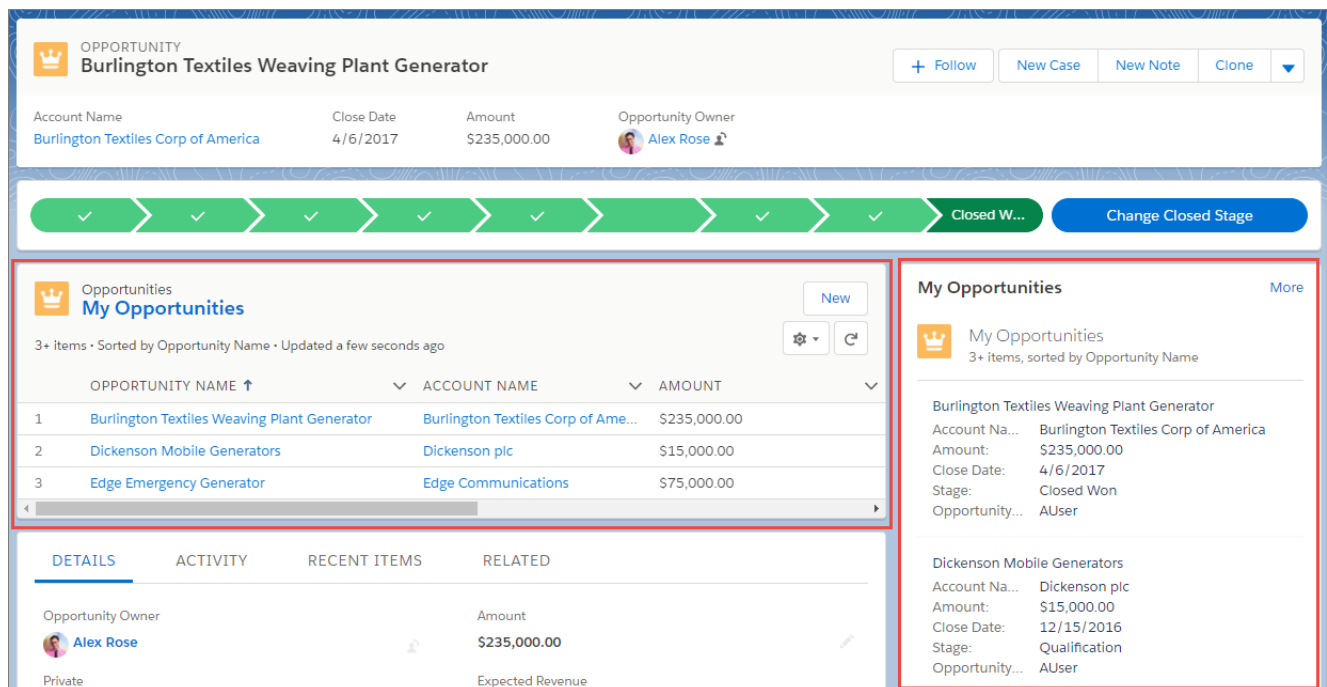
[Lightning Components Developer Guide: Component Versioning](#)

[Lightning Components Developer Guide: Don't Mix Component API Versions](#)

## Make Your Lightning Page Components Width-Aware with `lightning:flexipageRegionInfo`

When you add a component to a region on a page in the Lightning App Builder, the `lightning:flexipageRegionInfo` sub-component passes the width of that region to its parent component. With `lightning:flexipageRegionInfo` and some strategic CSS, you can tell the parent component to render in different ways in different regions at runtime.

For example, the List View component renders differently in a large region than it does in a small region as it's a width-aware component.



Valid region width values are: Small, Medium, Large, and Xlarge.

You can use CSS to style your component and to help determine how your component renders. Here's an example.

This simple component has two fields, field1 and field2. The component renders with the fields side by side, filling 50% of the region's available width when not in a small region. When the component is in a small region, the fields render as a list, using 100% of the region's width.

```
<aura:component implements="flexipage:availableForAllPageTypes">
  <aura:attribute name="width" type="String"/>
  <lightning:flexipageRegionInfo width="{!v.width}"/>
  <div class="{! 'container' + (v.width=='SMALL'? ' narrowRegion':'')}">
    <div class="{! 'eachField f1' + (v.width=='SMALL'? ' narrowRegion':'')}">
      <lightning:input name="field1" label="First Name"/>
    </div>
    <div class="{! 'eachField f2' + (v.width=='SMALL'? ' narrowRegion':'')}">
      <lightning:input name="field2" label="Last Name"/>
    </div>
  </div>
</aura:component>
```

Here's the CSS file that goes with the component.

```
.THIS .eachField.narrowRegion{
  width:100%;
}
.THIS .eachField{
  width:50%;
  display:inline-block;
}
```

## New and Changed Lightning Events

Lightning events facilitate communication between components and increase interactivity in your apps.

### New Events

The following events are new.

#### **wave:discoverDashboard**

This event sends a request to Analytics dashboards to identify their assets.

#### **wave:discoverResponse**

This event provides the response following a request for Analytics dashboards to identify their assets.

## New and Changed Lightning Interfaces

Lightning interfaces enable a component to be used in different contexts or to receive extra context data.

### New Interfaces

The following interfaces are new.

#### **lightning:appHomeTemplate**

Enables a component to be used as a custom Lightning page template for pages of type App Page.

#### **lightning:homeTemplate**

Enables a component to be used as a custom Lightning page template for the Lightning Experience Home page.



**lightning:recordHomeTemplate**

Enables a component to be used as a custom Lightning page template for record pages.

## Changed Interfaces

The following interface has changed.

**force:hasRecordId**

This interface is now supported for use in Lightning components added to the Utility Bar.

## Visualforce: Lightning Experience Readiness and Styling

Use Visualforce to develop custom pages for your org. In this release, changes are focused on making it easier to use Visualforce pages seamlessly in Lightning Experience. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

For more information on features affected by these enhancements, refer to the [Visualforce Developer Guide](#).

### IN THIS SECTION:

[Allow CSRF Protection on GET Requests to Visualforce Pages To Be Enforced \(Critical Update\)](#)

Allow CSRF Protection on GET Requests to Visualforce Pages was a critical update in Spring '17 and will be enforced for all orgs on October 15, 2017. This critical update gives you the option of ensuring that Visualforce pages receive a CSRF token with a GET request.

[Automatically Style Existing Visualforce Pages with Lightning Experience Stylesheets \(Beta\)](#)

Easily control whether a page is styled with the look of Lightning Experience when viewed in Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, with the `lightningStylesheets` attribute. Previously, restyling a page for Lightning Experience involved searching the SLDS reference site for matching components and altering your code. The new attribute gives unstyled Visualforce pages the Lightning Experience look automatically. This feature is available in Lightning Experience and all versions of the Salesforce app.

[Get Your Pages Ready for Lightning Experience](#)

Want to know if the Visualforce pages in your org are ready for Lightning Experience? Use the Lightning Experience Visualforce check to generate a report that flags pages that need changes before they're ready for prime time in Lightning Experience. This change applies to Lightning Experience only.

[Access Values in the Platform Cache Org Cache Using Visualforce Global Variables](#)

You can now access values stored in the Platform Cache org cache from a Visualforce page with the `$Cache.Org` global variable. Previously, you could only access values stored in the session cache by using Visualforce global variables.

[JavaScript Remoting Request Data Limit Increased to 4 MB](#)

The request payload limit has been increased to 4 MB. Previously, it was 1 MB.

[Other Changes to Visualforce](#)

Additional changes affect the styling and HTML output of Visualforce components. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Available in: **Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## Allow CSRF Protection on GET Requests to Visualforce Pages To Be Enforced (Critical Update)

Allow CSRF Protection on GET Requests to Visualforce Pages was a critical update in Spring '17 and will be enforced for all orgs on October 15, 2017. This critical update gives you the option of ensuring that Visualforce pages receive a CSRF token with a GET request.

While creating a Visualforce page in Setup, you can select **Require CSRF Protection on GET requests**. This option gives your Visualforce page an extra layer of security that guards against cross-site request forgery (CSRF). Previously, this option only had an effect when applied to Visualforce pages used for delete action overrides. Although you can enable CSRF protection on any Visualforce page, this critical update does not enable protection on every page.

When this option is enabled for a Visualforce page, you can't access that page by entering its URL—`/apex/PageName`—and plain links to that page using `<a>` tags don't work.

Plain links from a page with CSRF protection work, but links to the page do not. For example, if your page has the name `PageName`, the link `<a href="/apex/PageName">Link</a>` doesn't work. Instead, use the `URLFOR()` formula function, the `$Page` global variable, or the `apex:outputLink` component.

```
<apex:outputLink value="/apex/PageName">Link using apex:outputlink</apex:outputlink>
<a href="{!$Page.PageName}">Link using $Page</a>
<a href="{!URLFOR($Page.PageName)}">Link using URLFOR()</a>
```

CSRF checks on GET requests also affect how Visualforce pages are referenced from Apex controllers. Methods that return the URL of CSRF-protected pages for the purpose of navigation don't work.

```
public String getPage() {
    return '/apex/PageName';
}
```

Instead, use methods that return a reference to the Visualforce page instead of the URL directly.

```
public class customController {
    public PageReference getPage() {
        return new PageReference('/apex/PageName');
    }

    public PageReference getPage1() {
        return Page.PageName;
    }
}
```

When you use one of these methods to link to a page, Visualforce adds the required CSRF token to the URL. These are the preferred methods for linking to Visualforce pages, regardless of whether CSRF protection is enabled for the page. These are the only methods available for adding a CSRF token to a URL for a Visualforce page.

## Test This Critical Update


This update will be enabled everywhere on the auto-activation date. We recommend that you test your Visualforce code in a Developer Edition org before and verify that links to all your Visualforce pages using CSRF protection still work. If you must work in your production org, do so during off-peak hours.

To activate this critical update:

1. From Setup, enter *Critical Updates* in the Quick Find box, and then select **Critical Updates**.
2. For Allow CSRF Protection on GET Requests to Visualforce Pages, click **Activate**.
3. Test links to Visualforce pages that have CSRF protection on GET requests enabled.

## Automatically Style Existing Visualforce Pages with Lightning Experience Stylesheets (Beta)

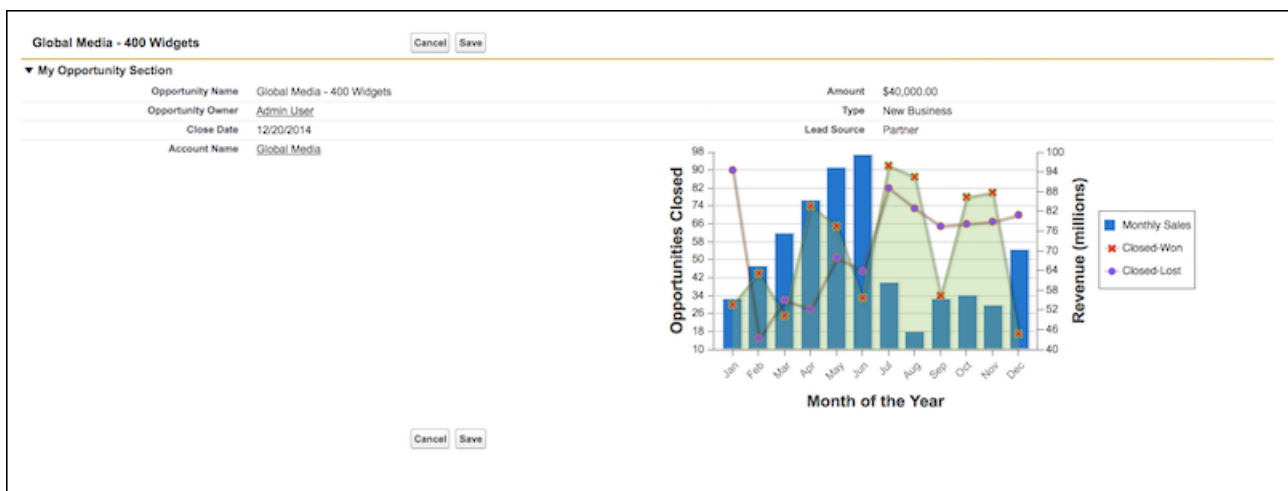
Easily control whether a page is styled with the look of Lightning Experience when viewed in Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, with the `lightningStylesheets` attribute. Previously, restyling a page for Lightning Experience involved searching the SLDS reference site for matching components and altering your code. The new attribute gives unstyled Visualforce pages the Lightning Experience look automatically. This feature is available in Lightning Experience and all versions of the Salesforce app.

 **Note:** This release contains a beta version of Lightning Experience stylesheets for Visualforce, which means it's a high-quality feature with known limitations. Lightning Experience stylesheets for Visualforce aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

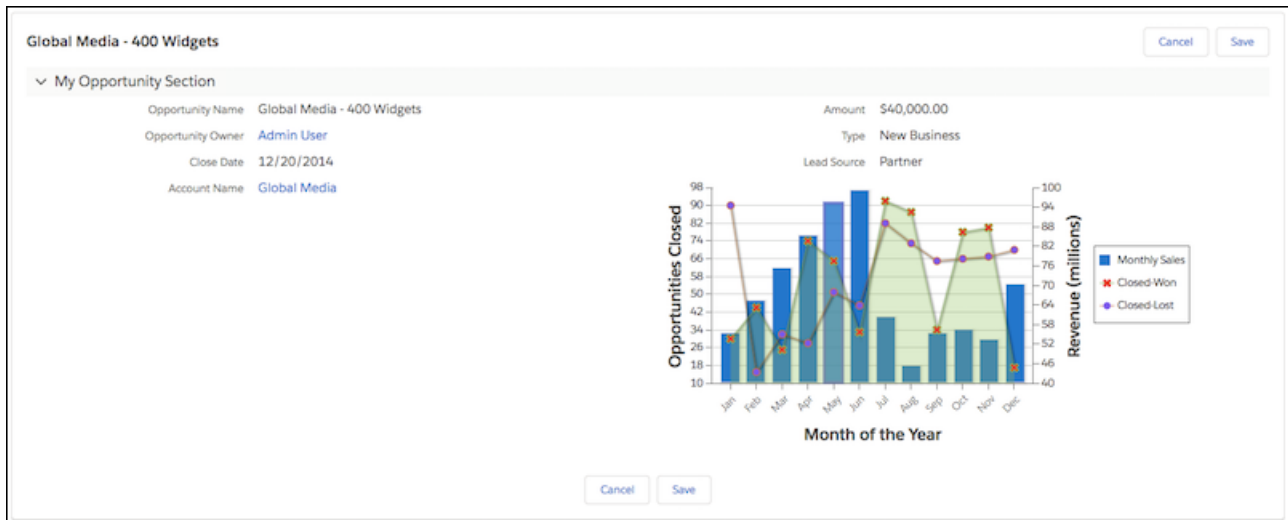
To style your Visualforce page to match the Lightning Experience UI when viewed in Lightning Experience, Salesforce for Android, Salesforce for iOS, or Salesforce mobile web, set `lightningStylesheets="true"` in the `<apex:page>` tag. When the page is viewed in Salesforce Classic, it doesn't get Lightning Experience styling.

```
<apex:page lightningStylesheets="true">
```

Here is a standard Visualforce page without the `lightningStylesheets` attribute. The page is styled with the Classic UI.



Here is the same Visualforce page with the `lightningStylesheets` attribute set to `true`.



You can style most commonly used Visualforce components with the `lightningStylesheets` attribute. However, some components differ slightly in style from Lightning Experience. For example, `<apex:selectOptions>`, `<apex:selectRadio>`, `<apex:inputFile>`, and some `<apex:inputField>` elements use the browser's default styling instead. Commonly used Visualforce components that don't require styling, such as `<apex:form>`, `<apex:outputText>`, and `<apex:param>`, are still supported.

## Get Your Pages Ready for Lightning Experience

Want to know if the Visualforce pages in your org are ready for Lightning Experience? Use the Lightning Experience Visualforce check to generate a report that flags pages that need changes before they're ready for prime time in Lightning Experience. This change applies to Lightning Experience only.

Run the Lightning Experience Visualforce Report directly from your Lightning Readiness Report PDF. The Visualforce Report looks at all pages in your org used in the past 90 days, and identifies features that aren't available in Lightning Experience.

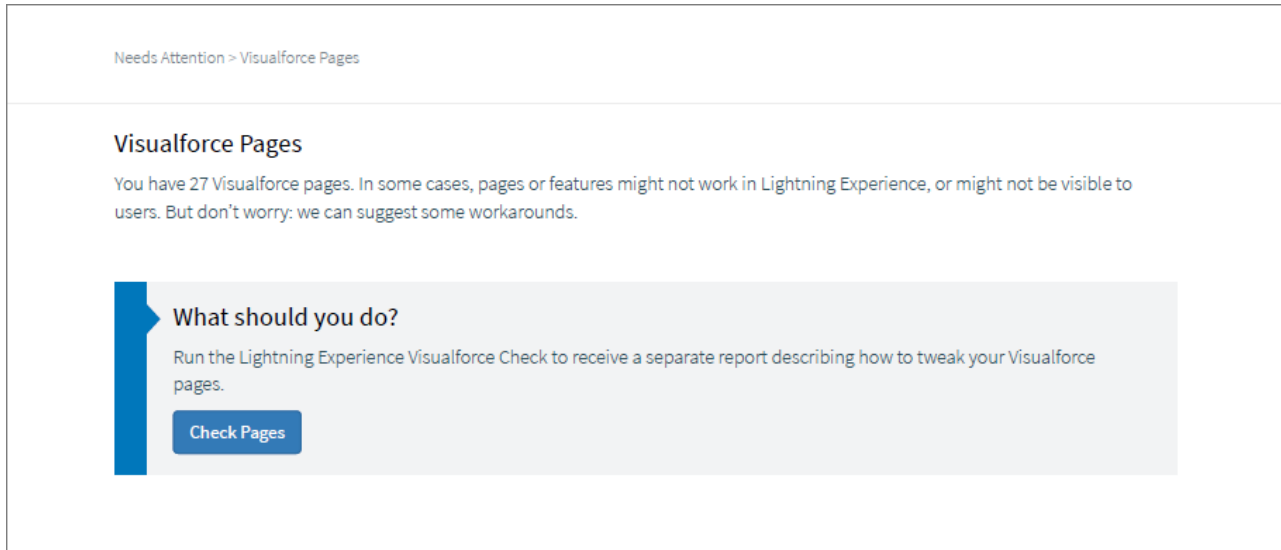
### USER PERMISSIONS

To run the Lightning Experience Visualforce Report

- Customize Application AND Modify All Data

To get the email with your Visualforce Report

- In Salesforce Setup, Email Deliverability set to the access level All email



Although many Visualforce pages work in Lightning Experience as you've designed them, some Salesforce Classic features and attributes aren't supported. Review the recommendations in the Visualforce Report to understand what tweaks you can make to get the page ready for users.

SEE ALSO:

[Salesforce Help: Check Your Lightning Experience Readiness](#)

## Access Values in the Platform Cache Org Cache Using Visualforce Global Variables

You can now access values stored in the Platform Cache org cache from a Visualforce page with the `$Cache.Org` global variable. Previously, you could only access values stored in the session cache by using Visualforce global variables.

## JavaScript Remoting Request Data Limit Increased to 4 MB

The request payload limit has been increased to 4 MB. Previously, it was 1 MB.

## Other Changes to Visualforce

Additional changes affect the styling and HTML output of Visualforce components. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

### **`analytics:reportChart` and `wave:Dashboard` rendered differently as HTML**

When you use `analytics:reportChart` or `wave:Dashboard` in your Visualforce page, they now load the resources they need using Lightning Out. As a result, pages using `analytics:reportChart` and `wave:Dashboard` have smaller initial downloads, and load content dynamically. This change also affects the HTML output of these components. If you style these components with custom CSS in any of your pages, you might need to update your styles to match the new HTML output.

### **Fewer stylesheets included by the `standardStylesheets` attribute**

Setting `standardStylesheets="false"` on the `apex:page` component allows you to use your own stylesheets instead of those provided by Salesforce. Previously, setting `standardStylesheets` to `false` still included some Salesforce stylesheets

in your page. Now, an `apex:page` with API version 41.0 and `standardStylesheets` set to `false` is completely free of Salesforce styles.

## Apex

Apex is a programming language that uses Java-like syntax and acts like database stored procedures. Apex enables developers to add business logic to system events, such as button clicks, updates of related records, and Visualforce pages.

In this release, changes include several new testing options. We also made updates to Platform Cache and improved access to External Objects from batch Apex.

For more information on Apex, see the [Apex Developer Guide](#).

### EDITIONS

Available in: Salesforce Classic and Lightning Experience

Available in: **Enterprise, Performance, Unlimited, Developer,** and **Database.com** Editions

### IN THIS SECTION:

#### [Run Parallel Tests Using a New Option on the @isTest Annotation](#)

Use the `@isTest(isParallel=true)` annotation to indicate test classes that can run in parallel and aren't restricted by the default limits on the number of concurrent tests. This makes the execution of test classes more efficient, because more tests can be run in parallel.

#### [Run Apex Tests Through the API Using Class Names](#)

You can now run individual test methods of an Apex class using that class's name instead of its ID. Because Apex class IDs are org-specific, this change facilitates source-driven development.

#### [Run Apex Tests Synchronously Without Firing Case Assignment Rules](#)

We fixed a bug that caused Apex tests that were run through synchronously using the Tooling API REST interface to fire assignment rules for cases. This bug affected the running of test methods from a single Apex class in the Developer Console, and Tooling API's `/runTestsSynchronous/` resource. This change applies to both Lightning Experience and Salesforce Classic.

#### [Find and Surface Duplicate Records in New Ways](#)

You can already use the SOAP API to find and surface duplicates when users create or edit records. Now you can use three new Datacloud classes in Apex to find and surface duplicates at other points in the flow or UI: `FindDuplicates`, `FindDuplicatesByIds`, and `FindDuplicatesResult`. For example, create a custom search for duplicates before records are created. Or use these Apex classes for identity resolution in a service desk implementation. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

#### [Access Values in the Platform Cache Org Cache Using Visualforce Global Variables](#)

You can now access values stored in the Platform Cache org cache from a Visualforce page with the `$Cache.Org` global variable. Previously, you could only access values stored in the session cache by using Visualforce global variables.

#### [Cache.Org.put Lifetime Value Now Matches the Documentation](#)

The Platform Cache class `Cache.Org` has two `put` methods that use the default for the amount of time the cached value lives in the org cache. The default value stated in the Summer '17 and earlier versions of the *Apex Developer Guide* is 86,400 seconds (24 hours), but the actual default was 43,200 seconds (12 hours). The actual default value now matches the documentation.

#### [Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset](#)

When you deploy a change set, the platform cache allocations in the destination org are set to the values contained in the change set. Previously, when you deployed a cache partition, the org and session cache allocations were set to zero, regardless of the allocation values in the change set. This new behavior also applies to metadata deploys.

#### [Improved Access to External Objects from Batch Apex](#)

You can now use `Database.QueryLocator` to access external objects from batch Apex. Previously, only `Iterable<SObject>` was supported.

[Control Access to Apex REST Services](#)

You can now control access to Apex REST services with the new Apex Rest Services administrative permission.

[Prevent Apex Callouts During Read-Only Mode](#)

During a site switch, your Salesforce org is in read-only mode and no write operations are allowed in Salesforce. However, Apex callouts to external services aren't blocked in read-only mode. To avoid incorrect program behavior, we recommend that you prevent making callouts in read-only mode. To check whether the org is in read-only mode, call

```
System.getApplicationReadWriteMode().
```

[Apex: New and Changed Classes](#)

These classes are new or have changed.

[ConnectApi \(Chatter in Apex\): New and Changed Classes and Enums](#)

Create custom experiences in Salesforce using Chatter in Apex. In this release, we introduce upvoting and answer verification.

## Run Parallel Tests Using a New Option on the `@isTest` Annotation

Use the `@isTest(isParallel=true)` annotation to indicate test classes that can run in parallel and aren't restricted by the default limits on the number of concurrent tests. This makes the execution of test classes more efficient, because more tests can be run in parallel.

This annotation overrides the default settings that disable parallel testing. A test class that doesn't have this annotation is restricted by the default limits on the number of concurrent tests.

## Run Apex Tests Through the API Using Class Names

You can now run individual test methods of an Apex class using that class's name instead of its ID. Because Apex class IDs are org-specific, this change facilitates source-driven development.

### Tooling API REST resource: `/runTestsAsynchronous/`

The `/runTestsAsynchronous/` REST resource accepts names of Apex test classes, including names that include a namespace. Previously, this resource accepted only class IDs. This change applies to all API versions.

### Tooling API REST resource: `/runTestsSynchronous/`

The `/runTestsSynchronous/` REST resource accepts names of Apex test classes, including names that include a namespace. Previously, this resource accepted only class IDs. This change applies to all API versions.

### SOAP API: `RunTestsRequest`

A `tests` property was added to the `RunTestsRequest` type used in the `runTests()` call. This property's type is `TestsNode[]`. Currently, a `TestsNode` array can contain only one entry.

#### `TestsNode`

A new subtype for `RunTestsRequest`. Lets you run individual methods in an Apex test class. A tests node includes a class ID or a class name, and an array of test methods.

### Tooling API SOAP call: `runTests()`

The `RunTestsRequest` object that you pass to the `runTests()` call now includes a `tests` property that the `runTests()` call requires in API version 41.0 and later. This property is an array of type `TestsNode`.

**Tooling API SOAP call: `runTestsAsynchronous()`**

The `tests` parameter is available and required in API version 41.0 and later. This property is an array of type [TestsNode](#).

SEE ALSO:

[Force.com Tooling API: REST Resources](#)

[Force.com Tooling API: SOAP Calls](#)

[Apex Developer Guide: RunTestsRequest](#)

[Force.com Tooling API: ApexTestQueueItem](#)

## Run Apex Tests Synchronously Without Firing Case Assignment Rules

We fixed a bug that caused Apex tests that were run through synchronously using the Tooling API REST interface to fire assignment rules for cases. This bug affected the running of test methods from a single Apex class in the Developer Console, and Tooling API's `/runTestsSynchronous/` resource. This change applies to both Lightning Experience and Salesforce Classic.

SEE ALSO:

[Known Issue: RunTestSynchronous through REST Tooling API fires assignment rules when creating a case in synchronous apex test](#)

## Find and Surface Duplicate Records in New Ways

You can already use the SOAP API to find and surface duplicates when users create or edit records. Now you can use three new Datacloud classes in Apex to find and surface duplicates at other points in the flow or UI: `FindDuplicates`, `FindDuplicatesByIds`, and `FindDuplicatesResult`. For example, create a custom search for duplicates before records are created. Or use these Apex classes for identity resolution in a service desk implementation. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

`FindDuplicates` and `FindDuplicatesByIds` available in: **Professional, Enterprise, Performance, Unlimited**, and **Developer** Editions

`FindDuplicatesResult` available in: **All** Editions

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SEE ALSO:

[New Apex Classes](#)

## Access Values in the Platform Cache Org Cache Using Visualforce Global Variables

You can now access values stored in the Platform Cache org cache from a Visualforce page with the `$Cache.Org` global variable. Previously, you could only access values stored in the session cache by using Visualforce global variables.

## `Cache.Org.put` Lifetime Value Now Matches the Documentation

The Platform Cache class `Cache.Org` has two `put` methods that use the default for the amount of time the cached value lives in the org cache. The default value stated in the Summer '17 and earlier versions of the *Apex Developer Guide* is 86,400 seconds (24 hours), but the actual default was 43,200 seconds (12 hours). The actual default value now matches the documentation.

The `put` method signatures that use the default lifetime value are:

- `put(key, value)`



- `put(key, value, visibility)`

If your Apex code depends on the default lifetime value, check that your code still behaves as expected in this release.


To change a cached value's lifetime, use these `put` methods, which include the `ttlSecs` parameter in their signatures.

- `put(key, value, ttlSecs)`
- `put(key, value, ttlSecs, visibility, immutable)`

## Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset

When you deploy a change set, the platform cache allocations in the destination org are set to the values contained in the change set. Previously, when you deployed a cache partition, the org and session cache allocations were set to zero, regardless of the allocation values in the change set. This new behavior also applies to metadata deploys.

Managed package upgrades also don't overwrite subscriber settings for cache allocations. Previously, a managed package upgrade reset the cache allocations in the namespace partition to zero. Keeping cache allocations at their original values ensures that the allocations changed by subscribers are preserved. Subscribers can fine-tune the allocations of org and session cache as they run AppExchange apps and observe app performance.

 **Note:** A managed and unmanaged package install and an unmanaged package upgrade always set the org and session cache allocations to zero. This behavior happens regardless of the allocation values in the packaged partition. Subscribers can allocate org and session cache sizes based on recommendations from Salesforce partners.

## Improved Access to External Objects from Batch Apex

You can now use `Database.QueryLocator` to access external objects from batch Apex. Previously, only `Iterable<SObject>` was supported.

For details, see [Process Large Sets of External Object Data Using Batch Apex](#).

### EDITIONS

Available in: **Developer** Edition

Available for an extra cost in: **Enterprise, Performance, and Unlimited** Editions

## Control Access to Apex REST Services

You can now control access to Apex REST services with the new Apex Rest Services administrative permission.

You no longer need the API Enabled administrative permission enabled to call Apex REST services. Use Apex REST Services to create permission sets for users that need to access Apex REST services but not access APIs, like the SOAP API.

Users must also have access to the Apex classes that provide the Apex REST services. You can control security settings for Apex classes via the Apex Classes setup page in Salesforce.

Contact Salesforce if you want to have this permission available in your org.

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

## Prevent Apex Callouts During Read-Only Mode

During a site switch, your Salesforce org is in read-only mode and no write operations are allowed in Salesforce. However, Apex callouts to external services aren't blocked in read-only mode. To avoid incorrect program behavior, we recommend that you prevent making callouts in read-only mode. To check whether the org is in read-only mode, call `System.getApplicationReadWriteMode()`.

Your Salesforce org is in read-only mode during some Salesforce maintenance activities, such as planned site switches and instance refreshes. As part of Continuous Site Switching, your Salesforce org is switched to its ready site approximately once every six months. For more information about site switching, see [Continuous Site Switching](#).

Typically, you might execute some follow-up operations in the same transaction after receiving a response from a callout. For example, you might execute a DML call to update a Salesforce record. Write operations in Salesforce, such as record updates, are blocked during read-only mode while callouts aren't. This inconsistency in behavior in read-only mode might break your program flow and causes issues in Salesforce. We recommend that you use `System.getApplicationReadWriteMode()` to check whether the org is read-only, and don't make callouts in read-only mode.

The following example checks the return value of `System.getApplicationReadWriteMode()`. If the return value is equal to `ApplicationReadWriteMode.READ_ONLY` enum value, the org is in read-only mode and the callout is skipped. Otherwise (`ApplicationReadWriteMode.DEFAULT` value), the callout is performed.



**Note:** This class uses Apex HTTP classes to make a callout as an example. You can also make a callout using an imported WSDL through WSDL2Apex. The process for checking for read-only mode is the same in either case.

```
public class HttpCalloutSampleReadOnly {
    public class MyReadOnlyException extends Exception {}

    // Pass in the endpoint to be used using the string url
    public String getCalloutResponseContents(String url) {

        // Get Read-only mode status
        ApplicationReadWriteMode mode = System.getApplicationReadWriteMode();
        String returnValue = '';

        if (mode == ApplicationReadWriteMode.READ_ONLY) {
            // Prevent the callout
            throw new MyReadOnlyException('Read-only mode. Skipping callouts!');
        } else if (mode == ApplicationReadWriteMode.DEFAULT) {
            // Instantiate a new http object
            Http h = new Http();

            // Instantiate a new HTTP request, specify the method (GET)
            // as well as the endpoint.
            HttpRequest req = new HttpRequest();
            req.setEndpoint(url);
            req.setMethod('GET');

            // Send the request, and return a response
            HttpResponse res = h.send(req);
            returnValue = res.getBody();
        }
        return returnValue;
    }
}
```

To test read-only mode in sandbox, contact Salesforce to enable the read-only mode test option. Once the test option is enabled, you can toggle read-only mode on and verify your apps.

## Apex: New and Changed Classes

These classes are new or have changed.

### IN THIS SECTION:

#### [New Apex Classes](#)

These classes were introduced in this release.

#### [Changed Apex Classes](#)

These existing classes have new or changed methods or constants.

## New Apex Classes

These classes were introduced in this release.

### Classes in the Datacloud Namespace

#### **FindDuplicates Class**

Performs rule-based searches for duplicate records. The input is an array of sObjects. Each sObject represents a record you want to find duplicates of. The output identifies the detected duplicates for each input sObject based on active duplicate rules for the given object.

#### **FindDuplicatesByIds Class**

Performs rule-based searches for duplicate records. The input is an array of IDs. Each ID specifies records to search for duplicates among. The duplicates are detected based on the active duplicate rules applicable to the object type corresponding to the input IDs.

#### **FindDuplicatesResult Class**

Output for rule-based searches for duplicate records. `FindDuplicatesResult` contains results of detecting duplicates using instances of `FindDuplicates` or `FindDuplicatesByIds` classes.

### FeatureManagement Class in the System Namespace

Use the methods in the `System.FeatureManagement` class to check and modify the values of feature parameters, and to show or hide custom objects and custom permissions in your subscribers' orgs. For information about feature parameters, see "Get Started with the Feature Management App" in the [ISVforce Guide](#).

#### **changeProtection(apiName, typeApiName, protection)**

Hides or reveals custom permissions, or reveals custom objects, in your subscriber's org.

#### **checkPackageBooleanValue(apiName)**

Checks the `value__c` value of the `FeatureParameterBoolean__c` record for a feature parameter in your subscriber's org. You set the record's value using `setPackageBooleanValue(apiName, value)`.

#### **checkPackageDateValue(apiName)**

Checks the `value__c` value of the `FeatureParameterDate__c` record for a feature parameter in your subscriber's org. You can set the record's value using `setPackageDateValue(apiName, value)`.

#### **checkPackageIntegerValue(apiName)**

Checks the `value__c` value of the `FeatureParameterInteger__c` record for a feature parameter in your subscriber's org. You can set the record's value using `setPackageIntegerValue(apiName, value)`.

#### **checkPermission(apiName)**

Checks whether a custom permission is enabled.

**setPackageBooleanValue (apiName, value)**

Sets the `value__c` value of the `FeatureParameterBoolean__c` record for a subscriber-to-LMO feature parameter in your subscriber's org. You can check the record's value using `checkPackageBooleanValue (apiName)`.

**setPackageDateValue (apiName, value)**

Sets the `value__c` value of the `FeatureParameterDate__c` record for a subscriber-to-LMO feature parameter in your subscriber's org. You can check the record's value using `checkPackageDateValue (apiName)`.

**setPackageIntegerValue (apiName, value)**

Sets the `value__c` value of the `FeatureParameterInteger__c` record for a subscriber-to-LMO feature parameter in your subscriber's org. You can check the record's value using `checkPackageIntegerValue (apiName)`.

## Changed Apex Classes

These existing classes have new or changed methods or constants.

### **Auth.AuthConfiguration Class**

#### **New Method**

**getRightFrameUrl ()**

Returns the URL for the right-frame content to display on the right side of the community login page. The admin supplies the URL.

### **QuickAction.DescribeQuickActionResult Class**

#### **New Methods**

**getFlowDevName ()**

If the custom action invokes a flow, returns the fully qualified name of the flow invoked by the custom action.

**getFlowRecordIdVar ()**

If the custom action invokes a flow, returns the input variable that the custom action passes the record's ID to.

#### **New Constants**

**flowdevname**

If the custom action invokes a flow, the fully qualified name of the flow.

**flowrecordidvar**

If the custom action invokes a flow, the input variable that the custom action passes the record's ID to.

### **Schema.RecordTypeInfo Class**

#### **New Methods**

**isActive ()**

Returns `true` if this record type is active, `false` otherwise.

### **System.Site Class**

#### **New Methods**

**getExperienceId ()**

Returns the value of the experience ID (expid). This expid value comes from a cookie in the user's web browser.

**setExperienceId (expIdValue)**

Sets the experience ID for the current user. Use this method to populate the value of the experience ID (expid) cookie in the user's web browser.

**Schema.FieldSet Class****Changed Methods****getLabel()**

This method has been updated to return the translation of the text label, instead of the text label itself.

## ConnectApi (Chatter in Apex): New and Changed Classes and Enums

Create custom experiences in Salesforce using Chatter in Apex. In this release, we introduce upvoting and answer verification.

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](#)

These classes are new or have changes this release.

[New and Changed Chatter in Apex Input Classes](#)

These input classes are new or have changes this release.

[New and Changed Chatter in Apex Output Classes](#)

These output classes are new or have changes this release.

[New and Changed Chatter in Apex Enums](#)

These enums are new or have changes this release.

## New and Changed Chatter in Apex Classes

These classes are new or have changes this release.

### Chatter Feeds

These methods are in the `ConnectApi.ChatterFeeds` class.

**Get or search Chatter streams, regardless of the context community (pilot)**

**Note:** We provide the `globalScope` parameter to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. The `globalScope` parameter isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

- `getStream(communityId, streamId, globalScope)` (Pilot)
- `getStreams(communityId, pageParam, pageSize, sortParam, globalScope)` (Pilot)
- `searchStreams(communityId, q, pageParam, pageSize, sortParam, globalScope)` (Pilot)

This method has a matching set test method.

### Get pinned feed elements from a group or topic feed (beta)



**Note:** This release contains a beta version of pinned posts, which means it's a high-quality feature with known limitations. Post pinning isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for pinned posts in the [Trailblazer Community](#).

- `getPinnedFeedElementsFromFeed(communityId, feedType, subjectId)`

### Pin or unpin feed elements to a group or topic feed (beta)

- `updatePinnedFeedElements(communityId, feedType, subjectId, pin)`

### Vote a comment or feed element up or down

- `setCommentVote(communityId, commentId, upDownVote)`
- `setFeedElementVote(communityId, feedElementId, upDownVote)`

### Mark an answer as verified or unverified

- `setCommentIsVerified(communityId, commentId, isVerified)`

### Get sorted comments for a feed element

- `getCommentsForFeedElement(communityId, feedElementId, sortParam)`
- `getFeedElement(communityId, feedElementId, commentSort)`
- `getFeedElement(communityId, feedElementId, recentCommentCount, elementsPerBundle, commentSort)`

## Knowledge

These methods are in the `ConnectApi.Knowledge` class.

### Get top viewed articles for a topic

- `getTopViewedArticlesForTopic(communityId, topicId, maxResults)`

## New and Changed Chatter in Apex Input Classes

These input classes are new or have changes this release.

### Chatter Feeds

#### **ConnectApi.ExtensionsCapabilityInput**

This input class has this new property.

- `itemsToRemove`—List of attachment IDs to remove from the feed element.

#### **ConnectApi.PinCapabilityInput (Beta)**

This new input class has these properties.

- `entityId`—ID of the entity to pin or unpin. In version 41.0, `entityId` must be a feed item ID, and only one feed item can be pinned per feed.
- `isPinned`—Specifies whether to pin (`true`) or unpin (`false`) the entity.

**ConnectApi.UpDownVoteCapabilityInput**

This new input class has one property.

- `vote`—Specifies the value of the vote for a feed element or comment. Values are:
  - `Down`
  - `None`
  - `Up`

## New and Changed Chatter in Apex Output Classes

These output classes are new or have changes this release.

### Chatter Feeds

**ConnectApi.CandidateAnswersStatus**

This new output class has these properties.

- `hasCandidateAnswers`—Indicates whether candidate answers are available for a question.
- `hasCandidateAnswersPublished`—Indicates whether any candidate answers are published.
- `hasCandidateAnswersRated`—Indicates whether any candidate answers are rated.

**ConnectApi.ChatterStream**

This output class has one new property.

- `community`—Community summary for the stream.

**ConnectApi.CommentCapabilities**

This output class has these new properties.

- `upDownVote`—If a comment has this capability, users can vote it up or down.
- `verified`—If a comment has this capability, users with permission can mark it as verified or unverified.

**ConnectApi.CommunitySummary**

This new output class has these properties.

- `id`—18-character ID of the community.
- `name`—Localized name of the community.

**ConnectApi.Extension**

This output class has one new property.

- `attachmentId`—Attachment ID of the extension.

**ConnectApi.ExtensionDefinition**

This output class has one new property.

- `position`—Position in which the extension is displayed in the publisher.

This output class no longer includes these properties.

- `isEnabledInCommunity`
- `isEnabledInLightningPublisher`

**ConnectApi.Feed**

This output class has one new property.

- `pinnedFeedElementsUrl` (Beta)—URL of pinned feed items.

**ConnectApi.FeedElementCapabilities**

This output class has these new properties.

- `mediaReferences`—If a feed element has this capability, it has one or more media references.
- `pin` (Beta)—If a feed element has this capability, users who have permission can pin it to a feed.
- `upDownVote`—If a feed post or comment has this capability, users can vote it up or down.

**ConnectApi.FeedItem**

This output class has one new property.

- `hasVerifiedComment`—`true` if the feed item has a verified comment, otherwise `false`.

**ConnectApi.InlineImageSegment**

This output class has one new property.

- `imageDetails`—Details for the image, or `null` if the file isn't an image.

**ConnectApi.MediaReference**

This new output class has these properties.

- `mediaUrl`—URL to stream or download the media.
- `thumbnailUrl`—URL of the media's thumbnail, if one exists.

**ConnectApi.MediaReferenceCapability**

This new output class is a subclass of `ConnectApi.FeedCapability`. It has one property.

- `media`—Collection of media references.

**ConnectApi.PinCapability (Beta)**

This new output class is a subclass of `ConnectApi.FeedCapability`. It has these properties.

- `isPinnableByMe`—Specifies whether the context user can pin or unpin the entity to the feed (`true`) or not (`false`).
- `isPinned`—Specifies whether the entity is pinned (`true`) or not pinned (`false`) to the feed.

**ConnectApi.PinnedFeedElements (Beta)**

This new output class has one property.

- `elements`—List of pinned feed elements.

**ConnectApi.QuestionAndAnswersCapability**

This output class has one new property.

- `candidateAnswers`—Status of candidate answers for the question.

**ConnectApi.SocialPostCapability**

This output class has one new property.

- `hiddenBy`—User who hid the social post.

**ConnectApi.UpDownVoteCapability**

This new output class is a subclass of `ConnectApi.FeedElementCapability`. It has these properties.

- `downVoteCount`—Number of down votes.
- `myVote`—Specifies the context user's vote. Values are:
  - `Down`
  - `None`
  - `Up`
- `upVoteCount`—Number of up votes.



**ConnectApi.VerifiedCapability**

This new output class is a subclass of `ConnectApi.FeedElementCapability`. It has these properties.

- `isVerifiableByMe`—Specifies whether the context user has permission to mark comments as verified or unverified (`true`) or not (`false`).
- `isVerified`—`true` if the comment is marked as verified, otherwise `false`.
- `lastVerifiedByUser`—User who last marked the comment as verified or unverified, otherwise `null`. Also `null` if the context user doesn't have permission to mark comments as verified or unverified.
- `lastVerifiedDate`—Date when the comment was last marked as verified or unverified, otherwise `null`. Also `null` if the context user doesn't have permission to mark comments as verified or unverified.

**Communities****ConnectApi.Community**

This output class has one new property.

- `siteAsContainerEnabled`—Specifies whether the community uses Site.com pages (`true`) or Visualforce tabs (`false`).

**Field Service****ConnectApi.Features**

This output class has one new property.

- `liveAgentHostName`—Live Agent host name configured for the org.

**ConnectApi.UserSettings**

This output class has these new properties.

- `hasFieldServiceLocationTracking`—User has Field Service Lightning GPS tracking enabled.
- `hasFieldServiceMobileAccess`—User has access to the Field Service Lightning mobile app.

**Files****ConnectApi.File**

This output class has these new properties.

- `createdDate`—ISO8601 date string when the file was created.
- `sharingPrivacy`—Specifies the sharing privacy of a file. Values are:
  - `None`—File is visible to anyone with record access.
  - `PrivateOnRecords`—File is private on records.
- `systemModstamp`—ISO8601 date string indicating when a user or any automated system process, such as a trigger, updated the file.

**ConnectApi.FileSummary**

This output class has these new properties.

- `createdDate`—ISO8601 date string when the file was created.
- `sharingPrivacy`—Specifies the sharing privacy of a file. Values are:
  - `None`—File is visible to anyone with record access.
  - `PrivateOnRecords`—File is private on records.

- `systemModstamp`—ISO8601 date string indicating when a user or any automated system process, such as a trigger, updated the file.

## New and Changed Chatter in Apex Enums

These enums are new or have changes this release.

For information about these enums, see `ConnectApi` Enums in *Apex Developer Guide*.

### **`ConnectApi.FeedCommentSortOrder`**

This new enum has these values.

- `CreatedDateLatestAsc`—Sorts by most recently created comments in ascending order.
- `Relevance`—Sorts by most relevant content.

### **`ConnectApi.FeedElementCapabilityType`**

This enum has these new values.

- `MediaReferences`—The feed element has one or more media references.
- `Pin (Beta)`—Users with permission can pin the feed element.
- `UpDownVote`—Users can vote the feed element up or down.
- `Verified`—Users who have permission can mark a comment as verified or unverified.

### **`ConnectApi.FeedFilter`**

This enum has these new values.

- `QuestionsWithCandidateAnswers`—Feed elements that are questions that have candidate answers associated with them.
- `QuestionsWithCandidateAnswersReviewedPublished`—Feed elements that are questions that have candidate answers that have been reviewed or published.
- `UnansweredQuestionsWithCandidateAnswers`—Feed elements that are questions that don't have answers but have candidate answers associated with them.

### **`ConnectApi.FileSharingPrivacy`**

This new enum has these values.

- `None`—File is visible to anyone with record access.
- `PrivateOnRecords`—File is private on records.

### **`ConnectApi.SocialPostStatusType`**

This enum has one new value.

- `Hidden`—Social post is hidden.

### **`ConnectApi.UpDownVoteValue`**

This new enum has these values.

- `Down`
- `None`
- `Up`

# ISVforce: Faster Onboarding, Easier Business Planning, and Packaging Enhancements

Navigate the partner journey more quickly with the AppExchange Trailblazer Checklist. Manage business plans for apps where you're accustomed to managing other listing details: the AppExchange publishing console. Control subscribers' access to individual features with feature parameters. We also enhanced managed package behavior in subscriber orgs.

## EDITIONS

Available in: **Enterprise**,  
**Performance**, **Unlimited**,  
and **Developer** Editions

### IN THIS SECTION:

#### [Build Your ISV Business Faster with the AppExchange Trailblazer Checklist](#)

Stay organized as you build your ISV business with the AppExchange Trailblazer Checklist. The checklist divides your partner journey into 10 steps, starting with guided learning on Trailhead and ending with a published listing on AppExchange. Each step is paired with new supporting content in the Partner Community.

#### [Manage Business Plans in the AppExchange Publishing Console](#)

Previously, sharing your app's business plan meant a chain of emails or faxes to Salesforce. Say goodbye to cluttered inboxes and chirpy, 90s-era dial tones. You can now create, manage, and submit business plans in the AppExchange publishing console. You can also check your plan's approval status and view comments from reviewers.

#### [Control and Track Access to Your App with Feature Parameters \(Generally Available\)](#)

As of mid-October 2017, feature parameters are generally available. Control feature access in subscriber orgs, dark-launch features to see how they work in production, and track activation metrics, all with the Feature Management App (FMA). The FMA links values in your License Management Org (LMO) with values in your subscribers' orgs. You can use Apex code to check and modify those values. This change applies to both Lightning Experience and Salesforce Classic.

#### [Managed Package Updates Preserve Deactivated and Reactivated Global Value Set Values](#)

We fixed a bug in which a managed package changed the setting of a value in a global value set to Inactive, even if the subscriber org set the value to Active before installing the managed package.

#### [My Domain Enabled Automatically in Patch Orgs](#)

When you create a patch org from a packaging org that has My Domain enabled, the patch org now also has My Domain enabled. The name of the patch org's custom subdomain is randomly generated. Previously, the patch org didn't have My Domain enabled, resulting in errors when the uploaded Managed - Release package in the packaging org required a subdomain.

#### [Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset](#)

When you deploy a change set, the platform cache allocations in the destination org are set to the values contained in the change set. Previously, when you deployed a cache partition, the org and session cache allocations were set to zero, regardless of the allocation values in the change set. This new behavior also applies to metadata deploys.

#### [Delete S-Controls from Managed - Released Packages](#)

You can now remove s-controls from a new version of a Managed - Released package. The subscriber org's administrator can also delete the s-controls when a subscriber upgrades to the new package version. If a subscriber installs the new version of the package for the first time, the s-controls are not installed.

#### [Change CustomTab Type From S-Control to Visualforce Page](#)

When you deploy metadata to an org using Metadata API, you can change the CustomTab type from an s-control to a Visualforce page or to any other type except a custom object. Similarly, you can't change a custom object tab to any other type.

#### [Salesforce DX Features for Partners \(Generally Available\)](#)

Salesforce DX includes some features specifically designed for partners. Salesforce DX will be generally available in mid-October 2017.

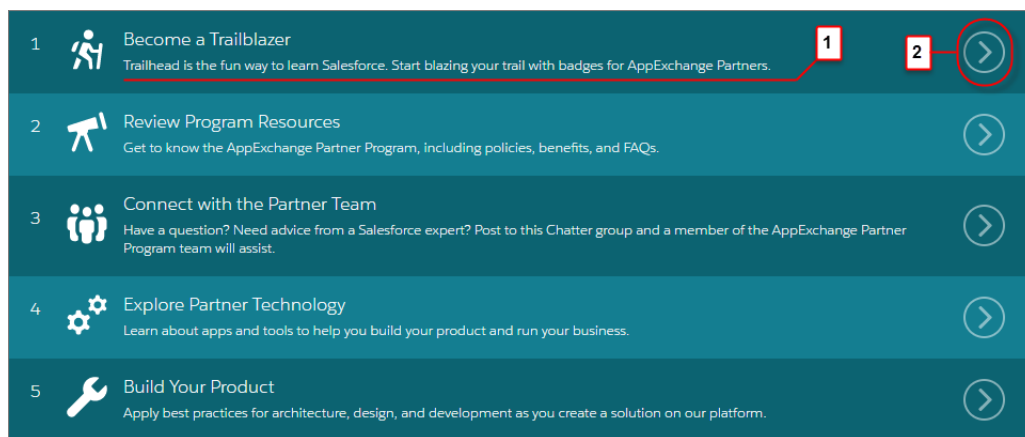
### Other Changes to the AppExchange Publishing Console

We made changes to the AppExchange publishing console to improve how Salesforce customers experience AppExchange listings. For paid AppExchange listings, you must now provide a minimum price for your solution if you didn't include one.

## Build Your ISV Business Faster with the AppExchange Trailblazer Checklist

Stay organized as you build your ISV business with the AppExchange Trailblazer Checklist. The checklist divides your partner journey into 10 steps, starting with guided learning on Trailhead and ending with a published listing on AppExchange. Each step is paired with new supporting content in the Partner Community.


You asked to see the entire partner journey at a glance, so we made the checklist easy to skim and navigate with short summaries (1). When you're ready for more details, jump to one of our new Partner Community pages (2). Get guidance, tips, and a list of resources on Trailhead, the Partner Community, and Salesforce Help and Training.



If you're new to the Partner Program, we display the checklist when you create your Partner Community profile. You can always return to the checklist in the Education section of the community.

## Manage Business Plans in the AppExchange Publishing Console

Previously, sharing your app's business plan meant a chain of emails or faxes to Salesforce. Say goodbye to cluttered inboxes and chirpy, 90s-era dial tones. You can now create, manage, and submit business plans in the AppExchange publishing console. You can also check your plan's approval status and view comments from reviewers.

 **Note:** This feature is available to eligible Salesforce partners only in English. For more information on the Partner Program, including eligibility requirements, visit [www.salesforce.com/partners](http://www.salesforce.com/partners).

When you open an AppExchange listing in the console, a new Business Plan tab (1) appears as the first step in the publishing flow. From here, you can:

- Tell us about your company and its operations (2).
- Share technical details about the product you're listing (3).
- Sign your company's compliance certification, and provide supporting documentation (4).

After you share your business plan with Salesforce, we review the submission and keep you informed of your approval status (5). If we have comments about the plan or require changes, we let you know here. After we approve your plan, you can submit your product for security review.

The screenshot shows the 'BUSINESS PLAN' form in the Salesforce Partner Community. The form is divided into three main sections: Business Details, Product Architecture, and Compliance Certification. Each section has a progress indicator and a list of required details. A 'Salesforce Approval' button is at the bottom, and a 'Submit' button is next to an 'Incomplete' message.

**1** BUSINESS PLAN

Share your business plan with Salesforce to help us learn about your product. We'll review the plan and give you feedback on how to maximize your AppExchange success.

**2** Business Details

Tell us about your company and the market for this product.

**Complete**

- 1. General Information
- 2. Partnerships
- 3. Financial Details
- 4. About this Listing
- 5. Go-to-Market Strategy

**3** Product Architecture

Tell us about the technical aspects of this product and how it integrates with Salesforce.

**In Progress**

- 1. Your Company
- 2. Your Users
- 3. App Cloud Usage
- 4. UI & Mobile
- 5. Tech Stack
- 6. Security
- 7. Enterprise Scale
- 8. Support & Enablement

**4** Compliance Certification

Verify that your company's business practices meet our standards for ethics and integrity.

**Not Started**

- 1. Contact Information
- 2. Business Information
- 3. Government Relationships
- 4. Principals and Key Employees
- 5. Compliance Information
- 6. Financial Information

**5** Salesforce Approval

After you provide the required details, submit your business plan to Salesforce. We'll review the submission and contact you.

**Incomplete**

Your business plan is missing required details

Submit

If you're an existing partner with a published AppExchange listing, we already have its business plan, so no need to update your listing. If you're an existing partner listing a new product, provide the business details and product architecture. We populate your compliance details using the information you provided when you joined the Partner Program.

## Control and Track Access to Your App with Feature Parameters (Generally Available)

As of mid-October 2017, feature parameters are generally available. Control feature access in subscriber orgs, dark-launch features to see how they work in production, and track activation metrics, all with the Feature Management App (FMA). The FMA links values in your License Management Org (LMO) with values in your subscribers' orgs. You can use Apex code to check and modify those values. This change applies to both Lightning Experience and Salesforce Classic.

Here at Salesforce, we sometimes run pilot programs, like the one we ran when we introduced Feature Management. Sometimes we dark-launch features to see how they work in production before sharing them with you. Sometimes we make features available to select orgs for limited-time trials. And sometimes we want to track activation metrics for those features.

With feature parameters, we're extending this previously secret functionality to you, our Partner Ohana. Install the FMA in your License Management Org (LMO). The FMA extends the License Management App, and like the LMA, it's distributed as a managed package.

## Feature Parameters

Feature parameters are represented as Metadata API types that you can work with in your packaging org. The `FeatureParameterBoolean`, `FeatureParameterDate`, and `FeatureParameterInteger` types store three types of values: boolean, integer, and date. You can use these types to store a `defaultValue` for each feature parameter. You can reference the values in your code, just like you reference other values in a customer's org. Each feature parameter also has a

`dataFlowDirection` value: LMO to Subscriber or Subscriber to LMO. You can use feature parameters only in managed packages.

The first time a subscriber installs your package, a `FeatureParameter__c` record is created in your LMO for each feature parameter. The feature parameter records store values in these fields: `FullName__c`, `DataType__c` (Boolean, Integer, or Date), `DataFlowDirection__c`, `Package__c`, `IntroducedInPackageVersion__c`, and, new for Winter '18, `Namespace_Prefix__c`.

In your LMO and in your subscriber's org, records of custom junction objects represent your feature parameters: records of `FeatureParameterBoolean__c`, `FeatureParameterDate__c`, and `FeatureParameterInteger__c` objects. The FMA creates records of these junction objects in the LMO and in the customer's org when a subscriber installs your package. These records associate your feature parameters with the licenses for your subscribers and set the feature parameters' values. Their values in your LMO and in your subscriber's orgs are linked. Each record stores three values: `FeatureParameter__r`, `License__c`, and `Value__c`.

## Apex Methods

Use these Apex methods to check and modify the values of your feature parameters.

- `System.FeatureManagement.checkPackageBooleanValue(apiName)`
- `System.FeatureManagement.checkPackageDateValue(apiName)`
- `System.FeatureManagement.checkPackageIntegerValue(apiName)`
- `System.FeatureManagement.setPackageBooleanValue(apiName, value)`
- `System.FeatureManagement.setPackageDateValue(apiName, value)`
- `System.FeatureManagement.setPackageIntegerValue(apiName, value)`

Use these Apex methods to show, hide, and check the protection of custom objects and custom permissions.

- `System.FeatureManagement.changeProtection(apiName, typeApiName, protection)`
- `System.FeatureManagement.checkPermission(apiName)`

## Get Started

To learn more about feature parameters and the FMA, see "Get Started with the Feature Management App" in the [ISVforce Guide](#).

For information about the `System.FeatureManagement` class, see "FeatureManagement Class" in the [Apex Developer Guide](#).

## Managed Package Updates Preserve Deactivated and Reactivated Global Value Set Values

We fixed a bug in which a managed package changed the setting of a value in a global value set to Inactive, even if the subscriber org set the value to Active before installing the managed package.

A global value set in a managed package can specify both Active and Inactive values. Let's say a subscriber org admin set a value from a managed package to Active. When the subscriber org installed an update to the managed package, the managed package set the value back to Inactive, even if the subscriber org didn't want it changed. Now, the managed package update preserves the Active and Inactive value settings of the subscriber org.

SEE ALSO:

[Fields and Picklists: Time Field Type Beta and Picklist Value Management Enhancements](#)

## My Domain Enabled Automatically in Patch Orgs

When you create a patch org from a packaging org that has My Domain enabled, the patch org now also has My Domain enabled. The name of the patch org's custom subdomain is randomly generated. Previously, the patch org didn't have My Domain enabled, resulting in errors when the uploaded Managed - Release package in the packaging org required a subdomain.

When you create a patch org in which My Domain is enabled, it can take several minutes for the randomly generated subdomain to be registered.

## Platform Cache Allocations in Change Set Deployments and Managed Package Upgrades Are No Longer Reset

When you deploy a change set, the platform cache allocations in the destination org are set to the values contained in the change set. Previously, when you deployed a cache partition, the org and session cache allocations were set to zero, regardless of the allocation values in the change set. This new behavior also applies to metadata deploys.

Managed package upgrades also don't overwrite subscriber settings for cache allocations. Previously, a managed package upgrade reset the cache allocations in the namespace partition to zero. Keeping cache allocations at their original values ensures that the allocations changed by subscribers are preserved. Subscribers can fine-tune the allocations of org and session cache as they run AppExchange apps and observe app performance.



**Note:** A managed and unmanaged package install and an unmanaged package upgrade always set the org and session cache allocations to zero. This behavior happens regardless of the allocation values in the packaged partition. Subscribers can allocate org and session cache sizes based on recommendations from Salesforce partners.

## Delete S-Controls from Managed - Released Packages

You can now remove s-controls from a new version of a Managed - Released package. The subscriber org's administrator can also delete the s-controls when a subscriber upgrades to the new package version. If a subscriber installs the new version of the package for the first time, the s-controls are not installed.

## Change CustomTab Type From S-Control to Visualforce Page

When you deploy metadata to an org using Metadata API, you can change the CustomTab type from an s-control to a Visualforce page or to any other type except a custom object. Similarly, you can't change a custom object tab to any other type.

## Salesforce DX Features for Partners (Generally Available)

Salesforce DX includes some features specifically designed for partners. Salesforce DX will be generally available in mid-October 2017.

## Scratch Org Allocations for Partners

Your Salesforce partner tier determines how many scratch orgs you are allocated and can create daily.

## Private Trialforce Templates

By default, templates are public. You can create a private template so that only authorized orgs can sign up new orgs using this template.

## Free Standard User License

Looking to use the Dev Hub in your production business org but don't have a Salesforce user license? The Salesforce Limited Access - Free license lets Salesforce DX developers access the Dev Hub to create and manage scratch orgs, and link namespaces to the namespace registry. In addition to this functionality, users can access Chatter to collaborate with each other.

SEE ALSO:

[ISVforce Guide: Scratch Org Allocations for Partners](#)

[ISVforce Guide: Create a Trialforce Template](#)

[ISVforce Guide: Free Limited Access License](#)

## Other Changes to the AppExchange Publishing Console

We made changes to the AppExchange publishing console to improve how Salesforce customers experience AppExchange listings. For paid AppExchange listings, you must now provide a minimum price for your solution if you didn't include one.



**Note:** This feature is available only to eligible Salesforce partners. For more information on the Partner Program, including eligibility requirements, visit [www.salesforce.com/partners](http://www.salesforce.com/partners).

### Add Minimum Pricing Information to Paid AppExchange Listings

If the pricing model of your AppExchange solution is **Paid, without Checkout**, the console now prompts you to provide a minimum price if you didn't include one. For published AppExchange listings, we prompt you for this information when you edit the listing. You're asked to provide:

- A price greater than zero
- The currency you accept for payment
- Subscription details, such as how often customers are billed

You add these details on the Pricing tab in the console. To learn more about these changes, go to the [Salesforce Partner Community](#).

## Debugging: Standardized Debug Log Retention

Debug logs are now deleted on a more predictable schedule, and we let you store more of them. We also added several new debug log events. This change applies to both Lightning Experience and Salesforce Classic.

### IN THIS SECTION:

[Retain More Debug Logs for Longer](#)

We changed the way that we delete old debug logs. We now retain debug logs for 7 days. You can generate a total of 250 MB of debug logs in a 15-minute window. When your org is upgraded to Winter '18, all logs that are at least 7 days old are deleted. This change applies to both Lightning Experience and Salesforce Classic.

[Debug Log Events for Platform Event Subscriptions](#)

We've added several debug log events to help you debug processes and flows that subscribe to platform events.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, **Developer**, and **Database.com** Editions

## Retain More Debug Logs for Longer

We changed the way that we delete old debug logs. We now retain debug logs for 7 days. You can generate a total of 250 MB of debug logs in a 15-minute window. When your org is upgraded to Winter '18, all logs that are at least 7 days old are deleted. This change applies to both Lightning Experience and Salesforce Classic.



Previously, you could generate up to 50 MB of debug logs. We kept them indefinitely, deleting the oldest log each time that you exceeded the limit. We removed the 50 MB limit and changed to a 7-day storage limit.

If you generate more than 250 MB of debug logs in a 15-minute window, your trace flags are disabled. We send an email to the users who last modified the trace flags, informing them that they can re-enable the trace flag in 15 minutes.

The per-log size limit of 2 MB hasn't changed. Debug logs that are larger than 2 MB are reduced in size by removing older log lines, such as log lines for earlier `System.debug` statements. The log lines can be removed from any location, not just the start of the debug log.

SEE ALSO:

[Salesforce Help: Monitor Debug Logs](#)

## Debug Log Events for Platform Event Subscriptions

We've added several debug log events to help you debug processes and flows that subscribe to platform events.

### **EVENT\_SERVICE\_PUB\_BEGIN**

Event type

### **EVENT\_SERVICE\_PUB\_DETAIL**

Subscription IDs, ID of the user who published the event, and event message data

### **EVENT\_SERVICE\_PUB\_END**

Event type

### **EVENT\_SERVICE\_SUB\_BEGIN**

Event type and action (subscribe or unsubscribe)

### **EVENT\_SERVICE\_SUB\_DETAIL**

ID of the subscription, ID of the subscription instance, reference data (such as process API name), ID of the user who activated or deactivated the subscription, and event message data

### **EVENT\_SERVICE\_SUB\_END**

Event type and action (subscribe or unsubscribe)

## API

Access more metadata types and data objects in API version 41.0. Improve your searches using new features in SOSL and Data Services. Create native mobile apps and custom web apps with the User Interface API. Process large amounts of records with a simplified interface using Bulk API 2.0.

### IN THIS SECTION:

[New and Changed Objects](#)

Access more data through these new and changed standard objects.

[SOSL](#)

Salesforce Object Search Language (SOSL) includes new support for searching through list views.

[REST API](#)

REST API includes new resources for Flow Runtime API (pilot).

[SOAP API](#)

SOAP API includes a changed type.

### EDITIONS

Available in: **Developer**,  
**Enterprise**, **Unlimited**, and  
**Performance** Editions

### [Chatter REST API](#)

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. In this release, we introduce upvoting, answer verification, and private files on records.

### [Reports and Dashboards REST API](#)

Reports and Dashboards REST API enhancements include a new resource describing folder sharing, new report and dashboard properties, and a change to an analytic notification parameter.

### [User Interface API \(Generally Available\)](#)

Build Salesforce UI for native mobile apps and custom web apps using the same API that Salesforce uses to build the Salesforce app and Lightning Experience. Not only do you get data and metadata in a single response, but the response matches metadata changes made to the org by Salesforce admins. You don't have to worry about layouts, picklists, field-level security, or sharing—all you have to do is build an app that users love.

### [Bulk API 2.0 \(Generally Available\)](#)

The new Bulk API 2.0, now GA, provides a simple interface for quickly loading large amounts of data into your Salesforce org.

### [Tooling API](#)

Tooling API includes new and changed objects. You can now perform CRUD operations on most Tooling API objects in active orgs. More Tooling API objects now support field-level updates.

### [Metadata API](#)

Metadata API includes new and changed types and fields.

### [Data Services: Work on Millions of Records with Custom Big Objects and Async SOQL](#)

You can store, manage, and query millions of records with custom big objects and Async SOQL, which are both now generally available.

### [Enterprise Messaging](#)

Use events to simplify communication between business systems. With the Change Data Capture pilot, receive real-time notifications of record changes in Salesforce. With the High-Volume Platform Events pilot, deliver and receive millions of custom events efficiently.

### [Customize Console Apps with the Lightning Console JavaScript API \(Generally Available\)](#)

The Lightning Console JavaScript API includes new and updated methods that let you customize a Lightning console app and utility bar programmatically. These changes apply to Lightning Experience only.

### [Open CTI API](#)

The `notifyInitializationComplete()` method is now available in Lightning Experience. This method notifies Salesforce that the softphone initialization is complete and that Salesforce must not switch to a standby URL. While the softphone initializes, a loading icon displays in the softphone area. The `notifyInitializationComplete()` method works differently than in Salesforce Classic. This change applies to Lightning Experience only.

### [Other API Changes](#)

Federated Search now supports RSS format for results. SOQL queries on record types have a new restriction.

## New and Changed Objects

Access more data through these new and changed standard objects.

### IN THIS SECTION:

#### [New Objects](#)

These objects are new.

### Changed Objects

These objects have changed.

## New Objects

These objects are new.

### **ChannelProgram**

Represents a channel program that vendors use to market and sell their products through channel partners.

### **ChannelProgramFeed**

Represents a single feed item on a channel program feed.

### **ChannelProgramHistory**

Represents the history of changes to the values in the fields of a channel program object. Access is read-only.

### **ChannelProgramLevel**

Represents a level, based on member experience, in a channel program.

### **ChannelProgramLevelFeed**

Represents a single feed item on a channel program level feed.

### **ChannelProgramLevelHistory**

Represents the history of changes to the values in the fields of a channel program level object. Access is read-only.

### **ChannelProgramMember**

Represents a partner who is a member of a channel program.

### **ChannelProgramOwnerSharingRule**

Represents a rule for sharing a channel program object with users other than the owner.

### **ChannelProgramShare**

Represents a sharing entry on a channel program record.

### **ListEmail**

Represents a list email in Salesforce.

### **ListEmailRecipientSource**

For a list email in Salesforce, represents the source of a recipient's email.

### **LocationFeed**

Represents a single feed item on a location detail page.

### **LogoutEventStream**

Represents a streaming endpoint for LogoutEvents.

### **MobileSettingsAssignment**

Represents the assignment of a unique configuration of Field Service Lightning mobile app settings to a specific user profile.

### **NetworkAffinity**

Represents a junction object that associates a user profile with a Network object, that is, with a community. Use NetworkAffinity to assign a default community to a user profile.

### **OmniSupervisorConfig**

Represents a configuration that determines a user's Omni-Channel Supervisor settings.

### **OmniSupervisorConfigGroup**

Represents a public group assigned to the Omni-Channel Supervisor configuration that's visible to a supervisor user.

**OmniSupervisorConfigProfile**

Represents a configuration that determines the Omni-Channel Supervisor settings that are assigned to users who are assigned to a specific profile. User-level configurations override profile-level configurations.

**OmniSupervisorConfigUser**

Represents a configuration that determines the Omni-Channel Supervisor settings that are assigned to a user. User-level configurations override profile-level configurations.

**OutOfOffice**

Represents a user-set value on a profile that shows when the user intends to be out of the office.

**PartnerFundAllocation**

Represents allocated funds from a partner marketing budget for channel partners.

**PartnerFundAllocationFeed**

Represents a single feed item on a partner fund allocation feed.

**PartnerFundAllocationHistory**

Represents the history of changes to the values in the fields of a partner fund allocation object. Access is read-only.

**PartnerFundAllocationOwnerSharingRule**

Represents a rule for sharing a partner fund allocation object with users other than the owner.

**PartnerFundAllocationShare**

Represents a sharing entry on a partner fund allocation record.

**PartnerFundClaim**

Represents a claim of funds from the partner marketing budget by a channel partner.

**PartnerFundClaimFeed**

Represents a single feed item on a partner fund claim feed.

**PartnerFundClaimHistory**

Represents the history of changes to the values in the fields of a partner fund claim object. Access is read-only.

**PartnerFundClaimOwnerSharingRule**

Represents a rule for sharing a partner fund claim object with users other than the owner.

**PartnerFundClaimShare**

Represents a sharing entry on a partner fund claim record.

**PartnerFundRequest**

Represents a request for funds from the partner marketing budget by a channel partner.

**PartnerFundRequestFeed**

Represents a single feed item on a partner fund request feed.

**PartnerFundRequestHistory**

Represents the history of changes to the values in the fields of a partner fund request object. Access is read-only.

**PartnerFundRequestOwnerSharingRule**

Represents a rule for sharing a partner fund request object with users other than the owner.

**PartnerFundRequestShare**

Represents a sharing entry on a partner fund request record.

**PartnerMarketingBudget**

Represents a budget that provides funds to channel partners for selling and marketing products and services.

**PartnerMarketingBudgetFeed**

Represents a single feed item on a partner marketing budget feed.

**PartnerMarketingBudgetHistory**

Represents the history of changes to the values in the fields of a partner marketing budget object. Access is read-only.

**PartnerMarketingBudgetOwnerSharingRule**

Represents a rule for sharing a partner marketing budget object with users other than the owner.

**PartnerMarketingBudgetShare**

Represents a sharing entry on a partner marketing budget record.

**PendingServiceRouting**

Represents a work assignment that's waiting to be routed. This object is available in API version 40.0 and later.

**QuoteOwnerSharingRule**

Represents a rule for sharing a Quote with users other than the owner.

**QuoteShare**

Represents a sharing entry on a Quote.

**ServiceCrew**

Represents a group of users who can be assigned to field service appointments as a unit.

**ServiceCrewFeed**

Represents a single feed item on a service crew detail page.

**ServiceCrewHistory**

Represents the history of changes to the values in the fields of a service crew.

**ServiceCrewMember**

Represents a service resource who belongs to a specific service crew.

**ServiceCrewMemberFeed**

Represents a single feed item on a service crew member detail page.

**ServiceCrewMemberHistory**

Represents the history of changes to the values in the fields of a service crew member.

**ServiceCrewOwnerSharingRule**

Represents the rules for sharing a service crew.

**ServiceCrewShare**

Represents a sharing entry on a service crew.

**UserPermissionAccess**

Represents the permissions accessibility for a current user.

**VoiceMailGreeting**

Represents a custom greeting message that plays upon reaching a user's voicemail.

**VoiceMailGreetingShare**

Represents a sharing entry on a VoiceMailGreeting.

**VoiceUserPreferences**

Represents the number the user displays when making outbound calls.

**VoiceUserPreferencesShare**

Represents a sharing entry on a VoiceUserPreferences object.

**WorkTypeOwnerSharingRule**

Represents the rules for sharing a work type.

**WorkTypeShare**

Represents a sharing entry on a work type.

## Changed Objects

These objects have changed.

### Changed Objects

#### ActivityHistory

On the `ActivitySubtype` field, added the value `List Email`.

#### AgentWork

Added the `create` property to the `CapacityPercentage` and `CapacityWeight` fields.

The `ShouldSkipCapacityCheck` field was added.

#### AppExtension

On the `FieldServiceMobileSettingsId` field, the `creatable` property has changed to `true`.

#### AppMenuItem

Type field now includes `Network`.

#### Asset

Added fields `ProductCode` and `StockKeepingUnit`.

#### AssignedResource

The `ServiceCrewId` field was added.

#### CampaignInfluenceModel

The `isActive` and `RecordPreference` fields were added.

3 new values were added to the `ModelType` field.

- 3: First Touch
- 4: Last Touch
- 5: Even Distribution

#### CaseMilestone

The `CaseMilestone` object now supports the `describeCompactLayout()` call.

#### ContentDocument

The `SharingPrivacy` field was added.

#### ContentNote

The `SharingPrivacy` field was added.

#### ContentVersion

The `SharingPrivacy` field was added.

The `L` picklist value was added to the `ContentLocation` field.

#### ContractLineItem

The `Product2Id` field was added.

#### CustomBrandAsset

The following picklist values were added to the `AssetCategory` field:

- `StaticLogoImageUrl`
- `LoginQuaternaryColor`
- `LoginRightFrameUrl`
- `LogoAssetId`

The `AssetSourceId` field was added. It replaced `ForeignKeyAssetId`, which is now deprecated.

### DigitalSignature

- On the `SignatureType` field:
  - The property `defaultedOnCreate` has changed to true.
  - The property `restrictedPicklist` has changed to false.

### DuplicateRecordSet

On the `DuplicateRecordSet` object, the `DuplicateRuleId` field label has been changed back to `Duplicate Rule ID`. Earlier in Winter '18, the label was `Parent`.

### Event

The 2 (Proposed event) picklist value is no longer used in the `GroupEventType` picklist.

### EventLogFile

The `EventLogFile` object has the following new event types.

- Knowledge Article
- Platform Encryption
- Search
- Search Click

The `CLIENT_IP` field was changed from a data type of IP to String. Also, the value `Salesforce.com` IP now represents a Salesforce internal IP, such as a login from Salesforce Workbench or AppExchange. This change affects all event types that contain `CLIENT_IP`.

In the Time-Based Workflow event type, the `ERRDEL` value was added to the `Type` field. `ERRDEL` indicates that an entry was deleted from the workflow queue because there was an error reading the record that triggered the workflow rule. The associated time-dependent actions weren't processed.

### FeedComment

The `IsVerified` field was added.

### FeedItem

The `HasVerifiedComment` field was added.

### FieldServiceMobileSettings

- The object attributes `createable` and `deletable` have changed to true.
- On the `DeveloperName` field, the properties `createable` and `updatable` have changed to true.
- On the `Language` field, the properties `defaultedOnCreate` and `createable` have changed to true.
- The property `creatable` has changed to true on the following fields:
  - `NavbarBackgroundColor`
  - `BrandInvertedColor`
  - `FeedbackPrimaryColor`
  - `FeedbackSecondaryColor`
  - `PrimaryBrandColor`
  - `SecondaryBrandColor`
  - `ContrastPrimaryColor`
  - `ContrastSecondaryColor`
  - `ContrastTertiaryColor`
  - `ContrastQuaternaryColor`

- ContrastQuinaryColor
- ContrastInvertedColor
- IsSendLocationHistory
- GeoLocationMinUpdateFreqMins
- GeoLocationAccuracy
- RecordDataCacheTimeMins
- MetadataCacheTimeDays
- UpdateScheduleTimeMins
- IsShowEditFullRecord
- TimeIntervalSetupMins
- DefaultListViewDeveloperName
- NavbarInvertedColor
- FeedbackSelectedColor
- FutureDaysInDatePicker
- FutureDaysInDatePicker
- PastDaysInDatePicker
- PastDaysInDatePicker
- The following fields were added:
  - MasterLabel
  - IsDefault
  - BgGeoLocationMinUpdateFreqMins
  - BgGeoLocationAccuracy

### FlowInterview

The Guid field was added to the FlowInterview documentation in the *Object Reference for Salesforce and Force.com*.

### ForecastingType

The following fields were added:

- OpportunitySplitTypeId
- RoleType
- Territory2ModelId

### Group

The ChannelProgramGroup picklist value was added to the Type field.

### Location

The following fields were added:

- RootLocationId
- LocationLevel

### NavigationMenuItem

The GlobalAction picklist value was added to the Type field.



**Network**

The `OptionsUpDownVoteEnabled`, `OptionsEinsteinAnswersEnabled`, `OptionsCWBannerState`, `OptionsTopicSuggestionsEnabled`, `OptionsEnableTalkingAboutStats` fields were added.

**NetworkMember**

The field `PreferencesDisableMarketingCloudEmail` was added.

**PlatformAction**

The `TargetObject` and `TargetUrl` fields were added.

**Product2**

The field `StockKeepingUnit` was added.

**SecurityCustomBaseline**

The `isDefault` field was added.

**ServiceAppointment**

On the `ParentRecordId` field, the property `nillable` has changed to `false`.

**ServiceResource**

- On the `RelatedRecordId` field, the property `nillable` has changed to `true`.
- On the `ResourceType` field, the picklist value `C` was added.
- The `ServiceCrewId` field was added.

**SlaProcess**

The fields `RecordTypeId` and `IsRecordTypeApplied` were added.

**Task**

On the `TaskSubtype` field, the picklist value `List Email` was added.

**UserAppMenuItem**

The `Type` field now includes `Network`.

**UserLicense**

The `UsedLicensesLastUpdated` field was added.

The following fields are now generally available: `MasterLabel`, `Status`, `TotalLicenses`, `UsedLicenses`.

**UserServicePresence**

The object attributes `deletable` and `undeletable` have changed to `true`.

The `OwnerId` field was added.

**VoiceCall**

The following fields were added:

- `CallerIdType`
- `FromCountry`
- `ToCountry`
- `VendorType`

**VoiceVendorInfo**

The following fields were added:

- `CompanyNumber`
- `LocalPresenceDefaultNumber`

**WorkOrder**

The following fields were added:

- `MinimumCrewSize`
- `RecommendedCrewSize`
- `ServiceReportTemplateId`

**WorkOrderLineItem**

The following fields were added:

- `LastViewedDate`
- `LastReferencedDate`
- `MinimumCrewSize`
- `RecommendedCrewSize`
- `ServiceReportTemplateId`

**WorkType**

The following fields were added:

- `OwnerId`
- `MinimumCrewSize`
- `RecommendedCrewSize`

**SEE ALSO:**

[Gain Visibility into Tenant Secret Usage with Event Log Files](#)

[Track Encryption Key Management Usage in Event Monitoring Logs](#)

## SOSL

Salesforce Object Search Language (SOSL) includes new support for searching through list views.

**Search Within a List View**

USING `ListView` lets you search through an object's list view, making it easier to look through a large list view for a single record.

The following SOSL statement searches through the *MVP Customers* list view for the Account object for *Acme*.

```
FIND {Acme} IN ALL FIELDS RETURNING Account(Id, Name USING ListView=MVPCustomers)
```

## REST API

REST API includes new resources for Flow Runtime API (pilot).

**IN THIS SECTION:**

[New Resources: Flows and Flow Interviews \(Pilot\)](#)

Have you ever wanted to build your own flow runtime experience? Here's your chance. We're providing two resources to describe flows and three resources to describe and manipulate interviews. If you're an existing pilot customer, nothing has changed since the last release.

## New Resources: Flows and Flow Interviews (Pilot)

Have you ever wanted to build your own flow runtime experience? Here's your chance. We're providing two resources to describe flows and three resources to describe and manipulate interviews. If you're an existing pilot customer, nothing has changed since the last release.



**Note:** We provide Flow Runtime REST API to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Flow Runtime REST API isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Flow Runtime REST API in the [IdeaExchange](#).

### Flows

Lists active flow definitions in your org.

```
/vXX.X/process/flows
```

### Specific Flow

Lists summary information about a specific flow.

```
/vXX.X/process/flows/FlowName
```

### Paused Interviews

Lists paused interviews that the running user can resume.

```
/vXX.X/process/interviews
```

### New Interview

Starts a flow interview.

```
/vXX.X/process/interviews/FlowName
```

### Specific Interview

Continues, pauses, or finishes an in-progress interview, or resumes a paused interview.

```
/vXX.X/process/interviews/FlowName/guid
```

### SEE ALSO:

[Make Flow Runtime REST API Requests in XML \(Pilot\)](#)

[Request Body for New Interview Expects a Map \(Pilot\)](#)

[Use Trailing Slashes in Flow Runtime REST Resources \(Pilot\)](#)

## SOAP API

SOAP API includes a changed type.

## New, Changed, and Deprecated Calls and Types

This type has changed.

## Changed Calls

### **describeQuickActions () and DescribeQuickActionResult**

For Update a Record type actions, read-only fields on the action layout are now included as part of the `layoutItems` returned in `DescribeLayoutRow`.

## Changed Types

### **RunTestsRequest**

A `tests` property was added to the `RunTestsRequest` type used in the `runTests ()` call. This property's type is `TestsNode[]`. Currently, a `TestsNode` array can contain only one entry.

### **TestsNode**

A new subtype for `RunTestsRequest`. Lets you run individual methods in an Apex test class. A tests node includes a class ID or a class name, and an array of test methods.

## Chatter REST API

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. In this release, we introduce upvoting, answer verification, and private files on records.



**Note:** To create custom Chatter and community experiences in Salesforce, use [ConnectApi \(Chatter in Apex\): New and Changed Classes and Enums](#).

### IN THIS SECTION:

[New and Changed Chatter REST API Resources](#)

These resources are new or have changes this release.

[New and Changed Chatter REST API Request Bodies](#)

These request bodies are new or have changes this release.

[New and Changed Chatter REST API Response Bodies](#)

These response bodies are new or have changes this release.

## New and Changed Chatter REST API Resources

These resources are new or have changes this release.

### Chatter Feeds

#### **Get or search Chatter streams, regardless of the context community (pilot)**



**Note:** We provide the `globalScope` parameter to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. The `globalScope` parameter isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

- Make a GET request to the existing `/chatter/streams` resource with the new `globalScope` parameter.
- Make a GET request to the existing `/chatter/streams/streamId` resource with the new `globalScope` parameter.

**Get pinned feed elements from a group or topic feed (beta)**

**Note:** This release contains a beta version of pinned posts, which means it's a high-quality feature with known limitations. Post pinning isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for pinned posts in the [Trailblazer Community](#).

- Make a GET request to the new `/chatter/feeds/record/groupId/pinned-feed-elements` resource.
- Make a GET request to the new `/chatter/feeds/topics/topicId/pinned-feed-elements` resource.

**Pin or unpin feed elements to a group or topic feed (beta)**

- Make a PATCH request to the new `/chatter/feeds/record/groupId/pinned-feed-elements` resource with the new Pin Capability Input.
- Make a PATCH request to the new `/chatter/feeds/topics/topicId/pinned-feed-elements` resource with the new Pin Capability Input.

**Get up and down votes for a comment**

Make a GET request to the new `/chatter/comments/commentId/capabilities/up-down-vote` resource.

**Vote a comment up or down**

Make a PATCH request to the new `/chatter/comments/commentId/capabilities/up-down-vote` resource with the new Up Down Vote Capability Input or the `vote` parameter.

**Get up and down votes for a feed element**

Make a GET request to the new `/chatter/feed-elements/feedElementId/capabilities/up-down-vote` resource.

**Vote a feed element up or down**

Make a PATCH request to the new `/chatter/feed-elements/feedElementId/capabilities/up-down-vote` resource with the new Up Down Vote Capability Input or the `vote` parameter.

**Access the media references capability for a feed element**

Make a GET request to the new `/chatter/feed-elements/feedElementId/capabilities/media-references` resource.

**Get the verified status of an answer on a question post**

Make a GET request to the new `/chatter/comments/commentId/capabilities/verified` resource.

**Mark an answer on a question post as verified or unverified**

Make a PATCH request to the new `/chatter/comments/commentId/capabilities/verified` resource with the new Verified Capability Input or the `isVerified` parameter.

**Get sorted comments for a feed element**

Make a GET request to the existing `/chatter/feed-elements/feedElementId/capabilities/comments` resource with the new `sort` parameter.

Make a GET request to the existing `/chatter/feed-elements/feedElementId` resource with the new `commentSort` parameter.

**Communities Knowledge****Get top-viewed articles for a topic**

Make a GET request to the new `/connect/communities/communityId/topics/topicId/top-viewed-articles` resource.

## Files

### Create files that are private on records

- Make a POST request to the existing `/connect/files/fileId` resource with the updated File Input or the new `sharingPrivacy` parameter.
- Make a POST request to the existing `/connect/files/users/userId` resource with the updated File Input or the new `sharingPrivacy` parameter.
- Make a POST request to the existing `/connect/folders/folderId/items` resource with the updated File Input or the new `sharingPrivacy` parameter.

### Update files to be private on records

Make a PATCH request to the existing `/connect/files/fileId` resource with the updated File Input or the new `sharingPrivacy` parameter.

## New and Changed Chatter REST API Request Bodies

These request bodies are new or have changes this release.

## Chatter Feeds

### Extensions Capability Input

This request body has this new property.

- `itemsToRemove`—List of attachment IDs to remove from the feed element.

### Pin Capability Input (Beta)

This new request body has these properties.

- `entityId`—ID of the entity to pin or unpin. In version 41.0, `entityId` must be a feed item ID, and only one feed item can be pinned per feed.
- `isPinned`—Specifies whether to pin (`true`) or unpin (`false`) the entity.

### Up Down Vote Capability Input

This new request body has one property.

- `vote`—Specifies the value of the vote for a feed element or comment. Values are:
  - Down
  - None
  - Up

### Verified Capability Input

This new request body has one property.

- `isVerified`—Specifies whether to mark the comment as verified (`true`) or unverified (`false`).

## Files

### File Input

This request body has one new property.

- `sharingPrivacy`—Specifies the sharing privacy of a file. Values are:
  - None—File is visible to anyone with record access.
  - PrivateOnRecords—File is private on records.

## New and Changed Chatter REST API Response Bodies

These response bodies are new or have changes this release.

### Chatter Feeds

#### Candidate Answers Status

This new response body has these properties.

- `hasCandidateAnswers`—Indicates whether candidate answers are available for a question.
- `hasCandidateAnswersPublished`—Indicates whether any candidate answers are published.
- `hasCandidateAnswersRated`—Indicates whether any candidate answers are rated.

#### Chatter Stream

This response body has one new property.

- `community`—Community summary for the stream.

#### Comment Capabilities

This response body has these new properties.

- `upDownVote`—If a comment has this capability, users can vote it up or down.
- `verified`—If a comment has this capability, users with permission can mark it as verified or unverified.

#### Community Summary

This new response body has these properties.

- `id`—18-character ID of the community.
- `name`—Localized name of the community.

#### Extension

This response body has one new property.

- `attachmentId`—Attachment ID of the extension.

#### Extension Definition

This response body has one new property.

- `position`—Position in which the extension is displayed in the publisher.

This response body no longer includes these properties.

- `isEnabledInCommunity`
- `isEnabledInLightningPublisher`

#### Feed

This response body has one new property.

- `pinnedFeedElementsUrl` (Beta)—URL of pinned feed items.

#### Feed Element Capabilities

This response body has these new properties.

- `mediaReferences`—If a feed element has this capability, it has one or more media references.
- `pin` (Beta)—If a feed element has this capability, users who have permission can pin it to a feed.
- `upDownVote`—If a feed post or comment has this capability, users can vote it up or down.

#### Feed Item

This response body has one new property.

- `hasVerifiedComment`—`true` if the feed item has a verified comment, otherwise `false`.

**Media Reference**

This new response body has these properties.

- `mediaUrl`—URL to stream or download the media.
- `thumbnailUrl`—URL of the media's thumbnail, if one exists.

**Media Reference Capability**

This new response body has one property.

- `media`—Collection of media references.

**Message Segment: Inline Image**

This response body has one new property.

- `imageDetails`—Details for the image, or `null` if the file isn't an image.

**Pin Capability (Beta)**

This new response body has these properties.

- `isPinnableByMe`—Specifies whether the context user can pin or unpin the entity to the feed (`true`) or not (`false`).
- `isPinned`—Specifies whether the entity is pinned (`true`) or not pinned (`false`) to the feed.

**Pinned Feed Element Collection (Beta)**

This new response body has one property.

- `elements`—Collection of pinned feed elements.

**Question and Answers Capability**

This response body has one new property.

- `candidateAnswers`—Status of candidate answers for the question.

**Social Post Capability**

This response body has one new property.

- `hiddenBy`—User who hid the social post.

**Up Down Vote Capability**

This new response body has these properties.

- `downVoteCount`—Number of down votes.
- `myVote`—Specifies the context user's vote. Values are:
  - `Down`
  - `None`
  - `Up`
- `upVoteCount`—Number of up votes.

**Verified Capability**

This new response body has these properties.

- `isVerifiableByMe`—Specifies whether the context user has permission to mark comments as verified or unverified (`true`) or not (`false`).
- `isVerified`—`true` if the comment is marked as verified, otherwise `false`.
- `lastVerifiedByUser`—User who last marked the comment as verified or unverified, otherwise `null`. Also `null` if the context user doesn't have permission to mark comments as verified or unverified.
- `lastVerifiedDate`—Date when the comment was last marked as verified or unverified, otherwise `null`. Also `null` if the context user doesn't have permission to mark comments as verified or unverified.



## Communities

### Community

This response body has one new property.

- `siteAsContainerEnabled`—Specifies whether the community uses Site.com pages (`true`) or Visualforce tabs (`false`).

## Field Service

### Features

This response body has one new property.

- `liveAgentHostName`—Live Agent host name configured for the org.

### User Settings

This response body has these new properties.

- `hasFieldServiceLocationTracking`—User has Field Service Lightning GPS tracking enabled.
- `hasFieldServiceMobileAccess`—User has access to the Field Service Lightning mobile app.

## Files

### File Detail

This response body has these new properties.

- `createdDate`—ISO8601 date string when the file was created.
- `sharingPrivacy`—Specifies the sharing privacy of a file. Values are:
  - `None`—File is visible to anyone with record access.
  - `PrivateOnRecords`—File is private on records.
- `systemModstamp`—ISO8601 date string indicating when a user or any automated system process, such as a trigger, updated the file.

### File Summary

This response body has these new properties.

- `createdDate`—ISO8601 date string when the file was created.
- `sharingPrivacy`—Specifies the sharing privacy of a file. Values are:
  - `None`—File is visible to anyone with record access.
  - `PrivateOnRecords`—File is private on records.
- `systemModstamp`—ISO8601 date string indicating when a user or any automated system process, such as a trigger, updated the file.

### Folder

This response body has one new property.

- `systemModstamp`—ISO8601 date string when a user or any automated system process, such as a trigger, updates the folder.

## Reports and Dashboards REST API

Reports and Dashboards REST API enhancements include a new resource describing folder sharing, new report and dashboard properties, and a change to an analytic notification parameter.

## New Resources and Parameters: **Folders and Analytic Notifications**

The Reports and Dashboards REST API contains a new resource, `/folders`, that describes folder sharing, and changes to a parameter on the `notifications` resource.

Resource URI	Supported HTTP Methods	Description
<code>/services/data/v41.0/folders/&lt;folder ID&gt;</code>	GET	Describes a report or dashboard folder.
<code>/services/data/v41.0/folders/&lt;folder ID&gt;/shares</code>	GET	Return sharing information about a report or dashboard folder (GET).
	POST	Share a report or dashboard folder (POST).
	PUT	Share a report or dashboard folder, deleting all other shares of the report or dashboard folder (PUT).
<code>/services/data/v41.0/folders/&lt;folder ID&gt;/shares/&lt;share ID&gt;</code>	GET	Describe a specified instance of sharing (GET).
	PATCH	Save changes to a specified instance of sharing (PATCH).
	DELETE	End a specified instance of sharing a report or dashboard folder (DELETE).
<code>/services/data/v41.0/folders/&lt;folder ID&gt;/shareRecipients?shareType=&lt;share type&gt;</code>	GET	Return a list of people who a report or dashboard folder is shared with. Valid values for <code>shareType</code> are: <ul style="list-style-type: none"> <li>• user</li> <li>• group</li> </ul>
<code>/services/data/v41.0/analytics/notifications?source=lightningSubscribe</code>	GET POST	The <code>?source=lightningSubscribe</code> parameter is deprecated in all versions of the API. Instead, use <code>?source=lightningReportSubscribe</code> .
<code>/services/data/v41.0/analytics/notifications?source=lightningReportSubscribe</code>	GET	Return a list of recent notifications (GET).
	POST	Create an analytic notification (POST).

## New and Changed Methods: **Report Instances**

You can now POST report instances with an empty request body. Previously, you needed to specify `reportMetadata` in the request body.

### Reports

Resource URI	Supported HTTP Method	Description
<code>/services/data/v41.0/reports/&lt;report ID&gt;/instances</code>	POST	You can now asynchronously execute a report run with an empty request body. Previously, you needed to specify <code>reportMetadata</code> in the request body.

## Changed Resources: **Dashboard Describe** and **Dashboard Results**

The Reports and Dashboards REST API includes new properties to describe the new Lightning table dashboard component, and properties to specify whether or not components show percentages and shorten numbers (for example, 1,876 becomes 1.9k).

### Dashboards

Property	Type	Description
<code>displayUnits</code>	String	Specify how to display numbers. Possible values are: <ul style="list-style-type: none"> <li><code>whole</code> — Display the true value of the number without rounding it.</li> <li><code>auto</code> — Display the number rounded to the nearest thousand, million, etc. and displayed as a shortened value. For example, 1,876 displays as 1.9k. In calculating summaries, the true value of the number (1,876) is used, even if 1.9k is displayed.</li> <li><code>null</code> — Customizing how numbers display isn't applicable..</li> </ul>
<code>showPercentages</code>	Boolean	Specify whether percentages are displayed ( <code>true</code> ) or not ( <code>false</code> ).
<code>tableColumns</code>	<code>tableColumns[]</code>	The <code>type</code> property <code>tableColumns</code> object has a new valid value: <ul style="list-style-type: none"> <li><code>detail</code> — A value from a source report column.</li> </ul>
<code>visualizationType</code>	<code>FlexTable[]</code>	The <code>visualizationType</code> property has a new Type, <code>FlexTable[]</code> , which describes a Lightning table dashboard component.

### Analytic Notifications

Property	Type	Description
<code>source</code>	String	The <code>lightningSubscribe</code> value of the <code>source</code> property is deprecated in all versions of the API. Instead, use <code>lightningReportSubscribe</code> .

## User Interface API (Generally Available)

Build Salesforce UI for native mobile apps and custom web apps using the same API that Salesforce uses to build the Salesforce app and Lightning Experience. Not only do you get data and metadata in a single response, but the response matches metadata changes made to the org by Salesforce admins. You don't have to worry about layouts, picklists, field-level security, or sharing—all you have to do is build an app that users love.

### EDITIONS

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

### IN THIS SECTION:

[All Resources Updated to API Version 41.0](#)

All resources have been updated to User Interface API version 41.0. If you used the Developer Preview version of User Interface API and have requests that use earlier API versions, they now return a 404 error.

### Less SOQL, More Actions!

User Interface API has new resources that make it easy to get data and metadata about actions displayed in the Salesforce UI. Examples include standard and custom buttons, quick actions, and productivity actions. Previously, this information was accessible only through SOQL queries. Use these resources to build UI for actions.

### Manage Favorites

Favorites let users access frequently used pages in Salesforce. Use the new User Interface API Favorites resources to manage favorites.

### Upload Binary Files

If a record has a Base64 field, you can upload binary data to the field when you create or update a record.

### Get Child Records

User Interface API has several resources that include child records in their responses. If a record has many child relationships, a response can be huge and have a negative effect on performance. To get only the records you need, request records for specific child relationships and set the page size of the results.

### Get Lookup Field Suggestions

When a user edits a lookup field, use this resource to search for and display suggestions. You can search for most recently used matches, for matching names, or for any match in a searchable field. You can also specify lookup filter bindings for dependent lookups.

### Specify Fields and Layout Type for Clone and Create Record Defaults

When you get default values to clone or create a record you can specify either a layout type and optional fields, or fields and optional fields.

### Other User Interface API Changes

We made some other changes to User Interface API to get it all dressed up for its GA debut.

## All Resources Updated to API Version 41.0

All resources have been updated to User Interface API version 41.0. If you used the Developer Preview version of User Interface API and have requests that use earlier API versions, they now return a 404 error.

## Less SOQL, More Actions!

User Interface API has new resources that make it easy to get data and metadata about actions displayed in the Salesforce UI. Examples include standard and custom buttons, quick actions, and productivity actions. Previously, this information was accessible only through SOQL queries. Use these resources to build UI for actions.

### Introducing Action Resources

Use these resources to get actions:

- `/ui-api/actions/global`—Get the actions in the Global Actions menu.
- `/ui-api/actions/record/{recordIds}`—Get the actions on record detail pages.
- `/ui-api/actions/record/{recordId}/record-edit`—Get the actions on a record edit page.
- `/ui-api/actions/record/{recordId}/related-list/{relatedListIds}`—Get the actions on related lists on a record detail page.
- `/ui-api/actions/record/{recordId}/related-list-record/{relatedListRecordIds}`—Get the actions on records in related lists.
- `/ui-api/actions/list-view/{listViewIds}`—Get the header actions on list views.
- `/ui-api/actions/list-view-record/{recordIds}`—Get the record actions on list views.
- `/ui-api/actions/list-view-chart/{objectApiName}`—Get the chart actions on list views.

- `/ui-api/actions/mru-list/${objectApiNames}`—Get the header actions on the most recently used (MRU) list view for objects.
- `/ui-api/actions/flexipage/${flexipageNames}`—Get the actions on Lightning pages (FlexiPages).
- `/ui-api/actions/lookup/${objectApiNames}`—Get the actions on lookup fields.
- `/ui-api/actions/photo/${recordIds}`—Get the photo actions for pages.

### Get Actions for a Record Detail Page

As an example, let's say we have an Account record detail page with a record ID of `001R0000003IDlwIAG`. The page has some standard buttons and quick actions. To get information about all the actions on this page, make this request:

```
GET /services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG
```

The request returns a list of actions on the page and the URLs of the request and subrequests.

```
{
  "actions": {
    "001R0000003IDlwIAG": {
      "actions": [{
        "actionListContext": "Record",
        "actionTarget": null,
        "actionTargetType": "Invoke",
        "apiName": "Edit",
        "externalId": "00DR00000008n7M:001R0000003IDlwIAG::Record:Phone:StandardButton:Edit",
        "iconUrl": "https://yourInstance.salesforce.com/img/icon/t4v35/action/edit_120.png",
        "id": "0JVR00000000017OAA",
        "isMassAction": "false",
        "label": "Edit",
        "primaryColor": "1DCCBF",
        "relatedListRecordId": null,
        "relatedSourceObject": null,
        "section": "Page",
        "sourceObject": "001R0000003IDlwIAG",
        "subtype": null,
        "targetObject": "Account",
        "targetUrl": null,
        "type": "StandardButton"
      }],
      {
        "actionListContext" : "Record",
        "actionTarget" : "/services/data/v41.0/quickActions/NewTask/describe",
        "actionTargetType" : "Describe",
        "apiName" : "NewTask",
        "externalId" : "00DR00000008n7M:001R0000003IDlwIAG::Record:Phone:09DR00000000Sns",
        "iconUrl" :
        "https://yourInstance.salesforce.com/img/icon/t4v35/action/new_task_120.png",
        "id" : "0JVR00000000014OAA",
        "isMassAction" : "false",
        "label" : "New Task",
        "primaryColor" : "4BC076",
        "relatedListRecordId" : null,
        "relatedSourceObject" : null,
        "section" : "ActivityComposer",
```

```

    "sourceObject" : "001R0000003IDlwIAG",
    "subtype" : "Create",
    "targetObject" : "Task",
    "targetUrl" : null,
    "type" : "QuickAction"
  }

  ... Additional actions removed for brevity ...

],
"links": ["/services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG/record-edit",

"/services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG/related-list",
"/services/data/v41.0/ui-
api/actions/record/001R0000003IDlwIAG/related-list-record/${relatedRecordId}"],
  "url": "/services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG"
}
},
"url": "/services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG"
}

```

### Filter the Action Results

To filter the results returned by the Actions resources, use the following request parameters:

- `actionTypes`—The action type.
- `formFactor`—The layout display size.
- `sections`—The section of the user interface that the action resides in.

For example, to filter a record actions request so that it includes only standard button actions, set the `actionTypes` parameter to `StandardButton`.

```

GET
/services/data/v41.0/ui-api/actions/record/001R0000003IDlwIAG?actionTypes=StandardButton

```

## Manage Favorites

Favorites let users access frequently used pages in Salesforce. Use the new User Interface API Favorites resources to manage favorites.

### Introducing Favorites Resources

Use these resources to manage favorites.

- `/ui-api/favorites`—Create a favorite and get all of a user's favorites.
- `/ui-api/favorites/${favoriteId}`—Get and update a favorite.
- `/ui-api/favorites/batch`—Update a batch of favorites.
- `/ui-api/favorites/${favoriteId}/usage`—Update the usage of an individual favorite, for example, the last time and number of times the favorite was clicked.

Responses return all fields required to render favorites.

```

GET /ui-api/favorites

```

```

{
  "favorites" : [ {

```

```

    "accessCount" : 1,
    "iconColor" : "FCB95B",
    "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/opportunity_120.png",

    "id" : "0MVR00000004GGLOAM",
    "lastAccessDate" : "2017-08-07T18:51:54.000Z",
    "name" : "My Best Opportunities",
    "objectType" : "Opportunity",
    "sortOrder" : 1,
    "subtitle" : "Opportunities",
    "target" : "00BR0000000tTTwMAM",
    "targetType" : "ListView"
  }, {
    "accessCount" : 1,
    "iconColor" : "A094ED",
    "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/contact_120.png",
    "id" : "0MVR00000004FOPOA2",
    "lastAccessDate" : "2017-07-21T21:35:27.000Z",
    "name" : "John Doe",
    "objectType" : "Contact",
    "sortOrder" : 2,
    "subtitle" : "Contact",
    "target" : "003R00000001bivAIAQ",
    "targetType" : "Record"
  }, {
    "accessCount" : 1,
    "iconColor" : "f6707b",
    "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/custom/custom84_120.png",
    "id" : "0MVR000000004D5OAI",
    "lastAccessDate" : "2017-08-11T17:24:01.000Z",
    "name" : "Trend Board",
    "objectType" : "TabDefinition",
    "sortOrder" : 3,
    "subtitle" : "Tab",
    "target" : "Trend_Board",
    "targetType" : "Tab"
  }, {
    "accessCount" : 1,
    "iconColor" : "F88962",
    "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/lead_120.png",
    "id" : "0MVR00000004GOpOAM",
    "lastAccessDate" : "2017-08-11T17:24:24.000Z",
    "name" : "Leads to Follow Up on",
    "objectType" : "Lead",
    "sortOrder" : 4,
    "subtitle" : "Leads",
    "target" : "Lead",
    "targetType" : "ListView"
  } ]
}

```

Adding a new favorite to the top of the list is as easy as knowing what type of favorite it is and what the target should be. For example, to add a new Account as a favorite, add it as a Record favorite using its ID. To insert it at the beginning of the list, explicitly set the sortOrder to 1, otherwise by default it's inserted at the end of the list.

```
POST /ui-api/favorites?target=001R00000002LBXUIA4&targetType=Record&sortOrder=1
{
  "accessCount" : 1,
  "iconColor" : "7F8DE1",
  "iconUrl" :
  "https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/account_120.png",
  "id" : "0MVR000000004DFOAY",
  "lastAccessDate" : "2017-08-11T19:26:04.000Z",
  "name" : "Global Media",
  "objectType" : "Account",
  "sortOrder" : 1,
  "subtitle" : "Account",
  "target" : "001R00000002LBXUIA4",
  "targetType" : "Record"
}
```

To keep track of how often a user is using a particular favorite, make a patch request using the favorite's ID and see the `accessCount` increment and the `lastAccessDate` update.

```
PATCH /ui-api/favorites/0MVR000000004DFOAY/usage
{
  "accessCount" : 2,
  "iconColor" : "7F8DE1",
  "iconUrl" :
  "https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/account_120.png",
  "id" : "0MVR000000004DFOAY",
  "lastAccessDate" : "2017-08-11T19:31:17.416Z",
  "name" : "Global Media",
  "objectType" : "Account",
  "sortOrder" : 1,
  "subtitle" : "Account",
  "target" : "001R00000002LBXUIA4",
  "targetType" : "Record"
}
```

Removing a favorite is just as easy and requires using the favorite's ID again.

```
DELETE /ui-api/favorites/0MVR000000004DFOAY
```

If you want to reorder or rename your favorites, you have some options. The first option is to individually update each favorite one by one. When reordering this way, the server automatically updates the sort order of affected favorites in the list so the sort order stays consistent. The second and more useful option is to reorder, rename, and delete favorites in a single request. This is useful for building an edit dialog where the user can rename some favorites, delete others, and reorder whichever they choose. All of these changes can then be made in a single request.

```
PUT /ui-api/favorites/batch
```

Here's the input for the PUT request:

```
{
  "favorites" : [
    {
```



```

        "id": "0MVR000000004GOpOAM"
    },
    {
        "id": "0MVR000000004GGlOAM",
        "name": "Top Opportunities"
    },
    {
        "id": "0MVR000000004D5OAI"
    }
]
}

```

Here's the response for the PUT request:

```

{
    "favorites" : [ {
        "accessCount" : 1,
        "iconColor" : "F88962",
        "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/lead_120.png",
        "id" : "0MVR000000004GOpOAM",
        "lastAccessDate" : "2017-08-11T17:24:24.000Z",
        "name" : "Leads to Follow Up on",
        "objectType" : "Lead",
        "sortOrder" : 1,
        "subtitle" : "Leads",
        "target" : "Lead",
        "targetType" : "ListView"
    }, {
        "accessCount" : 1,
        "iconColor" : "FCB95B",
        "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/standard/opportunity_120.png",

        "id" : "0MVR000000004GGlOAM",
        "lastAccessDate" : "2017-08-07T18:51:54.000Z",
        "name" : "Top Opportunities",
        "objectType" : "Opportunity",
        "sortOrder" : 2,
        "subtitle" : "Opportunities",
        "target" : "00BR00000000tTTwMAM",
        "targetType" : "ListView"
    }, {
        "accessCount" : 1,
        "iconColor" : "f6707b",
        "iconUrl" :
"https://canada.mobile01.blitz.salesforce.com/img/icon/t4v35/custom/custom84_120.png",
        "id" : "0MVR000000004D5OAI",
        "lastAccessDate" : "2017-08-11T17:24:01.000Z",
        "name" : "Trend Board",
        "objectType" : "TabDefinition",
        "sortOrder" : 3,
        "subtitle" : "Tab",
        "target" : "Trend_Board",
        "targetType" : "Tab"
    }
]
}

```

```
} 1
}
```

In this single request, we deleted our contact John Doe, moved Leads to Follow Up on to the top of the list, and we renamed My Best Opportunities to Top Opportunities.

## Upload Binary Files

If a record has a Base64 field, you can upload binary data to the field when you create or update a record.

The field determines the binary data file size limit. For example, the `ContentNote.Content` field has a different limit than the `Attachment.Body` field. For information about fields, see [Standard Objects](#) in *Object Reference for Salesforce and Force.com*.

There are two ways to upload a binary file in request.

- [Upload Binary Files in a Multipart/Form-Data Request](#)
- [Upload Binary Files in a JSON Request Body](#)

### Upload Binary Files in a Multipart/Form-Data Request

To upload a binary file, create a multipart request with a part that contains the JSON request body required by the resource, and a part for each file you want to upload. Each file must have its own part. To upload binary data to multiple fields, add a part for each field. The part names must match the field names.

Let's create a `ContentNote` record and upload a binary file to its `Content` field, which is the content or body of the note.

This [curl](#) example performs a multi-part request that contains the JSON request body and the binary file.

```
curl -v -H 'Authorization: Bearer 00Dxx0000001gER!ARoAQFFeB_55d8B3Sh....'
-F 'json={"apiName": "ContentNote", "fields": {"Title": "My List of
Things"}};type=application/json'
-F 'Content=@note.txt;type=application/octet-stream'
-X POST 'http://{instance-name}.salesforce.com/services/data/v41.0/ui-api/records'
```

The first part, starting with `-F`, contains the JSON request body that the `/ui-api/records` resource requires. The request body contains the API name of the record (`ContentNote`) and the title of the record (`My List of Things`). The part name must be `json`.

The second part, starting with the second `-F`, contains the binary file. The part name must match the name of the Base64 field to which the data is uploaded. The `ContentNote` Base64 field name is `Content`, and the plain text file we're uploading is `note.txt`.

### Upload Binary Files in a JSON Request Body

The JSON format doesn't support binary data. To upload a binary file in a JSON payload, encode the file using [Base64](#) encoding.

In this sample Record Input JSON request body, the `Content` property contains the file as a Base64 encoded string.

```
{
  "apiName": "ContentNote",
  "fields": {
    "Content": "SGksIFRoXMGaXMgYmFzZTY0",
    "Title": "Sample Title"
  }
}
```

This curl example creates a ContentNote record and uploads the file.

```
curl -X POST -H 'Authorization: Bearer 00Dxx0000001gER!ARoAQFFeB_55d8B3Sh...'
-H 'Content-Type: application/json' -H "Content-type: application/json"
-d '{"apiName": "ContentNote", "fields": {"Content": "SGksIFRoaxMgaXMgYmFzZTY0", "Title":
"Sample Title"} }'
'http://{instance-name}.salesforce.com/services/data/v41.0/ui-api/records'
```

## Get Child Records

User Interface API has several resources that include child records in their responses. If a record has many child relationships, a response can be huge and have a negative effect on performance. To get only the records you need, request records for specific child relationships and set the page size of the results.

### Get Child Records for a Specific Record and Child Relationship

To get child records for a specific child relationship for a specific record, make a GET request to `/ui-api/records/${recordId}/child-relationships/${relationshipName}`.

This example returns all the Contacts related to the Account record 001R0000003I6CoIAK.

```
/ui-api/records/001R0000003I6CoIAK/child-relationships/Contacts
```

The response is paginated. Use the `pageSize` parameter to specify the number of records per page. The default is 5.

```
{
  "count" : 5,
  "currentPageUrl" :

"/services/data/v41.0/ui-api/records/001R0000003I6CoIAK/child-relationships/Contacts?page=1&pageSize=5",

  "nextPageUrl" :

"/services/data/v41.0/ui-api/records/001R0000003I6CoIAK/child-relationships/Contacts?page=2&pageSize=5",

  "previousPageUrl" : null,
  "records" : [ {
    "apiName" : "Contact",
    "childRelationships" : { },
    "fields" : {
      "AccountId" : {
        "displayValue" : null,
        "value" : "001R0000003I6CoIAK"
      },
      "Id" : {
        "displayValue" : null,
        "value" : "003R0000007qXwQIAU"
      },
      "Name" : {
        "displayValue" : null,
        "value" : "John Smith"
      }
    }
  },
  "id" : "003R0000007qXwQIAU",
  "recordTypeInfo" : null
},
```

```
...
}
```

### Get a Record and Include Child Records

To include child records in a request for a record, use the `childRelationships` parameter  
`/ui-api/records/{recordId}?childRelationships={childRelationshipsList}`.

This example gets the data for fields in the compact layout for an opportunity record with ID `006R0000001rboIIAQ`. The response includes `OpportunityCompetitors` and `Partners` child records.

```
GET
/ui-api/records/006R0000001rboIIAQ?layoutTypes=Compact&childRelationships=Opportunity.Competitors,Opportunity.Partners
```

The child relationships records in the response are paginated. Use the `pageSize` parameter to specify the number of records per page. The default is 5.

### Get a Batch of Records and Include Child Records

To include child records in a batch request for a record, use the `childRelationships` parameter  
`/ui-api/records/batch/{recordIds}?childRelationships={childRelationshipsList}`.

This example gets the `Account.Name` field and `Account.Contacts` child records for two accounts.

```
GET /ui-api/records/batch/001R0000003I6CeIAK,001R0000003I6CgIAK?
fields=Account.Name&childRelationships=Account.Contacts
```

The child records in the response are paginated. Use the `pageSize` parameter to specify the number of records per page. The default is 5.

### Get Record Data and Metadata and Include Child Records

To include child records in a request for record data and metadata, use the `childRelationships` parameter  
`/ui-api/record-ui/{recordIds}?childRelationships={childRelationshipsList}`.

The response for this request includes layout information, metadata, and record data. The record data includes child relationship data for `Contacts` and `Opportunities`.

```
GET
/ui-api/record-ui/001R0000003I6CoIAK?childRelationships=Account.Contacts,Account.Opportunities
```

The child records in the response are paginated. Use the `pageSize` parameter to specify the number of records per page. The default is 5.

## Get Lookup Field Suggestions

When a user edits a lookup field, use this resource to search for and display suggestions. You can search for most recently used matches, for matching names, or for any match in a searchable field. You can also specify lookup filter bindings for dependent lookups.

```
/ui-api/lookups/{objectApiName}/{fieldApiName}
/ui-api/lookups/{objectApiName}/{fieldApiName}/{targetApiName}
```

- `objectApiName`—The API name of a source object.
- `fieldApiName`—The API name of a lookup field on the source object.
- `targetApiName`—The API name of the target (lookup) object.

A request to `/ui-api/lookups/{objectApiName}/{fieldApiName}` returns a `Lookup Values` response body, which is a map of object API names to `Record Collection` response bodies that contain the lookup results for each object type.

A request to `/ui-api/lookups/{objectApiName}/{fieldApiName}/{targetApiName}` returns a `Record Collection` response body, which is a list of the records that contains the lookup results for the target object.

The response from each resource is paginated. Use the `pageSize` parameter to specify the number of records per page. The default is 25.

```
{
  "lookupResults" : {
    "Account" : {
      "count" : 3,
      "currentPageUrl" :
"/services/data/v41.0/ui-api/lookups/Opportunity/AccountId/Account?searchType=Recent&page=1&pageSize=25",

      "nextPageUrl" : null,
      "previousPageUrl" : null,
      "records" : [ {
        "apiName" : "Account",
        "childRelationships" : { },
        "fields" : {
          "Id" : {
            "displayValue" : null,
            "value" : "001R00000003IIXdIAG"
          },
          "Name" : {
            "displayValue" : null,
            "value" : "Cats, LLC"
          }
        },
        "id" : "001R00000003IIXdIAG",
        "recordTypeInfo" : null
      }, {
        "apiName" : "Account",
        "childRelationships" : { },
        "fields" : {
          "Id" : {
            "displayValue" : null,
            "value" : "001R00000003IG0MIAW"
          },
          "Name" : {
            "displayValue" : null,
            "value" : "Tables, Inc."
          }
        },
        "id" : "001R00000003IG0MIAW",
        "recordTypeInfo" : null
      }, {
        "apiName" : "Account",
        "childRelationships" : { },
        "fields" : {
          "Id" : {
            "displayValue" : null,
            "value" : "001R00000003IG0wIAG"
          },
          "Name" : {
            "displayValue" : null,
            "value" : "Games, Inc."
          }
        }
      },
    ],
  },
}
```

```

        "id" : "001R00000003IG0wIAG",
        "recordTypeInfo" : null
      } ]
    }
  }
}

```

### Example: Get Most Recently Used Records

A lookup relationship field links a source object to a target object. To edit a lookup field, users click a lookup icon to search for and select a value from a popup list. The target object provides the values in the list.

For example, the Opportunity object has an `AccountId` lookup field. When a user edits an Opportunity record, the user selects an Account to associate with the Opportunity. To build UI that suggests the most recently used Account records to the user, use this resource. The default value of the `searchType` parameter is `Recent`, so the request doesn't specify it.

```
GET /ui-api/lookups/Opportunity/AccountId
```

### Example: Search for Suggestions

To search all searchable fields for suggestions, set `searchType=Search`. This example searches for strings that start with the characters `ca` (a wildcard is implied).

```
GET /ui-api/lookups/Opportunity/AccountId?searchType=Search&q=ca
```

### Example: Search Record Names for Suggestions

To search record name fields for suggestions, set `searchType=TypeAhead`. This example searches record names for strings that start with the characters `ta` (a wildcard is implied).

```
GET /ui-api/lookups/Opportunity/AccountId?searchType=TypeAhead&q=ta
```

### Example: Search Dependent Lookups for Suggestions

Some lookup fields have lookup filters that restrict their valid values by referencing fields on the source object. These fields are called dependent lookups. For example, you can filter the `Case Contact` field to show only contacts that are associated with the account selected in the `Case Account Name` field.

In the Salesforce UI, this lookup filter is `Contact Name: Account Name ID EQUALS Case: Account Name ID`. In User Interface API, lookup filter information appears in the `filteredLookupInfo` property of the `Object Info` response body, which is returned from several resources, including `/ui-api/record-ui/{recordIds}`. If the `filteredLookupInfo` property is non-null, the field it describes is a dependent lookup.

In this example, the `Case` object's `ContactId` field has a `filteredLookupInfo` property containing a `controllingFields` property. The controlling field is `AccountId`. To restrict the lookup search, you must pass all controlling fields and their values to the lookups resource in the `dependentFieldBindings` parameter.

```

"objectInfos" : {
  ...
  "Case" : {
    "apiName" : "Case",
    ...
    "fields" : {
      ...
      "ContactId" : {
        "apiName" : "ContactId",
        ...properties removed for space...
        "filteredLookupInfo" : {
          "controllingFields" : [ "AccountId" ],
          "dependent" : true,

```

```

        "optionalFilter" : false
    },
    ...
    "sortable" : true,
    "unique" : false,
    "updateable" : true
},
...

```

To get the value for `AccountId`, look in the `Record` response body, which is returned from several resources, including `/ui-api/record-ui/{recordIds}`.

```

"records" : {
  "500R0000000bKpBIAU" : {
    "apiName" : "Case",
    "childRelationships" : { },
    "fields" : {
      ...Some properties removed for space...
      "AccountId" : {
        "displayValue" : null,
        "value" : "001R00000003IGOMIAW"
      },
      "CaseNumber" : {
        "displayValue" : null,
        "value" : "00001005"
      },
      ...
    }
  }
}

```

To filter the suggestions for a dependent lookup, specify the names and values of the controlling fields in the `dependentFieldBindings` query parameter. (This example has one controlling field).

```
/ui-api/lookups/case/ContactId?dependentFieldBindings=AccountId=001R00000003IGOMIAW
```

## Specify Fields and Layout Type for Clone and Create Record Defaults

When you get default values to clone or create a record you can specify either a layout type and optional fields, or fields and optional fields.

To clone or create a record:

1. Make a request to either of these resources to get default values.
  - GET `/ui-api/record-defaults/create/${objectApiName}`
  - GET `/ui-api/record-defaults/clone/${recordId}`
2. Use the default values in a request to POST `/ui-api/records`. You can now specify `fields` and `optionalFields` or a `layoutType` and `optionalFields` in the request.

Parameter Name	Type	Description	Required or Optional	Available Version
<code>formFactor</code>	String	The layout display size for the record. One of these values: <ul style="list-style-type: none"> <li>• <b>Large</b>—(Default) Use this value to get a layout for desktop display size.</li> </ul>	Optional	41.0

Parameter Name	Type	Description	Required or Optional	Available Version
		<ul style="list-style-type: none"> <li>• <code>Medium</code>—Use this value to get a layout for tablet display size.</li> <li>• <code>Small</code>—Use this value to get a layout for phone display size.</li> </ul>		
<code>optionalFields</code>	<code>String[]</code>	<p>A collection of optional field names. If a field is accessible to the context user, it's included in the response. If a field isn't accessible to the context user, it isn't included in the response, but it doesn't cause an error.</p> <p>Specify names in the format <b><code>ObjectName.FieldName</code></b>. You can get any field that has a named relationship to this record. There is no limit to the number of fields you can specify.</p>	Optional	41.0
<code>recordTypeId</code>	<code>Id</code>	The ID of the record type (RecordType object) for the new record. If not provided, the default record type is used.	Optional	41.0

## Other User Interface API Changes

We made some other changes to User Interface API to get it all dressed up for its GA debut.

### Supported Objects

These objects are now supported by User Interface API.

- `BusinessAccount`
- `Case`
- `ContentDocument`
- `ContentNote`
- `ContentVersion`
- `ContractLineItem`
- `Lead`
- `Note`
- `Opportunity`
- `OpportunityLineItem`
- `OpportunityTeamMember`
- `Order`
- `OrderItem`
- `PersonAccount`
- `Pricebook2`



- PricebookEntry
- Product2
- QuoteDocument
- QuoteLineItem
- ServiceContract
- ServiceCrew
- ServiceCrewMember
- ServiceResourceCapacity
- Shipment
- User

### Field Response Body

The Field response body has these new properties.

- `compoundComponentName`—If this field is a component field of a compound field, the value is the normalized component name. Otherwise the value is `null`. For example, if the field represents `"BillingStreet"` of an Address compound field, this property contains `"Street"`.
- `compoundFieldName`—If this field is a component field of a compound field, this property contains the top-level compound field. Otherwise, the value of this property is `null`.
- `inlineHelpText`—The text that displays in the field-level help hover text.
- `polymorphicForeignKey`—Indicates whether the field is a foreign key over a domain of multiple objects (`true`) or not (`false`).
- `searchPrefilterable`—Indicates whether a foreign key (relationship field) can be included in a SOSL `WHERE` clause.
- `unique`—Indicates whether a field's value must be unique.

### Get Layout Component API Names

Every layout component response body includes an `apiName` property. There are several types of layout components. The value of the `apiName` property depends on the type of layout component.

- `Canvas`
- `CustomLink`
- `EmptySpace`
- `Field`
- `ReportChart`
- `VisualforcePage`

If the layout component type is `Canvas`, this property is the API name of the canvas app. If the layout component type is `Field`, this property is the API name of the field. Otherwise, this property is the API name of the field powering the component, if there is one.

### Object Info Resource Returns Metadata for All Object Fields

You can no longer specify `layoutType`, `modes`, or `recordTypeId` in a request to `/ui-api/object-info/{objectApiName}`.

### Match Results Response Body

The Match Results response body has these new properties.

- `objectLabel`—The object's label.
- `objectLabelPlural`—The object's label in plural form.

- `themeInfo`—Information about the object's theme, including color and icon.

#### Record Exception Error Response Body

The `statusCode` property has been renamed `errorCode` because the property contains a Salesforce error code, not an HTTP status code.

#### Record Layout Section Response Body

The Record Layout Section response body has two new properties that contain layout section information for the context user type.

- `collapsible`—Indicates whether the section can be collapsed.
- `id`—The ID of the section.

#### Record Layout Section User State Response Body

The Record Layout Section User State response body has two new properties that contain layout section information for the context user.

- `collapsed`—Indicates whether to initially display the section as collapsed.
- `id`—The ID of the section.

#### Record Layout User State Response Body

The Record Layout Section User State response body has two new properties that contain layout section information for the context user.

- `id`—The ID of a layout.
- `sectionUserStates`—A map of layout section user states, keyed to section IDs.

## Bulk API 2.0 (Generally Available)

The new Bulk API 2.0, now GA, provides a simple interface for quickly loading large amounts of data into your Salesforce org.

Bulk API 2.0 uses the same secure, high-performance REST framework as the Force.com REST API, which provides features like OAuth authentication and CORS support. Bulk API 2.0 also provides a streamlined interface for data operations by breaking data files into batches automatically. Upload your data and specify an operation. Salesforce then determines the most efficient way to batch the data.

Bulk API 2.0 includes the following new features.

#### Updated limits

Limits for Bulk API 2.0 data have been increased to 100 million records in a 24-hour period, and 150 MB of base64 encoded data per job data upload request.

#### Delimiter options for CSV data

Bulk API 2.0 supports six different types of field delimiters: backquote, caret, comma, pipe, semicolon, and tab.

#### Line ending options for CSV data

Bulk API 2.0 supports linefeed and carriage-return plus linefeed line endings for row data.

#### Monitoring support

You can monitor Bulk API 2.0 jobs on the Bulk Data Load Job setup pages in Salesforce.

#### New endpoints

All Bulk API 2.0 resources now use an endpoint root of `/services/data/vXX.X/jobs/ingest/` in place of the `/bulk/jobs/` root used in the Bulk API 2.0 pilot.

#### New unprocessed records resource

Bulk API 2.0 provides the `unprocessedrecords` resource for retrieving job data that was not processed during a failed job.

## Tooling API

Tooling API includes new and changed objects. You can now perform CRUD operations on most Tooling API objects in active orgs. More Tooling API objects now support field-level updates.

The [Force.com Tooling API Developer's Guide](#) contains all Tooling API information.

### IN THIS SECTION:

#### [Tooling API Now Supports CRUD Operations in Active Orgs](#)

CRUD operations on most Tooling API objects are now allowed in active orgs, just as they are in other kinds of orgs. However, for performance reasons you can't perform CRUD operations in an active org for some Tooling API objects.

#### [Update Individual Fields for More Tooling API Objects](#)

You can use Tooling API to directly modify individual fields of some metadata types. Instead of updating all fields in the object hierarchy, you can PATCH an individual field or subset of fields directly.

#### [Tooling API New and Changed Objects](#)

Tooling API includes new and changed objects.

#### [Tooling API Changed Calls and Resources](#)

Tooling API includes changed SOAP calls and REST resources.

## Tooling API Now Supports CRUD Operations in Active Orgs

CRUD operations on most Tooling API objects are now allowed in active orgs, just as they are in other kinds of orgs. However, for performance reasons you can't perform CRUD operations in an active org for some Tooling API objects.

CRUD operations on the following Tooling API objects in an active org generate the error "Save or update not supported in active organizations."

- ApexClass
- ApexComponent
- ApexPage
- ApexTrigger
- CustomField
- CustomObject

## Update Individual Fields for More Tooling API Objects

You can use Tooling API to directly modify individual fields of some metadata types. Instead of updating all fields in the object hierarchy, you can PATCH an individual field or subset of fields directly.

In API version 39.00, Tooling API added support for updating individual fields of metadata settings types. API version 41.0 extends Tooling API support for field-level updates to the following objects:

- EventDelivery
- EventSubscription
- KeywordList
- ModerationRule

For top-level objects that support field-level updates, you have these options.

- You can use the `Metadata` field on the object to update the fields. The `Metadata` field represents the entire Metadata API contract of the object.

The `Metadata` field is best suited to updating all fields in a hierarchy of metadata types, starting with the top-level, packageable type.

- To update a subset of fields in the object hierarchy, we modified the interface so that you can update individual fields directly. Field-level update is the better choice when you want to update only a subset of fields.

For example, in both of these code samples, the `Active` field on `ModerationRule` is updated to `true`. The code using field-level update is shorter and simpler.

### **Example: Changing a Field Value Using Field-Level Update**

Request:

```
GET host/query/?q=Select+DurableId,Active+from+ModerationRule
```

Response body after successfully executing the GET:


```
{
  "size": 1,
  "totalSize": 1,
  "done": true,
  "queryLocator": null,
  "entityTypeName": "ModerationRule",
  "records": [
    {
      "attributes": {
        "type": "ModerationRule",
        "url": "host/subjects/ModerationRule/DurableId"
      },
      "DurableId": "DurableId",
      "Active": false
    }
  ]
}
```

Use the URL from the response to PATCH the value of the `Active` field:

```
PATCH host/subjects/ModerationRule/DurableId
Body: { "Active": true }
```

After receiving an HTTP response code of 204 No Content, you can confirm that the `Active` field has been updated to `true`. To confirm the field value, repeat the first query or GET the URL used for the PATCH.

### **Example: Changing a Field Value Through the Metadata Field**

-  **Note:** To update the `Metadata` field, you also need the value of the `FullName` field, so include `FullName` in your query.

Request:

```
GET host/query/?q=Select+Metadata,Fullname+from+ModerationRule
```

Response (200 OK):

```
{
  "size" : 1,
  "totalSize" : 1,
  "done" : true,
  "queryLocator" : null,
  "entityTypeName" : "ModerationRule",
  "records" : [ {
    "attributes" : {
      "type" : "ModerationRule",
      "url" : "host/subjects/ModerationRule/DurableId"
    },
    "Metadata" : {
      "action" : {
        "ModerationRuleAction" : "Block"
      }
      "actionLimit" : "5"
      "active" : "false"
      "description" : "Community bad word list"
      "entitiesAndFields" : {
        "entityName" : "FeedItem"
        "fieldName" : "RawBody"
        "keywordList" : "community1.badword_list"
      }
      "masterLabel" : "Civil Language"
      "notifyLimit" : null
      "timePeriod" : "Medium"
      "type" : "Content"
      "userCriteria" : "All"
      "userMessage" : "You can't use %BLOCKED_KEYWORD% or other inappropriate words...",

      "urls" : null
    }
    "FullName" : "TestRule"
  } ]
}
```

Request - PATCH on records.attributes.url:

```
PATCH host/subjects/ModerationRule/DurableId
Body:
{
  "Metadata" : {
    "action" : "Block",
    "actionLimit" : "5",
    "active" : "true",
    "description" : "Community bad word list",
    "entitiesAndFields" : {
      "entityName" : "FeedItem",
      "fieldName" : "RawBody",
      "keywordList" : "community1.badword_list",
```

```

    }
    "masterLabel" : "Civil Language",
    "notifyLimit" : null,
    "timePeriod" : "Medium",
    "type" : "Content",
    "userCriteria" : "All",
    "userMessage" : "You can't use %BLOCKED_KEYWORD% or other inappropriate words...",

    "urls" : null
  },
  "FullName" : "TestRule"
}

```

## Tooling API New and Changed Objects

Tooling API includes new and changed objects.

### New Objects

#### **EventDelivery**

Represents how an event instance maps to a target payload.

#### **EventSubscription**

Represents a subscription to an event type.

#### **Index**

Represents the index defined within a custom big object.

#### **IndexField**

Represents the fields in the index of a custom big object.

#### **Package2 (Beta)**

Represents a second-generation package in a Dev Hub org.

#### **Package2Member (Beta)**

Represents a component in a second-generation package.

#### **Package2Version (Beta)**

Represents a second-generation package version in a Dev Hub org.

#### **Package2VersionCreateRequest (Beta)**

Represents a request to create a second-generation package version in a Dev Hub org.

#### **Package2VersionCreateRequestError (Beta)**

Represents an error encountered while creating a second-generation package version.

#### **InstalledSubscriberPackage**

Represents a package (first- and second-generation) that is installed in a subscriber's org.

#### **InstalledSubscriberPackageVersion**

Represents a package version (first- and second-generation) that is installed in a subscriber's org.

#### **PackageVersionUninstallRequestError**

Represents an error encountered while requesting an uninstall of a Package2Version (second-generation package version).

#### **SubscriberPackage**

Represents a package (first- and second-generation) across all Salesforce instances.

**SubscriberPackageVersionUninstallRequest**

Represents a request to uninstall a `Package2Version` (second-generation package version).

**Changed Objects****BusinessHoursSettings**

The `Holidays` field has been deprecated.

**CaseSettings**

The following fields have been added.

**EmailServicesAddress**

Specifies the routing address generated by Salesforce and used for setting up Email-to-Case forwarding.

**EmailToCaseId**

An identifier referencing the organization's Email-to-Case settings.

**IsVerified**

Indicates whether the customer has verified the routing address (typically by clicking a confirmation email).

**ShowEmailAttachmentsInCaseAttachmentsRl**

Indicates whether the case Attachments related list shows email attachments.

**WebToCaseId**

An identifier referencing the organization's Web-to-Case settings.

The following fields have been deprecated.

- `IsNewEmailDefaultTemplateEnabled`
- `NewEmailDefaultTemplateClass`

**ChatterAnswersSettings**

The `IsOptimizeQuestionFlowEnabled` field has been deprecated.

**ChatterMobileSettings**

The following fields have been deprecated.

- `AndroidAuthorized`
- `BlackberryAuthorized`
- `IpadAuthorized`
- `IphoneAuthorized`
- `IsChatterMobileEnabled`
- `SessionTimeout`

**EntityDefinition**

The following field has been added.

**IsAutomatedActivityCaptureEnabled**

Indicates whether the object is enabled for Einstein Activity Capture.

**FieldDefinition**

The following field has been added.

**IsPolymorphicForeignKey**

Indicates whether the foreign key includes multiple object types.

**FileUploadAndDownloadSecuritySettings**

The label of the `FileDownloadBehavior` field was changed to `Behavior`.

**ForecastingSettings**

The following fields have been deprecated.

- `AdjustmentsSettings`
- `AdjustmentsSettingsId`
- `DataSourceSettingsId`
- `ForecastRangeSettings`
- `ForecastRangeSettingsId`
- `ForecastingCategoryMappings`
- `OpportunityListFieldsLabelMappings`
- `OpportunityListFieldsSelectedSettings`
- `OpportunityListFieldsSelectedSettingsId`
- `QuotasSettings`
- `QuotasSettingsId`

The following fields have been added.

**IsAmount**

Indicates whether the forecast type is based on revenue amounts. The value of `isAmount` is always the opposite of the value of `isQuantity`.

**IsAvailable**

Indicates whether the forecast type can currently be used in the organization.

**IsQuantity**

Indicates whether the forecast type is based on product quantities. The value of `isQuantity` is always the opposite of the value of `isAmount`.

**MasterLabel**

Indicates the UI label for the forecast type.

**KnowledgeSettings**

The following fields have been added.

**AnswersId**

An identifier referencing the metadata used to manage settings for Salesforce knowledge and Answers.

**ArticlePublicSharingCommunities**

Represents the metadata used to manage settings for Salesforce Knowledge and Communities.

**ArticlePublicSharingSitesChatterAnswersId**

An identifier referencing the metadata used to manage settings for Salesforce Knowledge and Sites with Chatter Answers.

**ArticlePublicSharingSitesId**

An identifier referencing the metadata used to manage settings for Salesforce Knowledge and Sites.

**CaseFieldsId**

An identifier referencing a list of the case fields used to suggest articles for the case.

**CasesId**

An identifier referencing the metadata used to manage settings for Salesforce Knowledge and Cases.

**LanguagesId**

An identifier referencing a list of languages enabled for Salesforce Knowledge.



**SuggestedArticlesId**

An identifier referencing the metadata used to manage settings for the case fields used to suggest articles for cases.

**WorkOrderFieldsId**

An identifier referencing a list of the work order fields used to suggest articles for the work order.

**WorkOrderLineItemFieldsId**

An identifier referencing a list of the work order line item fields used to suggest articles for the work order line item.

**MobileSettings**

The following field has been added.

**SalesforceMobileId**

An identifier referencing settings for devices running Salesforce Classic Mobile.

**PasswordPolicies**

The label of the `MinPasswordLength` field was changed to `MinimumPasswordLength`.

**PathAssistantSettings**

The label of the `PathAssistantForOpportunityEnabled` field was changed to `PathAssistantEnabled`.

**QuickActionDefinition**

The following field changed.

**Type**

`Flow` is a new valid value as a Beta.

**TransactionSecurityPolicy**

The following fields have been added.

**Description**

The description entered for a policy.

**FullName**

The full name of the associated object in the Metadata API.

**Metadata**

The policy's metadata.

**Tooling API Changed Calls and Resources**

Tooling API includes changed SOAP calls and REST resources.

**Changed SOAP Calls****runTests()**

The `RunTestsRequest` object that you pass to the `runTests()` call now includes a `tests` property that the `runTests()` call requires in API version 41.0 and later. This property is an array of type [TestsNode](#).

**runTestsAsynchronous()**

The `tests` parameter is available and required in API version 41.0 and later. This property is an array of type [TestsNode](#).

**Changed REST Resources****/runTestsAsynchronous/**

The `/runTestsAsynchronous/` REST resource accepts names of Apex test classes, including names that include a namespace. Previously, this resource accepted only class IDs. This change applies to all API versions.

**/runTestsSynchronous/**

The `/runTestsSynchronous/` REST resource accepts names of Apex test classes, including names that include a namespace. Previously, this resource accepted only class IDs. This change applies to all API versions.

## Metadata API

Metadata API includes new and changed types and fields.

### New Metadata Types

**CaseSubjectParticle**

Represents Social Business Rules custom format for the Case Subject field on cases created from inbound social posts.

**EventDelivery**

Represents how an event instance maps to a target payload.

**EventSubscription**

Represents a subscription to an event type.

**FeatureParameterBoolean**

Represents a boolean feature parameter in a packaging org that has access to the Feature Management App (FMA). Feature parameters let you drive app behavior and track activation metrics in subscriber orgs that install your package.

**FeatureParameterDate**

Represents a date feature parameter in a packaging org that has access to the Feature Management App (FMA). Feature parameters let you drive app behavior and track activation metrics in subscriber orgs that install your package.

**FeatureParameterInteger**

Represents an integer feature parameter in a packaging org that has access to the Feature Management App (FMA). Feature parameters let you drive app behavior and track activation metrics in subscriber orgs that install your package.

**Index**

Represents an index defined within a custom big object. Use this metadata type to define the composite primary key (index) for a custom big object.

**NetworkBranding**

Represents the branding and color scheme applied to a community. Replaces the Branding subtype in the Network component.

**SocialCustomerServiceSettings**

Represents which Social Business Rules option has been saved to format inbound social posts to cases.

**TopicsForObjects**

Represents the ability to assign topics to objects or to remove topic assignments.

### Updated Metadata Types and Fields

These metadata types have changed or have fields that have been added or changed.

**ActivitiesSettings**

The following field has been removed.

**showRequestedMeetingsOnHomePage**

Found in the Salesforce Classic Calendar on the Home tab. Displayed the Requested Meetings subtab for Cloud Scheduler, which was retired in Winter '18, and listed the meetings a user had requested but not confirmed. Now that this feature has been removed, users no longer see the New Meeting Request button from the calendar on the Home tab. Administrators controlled this field on the Activity settings page.

**CommunityTemplateDefinition**

The following field has been added.

**baseTemplate**

Denotes that the CommunityTemplateDefinition was created in API version 41.0 or later.

**CustomApplication**

The following field has been added.

**subscriberTabs**

A list of tabs added by a subscriber to a Lightning app installed from a managed package.

The following field has changed.

**workspaceMapping**

Represents how records for a specific tab open in a console app. The field previously supported Salesforce Classic console apps. Starting in API version 41.0, use it for Lightning console apps too.

**CustomObject**

The following field has been added.

**eventType**

This field applies only to platform events. Indicates whether the event is a standard or a high-volume event. High-volume events are available as part of a pilot.

**CustomObjectTranslation**

The following fields have been added.

**fieldSets**

A list of field set translations.

**fieldSetTranslation**

Contains the details for a field set translation.

**CustomSite**

The following fields have been added.

**browserXssProtection**

Determines whether protection against cross-site scripting attacks is enabled. If a reflected cross-site scripting attack is detected, the browser shows a blank page with no content.

**contentSniffingProtection**

Determines whether the browser is prevented from inferring the MIME type from the document content. If enabled, it also prevents the browser from executing malicious files (JavaScript, Stylesheet) as dynamic content.

**cspUpgradeInsecureRequests**

Determines whether HTTP requests, including third-party domains, are upgraded to HTTPS.

**referrerPolicyOriginWhenCrossOrigin**

Determines whether the referrer header hides sensitive information when navigating to third-party sites.

**Field Types**

The following new `FieldType` is available as a beta feature for custom fields. For information on enabling this feature in your production org, contact Salesforce.

**Time**

`Time` is a timestamp without the date. Use the `Time` field type when you require a time of day that is not specific to a single date. For example, use it to display business hours or if you want to compare times of the day to calculate a duration.

**FlexiPage**

The following field has been added to the `ComponentInstance` subtype.

**visibilityRule**

A set of one or more filters that define the conditions under which the component displays on the page.

**ForecastingSettings**

The following fields were added.

**hasProductFamily**

Indicates whether the forecasting type has product family forecasts enabled.

**opportunitySplitName**

Indicates whether the forecasting type has a split type, and if so, the name of the split type.

**territory2ModelName**

Indicates whether the forecasting type has a Territory2 model, and if so, the name of the Territory2 model.

**NamedCredential**

The following fields have been added.

**allowMergeFieldsInBody**

Specifies whether Apex code can use merge fields to populate the HTTP request body with org data when a callout is made.

**allowMergeFieldsInHeader**

Specifies whether Apex code can use merge fields to populate the HTTP header with org data when a callout is made.

**generateAuthorizationHeader**

Specifies whether Salesforce generates an authorization header and applies it to each callout that references the named credential.

**Network**

The following fields have been added.

**communityRoles**

Identifies users with Customer, Partner or Employee roles in a community.

**disableReputationRecordConversations**

Determines whether to exclude contributions to records when counting points toward reputation levels, if reputation levels are enabled for the community.

**emailFooterLogo**

The document name of the logo that appears in the footer of community emails.

**emailFooterText**

The text that appears in the footer of community emails.

**enableCustomVFErrorPageOverrides**

Determines whether to use custom Visualforce error pages instead of the default Visualforce error pages.

**enableDirectMessages**

Determines whether community users can send direct messages to start a private conversation with one or more members.

**enableGuestFileAccess**

Determines whether guest users view asset files shared with the community on publicly accessible pages and login pages. If public access is enabled in Community Builder at the page or community level, this property is automatically enabled.

**enableShowAllNetworkSettings**

Shows settings that are hidden by default based on how the community is set up.

**enableTalkingAboutStats**

Determines whether community users see how many people are discussing a topic. The number of people discussing the topic appears as the user types the topic and the system gives topic suggestions.

**enableTopicSuggestions**

Enables topic suggestions when users write posts.

**enableUpDownVote**

Replaces the option to like a question or answer with the option to upvote or downvote.

**loginLogoStaticImageUrl**

The URL to the logo that appears on the community login page.

**loginQuaternaryColor**

The background color for the community login page.

**loginRightFrameUrl**

The path to the right frame for the community login page.

**recommendationAudience**

Creates an audience of new community members, or can be used to manage customized lists of audience members to organize and target recommendations.

**recommendationDefinition**

Represents a custom recommendation to drive engagement for a community. Targets a specific audience and uses channels to specify a location for the recommendation.

**selfRegProfilePageOverrideSetting**

Required. Specifies the page type that the Self Registration page setting applies to.

The following field has been deprecated.

**branding**

The NetworkBranding type replaces the Branding subtype.

**QuickAction**

The following field was added as a beta.

**flowDefinition**

If the custom action invokes a flow, this field represents the unique name of the flow.

Flow is now a valid value for the type field as a beta.

**SecuritySettings**

The following field has been added.

**httpsOnForcecomSites**

Indicates whether Visualforce, Force.com sites, or Communities must use HTTPS.

**SharedTo**

The following fields have been added.

**channelProgramGroup**

A system-managed group with sharing access containing all partner members of the corresponding channel program or level.

**channelProgramGroups**

A list of system-managed groups with sharing access containing all partner members of the corresponding channel programs or levels.

**Translations**

The following field was added.

**flowDefinitions**

A list of flow translations. Only Flow and AutolaunchedFlow types are supported for translation.

## Workflow

Starting in API version 41.0, using a wildcard to retrieve the Workflow metadata type doesn't return files for entities that don't have workflow rules or actions. In previous releases, when you used the (\*) wildcard as shown in the example, Salesforce returned one file for each standard or custom entity in the org. One file was returned even if the entity didn't have workflow rules or actions.

```
<?xml version="1.0" encoding="UTF-8"?>
<Package xmlns="http://soap.sforce.com/2006/04/metadata">
  <types>
    <members>*</members>
    <name>Workflow</name>
  </types>
  <version>41.0</version>
</Package>
```

## Data Services: Work on Millions of Records with Custom Big Objects and Async SOQL

You can store, manage, and query millions of records with custom big objects and Async SOQL, which are both now generally available.

### IN THIS SECTION:

#### [Manipulate Millions \(or Even Billions!\) of Records with Custom Big Objects \(Generally Available\)](#)

Custom big objects allow you to store and manage huge amounts of data on the Salesforce platform. Custom big objects provide consistent performance when working with one million to more than one billion records.

#### [Query Millions of Records with Async SOQL \(Generally Available\)](#)

Async SOQL is a method for running SOQL queries in the background over Salesforce entity data. Use the Async SOQL API to run queries on big, standard, and custom objects. It provides the optimal way to process large amounts of data stored in Salesforce big objects.

## Manipulate Millions (or Even Billions!) of Records with Custom Big Objects (Generally Available)

Custom big objects allow you to store and manage huge amounts of data on the Salesforce platform. Custom big objects provide consistent performance when working with one million to more than one billion records.

It's easy to integrate custom big objects with your live Salesforce data. You can process big objects with SOQL, Bulk, Chatter REST and SOAP APIs, and Async SOQL, a powerful tool for asynchronously processing massive volumes of data.

There are two types of big objects.

- **Standard big objects** — Objects defined by Salesforce and included in Salesforce products. `FieldHistoryArchive` is a standard big object that stores data as part of the Field Audit Trail product.
- **Custom big objects** — New objects that you create to store information unique to your org. Custom big objects extend the functionality that Force.com provides. For example, if you're building an app to track product inventory, create a custom big object called `HistoricalInventoryLevels` to track historical inventory levels for analysis and future optimizations.

Custom big objects are ideal for the following use cases.

- **360° view of the customer** — Extend your Salesforce data model to include detailed information from loyalty programs, e-commerce transactions, billing and provisioning information, and more.
- **Auditing and tracking** — Track and maintain a long-term view of your user's usage of Salesforce or your customer's usage of your products for analysis or compliance purposes
- **Historical archive** — Maintain access to historical data for analysis or compliance purposes while optimizing the performance of your core CRM or Force.com applications.

To learn more about using custom big objects in your org, see the [Big Object Implementation Guide](#).

## Query Millions of Records with Async SOQL (Generally Available)

Async SOQL is a method for running SOQL queries in the background over Salesforce entity data. Use the Async SOQL API to run queries on big, standard, and custom objects. It provides the optimal way to process large amounts of data stored in Salesforce big objects.

With the introduction of custom big objects, it's possible to keep billions of records on the platform. To help you work at this new scale, Salesforce has developed Async SOQL to handle queries on huge amounts of data.



**Note:** Async SOQL is included only with the licensing of additional big object capacity.

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.

Each query runs in the background, and by default, a single query can be executing at any given time. Results are written into an object that you specify, which can be an sObject or big object. As a result, you can subset, join, and create more complex queries that are not subject to timeout limits. Async SOQL is ideal when you have millions or billions of records, and need more scalable and more performant processing than is possible with synchronous SOQL.

For more information, see the [Async SOQL Guide](#).

## Enterprise Messaging

Use events to simplify communication between business systems. With the Change Data Capture pilot, receive real-time notifications of record changes in Salesforce. With the High-Volume Platform Events pilot, deliver and receive millions of custom events efficiently.

### IN THIS SECTION:

#### [Keep Your External Data up to Date with Change Data Capture \(Pilot\)](#)

Receive near-real-time changes of Salesforce records, and synchronize corresponding records in an external data store. Change Data Capture publishes data change events, which represent changes to Salesforce records. Changes include creation of a new record, updates to an existing record, deletion of a record, and undeletion of a record.

#### [Deliver Millions of Events Per Day with High-Volume Platform Events \(Pilot\)](#)

Last release, we introduced Platform Events—customizable, secure, and scalable events that are delivered within Salesforce and from external sources. This release, through a pilot, you can publish and subscribe to high volumes of platform events. Deliver several millions of events per day using the new high-volume platform events. This change applies to both Lightning Experience and Salesforce Classic.

## Keep Your External Data up to Date with Change Data Capture (Pilot)

Receive near-real-time changes of Salesforce records, and synchronize corresponding records in an external data store. Change Data Capture publishes data change events, which represent changes to Salesforce records. Changes include creation of a new record, updates to an existing record, deletion of a record, and undeletion of a record.



**Note:** We provide Change Data Capture to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Change Data Capture isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase

### EDITIONS

Available in: **Performance, Unlimited, Enterprise, and Developer** Editions

decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Change Data Capture in this [Trailblazer Community group](#).

For example, you have a human resource (HR) system with copies of employee custom object records from Salesforce. You can synchronize the employee records in the HR system by receiving data change events from Salesforce. After receiving the events, you can process the corresponding insert, update, delete, or undelete operations in the HR system. Because the changes are received in near real time, the data in your HR system stays up to date.

Data change events are available for all custom objects defined in your Salesforce org. Events for a custom object aren't published until you enable them for that object. Data change events are available and automatically enabled for a subset of standard objects. Data change events are published on a channel (the event bus) when changes occur in Salesforce.

In addition to custom objects, the following standard objects support data change events.

- Account
- Asset
- Campaign
- Case
- Contact
- ContractLineItem
- Entitlement
- Lead
- LiveChatTranscript
- Opportunity
- Order
- OrderItem
- Product2
- Quote
- QuoteLineItem
- ServiceContract

## Event Subscription

To subscribe to data change events, use CometD the same way you subscribe to other streaming events, like PushTopic events or platform events.

### Subscription Channels

The channel to subscribe to all data change events is:

```
/data/ChangeEvents
```

The channel to subscribe to data change events for a standard object is:

```
/data/<Standard_Object_Name>ChangeEvent
```

For example, the channel to subscribe to data change events for Account records is:

```
/data/AccountChangeEvent
```

The channel to subscribe to data change events for a custom object is:

```
/data/<Custom_Object_Name>__ChangeEvent
```



For example, the channel to subscribe to data change events for Employee\_\_c custom object records is:

```
/data/Employee__ChangeEvent
```



**Example:** This data change event is sent when an account is created.

```
{
  "data": {
    "schema": "IeRuaY6cbI_HsV8Rv1Mc5g",
    "payload": {
      "ChangeEventHeader": {
        "entityName": "Account",
        "recordIds": [
          "001R0000002aV0B"
        ],
        "changeType": "CREATE",
        "changeOrigin": "com.salesforce.core",
        "transactionKey": "001b7375-0086-250e-e6ca-b99bc3a8b69f",
        "sequenceNumber": 1,
        "isTransactionEnd": true,
        "commitTimestamp": 1501010206653,
        "commitNumber": 92847272780,
        "commitUser": "<User_ID>"
      },
      "Name": "Acme",
      "Description": "Everyone is talking about the cloud. But what does it mean?",
      "OwnerId": "<Owner_ID>",
      "CreatedDate": "2017-07-25T19:16:44Z",
      "CreatedById": "<User_ID>",
      "LastModifiedDate": "2017-07-25T19:16:44Z",
      "LastModifiedById": "<User_ID>"
    },
    "event": {
      "replayId": 6
    }
  },
  "channel": "/data/ChangeEvents"
}
```

## Deliver Millions of Events Per Day with High-Volume Platform Events (Pilot)

Last release, we introduced Platform Events—customizable, secure, and scalable events that are delivered within Salesforce and from external sources. This release, through a pilot, you can publish and subscribe to high volumes of platform events. Deliver several millions of events per day using the new high-volume platform events. This change applies to both Lightning Experience and Salesforce Classic.



**Note:** We provide High-Volume Platform Events to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. High-Volume Platform Events isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame

### EDITIONS

Available in: **Performance, Unlimited, and Enterprise Editions**

or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for High-Volume Platform Events in this [Trailblazer Community group](#).

By using a different underlying data store, the system processes high-volume events more efficiently than standard events. When you create the definition of a platform event, you specify the event type as high volume.

1. From Setup, enter *Platform Events* in the Quick Find box, then select **Platform Events**.
2. On the Platform Events page, click **New Platform Event**.
3. Complete the standard fields.
4. For Event Type, select **High Volume**.
5. Click **Save**.

You can publish and subscribe to high-volume platform events in the same way you publish and subscribe to standard-volume platform events. For more information, see [Publishing Platform Events](#) and [Subscribing to Platform Events](#) in the [Platform Events Developer Guide](#).


SEE ALSO:

[Metadata API Developer Guide: eventTypeId Field in CustomObject](#)

## Customize Console Apps with the Lightning Console JavaScript API (Generally Available)

The Lightning Console JavaScript API includes new and updated methods that let you customize a Lightning console app and utility bar programmatically. These changes apply to Lightning Experience only.

This API brings the benefits of the Console Integration Toolkit, which works only in Salesforce Classic, to Lightning Experience. The API integrates with Lightning components used in Lightning console apps and the utility bar.

 **Important:** The generally available Lightning Console JavaScript API has significant differences from the pilot version. The API syntax has changed. Methods now use promises instead of callbacks to return responses. Also, methods in the Utility Bar API, like methods in the Workspace API, take a JSON array of arguments.

The Lightning components associated with the API have also changed. To use the Workspace API or the Utility Bar API, add `<lightning:workspaceAPI />` and `<lightning:utilityBarAPI />`, respectively, to your Lightning component.

Console tab events, such as `lightning:tabClosed` and `lightning:tabFocused`, now use the `lightning` namespace.

The API has several new methods and events, and some methods take different arguments. Check the [Salesforce Console Developer Guide](#) reference to see the arguments for a method.

For example, this component and controller of a Lightning component use the `openTab()` method in the Workspace API. It has a button that, when pressed, opens a new workspace tab containing the specified record. The component then focuses the new tab using the `tabId` returned by the method.

### Component code

```
<aura:component implements="flexipage:availableForAllPageTypes" access="global" >
  <lightning:workspaceAPI aura:id="workspace" />
  <lightning:button label="Open Tab" onclick="{! c.openTab }" />
</aura:component>
```

### EDITIONS

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer Editions**

**Controller code**

```
((
  openTab : function(component, event, helper) {
    var workspaceAPI = component.find("workspace");
    workspace.openTab({
      url: '/sObject/001R00000003HgssIAC/view',
      focus: true
    }).then(function(newTabId) {
      workspaceAPI.focusTab({
        tabId: newTabId
      });
    });
  }
})
```

The following methods are new in API version 41.0.

**Workspace API****getEnclosingTabInfo()**

Returns information about the focused workspace tab or subtab.

**isConsoleNavigation()**

Determines whether the current app uses console navigation.

**setTabHighlighted()**

Highlights the specified tab with a different background color and a badge.

**Utility Bar API****getEnclosingUtilityId()**

Returns the ID of the enclosing utility, or `false` if not within a utility.

**toggleModalMode()**

Toggles modal mode for a utility. While in modal mode, an overlay blocks users from using the console while the utility panel is visible.

**force:hasRecordId**

This interface is now supported for use in Lightning components added to the Utility Bar.

**Omni-Channel API (Beta)**

**Note:** This release contains a beta version of Omni-Channel Methods for the Lightning Console JavaScript API, which means it's a high-quality feature with known limitations. The methods aren't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions based on generally available products and features only.

**acceptAgentWork()**

Accepts a work item that's assigned to an agent.

**closeAgentWork()**

Changes the status of a work item to Closed, and removes it from the list of work items in the Omni-Channel utility.

**declineAgentWork()**

Declines a work item that's assigned to an agent.

**getAgentWorks()**

Returns a list of work items that are currently assigned to an agent and open in the agent's workspace.

**getAgentWorkload()**

Retrieves an agent's currently assigned workload. Use this method for rerouting work to available agents.

**getServicePresenceStatusChannels()**

Retrieves the service channels that are associated with an Omni-Channel user's current presence status.

**getServicePresenceStatusId()**

Retrieves an agent's current presence status.

**login()**

Logs an agent in to Omni-Channel with a specific presence status.

**logout()**

Logs an agent out of Omni-Channel.

**setServicePresenceStatus()**

Sets an agent's presence status to a status with a particular ID. We log in the user to presence if that user is not already logged in so you don't have to make more calls.

SEE ALSO:

[Salesforce Console Developer Guide: Methods for Lightning Experience \(can be outdated or unavailable during release preview\)](#)

## Open CTI API

The `notifyInitializationComplete()` method is now available in Lightning Experience. This method notifies Salesforce that the softphone initialization is complete and that Salesforce must not switch to a standby URL. While the softphone initializes, a loading icon displays in the softphone area. The `notifyInitializationComplete()` method works differently than in Salesforce Classic. This change applies to Lightning Experience only.

- In Lightning Experience, the method takes an optional callback object. In Salesforce Classic, the method doesn't take arguments.
- In Lightning Experience, after you go to the standby URL, your browser session continues to use the standby URL. To force the standby URL check, you must close the browser. In Salesforce Classic, the standby URL check is completed only after you log in to Salesforce, and the check isn't repeated if you keep using the same Salesforce session.

SEE ALSO:

[Open CTI Developer Guide](#)

## Other API Changes

Federated Search now supports RSS format for results. SOQL queries on record types have a new restriction.

**Federated Search Supports RSS Format**

Federated Search connects the Salesforce federated search connector to the external search provider so that data from external repositories can be searched and returned within Salesforce. External search providers have partnered with Salesforce to provide a search service that conforms to the API found in the [Salesforce Federated Search Developer Guide](#).

The external search provider now returns results in both Atom and RSS format, as defined by the RSS specification.

**SOQL Queries on RecordType No Longer Return the Full List of Records Regardless of Which User Runs It**

We added a restriction on SOQL queries on record types. If a user doesn't have Read access on the object to which a record type belongs, that record type isn't returned in the query results.

## Critical Updates

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We're enforcing the critical update that blocks execution of JavaScript in the HYPERLINK function. And we delayed the critical update that routes records to the right approval process when they're submitted behind the scenes.

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 org and modify affected customizations. After the opt-in period has passed, the update is activated. For more details, see [Respond to Critical Updates](#).

## Pre-Existing Critical Updates

This critical update was announced in a previous release and is still available.

### Critical Updates for Stricter CSP Restrictions

Stricter Content Security Policy (CSP) restrictions have been decoupled from LockerService and aren't enforced in production orgs in Winter '18. Instead, to give you more time to update your code to work with stricter CSP, the stricter CSP changes are available in two critical updates that affect only sandbox and Developer Edition orgs.

## Enforced Critical Updates

### Block Execution of JavaScript in the HYPERLINK Function To Be Enforced (Critical Update)

Blocking execution of JavaScript in the HYPERLINK function was a critical update in Summer '17 and will be activated automatically for all orgs on October 30, 2017. This change was phased in over several releases. It addresses a security vulnerability that arises when you use JavaScript in the URL argument of a HYPERLINK function. The JavaScript can include cross-site scripting and make the URL execute on behalf of users.

### Allow CSRF Protection on GET Requests to Visualforce Pages To Be Enforced (Critical Update)

Allow CSRF Protection on GET Requests to Visualforce Pages was a critical update in Spring '17 and will be enforced for all orgs on October 15, 2017. This critical update gives you the option of ensuring that Visualforce pages receive a CSRF token with a GET request.

## Postponed Critical Updates

### "Make Sure Records that Are Submitted Behind the Scenes Are Routed to the Right Approval Process" Critical Update Postponed

This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Winter '19.

## Help and Training

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We added Trailhead modules and instructional videos. We also updated our Trust and Compliance documentation.

### IN THIS SECTION:

[Watch Videos \(English Only\)](#)

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

### [Explore Features with Trailhead](#)

Looking for a good way to get familiar with Salesforce or discover 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.

### [Review Trust and Compliance Documentation](#)

We made seasonal updates to the Salesforce Trust and Compliance Documents.

## Watch Videos (English Only)

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

- The new [Dynamically Filter Reports Using URL Parameters](#) video teaches you how to add filters to your reports that automatically and intelligently set filter values based on criteria that you configure.
- The new [Trend in Analytics](#) video teaches you how to track report data over time in Einstein Analytics.
- The new [Forecast Accurately with Collaborative Forecasts in Lightning Experience](#) video shows how to get the most from Collaborative Forecasts. The video demonstrates how to work with different forecast types, date ranges, currencies, rollup methods, adjustments, and quota displays.
- The new [Get Ready to Transition to Service Cloud in Lightning Experience](#) videos help you prepare for your transition from Salesforce Classic. The videos discuss common rollout concepts for Lightning Experience, and includes information about moving your Service Console and Service features to Lightning Experience.
- The [Create a Custom Baseline for Security Health Check \(Lightning Experience\)](#) video is updated to include choosing a default baseline and editing your baseline name and API name.
- The [Introduction to Analytics Explorer](#) video is updated to cover changes made to explorer in the Winter 18 release.
- The updated [Search in Salesforce Lightning Experience](#) video covers sorting changes on the search results page and options to narrow your search.
- Here's the best part, we've organized and grouped our videos into playlists to simplify your video discovery and learning experience. Intuitively organized playlists let you find and watch all videos for a specific area from a single location. For example, the How Tos for Salesforce Health Cloud playlist is your one-stop shop for all health cloud videos. Check out [Handy Videos to Learn More About Salesforce](#) in the Salesforce Help!

## Explore Features with Trailhead

Looking for a good way to get familiar with Salesforce or discover 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://trailhead.salesforce.com>, and find the right trail for you. Here are the latest modules.

### New Modules

#### [Community Search Basics](#)

Set up search features so that community members can find the information they need.

#### [App Upgrading for AppExchange](#)

Update your offering and share it with your customers.

#### [AppExchange Product Licensing and Customer Support](#)

Manage licenses for your app, and provide great customer support.

**Picklist Administration**

Choose the right picklist field for the job, manage picklists, and share picklist values.

**Einstein Intent API Basics**

Build a deep-learning custom model to categorize text and automate business processes.

## New Projects

**Build a Gauge Chart That Visually Identifies Regional Data**

Use flag icons to create a stunning dashboard with Einstein Analytics.

## New Trails

**Optimize Sales Forecasts**

Set up Collaborative Forecasts and help your reps to accurately predict sales revenue and quantities.

## Review Trust and Compliance Documentation

We made seasonal updates to the Salesforce Trust and Compliance Documents.

## Infrastruture and Sub-Processors

The following changes have been made in the **Infrastructure and Sub-Processor Documentation**.

**Salesforce**

- **Scope:** Changed “Analytics Cloud” references to “Einstein Analytics” to reflect new branding and made conforming changes throughout document.
- **Infrastructure - Customer Data Storage:** Added reference to new Australia data center.

**Commerce Cloud**

- **Scope:** Updated to include services branded “Commerce Cloud Einstein” and to remove services branded “Commerce Cloud Store.”

**Data.com**

- **Customer Data Processing:** Removed HCL Technologies and HCL America as a sub-processor.

**Desk.com, Einstein Discovery, LiveMessage, Quip, Salesforce Inbox, and SalesforceIQ CRM**

- **Scope:** Changed “Einstein Data Discovery” reference to “Einstein Discovery” to reflect new branding and made conforming changes throughout document.

**Heroku**

- **Customer Data Processing:** Updated entity name for customer data processing to only include salesforce.com and its affiliates.

**IOT Cloud**

- **Customer Data Processing:** Updated entity name for customer data processing to only include salesforce.com and its affiliates.

**Marketing Cloud**

- **Customer Data Processing:** Added five entities to the list of Customer Data processors: Accenture Inc.; Cognizant Technology Solutions U.S. Corporation; Cognizant Technology Solutions Hungary Kft.; Cognizant Technology Solutions India Pvt. Ltd.; and Cognizant Technology Solutions Philippines, Inc.

**Salesforce DMP**

- **Scope:** Updated to reflect branding changes from “KruX” to “Salesforce DMP.”

## Notices and Licenses

The following changes have been made in the **Notices and Licenses Documentation**.

### **Salesforce**

- No updates.

### **Commerce Cloud**

- Services Covered: Updated to reflect branding changes.
- Third Party Notices: Updated to reflect notices from new third party integrations.

### **Data.com**

- No updates.

### **Desk.com**

- Third Party Content: Updated information.

### **Einstein Analytics**

- Updated to reflect branding changes.

### **Einstein Discovery**

- Updated to reflect branding changes.

### **Einstein Vision**

- No updates.

### **ExactTarget**

- No updates.

### **Heroku**

- No updates.

### **IoT Cloud**

- Added AWS IoT Integration.

### **LiveMessage**

- Restricted Use of Information: Updated information.

### **Marketing Cloud (Radian6, Social Studio, Social.com)**

- No updates.

### **Pardot**

- Third Party Notices: Updated information.
- Distributed Software: Updated information.

### **Predictive Intelligence**

- No updates.

### **Quip**

- No updates.

### **SalesforceIQ**



- Services Covered: Updated information.
- Purpose of this Documentation: Updated information.

**Sales Cloud Einstein**

- No updates.

**Salesforce DMP**

- Updated to reflect branding changes.

## Security, Privacy, and Architecture

The following changes have been made in the **Security, Privacy, and Architecture Documentation**.

**Salesforce**

- **Services Covered:** Changed “Analytics Cloud” references to “Einstein Analytics” to reflect new branding and made conforming changes throughout document. Added reference to “Scratch Orgs” as certain elements described in this documentation do not apply to temporary developer testing environments.
- **Incident Management:** Updated language for consistency with Salesforce’s data processing addendum, which has been revised to address upcoming European legal requirements.
- **Audits and Certifications:** Added new Service Organization Control (SOC) 2 (Type 1) evaluation for Salesforce Quote-to-Cash and changed SSAE 16 to SSAE 18.
- **Analytics:** Changed title of section from “Tracking and Analytics” to “Analytics.” Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the “Interoperation with Other Services” section.
- **Sensitive Data:** Edited section for completeness, including adding a reference to “Customers using Public Cloud Infrastructure.”
- **Interoperation with Other Services:** Changed title of section from “Interoperation with Salesforce Services” to “Interoperation with Other Services.” Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the “Tracking and Analytics” section.

**Commerce Cloud**

- **Services Covered:** Updated to include services branded “Commerce Cloud Einstein” and to remove services branded “Commerce Cloud Store.”
- **Incident Management:** Updated language for consistency with Salesforce’s data processing addendum, which has been revised to address upcoming European legal requirements.
- **Reliability and Backup:** Replaced reference to “higher availability” with “high availability,” so the revised sentence states: “Customer Data submitted to the Commerce Cloud Services is stored on a primary database server with a replicated copy for high availability and performance.”
- **Analytics:** Changed title of section from “Tracking and Analytics” to “Analytics.” Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the “Interoperation with Other Services” section.
- **Interoperation with Other Services:** Changed title of section from “Interoperation with Salesforce Services” to “Interoperation with Other Services.” Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the “Tracking and Analytics” section.

**Data.com**

- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Desk.com, Einstein Discovery, LiveMessage, Quip, Salesforce Inbox, and SalesforceIQ CRM

- **Services Covered:** Changed "Einstein Data Discovery" reference to "Einstein Discovery" to reflect new branding and made conforming changes throughout document.
- **Audits and Certifications:** For the Service Organization Control (SOC) report applicable to Quip, replaced reference to "Type 1" with "2."
- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Einstein Vision

- **Services Covered:** Updated service definition for accuracy, and made conforming changes throughout document.
- **Architecture and Data Segregation:** Replaced "Org ID" with "unique ID" and added "based on business needs."
- **User Authentication:** Deleted references to "JWT Token" and replaced with a generic reference to "token." Added clarification that random session ID is created after successful authentication.
- **Reliability and Backup:** Added sentence stating that "Customer Data submitted to the Einstein Vision Services is backed up daily."
- **Disaster Recovery:** Added new section about disaster recovery for Einstein Vision Services.
- **Deletion of Customer Data:** Added language to address that "Salesforce reserves the right to reduce the number of days it retains such data after termination of the Master Subscription Agreement."
- **Sensitive Data:** Edited section for completeness, including adding a reference to "sounds or other information" containing or revealing sensitive data.
- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Heroku

- **Audits and Certifications:** Added section describing Payment Card Industry (PCI) certification applicable to certain of the Heroku Services.
- **Security Policies and Procedures:** Added new section describing the security policies and procedures applicable to the Heroku Services.
- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **User Authentication:** Added explanation for how passwords are stored on the Heroku Services.
- **Disaster Recovery:** Added further details on the disaster recovery plans that exist with respect to the Heroku Services.
- **Sensitive Data:** Deleted "Personal" from title. Clarified that payment cardholder data may be submitted to certain of the Heroku Services.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### IoT Cloud

- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Data Encryption:** Changed reference from 128-bit to 256-bit TLS Certificates.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Marketing Cloud

- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Deletion of Customer Data:** Added the words "up to," so the revised sentence states "After termination of the ExactTarget service, following the 30-day period for return of Customer Data, Customer Data submitted to ExactTarget is retained in inactive status for up to 90 days, after which it is securely overwritten or deleted from ExactTarget."
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Pardot

- **Audits and Certifications:** Added reference to Service Organization Control (SOC) 2 (Type 1) evaluation.

- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Deletion of Customer Data:** Changed reference from "termination of the Master Subscription Agreement" to "termination of the Pardot Services."
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Radian6

- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Sales Cloud Einstein

- **Disaster Recovery:** Added new section about disaster recovery
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the "Tracking and Analytics" section.

#### Salesforce DMP

- **Services Covered:** Updated to reflect branding changes from "KruX" to "Salesforce DMP."
- **Audits and Certifications:** Updated to reflect addition of Swiss-US Privacy Shield.
- **Incident Management:** Updated language for consistency with Salesforce's data processing addendum, which has been revised to address upcoming European legal requirements.
- **Disaster Recovery:** Added new section on disaster recovery.
- **Analytics:** Changed title of section from "Tracking and Analytics" to "Analytics." Clarified the description of analytics activity performed by Salesforce. Moved information about communications with Customers and Users to the "Interoperation with Other Services" section.
- **Sensitive Data:** Deleted "Personal" from title and edited section for completeness, including updating link to NAI Code of Conduct and definition of Personal Data to clarify that pseudonymous identifiers may be submitted to the service.
- **Interoperation with Other Services:** Changed title of section from "Interoperation with Salesforce Services" to "Interoperation with Other Services." Added information about how our services may interoperate with other services provided by Salesforce or

third parties. Added information about Salesforce communications with Customers and Users, replacing language that was previously located in the “Tracking and Analytics” section.

## Other Salesforce Products and Services

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### 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](#).

### LiveMessage

LiveMessage allows your service agents to receive inbound text messages from your customers on the same landline or 800 number that customers use to call. Agents can also initiate outbound text messages to your customers for proactive communications, meeting your customers wherever they are.

For information on new features, go to the [LiveMessage release page](#).

### Cloud Services

The certified experts, consultants, and innovative tools of Salesforce Cloud Services are here to help with professional services, prescriptive advice, and expertise at every stage of your journey.

For information on new features for Cloud Services' Premier and Signature Success Plans and Advisory Services, go to the [Cloud Services release page](#).