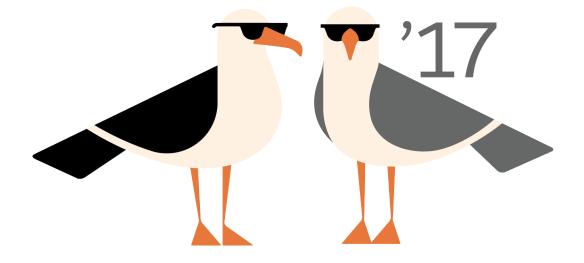


# Salesforce Summer '17 Release Notes

Salesforce, Summer '17

Blaze new trails to productivity





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# CONTENTS

Salesforce Summer '17 Release Notes
How to Use These Release Notes
How and When Do Features Become Available?
Supported Browsers
Salesforce Overall
Lightning Experience
Salesforce Einstein
Sales
Service
Analytics
Communities
Chatter
Files
Salesforce Integrations: Taking Salesforce to the Next Level
Mobile
Financial Services Cloud
Health Cloud
Customization
Security and Identity
Deployment
Development
Marketing
Critical Updates
Doc Content
Other Salesforce Products

# SALESFORCE SUMMER '17 RELEASE NOTES

Summer '17 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 These 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 Summer '17 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

We've made some changes to our supported browsers documentation, making it easier to find what you need. Supported browsers for Salesforce vary depending on whether you use Salesforce Classic or Lightning Experience.

# Salesforce Overall: More Tools to Help You Adopt Lightning Experience, Keyboard Shortcuts, and More Ways to Navigate and Manage Records

Summer '17 gives you more reasons to love Lightning Experience. We've given the Lightning Experience Migration Assistant an easier-to-use wizard-style interface, you can now use keyboard shortcuts to maximize efficiency, success messages now include an active link that takes you to the record you created, and you can open multiple records and related records on one screen with Lightning console split view.

#### 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, Duplicate Detection, and Gmail Integration

Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Improve your company's reputation and relieve your duplicate management headaches by getting a grip on duplicate records. And handle the sales process like a champ—directly in Gmail.

#### Service: Better Routing, Faster Setup, and More Power to the Field

Route cases and push work to the right agent at the right time with Lightning Omni-Channel. Set up Lightning Knowledge and Communities painlessly with our guided, step-by-step setup flows. And get more done remotely with Field Service Lightning preventative maintenance, parts requests, and stock transfers. Work where your customers are!

#### Analytics: Collaborative Reports and Dashboards and Einstein Analytics (Wave)

Drive decisions with insights from reports and dashboards and Wave Analytics. Lightning Experience reports and dashboards get more collaborative with dashboard filters, improvements to report subscriptions, and other enhancements. With Einstein Discovery and the new Wave features, analytics become more accessible for both admins and business users.

#### Communities: Partner Central Solution, CMS Connect, Notifications, and More

Communities makes a splash this summer with a slew of flexible new features. Extend Salesforce CRM to your partner network, and drive channel sales with the native Lightning Partner Central solution. Use CMS Connect to render content from your content management system (CMS) in your community for consistent branding and easier maintenance. Switch between communities and see real-time notifications with App Launcher and Notifications support. We've got lots more to show you, so dive in!

#### Chatter: Topics, Streams Enhancements, Better Group Member Management, and Top Users Reports

Organize feeds with topics, enjoy the new streams home, manage group membership with ease, and see who's been most active in Chatter.

#### Files: Add Multiple Files to Libraries, Share Files via Public Link, and Customize Files Detail Page

Libraries are available in Lightning Experience, even for users without Salesforce CRM Content licenses. Multiple upgrades to libraries help you work better in Lightning Experience: add multiple files to a library, customize your file detail pages, and take action on files right from your Chatter feed.

#### Salesforce Integrations: Taking Salesforce to the Next Level

Empower your users to be more productive by connecting Salesforce to some of the industry's leading business applications. Most of these integrated apps are available in both Salesforce Classic and Lightning Experience, but a few are available in only one or the other.

#### Mobile: Improved Search and Approvals, Updated Requirements, and Mobile Classic Retirement

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. Salesforce1 offers improvements to search, approvals, and many other sales features, so sales professionals can take care of even more business from their phones.

#### Financial Services Cloud: Lightning Components in Communities, Client Profile Builder, Individual and Relationship Group Enhancements

Share the wealth of Financial Services Cloud Lightning components that are now available in Communities. Get on the fast track to creating individuals and adding them to groups with the new Client Profile Builder. Take advantage of quick actions in Wave for Financial Services Cloud.

#### Health Cloud: Integrated Analytics Lists, Concurrent Care Plans, Health Cloud Empower Lightning Components, and More

We've streamlined the care of patients with chronic or long-term medical conditions by allowing them to have multiple, concurrent care plans and more than one care manager. And now patient lists created from the Einstein Analytics for Health Cloud app can be sent to and used in the Health Cloud console. To make your life easier as an admin, we've packaged up three new Lightning components that let you create patient communities in no time at all.

#### Customization: Smarter Lightning Pages, More Efficient Setup Navigation, More Options for Flows in Lightning Experience

Make your Lightning pages smarter by adding the new Einstein Recommendations component. Navigate more quickly around the Object Manager and other parts of Setup in Lightning Experience. And get more done in Lightning Experience with enhanced approvals and Lightning flow runtime. If that's not enough, check out the usability improvements to our data import tools and global picklists.

#### Security and Identity: More Lightning Support, Encryption for Formulas, Embedded Login

Transaction Security has a handy new Lightning Experience interface, formulas now work with encrypted fields, and you can connect your website to your backend CRM with Embedded Login.

Deployment: New Components Now Available in Change Sets, Deployment Permission Dependency Now Selected Automatically

#### Development: Create Your Own Salesforce App

Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, these enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to others.

#### Marketing: Tools to Engage Your Customers Like Never Before

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

#### Critical Updates

This release includes new critical updates for Lightning components, formulas, Apex controllers, and email notifications. We delayed the critical update that allows you to enable CSRF protection on GET requests to Visualforce pages. And we canceled the critical update that disables access to Lightning Experience and Salesforce1 from IE11.

#### Help and Training

Filter help search results by experience. Check out our Trailhead additions and instructional videos. We also updated our Trust and Compliance documentation.

Other Salesforce Products

# How to Use These 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.

- 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.

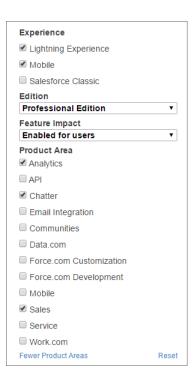
#### Feature Impact

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.



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."
- Topics, a new Communities feature, is available in Lightning Experience *only*, so its description says "This feature is new in Lightning Experience."

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

# You Asked for It!

We delivered the features you asked for on IdeaExchange.

IdeaExchange	Idea delivered
Lightning Experience	
Object History related list isn't supported in Lightning Experience	Access Field History Related Lists in Lightning Experience
Disable access to Salesforce Classic	Make Lightning Experience the Only Experience
Sales	
Change Letterhead on Template	Update Your Classic Letterhead Email Templates
Integrate Gmail with Salesforce	Lightning for Gmail: General Availability and Improved Efficiency
Relate Gmail emails to Salesforce	Relate Emails You're Composing to Salesforce Records
Add Attachments from Gmail to Salesforce	Choose Which Attachments Are Keepers
Chatter	
Chatter Email Settings: Notify When Someone Posts to an Object I'm Following	There Are Lots of Shiny New Features for Streams
Customization	
Default Values on Picklist Fields	Define Default Values at the Field Level
Ability to Update Metadata from Apex (Apex Metadata API)	Retrieve and Deploy Metadata in Apex
Is There a Way to Access the Record Counts Via the API?	New Resource: Record Count
Bulk API - Download Batch Job CSV Files to a Single File	Simplified Job Process for Bulk API 2.0 (Pilot)

# 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.
- Summer '17 Release. Check out the new features.
- Summer '17 Release module. Get the Summer '17 Trailhead badge.

# **Release Notes Changes**

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

## September 6, 2017

#### **Changed Header: Assignment Rule**

The AssignmentRule header is now applied to Accounts, in addition to Cases and Leads, when Sforce-Auto-Assign is TRUE.

#### **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.

#### **Metadata API**

The new identityConfirmationOnTwoFactorRegistrationEnabled field on the SecuritySettings type indicates whether users are challenged with Identity Conformation during 2FA registration.

## August 30, 2017

#### **Command Your Brand with Dynamic Branding**

Added a release note for Dynamic Branding.

#### Improve Files Adoption with Optimizer Analysis

Added that the Optimizer now includes information about Files adoption in its analysis.

#### Identify and Replace S-Controls with Optimizer Analysis

Added that the Optimizer recommends replacing s-controls in its analysis.

## August 16, 2017

#### Track and Report on Your Team's Engage Emails

Added a release note for Engage Team Reports.

#### Improve Service Cloud Adoption with Optimizer Analysis

Added that the Optimizer now includes information about Service Cloud adoption in its analysis.

#### **New Features in Optimizer Analysis**

Added that the Optimizer now includes information about formula fields and static resource limits in its analysis.

#### **Enable Lightning Login for All Users**

Added a release note that Lightning Login is available.

#### **Require Identity Confirmation When Adding Two-Factor Authentication**

Added a release note explaining that you can require users to verify their identity before allowing them to add two-factor authentication.

#### **Require Identify Verification When Changing Email Address**

Added a release note explaining that you can require users to confirm their identities when they change their email address.

#### **Changed Objects**

Added the samlIdpSLOBinding and samlSloUrl fields to the ConnectedApp object.

## August 9, 2017

#### SAML Single Logout (SLO) Is Available (Beta)

Added that Salesforce supports only front-channel SAML Single Logout for which Salesforce is the identity provider.

#### Salesforce Authenticator: More Backup and Version Help

Added information about where to find the app version while in the app, and tips for keeping your account backups current.

#### Streamline Connected App Access with Improved IP Relaxation

Added a release note explaining the new policies for relaxing IP restrictions.

## August 2, 2017

#### **Other Changes to Campaigns**

Noted that the legend has been removed from the Campaign Members related list chart on campaigns.

#### Salesforce DX (Beta)

Added new considerations to the Source Management section of the Salesforce DX (Beta) release notes.

#### Salesforce Development Tools for Visual Studio Code (Beta)

Added a release note for the Salesforce DX extension bundle for Visual Studio Code, which is being released on August 3, 2017.

#### Get the Big Picture with Attachments in the Case Feed

Noted that If your org uses custom Apex to create records from social posts, you might have to update Apex code to support attachments.

#### **Do More with Facebook Posts**

Added that changes apply to Salesforce Classic and removed that you can respond privately to posts.

## July 26, 2017

#### Lenses Added to Sales App Give You Fine-Grained Data Insights

Added lenses to Sales Analytics prebuilt app to provide detailed data insights about opportunities, sales stage, and pipeline history.

#### Salesforce DX (Beta)

Added new considerations to the Source Management section of the Salesforce DX (Beta) release notes. Also added link to weekly patch release notes on the Salesforce DX Beta Community page.

#### Use force:createRecord to Prepopulate Fields on the Record Create Panel

Promoted this change from the New and Changed Lightning Events section to its own release note, with a few added details.

#### **Changed Objects**

Noted that the new CanCreateQuoteLineItems field on the Quote object is not used.

# July 19, 2017

#### **Upcoming Events Are Now Today's Events**

We've changed the label for Upcoming Events on the Home page in Lightning Experience.

#### **Assign a Permission Set License**

This permission set license requirement includes Health Cloud packages installed in a production or sandbox org after the Summer '17 release.

#### Make Lightning Experience the Only Experience

Updated considerations for enabling this permission.

#### **Chatter Answers Retires in Spring '18**

Updated the retirement date of Chatter Answers from Winter '18 to Spring '18, and fixed a broken link to the retirement article.

#### Use Pre-Chat APIs to Send Nonstandard Pre-Chat Details

Added a release note explaining that pre-chat APIs can be used to send nonstandard pre-chat details along with what's available in setup.

#### Salesforce Command-Line Interface (CLI)

Added a release note that we renamed a property in the Salesforce CLI command definitions.

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

Added new Tooling API object: SourceMember (Beta).

#### New and Changed Chatter in Apex Classes

Added a Files Connect section that includes set test methods.

# July 12, 2017

#### Trailhead

Added link to new Trailhead module: Summer '17 Release Notes Highlights.

#### Improve Feature Adoption with Optimizer Analysis

Added information about new features that are supported in Optimizer.

#### Legacy Charts in Salesforce1 Will Retire in Spring '18 (Phased Retirement)

Updated the retirement date of Legacy Charts in Salesforce1 from Winter '18 to Spring '18, and fixed a broken link to the retirement article. Legacy Charts in Salesforce1 are being retired as part of a phased retirement, and the date of full retirement might be moved to a later release.

#### Modify All Data Permission Is Automatically Selected When You Select Deploy Change Sets

Added a release note explaining that both permissions users need to deploy or validate inbound change sets are now selected when you select Deploy Change Sets. This change was incorrectly included in the Spring '17 release notes.

## July 5, 2017

#### Stay on Top of Things with the Updated Activity Timeline

Updated the entry on the activity timeline to clarify how email entries work. Expanded emails are shown as a text-only preview, with paragraphs and line breaks in the same place. Case emails do not show the Reply All, Reply, and Forward links.

## June 28, 2017

#### Videos

Added a video on getting started with the latest explorer.

#### Change Opportunity Forecast Categories in Lightning Experience

Added a release note about changes to field on the opportunity object.

#### Salesforce DX (Beta)

Added release notes for the Beta launch of Salesforce Developer Experience (DX).

#### **New Objects**

Added 3 new objects related to Salesforce DX: ScratchOrgInfo, ActiveScratchOrg, and NamespaceRegistry. (Beta)

#### **Metadata API**

Added new valid preference field value for the OrgPreferenceSettings metadata type: ScratchOrgManagementPref. (Beta)

#### New addEventHandler() Method

Use this method instead of the deprecated addHandler() method.

#### Changes to the Web-to-Case and Web-to-Lead Endpoint URL

Added information about changes to the Web-to-Case and Lead-to-Case endpoint URL.

#### Walkthroughs

Added Walkthrough section, which includes a new walkthrough of Lightning console apps.

#### Other Enhancements to Reports and Dashboards in Lightning Experience

Corrected information about the number of groupings displayed in Dashboard Charts. Line and bar charts display up to 500 groupings. All other charts display up to 200 groupings.

#### Trailhead

Added links to new Trailhead module and project.

#### **Assess Your Sales Cloud Einstein Readiness**

The Einstein Readiness Check is now the Einstein Readiness Assessor.

#### Use the Developer Hub to Manage Your Scratch Orgs (Beta)

Added information about the Dev Hub.

Also removed release note and topic from the *ISVForce Guide* about the Salesforce Limited Access - Free because the license is not yet available.

#### **Tooling API**

Added information about the new /tooling/composite resource.

#### Use Async SOQL and UniqueKey for More Flexibility in Login Forensics

Corrected editions by removing Developer Edition. Also added Async SOQL limitations.

## June 21, 2017

#### Use the API to Relate an Existing Opportunity During Lead Conversion

Added a topic about relating existing opportunities to leads during lead conversion via the API.

#### **Create Tasks and Activities with New Buttons**

The Activity tab for any object has two new buttons—New Task and New Activity.

#### **Use Your Salesforce Sharing Settings in Wave**

Added third option for setting up sharing inheritance in Wave (via the dataset edit page).

#### Get the Right Tool to the Job with Parts Requests and Stock Transfers

Noted that product transfers cannot be created for product items with serial numbers.

#### Give Care Team Members Access to Tasks from the Community

Removed the Show All Tasks option that enabled care team members to see the tasks of other members.

#### **Create More Permission Sets in Professional Edition**

Added information about a permission set limit increase from 2 to 10 in Professional Edition.

## June 14, 2017

#### Mobile Field Service: Field Service Lightning iOS App Turns 2.0, Android App in Beta

Update the schedule release date of iOS 2.0. Service report feature limitation changes, multiday appointments, community users.

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

Wave Analytics, the prebuilt Wave apps, and Einstein Data Discovery have new names.

#### **Do More with Sales Predictions in Collaborative Forecasts**

You can now click the up arrow in the opportunity list to show more opportunities on the forecasts page.

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

Announcing the general availability of version 13.0 of the Salesforce1 downloadable apps for iOS. Learn all about the new enhancements for your iOS users.

#### **Browser Caching**

Support for browser caching has been removed from Summer '17.

#### **New and Changed Lightning Components**

Added information about changes to the lightning:inputRichText component.

## June 7, 2017

#### Track External Object Data Callouts with Event Log Files (Pilot)

Announced the new pilot feature.

#### Lightning Design System Release Notes

Added a link to the Lightning Design System Release Notes.

#### **Enjoy Profile-Based Access to Field Service Features**

Removed a note about changes to Opportunity access, and added a note about changes to Location access.

#### Criteria-Based Sharing for Work Orders (Generally Available)

Announced that criteria-based sharing for work orders is now generally available.

#### User Interface API (Developer Preview)

Changed API name from UI API to User Interface API.

#### **Override Standard Actions with Lightning Components**

Action overrides aren't supported in Lightning console apps, and are silently ignored when invoked.

## May 31, 2017

#### Storage Limits, Unsupported Browsers, and New Analysis in Optimizer Reports

Added information about new features that are now supported in Optimizer.

#### Sales Analytics: Smarter Selling and Sales Process Optimization, Now Faster than Ever

Added new version of app.

#### **Help and Training**

Added Help and Training section.

#### **New and Changed Lightning Components**

Added information about styling updates to force:recordEdit and force:recordView.

#### Do More with Field Service in the Process Builder

Added information about new field service object support in Lightning Process Builder.

#### Supported CometD Versions for Streaming API

Added note about documentation sample upgrades to a new CometD version.

#### **Resource Absences Can Now Overlap**

Explained that service resource absences in field service can now overlap.

#### Modifying an Apex Class Invalidates Platform Cache

Added release note that describes how modifying any Apex class invalidates platform cache.

#### **Deliver Custom Notifications with Platform Events (Generally Available)**

Modified the following platform event limits.

- Maximum number of events published per hour
- Maximum number of events delivered to CometD clients within a 24–hour period

#### **Create Care Plans That Fit Your Patients**

To use multiple care plan record types, existing orgs with cloned permission sets must add Read and Edit permissions to the Care\_Plan\_Record\_Type\_Name and Care\_Plan\_Record\_Type\_Namespace fields on the Lead object. Users without permissions on these fields can access the default care plan record type only.

#### Salesforce Chatter: A New Way to Work with Windows 10

Added information about the new Salesforce Chatter app available for Windows 10 Anniversary Edition users.

#### Updated Event Monitoring Analytics App Lets You Visualize Your Users' Actions in Lightning Experience

Added information about dashboard and dataset retirement, and added a section discussing dashboard description improvements.

#### Block Execution of JavaScript in the HYPERLINK Function (Critical Update)

Added link to information on locating the formula fields impacted by the Critical Update.

### May 24, 2017

#### **Secure HTTPS Connections for Third-Party Domains**

Added information about the new session setting.

#### See Where Your Service Cloud Features Stand with Lightning Experience

Prepare your Service Cloud features for Lightning Experience using the Readiness Check.

#### **Mute Your Microphone During Calls**

Added information about the new mute button in Lightning Dialer.

#### Get Extended Error Details for Flows in the Tooling API

Corrected the v39.0 example to reference "UNKNOWN\_EXCEPTION".

#### **Changed Objects**

For the QuoteLineItem object, the Product2Id field is required.

#### View Asset Level at a Glance

Introduced the new Asset Level field.

#### **Enjoy Profile-Based Access to Field Service Features**

Added information about changes to the way object access is granted to Field Service Lightning users.

#### **SAML Signing Certificate Is Being Retired**

Added information about retiring our SAML proxy certificate and how to prepare for it.

#### **Enjoy a Spiffier Look and Feel in Lightning Experience**

Added description of visual-design and text changes in Lightning Experience.

# May 17, 2017

#### Set Up Extended Mail Merge from Salesforce Classic Without a Call to Customer Support

Added steps for setting up Extended Mail Merge.

#### Track Time with the New Time Field Type (Pilot)

Contact Salesforce to participate in the pilot program for a new custom field type that tracks date-independent time, such as business hours.

#### Stay in Your Current App When You Open Favorites

Added information about changes to favorites in Lightning Experience.

#### **Easily Switch Between Your Salesforce Org and Communities**

Clarified that with the App Launcher in communities you can now switch back and forth between your Salesforce org in Lightning Experience and your Lightning communities.

## May 10, 2017

#### Get Expanded Analysis When You Check Your Lightning Experience Readiness

Added details about how to kick off the Readiness Check from SalesforceA on your mobile device.

#### Keep Your Code Current with Optimizer

Optimizer now analyzes Apex and Visualforce code to check whether your API versions are up to date.

#### Find Unused Reports and Dashboards with Optimizer on page 58

Optimizer now analyzes reports and dashboards to check whether any haven't been run in more than a year.

#### Lightning Sync for Google: Two-Way Contact Sync, General Availability

Clarified that in Summer '17 Lightning Sync is introducing two-way sync for contacts only.

#### Simplified Job Process for Bulk API 2.0 (Pilot)

Bulk API 2.0 now provides a simplified process for creating jobs and uploading job data.

#### POST Method for runTestsSynchronous Requires View Setup Permission (Critical Update)

View Setup user permission now required to run tests synchronously using the post method for /runTestsSynchronous/.

#### Withdrawn New Option for Parallel Testing on the isTest() Annotation

The isParallel option on the isTest() annotation is not available in this release. The release note about the option was removed.

#### **Recompiles Triggered by Deployment Changes Withdrawn**

Automatic recompile of Apex classes before completing a metadata deployment, a package install, or a package upgrade has been deferred. The release note about this feature was removed.

#### **Prepopulate Fields on a Record Create Panel**

Added information about the updated sforce.one.createRecord function, which now includes defaultFieldValues.

#### **Extended Deadline for TLS 1.0 Disablement in Communities**

To give admins more time to prepare community users, the TLS 1.0 disablement deadline for Salesforce Communities has been extended to March 2018.

#### **Supported Browsers**

Removed browser versions that are no longer supported and clarified some of the browser limitations.

#### Say Goodbye to Dropped Chats for Wandering Visitors

The storageDomain parameter is now required for version 2.0 code snippets. Added usage details.

#### **Disable Lookup Record Preview in Lightning Experience for Accessibility**

Added details on the option to disable lookup record preview.

#### SalesforceA: More Resource Options for Android and iOS Users

Announcing the general availability of SalesforceA version 3.1 for Android, and SalesforceA version 3.4 for iOS.

#### Analyze and Improve Community Performance (Developer Preview)

The Salesforce Communities Page Optimizer is available as a developer preview.

#### You Asked for It!

Added Ideas that we delivered.

# May 3, 2017

#### **New Apex Classes**

Removed the Metadata. DeployCallbackQueueable class.

#### **New and Changed Lightning Components**

Renamed lightning: formattedRelative to lightning: relativeDateTime for a clearer name that reflects what the component does.

#### Show Custom Apps in Lightning Experience

If you haven't yet enabled Lightning Experience for your org, we're changing the custom app settings for your Classic apps to enable **Show in Lightning Experience**. When you enable Lightning Experience for the org, those apps are visible.

# 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.

# How and When Do Features Become Available?

Some features in Summer '17 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**

We've made some changes to our supported browsers documentation, making it easier to find what you need. 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
Supported Browsers for Lightning Experience	<			
Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11			~	
Supported Browsers for Salesforce Classic	~			

# Salesforce Overall

Summer '17 gives you more reasons to love Lightning Experience. We've given the Lightning Experience Migration Assistant an easier-to-use wizard-style interface, you can now use keyboard shortcuts to maximize efficiency, success messages now include an active link that takes you to the record you created, and you can open multiple records and related records on one screen with Lightning console split view.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Improve Files Adoption with Optimizer Analysis (not immediately available)		×		
Identify and Replace S-Controls with Optimizer Analysis (not immediately available)				
Improve Service Cloud Adoption with Optimizer Analysis (not immediately available)		<b>V</b>		
New Features in Optimizer Analysis (not immediately available)		<b>~</b>		
Improve Feature Adoption with Optimizer Analysis (not immediately available)		<b>V</b>		
Storage Limits, Unsupported Browsers, and New Analysis in Optimizer Reports (not immediately available)		✓		
Keep Your Code Current with Optimizer (not immediately available)		~		
Find Unused Reports and Dashboards with Optimizer (not immediately available)		✓		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Get Better Assistance with the Restyled Lightning Experience Migration Assistant				
Get Expanded Analysis When You Check Your Lightning Experience Readiness		~		
Switch More Users to Lightning Experience		~		
Make Lightning Experience the Only Experience		~		
Ditch Your Mouse—Keyboard Shortcuts Are Here	~			
Navigate to a Record Directly from an Action Success Message	~			
Lightning Console Apps: See and	Do More (Generally A	Available) (available v	within 24 hours afte	r the release)
Keep Everything at Hand with Lightning Console Split View	~			
Boost Productivity with Keyboard Shortcuts for Lightning Console Apps				
Work with Person Accounts in Lightning Console Apps	~			
Customize Console Apps with the Lightning Console JavaScript API (Pilot)			×	
Choose Utility Icons for Your Lightning Apps More Easily		<b>×</b>		
Rich Text Editors Reenabled for LockerService	<b>~</b>			
Access Field History Related Lists in Lightning Experience			×	
Preview Case Details with Case Hovers	<b>~</b>			
Stay in Your Current App When You Open Favorites	~			
"Disable Access to Lightning Experience and the Salesforce1 Mobile Browser App from IE11" Critical Update Canceled			✓	
Enjoy a Spiffier Look and Feel in Lightning Experience		<b>~</b>		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Sea	rch		
See Results from External Search Engines with Federated Search (Generally Available)			▼.	
Search for Opportunities Using the Account Name	~			
Know When Spell Correction Is Applied to Your Term	~			
Get Search Results for More Objects		<b>~</b>		

# Sales

Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Improve your company's reputation and relieve your duplicate management headaches by getting a grip on duplicate records. And handle the sales process like a champ—directly in Gmail.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Experience Resources		*		
Einstein High Velocity Sales			~	
	Sales Clou	d Einstein		
Assess Your Sales Cloud Einstein Readiness			~	
Einstein Automated Contacts				
Make Data Entry a Breeze with Einstein Automated Contacts			~	
See More Relevant Activities with Smart Email Matching (Beta)			~	
Set Up Einstein Automated Contacts			~	
Einstein Activity Capture				
See More Relevant Activities on Opportunities with Date Matching			<b>V</b>	
Select Default Activity Sharing for New Users			<b>~</b>	
Einstein Lead Scoring				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
See Which Lead Field Values Affect Conversion Rates Most			~	
Assign Leads and Create Processes Based on Score			×	
Einstein Insights				
Stay Up to Date on Accounts with More Types of Insights	~			
See Insights for Records You Follow	<b>~</b>			
Bring Back Insights That Were Mistakenly Dismissed	~			
Access More Opportunity Insights	<b>~</b>			
Say Goodbye to Advanced Email Matching to Opportunities		~		
	Core Sales	Features		
Leads				
Keep Related Files and Records When Reps Convert Leads			~	
Encrypt Sensitive Lead Fields (Beta)			×	
Relate Accounts to Leads Faster with Account Matching			~	
Use the API to Relate an Existing Opportunity During Lead Conversion			~	
Accounts				
See Account Hierarchy Details on the Same Page	~			
Add Account Team Members with Accuracy	<b>~</b>			
Campaigns				
See Which Campaigns Accounts Are Responding To			~	
Add Members to Campaigns from Reports in Lightning Experience			~	
Add Members to Campaigns from Accounts	<b>~</b>			
Track Campaign Field History			×	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Other Changes to Campaigns			×	
Collaborative Forecasts			*	
Opportunities				
See Opportunity Stage History in Lightning Experience	<b>v</b>			
Jump to Today's Date With One Click	~			
Change Opportunity Forecast Categories in Lightning Experience	<b>v</b>			
Path				
Build Success with Path on Contracts and Orders	✓			
Decide How Path Displays			×	
Package Path		×		
Contacts				
Show Who Reports to Whom from Contact Pages in Lightning Experience			~	
Create Contacts Quicker from Account Records	~			
News	<b>~</b>			
	Productivit	y Features		
Sales Console (available within 24 hours after the release)	~			
Lightning Voice				
Lightning Voice Is Now Lightning Dialer	<b>~</b>			
Organize Calls with a Call List (Generally Available)			×	
Send Prerecorded Voicemail Messages			~	
Mute Your Microphone During Calls			×	
Make Calls from Numbers in Reports	<b>~</b>			
Set Up Lightning Dialer with Ease		~		
Inbox			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Email				
Use Your Classic Email Templates in Lightning Experience	<b>V</b>			
Update Your Classic Letterhead Email Templates		<b>~</b>		
See and Do More with the Pop–Out Email Composer	<b>~</b>			
See and Edit Your Email Signature as You Write	<b>v</b>			
Activities				
Stay on Top of Things with the Updated Activity Timeline	~			
Make Friends with the Updated Activity Composer	•			
Create Tasks and Activities with New Buttons	<b>V</b>			
List Views				
Delete Charts from List Views	<b>~</b>			
Navigate List Views with Your Keyboard	~			
Kanban				
Get the Kanban View for Knowledge and Social Persona	~			
Summarize by Numeric Fields	<b>~</b>			
Group the Kanban View by Owner	<b>~</b>			
Identify Cards That Reps Can't Update	<b>~</b>			
Notes				
Share Notes and Add Them to Records with Ease				
Convert Old Notes to Lightning Experience with the Salesforce API	2		~	
Turn Off Feed Tracking for Notes	×			
Person Accounts Show All Notes in Related Lists	✓			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Calendar		~		
Home				
See Assistant Updates in a New Way	<b>~</b>			
Group Data Points on the Performance Chart	<b>~</b>			
Upcoming Events Are Now Today's Events	<b>~</b>			
	Data Q	Juality		
Detect Duplicates Across Contacts and Leads Using Standard Rules			<b>v</b>	
Surface Duplicates Across Objects in Lightning Experience			~	
Handle Potential Duplicates More Easily in Lightning Experience	~			
Get a Free Assessment Before Investing in Data Packages			~	
	Google In	tegration		
Lightning for Gmail				
Relate Emails You're Composing to Salesforce Records			~	
Gain Speed and Consistency with Lightning Email Templates			~	
Stay Logged In to Lightning for Gmail	<b>~</b>			
Choose Which Attachments Are Keepers	<b>~</b>			
Keep Salesforce Events Up-to-Date			~	
Identify Emails Related to Salesforce Records Easily			<b>~</b>	
Lightning Sync for Google				
Sync Contacts Between Salesforce and Google Contacts			~	
Stay More Productive with Lightning Sync (Generally Available)			~	
Select Which Google Calendar Events Sync to Salesforce			<b>v</b>	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Google <sup>®</sup> Contacts and Events Sync More Frequently	<b>~</b>			
	Microsoft <sup>®</sup> I	ntegration		
Lightning for Outlook				
Pin Lightning for Outlook to Make Efficiency Pop			<b>V</b>	
Relate Emails You're Composing to Salesforce Records (available within 24 hours after the release)			~	
Gain Speed and Consistency with Lightning Email Templates	~			
Choose Which Attachments Are Keepers			<b>~</b>	
Rev Up Productivity with Enhanced Email			~	
Identify Emails Related to Salesforce Records Easily			<b>~</b>	
Lightning Sync for Microsoft <sup>®</sup> Exchange	0			
Sync Events in Both Directions Between Microsoft <sup>®</sup> Office 365 <sup>®</sup> and Salesforce			<b>v</b>	
Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events			~	
Microsoft <sup>®</sup> Contacts and Events Sync More Frequently	<b>~</b>			
Salesforce for Outlook				
Critical Upgrade Required to Continue Using Salesforce for Outlook	~			
Retirement for Microsoft <sup>®</sup> Outlook <sup>®</sup> 2007 Is Approaching			~	
Give Up Manual Upgrades by Migrating to Lightning for Outlook and Lightning Sync			<b>~</b>	
Extended Mail Merge				
Set Up Extended Mail Merge from Salesforce Classic Without a Call to Customer Support (available within 24 hours after the release)			~	

Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
		~	
Other Changes ir	the Sales Cloud		
		~	
	~		
~			
	×		
~			
~			
	×		
	×		
~			
nt Studio Enhanceme	nts and More Engage	e Reporting Options	
	Other Changes in           Image: Control of the control of th	Enabled for users       administrators/ developers         Other Changes in the Sales Cloud         Image: Cloud state s	administrators/ developers       administrators/ setup         Other Changes in the Sales Cloud       Image: Cloud         Image: Cloud

## Pardot Engagement Studio

Manage Prospect Assignments from Engagement Programs via Salesforce Queues

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Adjust Scoring Category Scores Based on Prospect Activity				
Check Scoring Category Scores in Engagement Programs				
Track and Report on Your Team's Engage Emails			<b>~</b>	

# Service

Route cases and push work to the right agent at the right time with Lightning Omni-Channel. Set up Lightning Knowledge and Communities painlessly with our guided, step-by-step setup flows. And get more done remotely with Field Service Lightning preventative maintenance, parts requests, and stock transfers. Work where your customers are!

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Experience Readiness Report		~		
Service C	onsole (available wit	hin 24 hours after the	e release)	
Supercharge Your Productivity in the Lightning Service Console App			<b>V</b>	
More Lightning Service Setup Flows (Beta)		×		
Streamline Support for Customers with Community 360 (Pilot)				~
	Cas	ses		
Less Is More—the Compact Case Feed	<b>~</b>			
Filter Your Case Feed in Lightning Experience	~			
View, Create, Edit, and Delete Case Comments			~	
See Email Attachments in the Case's Attachment Related List	~			
Send Snazzier Emails with a Better Rich-Text Toolbar	~			
The Send Email Quick Action Is Renamed Email	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Log a Call Action Available for Lightning Experience			~	
Reply to Social Posts in the Case Feed	<b>~</b>			
	Knowl	edge		
One-Stop Shop for Lightning Knowledge Setup	<b>~</b>			
Take Action with Knowledge Articles in the Sidebar	<b>v</b>			
View Knowledge Articles, No Clicks Needed	<b>V</b>			
A Record Home of Your Own—Configure Lightning Knowledge Record Home				
Lightning Knowledge Is Now Supported in Communities		~		
Create Engaging Articles with Enhancements to the Lightning Knowledge Rich Text Editor	~			
No Files Left Behind with Lightning Knowledge	<b>V</b>			
Move Them in, Move Them out: Import and Export with Record Types	~			
Lightning Knowledge Shows Knowledge, Not Articles	~			
Get Answers on the Go With Knowledge Articles in Salesforce1			~	
Find What You Need with Search Layouts in Lightning Knowledge			~	
Query Quickly with Updates to SOQL Queries for Knowledge Article Version (KAV)	~			
Check Out New Derived Fields for Knowledge			~	
Set Up Knowledge in the Lightning Service Setup				
Considerations for Lightning Knowledge				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Knowledge Search: Enhanced Relevand	ce, More Control over	Suggested Articles		
Find the Right Article for a Case with Higher Character Limits			<b>~</b>	
Search by Attached Files to Find Articles Faster	<b>×</b>			
	Omni-C	hannel		
Route Work to Agents in Lightning Experience (Beta)			~	
Use an External Routing Implementation with Omni-Channel (Beta)				
	Field S	ervice		
Get Ahead of the Game with Preventive Maintenance			×	
Get the Right Tool to the Job with Parts Requests and Stock Transfers			×	
Manage Your Mobile Workforce with Time Sheets			×	
Optimize Scheduling with the Field Service Lightning Managed Package			×	
Enjoy Profile-Based Access to Field Service Features			×	
Resource Absences Can Now Overlap		*		
Do More with Field Service in the Process Builder		~		
	Mobile Fie	ld Service		
View Work Orders Based on Location in iOS			~	
Finalizing Jobs Is More Reliable in iOS			~	
Bring the Schedule Screen Under Control in iOS			~	
New Branding Options and Geolocation Accuracy in the Field Service Mobile Settings Page for iOS			⊻	
Dependent Picklists Supported in iOS			<b>~</b>	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Community Users Gain Access to the iOS App		uevelopeis		enuble
Multi-day Appointments in iOS			~	
Good News, Android Lovers! The Field Service Lightning Mobile App for Android Is on the Horizon (Beta)			•	
	Social Custo	mer Service		
Get Social Customer Service in Professional Edition			<b>~</b>	
Do More with Facebook Posts	~			
Do All Your Socializing in Lightning Experience		~		
Boost Productivity with New Twitter Actions in the Redesigned Case Feed	~			
Get the Big Picture with Attachments in the Case Feed	~			
	Snap-ins	for Web		
Add Snap-ins to Your Lightning Communities			<b>~</b>	
Say Goodbye to Dropped Chats for Wandering Visitors			×	
Supply Notifications and Chat Options in an Informational Chat Window Header	~			
Let Agents Call for Backup with Chat Transfer			<b>~</b>	
Help Your Agents Get More from Chat Visitors with File Transfer			<b>~</b>	
Speak the Language: Customize and Translate Labels for Chat Visitors			<b>~</b>	
Don't Make Agents Wait for a Long-Lost Chat Visitor			×	
Your Chat Visitors Can Save Their Chat Transcripts	~			
Direct Chat Visitors to Other Resources			<b>~</b>	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Resize Your Chat Window and Font			<b>~</b>	
See Visitor Information with Incoming Chats	~			
Use Pre-Chat APIs to Send Nonstandard Pre-Chat Details			~	
Upgrade Your Snap-ins Chat Code Snippet to Use More Chat Features			<b>V</b>	
Bye-Bye, Send Button!	<b>~</b>			
Snap-ins for Mobile			~	
	Other C	hanges		
See the Assignment Checkbox in Salesforce1			~	
Changes to the Open CTI for Lightning Experience saveLog Method		×		
Chatter Answers Retires in Spring '18	~			
Work with Your Support Entitlements in Lightning Experience		×		
View Asset Level at a Glance	~			
Criteria-Based Sharing for Work Orders (Generally Available)	~			
Changes to the Web-to-Case and Web-to-Lead Endpoint URL				

# Analytics

Drive decisions with insights from reports and dashboards and Wave Analytics. Lightning Experience reports and dashboards get more collaborative with dashboard filters, improvements to report subscriptions, and other enhancements. With Einstein Discovery and the new Wave features, analytics become more accessible for both admins and business users.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	<b>Reports and</b>	Dashboards		
Add Dashboard Filters in Lightning Experience	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Find Reports More Easily While Adding or Editing Dashboard Components	~			
Add Combination Charts to Dashboards in Lightning Experience	~			
Subscribe Other People to Reports	<b>~</b>			
Create Report and Dashboard Folders in Lightning Experience	~			
Other Enhancements to Reports and Dashboards in Lightning Experience	~			
	Einstein Anal	ytics (Wave)		
Einstein Analytics, the New Name for Wave Analytics	~			
Wave: Einstein Discovery				
Set Up Einstein Discovery				~
Bring Your Data into Einstein Discovery			~	
Find the Stories Buried in Your Data			~	
Better Understand Your Data Through Visualizations			<b>V</b>	
Dig Deeper into the Data			~	
Share or Export the Story			~	
Display Einstein Discovery Recommendations in a Salesforce Object				<b>~</b>
Wave: Personalize Your Analytics Home	and Apps			
Experience Wave Via Streamlined Pathways for Business Users and Builders	<b>V</b>			
Include Lenses in Your Wave Apps	~			
Get Notified About Changes to Any Dashboard Widget	~			
Track and Manage Notifications on Your Wave Home Page like a Pro	~			
Delete a Dashboard from Its Tile or List View	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Reach the Heights of Productivity with the New Explorer	~			
Access More Wave Charts and Configure Them in More Ways	~			
Run Your Dashboards Faster with the Dashboard Inspector	~			
Tailor the Results to the User Viewing the Dashboard		~		
Show Totals and Maximize the Display in Tables	~			
Wave Designer Labels Have Changed	<b>~</b>			
Get Familiar with Dashboard JSON Changes for Wave Designer		×		
Wave: Updated Data Manager, New Co	nnectors to External S	ources, Dataflow En	hancements	
Work Smarter in the Data Manager		×		
Connect to External Data with Clicks, Not Code (Generally Available)			×	
Create Dataflows with Clicks, Not Code		×		
Extract Replicated Data with the Digest Transformation		~		
Learn About Dataflow Validation Enhancements		~		
Learn About Changes to Dataflow Limits		×		
Enable New Fields for Replication with Ease		~		
Add More Flavor to Your Data with New Recipe Ingredients		~		
Get On Track with the Flexible Scheduler		×		
Create Datasets, Avoid Clutter		×		
Use Your Salesforce Sharing Settings in Wave			×	
Wave: Action Menu Customization, Mo	re Bindings, and Emb	edding in Communit	ies	
Enable Actionable Insights with Clicks Not Code	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Define Richer Widget Interactions with Enhanced Bindings Support		<b>v</b>		
Embed Wave Dashboards in Communities the Easy Way with Community Builder			✓	
Wave: Trend Data				
Delete Inactive Trending Dashboards			~	
Embed Trending Dashboards into Lightning Reports	~			
Wave: Accelerate with Prebuilt Wave Ap	ops			
Lenses Added to Sales App Give You Fine-Grained Data Insights				
Sales Analytics: Smarter Selling and Sales Process Optimization, Now Faster than Ever				
Introducing Field Service Analytics				
Optimize Sales Processes With the Latest Sales Wave Dashboard				
Keep Your Team Productive and Customers Happy with New Service Wave Dashboard				
Wave: Analytics on Mobile				
Experience the Latest Wave for iOS	<b>~</b>			
Get the Latest for Wave Analytics for Android	~			
Wave: New APIs, SDKs, and Templates				
Introducing Wave Templates		<b>~</b>		
Updates to the REST API		<b>~</b>		
Query your Dataset with the Wave Apex SDK		~		
Communicate with Wave Dashboards Using the Web SDK		~		

# Communities

Communities makes a splash this summer with a slew of flexible new features. Extend Salesforce CRM to your partner network, and drive channel sales with the native Lightning Partner Central solution. Use CMS Connect to render content from your content management

system (CMS) in your community for consistent branding and easier maintenance. Switch between communities and see real-time notifications with App Launcher and Notifications support. We've got lots more to show you, so dive in!

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Critical Update Activation: LockerService in Communities			<b>~</b>	
Extended Deadline for TLS 1.0 Disablement in Communities			<b>~</b>	
Announcing Partner Central—The New Partner Community Solution			<b>~</b>	
Connect Your Content Management System (CMS) to Your Community (Beta)		×		
Get More Criteria-Based Audiences		<b>~</b>		
Community 360 Empowers Support Agents to Better Help Customers (Pilot)		~		
Protect Your Secrets by Adding a Login Form to Your Website		×.		
Move Communities Between Orgs with Change Sets		×		
Upgrade Community User Licenses in a Blink		×		
Lightning Bolt		×		
Usak	oility, Design, and Per	formance Improvem	ents	
Get More Out of Communities with Community Workspaces		<b>~</b>		
Easily Switch Between Your Salesforce Org and Communities			<b>~</b>	
Stay on Top of What Happens in Your Communities with Global Notifications			~	
Simplify Your Style with Centralized Branding Properties		×		
Analyze and Improve Community Performance (Developer Preview)			×	
Components—Use 'Em Where You Need 'Em		×		
Improve SEO Results by Setting Your Preferred Domain		×		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Communities				
Refine Your Content with a Streamlined Rich Content Editor and Dedicated HTML Editor				
Koa and Kokua Templates No Longer Available for New Communities		~		
Include Topics and Feeds in Community Global Search Results		~		
Organize Your Community's Top Articles by Topic		~		
Search and Sort Specific Feeds in Communities		~		
Assign Topics Automatically to Articles in Communities		~		
Help Customers Discover and Interact with Content Using the Improved Article Detail Page				
Add the Language Picker to Any Lightning Community Page		~		
Case Detail Page Variation and Components to Retire Summer '19		~		
Set Up a Community in Lightning Service Setup		~		
Use the Snap-ins Component to Add Live Agent to Lightning Communities			~	
Files in Lightning Communities				
Take Action on Files Right from the Feed	×			
Take Action on Files from the Related List	<b>~</b>			
Share Public Links to Your Files	~			
Unshare a File in Communities	<b>~</b>			
Add Multiple Files to Libraries	~			
Chatter in Lightning Communities				
New Editor Brings Better Topics, Mentions, and Comments	<b>~</b>			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Sort Discussion Global Search Results by Relevance	<			
Filter Community Groups to Show Unread Posts	~			
Share Posts with a Community Group	~			
Create a Report on the Top 100 Feed Item Views		×		
Direct Messages Has Better Membership Management and Navigation	~			
Poll Your Community	×			
Manage Group Members in One Place	<b>~</b>			
Change Your Email Notifications While in Your Group				
Get and Do More with Group Tiles	<b>~</b>			
	Custom Lightnin	ng Components		
Add App Launcher and Notifications Components to Lightning Components in Communities			<b>~</b>	
Integrate Your Custom Apps into the Chatter Publisher (Pilot)		×		
	Anal	ytics		
Keep Track of Community Health with the Service Community Scorecard		<b>~</b>		
Create a Custom Report Type to See Click-Through Rates for Related Articles		<b>~</b>		
Track Community Activity with New Participation Reports			~	
Mark the Sentiment of Your Feed Posts and Comments (Pilot)		×		
Detect Spam with Einstein (Pilot)			~	
Embed Wave Analytics with the Wave Dashboard Component			~	
Take Action from the Flagged Discussions Moderation Queue		×		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Other Changes i	n Communities		
Mass Actions Available for External Members	~			
Lightning Knowledge Is Now Supported in Communities		×		
Object Detail Pages Now Redirect to SEO-Friendly URLs		×		
Use More Rel Attribute Values in Head Markup		×		
The Builder Link Is Back!		~		
More Accurate Label on Administration Preference in Community Workspaces		×		
The Moderation Perm for Direct Messages Has Changed		~		
Customer Community Plus Users Can Change Case Statuses		×		
Manage External Users Permission Allows Account Merges		×		

### Chatter

Organize feeds with topics, enjoy the new streams home, manage group membership with ease, and see who's been most active in Chatter.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Chatter	Overall		
Use Topics to Organize Your Content in Chatter	✓			
Discover People to Follow and Groups to Join	~			
	Fee	ds		
There Are Lots of Shiny New Features for Streams	~			

Forsterro		Enabled for administrators/	Requires administrator	Contact Salesforce to
Feature	Enabled for users	developers	setup	enable
Use a Record's Follow Action to Add It to a Stream	<b>~</b>			
Get a Richer Experience with the New Editor in Chatter	<b>v</b>			
Sort Feed Global Search Results by Relevance	<b>v</b>			
Company Highlights Is the Default Feed for New Users	~			
Filter Groups to Show Unread Posts	<b>~</b>			
Filter a Profile to See a User's Posts	<b>~</b>			
The What I Follow Feed Gets Some New Filters	~			
Is Your Post Reaching the Right People?	<b>~</b>			
Share a Post with a Group in Lightning Experience	<b>v</b>			
Create a Report on the Top 100 Feed Item Views			<b>~</b>	
Encryption for Chatter Gets Updates (Pilot)				~
	Gro	ups		
Manage Members with Ease	<b>~</b>			
Create New Groups from Chatter Home	<b>~</b>			
See Group Email Notifications on the Group Page	<b>v</b>			
Get Group Info (and Even Join) in the Tile View	~			
	User P	rofiles		
See Who's Most Active in Chatter with the Top Users Report		~		
Identify External Users at a Glance	<b>~</b>			
Flaunt Your Vacation with Out-of-Office Messages for Your Profile (Pilot)	~			

### Files

Libraries are available in Lightning Experience, even for users without Salesforce CRM Content licenses. Multiple upgrades to libraries help you work better in Lightning Experience: add multiple files to a library, customize your file detail pages, and take action on files right from your Chatter feed.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Consciously Uncoupling: Libraries and Content	~			
Updates to Libraries	<b>~</b>			
Customize the Files Detail Page		~		
Validation Rules Improve File Data			<b>~</b>	
Share Public Links to Your Files	~			
Get Better Performing, More Secure Content Previews with Lightning Delivery Player	~			
Unshare a File	×			
Right-Click to Open a File in a New Tab	<b>~</b>			
Drag Files onto Files and Attachments Related Lists	•			
Take Action on Files Right from the Feed	<b>~</b>			
Files Transfer to Related Records Automatically When Leads Are Converted	<b>~</b>			
Convert Attachments to Files			~	
Authenticate Effortlessly to External File Sources in Salesforce	~			
Enjoy More Room for Files	<b>~</b>			

### Salesforce Integrations: Taking Salesforce to the Next Level

Empower your users to be more productive by connecting Salesforce to some of the industry's leading business applications. Most of these integrated apps are available in both Salesforce Classic and Lightning Experience, but a few are available in only one or the other.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Skype for Salesforce (Beta) in Lightning Experience: Simplified Administration Between Microsoft 365 <sup>°</sup> and Salesforce			<b>v</b>	
Google Integration: General Availability for Lightning for Gmail and Lightning Sync			~	
Microsoft <sup>®</sup> Integration: More Improvements, Increased Productivity			<b>V</b>	

### 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. Salesforce1 offers improvements to search, approvals, 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
	Salesf	orce1		
What's New in the Latest Salesforce1 Downloadable Apps	~			
Salesforce1: Everything That's New				
Updated Salesforce1 Requirements	<b>~</b>			
New Search Experience in Salesforce1 for Android	~			
Get More Information About Records Before You Tap	~			
Navigate Easily to Person Accounts				
Create Contacts Quicker from Account Records	✓			
Legacy Charts in Salesforce1 Will Retire in Spring '18 (Phased Retirement)	~			
Tag Posts and Comments with Topics	<b>~</b>			
Sort Feed and Discussion Global Search Results by Relevance	~			
Poll a Community from Your Mobile Device	<b>~</b>			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Salesforce A	uthenticator		
Get More Reminders to Keep Your Authenticator Account Backups Current	<b>v</b>			
Find Your App Version in Salesforce Authenticator	~			
Salesforce Mobile Classic		~		
Salesforce	A: More Resource Op	tions for Android and	d iOS Users	
Check Your Lightning Experience Readiness with SalesforceA				
Kick Off Optimizer with SalesforceA				
SalesforceA Connected App Splits into Two				
Salesfor	rce Chatter: A New Wa	ay to Work with Win	dows 10	
Supported Devices and Installing Salesforce Chatter	~	<b>~</b>		
What's Available in Salesforce Chatter	<b>~</b>	<b>~</b>	~	

### **Financial Services Cloud**

Share the wealth of Financial Services Cloud Lightning components that are now available in Communities. Get on the fast track to creating individuals and adding them to groups with the new Client Profile Builder. Take advantage of quick actions in Wave for Financial Services Cloud.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Build a Digital Portal for Independent Advisors with Lightning Components			<b>v</b>	
Access Financial Services Cloud in Communities			~	
Create an Individual with the Client Profile Builder			~	
Take Action in Einstein Analytics for Financial Services Cloud			~	
Unlock Member Details on Relationship Groups			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Configure Account and Contact Information			~	
Let the Last Name Be First			<b>~</b>	
	Other Changes in Fin	ancial Services Cloud	i	
Assign a Permission Set License		~		

### Health Cloud

We've streamlined the care of patients with chronic or long-term medical conditions by allowing them to have multiple, concurrent care plans and more than one care manager. And now patient lists created from the Einstein Analytics for Health Cloud app can be sent to and used in the Health Cloud console. To make your life easier as an admin, we've packaged up three new Lightning components that let you create patient communities in no time at all.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create Concurrent Care Plans		<b>~</b>		
Use Health Cloud Er	npower Lightning Co	mponents to Build a	Patient Community	
Give Care Team Members Access to Care Plans from the Community			<b>V</b>	
Access the Care Team in Communities			~	
Give Care Team Members Access to Tasks from the Community			~	
Send a Patient List from the Analytics App to Health Cloud	~			
Control the Sort Order of Items in Care Plans			~	
Create Care Plans That Fit Your Patients		~		
Get Timeline Details at Your Fingertips			~	
Procedures and Procedure Requests Added to the Timeline	~			
Delete Patient Lists	<b>~</b>			
Archived Tasks Are Available in Health Cloud Console	~			
Assign a Permission Set License		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Add Visualforce Page Access to Console Users			~	
Health Cloud Has New Custom Objects		~		
Changed Health Cloud Object		~		

### Customization

Make your Lightning pages smarter by adding the new Einstein Recommendations component. Navigate more quickly around the Object Manager and other parts of Setup in Lightning Experience. And get more done in Lightning Experience with enhanced approvals and Lightning flow runtime. If that's not enough, check out the usability improvements to our data import tools and global picklists.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Lightning A	pp Builder		
Power Up Your Lightning Pages with the Flow Component (Generally Available)				
Personalize Home and Record Pages with Einstein Recommendations		×		
Add a Launch Pad for All Your Third-Party Apps on Your Home Pages		×		
	Set	up		
Open More Tabs from Setup with Right-Click		×		
Find Your Way to Object Manager More Quickly		<b>×</b>		
Efficiency Features at Your Fingertips in Setup		<b>~</b>		
Rich Text Editors for Custom Fields Get a New Look	~			
Show Custom Apps in Lightning Experience		<b>~</b>		
Disable Lookup Record Preview in Lightning Experience for Accessibility		<b>~</b>		
Supported Languages Changed and Added			<b>~</b>	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Delegated Admins: View and Assign Public Groups with More Ease		<b>~</b>		
Block Execution of JavaScript in the HYPERLINK Function (Critical Update)			<b>~</b>	
	Appro	ovals		
Reassign Approval Requests	<b>~</b>			
Recall Submitted Approval Requests	<b>~</b>			
View Approval Comments	<b>~</b>			
	Visual W	orkflow		
Embed Your Flows in Lightning Pages (Generally Available)		<b>~</b>		
Launch Flows in Lightning Runtime from Buttons, Links, and Custom Tabs		~		
Redirect Flows That Render in Lightning Runtime		×		
Now You See Me, Now You Don't: Dynamically Update Flow Screen Fields (Pilot)				
Access Encrypted Data in Your Flows (Beta)				~
Get Extended Error Details for Flows in the Tooling API		×		
Customize the Look and Feel of Flow Interviews with the REST API (Pilot)				~
	Data lı	mport		
Search for Fields When Mapping	<b>~</b>			
Separate Data in Your Import File	<b>~</b>			
The Handling of Errors During Import Has Changed	<b>×</b>			
Match Look-Up Fields with an External ID	~			
	Custom Field and Pic	klist Administration		
Track Time with the New Time Field Type (Pilot)				~

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Define Default Values at the Field Level			~	
Promote Your Picklist Fields to Global Value Sets			~	
Global Value Sets Get Higher Limits			~	
	Permiss	ion Sets		
Session-Based Permission Sets Are Generally Available (available within 24 hours after the release)		<b>V</b>		
Activate or Deactivate a Session-Based Permission Set Using a Flow (available within 24 hours after the release)				
Create More Permission Sets in Professional Edition				
Permission Set Metadata Behavior Change				
	Salesforce	Connect		
Track External Object Data Callouts with Event Log Files (Pilot)		~		
Improved Support for Picklist and Multi-Select Picklist Fields on External Objects			~	
New Rate Limit Applied to External Object Search Results	~			
Prepare for Temporary Salesforce IDs for External Object Records		×		
	Process	Builder		
Access Encrypted Data in Process Builder (Beta)				<b>~</b>
Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)			~	

### Security and Identity

Transaction Security has a handy new Lightning Experience interface, formulas now work with encrypted fields, and you can connect your website to your backend CRM with Embedded Login.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Authentication	n and Identity		
Embedded Login Enables Users to Log In to Your Website		~		
Get More Control over Connected App Access				~
Export Profile Password Policies		×		
Bookmark Redirection Is Supported Even When Chatter Is Disabled				~
Command Your Brand with Dynamic Branding		~		
Remove the Surprise of Session Timeout	<b>~</b>			
Tooling API Endpoints Now Included for Salesforce Identity				
Require Identity Confirmation When Adding Two-Factor Authentication		×		
Require Identify Verification When Changing Email Address		×		
Deprecating loginURL Query Parameter		*		
Enable Lightning Login for All Users		×		
Avoid Using Path Prefixes Reserved by Salesforce		~		
SAML Single Logout (SLO) Is Available (Beta)		×		
SAML Signing Certificate Is Being Retired		×		
Streamline Connected App Access with Improved IP Relaxation				
	Health	Check		
Import a Custom Security Baseline into Health Check (Generally Available)		~		
Health Check Has New and Changed Security Settings		~		
	Salesforc	e Shield		
Platform Encryption				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Retrieve Encrypted Data with Custom Formula Fields (Generally Available)			×	
Apply BYOK Tenant Secrets to Search Index Files			×	
Granular Control of Certificates with the New Manage Certificates Permission			×	
Access Encrypted Data with Flows and Process Builder (Beta)			×	
Encrypt More Data in Chatter Feeds (Pilot)			~	
Encrypt Standard Lead Fields (Beta)				~
Encryption for Wave (Beta)			~	
Mass Encryption Now Includes Existing Email Attachments			×	
Critical Update: Encrypted Data Is Visible to Authenticated Users				
Event Monitoring				
Updated Event Monitoring Analytics App Lets You Visualize Your Users' Actions in Lightning Experience		<b>•</b>		
Streamlined Permission Setup for Event Monitoring Analytics Apps		×		
Identify Users Who Download Large Reports		~		
Track User Actions in Lightning Experience More Comprehensively with New Fields		×		
Use Async SOQL and UniqueKey for More Flexibility in Login Forensics		×		
Prevent Identity Fraud in Government Cloud with Login Forensics		×		
Track Salesforce Connect Callouts with Event Log Files (Pilot)		×		
Prepare Your Org for UI Tracking Event Type Retirement		~		
Transaction Security				
New Wizard Guides You Through Creating Policies			×	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Monitor Chatter Posts with New Resources and Actions			~	
Get Comfortable Writing Chatter Policies with New Examples			~	
Other Changes				
Secure HTTPS Connections for Third-Party Domains				

### Deployment

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
New Change Set Components		✓		
Modify All Data Permission Is Automatically Selected When You Select Deploy Change Sets		<b>v</b>		

### Development

Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, these enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to others.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Lightning C	omponents		
LockerService Critical Update Activation		~		
Critical Updates for Stricter CSP			<b>~</b>	
Restrictions			_	
Disable Access to Non-global Apex			<b>~</b>	
Controller Methods in Managed				
Packages (Critical Update)				
Override Standard Actions with			<b>~</b>	
Lightning Components			_	
Lightning Data Service (Beta)		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Find Component Markup Errors Faster with Improved Error Messages	~			
Browser Console Warnings for JavaScript and Apex Actions with the Same Name		✓		
Use the aura:valueRender Event Instead of a Custom Renderer		<b>v</b>		
Streamlined Validity Checks for Components		×		
Use the force:hasSObjectName Interface with Quick Actions			×	
Use force:createRecord to Prepopulate Fields on the Record Create Panel			~	
Choose a CSP Level for lightning:container (Developer Preview)		<b>~</b>		
Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods		₹		
Deprecated useAppcache Attribute in aura:application		×		
Removed LockerService Restriction on instanceof in JavaScript		×		
New and Changed Lightning Components		<b>~</b>		
New and Changed Lightning Events		~		
New and Changed Lightning Interfaces		~		
New JavaScript API Methods		*		
	Einstein	Vision		
Einstein Vision Is Now Generally Available		<b>~</b>		
New UI Makes It Easy to Get a Token		<b>~</b>		
Access the API in Heroku Using the Einstein Vision Add-On		~		
Create a Dataset from a Zip File		<b>~</b>		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Page Through All Examples in a Dataset		· · · ·	•	
Monitor API Usage		~		
	Visual	force		
Use Advanced PDF to Render Visualforce Pages as PDF Files (Pilot)			~	
Prepopulate Fields on a Record Create Panel			~	
Access Visualforce Page Metrics Using the SOAP API			~	
Roll Back Changes in Your Org When Remote JavaScript Methods Throw Exceptions			<b>V</b>	
Allow CSRF Protection on GET Requests to Visualforce Pages Critical Update Postponed				
Add Clickjack Protection for Legacy Browsers to Visualforce Pages Without Page Header Is Now Enforced (Critical Update)			<b>×</b>	
Lightning Design System		~		
	Salesforce	DX (Beta)		
Access Salesforce DX (Beta)				
Second-Generation Packaging (Pilot)				
Salesforce Development Tools for Visual Studio Code (Beta)				
Salesforce Command-Line Interface (CLI)				
Considerations for Salesforce DX (Beta)				
Considerations for Force.com IDE 2 (Beta)				
Information for Pilot Participants				
Upgrade Your Salesforce DX Pilot to Beta				
Beta Changes That Affect the Pilot Salesforce DX Environment				
Force.com IDE 2: Move from Pilot to Beta				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Ар	ex		
Retrieve and Deploy Metadata in Apex		~		
Send and Manage Orders with Apex				~
Modifying an Apex Class Invalidates Platform Cache		~		
Safely Cache Values with the New Cache Builder Interface		~		
Cache Operations Supported in Visualforce Controllers		~		
Handle Attachments Easily with New Messaging Methods		×		
Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)			~	
POST Method for runTestsSynchronous Requires View Setup Permission (Critical Update)			~	
Apex: New and Changed Classes and In	terfaces			
New Apex Classes		×		
Changed Apex Classes		×		
New Apex Enums		×		
New Apex Interfaces		~		
Changed Apex Interface		×		
ConnectApi (Chatter in Apex): New and	Changed Classes and	Enums		
New and Changed Chatter in Apex Classes		×		
New and Changed Chatter in Apex Input Classes		×		
New and Changed Chatter in Apex Output Classes		×		
New and Changed Chatter in Apex Enums		<b>~</b>		
	AF	2		
New and Changed Objects				
New Objects		<b>~</b>		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Changed Objects		✓	•	
SOSL				
WITH HIGHLIGHT Supports Custom Fields and Objects		×		
Disable Spell Correction on a Search Query with WITH SPELL_CORRECTION		×		
REST API				
New Resource: Record Count		×		
New Resources: Flows and Flow Interviews (Pilot)				~
Changed Resource: Search Suggested Records		~		
New Resources for Platform Event Schema		<b>~</b>		
Changed Header: Assignment Rule		<b>~</b>		
SOAP API				
New and Changed Calls		~		
Chatter REST API				
New and Changed Chatter REST API Resources		~		
New and Changed Chatter REST API Request Bodies		×.		
New and Changed Chatter REST API Response Bodies		×		
Reports and Dashboards REST API				
New Resources: Filter Operators, Filter Options Analysis, Report Fields		×		
New Methods		×		
Changed Resources: Analytics Notifications and Dashboard Describe		×		
Bulk API				
Simplified Job Process for Bulk API 2.0 (Pilot)				<b>~</b>
Enterprise Messaging Platform				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Deliver Custom Notifications with Platform Events (Generally Available)		<b>~</b>		
Supported CometD Versions for Streaming API		<b>~</b>		
Tooling API				
Warnings Returned from Successful Metadata Save Operations				
Improve the Performance of Tools and Apps Built with Tooling API By Using the Composite Resource				
Tooling API New and Changed Objects		~		
Metadata API		~		
Data Services				
Enhancements to BigObjects (Pilot)				×
Enhancements to Async SOQL (Pilot)				×
User Interface API (Developer Preview)				
Lightning API Name Changed to User Interface API		~		
User Interface API Supported Objects		~		
Object Info Response Body Includes Child Relationships		~		
Discover Whether a Field Is Required in a Layout		<b>v</b>		
Record Exception Error Includes Information About Compound Fields and Duplicate Records				
Lightning Console JavaScript API (Pilot)			<b>~</b>	
Open CTI API		~		
Other API Changes				
Federated Search API				
	Custom Meta	adata Types		
Add Validation Rules for Custom Metadata Type Fields		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Custom Metadata Types Support Long Text Areas (Generally Available)		~		
Still Using Custom Settings? We Have a Usage Button for You		×		
	ISVfo	orce		
Send and Manage Orders in Lightning Experience				<b>v</b>
Automate Order Processing with the Channel Order Apex API				~
Exclude Subscriber Orgs from a Push Upgrade				~
Improved Performance for Managed Package Push Upgrades				~
Metadata Access in Apex				~
Use the Developer Hub to Manage Your Scratch Orgs (Beta)				~

### Supported Browsers

We've made some changes to our supported browsers documentation, making it easier to find what you need. 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

We previously communicated that the end of support date for Internet Explorer version 11 (IE11) for Lightning Experience was December 16, 2017. We received your feedback, and as a result will be offering Extended Support for IE11. This extended support will be available through December 31, 2020.

#### Supported Browsers for Salesforce Classic

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

### Supported Browsers for Lightning Experience

See the supported browsers and limitations for Lightning Experience.

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

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 into Extended Support for IE11, you can continue to use IE11 to access Lightning Experience until December 31, 2020.
- This change doesn't impact Salesforce Classic or users of orgs with Communities.

For more details about this change, see Retirement of 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

	Microsoft <sup>®</sup> Internet Explorer <sup>®</sup>	Microsoft <sup>®</sup> Edge	Google Chrome <sup>™</sup>	Mozilla <sup>®</sup> Firefox <sup>®</sup>	Apple <sup>®</sup> Safari <sup>®</sup>
Lightning Experience	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	10.x+
Lightning Console Apps	No	Latest	Latest	Latest	10.x+
Lightning Communities	IE 11	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

We previously communicated that the end of support date for Internet Explorer version 11 (IE11) for Lightning Experience was December 16, 2017. We received your feedback, and as a result will be offering Extended Support for IE11. This extended support will be available through December 31, 2020.

We believe that this extended period will give you the time you need to migrate from IE11 to more modern and secure browsers, while still allowing you to take advantage of the benefits of Lightning Experience now.

#### EDITIONS

Lightning Experience is available in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions For complete details of Extended Support for IE11, including what's covered and what isn't, and steps you need to take, see Retirement of Support for Accessing Lightning Experience Using Microsoft Internet Explorer version 11.

#### SEE ALSO:

"Disable Access to Lightning Experience and the Salesforce1 Mobile Browser App from IE11" Critical Update Canceled

### Supported Browsers for Salesforce Classic

Salesforce Classic is supported with Microsoft<sup>®</sup> Internet Explorer<sup>®</sup> version 9, 10, and 11, and Apple<sup>®</sup> Safari<sup>®</sup> version 10.x on macOS. The most recent stable versions of Microsoft Edge, Mozilla<sup>®</sup> Firefox<sup>®</sup>, and Google Chrome<sup>™</sup> 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 Salesforce1 app when you're working on a mobile device. To see the mobile browsers that are supported for Salesforce1, check out Requirements for the Salesforce1 Mobile App.

	Microsoft <sup>®</sup> Internet Explorer <sup>®</sup>	Microsoft <sup>®</sup> Edge	Google Chrome <sup>™</sup>	Mozilla <sup>®</sup> Firefox <sup>®</sup>	Apple <sup>®</sup> Safari <sup>®</sup>
Salesforce Classic	IE 9+	Latest	Latest	Latest	10.x+
Salesforce Console	IE 9+	Latest	Latest	Latest	No
Special setup considerations?	Yes	No	No	Yes	No
Limitations?	Yes	Yes	No	No	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.
- Salesforce Classic support for Microsoft<sup>®</sup> Internet Explorer<sup>®</sup> versions 7 and 8 is discontinued as of Summer '15.

### Salesforce Overall: More Tools to Help You Adopt Lightning Experience, Keyboard Shortcuts, and More Ways to Navigate and Manage Records

Summer '17 gives you more reasons to love Lightning Experience. We've given the Lightning Experience Migration Assistant an easier-to-use wizard-style interface, you can now use keyboard shortcuts to maximize efficiency, success messages now include an active link that takes you to the record you created, and you can open multiple records and related records on one screen with Lightning console split view.

IN THIS SECTION:

#### Improve Files Adoption with Optimizer Analysis

Optimizer now analyzes whether your users are working with Files features to manage their documents in Salesforce more effectively.

#### Identify and Replace S-Controls with Optimizer Analysis

Optimizer now analyzes whether your implementation contains s-controls, a feature that Salesforce no longer supports. Optimizer recommends replacing all s-controls with Lightning components or Visualforce pages.

#### Improve Service Cloud Adoption with Optimizer Analysis

Optimizer now analyzes whether your implementation uses certain Service Cloud features that can help your support agents work more productively.

#### New Features in Optimizer Analysis

Optimizer now analyzes your implementations' static resource limits and formula fields.

#### Improve Feature Adoption with Optimizer Analysis

Optimizer now analyzes whether your implementation uses certain features that can help your users work more productively.

#### Storage Limits, Unsupported Browsers, and New Analysis in Optimizer Reports

Optimizer now analyzes several new items across your implementation. These features are available in late May 2017.

#### Keep Your Code Current with Optimizer

Optimizer now analyzes your Apex and Visualforce code to check whether your implementation uses out-of-date API versions. Optimizer flags the code so that your developers can update it to the latest API version. This feature is available in May 2017.

#### Find Unused Reports and Dashboards with Optimizer

Optimizer now checks for reports and dashboards that haven't been run in more than a year so that you can delete them from your implementation. This feature is available in May 2017.

#### Get Better Assistance with the Restyled Lightning Experience Migration Assistant

To guide you through the optimal path to enabling Lightning Experience, we've given the Migration Assistant an easier-to-use, wizard-style interface. The tools for assessing and previewing your org's readiness, setting up features and users, and flipping the switch are now visible at a glance—and faster to access. Oh, and it's also easier to find the Migration Assistant in Setup. This change applies to both Lightning Experience and Salesforce Classic.

#### Get Expanded Analysis When You Check Your Lightning Experience Readiness

The Readiness Check is chock full of more actionable advice for preparing your Salesforce implementation for Lightning Experience. We've got specifics on preparing Sales and Service Console and Salesforce Knowledge, as well as roadmap and usage data for several Service Cloud features. In addition, we're building on our past advice for resolving Cases and JavaScript buttons and links, and adding insight on who's ready to move to Lightning Experience. We've also reorganized instructions on how to use your report to inform your rollout plan moving forward. And since it only takes one click to get a personalized report sent straight to your email inbox, there's no reason to wait to kick off the Readiness Check. This change applies to both Lightning Experience and Salesforce Classic.

#### Switch More Users to Lightning Experience

When you enable Lightning Experience, it's important to get your users working in—and benefiting from—the new interface. To help, the Switch Users to Lightning Experience tool now displays all users in your org, so you can switch the exact group that you want in one go. The tool also makes it easier to find specific users in the list and to see which users in your org are eligible to switch. This change applies to both Lightning Experience and Salesforce Classic.

#### Make Lightning Experience the Only Experience

Ready to move from Salesforce Classic to Lightning Experience without looking back? Just hide the option to switch to Salesforce Classic from your Lightning Experience users so that they stay in Lightning Experience. This feature is new in both Lightning Experience and Salesforce Classic.

#### Ditch Your Mouse—Keyboard Shortcuts Are Here

You can now use keyboard shortcuts to maximize your efficiency and speed while working in Lightning Experience. You can search for, edit, save, and close a record—all without touching a mouse. We've even got keyboard shortcuts to help you go to the publisher and post to a feed. So start planning what you want to do with all the time you're going to save! By default, keyboard shortcuts work in all Lightning apps. This change applies to Lightning Experience only.

#### Navigate to a Record Directly from an Action Success Message

We added a small but powerful enhancement to the success message that displays when you create or update a record via a quick action. The message now includes the record name as an active link that takes you right to that record. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### Lightning Console Apps: See and Do More (Generally Available)

Lightning console apps are generally available and include more features that help your users be productive. With the addition of split view, keyboard shortcuts, and person accounts, users have everything they need at their fingertips. These changes apply to Lightning Experience only.

#### Choose Utility Icons for Your Lightning Apps More Easily

When creating or editing Lightning apps, you can choose icons for your utilities directly in the Lightning app wizard. Previously, you clicked a link to open a new browser tab that listed the Salesforce Lightning Design System utility icons. This change applies to Lightning Experience only.

#### Rich Text Editors Reenabled for LockerService

You can now use rich text editors and edit fields with rich text when the LockerService critical update is active. Previously, rich text editors were disabled in sandboxes and Developer Edition orgs when the LockerService critical update was active. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### Access Field History Related Lists in Lightning Experience

Track and display the field history for standard or custom objects, regardless of which Salesforce interface you're using. If you added the History related list to objects in Salesforce Classic, you can now see it in Lightning Experience. You can also set up a field history related list in Lightning Experiences. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce 1 mobile app.

#### Preview Case Details with Case Hovers

Users can hover over cases to get a sneak peek at the details, including the description and latest update. No more opening the case record to get important information—talk about a time saver! Support agents who work with cases all day will appreciate this feature. Case hovers work automatically, so there's nothing for you to set up. This change applies to Lightning Experience only.

#### Stay in Your Current App When You Open Favorites

Using a sales app? Working with the Lightning console? Your favorites don't care. They open in whichever app you're using. No more switching to the app where you created your favorite. Now use your favorites from anywhere to instantly access important Salesforce pages, like records, lists, groups, and dashboards. This change applies to Lightning Experience only.

#### Find Favorites with a Simplified Favorites List

We removed the top favorites section from your favorites list to simplify the way you access your favorite pages in Salesforce. Favorites give you instant access to important records, lists, groups, dashboards, and other frequently used pages. Turns out, top favorites wasn't your favorite way to use favorites. You no longer see top favorites because we're focused on the features that matter to you most and, based on your feedback, this one didn't. This change applies to Lightning Experience only.

#### "Disable Access to Lightning Experience and the Salesforce1 Mobile Browser App from IE11" Critical Update Canceled

The timetable for the end of support date for Internet Explorer version 11 (IE11) for Lightning Experience has changed significantly. As a result, this critical update has been canceled.

#### Enjoy a Spiffier Look and Feel in Lightning Experience

We've enhanced the look and feel of some areas to bring a little Trailhead pizazz into Lightning Experience. For example, we've updated the text and visuals on Setup Home, and there's more engaging text on the Profile page. This change applies to Lightning Experience only.

#### Search: External Search Results, a Better Way to Find Opportunities, and More

Extend your reach with search. Connect external search providers to see results from Google, Dropbox, Confluence, and other repositories right in Salesforce. Trying to find an opportunity in a sea of similarly named opportunities? Add the account name to your search term to find the right one. Plus, see when your search term has been spell corrected, and search more objects.

### Improve Files Adoption with Optimizer Analysis

Optimizer now analyzes whether your users are working with Files features to manage their documents in Salesforce more effectively.

Optimizer reports on the adoption levels of these items.

#### Files Usage

Optimizer evaluates how many users are using Salesforce Files and recommends ways to improve Files adoption.

#### **Converting Attachments to Files**

If your implementation contains a high number of Attachment objects, Optimizer recommends converting them to Files.

#### **Replacing the Notes and Attachments Related List**

If your implementation uses the Notes and Attachments related list, Optimizer recommends replacing it with the Files related list.

### Identify and Replace S-Controls with Optimizer Analysis

Optimizer now analyzes whether your implementation contains s-controls, a feature that Salesforce no longer supports. Optimizer recommends replacing all s-controls with Lightning components or Visualforce pages.

Improve Service Cloud Adoption with Optimizer Analysis Optimizer now analyzes whether your implementation uses certain Service Cloud features that can

help your support agents work more productively.

Optimizer reports on the adoption levels of these items in its analysis.

#### Lightning Service Console

Optimizer suggests that your support agents use the Lightning Sales Console so that they can access and update support records quickly and easily.

#### Case Feed

If Case Feed isn't enabled, Optimizer suggests enabling it to help your agents collaborate on service records.

#### Omni-Channel

If Omni-Channel isn't enabled, Optimizer suggests enabling it to route work items to agents efficiently.

#### Macros

If Macros isn't enabled, Optimizer suggests enabling it. Use macros to streamline your agents' most common workflows while they work on support records.

#### **Keyboard Shortcuts**

If your implementation doesn't contain custom keyboard shortcuts, Optimizer suggests creating some to help your agents navigate Salesforce quickly.

#### EDITIONS

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

## EDITIONS

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

#### EDITIONS

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

Available in: Professional,

Enterprise, Performance,

Unlimited, and Developer

### New Features in Optimizer Analysis

Optimizer now analyzes your implementations' static resource limits and formula fields.

Optimizer reports on the following feaures in its analysis.

#### Formula Fields that Contain JavaScript Code

Optimizer analyzes your existing formula fields to determine if they contain JavaScript code, which can cause security issues. If Optimizer finds JavaScript code in formula fields, it recommends that you replace them.

#### **Static Resource Limits**

Optimizer determines if you're approaching static resource limits in your implementation.

### Improve Feature Adoption with Optimizer Analysis

Optimizer now analyzes whether your implementation uses certain features that can help your users work more productively.

Optimizer reports on the adoption levels of these items in its analysis.

#### Chatter

Optimizer evaluates how many users are regularly engaging with content on Chatter.

#### **Duplicate Management**

If Duplicate Management isn't enabled, Optimizer suggests enabling it to help your users avoid creating redundant records.

#### Lightning Sales Console

Optimizer suggests that your most active sales reps use the Lightning Sales Console so that they can access and update sales records quickly and easily.

#### Path

If your Sales Cloud objects aren't using Path, Optimizer suggests that you enable Path to guide your users through the life cycle of their records.

#### **Process Builder**

If your implementation uses workflow rules, Optimizer suggests resources to migrate your workflow rules to processes in Process Builder.

#### Salesforce1

Optimizer evaluates how many users are engaging with Salesforce on the Salesforce1 mobile app.

### Storage Limits, Unsupported Browsers, and New Analysis in Optimizer Reports

Optimizer now analyzes several new items across your implementation. These features are available in late May 2017.

Optimizer now reports on these items in its analysis:

- File storage limits
- Data storage limits
- New Apex and Visualforce code that's running on out-of-date API versions
- Page layouts that aren't assigned to record types

#### EDITIONS

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

#### EDITIONS

**EDITIONS** 

Editions

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

- Record types that aren't assigned to profiles
- Roles that aren't assigned to users
- Users who access Salesforce on unsupported browsers

### Keep Your Code Current with Optimizer

Optimizer now analyzes your Apex and Visualforce code to check whether your implementation uses out-of-date API versions. Optimizer flags the code so that your developers can update it to the latest API version. This feature is available in May 2017.

### Find Unused Reports and Dashboards with Optimizer

Optimizer now checks for reports and dashboards that haven't been run in more than a year so that you can delete them from your implementation. This feature is available in May 2017.

#### **EDITIONS**

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

#### **EDITIONS**

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

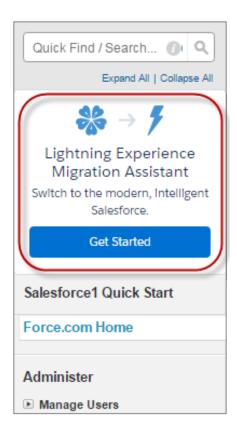
# Get Better Assistance with the Restyled Lightning Experience Migration Assistant

To guide you through the optimal path to enabling Lightning Experience, we've given the Migration Assistant an easier-to-use, wizard-style interface. The tools for assessing and previewing your org's readiness, setting up features and users, and flipping the switch are now visible at a glance—and faster to access. Oh, and it's also easier to find the Migration Assistant in Setup. This change applies to both Lightning Experience and Salesforce Classic.

Accessing the Migration Assistant in Salesforce Classic is a no-brainer now. From Setup, click **Get Started** in the Lightning Experience Migration Assistant tile at the top of the menu. (From Setup in Lightning Experience, continue to access the Migration Assistant from the **Lightning Experience** link.)

#### **EDITIONS**

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



We predict you won't pine for the long, long Migration Assistant page of yore. The new Migration Assistant is a clean, concise wizard, with tabs that highlight the steps for transitioning to Lightning Experience.

ightning Experience Migration Assistant	
earn Check Readiness Preview Optimize with Features Set	t Up Users Turn It On
/	
Learn About Lightning Experience	
Introducing Lightning Experience See how Lightning Experience can revolutionize the way your team gets work done.	Watch Video
Compare Lightning Experience and Salesforce Classic Verify that the features and customizations your users need are available in the new Interface.	Compare
Get Ready to Migrate to Lightning Experience Learn more about Lightning Experience and the best practices for rolling out the new	Start Trail
Interface to your users. And get a badge while you're at it!	
	Next Step

The interface focuses on specific tasks, one at a time. But you aren't restricted to going through the tabs in a sequential order. As before, you can use the Migration Assistant to run tools like the Readiness Check and the Preview whenever and as often as needed. Simply click the desired tab to get down to business.

Lightning Experience M	ligration Assista	int	
Learn Check Readiness Preview	Optimize with Features	Set Up Users	Turn It On
See what's needed to get k Experience. We'll email you	ghtning Experience R ey features and customizations a readiness report with recommon	ready for Lightning	
	Check ReadIness		
			Next Step

#### SEE ALSO:

Switch More Users to Lightning Experience

### Get Expanded Analysis When You Check Your Lightning Experience Readiness

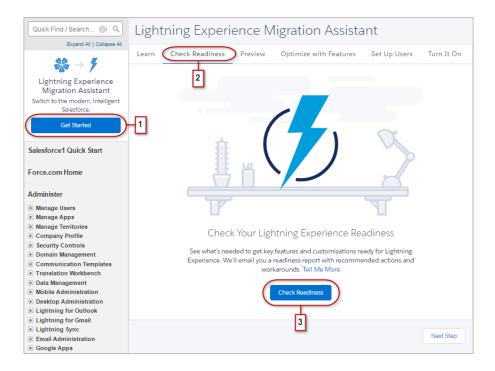
The Readiness Check is chock full of more actionable advice for preparing your Salesforce implementation for Lightning Experience. We've got specifics on preparing Sales and Service Console and Salesforce Knowledge, as well as roadmap and usage data for several Service Cloud features. In addition, we're building on our past advice for resolving Cases and JavaScript buttons and links, and adding insight on who's ready to move to Lightning Experience. We've also reorganized instructions on how to use your report to inform your rollout plan moving forward. And since it only takes one click to get a personalized report sent straight to your email inbox, there's no reason to wait to kick off the Readiness Check. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

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

Even if you've run the Readiness Check before, we're always adding to the list of features and customizations that you can evaluate, even between releases. Take some time to check your readiness again.

You still kick off the Readiness Check from the Lightning Experience Migration Assistant, but the steps are a bit different now. From Setup, click **Get Started** in the Migration Assistant tile (1). On the Check Readiness tab (2) in the Migration Assistant, click **Check Readiness** (3).



If you're using SalesforceA to administer Salesforce from your mobile device, you can also kick off the Readiness Check from the Resources page in the app.

After kicking off the check, the Readiness Report that you receive includes our most up-to-date recommendations on how you can prepare for Lightning Experience.

• Get insight about how to prepare features like Sales and Service Console and Salesforce Knowledge. You also get Lightning Experience roadmap and usage details on Service features like Live Agent, Omni-Channel, Entitlements, and more.

-		ning Experience, but some features differ from those in Salesforce re some setup from you. Other console features aren't available in
Impacts All Console Apps		
FEATURE	WHEN IS IT COMING TO LIGHTNING EXPERIENCE?	USER IMPACT
QuickText	Winter '18	N Included in 15 profiles, assigned to 2 total users
Impacts Specific Console App	25	
FEATURE	APP LABEL	WHEN IS IT COMING TO LIGHTNING EXPERIENCE?
Push notifications	standardServiceConsole , My_Sales_Console , OtherConsole , My_Custom_Service , Other_console_app	A Stay tuned. Lightning didn't strike yet.
Custom keyboard shortcuts	My_Custom_Service	🔺 Stay tuned. Lightning didn't strike yet.
Pinned lists	My_Custom_Service	Users get split view in Lightning console apps. Learn More
Multi-monitor support	standardServiceConsole , My_Sales_Console , OtherConsole , My_Custom_Service , Other_console_app	Stay tuned. Lightning didn't strike yet.
Custom console components	standardServiceConsole , My_Custom_Service	Add the Lightning component to a Lightning page using Lightning A Builder or migrate to utilities for Lightning console apps. Note: You can't add Visualforce components to the utility bar from

• Get more precise recommendations about how to modify your JavaScript buttons and links for Lightning Experience.

1	If this button opens a list view, replace with a Visualforce custom button. In other cases, create a Lightning component. Learn More
2	Create a Lightning component. Then give users access by either invoking access from a Lightning component action or using the Lightning App Builder to add the Lightning component to a Lightning page. Learn More
3	Create a Lightning component. Then set up a Lightning component action so users can access it. Add "force:hasRecordId" interface and <aura:attribute name="recordId" type="Id"></aura:attribute> attribute to obtain ID from the current object. Then set up a Lightning java component action so users can access it. Learn More
4	Check out Lightning Alternatives to JavaScript Buttons to identify an alternative, or post to the Lightning Now group in the Salesforce Success Community. Use the hashtag #JS_Alternatives to call on our experts.

• See where your user profiles stand with Lightning Experience so you can decide who's most-ready to participate in a pilot.

Which Users Are Ready? Based on the features and customizations we've evaluated, here's where users from each profile stand with Lightning Experience. Use these recommendations to select users from these profiles to be your Lightning Experience champions.						
الط Almost Ready						
Of the features and customizations we've evaluated, these profiles have access to features that require your attention before rolling out Lightning Experience. However, these users could still be great candidates for your pilot program.						
PROFILE NAME	NUMBER OF USERS	NUMBER OF FEATURES THAT NEED ATTENTION				
BA Viewer Platform	7	9				
BA Negotiator+ Platform	4	9				
BA Finance Platform	5	9				
BA Legal Platform	39	9				
BA Admin SpringCM	2	9				
BA Negotiator Platform	32	9				

• At the end of your report, we've added a checklist with explicit advice on which steps to take next on your journey to Lightning Experience.

-	uu're now closer to Lightning Experience than ever before. Wondering what's next? Here's how you can use th going with Lightning Experience.	iis report keep the
1	Schedule a consultation with an expert To get feedback on your report, register for a free Lightning Experience consultation.	Register
2	Select your Lightning Experience champions We recommend that you select pilot users from the profiles that we suggest in the next section.	
3	Preview Lightning Experience Remember that Readiness Check hasn't evaluated all of the features in Salesforce. Verify that the features champions use regularly are accessible from Lightning Experience.	Preview
4	Enable Lightning Experience for your champions Roll out Lightning Experience to your champions only, and show them around the new interface.	Enable Lightning Experience
5	Get champion feedback Have your champions do their job in Lightning Experience for a week. Then get their feedback about which features aren't ready for showtime yet.	
6	Make the recommended changes Get these features and customizations ready for Lightning Experience by making the recommended changes. Use this report and feedback from your champions to help you prioritize what's used the most.	
7	Repeat the process When you're done making changes, kick off Readiness Check and start over at step 1. Eventually, you'll have made all the modifications necessary to get your users into Lightning Experience.	Evaluate Again

#### SEE ALSO:

Check Your Lightning Experience Readiness with SalesforceA

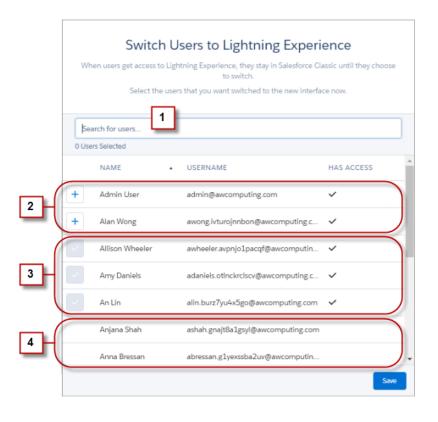
### Switch More Users to Lightning Experience

When you enable Lightning Experience, it's important to get your users working in—and benefiting from—the new interface. To help, the Switch Users to Lightning Experience tool now displays all users in your org, so you can switch the exact group that you want in one go. The tool also makes it easier to find specific users in the list and to see which users in your org are eligible to switch. This change applies to both Lightning Experience and Salesforce Classic.

The Switch Users to Lightning Experience tool is available from the Lightning Experience Migration Assistant in Setup. In the Migration Assistant, click the **Set Up Users** tab, then click **Switch Users**.

#### **EDITIONS**

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



Search the user list to find exactly the user you want (1). See at a glance which users have permission to access Lightning Experience and are eligible to switch (2), which users have already switched (3), and which users can't be switched because they don't have the Lightning Experience User permission (4).

To switch users to Lightning Experience, click the 🔸 button next to their names.

Unlike before, you can't use this tool to switch users back to Salesforce Classic. But users can switch themselves back as needed, using the Switcher in their profile menus.

🕐 Tip: Want to prevent your users from switching back to Salesforce Classic? See Make Lightning Experience the Only Experience

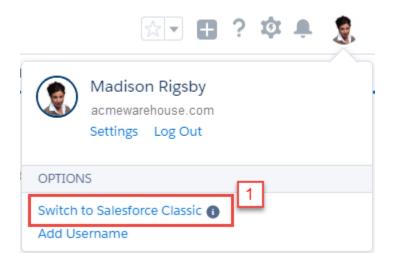
#### SEE ALSO:

Get Better Assistance with the Restyled Lightning Experience Migration Assistant

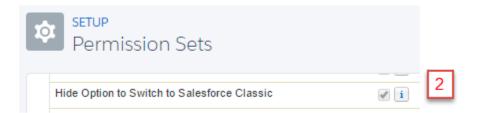
### Make Lightning Experience the Only Experience

Ready to move from Salesforce Classic to Lightning Experience without looking back? Just hide the option to switch to Salesforce Classic from your Lightning Experience users so that they stay in Lightning Experience. This feature is new in both Lightning Experience and Salesforce Classic.

By default, when you enable Lightning Experience, your users get the Switcher, allowing them to switch back and forth between Lightning Experience and Salesforce Classic. But if you want some or all of your users to stick to Lightning Experience, you can remove the Switcher (1).



In Setup, enable the Hide Option to Switch to Salesforce Classic permission (2) in profiles and permission set.



When you enable the permission for your Lightning Experience users, new and existing users see Lightning Experience the next time they log in to Salesforce. And, they no longer see the Switch to Salesforce Classic link.

Keep these considerations in mind when you enable the Hide Option to Switch to Salesforce Classic permission.

• If users access features that aren't available in Lightning Experience, they temporarily access Salesforce Classic in a new browser tab, even though the permission is enabled. They use Salesforce Classic only as long as they're using a feature that's not available in Lightning Experience.

- The permission doesn't affect the full site link in the Salesforce1 mobile browser app. Salesforce1 users always switch to the Salesforce Classic version of the full site, regardless of the interface they see from desktop devices.
- Users with the system administrator profile or assigned one of the following permissions see the Switch to Salesforce Classic link even when the Hide Option to Switch to Salesforce Classic permission is enabled: Customize Application, Modify All Data, or Manage Users.

### Ditch Your Mouse—Keyboard Shortcuts Are Here

You can now use keyboard shortcuts to maximize your efficiency and speed while working in Lightning Experience. You can search for, edit, save, and close a record—all without touching a mouse. We've even got keyboard shortcuts to help you go to the publisher and post to a feed. So start planning what you want to do with all the time you're going to save! By default, keyboard shortcuts work in all Lightning apps. This change applies to Lightning Experience only.

To view the available keyboard shortcuts, press:

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

Global		Navigation	
Show this menu	Ctrl+/	Go to publisher	G
Save	Ctrl+S		
Edit	E		
Search	1		
Open or close Notes	Ν		
Close or deselect	Esc		
Post to feed	Ctrl+Enter		

For Lightning apps with console navigation, extra shortcuts are available to help users navigate tabs, utilities, and more.

SEE ALSO:

Boost Productivity with Keyboard Shortcuts for Lightning Console Apps Salesforce Help: Keyboard Shortcuts (can be outdated or unavailable during release preview)

### Navigate to a Record Directly from an Action Success Message

We added a small but powerful enhancement to the success message that displays when you create or update a record via a quick action. The message now includes the record name as an active link that takes you right to that record. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

Tasks 🗸 Fil	les Accounts 🗸	Contacts 🗸	Campaigns	~	Dashboards	~
Contact <u>Mari Sinclair</u> was created.					×	

#### EDITIONS

Quick actions available in: Group, Professional, Enterprise, Performance, Unlimited, Contact Manager, and Developer Editions

### Lightning Console Apps: See and Do More (Generally Available)

Lightning console apps are generally available and include more features that help your users be productive. With the addition of split view, keyboard shortcuts, and person accounts, users have everything they need at their fingertips. These changes apply 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 can't migrate Salesforce Classic console apps to Lightning Experience.

#### IN THIS SECTION:

#### Keep Everything at Hand with Lightning Console Split View

Lightning console apps allow users to work quickly by opening multiple records and related records on one screen. Now users can work even more quickly with Lightning console split view, a collapsible pane that keeps the list views you need close at hand. This feature is new in Lightning Experience.

#### Boost Productivity with Keyboard Shortcuts for Lightning Console Apps

### EDITIONS

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. This add-on license will be available for purchase in late June 2017. For pricing details, contact your Salesforce account executive.

Lightning console apps can now use keyboard shortcuts. With keyboard shortcuts, your sales reps, support agents, and other console users can manage their records faster and more efficiently. So let your console users know that they can search for, edit, save, and close a record without touching a mouse! This change applies to Lightning Experience only.

#### Work with Person Accounts in Lightning Console Apps

If you work directly with individuals, as opposed to companies, you know all about the power of person accounts. And if you also rely on the productivity that comes with console apps, console apps now fully support person accounts. This change applies to Lightning Experience only.

#### Customize Console Apps with the Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps. This feature is new in Lightning Experience.

#### SEE ALSO:

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

### Keep Everything at Hand with Lightning Console Split View

Lightning console apps allow users to work quickly by opening multiple records and related records on one screen. Now users can work even more quickly with Lightning console split view, a collapsible pane that keeps the list views you need close at hand. This feature is new in Lightning Experience.

Split view shows a list view next to your workspace tabs and subtabs, allowing you to quickly open records from the list.

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CASE NUMBER 🕇	000	Number	Case Owner Brian Trimboli	FE	ED DETAIL	DETAILS			
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00001001 Edward Stam Sample Case 2: The widgets we received are the wrong size. Ne		-	High	/	Post Log a Call	New Task New B	Event Poll	Question	
00001002 Edward Stam Sample Case 3: Cannot track our order. On Ho	Subj Sam	ect ple Case 2: The widge he wrong size.	ts we received	1	Share an update			Share	
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You can access split view in two ways. Click the arrow (1) on the left side of the console.

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Alternatively, make a selection from the item menu, then click the **Display As** dropdown and select **Split View**.

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2	00001005		Problem	with n	ew widget		On Hold			4/6/2017 2:2	9 PM	E	Kanban 📊	•
3	00001004		Widgets	didn't	make it to	warehouse	Escalated			4/6/2017 2:28	B PM	E	Split View	
4	00001001		Sample 0	Case 2:	The widge	ets we rece	New			2/27/2017 1:	00 PM	£		<b>_</b>
5	00001002		Sample C	Case 3:	Cannot tra	ack our ord	On Hold			2/27/2017 1:	00 PM	BTrim		•
6	00001000		Sample 0	Case: C	our Widget	s have not	Escalated			2/27/2017 1:	00 PM	BTrim		•
C Phor	ne													

# Boost Productivity with Keyboard Shortcuts for Lightning Console Apps

Lightning console apps can now use keyboard shortcuts. With keyboard shortcuts, your sales reps, support agents, and other console users can manage their records faster and more efficiently. So let your console users know that they can search for, edit, save, and close a record without touching a mouse! This change applies to Lightning Experience only.

By default, keyboard shortcuts work in all Lightning console apps. They also work in Lightning apps with standard navigation. Console users will be happy to know that we're providing console-specific shortcuts to navigate tabs and subtabs, access list views and item menus, and even open some console utilities.

To view the available keyboard shortcuts, press:

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

Global		Navigation		Tabs	
Show this menu	Ctrl+/	Go to publisher	G+P	Refresh tab	Shift+F
Save	Ctrl+S	Go to workspace tab	G+W	Close workspace tab	Shift+)
Edit	E	Go to subtab	G+S		
Search	1	Go to list view	G+L		
Open or close History	н	Go to item menu	G+]		
Open or close Omni-Channel	0	Switch tabs	$\leftarrow \text{or} \rightarrow$		
Open or close Notes	Ν				
Close or deselect	Esc				
Post to feed	Ctrl+Enter				

### SEE ALSO:

### Ditch Your Mouse—Keyboard Shortcuts Are Here

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

# Work with Person Accounts in Lightning Console Apps

If you work directly with individuals, as opposed to companies, you know all about the power of person accounts. And if you also rely on the productivity that comes with console apps, console apps now fully support person accounts. This change applies to Lightning Experience only.

Person accounts in Lightning console apps work just as they do in standard Lightning apps, but boost the additional productivity of console apps. Remember, Salesforce must enable person accounts. And after they're enabled, they can't be disabled.

### Customize Console Apps with the Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps. This feature is new in Lightning Experience.

Note: The Lightning Console JavaScript API is available as a developer preview. The Lightning Console JavaScript 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. 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.

We also provide the Lightning Console JavaScript 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. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for the Lightning Console JavaScript API in the IdeaExchange.

This API brings the benefits of the Console Integration Toolkit, which works only in Salesforce Classic, to Lightning Experience and integrates with Lightning components used in Lightning console apps and the utility bar.

The Lightning Console JavaScript API has two libraries, the workspace API and the utility bar API. To use the libraries, include force:workspaceAPIAccess or force:utilitybarAPIAccess in your Lightning component, respectively. These components allow you to use API methods in the JavaScript controller of your component.

SEE ALSO:

Lightning Console JavaScript API (Pilot) *Console Developer Guide* (can be outdated or unavailable during release preview)

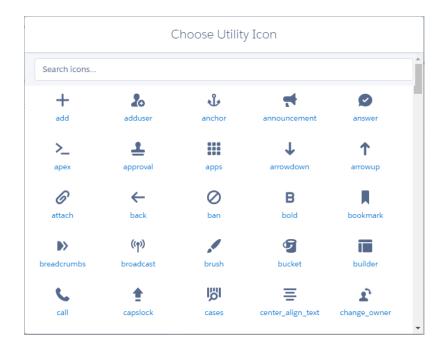
# Choose Utility Icons for Your Lightning Apps More Easily

When creating or editing Lightning apps, you can choose icons for your utilities directly in the Lightning app wizard. Previously, you clicked a link to open a new browser tab that listed the Salesforce Lightning Design System utility icons. This change applies to Lightning Experience only.

By default, utilities without an assigned icon use the fallback icon.

Icor	٦	
4	fallback	×

To change the icon, remove the existing icon and click **Choose Icon**. A window displays the available icons.



You can't change the icon for some utilities, such as Notes and History.

### SEE ALSO:

Salesforce Help: Add a Utility Bar to Lightning Apps (can be outdated or unavailable during release preview)

# Rich Text Editors Reenabled for LockerService

You can now use rich text editors and edit fields with rich text when the LockerService critical update is active. Previously, rich text editors were disabled in sandboxes and Developer Edition orgs when the LockerService critical update was active. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.



Available in all editions

Most rich text editors in Salesforce are now using Quill, and a few continue to use CKEditor in an

iframe. The move to Quill enables the rich text editors to be compliant with LockerService, but there are minor visual and formatting differences compared to previous releases.

Note: The availability of toolbar buttons varies across features. For example, the code snippet button is available in Chatter publisher but not in custom fields.

### **Custom Fields**

Rich text editors in fields with the rich text area type are back. Some formatting appear different when you save a record in Salesforce Classic and edit it in Lightning Experience. For more information, see Rich Text Editors for Custom Fields Get a New Look.

### **Chatter Feeds**

The rich text editor in the composer has changed slightly. For example, the @mention button is next to the Insert Image button. For more information, see Get a Richer Experience with the New Editor in Chatter.

### **Chatter Questions**

The changes to the rich text editor in Chatter Questions are similar to the changes for Chatter Feeds.

### **Community Builder**

The Rich Content Editor component in the community builder has changed. The Underline button is now available, and the Code Snippet button is no longer available. For more information, see Refine Your Content with a Streamlined Rich Content Editor and Dedicated HTML Editor.

### Groups

The toolbar in the Information field provides more support for rich text formatting. Give your group's information a boost using these new toolbar features:

- Change the font face
- Underline or strike out text
- Create a numbered list
- Add or remove indentation
- Remove formatting

We recommend using the toolbar as much as you can to format your content. If you copy formatted content from another source and paste into the editor, unsupported tags are removed and text within those tags are preserved as plain text. Only formatting available in the toolbar is supported. For example, if you paste red bold text, the bold formatting is preserved but not the color.

### Sales Path

The rich text editor in the Guidance for Success field has changed. The undo and redo buttons are no longer available. You can use the Edit menu in your browser to undo or redo your changes. We recommend using the toolbar as much as you can to format your content. If you copy formatted content from another source and paste into the editor, unsupported tags are removed and text within those tags are preserved as plain text. Only formatting available in the toolbar is supported.

### forceChatter:publisher Component

The changes to the rich text editor in forceChatter:publisher are similar to the changes for Chatter Feeds.

Note: We recommend using the toolbar to format your content. The rich text editor provides only a WYSIWYG interface. You can't edit HTML tags. When you copy content from a web page or another source and paste it into the editor, unsupported tags are removed. Text that was enclosed in unsupported tags is preserved as plain text.

# Rich Text Editors Using CKEditor

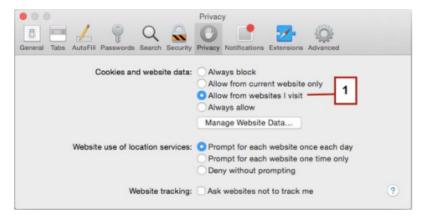
Rich text editors in Salesforce Classic continue to use CKEditor. In Lightning Experience and Salesforce 1, the following features have rich text editors that continue to use CKEditor.

- Email Composer, using the Send Email action
- Lightning Knowledge
- Lightning App Builder
- ui:inputRichText component

Note: The ui:inputRichText component is no longer supported for LockerService. Use lightning:inputRichText instead.

These features load the rich text editor in an iframe, so they don't load correctly if your browser doesn't have the appropriate security settings. Refer to your browser's instructions to configure the settings. For example, in Internet Explorer, the Launching programs and files in an IFRAME security setting must be set to Enable or Prompt. In Safari, we recommend changing your Privacy settings for cookies to Allow from websites I visit (1). In Chrome, make sure that Block third-party cookies and site data is not selected in the Content settings.

Additionally, to start typing in the rich text editor on Internet Explorer 11 on touch-enabled devices running Windows, you must click the rich text area field and tab into the editor first.



# Access Field History Related Lists in Lightning Experience

Track and display the field history for standard or custom objects, regardless of which Salesforce interface you're using. If you added the History related list to objects in Salesforce Classic, you can now see it in Lightning Experience. You can also set up a field history related list in Lightning Experiences. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

If you already added the History related list to your objects in Salesforce Classic, you're all set. In Lightning Experience, look for your History related list (1) under the Related tab (2).

Cowpoke Coffee						
RELATED 2 DETAI	LS NE	EWS				
🗶 We found no po	tential dupli	icates of this a	ccount.			
Contacts (1)					New	
ES Janice Smith Title: Email: Phone:		ther th@cowpokecoff -867-5309	ee.com		۳	
					View All	
Account History	(5) 1					
DATE	FIELD	USER	ORIGINAL VALUE	NEW VALUE		
4/18/2017 5:34 PM	Phone	Karen Adams		111-867-5309		
4/18/2017 5:34 PM	Website	Karen Adams		www.cowpokecoffe	e.com	
4/18/2017 5:34 PM	Employees	Karen Adams	3	5		

Already working in Lightning Experience and want to add a History related list to an object? No problem.

- 1. Click the Object Manager tab, and select an object from the list
- 2. In the left pane, click Fields and Relationships and then click Set History Tracking
- 3. Select the fields you want to track
- 4. Add that related list to your object's page layout

# Preview Case Details with Case Hovers

Users can hover over cases to get a sneak peek at the details, including the description and latest update. No more opening the case record to get important information—talk about a time saver! Support agents who work with cases all day will appreciate this feature. Case hovers work automatically, so there's nothing for you to set up. This change applies to Lightning Experience only.

	Lightnin	💼 Coi	mputer monit	tor freezes			
	Cases	Priority Medium	Status On Hold	Case Number 00001032	Case Owner Admin User		
	00001032 Subject: Priority: Date/Time Op	Description The monitor freezes and won't refresh. Latest Update Admin User March 30, 2017 at 2:50 PM To: gvasudev					
*	<ul> <li>Notes</li> <li>monito Mar 28,</li> </ul>	C	i Greg, an you give us your scre hanks! ead More	en model?			

Case hovers work in all Lightning apps, including apps with standard navigation and console navigation. These handy hovers are specific to cases only. Case hovers work anywhere there's a case number, except in list views.

Tip: Want to customize the fields displayed in the hover? Edit the case's compact layout from the Object Manager in Setup. The case hover displays only the first five fields. We recommend using the Subject as the first field in your compact layout. The first

field becomes the title of the hover. Keep in mind that the Highlights Panel and case hover use the same compact layout. If you change the layout for one, you also change it for the other.

You can't customize the Latest Update section of the case hover. This section displays only one post. All post types are supported. For example, if the latest post was a post from a social channel like Facebook, that's what displays in the hover. Pretty awesome, right?

SEE ALSO:

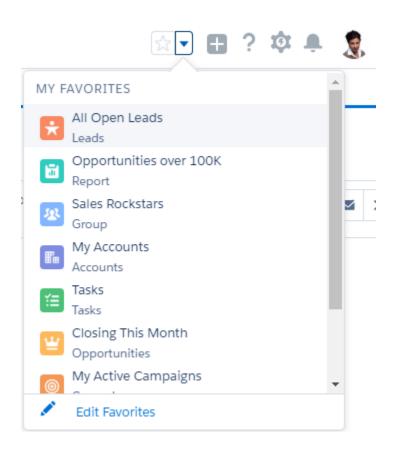
Salesforce Help: Customize Case Hovers in Lightning Experience (can be outdated or unavailable during release preview)

# Stay in Your Current App When You Open Favorites

Using a sales app? Working with the Lightning console? Your favorites don't care. They open in whichever app you're using. No more switching to the app where you created your favorite. Now use your favorites from anywhere to instantly access important Salesforce pages, like records, lists, groups, and dashboards. This change applies to Lightning Experience only.

# Find Favorites with a Simplified Favorites List

We removed the top favorites section from your favorites list to simplify the way you access your favorite pages in Salesforce. Favorites give you instant access to important records, lists, groups, dashboards, and other frequently used pages. Turns out, top favorites wasn't your favorite way to use favorites. You no longer see top favorites because we're focused on the features that matter to you most and, based on your feedback, this one didn't. This change applies to Lightning Experience only.



# "Disable Access to Lightning Experience and the Salesforce1 Mobile Browser App from IE11" Critical Update Canceled

The timetable for the end of support date for Internet Explorer version 11 (IE11) for Lightning Experience has changed significantly. As a result, this critical update has been canceled.

SEE ALSO:

Critical Updates

*Summer '16 Release Notes:* Disable Access to Lightning Experience and the Salesforce 1 Mobile Browser App from IE11 (Critical Update) Extended Support for Accessing Lightning Experience Using Microsoft Internet Explorer Version 11

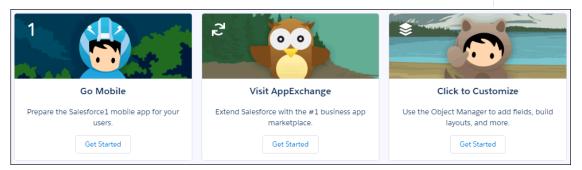
# Enjoy a Spiffier Look and Feel in Lightning Experience

We've enhanced the look and feel of some areas to bring a little Trailhead pizazz into Lightning Experience. For example, we've updated the text and visuals on Setup Home, and there's more engaging text on the Profile page. This change applies to Lightning Experience only.

EDITIONS

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

Here's the updated Setup Home.



And here's some new text on the Profile page. A little livelier, huh?

San Francisco, CA 94105 US About Me Share your awesomeness with the world. (Or at least with your colleagues on Chatter.)

# Search: External Search Results, a Better Way to Find Opportunities, and More

Extend your reach with search. Connect external search providers to see results from Google, Dropbox, Confluence, and other repositories right in Salesforce. Trying to find an opportunity in a sea of similarly named opportunities? Add the account name to your search term to find the right one. Plus, see when your search term has been spell corrected, and search more objects.

EDITIONS

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

### IN THIS SECTION:

### See Results from External Search Engines with Federated Search (Generally Available)

Salesforce makes it possible to search external content from within Salesforce with Federated Search. It's now easy to connect external search providers to your org with the Salesforce OpenSearch connector. Users stay inside Salesforce to view Salesforce records and external search results, saving time and hassle. This change applies to both Lightning Experience and Salesforce Classic.

### Search for Opportunities Using the Account Name

Like suitcases at the airport, many opportunity names look alike. Find the right opportunity by searching for its name plus the account name. This improvement also makes it easier to name opportunities—you don't need to come up with a unique name for every order of 20 widgets, unless you want to. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Know When Spell Correction Is Applied to Your Term

Surprises can be fun—like when you find money in your pocket. But when you're doing business, surprises can be less welcome. That's why, when your search term gets no results because of a possible misspelling, we let you know that we're showing results for spell-corrected terms. This change applies to Lightning Experience only.

### Get Search Results for More Objects

You can now see search results from Entitlement and Topics. This change applies to Lightning Experience and the Salesforce 1 mobile browser app.

### SEE ALSO:

Knowledge Search: Enhanced Relevance, More Control over Suggested Articles Sort Feed Global Search Results by Relevance

### See Results from External Search Engines with Federated Search (Generally Available)

Salesforce makes it possible to search external content from within Salesforce with Federated Search. It's now easy to connect external search providers to your org with the Salesforce OpenSearch connector. Users stay inside Salesforce to view Salesforce records and external search results, saving time and hassle. This change applies to both Lightning Experience and Salesforce Classic.

The connector and the associated developer guide follows the OpenSearch specification, with more extensions. External search providers who conform to the Salesforce Federated Search API remain fully compliant to the OpenSearch specification and can be queried by any OpenSearch client. The Salesforce Federated Search Developer Guide is available.

Salesforce has also partnered with Coveo, Docurated, and Swiftype to make it easy to connect external search providers to Salesforce. Leveraging these partner's services, you can search through the external repositories they serve. For example, Dropbox, Confluence, SharePoint. The process is the same as connecting external data sources to Salesforce.

### **EDITIONS**

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

### 78

When connected you search per usual. In addition to Salesforce records, results from external search engines appear right in the Salesforce search results page.

In Lightning Experience, you see where the results come from with an easy-to-find External Results section.

	Q	salesforce		0		0 ★ ? ¤ ♣	2
Sales Home	Accounts V Contacts V	✓ Opportunities ✓	Leads 🛩 Group	s 🗸 Files 🗸 Dashbo	oards 🗸 Reports 🗸 C	hatter $\sim$	
SEARCH RESULTS	Accounts						
Top Results	2 Results · Sorted by Relevan	ice					
Accounts	NAME ACC	COUNT OWNER P	HONE NUMBER	WEBSITE	SHIPPING CITY	PRIORITY	
Contacts	Salesforce Bill	Smith 4	15-331-0391	https://www.salesforce	San Francisco	High	10
Opportunities	Salesforce CRM Geo	orge Costanza 7	757-211-9877	https://www.watson.co	New York City	Medium	Ŧ
Leads	(						
Groups	Confluence Blog Por 5 Results - Sorted by Relevan						
Files	TITLE	BODY					
Dashboards	Salesforce.com	Salesforce.com (style	d as sales force) is an	American cloud computing	g company headquartered in S	ian Francisco, California. Though	
Reports	Salesforce Tower	Salesforce Tower, for	merly known as the T	ransbay Tower, is a 1,070-fr	oot (326 m) supertail office sky	scraper under construction in th	1
Feed	Marc Benioff	Marc Russell Benioff	(born September 25,	1964) is an American inter	net entrepreneur, author and	philanthropist. He is the founder	v
> Show More	Salesforce Marketing Cloue	d Salesforce Marketing	Cloud (formerly kno	wn as ExactTarget) is a prov	ider of digital marketing autor	nation and analytics software and	
EXTERNAL RESULTS	SalesforceIQ	SalesforceIQ (former	ly RelateIQ), a subsid	iary of Salesforce.com, is an	American enterprise software	company based in Palo Alto, CA	(Y)
Confluence Blog Posts Confluence Pages	Opportunities 3 Results - Sorted by Relevan	ce					
Google Drive	NAME	ACCOUNT NAME	CLOSE DATE	STAGE	OPPORTUNITY AMOUNT	OPPORTUNITY OWNER	
Sharepoint Pages	Accountly Salesforce Licen	ise Salesforce	3/21/2016	Proposal/Quote	\$50,000	Ben Hickson	
	200 Service Licenses	Salesforce CRM	6/25/2016	Closed-Won	\$50,000	William Hale	w
	Annual Supply Shipping	Salesforce CRM	1/15/2016	Negotiation	\$175,000	Ben Hickson	

On the search results page, go directly to the page by clicking the link. In addition, you can select the title of the external result to navigate to the detail page to view details about the external record or post comments.

pdf		+ Follow	New Contact	New Opportunity	New Case	•
RELATED DETAILS			CHATTER			
Title Guilde.pdf	Display URL URL		Post Share an u		stion Share	
Summary			Latest Posts	Q. Search this fee	đ	C
Source Salesforce			Col	laborate with ( No updates here ye		
0.1						
File Type Adobe Acrobat PDF						

The URL for the record is front and center. Clicking the URL opens a new browser tab or, if the external search provider is a Salesforce partner, the URL opens as a frame inside Salesforce.

More information about how to Set Up and Manage Federated Search is available in Salesforce Help.

# Search for Opportunities Using the Account Name

Like suitcases at the airport, many opportunity names look alike. Find the right opportunity by searching for its name plus the account name. This improvement also makes it easier to name opportunities—you don't need to come up with a unique name for every order of 20 widgets, unless you want to. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.



🗹 Note: This feature is not immediately available to orgs. Once all records of an org get reindexed, the feature is available to that org. This per-org feature enablement is occurring throughout the release.

To find an opportunity, search for the opportunity name plus the account name.

Search Term	Returned Opportunity	Related Account
20 Widgets Acme	20 Widgets	Acme

# Know When Spell Correction Is Applied to Your Term

Surprises can be fun—like when you find money in your pocket. But when you're doing business, surprises can be less welcome. That's why, when your search term gets no results because of a possible misspelling, we let you know that we're showing results for spell-corrected terms. This change applies to Lightning Experience only.

	Q globel		(	☆▼ 🖶 ? 🅸 🌲	2
Sales Home	Opportunities 🗸 Leads 🗸	Tasks 🗸 Files Accounts	✓ Contacts ✓	Campaigns 🗸 More 🗸	,
SEARCH RESULTS	Showing results for spell-co	orrected terms. No results found for	"globel".		
Top Results	Accounts				
Opportunities	2 Results • Sorted by Relevance				
Leads	ACCOUNT NAME	PHONE	ACCOUNT OWNER AL	LIAS	
Tasks	Global Media	(905) 555-1212	AUser		▼
Files	salesforce.com	(415) 901-7000	AUser		•
Accounts					
Contacts	Opportunities 1 Result				
Campaigns	OPPORTUNITY NAME	ACCOUNT NAME STAGE	CLOSE DATE	OPPORTUNITY OWNER ALIAS	5
Reports	Global Media - 400 Widgets	Global Media Id. Decision Ma	ikers 1/15/2015	AUser	▼

When we correct the spelling on your search term, you see a message at the top of the search results page.

Each object can have a different corrected spelling for the same term.

# Get Search Results for More Objects

You can now see search results from Entitlement and Topics. This change applies to Lightning Experience and the Salesforce1 mobile browser app.

Object	New to Salesforce Classic	New to Lightning Experience	New to Salesforce1 Mobile Browser App	New to Salesforce1 Downloadable Apps
Entitlement		$\checkmark$		
Topics		~	~	

SEE ALSO:

Searchable Objects and Fields

# 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.

### **EDITIONS**

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

IN THIS SECTION:

### Lightning Experience Features in This Release

Here's the list of the powerful features and enhancements that make Lightning Experience the

go-to interface for selling smarter and faster. Use this list to quickly access the details about each feature. Some Lightning Experience features, including enhancements to accounts and Chatter, are available within 24 hours after the Summer '17 release. Otherwise, there's no wait.

### What's Different or Not Available in Summer '17 Lightning Experience Features

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

# Lightning Experience Features in This Release

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- IN THIS SECTION:
  - General Enhancements
  - Search
  - Core Sales
  - Sales Productivity
  - Data Quality
  - Google Integration
  - Microsoft<sup>®</sup> Integration
  - Service
  - Reports and Dashboards

Chatter Communities Files Lightning App Builder Salesforce Connect Business Logic & Process Automation Setup Security and Identity Development

### **General Enhancements**

### Get Better Assistance with the Restyled Lightning Experience Migration Assistant

To guide you through the optimal path to enabling Lightning Experience, we've given the Migration Assistant an easier-to-use, wizard-style interface. The tools for assessing and previewing your org's readiness, setting up features and users, and flipping the switch are now visible at a glance—and faster to access. Oh, and it's also easier to find the Migration Assistant in Setup.

### Get Expanded Analysis When You Check Your Lightning Experience Readiness

The Readiness Check is chock full of more actionable advice for preparing your Salesforce implementation for Lightning Experience. We've got specifics on preparing Sales and Service Console and Salesforce Knowledge, as well as roadmap and usage data for several Service Cloud features. In addition, we're building on our past advice for resolving Cases and JavaScript buttons and links, and adding insight on who's ready to move to Lightning Experience. We've also reorganized instructions on how to use your report to inform your rollout plan moving forward. And since it only takes one click to get a personalized report sent straight to your email inbox, there's no reason to wait to kick off the Readiness Check.

### Switch More Users to Lightning Experience

When you enable Lightning Experience, it's important to get your users working in—and benefiting from—the new interface. To help, the Switch Users to Lightning Experience tool now displays all users in your org, so you can switch the exact group that you want in one go. The tool also makes it easier to find specific users in the list and to see which users in your org are eligible to switch.

### Make Lightning Experience the Only Experience

Ready to move from Salesforce Classic to Lightning Experience without looking back? Just hide the option to switch to Salesforce Classic from your Lightning Experience users so that they stay in Lightning Experience.

### Ditch Your Mouse—Keyboard Shortcuts Are Here

You can now use keyboard shortcuts to maximize your efficiency and speed while working in Lightning Experience. You can search for, edit, save, and close a record—all without touching a mouse. We've even got keyboard shortcuts to help you go to the publisher and post to a feed. So start planning what you want to do with all the time you're going to save! By default, keyboard shortcuts work in all Lightning apps.

### Navigate to a Record Directly from an Action Success Message

We added a small but powerful enhancement to the success message that displays when you create or update a record via a quick action. The message now includes the record name as an active link that takes you right to that record.

### Lightning Console Apps: See and Do More (Generally Available)

Lightning console apps are generally available and include more features that help your users be productive. With the addition of split view, keyboard shortcuts, and person accounts, users have everything they need at their fingertips.

### **Choose Utility Icons for Your Lightning Apps More Easily**

When creating or editing Lightning apps, you can choose icons for your utilities directly in the Lightning app wizard. Previously, you clicked a link to open a new browser tab that listed the Salesforce Lightning Design System utility icons.

### **Preview Case Details with Case Hovers**

Users can hover over cases to get a sneak peek at the details, including the description and latest update. No more opening the case record to get important information—talk about a time saver! Support agents who work with cases all day will appreciate this feature. Case hovers work automatically, so there's nothing for you to set up.

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### **Delegated Admins: View and Assign Public Groups with More Ease**

On the Assignable Public Groups page, you can view up to 1,000 groups at a time and page through the list as you go. If you have many public groups to assign, your life just got easier. We also updated the label on a button. Instead of **Cancel** the button is now **Close**.

### Stay in Your Current App When You Open Favorites

Using a sales app? Working with the Lightning console? Your favorites don't care. They open in whichever app you're using. No more switching to the app where you created your favorite. Now use your favorites from anywhere to instantly access important Salesforce pages, like records, lists, groups, and dashboards.

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### Enjoy a Spiffier Look and Feel in Lightning Experience

We've enhanced the look and feel of some areas to bring a little Trailhead pizazz into Lightning Experience. For example, we've updated the text and visuals on Setup Home, and there's more engaging text on the Profile page.

### Search

### See Results from External Search Engines with Federated Search (Generally Available)

Salesforce makes it possible to search external content from within Salesforce with Federated Search. It's now easy to connect external search providers to your org with the Salesforce OpenSearch connector. Users stay inside Salesforce to view Salesforce records and external search results, saving time and hassle.

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### **Get Search Results for More Objects**

You can now see search results from Entitlement and Topics.

### **Core Sales**

### Sell Smarter and Faster with Einstein High Velocity Sales

Close more deals in less time with an experience designed specifically for the needs of today's sales reps. Einstein High Velocity Sales combines Sales Cloud Einstein, the Lightning Dialer, and the Lightning Sales Console to help reps succeed in the digital era.

### **Keep Related Files and Records When Reps Convert Leads**

When sales users convert a lead, files and related records attached to the lead are attached to the resulting contact, account, person account, and opportunity records.

### **Relate Accounts to Leads Faster with Account Matching**

When sales users convert leads, if the lead company name matches any of your accounts, it's quick and easy to choose one of the matching accounts.

### See Account Hierarchy Details on the Same Page

Now when users hover over an account name in an account hierarchy, a preview card shows more details.

### Add Account Team Members with Accuracy

When adding account team members in Lighting Experience, the Contact Access picklist now shows only valid options. No more guessing, or worse, guessing wrong and receiving errors.

### See Which Campaigns Accounts Are Responding To

Let your marketing team see how their efforts impact opportunities on specific accounts using the Campaign Influence related list on accounts.

### Add Members to Campaigns from Reports in Lightning Experience

Your marketing department can quickly target specific groups of leads, contacts, or person accounts by adding them to campaigns directly from standard and custom reports.

### Add Members to Campaigns from Accounts

Your marketing team can work faster by adding members to campaigns directly from the Contacts related list on accounts.

### **Track Campaign Field History**

Let reps see how campaign field values have changed in the Campaign Field History related list on campaigns. Track who changed each value, when the change happened, and what the original value was.

### **Do More with Sales Predictions in Collaborative Forecasts**

In Lightning Experience, Collaborative Forecasts users now get more information and can do more with it when they're projecting sales.

### See Opportunity Stage History in Lightning Experience

Review changes to an opportunity's amount, probability, stage, and close date on the Stage History related list in Lightning Experience.

### **Change Opportunity Forecast Categories in Lightning Experience**

Fine-tune forecasts by changing an opportunity's forecast category regardless of its stage in Lightning Experience.

### **Build Success with Path on Contracts and Orders**

Guide your users through your business process by adding Path to your contracts and orders. Paths visually highlight key fields and provide users helpful links, policy information, and tips at each step.

### **Decide How Path Displays**

Path is now closed when the page loads, helping users view more record details without scrolling. You can configure how users display Path.

### Package Path

Include Path in packages that you build for your customers.

#### Show Who Reports to Whom from Contact Pages in Lightning Experience

Give your sales team a key tool for planning sales strategy. Use Lightning Contact Hierarchy to visualize the contacts on an account according to what sales reps enter in the Reports To field. Plus, customize contact hierarchy columns to show the information that's most useful to your sales teams.

### **Create Contacts Quicker from Account Records**

When sales reps create contacts from either the Contacts or Related Contacts related list on account records, the mailing address, phone number, and fax number from the account record are autopopulated on the new contact.

#### See News in a New Way

We moved News and Twitter to their own tab on default page layouts. Check out the News tab on account, contact, and lead records. We also made it easier to scan news.

#### Make It Easier to Create Orders

You can now add Orders as global actions, so you can choose the pages in Salesforce where your reps can create orders.

### Add and Edit Multiple Order Products

In Lightning Experience, reps can now add multiple products to orders and edit multiple order products at the same time.

### **Email Quote PDFs with One Click**

In Lightning Experience, reps can now email one or more quote PDFs by clicking **Email PDF** in the Quote PDFs related list or list view.

### In Hierarchies, Only Parent Records Are Displayed with Icon for Expanding Row

In a hierarchy, such as an account or campaign hierarchy, only parent records are displayed with an icon indicating that the row can be expanded to show children. Previously, rows for records at the end of a branch appeared to be expandable.

### Sales Productivity

### Be More Productive with the Sales Console (Generally Available)

The Lightning Sales Console app is now generally available. Plus, it also benefits from all the great improvements we've made to all Lightning console apps, such as person account support, split view navigation, and keyboard shortcuts.

### Lightning Voice: New Name, Call List General Availability, and Voicemail Drop

Lightning Voice has a new name and more call list features. Sales reps can also send prerecorded voicemail messages and dial numbers in reports and dashboards.

#### **Use Your Classic Email Templates in Lightning Experience**

Leverage all the work and planning that went into your Salesforce Classic email templates by using the same templates in Lightning Experience. You can use your Text, Custom HTML, and Letterhead email templates in Lightning Experience.

### **Update Your Classic Letterhead Email Templates**

Update existing Letterhead email templates by changing which letterhead is associated with the template.

### See and Do More with the Pop–Out Email Composer

Expand your email composer while writing an email. A larger screen makes it easier to see what you're writing. And, you can navigate to another screen before sending your email, without losing the email. Multi-task, research what you want to say, look something up, and then return to the email to finish it.

### See and Edit Your Email Signature as You Write

Your email signature is now displayed in the email composer, so you have the option of editing it before sending the email.

### Stay on Top of Things with the Updated Activity Timeline

Quickly see what each activity is about with easily read summaries. Need the details? Click **Expand** to see more, without leaving the timeline. Want to drill deeper into your day? Click **Expand All** to see all the details on all the activities in your timeline.

### Make Friends with the Updated Activity Composer

Recording your activities is a breeze with the activity composer. New tab names and inspiring messages remind you to send that email, log the call, create an event, or jot down a task. Click anywhere in the text box, or click the button, to open the activity composer. And, you can do it all without leaving the opportunity or account you're viewing.

### **Delete Charts from List Views**

You've been able to create and edit charts on list views in Lightning Experience for a while now. But what about removing one? Now you can remove charts that you created from the report chart menu.

### Get the Kanban View for Knowledge and Social Persona

Display Knowledge and Social Persona records in an entirely new way by switching to Kanban view.

### Summarize by Numeric Fields

Money isn't everything. In the Kanban view, reps can summarize by numeric fields, not just currency fields.

### Group the Kanban View by Owner

Your reps can configure the Kanban view to group cards by the record's owner.

### Identify Cards That Reps Can't Update

Reps can see in a glance which Kanban cards they don't have permission to drag.

### Share Notes and Add Them to Records with Ease

We've given the Notes editor some love with better button labels and features that make it a snap to share notes and add them to records.

### Convert Old Notes to Lightning Experience with the Salesforce API

Want users to edit notes found in the Notes & Attachments related list in Lightning Experience? Using the Salesforce API, you can copy old notes from the Notes & Attachments related list to the Notes related list in Lightning Experience, where users can view and edit them.

### **Turn Off Feed Tracking for Notes**

Want to hide feed updates that tell your users whenever someone creates or changes a note? Now, note feed tracking is controlled by enabling and disabling feed tracking for all related objects. To turn off feed tracking for notes, disable feed tracking for all related objects.

### Person Accounts Show All Notes in Related Lists

The Notes related list on person account records now includes notes where the person account is listed as a related contact. Previously, those notes only appeared on the Notes home page.

### Get Event Attendee Details in the Calendar When You Sync Microsoft<sup>®</sup> Office 365<sup>®</sup> with Salesforce

You give your users enhanced meeting scheduling options when you set up events to sync between reps' Microsoft Office 365 calendars and Salesforce. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

### Home: Assistant and Performance Chart Updates

The Assistant has a new look, and the performance chart can group data points by week or by day.

### Person Accounts Show All Cases in Related Lists

The Cases related list on person account records now includes cases where the person account is listed in the **Contact Name** field. Previously, only cases where the person account was listed in the **Account Name** field appeared in the Cases related list.

### Data Quality

### **Detect Duplicates Across Contacts and Leads Using Standard Rules**

Do your sales reps create leads for contacts that are already in Salesforce, or the reverse? Two standard duplicate rules make it simpler to detect contacts and leads that duplicate each other.

### Surface Duplicates Across Objects in Lightning Experience

Protect your company's reputation and save your sales reps time. Do you use duplicate rules that match duplicates across objects (such as one of the new rules for detecting duplicates across contacts and leads)? Now you can use the Potential Duplicates component in the Lightning App Builder to surface those duplicates. Previously, you could surface only duplicates on the same object.

### Handle Potential Duplicates More Easily in Lightning Experience

We've streamlined the way Lightning Experience alerts sales reps to duplicate accounts, contacts, and leads during the process of creating or editing a record. And during creating or editing, Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app all display a new customizable alert message.

### Get a Free Assessment Before Investing in Data Packages

On AppExchange, you can purchase packages of industry data to enhance your Salesforce accounts, leads, and other data. Before you buy a package, run a free Data Assessment to make sure that the data in the package is valuable for your business.

### Data.com Prospecting Insights in Lightning Separated from News Component

Prospecting Insights is now a separate component in Lightning Experience. Previously, it was included in the News component. In some orgs the News component was moved in Summer '17, but the Prospecting Insights component remains on account and opportunity pages. You can move or remove it any time using the Lightning App Builder.

### Data.com Account Data Assessment to Be Retired

Free account data assessments using the Company Info for Accounts data integration rule are scheduled for retirement in Salesforce as of Winter '18. You will no longer have access to assessments that you've run 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.

### **Google Integration**

### Lightning for Gmail

### Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails.

### Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Gmail, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Gmail also ensures consistent messaging from your team to your customers.

### Stay Logged In to Lightning for Gmail

Reps get to work on Salesforce records with fewer interruptions. Lightning for Gmail now saves reps' Salesforce login credentials after the initial authentication. Reps no longer need to log in to Lightning for Gmail each time they work in Gmail.

### **Choose Which Attachments Are Keepers**

Not all email attachments are equally important. That's why Lightning for Gmail now lets reps select the attachments they want to add to Salesforce records.

### Keep Salesforce Events Up-to-Date

Don't let your Salesforce events get stale. If you set up reps for both Lightning for Gmail and Lightning Sync, you can select an option that syncs event updates. That way, when your reps relate an event, any subsequent changes made to that event from Google Calendar<sup>™</sup> sync to Salesforce.

### **Identify Emails Related to Salesforce Records Easily**

Do your reps want an easy way to tell which emails they related to Salesforce? There's a category that does just that. Lightning for Outlook adds all emails that are related to Salesforce records in one category. To identify these emails in Outlook<sup>®</sup> quickly or filter by this category, we recommend that reps add this category to the category list in Outlook. For an eye-catching effect, reps can assign the category a color.

### Lightning Sync for Google (Beta)

### Sync Contacts Between Salesforce and Google Contacts

Now contacts sync in both directions between Google Contacts and Salesforce. Set up reps to sync both ways so that they can create and edit contacts from the application that's most convenient to them: Gmail or Salesforce.

### Stay More Productive with Lightning Sync (Generally Available)

No need to hold off any longer! Lightning Sync for Google is generally available and open for business! When you set up your reps to sync contacts and events between their G Suite account and Salesforce, you give them an opportunity to be more productive. Save your reps time and eliminate unnecessary data entry while also doing your part to promote Salesforce adoption across your team.

### Select Which Google Calendar Events Sync to Salesforce

Reps have tons of appointments on their calendars, but only a subset of those events contains valuable data that reps want to track in Salesforce. Now setting up reps for both Lightning for Gmail and Lightning Sync lets them choose which Google Calendar<sup>™</sup> events sync to Salesforce.

### **Google<sup>®</sup> Contacts and Events Sync More Frequently**

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' G Suite account and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience.

# Microsoft<sup>®</sup> Integration

### Lightning for Outlook

### Pin Lightning for Outlook to Make Efficiency Pop

Remember when reps had to reopen Lightning for Outlook each time they moved from one email to the next? Well, that isn't always convenient. That's why Lightning for Outlook is now pinnable. This change applies to both Lightning Experience and Salesforce Classic, and, for now, requires Microsoft<sup>®</sup> Outlook<sup>®</sup> 2016 on Windows operating system.

### Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails.

### Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Outlook, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Outlook also ensures consistent messaging from your team to your customers.

### **Choose Which Attachments Are Keepers**

Not all email attachments are equally important. That's why Lightning for Outlook now lets reps select the attachments they want to add to Salesforce records.

### **Rev Up Productivity with Enhanced Email**

To help reps relate emails to relevant Salesforce records quicker and more easily, turn on Enhanced Email with Lightning for Outlook. As a bonus, the related emails maintain their look and feel in Salesforce.

### Identify Emails Related to Salesforce Records Easily

Do your reps want an easy way to tell which emails they related to Salesforce? There's a category that does just that. Lightning for Outlook adds all emails that are related to Salesforce records in one category. To identify these emails in Outlook<sup>®</sup> quickly or filter by this category, we recommend that reps add this category to the category list in Outlook. For an eye-catching effect, reps can assign the category a color.

### Lightning Sync for Microsoft Exchange

### Sync Events in Both Directions Between Microsoft<sup>®</sup> Office 365<sup>®</sup> and Salesforce

Save your reps time and unnecessary data entry by setting up their events to sync between Microsoft and Salesforce. Reps can create and edit meetings from either application, and you can promote Salesforce adoption by making it easy for reps to relate important meetings to their records. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

### Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events

Now that meeting organizers can invite prospects, customers, and colleagues to the meetings they schedule from Lightning Experience and Salesforce1, reps can see attendee details and their responses from either system. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

### Microsoft<sup>®</sup> Contacts and Events Sync More Frequently

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' Microsoft calendars and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience.

### Salesforce for Outlook

### Critical Upgrade Required to Continue Using Salesforce for Outlook

To avoid service disruption, all Salesforce for Outlook users must be working from version 3.0.0 or later by July 2017. At that time, Salesforce disables TLS 1.0 security encryption protocol, and Salesforce for Outlook v2.9.3 and earlier no longer functions. Reps working from those versions can't sync their Microsoft<sup>®</sup> Outlook<sup>®</sup> items to Salesforce nor can they work with their Salesforce records from the side panel. Make sure that your sales teams upgrade as soon as possible to work through any installation issues before July.

### Retirement for Microsoft<sup>®</sup> Outlook<sup>®</sup> 2007 Is Approaching

Microsoft has extended support beyond the previously announced retirement date. To stay aligned, we're extending support, too. However, Outlook 2007 retirement is still pending, and Microsoft has currently scheduled it for October 2017. To continue using Salesforce for Outlook after retirement, start migrating your sales reps to Outlook 2016, 2013, or 2010. Otherwise, reps' items don't sync between Outlook and Salesforce, and the side panel stops working.

### Give Up Manual Upgrades by Migrating to Lightning for Outlook and Lightning Sync

Compare your Microsoft<sup>®</sup> applications with our system requirements to see if you're ready to migrate to our most innovative Microsoft integration products to date. Get access to our coolest features and—better yet—give up manually installing software for good.

### Service

### Supercharge Your Productivity in the Lightning Service Console App

To keep your support agents happy and efficient, we're giving them some awesome new features. Keyboard shortcuts and split view let agents manage cases faster and with fewer clicks. Combine all that goodness with the new Omni-Channel utility, and your agents have even more power at their fingertips.

### Less Is More—the Compact Case Feed

If you've ever had a case that drags on and on, you know that the case feed becomes a very busy place. So we've cut out much of the "noise" for your agents using Lightning Service Console.

### Filter Your Case Feed in Lightning Experience

Support agents can find what they're looking for in a case faster by using filters in feed-based case page layouts.

### View, Create, Edit, and Delete Case Comments

View complete case comments in the case feed for Lightning Experience. You can also see complete case comments in the Case Comments related list, where you can edit or delete them. And you can create a Lightning Experience quick action for creating case comments that you can add to a page layout.

### See Email Attachments in the Case's Attachment Related List

We've made it easier for your agents to identify attachments that originated from customer emails or that were sent to customers via email. On any case page that includes the Attachments related list, agents see email attachments in the related list. Previously, email attachments weren't displayed. This feature is enabled by default.

### Send Snazzier Emails with a Better Rich-Text Toolbar

Our email publisher just got a touch-up. If you've added the HTML Body to the Lightning-optimized Case Email quick action layout, your agents see a cleaner toolbar for formatting rich text.

### The Send Email Quick Action Is Renamed Email

We've shortened the label of the Lightning Experience *Send Email* quick action to *Email*. Why? Because the label was often getting cut off (ouch).

### Log a Call Action Available for Lightning Experience

Lightning Experience has a new Log a Call quick action optimized for the case feed. You're no longer limited to the global action, which didn't have all the features of Log a Call in Salesforce Classic, such as autopopulating the case contact and autolinking the call log to the case. Now, Log a Call actions for Lightning and Classic work the same: yay.

### **Reply to Social Posts in the Case Feed**

Support agents can reply to social posts directly in the case feed for Lightning Experience. Previously, you could reply to social posts only in Salesforce Classic.

### Work with Your Support Entitlements in Lightning Experience

Entitlements are available in Lightning Experience with some limitations.

- The Case Milestone related list isn't available on cases.
- The Milestones related list isn't available on work orders.
- The Milestones' related list isn't available on work orders.
- The Milestone Tracker isn't available on work orders and cases.
- The Entitlement Template related list isn't available on products.
- The Contact related list isn't available on entitlements.
- The Entitlement related list isn't available on contacts.

### **Route Work to Agents in Lightning Experience (Beta)**

Support agents can use Omni-Channel in a Service Console app to change their presence status and accept and decline work requests. Agents see different visual notifications in Lightning Experience, but they keep the sonic notifications we introduced in

Spring '17. Keep in mind that you can't route certain objects, and Omni-Channel Supervisor isn't currently supported in Lightning Experience.

### **Get Social Customer Service in Professional Edition**

If you have Professional Edition and want to set up Social Customer Service for the first time, you can do so easily and more economically than before.

### **Administer Social Customer Service**

Now you can set up and administer Social Customer Service without ever touching Salesforce Classic.

#### **Do More with Facebook Posts**

Empower your agents with features that extend their ability to handle Facebook posts. Agents can see star ratings, reply to reviews, and respond privately to posts and comments.

### Boost Productivity with New Twitter Actions in the Redesigned Case Feed

The sleek, versatile case feed now includes new actions that let agents respond to tweets and keep tabs on people on Twitter.

### Get the Big Picture with Attachments in the Case Feed

Give agents access to more customer details, letting them see multiple attachments on a social post within a case feed.

### Search by Attached Files to Find Articles Faster

You can search for a Knowledge article by its attached files. For example, service reps search for an article using the search term *F-12345*, which is the name of the file attached to the article they're looking for.

### Find the Right Article for a Case with Higher Character Limits

We increased the character limit from 100 characters to 250 so that your users can more precisely describe the article that they're looking for. You can also choose which case fields to consider when suggesting articles.

### **Reports and Dashboards**

### Add Dashboard Filters in Lightning Experience

Add, edit, or remove filters from your Lightning Experience dashboard directly from the lightning dashboard builder. Filters let people choose different views of a dashboard, so one dashboard does the job of many. Without dashboard filters, you'd have to create multiple dashboards, each with its own set of filtered reports. For example, add a filter on the industry field to track opportunities by industry.

### Find Reports More Easily While Adding or Editing Dashboard Components

Instead of just searching by report name, find reports in the dashboard component editor just like you do on the reports tab. Flip through views (like Recent, Private, and Public) and folders. Of course, you can still search by report (and folder) name.

### Add Combination Charts to Dashboards in Lightning Experience

Combination charts plot two or more sets of data on a single chart, making charts "multimetric." For example, show the average probability and number of opportunities by stage.

### **Subscribe Other People to Reports**

You subscribed to the Opportunity Overview report and receive the report by email each morning. Now you can subscribe your whole team to the report, so everyone is up-to-date for the morning sync-up meeting. Either run the report as yourself, or as someone else. Recipients see emailed report data as the person running the report. Consider that they may see more or less data than they normally see in Salesforce.

### **Create Report and Dashboard Folders in Lightning Experience**

Folders are key to sharing and organizing reports and dashboards. Now you can create them in Lightning Experience. Switch to Salesforce Classic to grant other people access to folders.

### Other Enhancements to Reports and Dashboards in Lightning Experience

We've made some small-but-notable improvements to reports and dashboards.

### Chatter

### **Use Topics to Organize Your Content in Chatter**

You most definitely asked, and we most definitely answered by introducing topics in Lightning Experience. No need to set up anything, as our Lightning Experience org is automatically updated to support topics.

### **Discover People to Follow and Groups to Join**

Personalized Einstein Recommendations on the Chatter home page help you find the people and groups that most closely relate to your job and interests. The more recommendations you accept, the more relevant your feed becomes.

### There Are Lots of Shiny New Features for Streams

Streams have a new home page, new actions and filters, and a higher limit. Create up to 100 streams. Your Chatter home lists the five you most recently viewed. Set the frequency of notifications for Stream activity when you create a stream or from the stream itself.

### Use a Record's Follow Action to Add It to a Stream

When you create a stream, the **Follow** button that appears on profile and record detail pages changes. A plus sign is added to it. It indicates that you can use the **Follow** button not only to follow, but also to add that person or record to a stream. You can also add them to a stream that you create on the spot. Groups get a new Follow in Stream action for adding the group feed to an existing stream.

### Get a Richer Experience with the New Editor in Chatter

We updated the editor in the Chatter publisher for faster performance and compatibility with Locker Service. But they're not the only benefits. We improved mentions. When you start to mention someone, the selection list opens right where your cursor is instead of at the bottom of the publisher. And topics gets the same treatment (Yes! Topics in Lightning Experience!).

### Sort Feed Global Search Results by Relevance

Chatter results have a new sorting option when you do a global search: Top Posts. Top posts are the most relevant posts based on your search query.

### **Company Highlights Is the Default Feed for New Users**

The default feed on the Chatter home page is shown when a user navigates to the page, returns to it, or refreshes the Chatter home. Up to now, the default for everyone was the What I Follow feed. From now on, if someone is following fewer than 10 things, the Company Highlights feed becomes their default. New users now have a chance to see what's most active in their org and to get ideas about more things to follow. When a user follows more than 10 things, the default feed changes to What I Follow.

### Filter Groups to Show Unread Posts

Groups have a new feed filter, Unread Posts, to get you to unread content quickly. To see this filter, you must be a member of the group. What's considered read? Posts you've liked, commented on, edited, scrolled through, or viewed in detail.

### Filter a Profile to See a User's Posts

When you visit someone's profile, you can filter their profile feed to show just the posts that they added. You can filter your own profile, too. Select the **Posts by This User** filter to show only posts from the user whose profile you're visiting, including when you visit your own. It's a quick way to get to the information you're most interested in.

### The What I Follow Feed Gets Some New Filters

We added a little volume control to your What I Follow Feed. Use the **All Updates** and **Fewer Updates** filters to include or omit Feed Tracked Changes in your feed.

### Is Your Post Reaching the Right People?

Posts in private and unlisted Chatter groups have a seen-by count that shows the number of people who have seen a post. Click the count to see the names of the people.

### Share a Post with a Group in Lightning Experience

In Lightning Experience, besides sharing a Chatter post with your followers, you can also share it with a group. Click the **Share** link next to **Like** and **Comment** to see the new **Share with Group** option. Select **Share with Group**, and search in the share dialog for the group you're interested in.

### Create a Report on the Top 100 Feed Item Views

Here's another opportunity to get great insight into current trends in your company. A new primary object, Interaction Count Reports, is available for creating custom reports on the top 100 feed item views in your organization or community.

### **Encryption for Chatter Gets Updates (Pilot)**

The encryption for Chatter pilot continues to protect sensitive information in your Chatter feed. We added link URLs and poll choices to the body of encrypted content. Encryption for Chatter isn't ready for production, but you can safely try it out in a dedicated sandbox environment.

### Manage Members with Ease

In the spirit of consolidation and streamlining, we improved member management. No longer do you need to go to multiple places to take care of member business. Add or remove members right from Manage Members, or change them from member to manager (or back)—kind of like one-stop shopping but easier.

### See Group Email Notifications on the Group Page

The type of email notifications you are currently receiving for a group display on a button next to the group image. Not getting enough notifications? Getting too many? Click it and change the setting.

### Get Group Info (and Even Join) in the Tile View

You know how you can switch the groups list view so that groups display as tiles? We thought tiles were so much fun that we decided to make them even more useful. Now you can see how many members are in a group, what type of group it is, when the last activity took place, who owns it, if you are a member, and even join or leave the group right from the tile.

### **Identify External Users at a Glance**

Sometimes you want to know a bit more about Chatter users, like if they are part of your org or not. To make that easier, we added an orange border and the word external to the user's profile photo if the user is not part of your org.

### Communities

### **Easily Switch Between Your Salesforce Org and Communities**

This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

### **Files**

### **Updates to Libraries**

Folders in libraries are now generally available, and we've made some updates to improve your experience using files and folders in libraries. You can now add multiple files to a library, update and delete library files, and move folders within a library.

### **Customize the Files Detail Page**

Make files work better for you by customizing the fields and layout of the Files detail page. Choose from standard fields to show when the file was last updated, file size, file type, and more. Create custom fields and buttons to track metadata specific to your business, to use in validation rules, and provide data for searches and reports.

### Validation Rules Improve File Data

To ensure the quality of the information in your libraries, create validation rules for files added to libraries, records, and Files home, such as requiring users to follow naming conventions or fill in mandatory fields. Combine validation rules with customized file detail pages and record types to turbocharge the quality of the file data in your org.

### **Share Public Links to Your Files**

Sharing your files just got even easier. Create a public link to a file, then distribute the URL to anyone you want. Public link sharing was already available in Salesforce Classic and Lightning Email. Now it's available as a Files action in Lightning Experience and Communities.

### Get Better Performing, More Secure Content Previews with Lightning Delivery Player

When someone shares a file with you via a public link, you open a preview of that file in the Lightning Delivery Player. The new Lightning Delivery Player runs on HTML5 instead of Flash, improving security. The images are based on vector graphics, which provide higher quality renditions and better performance as they load page by page. The Lightning Delivery Player retains the ability to protect content deliveries with a password and delivery expiration, so content is seen by the right recipients at the right time.

### **Unshare a File**

You can now remove sharing settings on a file from a library or record. Because sometimes when you giveth, you later need to taketh away.

### Right-Click to Open a File in a New Tab

Sometimes it's the littlest changes that make the biggest impact in your daily work. Right-click a file to open it in a new tab. Now you can open multiple files at once and work on them in the order you choose.

#### **Drag Files onto Files and Attachments Related Lists**

We made adding files to records super easy. Just drag them onto a Files or Attachments related list for any object. You can also click the **Upload Files** button to add files. You get this new functionality automatically— there's nothing to enable.

### **Take Action on Files Right from the Feed**

Access the most important file actions directly from the feed. You no longer have to open the file preview to copy a link or share or download a file—you can do it right from Chatter.

#### Authenticate Effortlessly to External File Sources in Salesforce

Does your org have external file sources like Google Drive enabled? If you're not logged in, click the banner notification to sign in with one click. When you post a link to a Google Drive document in a feed post when you're not logged in, a prompt displays immediately after you post. These prompts get you authenticated quickly right where you are so you can get on with your work.

#### **Enjoy More Room for Files**

You're moving away from documents and attachments in favor of Salesforce Files. Image and video files are more popular (and bigger) than ever. And Salesforce Files get more versatile and more shareable all the time. You need more room for files, and we're giving you more. So go ahead and add files, convert attachments, and make updates to the files you already have without fear of hitting limits.

### Lightning App Builder

### Power Up Your Lightning Pages with the Flow Component (Generally Available)

Welcome a new component to the Lightning App Builder. Use the Flow component to embed active flows in your Lightning page.

### Personalize Home and Record Pages with Einstein Recommendations

Add the new Recommendations component so that your users can see relevant people to follow and groups to join.

#### Add a Launch Pad for All Your Third-Party Apps on Your Home Pages

We added an App Launcher component to the Lightning App Builder. Now you can make all your third-party apps available from the first page that your users see. With a Home page, you can combine various components on a single page to present key information to your user in one place. But until now, you couldn't add any third-party apps to Home pages. By adding an App Launcher component to the Home page, users can access all their third-party apps and items in a single click.

### Salesforce Connect

### Improved Support for Picklist and Multi-Select Picklist Fields on External Objects

With the cross-org adapter for Salesforce Connect, your users can interact with picklist and multi-select picklist fields on external objects just as they do with custom objects. Syncing no longer converts multi-select picklist fields on the provider org into text fields on the subscriber org's external objects. We now support picklist fields that use a global picklist value set on the provider org.

### New Rate Limit Applied to External Object Search Results

External data rows that are retrieved as search results now count toward a separate and much higher rate limit from rows retrieved by other means. So good news: Your org is unlikely to exceed rate limits when searching, reading, or writing to external objects.

### Prepare for Temporary Salesforce IDs for External Object Records

In a near future release, temporary Salesforce record IDs will be assigned to external object records that are retrieved by SOSL and Salesforce searches, rather than permanent IDs. To prepare for this change, don't create code or use third-party integrations that require these record IDs to remain associated with the same external data rows. For existing code and integrations, we recommend removing dependencies on external object record IDs to avoid issues when this change is rolled out.

### **Business Logic & Process Automation**

### Approvals

### **Reassign Approval Requests**

If you receive an approval request that someone else should approve, you can now reassign it to the person from any Salesforce experience. Previously, you could reassign approval requests only in Salesforce Classic.

### **Recall Submitted Approval Requests**

If you want to pull back an approval request that you submitted, you can now recall it from any Salesforce experience. Previously, you could recall approval requests only in Salesforce Classic.

### Visual Workflow

### Embed Your Flows in Lightning Pages (Generally Available)

We're rolling out a Flow component for the Lightning App Builder. You can now add flows to any Lightning page.

### Launch Flows in Lightning Runtime from Buttons, Links, and Custom Tabs

Lightning flow runtime now plays nicer with custom buttons, custom links, and web tabs. Say goodbye to blank screens and tabs where you were expecting a flow to render.

### **Redirect Flows That Render in Lightning Runtime**

The URL parameter retURL lets you control what happens when a flow interview finishes. Lightning runtime now respects the URL parameter retURL. Previously, only the Classic runtime respected the parameter.

### Now You See Me, Now You Don't: Dynamically Update Flow Screen Fields (Pilot)

The fewer times your users have to click **Next**, the better. If you agree, keep reading! Use field rules to control when to show or hide particular screen fields. Turn your flows into guided UIs that respond to users' inputs and selections. Save your users time by showing only what they need when they need it.

### Access Encrypted Data in Your Flows (Beta)

Flows now support encrypted fields, except in filters and sorting.

### Get Extended Error Details for Flows in the Tooling API

Do you use the Force.com Tooling API to build flows? In most places, we replaced the dreaded UNKNOWN\_EXCEPTION error code with FLOW\_EXCEPTION. And we added extended error details to most flow errors. That way, you can craft the right error message for your client.

### 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.

### **Process Builder**

### Access Encrypted Data in Process Builder (Beta)

Process Builder now supports encrypted fields, except in filters in the Update Records action.

### Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)

For various operations, such as assigning a task to someone, you can choose to notify the affected user by email. This update stops processes, workflow rules, and Apex triggers from suppressing these email notifications.

### Setup

### Block Execution of JavaScript in the HYPERLINK Function (Critical Update)

Previously, you could use JavaScript to prepare the URL argument in a HYPERLINK function. However, this approach introduces a security vulnerability because JavaScript can include cross-site scripting and make the URL execute on behalf of users. This critical update blocks the execution of JavaScript used to specify a URL in the HYPERLINK function.

### **Disable Lookup Record Preview in Lightning Experience for Accessibility**

When you're viewing a record in Lightning Experience, you can hover over links to related records to preview lookup record details. For example, while viewing an Opportunity, you can view the cases and other opportunities associated with the account by hovering over the account name. You can disable this feature to ensure that Lightning Experience is accessible for visually impaired users employing screen readers. To disable lookup record preview, contact Salesforce Support.

### Security and Identity

### Import a Custom Security Baseline into Health Check (Generally Available)

Security Health Check custom baselines, which were beta in Spring '17, are now released to all customers. You can customize the Health Check security baseline to compare your org's security settings with your industry standards.

### **New Wizard Guides You Through Creating Policies**

The new Lightning Experience interface for Transaction Security incorporates a wizard for creating basic policies, a new way to look at policy views, and a carousel.

### Development

### **User Interface API (Developer Preview)**

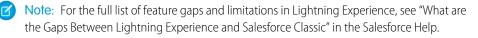
User Interface API enables you to create native mobile apps and custom web apps with your own branding and look and feel. A single REST request returns enough metadata, layout information, and data to display, edit, or create a record.

### Send and Manage Orders in Lightning Experience

The Channel Order App (COA) is now available in Lightning Experience. We streamlined order submission so it's faster to send orders to Salesforce for billing, activation, and provisioning. You also have more flexibility managing your existing orders with new edit, recall, and clone actions.

# What's Different or Not Available in Summer '17 Lightning Experience Features

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



### IN THIS SECTION:

Data Access and Views: Lightning Experience Considerations 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 Chatter: Lightning Experience Considerations Communities: Lightning Experience Considerations Navigation and Actions: Lightning Experience Considerations Security: Lightning Experience Considerations

### Data Access and Views: Lightning Experience Considerations

Learn about the issues to expect when using List Views in Lightning Experience.

### Kanban View

- Summaries can only be created for numeric and currency fields that are not roll up summary or formula fields.
- You can't group records by the Currency field.
- Knowledge articles can't be grouped by owner.
- Mass actions can't be performed in the Kanban view.

# Search: Lightning Experience Considerations

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

### Searchable Objects

These objects aren't searchable in Lightning Experience: Attachment, Coaching, Community, Contract Line Item, D&B Company, Document, Discussion, Goal, Idea, Live Chat Transcript, Macro, Metric, Performance Cycle, Question, Quick Text, Resource Absence, Reward Fund, Reward Fund Type, Salesforce CRM Content, Self-Service User, Service Contract, Service Resource Skill, Service Territory Member, Skill, Solution, and Work Order Line Item.

# Sales Features: Lightning Experience Considerations

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

### **EDITIONS**

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

### Path for Opportunities, Leads, Quotes, Contracts, Orders, and Custom Objects

- Images can't be included in packages for Path.
- Custom values in standard picklist fields aren't packagable.

# Productivity Features: Lightning Experience Considerations

Learn about the issues to expect when using Salesforce productivity tools in Lightning Experience.

### Email

### Email

Users with community licenses can't create or update email templates. This affects both community and portal licenses supported on Communities.

### **Email Templates**

Users using Classic email templates in Lightning Experience can't use Visualforce Classic email templates.

### Activities: Events and Calendars

### **Event Attendees**

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

- Admins have to set up Lightning Sync using OAuth 2.0 with the Sync Both Ways sync direction, so events are syncing between Salesforce and users' Microsoft<sup>®</sup> calendars.
- Admins have to add the Attendees field to the Event page layout or the quick actions layout for events.
- Users have to create the event or edit events from Lightning Experience or Salesforce1.

You can't view or edit event attendees from Lightning Experience if you're syncing events from Microsoft<sup>®</sup> Exchange to Salesforce only, or using Lightning Sync for Google.

The Attendees field isn't supported for Compact Layouts. However, adding attendees to the Event page layout let's your users view, invite, and remove attendees from events in Lightning Experience and Salesforce1.

Selecting Sync Both Ways limits some Salesforce Classic functionality. To learn more, see Lightning Sync Considerations in the Salesforce Help.

### **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 using OAuth 2.0 with the Sync Both Ways sync direction, so events are syncing between Salesforce and users' Microsoft<sup>®</sup> calendars.
- Admins have to add the Attendees field to the Event page layout or the quick actions layout for events.
- Users have to create or edit events from Lightning Experience or Salesforce1.

Invitations are emailed to event attendees from Microsoft Office 365<sup>°</sup>, and attendees can accept or decline event invitations from their Microsoft calendars only.

Event invitations aren't sent if you're syncing event and attendee information from Microsoft<sup>®</sup> Exchange to Salesforce only, or using Lightning Sync for Google.

Selecting Sync Both Ways limits some Salesforce Classic functionality. To learn more, see Lightning Sync Considerations in the Salesforce Help.

# Customer Service Features: Lightning Experience Considerations

Learn about the issues to expect if your org uses customer service tools. In general, Service Cloud data and features aren't supported in this release of Lightning Experience. Salesforce Console for Service, Entitlements, Social Customer Service, Knowledge, Field Service Lightning, and cases are supported but don't have full parity with what's available in Salesforce Classic.

### **Case Comments**

For a better experience, we recommend that you add comments to the feed instead of the Case Comments related list. However, Case Comments are supported in Lightning Experience. If you sort a Case Comments related list and then refresh or close and return to it, your sort preferences aren't saved.

### **Omni-Channel**

- Objects that aren't supported in Lightning Experience can't be routed using the Omni-Channel utility. Currently, you can't route Live Agent chats or SOS sessions.
- Omni-Channel Supervisor isn't available in Lightning Experience. To use Omni-Channel Supervisor, switch to Salesforce Classic.
- Omni-Channel Supervisor isn't available in Lightning Experience. To use Omni-Channel Supervisor, switch to Salesforce Classic. Active Time tracking is unavailable for agents using Lightning Experience. You can see active time data only for agents using Salesforce Classic.
- Active Time tracking is unavailable for agents using Lightning Experience. You can see active time data only for agents using Salesforce Classic.Omni-Channel settings (including enabling Omni-Channel) are available only in Salesforce Classic.

### Entitlements

Entitlements are available in Lightning Experience with some limitations.

- The Case Milestone related list isn't available on cases.
- The Milestones related list isn't available on work orders.
- The Milestones' related list isn't available on work orders.
- The Milestone Tracker isn't available on work orders and cases.
- The Entitlement Template related list isn't available on products.
- The Contact related list isn't available on entitlements.
- The Entitlement related list isn't available on contacts.

### Lightning Knowledge

Important considerations before enabling Lightning Knowledge

- You can have only one article type when enabling Lightning Knowledge. Currently, there are no migration tools to assist in merging your article types. To enable Lightning Knowledge, migrate your articles to one article type and disable or delete your other article types, or wait until migration tools are available to enable Lightning Knowledge.
- Lightning Knowledge currently doesn't support multiple language mode or translation.
- We recommend using Lightning Knowledge only if you have fewer than 300 data categories. If you have more than 300 data categories, you may experience slower performance.
- For articles with more than 30 versions, the versions above 30 will show in Salesforce Classic, but not in Lightning Experience.
- After you enable Lightning Knowledge, the 'ArticleType' field is no longer accessible via SOQL (or the API). This can impact custom code that queries for the 'ArticleType' field.
- If your org currently has a Visualforce tab named "Knowledge," you get an "Insufficient Privileges" error when trying to access the Knowledge tab in Lightning Knowledge. To avoid this error you can rename or delete your existing Visualforce tab, or rename your Knowledge Base from "Knowledge" to something else.

General usage limitations for Lightning Knowledge

• You can't currently assign articles or delete archived articles in Lightning Knowledge.

- You can't use article actions with public groups when Lightning Knowledge is enabled. This is replaced by new user profile permissions.
- You currently can't remove a published article while editing it. Instead, the article remains published while you edit the new version as a draft. You can still do this in Classic when Lightning Knowledge is enabled.
- You can't save as the same version when publishing an article in Lightning Knowledge. Publishing will always create a new version. You can still do this in Classic when Lightning Knowledge is enabled.
- You can't restore a past version of an article in Lightning. You can still do this in Classic when Lightning Knowledge is enabled.
- You can't use mass actions (such as mass archiving and mass publishing) with Lightning Knowledge.
- For list views, you must specify one language and one publishing status on all Knowledge list views. If one language and one publishing status are not specified in Listviews, we will default to "Published" for Publishing Status and the default user language for language.
- We don't support multiple-selection on PublishStatus or Language, or the "IN" and "OR" operators in list view filters.
- Data categories can't be shown in Knowledge list views.
- We don't support external data sources in Knowledge search in Lightning Knowledge.
- You can't see vote information in the new ratings component unless there's a Published (also known as online) version of the article. This affects article drafts and archived articles, because all online versions are removed when an article is archived.
- Most Knowledge actions aren't available in the Lightning Process Builder.
- In a Lightning Knowledge enabled org, the ModifyAll permission is necessary to delete archived articles

Console Limitations for Lightning Knowledge

- The Knowledge footer is not in the Lightning Service Console.
- The following actions aren't available in the Knowledge Sidebar for the Lightning Service Console: attach as a PDF, attach as a PDF to case email, insert article contents to case email, insert Article Community URL, and insert article URL to case publishers.

Limitations in Salesforce Classic after enabling Lightning Knowledge

- Multiple Languages mode can't be enabled after Lightning Knowledge is enabled.
- Page Layouts selections for Actions and Related lists don't reflect in Salesforce Classic.
- Page Layouts don't display in two columns in Salesforce Classic.
- Some actions, such as Change Record Type, aren't available in Salesforce Classic.
- Knowledge list views aren't available in Salesforce Classic.
- You can't filter a search by Knowledge Record Type in Salesforce Classic.
- You can't filter a search by archived articles in Salesforce Classic, except in Article Management.
- Files in the Files Related list inLightning Experience don't display in Salesforce Classic, and files in the Article File Fields Salesforce Classic don't display in Lightning Experience.

Limitations for using Lightning Knowledge with other Salesforce products

- File attachments in your Classic Knowledge implementation don't transfer to Lightning Knowledge. After migrating your articles to Lightning Knowledge, add the Files related list to your page layout and use the Files related list on each article to add files to your articles.
- You can't detach or remove a file from the Files component after it has been associated with an Article. When the file is shared with a record via the record feed, the workaround is to delete the feed post. Read Delete Files and Links from Feeds to learn more about removing files.
- Currently, the only way to remove an attached file from an article is to delete the file from File home.
- Reporting with record types is not currently supported in Lightning Knowledge.

- The rich text editor is limited for Lightning Knowledge. The following rich text editor features aren't currently supported in Lightning Knowledge: smart links, anchors, and videos.
- If you are using the Salesforce1 for Android and IOS downloadable apps recent articles are not displayed on object home.

# Reports and Dashboards: Lightning Experience Considerations

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

### **Relative Dates in Dashboard Filters**

You can't add or edit relative dates, such as "last month", to dashboard filters in Lightning Experience. Relative date filters set up in Salesforce Classic can be applied by dashboard viewers in Lightning Experience.

### **Combination Charts**

You can add these types of combination charts to dashboards in Lightning Experience:

- Vertical bar chart with an added line chart
- Vertical chart with up to four bars

To add these types of combination charts to dashboards, switch to Salesforce Classic:

- Stacked or grouped vertical bar chart with an added line chart
- Line chart with an added line chart

### **Create Report and Dashboard Folders**

You can create report and dashboard folders in Lightning Experience. Switch to Salesforce Classic to grant other people access to folders.

### Chatter: Lightning Experience Considerations

Learn about the issues to expect when your users collaborate in Lightning Experience using Chatter.

### Topics

- You can use topics on a record's feed, but topics on objects aren't available in Lightning Experience.
- After a topic is added to a post, it's associated permanently to the post in the system, even if you remove it visibly by editing the post.
- There's a maximum of 10 topics per post, including topics in comments.
- There isn't a topic list view on the Chatter home page in Lightning Experience.
- Topic detail pages open only by clicking directly on the topic. You can't open a topic detail page by right-clicking to open in a new tab.

### Recommendations

- Recommendations appear only on the Chatter home page.
- Files and records aren't recommended.

### Communities: Lightning Experience Considerations

Learn about the issues to expect using communities in Lightning Experience.

Switch to Salesforce Classic for the following functionality:

- The global header
  - Note: To switch between your org and communities in Lightning Experience orgs, use the App Launcher.

- Creating and disabling partner accounts and users
- Creating and disabling customer accounts and users
- Logging in as a community user
- Using delegated administration

# Navigation and Actions: Lightning Experience Considerations

Learn about the issues to expect when using actions in Lightning Experience.

### **Chatter and Forecasts Tabs**

You can hide the Chatter and Forecasts tabs using the Tab settings on the Profile Edit page in both Salesforce Classic and Lightning Experience, but in Lightning Experience the tabs display regardless of the settings.

# Security: Lightning Experience Considerations

Learn about the issues to expect for Salesforce security features in Lightning Experience.

### **Transaction Security**

When using the Entity category for a Chatter-based Transaction Security policy, Lightning Experience supports only the Feed Comment and Feed Item resources. Salesforce Classic supports all Chatter resources.

The optional condition available when automatically generating Apex policy event code in Salesforce Classic is not available in Lightning Experience.

# 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.

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

# Analytics

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

Wave Analytics is now "Einstein Analytics." Einstein Analytics includes Einstein Data Discovery, which is now "Einstein Discovery." The prebuilt Wave apps also have modified names.

### **Wave: Einstein Discovery**

Einstein Discovery finds relevant facts and themes in your data without building sophisticated software and statistical models. When it has finished analyzing your data, Einstein Discovery generates unbiased answers, explanations, and recommendations to help you learn what, why, and how to act on it. And results are easy for business users to understand. Now anyone can tap into the power of data science and do statistical and predictive analytics.

# Chatter

### Discover People to Follow and Groups to Join

Personalized Einstein Recommendations on the Chatter home page help you find the people and groups that most closely relate to your job and interests. The more recommendations you accept, the more relevant your feed becomes.

# Commerce

### Einstein Predictive Sort: Personalized Product Assortments Infused Into the Shopper Journey

Einstein Predictive Sort uses machine learning to personalize the order in which products appear in search and category pages on ecommerce sites. This capability uses commerce (product, order history) and customer (live click stream) data to create a predictive model for each unique shopper. That model powers more tailored product sorts, so the best products for each individual shopper are shown first, making shopping easier and driving conversion.

# Communities

### Create a Custom Report Type to See Click-Through Rates for Related Articles

Find out how often members click related articles suggested by Salesforce Einstein in your community. Create a custom report type using **Related Content Metrics** as the primary object and monitor click-through rates of related articles. You have a daily tracker of the number of times a related article was shown in the community (impressions), how often it was clicked, and the ratio between the two.

# Sales

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

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

### **Assess Your Sales Cloud Einstein Readiness**

Wondering whether you're ready for Sales Cloud Einstein or whether it can help your users? Run the Sales Cloud Einstein Readiness Assessor, and we analyze your Salesforce implementation. Then, we send you a personalized report that tells you which Einstein features you're ready to use now and which ones require extra steps.

### Einstein Automated Contacts: Contact and Contact Role Suggestions, and Smart Email Matching

We expanded the Sales Cloud Einstein product suite with Einstein Automated Contacts. It's the beginning of the end for data entry.

### Einstein Activity Capture: Activities Matched to Opportunities by Date and Default Activity Sharing

Einstein Activity Capture now uses date matching to determine if an activity is added to a related opportunity. Plus, you can choose default activity sharing for new users.

### Einstein Lead Scoring: Company-Level Insights and Support for Process Builder

Einstein Activity Capture now uses date matching to determine if an activity is added to a related opportunity. Plus, you can choose default activity sharing for new users.

### Einstein Insights: Improved Account and Opportunity Insights

Einstein now shows insights for records that sales reps follow and includes some updates that used to be available only in the Assistant. Plus, reps can see new types of Account Insights and undo hastily dismissed insights.

# Development

### **Einstein Vision Is Now Generally Available**

Sign up for Einstein Vision to receive 1,000 free predictions per calendar month. If you need more predictions, you can purchase them.

### New UI Makes It Easy to Get a Token

The Einstein Vision API uses OAuth 2.0 JWT bearer token flow for authorization. Each API call must contain a valid OAuth token in the request header. To quickly generate an OAuth access token, just use the token page.

### Access the API in Heroku Using the Einstein Vision Add-On

The Einstein Vision add-on gives you easy access to the API in your apps running on Heroku.

### Create a Dataset from a Zip File

You can now create a dataset, add labels, and upload images to the dataset, all in a single API call. When you pass a compressed .zip file to the API, the dataset name, label names, and image names are generated from the .zip file structure. The .zip file can be located in the cloud or on a local drive.

### Page Through All Examples in a Dataset

A dataset can contain thousands of examples. To make life easier, use the offset and count query parameters to page through them.

### **Monitor API Usage**

With the Einstein Vision API, you can make as many calls as needed to create datasets, add images, and create models. However, the number of predictions—any call to the predict resource—is limited. To proactively manage your API prediction limits, you can get your API usage.

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

Use Apex to create a simple app to recognize and classify images in this Trailhead project.

# Sales: Einstein Lead Scoring, Duplicate Detection, and Gmail Integration

Deliver high-impact Lightning Experience features that keep sales teams laser-focused on the leads and deals most likely to generate sales. Improve your company's reputation and relieve your duplicate management headaches by getting a grip on duplicate records. And handle the sales process like a champ—directly in Gmail.

### IN THIS SECTION:

### Lightning Experience Resources: Readiness Check and Feature Optimization

If you and your teams are still working in Salesforce Classic, consider switching to Lightning Experience where we're developing the latest and greatest features. In it, subscription-based artificial intelligence gets your sales teams making the smartest moves toward closing the most promising deals. Plus, sales reps get access to the best ways to manage leads, opportunities, and the activities related to them. And that's not all. To help you deliver those great features, we give you resources so that you don't go at it alone.

### Sell Smarter and Faster with Einstein High Velocity Sales

Close more deals in less time with an experience designed specifically for the needs of today's sales reps. Einstein High Velocity Sales combines Sales Cloud Einstein, the Lightning Dialer, and the Lightning Sales Console to help reps succeed in the digital era.

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

We've changed the names of Sales Cloud Einstein features to Einstein Activity Capture, Einstein Lead Scoring, Einstein Opportunity Insights, and Einstein Account Insights. Check whether you're ready for Sales Cloud Einstein with the new Readiness Assessor. Einstein Automated Contacts is a new feature that suggests contacts to add to Salesforce. Einstein Lead Scoring provides more details about lead score calculation, and your reps can assign leads based on lead score. Einstein Activity Capture now uses dates to determine if activities are added to related opportunities. Plus, your users can bring back mistakenly dismissed insights and see insights when they're available. These changes apply to Lightning Experience only.

### Core Sales Features: Campaign Engagement and Enhanced Sales Predictions

Deliver the best sales experience in Lightning Experience. And see which accounts respond to campaigns.

### Productivity Features: Voicemail Messages, Classic Email Templates, and Improved List Views

Give your teams the Lightning Experience edge with the ability to send prerecorded voicemail messages, Salesforce Classic email templates in Lightning Experience, and better list views. Also, the revamped Sales Console is generally available.

### Data Quality: Duplicate Detection Across Objects, Better Duplicate Alerts, and Assessments of AppExchange Package Data

We've created standard duplicate rules that work across contacts and leads. In Lightning Experience, you can now use the Potential Duplicates component to surface potential duplicates that span objects. We've also streamlined duplicate alerts when reps create or edit records in Lightning Experience. It all helps protect your company's reputation, keep your data clean, and make sales reps more successful. And before you purchase AppExchange packages with industry data, make sure that the data can enhance your sales efforts by getting a free Data Assessment.

### Google Integration: General Availability for Lightning for Gmail and Lightning Sync

Do your sales reps live in Google applications like Gmail and Google Calendar<sup>™</sup>, but want to get sales data from emails, contacts, and events into Salesforce easily? No need to wait any longer: Set up our Google integration products, which are now generally available. Let reps view relevant Salesforce records from their Gmail inboxes and relate emails to Salesforce records using Lightning for Gmail. And when you introduce Lightning Sync for Google, reps can sync contacts between Gmail and Salesforce, and events from Google Calendar to Salesforce.

### Microsoft<sup>®</sup> Integration: More Improvements, Increased Productivity

Help reps maximize productivity directly from their Microsoft email and calendars. Now Lightning for Outlook integrates with more features, like Email Experience and Email Templates. Reps can take advantage of even more Salesforce content from the comfort of Microsoft Outlook<sup>®</sup>. And for Microsoft Office 365<sup>®</sup> and Lightning Experience users, now Lightning Sync can sync reps' events both ways between their Microsoft and Salesforce calendars.

### Other Changes in the Sales Cloud

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

### Pardot: Engagement Studio Enhancements and More Engage Reporting Options

We've improved Salesforce Engage reporting, so you can get more insights into your team's campaigns. We've also added even more options for managing assignments and automation from engagement programs.

# Lightning Experience Resources: Readiness Check and Feature Optimization

If you and your teams are still working in Salesforce Classic, consider switching to Lightning Experience where we're developing the latest and greatest features. In it, subscription-based artificial intelligence gets your sales teams making the smartest moves toward closing the most promising deals. Plus, sales reps get access to the best ways to manage leads, opportunities, and the activities related to them. And that's not all. To help you deliver those great features, we give you resources so that you don't go at it alone.

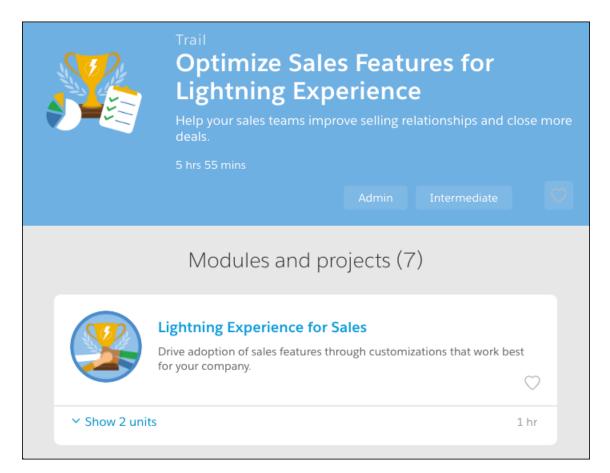
# Feel Confident About Your Lightning Experience Readiness

If you're feeling skittish about Lightning Experience, the Readiness Check is here to help you learn where you stand with the new interface. Kicking off the Readiness Check runs an evaluation on your features and customizations and emails you a personalized report about your Salesforce instance. The report describes actions you can take to get your sales features ready for Lightning Experience.

Even if you've run the Readiness Check before, we're always adding to the list of features and customizations that you can evaluate, even between releases. Take some time to check your readiness again. To learn about our latest improvements and how to kick off the check, see Get Expanded Analysis When You Check Your Lightning Experience Readiness.

# **Optimize Sales Features for Lightning Experience**

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



# Sell Smarter and Faster with Einstein High Velocity Sales

Close more deals in less time with an experience designed specifically for the needs of today's sales reps. Einstein High Velocity Sales combines Sales Cloud Einstein, the Lightning Dialer, and the Lightning Sales Console to help reps succeed in the digital era.

Learn more about Einstein High Velocity Sales!

### SEE ALSO:

Sales Cloud Einstein Lightning Dialer Sales Console

### **EDITIONS**

Lightning Sales Console is available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with Sales Cloud

Sales Cloud Einstein is available at an extra cost in: Enterprise, Performance, and Unlimited Editions

Lightning Dialer is available at an extra cost in: Professional, Enterprise, Performance, and Unlimited Editions

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

We've changed the names of Sales Cloud Einstein features to Einstein Activity Capture, Einstein Lead Scoring, Einstein Opportunity Insights, and Einstein Account Insights. Check whether you're ready for Sales Cloud Einstein with the new Readiness Assessor. Einstein Automated Contacts is a new feature that suggests contacts to add to Salesforce. Einstein Lead Scoring provides more details about lead score calculation, and your reps can assign leads based on lead score. Einstein Activity Capture now uses dates to determine if activities are added to related opportunities. Plus, your users can bring back mistakenly dismissed insights and see insights when they're available. These changes apply to Lightning Experience only.

**EDITIONS** 

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

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

### IN THIS SECTION:

### Assess Your Sales Cloud Einstein Readiness

Wondering whether you're ready for Sales Cloud Einstein or whether it can help your users? Run the Sales Cloud Einstein Readiness Assessor, and we analyze your Salesforce implementation. Then, we send you a personalized report that tells you which Einstein features you're ready to use now and which ones require extra steps. This feature is new in Lightning Experience.

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### Einstein Lead Scoring: Company-Level Insights and Support for Process Builder

See which lead field values correlate to conversion and how lead scores line up with your company's sales results. Automatically assign hot leads to top sales representatives, and build other processes on lead score. These changes apply to Lightning Experience only.

### Einstein Insights: Improved Account and Opportunity Insights

Einstein now shows insights for records that sales reps follow and includes some updates that used to be available only in the Assistant. Plus, reps can see new types of Account Insights and undo hastily dismissed insights. These changes apply to Lightning Experience only.

### SEE ALSO:

Salesforce Help: Set Up Sales Cloud Einstein (can be outdated or unavailable during release preview) Trailhead: Sales Cloud Einstein (can be outdated or unavailable during release preview) Salesforce Einstein Lightning Experience: A Modern and Intelligent User Experience

# Assess Your Sales Cloud Einstein Readiness

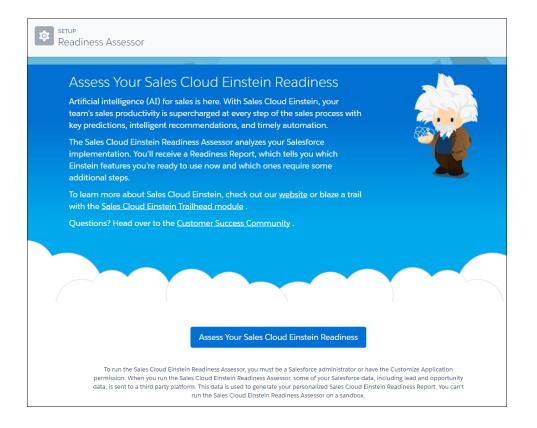
Wondering whether you're ready for Sales Cloud Einstein or whether it can help your users? Run the Sales Cloud Einstein Readiness Assessor, and we analyze your Salesforce implementation. Then, we send you a personalized report that tells you which Einstein features you're ready to use now and which ones require extra steps. This feature is new in Lightning Experience.

- 1. From Setup, enter *Readiness Assessor* in the Quick Find box, then select **Readiness Assessor** under Sales Cloud Einstein.
- 2. Click Assess Your Sale Cloud Einstein Readiness.

## USER PERMISSIONS

To run the Sales Cloud Einstein Readiness Assessor:

Customize Application



3. Follow the instructions to let Salesforce access your data and determine your Sales Cloud Einstein readiness.

We email you a personalized Sales Cloud Einstein Readiness Report which is also available from the Files tab in Salesforce.

### SEE ALSO:

*Salesforce Help:* Sales Cloud Einstein (can be outdated or unavailable during release preview)

# Einstein Automated Contacts: Contact and Contact Role Suggestions, and Smart Email Matching

We expanded the Sales Cloud Einstein product suite with Einstein Automated Contacts. It's the beginning of the end for data entry.

### IN THIS SECTION:

### Make Data Entry a Breeze with Einstein Automated Contacts

Reps can spend less time on data entry and more time on sales. Einstein now uses email and event activity to suggest new record data that reps can add to Salesforce with just a couple of clicks. Suggested record data includes new contacts and opportunity contact roles. This change applies to Lightning Experience only.

### See More Relevant Activities with Smart Email Matching (Beta)

When you use Einstein Automated Contacts, Smart Email Matching helps improve the relevancy of emails and events in the activity timeline of opportunity records. A more relevant activity timeline on opportunity records means better opportunity contact role suggestions. This change applies to Lightning Experience only.

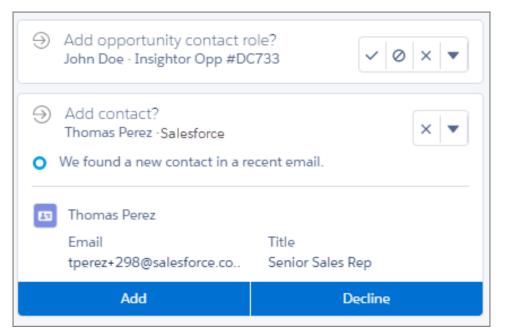
### Set Up Einstein Automated Contacts

Set up Einstein Automated Contacts so that reps can spend less time on data entry and more time on sales. This change applies to Lightning Experience only.

# Make Data Entry a Breeze with Einstein Automated Contacts

Reps can spend less time on data entry and more time on sales. Einstein now uses email and event activity to suggest new record data that reps can add to Salesforce with just a couple of clicks. Suggested record data includes new contacts and opportunity contact roles. This change applies to Lightning Experience only.

Suggestions appear in the Einstein component. Your reps see them when they connect their email and calendar to Salesforce with Einstein Activity Capture. The type of data suggested determines where the suggestion appears and who can see it.



Type of Suggestion	Where the Suggestion Appears	Who Sees the Suggestion
Contact	<ul><li>Home page</li><li>Account records</li></ul>	<ul> <li>Anyone in the <b>To</b> field of the email or activity</li> <li>Account owner</li> <li>Account team members</li> <li>User's manager</li> </ul>
Opportunity Contact Role	<ul><li>Home page</li><li>Opportunity records</li></ul>	<ul><li> Opportunity owner</li><li> Opportunity team members</li><li> User's manager</li></ul>

When a rep adds suggested data to Salesforce, Einstein takes the rep to the record edit page. From there, the rep reviews and saves the new data. After the data is added, the suggestion disappears for all users who had access to it.

When a rep declines suggested data, the suggestion disappears for all users. If you've enabled Smart Email Matching, when a rep declines opportunity contact roles suggestions, all related activities are removed from the activity timeline. Removing unrelated activities improves the relevancy of both activities in the timeline and the suggestions.

From the Home page, reps can also dismiss suggestions, which removes them from the Home page. They can also leave feedback about the relevance of individual suggestions.

If you use Duplicate Management, when a rep adds a suggested contact, it could be flagged as a duplicate. If the suggestion is flagged, the rep must select an existing contact from the list.

### SEE ALSO:

### Set Up Einstein Automated Contacts

## See More Relevant Activities with Smart Email Matching (Beta)

When you use Einstein Automated Contacts, Smart Email Matching helps improve the relevancy of emails and events in the activity timeline of opportunity records. A more relevant activity timeline on opportunity records means better opportunity contact role suggestions. This change applies to Lightning Experience only.

Set up Einstein Automated Contacts and enable suggestions for Opportunity Contact Roles. Then select the option to improve suggestions.

Here's how it works: Activities from Salesforce contacts who are part of opportunity contact role suggestions are added to the opportunity's activity timeline. The more activities on the timeline, the more opportunity contact role suggestions. When users decline suggestions, the related activities are removed from the activity timeline, which improves the relevancy of both activities in the timeline and the suggestions.

Select the Data to Suggest to Users	
Contacts	Enabled 🗸
Opportunity Contact Roles	Enabled
Improve Suggestions with Smart Email Matching (Beta) Activities from contacts who are part of opportunity contact role suggestions are added to the activity timeline. Those activities are used to find more opportunity contact role suggestions. When users decline suggestions, the related activities are removed from the activity timeline, which improves the relevancy of both activities in the timeline and suggestions.	Enabled 💽

SEE ALSO:

Make Data Entry a Breeze with Einstein Automated Contacts

# Set Up Einstein Automated Contacts

Set up Einstein Automated Contacts so that reps can spend less time on data entry and more time on sales. This change applies to Lightning Experience only.

Einstein Activity Capture must be enabled.

- 1. From Setup, enter *Sales Cloud Einstein* in the Quick Find box, then select **Setup Assistant** under Sales Cloud Einstein.
- 2. Click Set Up next to Einstein Automated Contacts.
- 3. On the Setup page, enable the types of data you want to suggest to reps.

### USER PERMISSIONS

- To enable Automated Data Capture:
- Customize Application
   AND Modify All Data

- If you enable Contact suggestions, make sure that all required contact fields have a default value to help avoid errors when reps create contacts.
- If you enable Opportunity Contact Role suggestions, you can improve suggestions with Smart Email Matching.
- 4. Suggestions appear in the Einstein component, so make sure that the component was added to the relevant Lightning pages.

### SEE ALSO:

Einstein Automated Contacts: Contact and Contact Role Suggestions, and Smart Email Matching Salesforce Help: Considerations for Setting Up Sales Cloud Einstein (can be outdated or unavailable during release preview)

# Einstein Activity Capture: Activities Matched to Opportunities by Date and Default Activity Sharing

Einstein Activity Capture now uses date matching to determine if an activity is added to a related opportunity. Plus, you can choose default activity sharing for new users. These changes apply to Lightning Experience only.

# EDITIONS

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

### IN THIS SECTION:

### See More Relevant Activities on Opportunities with Date Matching

Einstein Activity Capture adds an activity to a related opportunity if the activity occurred within the opportunity's date range. This better ensures that your users see related activities on their opportunities. This change applies to Lightning Experience only.

### Select Default Activity Sharing for New Users

Select whether new users share their emails and events with everyone or keep them private. Users can change their activity sharing at any time from their personal settings. This change applies to Lightning Experience only.

### SEE ALSO:

*Salesforce Help*: Set Up Einstein Activity Capture (can be outdated or unavailable during release preview) *Salesforce Help*: Connect Your Email and Calendar to Salesforce with Einstein Activity Capture (can be outdated or unavailable during release preview)

## See More Relevant Activities on Opportunities with Date Matching

Einstein Activity Capture adds an activity to a related opportunity if the activity occurred within the opportunity's date range. This better ensures that your users see related activities on their opportunities. This change applies to Lightning Experience only.

Salesforce defines an opportunity's date range using the opportunity's created and closed dates.

	Start of Activity Date Range	End of Activity Date Range
Open opportunities	60 days before created or closed date (whichever is earlier)	60 days from today

## USER PERMISSIONS

To review activity dates:

Customize Application
 AND Modify All Data

	Start of Activity Date Range	End of Activity Date Range
Closed opportunities	60 days before created or closed date (whichever is earlier)	60 days after being closed

You can review the date range for opportunities but you can't customize it.

- 1. From Setup, enter *Einstein Activity Capture* in the Quick Find box, then select **Settings** under Einstein Activity Capture.
- 2. Click Review Activity Dates.

### SEE ALSO:

Einstein Activity Capture: Activities Matched to Opportunities by Date and Default Activity Sharing

# Select Default Activity Sharing for New Users

Select whether new users share their emails and events with everyone or keep them private. Users can change their activity sharing at any time from their personal settings. This change applies 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 Default.
- **3.** Select the default activity sharing for users.

When new users connect their account to Salesforce with Einstein Activity Capture, their activity sharing is the default that you selected. Users who have already connected their account to Salesforce aren't affected.

### SEE ALSO:

Einstein Activity Capture: Activities Matched to Opportunities by Date and Default Activity Sharing

# Einstein Lead Scoring: Company-Level Insights and Support for Process Builder

See which lead field values correlate to conversion and how lead scores line up with your company's sales results. Automatically assign hot leads to top sales representatives, and build other processes on lead score. These changes apply to Lightning Experience only.

IN THIS SECTION:

### See Which Lead Field Values Affect Conversion Rates Most

The new Einstein Lead Scoring dashboard, powered by Wave, provides insights into which lead characteristics result in the most conversions. See how well lead scores correlate to conversion rates, monitor the average lead score of each lead source, and more. This change applies to Lightning Experience only.

### USER PERMISSIONS

To set default activity sharing:

Customize Application
 AND Modify All Data

### **EDITIONS**

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

### Assign Leads and Create Processes Based on Score

The ScoreIntelligence object and its Score field for leads are now available for use in triggers, Process Builder, and custom formula fields. Use Process Builder or triggers to assign leads to specific sales reps or queues based on their lead score. Add leads to campaigns, update lead status, and build other processes around lead scores. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### SEE ALSO:

Salesforce Help: Einstein Lead Scoring (can be outdated or unavailable during release preview)

# See Which Lead Field Values Affect Conversion Rates Most

The new Einstein Lead Scoring dashboard, powered by Wave, provides insights into which lead characteristics result in the most conversions. See how well lead scores correlate to conversion rates, monitor the average lead score of each lead source, and more. This change applies to Lightning Experience only.

To open the Einstein Lead Scoring dashboard, users click the **Einstein Analytics** tab, and then click **Leads**.

The Company-Level Predictive Factors chart shows which lead field values are seen more often in your sales reps' converted leads (1), and which are seen more often in unconverted leads (4).

To view the percentage of leads that have a specific field value, hover over a bar on the chart (2). To dive into the details and see the leads that have that field value, click the bar and then click **Launch** (3).

### USER PERMISSIONS

To view the Einstein Lead Scoring dashboard:

 Use Einstein Lead Scoring

AND

Use Wave Analytics Templated Apps

AND

View All on leads

To create Wave apps using the Einstein Lead Scoring app template

Use Einstein Lead Scoring

AND

Manage Wave Analytics Templated Apps

AND

View All on leads



The Lead Conversion Rate chart (5) shows the conversion rate for each slice of lead scores: 0–20, 21–40, 41–60, 61–80, and 81–100. The Average Lead Score table (6) shows the average scores for each lead source.

Lead C	onversion Rate by Lead Score Bucket5	Average Lead Score by Le	ad Source6	
81-10	0 41-60	LEAD SOURCE	AVERAGE LEAD SCORE	
	21-40	Trialforce	1	
80%		Partner Referral	3	E
	61-80	Lead Buy	15.625	
%09 gate		Tforce	22.9275	
60% Lead Conversion Rate		Paid Social Media	33.7517	
Augo page 40%		Email Marketing - 3rd Party	36.4545	
Lea 1		Blog	40.5	
	0-20	Nurture	41	
20%		Website	42.8462	
		Email Marketing - SFDC	47	
0%	Lead Score Bucket	Online Ads/Banners	49.6	
	PLOG CONC DREVEL			Ŧ

To view lead statistics for a specific time period, users can simply select a start and end time at the top of the dashboard (7).

Quarter Year	
current year to today	· · ·

The dashboard also displays more statistics for the selected time period.

- Total number of leads scored
- Number of leads scored between 81–100
- Conversion rate for leads scored between 81–100
- The sales team's overall conversion rate

You can create custom Wave apps for your users based on the Einstein Lead Scoring app.

- 1. From the App Launcher, click Analytics.
- 2. Click Create and then click App.
- 3. Choose the Einstein Lead Scoring Analytics template.

Note: Einstein Lead Scoring includes five Wave user licenses.

## Assign Leads and Create Processes Based on Score

The ScoreIntelligence object and its Score field for leads are now available for use in triggers, Process Builder, and custom formula fields. Use Process Builder or triggers to assign leads to specific sales reps or queues based on their lead score. Add leads to campaigns, update lead status, and build other processes around lead scores. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

# Einstein Insights: Improved Account and Opportunity Insights

Einstein now shows insights for records that sales reps follow and includes some updates that used to be available only in the Assistant. Plus, reps can see new types of Account Insights and undo hastily dismissed insights. These changes apply to Lightning Experience only.

### IN THIS SECTION:

### Stay Up to Date on Accounts with More Types of Insights

Einstein Account Insights has more to offer. Newly added insights about key moments, such as when a contact mentions a competitor or a contact is leaving their company, keeps your account team on their game. We've also added an insight that alerts your team when customers make changes to their internal leadership. These changes apply to Lightning Experience only.

### See Insights for Records You Follow

Want intelligent updates for opportunities or accounts you don't own or aren't associated with through your team? Einstein users can now follow a record to see the related insights on their Home page. This change applies to Lightning Experience only.

### Bring Back Insights That Were Mistakenly Dismissed

Accidentally dismiss an important insight? Sales reps can now undo the action and access recently dismissed updates. This change applies to Lightning Experience only.

### Access More Opportunity Insights

Miss the updates that appeared in the Assistant before Einstein was enabled? Your sales reps now get some of these updates in Einstein. This change applies to Lightning Experience only.

### Say Goodbye to Advanced Email Matching to Opportunities

To improve the relevance of emails and events, use the new Smart Email Matching beta feature instead. Find it on the Automatic Data Capture page in Setup. The Advanced Email Matching to Opportunities beta feature is no longer available. This change applies to Lightning Experience only.

### SEE ALSO:

*Salesforce Help*: Einstein Account Insights (can be outdated or unavailable during release preview) *Salesforce Help*: Einstein Opportunity Insights (can be outdated or unavailable during release preview)

# Stay Up to Date on Accounts with More Types of Insights

Einstein Account Insights has more to offer. Newly added insights about key moments, such as when a contact mentions a competitor or a contact is leaving their company, keeps your account team on their game. We've also added an insight that alerts your team when customers make changes to their internal leadership. These changes apply to Lightning Experience only.

### Competitor was mentioned

Team members are notified when an email from a contact mentions a competitor.

### **Contact is leaving**

Team members are notified when an email indicates that a contact is leaving their current company.

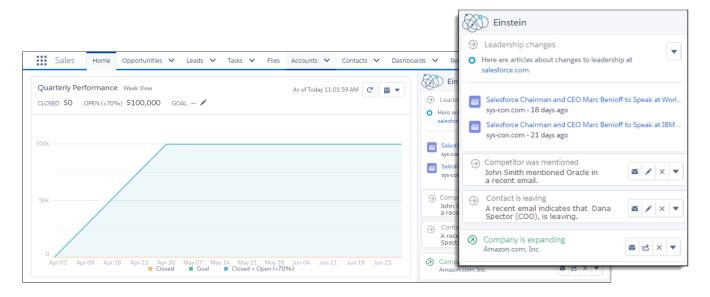
### Leadership changes

Team members are notified when customers make changes to their internal leadership. As with other insights about business developments, each leadership change insight includes up to three of the most relevant articles from reputable U.S. news sources.

You need to enable Activity Capture for your sales team. When insights come from private emails, the insight is public, but the email content isn't displayed unless the activity owner has opted to make the email public. To get the most out of Account Insights, encourage your team to set their **Sharing Setting for All Emails and Events** option to Everyone.

EDITIONS

Available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions All account insights appear on the Einstein component on the Home page and account records. All Einstein users with access to the record can see the insights.



### SEE ALSO:

Salesforce Help: Account Insights (can be outdated or unavailable during release preview)

## See Insights for Records You Follow

Want intelligent updates for opportunities or accounts you don't own or aren't associated with through your team? Einstein users can now follow a record to see the related insights on their Home page. This change applies to Lightning Experience only.

# Bring Back Insights That Were Mistakenly Dismissed

Accidentally dismiss an important insight? Sales reps can now undo the action and access recently dismissed updates. This change applies to Lightning Experience only.

After an insight is dismissed, a toast appears that allows reps to undo the dismiss action.

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Tasks 🗸	Files	Accounts	~	Contacts	~	Dashboards	$\sim$	Reports	~	Chatter	Groups	$\sim$	Calendar	People	~
	0	Insight w	as d	ismissed.	Und	<u>o</u>			×	8	Einsteir	ı			
											Acme is ex Acme	pand	ling		

Additionally, the Einstein component now refreshes automatically, so new insights appear right away after older insights are dismissed.

## Access More Opportunity Insights

Miss the updates that appeared in the Assistant before Einstein was enabled? Your sales reps now get some of these updates in Einstein. This change applies to Lightning Experience only.

The Einstein component provides additional updates, such as when an opportunity doesn't have open activity or if an opportunity is overdue.

## Say Goodbye to Advanced Email Matching to Opportunities

To improve the relevance of emails and events, use the new Smart Email Matching beta feature instead. Find it on the Automatic Data Capture page in Setup. The Advanced Email Matching to Opportunities beta feature is no longer available. This change applies to Lightning Experience only.

SEE ALSO:

See More Relevant Activities with Smart Email Matching (Beta)

# Core Sales Features: Campaign Engagement and Enhanced Sales Predictions

Deliver the best sales experience in Lightning Experience. And see which accounts respond to campaigns.

### IN THIS SECTION:

### Leads: Carry Over Related Records During Conversion, Encryption, and More

Keep related files and records when converting leads, encrypt personally identifying information in leads, and automatically match accounts during lead conversion.

### Accounts: Improved Account Hierarchy and Account Teams, Campaign Members on Accounts, and Field History

See account details from the account hierarchy page, add account team members more accurately. Add campaign members from account records and track account field history. These changes apply to Lightning Experience only.

### Campaigns: Campaign Influence on Accounts, Actions on Reports, Field History, and More

See the campaigns that accounts are responding to, add members to campaigns from accounts and reports in Lightning Experience, and track campaign field history. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Do More with Sales Predictions in Collaborative Forecasts

In Lightning Experience, Collaborative Forecasts users now get more information and can do more with it when they're projecting sales. These changes apply to Lightning Experience only.

### Opportunities: Opportunity Stage History, Date Selection in Lightning Experience

Your reps can save time by selecting today's date in one click. And reps no longer need to switch to Salesforce Classic to review an opportunity's Stage History. These changes apply to Lightning Experience only.

### Path: Available in Packages and on Contracts and Orders

Decide how Path is displayed. Include Path when building a package. Help your reps work contracts more efficiently by adding a path. These changes apply to Lightning Experience only.

### Contacts: Contact Hierarchies in Lightning Experience and Easier Contact Creation

Display a hierarchical view of the contacts on an account in Lightning Experience and create contacts from account records with ease. These changes apply to Lightning Experience, Salesforce Classic, and the Salesforce1 mobile browser app.

### See News in a New Way

We moved News and Twitter to their own tab on default page layouts. Check out the News tab on account, contact, and lead records. We also made it easier to scan news. These changes apply to Lightning Experience only.

**EDITIONS** 

# Leads: Carry Over Related Records During Conversion, Encryption, and More

Keep related files and records when converting leads, encrypt personally identifying information in leads, and automatically match accounts during lead conversion.

### IN THIS SECTION:

### Keep Related Files and Records When Reps Convert Leads

When sales users convert a lead, files and related records attached to the lead are attached to the resulting contact, account, person account, and opportunity records. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Encrypt Sensitive Lead Fields (Beta)

You can encrypt 10 standard fields containing personally identifying information (PII) in Lead records.

### Relate Accounts to Leads Faster with Account Matching

When sales users convert leads, if the lead company name matches any of your accounts, it's quick and easy to choose one of the matching accounts. This change applies to Lightning Experience only.

### Use the API to Relate an Existing Opportunity During Lead Conversion

When developers use the API to convert leads, they can now relate an existing opportunity to the lead. Previously, only a new opportunity created during lead conversion could be related to the lead. This change applies to both Lightning Experience and Salesforce Classic.

# Keep Related Files and Records When Reps Convert Leads

When sales users convert a lead, files and related records attached to the lead are attached to the resulting contact, account, person account, and opportunity records. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

Items from the following related lists on leads are carried over to the new or existing contact, account, and opportunity during lead conversion.

Lead Related List	Contact	Account	Person Account	Opportunity
Open Activities	~	*	*	~
Activity History	✓	*	*	~
Campaign History	✓		*	
HTML Email Status	✓		*	
Notes and Attachments	<		*	
Files	✓	*	*	~
Notes (new)	✓	*	*	
Content Deliveries	~			
Social Posts	<		*	
Social Personas	<		*	
Marketing Actions	~		~	

Available in: **Group**,

Professional, Enterprise,

Performance, Unlimited,

and Developer Editions

# Encrypt Sensitive Lead Fields (Beta)

You can encrypt 10 standard fields containing personally identifying information (PII) in Lead records.

Note: This beta version of encryption support in Leads is production quality but has known limitations. Contact Salesforce to activate it. To provide feedback and suggestions, go to IdeaExchange.

You can encrypt these standard Lead fields:

- Name (First Name, Middle Name, Last Name)
- Email
- Phone
- Mobile Phone
- Fax
- Address (Street, City)
- Title
- Website
- Description
- Company

# Relate Accounts to Leads Faster with Account Matching

When sales users convert leads, if the lead company name matches any of your accounts, it's quick and easy to choose one of the matching accounts. This change applies to Lightning Experience only.

Previously in Lightning Experience, if there was a single exact match between the lead company name and an existing account name, the account populated the Account Name field during lead conversion. New account matching brings Lightning Experience in line with Salesforce Classic.

- Support for person accounts—If the lead contains a company name, we search business accounts. If there is no company name, we search person accounts instead.
- Enhanced type ahead—Type-ahead search in the Account Name field now searches across all accounts rather than searching only the user's recently used accounts.
- Multiple match—When a user clicks the Account Name field during lead conversion, a dropdown menu includes a list of all accounts that match the lead's company name. If the lead does not have a company name, the list contains matching person accounts.

# Use the API to Relate an Existing Opportunity During Lead Conversion

When developers use the API to convert leads, they can now relate an existing opportunity to the lead. Previously, only a new opportunity created during lead conversion could be related to the lead. This change applies to both Lightning Experience and Salesforce Classic.

### SEE ALSO:

New and Changed Calls

# Accounts: Improved Account Hierarchy and Account Teams, Campaign Members on Accounts, and Field History

See account details from the account hierarchy page, add account team members more accurately. Add campaign members from account records and track account field history. These changes apply to Lightning Experience only.

### See Account Hierarchy Details on the Same Page

Now when users hover over an account name in an account hierarchy, a preview card shows more details.

#### Add Account Team Members with Accuracy

When adding account team members in Lighting Experience, the Contact Access picklist now shows only valid options. No more guessing, or worse, guessing wrong and receiving errors.

### Work with Person Accounts in Lightning Console Apps

If you work directly with individuals, as opposed to companies, you know all about the power of person accounts. And if you also rely on the productivity that comes with console apps, console apps now fully support person accounts.

### Add Members to Campaigns from Accounts

Your marketing team can work faster by adding members to campaigns directly from the Contacts related list on accounts.

### **Track Changes to Accounts with Field History**

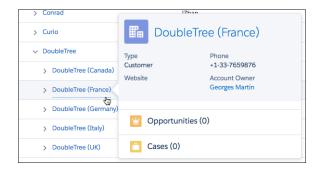
Use the Field History related list in Lightning Experience to track changes to accounts.

### Person Accounts Show All Cases in Related Lists

The Cases related list on person account records now includes cases where the person account is listed in the **Contact Name** field. Previously, only cases where the person account was listed in the **Account Name** field appeared in the Cases related list.

### See Account Hierarchy Details on the Same Page

Now when users hover over an account name in an account hierarchy, a preview card shows more details. This change applies to Lightning Experience only.



## **EDITIONS**

Available in: Lightning Experience

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

### SEE ALSO:

In Hierarchies, Only Parent Records Are Displayed with Icon for Expanding Row

### Add Account Team Members with Accuracy

When adding account team members in Lighting Experience, the Contact Access picklist now shows only valid options. No more guessing, or worse, guessing wrong and receiving errors. This change applies to Lightning Experience only.



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

# Campaigns: Campaign Influence on Accounts, Actions on Reports, Field History, and More

See the campaigns that accounts are responding to, add members to campaigns from accounts and reports in Lightning Experience, and track campaign field history. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### IN THIS SECTION:

### See Which Campaigns Accounts Are Responding To

Let your marketing team see how their efforts impact opportunities on specific accounts using the Campaign Influence related list on accounts. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Add Members to Campaigns from Reports in Lightning Experience

Your marketing department can quickly target specific groups of leads, contacts, or person accounts by adding them to campaigns directly from standard and custom reports. This change applies to both Lightning Experience and Salesforce Classic.

### Add Members to Campaigns from Accounts

Your marketing team can work faster by adding members to campaigns directly from the Contacts related list on accounts. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

### Track Campaign Field History

Let reps see how campaign field values have changed in the Campaign Field History related list on campaigns. Track who changed each value, when the change happened, and what the original value was. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Other Changes to Campaigns

Additional enhancements make campaigns more useful and flexible. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### SEE ALSO:

In Hierarchies, Only Parent Records Are Displayed with Icon for Expanding Row

# See Which Campaigns Accounts Are Responding To

Let your marketing team see how their efforts impact opportunities on specific accounts using the Campaign Influence related list on accounts. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

# Note: This information applies only to Customizable Campaign Influence and not to Campaign Influence 1.0.

When your sales and marketing reps view an account detail page, the Campaign Influence related list shows the campaigns on the account. For each opportunity, the list also shows the share of revenue influenced by specific campaigns. In Lightning Experience, a pair of charts shows how each campaign influenced the revenue influenced (1), and the share influenced by each campaign type (2).

## EDITIONS

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

# EDITIONS

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



To filter the opportunities represented, reps can use the menus above each chart. To choose a different type of chart, users click the gear icon. To see the complete list of influenced opportunities along with the share of revenue attributed to each campaign, users click **View All**.

The opportunities displayed are based on the default campaign influence model designated by the admin. The Influence by Campaign chart shows results from up to 1,000 campaigns with the highest revenue shares. This chart combines campaign influence records from deleted campaigns into a separate amount. The Influence by Campaign Type chart shows results from up to 1,000 campaign types with the highest revenue shares. To calculate the charts correctly, give each campaign a unique name.

To let users see this related list, add it to your account page layouts. In Salesforce1, campaign influence records appear without the charts.

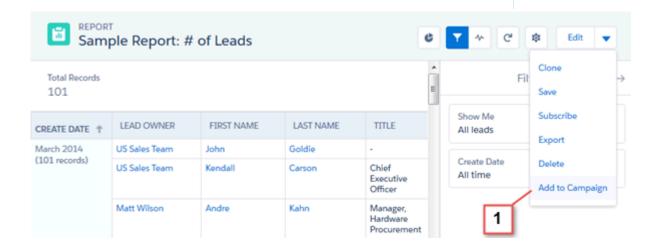
# Add Members to Campaigns from Reports in Lightning Experience

Your marketing department can quickly target specific groups of leads, contacts, or person accounts by adding them to campaigns directly from standard and custom reports. This change applies to both Lightning Experience and Salesforce Classic.

Reps can add up to 50,000 returned records to campaigns by clicking Add to Campaign (1).



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



To let marketers add members to campaigns from custom reports, the report's primary object must be Lead or Contact. The custom report type must also include the Full Name field.

Previously, Salesforce Classic allowed members to be added to campaigns only from standard reports. The ability to add members to campaigns from custom report types is available in both Salesforce Classic and Lightning Experience.

### SEE ALSO:

Idea Exchange: Campaigns: 'add to campaign' button not available in Custom Report Type

## Add Members to Campaigns from Accounts

Your marketing team can work faster by adding members to campaigns directly from the Contacts related list on accounts. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

On account detail pages, the Contacts related list now includes an Add to Campaign action. The action is available for individual contacts in Lightning Experience (1) and Salesforce 1, and for multiple contacts in Lightning Experience (2).

**EDITIONS** 

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

53	Co	ontacts (2)			Nev	N
•	Titl Em Pho Joł Titl Em	ail: one: nn Walsh	Sr. Sales Direc owen.granger 1-313-555-12 Operations M j.walsh@um.c 1-313-555-12	@trainingorg-un 77 anager om	iversalmotors.com 1 Viev	Edit Delete Add to Campaign
ACCOU Conta 2 items :	cts	> UNIVERSAL MOT	ORS		New 2	Add to Campaign
		CONTACT N	TITLE	EMAIL	PHONE MC	DBILE
1	•	Owen Granger	Sr. Sales Director	owen.granger	1-313-555-1277	•
2		John Walsh	Operations Ma	j.walsh@um.com	1-313-555-1234	-

The Related Contacts related list, available when Contacts to Multiple Accounts is enabled, also includes the Add to Campaign button in the full list view.

Note: When an admin creates a Contact related list based on a custom lookup relationship, the Add to Campaign row-level action isn't displayed for person accounts in Lightning Experience or Salesforce 1. The Add to Campaign action isn't available in Salesforce Classic.

# Track Campaign Field History

Let reps see how campaign field values have changed in the Campaign Field History related list on campaigns. Track who changed each value, when the change happened, and what the original value was. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

When you enable Field History Tracking for Campaigns, changes to standard and custom campaign field values are recorded and stored for 18 months. The one exception is the Description field, which does not record the original and new values for each change.

## EDITIONS

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

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Can	PAIGNS > TM_CAMP1-1 npaign Field History Is • Sorted by Date • Updated a few	seconds ago				C
	DATE	FIELD	USER	ORIGINAL VALUE	NEW VALUE	
L	3/14/2017 7:48 PM	Budgeted Cost in Campaign	zcheng@208.0314	\$0.00	\$3,432.00	
	3/14/2017 6:39 PM	Туре	zcheng@208.0314	Advertisement	Telemarketing	
3	3/14/2017 6:39 PM	Created.	zcheng@208.0314			

### SEE ALSO:

Field History Tracking

# Other Changes to Campaigns

Additional enhancements make campaigns more useful and flexible. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Validation for Campaign Influence

Customizable Campaign Influence records now support validation rules.

### Sortable Campaign Members related list

Users can sort the Campaign Members related list columns in the full view of the related list.

### More chart types for the Campaign Member related list

Users can now view campaign member status as a vertical bar, horizontal bar, or donut chart.

### Primary campaign influence model renamed

The Primary designation for a campaign influence model is now called Default.

### Salesforce campaign influence model renamed

The Salesforce campaign influence model is now named the Primary Campaign Source model.

### Legend removed from the Campaign Members related list chart

The legend was removed because it was confusing on some of the available chart types.

### **EDITIONS**

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

# Do More with Sales Predictions in Collaborative Forecasts

In Lightning Experience, Collaborative Forecasts users now get more information and can do more with it 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

FORECASTS Nate Silver	•						章 🔻
MONTHS	CI	OSED ONLY	COMMI	FORECAST	BEST CASE FOREC	AST	OPEN PIPELINE
Total: 3 Months		\$0.00		\$75,000.00	\$168,000	0.00	\$257,000.00
✓ April FY 2017	ų	\$0.00		\$34,000.00	\$69,000	0.00	\$90,000.00
> Hardware		\$0.00		\$26,000.00	\$51,000	0.00	\$59,000.00
> Software		\$0.00		\$8,000.00	\$18,000	0.00	\$31,000.00
> May FY 2017	2	\$0.00		\$32,000.00	\$53,000	0.00	\$72,000.00
> June FY 2017	4	\$0.00		\$9,000.00	\$46,000	0.00	\$95,000.00
Nate Silver Team •	Total: 3 Months •	All Forecast Cat	egories				4-0
NAME	ACCOUNT NAME	AMOUNT	CLOSE DATE	STAGE	PROBABILITY (%)	FORECAST CATEGORY	FULL NAME
Tyconet - Services - 18K	Tyconet 3	\$18,000.00	04/09/2017	Negotiation	90%	Commit	Central, Cindy
Datanet, Inc Service	Datanet, Inc.	\$16,000.00	04/09/2017	Negotiation	90%	Commit	West, Wendy
Open Source Inc Ser	Open Source Inc.	\$16,000,00	06/23/2017	Qualification	20%	Pipeline	Central, Cindy

Forecasts users now see:

- Product family forecasts, if enabled (1)
- An opportunity summary header with the user, period, and forecast category (2)

We also improved views on the forecasts page.

- The product family forecasts view is organized first by period, product family, and then user. That way, users see product family forecast totals.
- The way you expand the forecasts grid remains the same during each session.
- When you return to the opportunity summary after switching the view, leaving the page, or logging out, the last selected column sort appears (3). When you switch to a forecast view that doesn't include the column sorted on, the default sort appears.
- Click the up arrow in the opportunity summary to show more opportunities (4). Then click the down arrow to return to the previous view.

When you use product family forecasts in Lightning Experience, you choose the product families that your users forecast on and the order in which they appear. Keep in mind that the more product families you choose, the more rows appear in the forecasts grid, up to 2,000. To set up product family forecasts, switch to Salesforce Classic.

SEE ALSO:

*Salesforce Help*: Considerations for Defining Forecasts Settings in Collaborative Forecasts (can be outdated or unavailable during release preview)

# Opportunities: Opportunity Stage History, Date Selection in Lightning Experience

Your reps can save time by selecting today's date in one click. And reps no longer need to switch to Salesforce Classic to review an opportunity's Stage History. These changes apply to Lightning Experience only.

# EDITIONS

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

### IN THIS SECTION:

### See Opportunity Stage History in Lightning Experience

Review changes to an opportunity's amount, probability, stage, and close date on the Stage History related list in Lightning Experience. This change applies to Lightning Experience only.

### Jump to Today's Date With One Click

The date picker on date fields now displays when you click in the field. Previously, you clicked the date picker icon to display the date picker. This change applies to Lightning Experience only.

### Change Opportunity Forecast Categories in Lightning Experience

Fine-tune forecasts by changing an opportunity's forecast category regardless of its stage in Lightning Experience. This change applies to Lightning Experience only.

# See Opportunity Stage History in Lightning Experience

Review changes to an opportunity's amount, probability, stage, and close date on the Stage History related list in Lightning Experience. This change applies to Lightning Experience only.

account Name Jnited Partners*	Close Date 1/14/2016	Amount \$148,000.00	Opportunity Owner		
🗊 Stage History (	6+)				
STAGE	AMOUNT	PROBABILI	TY (%) CLOSE DATE	LAST MODIFIED BY	LAST MODIFIED
Needs Analysis	\$148,000	0.00 20%	1/14/2016	Aria Niazi	3/6/2017 3:22 PM
Qualification	\$148,000	0.00 10%	1/14/2016	Aria Niazi	2/16/2017 3:55 PM
Needs Analysis	\$148,000	0.00 20%	1/14/2016	Aria Niazi	2/16/2017 3:55 PM
Qualification	\$148,000	0.00 10%	1/14/2016	Aria Niazi	2/16/2017 3:55 PM
Negotiation/Review	\$148,000	0.00 90%	1/14/2016	Aria Niazi	2/16/2017 2:56 PM

# Jump to Today's Date With One Click

The date picker on date fields now displays when you click in the field. Previously, you clicked the date picker icon to display the date picker. This change applies to Lightning Experience only.

We even added the Today link (1) so that you can quickly set the date to today.

1/27	7/2015	Ŧ					餔
•	JANUARY			F	2015	\$	
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18	19	20	21	22	23	24	
25	26	27	28	29	30	31	
1	2		4		6	7	
			Today		1		

# Change Opportunity Forecast Categories in Lightning Experience

Fine-tune forecasts by changing an opportunity's forecast category regardless of its stage in Lightning Experience. This change applies to Lightning Experience only.

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Sales	Edit 4 An	tigravity Units		re 🔻
OPPORTUI 4 Antig Account Name International Ether	Opportunity Owner Zephyr Universo-Martien * Opportunity Name	Close Date 8/1/2017 Chanse		New Note
Prospecting	4 Antigravity Units Account Name	Stage     Prospecting     Probability (%)	•	k Stage as Complete
ACTIVITY	International Etherofloat ×	10%		
Opportunity Owne	Type New Business	Amount \$45,999.98		Y
Opportunity Name 4 Antigravity Unit	Primary Campaign Source Search Campaigns	Forecast Category		ter ger Viet
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New Business Primary Campaign	Next Step	Cancel Save 8	New Save	View
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# Path: Available in Packages and on Contracts and Orders

Decide how Path is displayed. Include Path when building a package. Help your reps work contracts more efficiently by adding a path. These changes apply to Lightning Experience only.

### IN THIS SECTION:

### Build Success with Path on Contracts and Orders

Guide your users through your business process by adding Path to your contracts and orders. Paths visually highlight key fields and provide users helpful links, policy information, and tips at each step. This change applies to Lightning Experience only.

### Decide How Path Displays

Path is now closed when the page loads, helping users view more record details without scrolling. You can configure how users display Path. This change applies to Lightning Experience only.

### Package Path

Include Path in packages that you build for your customers. This change applies to Lightning Experience only.

### **EDITIONS**

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

## Build Success with Path on Contracts and Orders

Guide your users through your business process by adding Path to your contracts and orders. Paths visually highlight key fields and provide users helpful links, policy information, and tips at each step. This change applies to Lightning Experience only.

After activating the path, add it to page layout.

# Decide How Path Displays

Path is now closed when the page loads, helping users view more record details without scrolling. You can configure how users display Path. This change applies to Lightning Experience only.

iew or hide a path's key field	ds and gi	uidance, users click 📏	9.					_
39812291 - Const	ruction	Tools			New Contact	New Lead	Edit	•
	~	Shipped	Transit	Delivered		Mark Status a	s Complete	te
RELATED DETAILS				ACTIVITY	_			
Delivery Name 39812291 - Construction Tools	/	Owner	£	New Task	Log a Call			
Opportunity United Widgets - 61K	1			Create a t	task		Add	

To let your users decide whether a path's guidance and key fields display automatically when the page loads, from Setup, enter *Path Settings* in the Quick Find box, then select **Path Settings**. Then enable **Remember User's Path Preferences**.

# Package Path

Include Path in packages that you build for your customers. This change applies to Lightning Experience only.

Package a Path to distribute it to other organizations, such by including it in an AppExchange package.

# Contacts: Contact Hierarchies in Lightning Experience and Easier Contact Creation

Display a hierarchical view of the contacts on an account in Lightning Experience and create contacts from account records with ease. These changes apply to Lightning Experience, Salesforce Classic, and the Salesforce1 mobile browser app.

### IN THIS SECTION:

### Show Who Reports to Whom from Contact Pages in Lightning Experience

Give your sales team a key tool for planning sales strategy. Use Lightning Contact Hierarchy to visualize the contacts on an account according to what sales reps enter in the Reports To field. Plus, customize contact hierarchy columns to show the information that's most useful to your sales teams. This feature is new in Lightning Experience.

### Create Contacts Quicker from Account Records

When sales reps create contacts from either the Contacts or Related Contacts related list on account records, the mailing address, phone number, and fax number from the account record are autopopulated on the new contact. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

# Show Who Reports to Whom from Contact Pages in Lightning Experience

Give your sales team a key tool for planning sales strategy. Use Lightning Contact Hierarchy to visualize the contacts on an account according to what sales reps enter in the Reports To field. Plus, customize contact hierarchy columns to show the information that's most useful to your sales teams. This feature is new in Lightning Experience.

 Give your sales reps access to the hierarchy from contact pages. In Setup, in the Salesforce1 and Lightning Experience Actions section of your contact page layout, add the View Contact Hierarchy action.

The Actions menu includes the View Contact Hierarchy action unless you customized the contact page layout before Summer '17.

Dina Thacker		+ Follow	Send Email	Edit D	elete 🔻
Title Director of Business Develops	Account Name nent Advanced Interconnections Corp	Phone(2)	(	View Contact Clone	Hierarchy
RELATED DETA	ILS NEWS	ACTIVITY	CHATTE	Change Own Check Integr	

The hierarchy shows who reports to whom according to the Reports To field. Sales reps can expand or collapse areas as they navigate. They can view up to 2,000 contacts from each point where they enter a hierarchy. To view contacts in a different part of the hierarchy, a sales rep can enter the hierarchy from a different contact.

CONTACT > DINA THACKER Contact Hierarchy		
NAME	TITLE	PHONE
✓ Kathy Fitzpatrick	President	(231) 555-1212
Brenda McClure	Chief Financial Officer	(231) 555-1212
✓ Mark Metz	Chief Executive Officer	(231) 555-0100
Dina Thacker CURRENT	Director of Business Development	(692) 555-1212
> Sean Murphy	Director of Marketing	(231) 555-0100
> Steve McDonald	Director of Information Technology	(231) 555-1212

Hovering over a contact's name shows more details.

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Available in: Lightning Experience

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

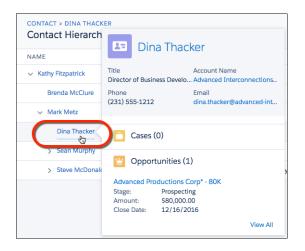
## USER PERMISSIONS

To customize hierarchy columns:

Customize Application

To change the Reports To field on a contact:

Edit on Contact



- 2. You can edit the hierarchy columns to show the information that's most useful to your sales reps.
  - a. In Setup, in the Quick Find box, enter Object Manager and then click Object Manager.
  - **b.** In Contact, click **Hierarchy Columns** and then edit the columns.

You can include up to 15 columns.

Choose Co		nns to Display	
Created Date Data.com Key Department Email Email Bounced Date	> <sup>®</sup> <	Columns Displayed	^ ~
Email Bounced Reason external id			Cancel Save

# Create Contacts Quicker from Account Records

When sales reps create contacts from either the Contacts or Related Contacts related list on account records, the mailing address, phone number, and fax number from the account record are autopopulated on the new contact. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

### **EDITIONS**

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

# See News in a New Way

We moved News and Twitter to their own tab on default page layouts. Check out the News tab on account, contact, and lead records. We also made it easier to scan news. These changes apply to Lightning Experience only.

# EDITIONS

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

salesforce.com	+ Follow Edit New Contact New Case 🗸
RELATED DETAILS NEWS	ACTIVITY CHATTER
✓ Twitter	New Task New Event Email Log a Call
Learn More Link a Twitter user profile to find people you know in common and quickly access recent tweets.	Create a task Add
✓ Account News (5)	Filter Timeline 🔻 📿
Salesforce Insights on Shifting Consumer Behaviors in a Mobile Landscape Salesforce.com News - wwd.com - 2d Shoppers are more spontaneous due to alleviated friction points from digitized retail – here, head of consumer insights at Salesforce Commer	Next Steps     More Steps       > (a) Call Marc     Mar 31 (a)       You have an upcoming Task     Mar 31 (b)
Bloomberg TV SeBloomberg TV SeBloomb	Past Activity           > Image: Dreamforce prep You had an Event         4:00 PM   Yesterday           You had an Event         More Past Activity
Salesforce (CRM) to Host Core Products in Australia with AWS Salesforce.com News - Zacks.com - 3d salesforce.com, Inc. (CRM) and Amazon.com, Inc. (AMZN) took forward their strategic alliance.	

Instead of a carousel, news now appears in a list. If you prefer the carousel view, change it with the Lightning App Builder. News remains the same on Home pages.

Also, to make sure that you have only the most relevant news, we removed the General Business News category from accounts, contacts, and leads. It remains on the Home page.

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# Important:

For opportunity and customized page layouts, News and Twitter haven't moved. Use the Lightning App Builder to move News and Twitter to a separate tab.

### SEE ALSO:

Knowledge Article: Move News and Twitter on Customized Pages (can be outdated or unavailable during release preview)

# Productivity Features: Voicemail Messages, Classic Email Templates, and Improved List Views

Give your teams the Lightning Experience edge with the ability to send prerecorded voicemail messages, Salesforce Classic email templates in Lightning Experience, and better list views. Also, the revamped Sales Console is generally available.

IN THIS SECTION:

### Be More Productive with the Sales Console (Generally Available)

The Lightning Sales Console app is now generally available. Plus, it also benefits from all the great improvements we've made to all Lightning console apps, such as person account support, split view navigation, and keyboard shortcuts. These changes apply to Lightning Experience only.

### Lightning Voice: New Name, Call List General Availability, and Voicemail Drop

Lightning Voice has a new name and more call list features. Sales reps can also send prerecorded voicemail messages and dial numbers in reports and dashboards. These changes apply to Lightning Experience only.

See More Relevant Activities on Opportunities and Select Default Sharing for New Users with Einstein Activity Capture for Inbox

Einstein Activity Capture now uses date matching to determine if an activity is added to a related opportunity. Plus, you can choose default activity sharing for new users. These changes apply to Lightning Experience only.

### Email: Classic Templates, Signatures, and Pop-Out Composers

You can now use your Classic Text, Custom HTML, and Letterhead email templates in Lightning Experience. And it's so easy—open the template and send! And, you can update the letterhead associated with your Letterhead email templates. Easily provide your details in an email by automatically adding your predefined email signature to the email body—not as an attachment. And devote your entire screen to an email by popping out the composer into a separate window. These changes apply to Lightning Experience only.

### Activities: Faster, Easier Activity Management

There's a whole new look to creating and viewing activities. The activity composer is easier to read and helps you create activities or send emails within the page. The activity timeline has been redesigned to help you understand context more quickly and get the details of upcoming activities. The new design lets you view activity details inline, reducing navigation and helping you quickly scan through your list of activities. Plus, improved performance helps you get more done, faster. This change applies to Lightning Experience only.

### List Views: Chart Deletion and Greater Accessibility in Lightning Experience

Remove charts that you created from the report chart menu. Navigate list views more easily with enhanced accessibility.

### Kanban: More Objects, More Settings

Several enhancements make the Kanban View easier to use. These changes apply to Lightning Experience only.

### Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

It's now easier for users to share notes and add them to records. We've improved the Salesforce API, so you can convert notes from the Notes and Attachments related list for use in Lightning Experience. Plus, feed tracking for notes now turns off when you disable feed tracking for all related objects. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce 1 mobile app.

### Get Event Attendee Details in the Calendar When You Sync Microsoft® Office 365® with Salesforce

You give your users enhanced meeting scheduling options when you set up events to sync between reps' Microsoft Office 365 calendars and Salesforce. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

### Home: Assistant and Performance Chart Updates

The Assistant has a new look, and the performance chart can group data points by week or by day. These changes apply to Lightning Experience only.

# Be More Productive with the Sales Console (Generally Available)

The Lightning Sales Console app is now generally available. Plus, it also benefits from all the great improvements we've made to all Lightning console apps, such as person account support, split view navigation, and keyboard shortcuts. These changes apply to Lightning Experience only.

EDITIONS

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

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

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8 items • Updated 27 minutes ago	III ▼ C'	+ Follow	New Task New Event Email Log a Call	duplicates of this person account.
RECENTLY VIEWED 👃				
salesforce.com MRigs	(415) 901-7000	Edit New Contact New Case  Title	Create a task Add	<ul> <li>Related Contacts (1)</li> </ul>
Mia Smith MRigs	415-555-4547	Phone(2) 415-555-4547	Filter Timeline   Expand All  Next Steps	Accou salesforce.com Title: Executive Officer Email: info@salesforce.com
American Airlines MRigs	1-817-963-1234	Email Account Owner Madison Rigsby	> 🖆 🗌 send contracts Apr 19 🕤	View All
Amazon.com, Inc. MRigs	1-206-266-1000	Madison Rigsby	You have an upcoming Task with Mia Smith	<ul><li>Opportunities (1)</li></ul>
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Acme MRigs	(212) 555-5555			2 Notes (1)
Global Media MRigs	(905) 555-1212			call cell phone 4/4/2017 11:31 AM by Madison Rigsby
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### Work with Person Accounts in Lightning Console Apps

If you work directly with individuals, as opposed to companies, you know all about the power of person accounts. And if you also rely on the productivity that comes with console apps, console apps now fully support person accounts.

### Keep Everything at Hand with Lightning Console Split View

Lightning console apps allow users to work quickly by opening multiple records and related records on one screen. Now users can work even more quickly with Lightning console split view, a collapsible pane that keeps the list views you need close at hand.

### **Streamlined Calling with Voice Enhancements**

Improvements to Lightning Voice (now known as Lightning Dialer), such as prerecorded voicemail messages and easier setup, mean making calls is easier than ever.

### Boost Productivity with Keyboard Shortcuts for Lightning Console Apps

Lightning console apps can now use keyboard shortcuts. With keyboard shortcuts, your sales reps, support agents, and other console users can manage their records faster and more efficiently. So let your console users know that they can search for, edit, save, and close a record without touching a mouse!

### Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps.

SEE ALSO:

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

# Lightning Voice: New Name, Call List General Availability, and Voicemail Drop

Lightning Voice has a new name and more call list features. Sales reps can also send prerecorded voicemail messages and dial numbers in reports and dashboards. These changes apply to Lightning Experience only.

**Note:** For now, we support outgoing calls to the United States and Canada only.

EDITIONS

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

### IN THIS SECTION:

### Lightning Voice Is Now Lightning Dialer

A telephony solution by any other name would still make in-app calling just as sweet. We've renamed Lightning Voice to Lightning Dialer. This change applies to Lightning Experience only.

### Organize Calls with a Call List (Generally Available)

Your sales reps can keep a running list of the calls they need to make in a single, convenient place. Call lists now support accounts, person accounts, and contacts. Enable call lists from the Dialer Settings page in Setup. This change applies to Lightning Experience only.

### Send Prerecorded Voicemail Messages

Save time with custom voicemail messages. Reps can "drop" (or send) prerecorded messages to recipients' voicemail boxes to focus their time on selling. Enable Voicemail Drop from the Dialer Settings page in Setup. This change applies to Lightning Experience only.

### Mute Your Microphone During Calls

Sales reps can click the mute button on the call panel to mute their mic.

### Make Calls from Numbers in Reports

Your sales reps can now use Lightning Dialer to call phone numbers in reports with a single click. This change applies to Lightning Experience only.

### Set Up Lightning Dialer with Ease

You can now set up Lightning Dialer in a fraction of the time it took before because we've simplified the process for creating and assigning permission sets. This change applies to Lightning Experience only.

# Lightning Voice Is Now Lightning Dialer

A telephony solution by any other name would still make in-app calling just as sweet. We've renamed Lightning Voice to Lightning Dialer. This change applies to Lightning Experience only.

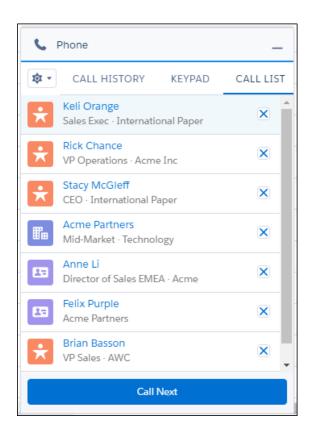
# Organize Calls with a Call List (Generally Available)

Your sales reps can keep a running list of the calls they need to make in a single, convenient place. Call lists now support accounts, person accounts, and contacts. Enable call lists from the Dialer Settings page in Setup. This change applies to Lightning Experience only.

To create a call list, reps can select the people they want to call, and click Add to Call List.

*	lea <b>All</b>	<sup>DS</sup> <b>Leads</b> ▼				(	New Import	Add to	Campaign 🔻
4 item	ns selec	ted					* •	ď	Change Status
	-	NAME	TITLE	PHONE	COMPANY	EMAIL	LEAD STATUS	OWN	Add to Call List
1		Keli Orange	Sales Exec	(314) 123-4667	International P	keliorange@int.	Open	AUser	•
2	<b>~</b>	Jeff Green	Director-HR	(415) 632-8841	Acme Inc	jeff.green@ac	Open	AUser	•
3		Brian Basson	VP Sales	<b>(</b> 415) 536-7990	AWC	brian@awc.com	n Open	AUser	•
4	<	Lorraine Tao	EVP Business D	<b>(</b> 510) 333-4444	AWC		Open	AUser	•
5	<ul> <li>Image: A start of the start of</li></ul>	Rick Chance	VP Operations	<b>(</b> 415) 555-6677	Acme Inc		Open	AUser	•

The prioritized list appears in the call panel. In addition to leads, call lists also support accounts, person accounts, and contacts.



Reps can click Call Next to dial the number at the top of the list and open the related record. Only one call list is available at a time.

# Send Prerecorded Voicemail Messages

Save time with custom voicemail messages. Reps can "drop" (or send) prerecorded messages to recipients' voicemail boxes to focus their time on selling. Enable Voicemail Drop from the Dialer Settings page in Setup. This change applies to Lightning Experience only.

To create a voicemail message, reps can select Voicemail Drop Sett	<b>tings</b> from the call p	anel or their per	sonal settings.
--	------------------------------	-------------------	-----------------

Record Message	
*Title	
Standard greeting and call-me-back message	
Voicemail Recording	
Stop	0:17
	Max length 1:00 minute
	Cancel Save

For best results, we recommend reps start their message as soon as the recording begins. Messages can be up to 1 minute long. For now, reps can have only one voicemail drop recording.

📞 Phone		_	
	raine Tao ( Business Developmen	<b>n"</b> 0:05	
•	Enter extension		
Enter notes			
	Click after the beep Prerecorded message		
Auto-log	Q	End Call	

To drop a voicemail message, reps can click and select their message right after the beep.

# Mute Your Microphone During Calls

Sales reps can click the mute button on the call panel to mute their mic.

C Phone _	-
Lorraine Tao EVP Business Developmen (ゆ) 1:03	
Enter extension	
Enter notes	
Auto-log End Call	

## Make Calls from Numbers in Reports

Your sales reps can now use Lightning Dialer to call phone numbers in reports with a single click. This change applies to Lightning Experience only.

## Set Up Lightning Dialer with Ease

You can now set up Lightning Dialer in a fraction of the time it took before because we've simplified the process for creating and assigning permission sets. This change applies to Lightning Experience only.

For more information, see "Set Up Lightning Dialer" in the Salesforce Help.

#### SEE ALSO:

Salesforce Help: Set Up Lightning Dialer (can be outdated or unavailable during release preview)

# See More Relevant Activities on Opportunities and Select Default Sharing for New Users with Einstein Activity Capture for Inbox

Einstein Activity Capture now uses date matching to determine if an activity is added to a related opportunity. Plus, you can choose default activity sharing for new users. These changes apply to Lightning Experience only.



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

For more information, see Einstein Activity Capture: Activities Matched to Opportunities by Date and Default Activity Sharing.

## **EDITIONS**

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

## Email: Classic Templates, Signatures, and Pop-Out Composers

You can now use your Classic Text, Custom HTML, and Letterhead email templates in Lightning Experience. And it's so easy—open the template and send! And, you can update the letterhead associated with your Letterhead email templates. Easily provide your details in an email by automatically adding your predefined email signature to the email body—not as an attachment. And devote your entire screen to an email by popping out the composer into a separate window. These changes apply to Lightning Experience only.

#### IN THIS SECTION:

#### Use Your Classic Email Templates in Lightning Experience

Leverage all the work and planning that went into your Salesforce Classic email templates by using the same templates in Lightning Experience. You can use your Text, Custom HTML, and Letterhead email templates in Lightning Experience. This change applies to Lightning Experience only.

#### Update Your Classic Letterhead Email Templates

Update existing Letterhead email templates by changing which letterhead is associated with the template. This change applies to Salesforce Classic only.

#### See and Do More with the Pop–Out Email Composer

Expand your email composer while writing an email. A larger screen makes it easier to see what you're writing. And, you can navigate to another screen before sending your email, without losing the email. Multi-task, research what you want to say, look something up, and then return to the email to finish it. This change applies to Lightning Experience only.

#### See and Edit Your Email Signature as You Write

Your email signature is now displayed in the email composer, so you have the option of editing it before sending the email. This change applies to Lightning Experience only.

## Use Your Classic Email Templates in Lightning Experience

Leverage all the work and planning that went into your Salesforce Classic email templates by using the same templates in Lightning Experience. You can use your Text, Custom HTML, and Letterhead email templates in Lightning Experience. This change applies to Lightning Experience only.



When you insert an email template, change the filter to Classic Templates.

## EDITIONS

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



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

	Insert Email Template							
Choose a Template for: 😰 Jeff Kane								
TEMPLATES	g	Search						
My Lightning Templates  My Lightning Templates		Search Lightning Templates						
All Lightning Templates Classic Templates	CREATED B	Y CREATED DATE ACTION						
	You don't have any email templates yet.							
Choo	ose a different template filter or create a new Lightning email t	emplate.						
		Cancel						

## Things to Know When You Use Classic Email Templates in Lightning Experience

- The Lightning Email action layout must include the TemplateId field to display Classic email templates. The field is added by default to all Lightning Email action layouts.
- Inserting a Custom HTML or Letterhead email template overwrites an automatic signature.
- Attachments are read only, and you can't add or remove an email attachment. You can download an attachment to verify the content.
- To change the attachments that are part of a Salesforce Classic email template, switch to Salesforce Classic. In Setup, under Email > Email Templates, edit the template. Changes are reflected in the sent email, even if the changes aren't seen in the email composer.
- You can't forward an attachment in emails sent or received in Salesforce Classic or Classic email templates sent from Lightning email actions.
- Externally linked CSS files are not supported. Although the CSS resource is displayed in the preview section in a Classic email template, externally linked CSS files aren't supported by most email clients.

#### Merge Fields

- Merge fields in the email template are resolved when the template is inserted, based on the values in the Recipient and Related To
  fields. If you change the Recipient and Related To values after you insert the template, the email content doesn't update. You don't
  need to preview the template to see how it looks after the fields have merged.
- You can't add, edit, or remove merge fields using the merge field modal.
- Unresolved merge fields are removed when the template is inserted.

#### **Text Email Templates**

• You can edit both the subject and the body.

#### **Custom HTML Email Templates**

- You can't edit the subject or body. This is also the case in Salesforce Classic.
- You can't pop out the email composer. The email must remain in docked mode.

#### Letterhead Email Templates

The behavior is the same as it is in Salesforce Classic.

- You can edit the subject. ٠
- You can't edit the header and footer.
- Locked template sections remain locked and can't be edited.

#### SEE ALSO:

Update Your Classic Letterhead Email Templates

## Update Your Classic Letterhead Email Templates

Update existing Letterhead email templates by changing which letterhead is associated with the template. This change applies to Salesforce Classic only.

SEE ALSO:

Use Your Classic Email Templates in Lightning Experience

## See and Do More with the Pop–Out Email Composer

Expand your email composer while writing an email. A larger screen makes it easier to see what you're writing. And, you can navigate to another screen before sending your email, without losing the email. Multi-task, research what you want to say, look something up, and then return to the email to finish it. This change applies to Lightning Experience only.

Start composing your email as you normally would. Click dia in the toolbar to dock the email.



Click [2] in the docked email to expand the email composer.

## See and Edit Your Email Signature as You Write

Your email signature is now displayed in the email composer, so you have the option of editing it before sending the email. This change applies to Lightning Experience only.

Make it easy for people to get in touch with you by setting a default signature.

Your email signature is automatically added to the body of all Lightning emails and inserted Classic text templates.

Note: If you open your email with a button or action that specifies content for the email body, your signature is overwritten.

# Activities: Faster, Easier Activity Management

There's a whole new look to creating and viewing activities. The activity composer is easier to read and helps you create activities or send emails within the page. The activity timeline has been redesigned to help you understand context more quickly and get the details of upcoming activities. The new design lets you view activity details inline, reducing navigation and helping you guickly scan through your list of activities. Plus, improved performance helps you get more done, faster. This change applies to Lightning Experience only.

**EDITIONS** 

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

#### **EDITIONS**

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

#### **EDITIONS**

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

#### **EDITIONS**

Available in all editions

#### IN THIS SECTION:

#### Stay on Top of Things with the Updated Activity Timeline

Quickly see what each activity is about with easily read summaries. Need the details? Click **Expand** to see more, without leaving the timeline. Want to drill deeper into your day? Click **Expand All** to see all the details on all the activities in your timeline. This change applies to Lightning Experience only.

#### Make Friends with the Updated Activity Composer

Recording your activities is a breeze with the activity composer. New tab names and inspiring messages remind you to send that email, log the call, create an event, or jot down a task. Click anywhere in the text box, or click the button, to open the activity composer. And, you can do it all without leaving the opportunity or account you're viewing. This change applies to Lightning Experience only.

#### Create Tasks and Activities with New Buttons

It's now easier to add tasks and activities when you're looking at a list of activities, such as the Open Activities related list. The New Task and New Activity buttons appear on the Activity tab for any object. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

## Stay on Top of Things with the Updated Activity Timeline

Quickly see what each activity is about with easily read summaries. Need the details? Click **Expand** to see more, without leaving the timeline. Want to drill deeper into your day? Click **Expand All** to see all the details on all the activities in your timeline. This change applies to Lightning Experience only.



Available in all editions

Filt	er Tim	eline 🔻		Expand All	C'
Ne	ext St	eps		More St	eps
~	ĭ=	Invite to corporate road show You have an upcoming Task		Apr 21	¥
		Description Make sure Andrea (or someone on her team) can attend the upcoming road show. about upcoming features!	Sure to ge	t them excite	∋d
>			II-Day Event	Tomorrow	¥
		You have an upcoming Event			
Pa	st Ac	tivity			
>		Investor packet	10:58	AM   Today	¥
	Τ	You emailed Andrea Creel			
>		Following up on our discussion today	9:48	AM   Today	Ŧ
		You emailed Andrea Creel			
>	8	Internal Call		Today	¥
		You logged a call			
>	ŝ.	Call		Today	¥
		You logged a call			
>	8	Call		Today	¥
		You logged a call			
>	m	Meet for intro coffee	8:00	AM   Apr 5	¥
		You had an Event			
>	ĭΞ	Send promo materials		Apr 5	¥
		You had a Task			
>	ĭΞ	Invite to trade show		Apr 3	¥
		You had a Task	_		
	1		N	fore Past Acti	vity
1					_

You can expand each activity individually, or expand and collapse the entire list of activities at once.

Expanded emails are shown as a text-only preview, with paragraphs and line breaks in the same place. To see the full contents, click the email subject.

You can take action from within the email summary, too.



Note: Case emails do not show the Reply All, Reply, and Forward links.

	From Address	To Address			
	Sir Alex Ferguson	Roy Keane			
	Text Body				
- - -	To date, the tech giant has been infuriatingly secretive about it's efforts to build a self-driving car, code named Project Titan. Apple has been working on Project Titan for several years, but has never formally acknowledged it. Lately, the autonomous car project seems to be in flux. Recent reporting suggests that the company is no longer attempting to build its own autonomous, electric car to compete with companies like Tesla, but is instead focused on developing self-driving software it can deploy in partnership with existing carmakers.				
	"investing heavily in the study of machi	to the National Highway Traffic Safety Administration in which it said that ne learning and automation, and is excited about the potential of automa portation." At the time, it was seen as the strongest hint that Apple was sti	ted		

## Make Friends with the Updated Activity Composer

Recording your activities is a breeze with the activity composer. New tab names and inspiring messages remind you to send that email, log the call, create an event, or jot down a task. Click anywhere in the text box, or click the button, to open the activity composer. And, you can do it all without leaving the opportunity or account you're viewing. This change applies to Lightning Experience only.

ACTIVITY	CHAT	TTER	
Log a Call	New Task	New Event	Email
Recap you	ır call		Add

The label and location of the tabs can be configured, but not the content of the text box.

## Create Tasks and Activities with New Buttons

It's now easier to add tasks and activities when you're looking at a list of activities, such as the Open Activities related list. The New Task and New Activity buttons appear on the Activity tab for any object. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

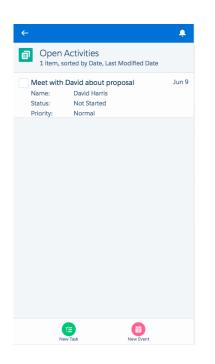
## **EDITIONS**

Available in all editions

## EDITIONS

Available in all editions

Salesforce Summer '17 Release Notes



# List Views: Chart Deletion and Greater Accessibility in Lightning Experience

Remove charts that you created from the report chart menu. Navigate list views more easily with enhanced accessibility.

**EDITIONS** 

IN THIS SECTION:

#### Delete Charts from List Views

You've been able to create and edit charts on list views in Lightning Experience for a while now. But what about removing one? Now you can remove charts that you created from the report chart menu. This change applies to Lightning Experience and the Salesforce1 mobile browser app.

Navigate List Views with Your Keyboard

Keyboard navigation in list views now matches accessibility standards. You can navigate list views in navigation mode and action mode This change applies to Lightning Experience only.

## Delete Charts from List Views

You've been able to create and edit charts on list views in Lightning Experience for a while now. But what about removing one? Now you can remove charts that you created from the report chart menu. This change applies to Lightning Experience and the Salesforce1 mobile browser app.

Available in: Contact Manager, Personal, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

United Oil & Gas Co DISPLAY Vertical E Grand Hotels & Rese Ltd Donut Cl Edge Communicatic Express Logistics an Transport Delete C	1
Grand Hotels & Resc Ltd Donut Cl Edge Communicatic Express Logistics an Transport Edit Cha	AS
Ltd Horizont Donut Cl Edge Communicatic Express Logistics an Transport Edit Cha	Bar Chart
Edge Communication New Char Express Logistics an Transport	al Bar Chart
Express Logistics an Transport	hart
Express Logistics an Edit Char Transport	
Transport	ert –
Delete C	rt
Delete G	hart
GenePoint	3

#### SEE ALSO:

Lightning Experience Features in This Release

## Navigate List Views with Your Keyboard

Keyboard navigation in list views now matches accessibility standards. You can navigate list views in navigation mode and action mode This change applies to Lightning Experience only.

You enter navigation mode when you tab to the list view the first time, which triggers focus on the first cell (1) in the table body. Use the arrow keys to move around the table. To return to the previous cell you were on, press Shift+Tab. To exit the list view, press the Tab key.

$\star$	LEA My	os / Unread Lea	ads 🔻				New	Import	A	dd to C	ampaig	'n	•
22 it	ems • Se	orted by Name . File	ered by Unread By C	Dwner • Updated 3 n	ninutes ago			<b>\$</b> *	•	C'	/	C	Ŧ
		NAME 1	COMPANY	STATE/PRO	EMAIL	LEAD STAT	CREATED D	OWNER AL		UNRE	AD B.		
1		Andy Young 🔒	Dickenson	кs	a_young@	Closed - C	2/15/201	DWidj		~			¥
2		Bertha Box	Farmers Co	FL	bertha@fc	Working	2/15/201	DWidj		~			¥
3		Betty Bair	American	PA	bblair@ab	Working	2/15/201	DWidj		~			•
4		Bill Dadio Jr	Zenith Ind	ОН	bill_dadio	Closed - N	2/15/201	DWidj		~			¥
5		Brenda Mc	Cadinal Inc.	IL	brenda@c	Working	2/15/201	DWidj		~			¥

You enter action mode when you press Enter in a table cell, which triggers the actionable element in that cell, such as an edit icon. You can perform the following actions.

- Move around the table using the arrow keys
- Navigate to each actionable element in the table using the Tab key
- Resize headers

To resize a header, navigate to the header by pressing the Up Arrow key. Press the Tab key to activate the column divider (2). Press the Left Arrow or Right Arrow key to decrease or increase the column width. To return to navigation mode, press the Esc key.

***	Sales	Home	Oppor	tunities	~	Quotes	~	Leads	~	Tasks	<
S1 iter	OPPORTUNITIES My Opportunities 31 items · Sorted by Opportunity Nan 2 pdated 2 minutes ago										
	OPPORTU	NITY NAM	ΕŤ	ACCOL	UNT N	IA	амои	NT		CLOSE	DATE
1	Burlington	Textiles We	av	Burling	gton Te	ex	\$235,0	00.00		1/27/2	2015
2	Dickenson	Mobile Ge	ne	Dicken	ison p	lc	\$15,00	00.00		1/27/2	2015
3	Edge Emerg	gency Gen	era	Edge C	Comm	u	\$75,00	00.00		1/27/2	2015

# Kanban: More Objects, More Settings

Several enhancements make the Kanban View easier to use. These changes apply to Lightning Experience only.

#### IN THIS SECTION:

#### Get the Kanban View for Knowledge and Social Persona

Display Knowledge and Social Persona records in an entirely new way by switching to Kanban view. This change applies to Lightning Experience only.

#### Summarize by Numeric Fields

Money isn't everything. In the Kanban view, reps can summarize by numeric fields, not just currency fields. This change applies to Lightning Experience only.

#### Group the Kanban View by Owner

Your reps can configure the Kanban view to group cards by the record's owner. This change applies to Lightning Experience only.

#### Identify Cards That Reps Can't Update

Reps can see in a glance which Kanban cards they don't have permission to drag.

## Get the Kanban View for Knowledge and Social Persona

Display Knowledge and Social Persona records in an entirely new way by switching to Kanban view. This change applies to Lightning Experience only.

The Kanban displays records visually for any list view except Recently Viewed. Users get a quick summary of their records and can easily move records through a process or to different column groups. And sort and segment data on the fly with temporary filters.

#### **EDITIONS**

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

7 items • Updated 2 minutes ago	\$\$ <b>• □ □ • C • ● ▼</b>	
Best Practices (3)	Getting Started (2)	Troubleshooting (2)
BEST PRACTICES: Process Maps for S   O00001002 English BEST PRACTICES: Release Preparation O00001003 English	Sales Cloud Einstein Feature Summary  O00001004 English Salesforce Agile Accelerator - Getting  O00001000 English	Import Documents Into Quip 000001005 English Show Trailhead Badges or Salesforce 000001006 English
Increase Close Rates with the Sales P 💌 000001001 English		

To switch to the Kanban view from the list view, select **Kanban** from the 🔹 🗾 menu.

## Summarize by Numeric Fields

Money isn't everything. In the Kanban view, reps can summarize by numeric fields, not just currency fields. This change applies to Lightning Experience only.

Have you dreamed of estimating work hours for projects in your custom Project Management object? Or counting how many pairs of sneakers are in the order pipeline for your shoe store? Do it on the Kanban view when you configure a numeric field as the summary field. You can't summarize by a field that's a rollup summary or formula field, but any other numeric field is fair game.

## Group the Kanban View by Owner

Your reps can configure the Kanban view to group cards by the record's owner. This change applies to Lightning Experience only.

Users can change a record's owner in a jiffy by dragging the record from one column to another.

## Identify Cards That Reps Can't Update

Reps can see in a glance which Kanban cards they don't have permission to drag.

If a rep doesn't have access to update a record, the card is disabled and can't be dragged to a different column.

# Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

It's now easier for users to share notes and add them to records. We've improved the Salesforce API, so you can convert notes from the Notes and Attachments related list for use in Lightning Experience. Plus, feed tracking for notes now turns off when you disable feed tracking for all related objects. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

## **EDITIONS**

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

#### IN THIS SECTION:

#### Share Notes and Add Them to Records with Ease

We've given the Notes editor some love with better button labels and features that make it a snap to share notes and add them to records. This change applies to Lightning Experience only.

#### Convert Old Notes to Lightning Experience with the Salesforce API

Want users to edit notes found in the Notes & Attachments related list in Lightning Experience? Using the Salesforce API, you can copy old notes from the Notes & Attachments related list to the Notes related list in Lightning Experience, where users can view and edit them. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Turn Off Feed Tracking for Notes

Want to hide feed updates that tell your users whenever someone creates or changes a note? Now, note feed tracking is controlled by enabling and disabling feed tracking for all related objects. To turn off feed tracking for notes, disable feed tracking for all related objects. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Person Accounts Show All Notes in Related Lists

The Notes related list on person account records now includes notes where the person account is listed as a related contact. Previously, those notes only appeared on the Notes home page. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### SEE ALSO:

Salesforce Help: Set Up Notes (can be outdated or unavailable during release preview)

## Share Notes and Add Them to Records with Ease

We've given the Notes editor some love with better button labels and features that make it a snap to share notes and add them to records. This change applies to Lightning Experience only.

To add (or relate) a note to other Salesforce records, click Add to Records (1).

Go to related records—records with the note already added—from the bottom of the note (2).

Because sharing is caring, we've also improved the labels on the sharing pop-up. To share a note with people or groups, click **Share** (3). The number on the Share button shows how many people and groups you're sharing the note with.

Acme -	1,200 Widgets			L Callour Follow In Stream Celit More Care More More More Alexa ₽ Meeting notes x <sup>A</sup> ×
Account Name Acme	Close Date 12/30/2014	Amount \$140,000.00	Opportunity Admin	Meeting notes
$\sim$	$\rightarrow \rightarrow \rightarrow$	~ <b>&gt;</b> ~ >	~ >	B I <u>U</u> ÷ = = = •= •
ACTIVITY	CHATTER	DETAILS		Met with Bugs Bunny to discuss the anvil order.  • Bugs loved the carrot salad
Opportunity Owne	r L	Close Date 12/30/2014		• Send proposal by Monday • Check with Road Runner, Inc. rep • Set up follow-up for Friday
Opportunity Name Acme - 1,200 Wid		Stage Closed Won		2
Account Name Acme	/	Probability (%)		Related to
Type Existing Business		Amount \$140,000.00		Delete 3 Share 9 (Add to Records) Done

SEE ALSO:

Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

## Convert Old Notes to Lightning Experience with the Salesforce API

Want users to edit notes found in the Notes & Attachments related list in Lightning Experience? Using the Salesforce API, you can copy old notes from the Notes & Attachments related list to the Notes related list in Lightning Experience, where users can view and edit them. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

- 1. Copy the contents of Note records (Body and Title fields) into new ContentNote records.
- 2. Set the owner, created date, and last modified date on the ContentNote records to match the copied Note records.
- 3. Add the Notes related list to page layouts.

Copied notes appear in the Notes related list and Notes tab in Lightning Experience, where users can view and edit them. They also remain in the Notes & Attachments related list.

For details on the API changes that we made, see Changed Objects: ContentNote.

#### SEE ALSO:

SOAP API Developer Guide: ContentNote

Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

## Turn Off Feed Tracking for Notes

Want to hide feed updates that tell your users whenever someone creates or changes a note? Now, note feed tracking is controlled by enabling and disabling feed tracking for all related objects. To turn off feed tracking for notes, disable feed tracking for all related objects. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

- 1. From Setup, enter *Feed Tracking* in the Quick Find box, then select **Feed Tracking**.
- 2. Select the object you want to turn off feed tracking for.
- 3. Deselect All Related Objects.

#### USER PERMISSIONS

To convert notes to Lightning Experience with the Salesforce API:

 Set Audit Fields Upon Creation

nose fields are change	d on records t		ype. Select fields to track so	users can see feed u	odates when
Object	Tracked	Fields in accounts			
Account	2 Fields	Save Cancel	Enable Feed Tracking	Re	store Defaults
Asset			Chable Food Hadding	100	Store Bondant
Asset Relationship		You can select up to 20 fields.			
Badge		Account Name		Account Number	
Case	2 Fields	Account Owner	<ul><li>✓</li></ul>	Account Site	
Contact	3 Fields	Account Source		Annual Revenue	
Content Document	0 Fields		0		0
Contract		Billing Address		Data.com Key	
Dashboard		Description		Employees	
Endorsement		Fax		Industry	
Event		0	_	Parent Account	-
Group	7 Fields	Ownership		Parent Account	
Lead	3 Fields	Phone		Rating	
Opportunity Order	5 Fields	SIC Code		SIC Description	
Order Order Product		Shipping Address		Ticker Symbol	
Product					0
Report		Туре		Website	
Site	0 Fields	You can also display feed activit	for related objects		
Skill	UFIElds		rior related objects.		
SKIII		All Related Objects			

#### 4. Click Save.

Repeat these steps for each object you want to turn off feed tracking for.

#### SEE ALSO:

Salesforce Help: Enable Feed Updates for Related Records (can be outdated or unavailable during release preview) Salesforce Help: Feed Tracking (can be outdated or unavailable during release preview) Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

## Person Accounts Show All Notes in Related Lists

The Notes related list on person account records now includes notes where the person account is listed as a related contact. Previously, those notes only appeared on the Notes home page. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### SEE ALSO:

Notes: Better Sharing and Adding Notes to Records, API Conversion of Old Notes to Lightning Experience, and Feed Tracking Control

# Get Event Attendee Details in the Calendar When You Sync Microsoft® Office $365^{\ensuremath{\mathbb{R}}}$ with Salesforce

You give your users enhanced meeting scheduling options when you set up events to sync between reps' Microsoft Office 365 calendars and Salesforce. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

If your company uses Microsoft Office 365, when reps schedule meetings from Lightning Experience or Salesforce1, they can invite contacts, leads, and other Salesforce users to attend, and all Salesforce users can see how meeting attendees responded.

You can also set up reps to invite attendees to events that reps create from the quick actions menu.

And because giving your reps access to attendees' details requires you to set up Lightning Sync, meetings scheduled from reps' Microsoft calendars sync to Salesforce, too. That way, your whole team can access meeting data, where they can track or 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 reps' Microsoft calendars.
- Add the Attendees field to the Event page layout.
- Users have to create or edit the event (from which they're viewing or editing attendees) from Lightning Experience or Salesforce1.

Keep in mind that selecting Sync Both Ways limits some Calendar functionality in Salesforce Classic. To learn more, check out "Lightning Sync Considerations" in the Salesforce Help.

#### SEE ALSO:

Productivity Features: Lightning Experience Considerations *Salesforce Help*: Lightning Sync for Microsoft Exchange (can be outdated or unavailable during release preview) *Salesforce Help*: Lightning Sync Considerations (can be outdated or unavailable during release preview)

# Home: Assistant and Performance Chart Updates

The Assistant has a new look, and the performance chart can group data points by week or by day. These changes apply to Lightning Experience only.

#### IN THIS SECTION:

#### See Assistant Updates in a New Way

The Assistant has a slightly different look and feel. Click > to see more details about a specific update. This change applies to Lightning Experience only.

#### Group Data Points on the Performance Chart

The performance chart displays opportunities for the current sales quarter that are closed or open with a probability over 70%. Sales reps can now see these opportunities grouped by week or by day. This change applies to Lightning Experience only.

#### Upcoming Events Are Now Today's Events

On the Home page in Lightning Experience, we've renamed the "Upcoming Events" section to "Today's Events". Your reps still get the same functionality—they see the next five events scheduled on their default Salesforce Calendar that day—but we renamed the section to make it clear that tomorrow's events don't display there. Reps can navigate to their calendars to see events scheduled for the next day. These changes apply to Lightning Experience only.

## **EDITIONS**

Available to sync with: Salesforce Classic, Lightning Experience, and Salesforce1

Available to set up from: Salesforce Classic and Lightning Experience

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

#### **EDITIONS**

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

## See Assistant Updates in a New Way

The Assistant has a slightly different look and feel. Click > to see more details about a specific update. This change applies to Lightning Experience only.

Assis	stant	
	New lead assigned to you today r Telephono ales - Acme	×
	Email	
> 🝟	Opportunity is overdue 50 Widgets	×
> 🝟	Opportunity is overdue 270 Bundles	×

Your sales reps can also quickly act on different updates with the new action buttons, such as sending an email or editing an opportunity.

## Group Data Points on the Performance Chart

The performance chart displays opportunities for the current sales quarter that are closed or open with a probability over 70%. Sales reps can now see these opportunities grouped by week or by day. This change applies to Lightning Experience only.



#### Data Quality: Duplicate Detection Across Objects, Better Duplicate Alerts, and Assessments of AppExchange Package Data

Hover over the chart to see the closed and committed opportunity amounts for different dates. A blue dot appears if you hover over a date when an opportunity was closed or set to a probability over 70%. Data points are grouped by week for the week view, or by day for the day view.

## Upcoming Events Are Now Today's Events

On the Home page in Lightning Experience, we've renamed the "Upcoming Events" section to "Today's Events". Your reps still get the same functionality—they see the next five events scheduled on their default Salesforce Calendar that day—but we renamed the section to make it clear that tomorrow's events don't display there. Reps can navigate to their calendars to see events scheduled for the next day. These changes apply to Lightning Experience only.

# Data Quality: Duplicate Detection Across Objects, Better Duplicate Alerts, and Assessments of AppExchange Package Data

We've created standard duplicate rules that work across contacts and leads. In Lightning Experience, you can now use the Potential Duplicates component to surface potential duplicates that span objects. We've also streamlined duplicate alerts when reps create or edit records in Lightning Experience. It all helps protect your company's reputation, keep your data clean, and make sales reps more successful. And before you purchase AppExchange packages with industry data, make sure that the data can enhance your sales efforts by getting a free Data Assessment.

## **EDITIONS**

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

#### IN THIS SECTION:

#### Detect Duplicates Across Contacts and Leads Using Standard Rules

Do your sales reps create leads for contacts that are already in Salesforce, or the reverse? Two standard duplicate rules make it simpler to detect contacts and leads that duplicate each other. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Surface Duplicates Across Objects in Lightning Experience

Protect your company's reputation and save your sales reps time. Do you use duplicate rules that match duplicates across objects (such as one of the new rules for detecting duplicates across contacts and leads)? Now you can use the Potential Duplicates component in the Lightning App Builder to surface those duplicates. Previously, you could surface only duplicates on the same object. This change applies to Lightning Experience only.

#### Handle Potential Duplicates More Easily in Lightning Experience

We've streamlined the way Lightning Experience alerts sales reps to duplicate accounts, contacts, and leads during the process of creating or editing a record. And during creating or editing, Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app all display a new customizable alert message.

#### Get a Free Assessment Before Investing in Data Packages

On AppExchange, you can purchase packages of industry data to enhance your Salesforce accounts, leads, and other data. Before you buy a package, run a free Data Assessment to make sure that the data in the package is valuable for your business. This feature is new in both Lightning Experience and Salesforce Classic.

SEE ALSO:

Duplicate Management Setup Items Consolidated

Ineffective Matching Rules Can't Be Activated

Data.com Prospecting Insights in Lightning Separated from News Component

Data.com Tab to Be Available Only to Prospector Customers

Data.com Account Data Assessment to Be Retired

## Detect Duplicates Across Contacts and Leads Using Standard Rules

Do your sales reps create leads for contacts that are already in Salesforce, or the reverse? Two standard duplicate rules make it simpler to detect contacts and leads that duplicate each other. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

If your org was created before Summer '17, your default duplicate rules for contacts and leads each match only duplicates on the same object. However, additional rules that match duplicates across objects are available to activate in Setup.

#### **EDITIONS**

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

Standard Rule for Contacts with Duplicate Leads	Identify contacts with duplicate leads.	Contact	Standard Lead Matching Rule	autoproc	4/5/2017
Standard Rule for Leads with Duplicate Contacts	Identify leads with duplicate contacts.	Lead	Standard Contact Matching Rule	autoproc	4/5/2017

In orgs created in Summer '17 or later, the matching rules on standard contact and lead duplicate rules already match duplicates across objects.

Standard Contact Duplicate Rule	Identify contacts that duplicate other contacts and leads.	Contact	Standard Lead Matching Rule Standard Contact Matching Rule	1	autoproc	4/11/2017
Standard Lead Duplicate Rule	Identify leads that duplicate other leads and contacts.	Lead	Standard Lead Matching Rule Standard Contact Matching Rule	~	AUser	4/19/2017

SEE ALSO:

Surface Duplicates Across Objects in Lightning Experience

Handle Potential Duplicates More Easily in Lightning Experience

*Salesforce Help*: Duplicate Rules (can be outdated or unavailable during release preview)

# Surface Duplicates Across Objects in Lightning Experience

Protect your company's reputation and save your sales reps time. Do you use duplicate rules that match duplicates across objects (such as one of the new rules for detecting duplicates across contacts and leads)? Now you can use the Potential Duplicates component in the Lightning App Builder to surface those duplicates. Previously, you could surface only duplicates on the same object. This change applies to Lightning Experience only.

**EDITIONS** 

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

The Potential Duplicates component displays a message on record home pages in Lightning Experience. (You can also add or switch to a temporary toast message.)

We found 2 potential duplicates of this lead. View Duplicates					
🚼 Rob	ert Sm	nith			
+ Follow					
Convert	Edit	New Case	•		

Clicking View Duplicates shows that the lead record is duplicated by one other lead—plus one contact.

	Potential Duplicate Records							
	View Duplicates							
	rge duplicates, eads (2)	choose up to	3 leads. Then o	lick Next and o	choose the field	is to keep.		
	NAME	TITLE	COMPANY		PHONE	EMAIL	LEAD STATUS	OWNER ALIAS
~	Robert Smith		Universal Tecl	nnologies	555-1212		New	rlee
	Bob Smith		Universal Tecl	n	5551212	rsmith@universal.com	New	rlee
	duplicates can' ontacts (1)	-	with leads.					
NAM	E	ACCOUNT	NAME	PHONE	EMAIL		CONTACT OWNER A	ALIAS
Bob	Smith	Universal T	ech	5551212	rsmith@u	iniversal.com	ymartin	
			0				•	Next

A rep who has permission to merge duplicates can merge records for the same object.

#### SEE ALSO:

Detect Duplicates Across Contacts and Leads Using Standard Rules Salesforce Help: Let Users View and Merge Records in Lightning Experience (can be outdated or unavailable during release preview)

## Handle Potential Duplicates More Easily in Lightning Experience

We've streamlined the way Lightning Experience alerts sales reps to duplicate accounts, contacts, and leads during the process of creating or editing a record. And during creating or editing, Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app all display a new customizable alert message.

## Streamlined Handling of Potential Duplicates in Lightning Experience

When a sales rep is creating or editing a record in Lightning Experience, Salesforce handles duplicates a little differently depending on your duplicate rules. You can alert sales reps that they're creating a duplicate or block new duplicates altogether. In Lightning Experience, the new, streamlined flow is less repetitive, and completing the process requires fewer clicks.

EDITIONS

Available in: Lightning Experience, Salesforce Classic, and Salesforce1

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

Suppose that a sales rep starts creating a record, entering a phone number that matches a phone number already in Salesforce. Salesforce shows a message with a link. The rep can save the new record or click **View Duplicates** to see the existing records.

	Create Lead	
i The record you're about to cre	eate looks like a duplicate. Open an existing record instead? View Duplicates	
Lead Owner	*Lead Status	
	Lead Status     Contacted	
Ruby Lee		•
Lead Owner Ruby Lee *Name Salutation	Contacted	•

In this example, the new record duplicates two leads and a contact (1), and Lightning Experience displays the new default customizable alert (2).

		View Du	plicates					
Use one of the	Use one of these records? 2							
LEADS (2)	ONTACT (1) 1							
Bob S Lead	mith		Rober Lead	t Smith				
Name:	Bob Smith		Name:	Robert Smith				
Title:			Title:					
Company:	Universal Tech		Company:	Universal Technologies				
Phone:	5551212		Phone:	555-1212				
Email:	rsmith@universal.com		Email:					
Lead Status:	New		Lead Status:	New				
Owner Alias:	rlee		Owner Alias:	rlee				
	Open This Lead			Open This Lead				

If you block sales reps from creating duplicates instead of alerting them, a sales rep can click to view duplicates but can't save a new one.

Create Lead						
This record looks like a duplicate. View Duplicates						
Lead Information						
Lead Owner	* Lead Status					
Ruby Lee	New 🔻					
*Name Phone						
Salutation	5551212					
None	▼					

## New Duplicate Alert in Lightning Experience, Salesforce Classic, and Salesforce1

If you customized the duplicate alert message before Summer '17, the message isn't changed. Otherwise, Salesforce displays the new customizable alert, "Use one of these records?" The part of the duplicate alert message that wasn't previously customizable—"Did you mean one of these records?"—has been removed.

# Get a Free Assessment Before Investing in Data Packages

On AppExchange, you can purchase packages of industry data to enhance your Salesforce accounts, leads, and other data. Before you buy a package, run a free Data Assessment to make sure that the data in the package is valuable for your business. This feature is new in both Lightning Experience and Salesforce Classic.

Any Salesforce admin at your company can run data assessments and access them in Setup.

1. Install the package.

AppExchange currently offers one package supporting Data Assessment, by Bombora.

We notify you in-app and via email when your data package has been installed. The notifications include links to the data integration rules included in the package.

2. Configure your assessment by choosing the areas of the package data that you're interested in.

In Setup, in the Quick Find box, enter *Data Integration Rules*. Click one of the rules included in the package, and then click **Configure**.

For example, suppose that you sell a data analytics product: A search for "analytics" filters the areas included in the data package (1). Select the items you want to include in your assessment (2).

**EDITIONS** 

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

	data integration rules > bombora purchase intent information for leads on figure Assessment
	rreas to include in your assessment. This assessment matches your lead records to the Bombora Purchase Intent Information data provided by . It summarizes available information for the following field: Topic.
ana	lytics
Ana	lytics Software 🗙 🛛 Big Data Analytics 🗙 🗍 Business Analytics 🗙 🗍 Business Intelligence Analytics 🗙 🗍 Data Analytics 🗴
Clear	Search
5 item	ss selected (30 maximum) 2
	Analytics Software
	Big Data Analytics
	Business Analytics
	Business Intelligence Analytics
+	Cognitive Analytics

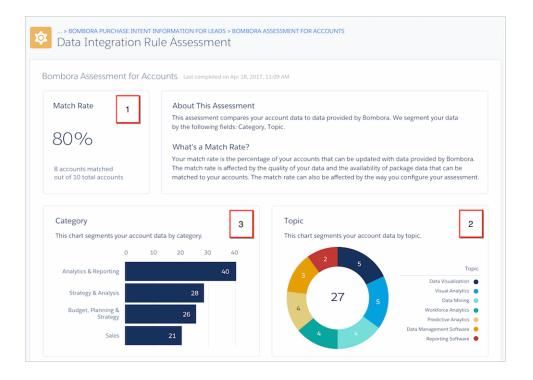
No need to configure more than one rule: All the rules in a package share a configuration. In some packages, rules aren't configurable.

**3.** Run the assessment.

We notify you in-app and via email when your assessment is ready. You run a separate assessment for each rule, and each assessment covers a single field in the package data.

Your assessment includes a match rate—the percentage of your records that can be matched to records in the data package (1). It also segments your data compared to the package data by the areas you choose when configuring. Some assessments include more charts, depending on the nature of the data.

In this example, the assessment segments the data not only by the product areas selected (2) but also by product category (3).



SEE ALSO:

External Link: Bombora Intent Data on AppExchange

# Google Integration: General Availability for Lightning for Gmail and Lightning Sync

Do your sales reps live in Google applications like Gmail and Google Calendar<sup>™</sup>, but want to get sales data from emails, contacts, and events into Salesforce easily? No need to wait any longer: Set up our Google integration products, which are now generally available. Let reps view relevant Salesforce records from their Gmail inboxes and relate emails to Salesforce records using Lightning for Gmail. And when you introduce Lightning Sync for Google, reps can sync contacts between Gmail and Salesforce, and events from Google Calendar to Salesforce.

IN THIS SECTION:

#### Lightning for Gmail: General Availability and Improved Efficiency

Lightning for Gmail is now generally available, and with our latest features, your team gets a boost in productivity. And reps get to relate emails to Salesforce before sending them. Crafting emails is faster with the use of Lightning email templates. If you're using Group or Professional editions, Lightning for Gmail is available within 24 hours after the Summer '17 release. Otherwise, there's no wait. You can manage Lightning for Gmail from both Lightning Experience and Salesforce Classic.

#### Lightning Sync for Google: Two-Way Contact Sync, General Availability

Make your teams more productive by setting up contacts to sync between Google Contacts and Salesforce, and events to sync from Google Calendar<sup>™</sup> to Salesforce. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

# Lightning for Gmail: General Availability and Improved Efficiency

Lightning for Gmail is now generally available, and with our latest features, your team gets a boost in productivity. And reps get to relate emails to Salesforce before sending them. Crafting emails is faster with the use of Lightning email templates. If you're using Group or Professional editions, Lightning for Gmail is available within 24 hours after the Summer '17 release. Otherwise, there's no wait. You can manage Lightning for Gmail from both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails. This change applies to both Lightning Experience and Salesforce Classic.

#### Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Gmail, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Gmail also ensures consistent messaging from your team to your customers. This change applies to Lightning Experience only.

## **EDITIONS**

Available to be managed from both Salesforce Classic and Lightning Experience

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

#### Stay Logged In to Lightning for Gmail

Reps get to work on Salesforce records with fewer interruptions. Lightning for Gmail now saves reps' Salesforce login credentials after the initial authentication. Reps no longer need to log in to Lightning for Gmail each time they work in Gmail. This change applies to both Lightning Experience and Salesforce Classic.

#### Choose Which Attachments Are Keepers

Not all email attachments are equally important. That's why Lightning for Gmail now lets reps select the attachments they want to add to Salesforce records. This change applies to both Lightning Experience and Salesforce Classic.

#### Keep Salesforce Events Up-to-Date

Don't let your Salesforce events get stale. If you set up reps for both Lightning for Gmail and Lightning Sync, you can select an option that syncs event updates. That way, when your reps relate an event, any subsequent changes made to that event from Google Calendar<sup>™</sup> sync to Salesforce. This change applies to both Lightning Experience and Salesforce Classic.

#### Identify Emails Related to Salesforce Records Easily

Do your reps want an easy way to tell which emails they related to Salesforce? There's a label that does just that. Lightning for Gmail adds a label to all emails that are related to Salesforce records. To identify these emails in Gmail quickly or filter by this label, reps can assign the label a unique color. This change applies to both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

#### *IdeaExchange*: Integrate Gmail with Saleforce

## Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails. This change applies to both Lightning Experience and Salesforce Classic.

When drafting an email or a reply, reps can select a relevant account, opportunity, case, or custom object to relate the email to. Lightning for Gmail relates the email to the selected record, plus any contacts, leads, and users with a matching record in Salesforce. Reps can also choose to relate an email to just those individuals who appear in the People section of Lightning for Gmail.

To set up this feature, from the Lightning for Gmail Settings page, verify that Enhanced Email and Email to Salesforce are enabled in your org.

#### SEE ALSO:

IdeaExchange: Relate Gmail emails to Saleforce

## Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Gmail, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Gmail also ensures consistent messaging from your team to your customers. This change applies to Lightning Experience only.

SEE ALSO:

*Salesforce Help*: Use Lightning Email Templates with Your Email Application (can be outdated or unavailable during release preview) *IdeaExchange*: Add Attachments from Gmail to Saleforce

## Stay Logged In to Lightning for Gmail

Reps get to work on Salesforce records with fewer interruptions. Lightning for Gmail now saves reps' Salesforce login credentials after the initial authentication. Reps no longer need to log in to Lightning for Gmail each time they work in Gmail. This change applies to both Lightning Experience and Salesforce Classic.

## Choose Which Attachments Are Keepers

Not all email attachments are equally important. That's why Lightning for Gmail now lets reps select the attachments they want to add to Salesforce records. This change applies to both Lightning Experience and Salesforce Classic.

Note: Your reps' Gmail<sup>™</sup> attachments are uploaded as Salesforce Files, not attachments. So, ensure that reps have access to files from their record layouts.

SEE ALSO:

Salesforce Help: Add the Files Related List to Page Layouts

## Keep Salesforce Events Up-to-Date

Don't let your Salesforce events get stale. If you set up reps for both Lightning for Gmail and Lightning Sync, you can select an option that syncs event updates. That way, when your reps relate an event, any subsequent changes made to that event from Google Calendar<sup>™</sup> sync to Salesforce. This change applies to both Lightning Experience and Salesforce Classic.

SEE ALSO:

Select Which Google Calendar Events Sync to Salesforce Salesforce Help: Lightning Sync for Google (can be outdated or unavailable during release preview)

## Identify Emails Related to Salesforce Records Easily

Do your reps want an easy way to tell which emails they related to Salesforce? There's a label that does just that. Lightning for Gmail adds a label to all emails that are related to Salesforce records. To identify these emails in Gmail quickly or filter by this label, reps can assign the label a unique color. This change applies to both Lightning Experience and Salesforce Classic.

# Lightning Sync for Google: Two-Way Contact Sync, General Availability

Make your teams more productive by setting up contacts to sync between Google Contacts and Salesforce, and events to sync from Google Calendar<sup>™</sup> to Salesforce. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

IN THIS SECTION:

#### Sync Contacts Between Salesforce and Google Contacts

Now contacts sync in both directions between Google Contacts and Salesforce. Set up reps to sync both ways so that they can create and edit contacts from the application that's most

convenient to them: Gmail or Salesforce. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

## **EDITIONS**

Available to be managed from: both Salesforce Classic and Lightning Experience

Available in all editions

#### Stay More Productive with Lightning Sync (Generally Available)

No need to hold off any longer! Lightning Sync for Google is generally available and open for business! When you set up your reps to sync contacts and events between their G Suite account and Salesforce, you give them an opportunity to be more productive. Save your reps time and eliminate unnecessary data entry while also doing your part to promote Salesforce adoption across your team. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Select Which Google Calendar Events Sync to Salesforce

Reps have tons of appointments on their calendars, but only a subset of those events contains valuable data that reps want to track in Salesforce. Now setting up reps for both Lightning for Gmail and Lightning Sync lets them choose which Google Calendar<sup>™</sup> events sync to Salesforce. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Google<sup>®</sup> Contacts and Events Sync More Frequently

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' G Suite account and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

## Sync Contacts Between Salesforce and Google Contacts

Now contacts sync in both directions between Google Contacts and Salesforce. Set up reps to sync both ways so that they can create and edit contacts from the application that's most convenient to them: Gmail or Salesforce. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

To set up contacts to sync between Google Contacts and Salesforce, first set up contacts to sync with Salesforce from your company's G Suite account. Then, select the **Sync Both Ways** option for contacts from your reps' Lightning Sync configurations.

SEE ALSO:

*Salesforce Help*: Prepare Your G Suite Account for Lightning Sync (can be outdated or unavailable during release preview)

*Salesforce Help*: Define Lightning Sync for Google Settings for Reps (can be outdated or unavailable during release preview)

#### USER PERMISSIONS

To prepare your Google for Work account to communicate with Salesforce:

• The Owner role on your company's Google for Work account, which gives you administrative permissions

To access Lightning Sync setup in Salesforce:

Customize Application

To create, edit, or delete Lightning Sync configurations:

 Manage Exchange Configurations AND Manage Users

## Stay More Productive with Lightning Sync (Generally Available)

No need to hold off any longer! Lightning Sync for Google is generally available and open for business! When you set up your reps to sync contacts and events between their G Suite account and Salesforce, you give them an opportunity to be more productive. Save your reps time and eliminate unnecessary data entry while also doing your part to promote Salesforce adoption across your team. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

Lightning Sync also lets reps work from their preferred platform, because new and updated contacts and events sync whether reps are working from their desks or from their mobile devices.

Check out the Salesforce Help to learn more about whether Lightning Sync for Google is right for your company and how you can get started with the product.

SEE ALSO:

*Salesforce Help*: Lightning Sync for Google (can be outdated or unavailable during release preview)

## Select Which Google Calendar Events Sync to Salesforce

Reps have tons of appointments on their calendars, but only a subset of those events contains valuable data that reps want to track in Salesforce. Now setting up reps for both Lightning for Gmail and Lightning Sync lets them choose which Google Calendar<sup>™</sup> events sync to Salesforce. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

As a bonus, when reps relate Google events to Salesforce using Lightning for Gmail, edits made in Google Calendar sync back to Salesforce, keeping important Salesforce events up to date automatically.

Set up reps to select which Google events sync to Salesforce.

- 1. Enable Lightning for Gmail for reps, if you haven't already.
- 2. Tell reps that from now on, events that they relate to Salesforce records using Lightning for Gmail are syncing to Salesforce. Reps should edit event fields that sync (like date, time, subject, or description) in Google Calendar, not from Salesforce. That way, Lightning Sync doesn't overwrite those edits in Salesforce.
- 3. In reps' Lightning Sync configurations, enable the feature. For the option Specify Which Google Events Sync to Salesforce, select **Events Users Select**.

#### SEE ALSO:

Keep Salesforce Events Up-to-Date

*Salesforce Help*: Considerations for Syncing Events from Microsoft<sup>®</sup> or Google to Salesforce (can be outdated or unavailable during release preview)

*Salesforce Help*: Define Lightning Sync for Google Settings for Reps (can be outdated or unavailable during release preview)

## USER PERMISSIONS

To prepare your Google for Work account to communicate with Salesforce:

• The Owner role on your company's Google for Work account, which gives you administrative permissions

To access Lightning Sync setup in Salesforce:

Customize Application

To create, edit, or delete Lightning Sync configurations:

 Manage Exchange Configurations

AND

Manage Users

## USER PERMISSIONS

To create, edit, or delete Lightning Sync configurations:

 Manage Exchange Configurations AND Manage Users

## Google® Contacts and Events Sync More Frequently

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' G Suite account and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

# Microsoft<sup>®</sup> Integration: More Improvements, Increased Productivity

Help reps maximize productivity directly from their Microsoft email and calendars. Now Lightning for Outlook integrates with more features, like Email Experience and Email Templates. Reps can

**EDITIONS** 

Available to be managed from: both Salesforce Classic and Lightning Experience

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

take advantage of even more Salesforce content from the comfort of Microsoft Outlook<sup>®</sup>. And for Microsoft Office 365<sup>®</sup> and Lightning Experience users, now Lightning Sync can sync reps' events both ways between their Microsoft and Salesforce calendars.

#### IN THIS SECTION:

#### Lightning for Outlook: Improved Efficiency and Integration with Salesforce

See reps step up their efficiency with our latest features. With the new pin option, Lightning for Outlook stays open, so reps can work through their emails faster. Reps can also relate their emails to Salesforce before sending them. Crafting emails is faster with Lightning email templates. To jazz up those emails and make quick work of relating them to Salesforce records, use Enhanced Email with Lightning for Outlook. You can manage Lightning for Outlook from both Lightning Experience and Salesforce Classic.

#### Lightning Sync for Microsoft<sup>®</sup> Exchange: Two-Way Event Sync and Better Calendar Integration

Make your team more productive by setting up contacts and events to sync both ways between Microsoft Exchange and Salesforce. And help your teams get the most out of Salesforce Calendar by setting up some features that work exclusively with Lightning Sync. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft<sup>®</sup> Office 365<sup>®</sup> and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

#### Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available

Our installable Microsoft<sup>®</sup> integration product is still available for sales teams working from older versions of Microsoft applications. However, if you meet the system requirements for our latest Microsoft integrations, Lightning for Outlook and Lightning Sync, we encourage you to migrate to those products now. That way, you can take advantage of the latest features and avoid manual upgrades in the future. And if you don't meet the system requirements for our next-generation products, to avoid service disruptions, make sure to read about the pending changes to Salesforce for Outlook system requirements. These changes apply to both Lightning Experience and Salesforce Classic.

#### Extended Mail Merge: Easier Setup, and Support for More Microsoft<sup>®</sup> Word File Types

Extended Mail Merge lets reps generate mail merge Word documents with data from contacts, leads, and other Salesforce records. Because Extended Mail Merge generates Word documents, reps can get mail merged content to prospects or customers in whichever format they like. Reps can send letters, create labels, or attach merged communications to emails. These changes apply to Salesforce Classic only.

# Lightning for Outlook: Improved Efficiency and Integration with Salesforce

See reps step up their efficiency with our latest features. With the new pin option, Lightning for Outlook stays open, so reps can work through their emails faster. Reps can also relate their emails to Salesforce before sending them. Crafting emails is faster with Lightning email templates. To jazz up those emails and make quick work of relating them to Salesforce records, use Enhanced Email with Lightning for Outlook. You can manage Lightning for Outlook from both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Pin Lightning for Outlook to Make Efficiency Pop

Remember when reps had to reopen Lightning for Outlook each time they moved from one email to the next? Well, that isn't always convenient. That's why Lightning for Outlook is now pinnable. This change applies to both Lightning Experience and Salesforce Classic, and, for now, requires Microsoft<sup>®</sup> Outlook<sup>®</sup> 2016 on Windows operating system.

#### Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails. This change applies to both Lightning Experience and Salesforce Classic.

#### Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Outlook, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Outlook also ensures consistent messaging from your team to your customers. This change applies to Lightning Experience only.

#### Choose Which Attachments Are Keepers

Not all email attachments are equally important. That's why Lightning for Outlook now lets reps select the attachments they want to add to Salesforce records. This change applies to both Lightning Experience and Salesforce Classic.

#### Rev Up Productivity with Enhanced Email

To help reps relate emails to relevant Salesforce records quicker and more easily, turn on Enhanced Email with Lightning for Outlook. As a bonus, the related emails maintain their look and feel in Salesforce. This change applies to both Lightning Experience and Salesforce Classic.

#### Identify Emails Related to Salesforce Records Easily

Do your reps want an easy way to tell which emails they related to Salesforce? There's a category that does just that. Lightning for Outlook adds all emails that are related to Salesforce records in one category. To identify these emails in Outlook<sup>®</sup> quickly or filter by this category, we recommend that reps add this category to the category list in Outlook. For an eye-catching effect, reps can assign the category a color. This change applies to both Lightning Experience and Salesforce Classic.

## Pin Lightning for Outlook to Make Efficiency Pop

Remember when reps had to reopen Lightning for Outlook each time they moved from one email to the next? Well, that isn't always convenient. That's why Lightning for Outlook is now pinnable. This change applies to both Lightning Experience and Salesforce Classic, and, for now, requires Microsoft<sup>®</sup> Outlook<sup>®</sup> 2016 on Windows operating system.

When pinned, as reps select another email, Lightning for Outlook remains open and refreshes to show records relevant to the newly selected email. So, reps continue working without interruption.

## EDITIONS

Available in: Salesforce Classic and Lightning Experience

Available with Sales Cloud, Service Cloud, and Force.com in: **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

#### Salesforce Summer '17 Release Notes

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ok Store	e				
Add-i	ns				₹ ×
Sear	rch Salesforce	8	3	Ļ	0
8	People				
÷	Marianne Schumacher +Add as a contact				
	Jules Wada Account Name: Soylent Corporation				٢
To	Accounts				
Soyle	ent Corporation				~

**Important**: To use this feature, reps have to upgrade to latest versions of Microsoft Outlook 2016 from the Microsoft Store.

- Reps working on Office with the Current or Office Insider Channels need Outlook 2016 build 7668.2000 or later.
- Reps working on Office with the Deferred Channel need Outlook 2016 build 7900 or later.

Contact your Microsoft or IT admin for help with the Outlook update.

## Relate Emails You're Composing to Salesforce Records

Team members don't have to wait until they've sent their emails or toggle between their email folders to relate emails to Salesforce. Reps can relate emails to Salesforce records when they write emails. This change applies to both Lightning Experience and Salesforce Classic.

When drafting an email or a reply, reps can select a relevant account, opportunity, case, or custom object to relate the email to. Lightning for Outlook relates the email to the selected record plus any email recipients with a matching record in Salesforce. Reps can also choose to relate an email to just those individuals who appear in the People section of Lightning for Outlook.

To set up this feature, from the Lightning for Outlook Settings page, verify that Enhanced Email and Email to Salesforce are enabled in your org.

## Gain Speed and Consistency with Lightning Email Templates

See reps breeze through their daily correspondence from now on. Whether it's writing to prospects or customers, reps can craft emails quicker with Lightning email templates. Reps can create email templates that address your different business needs in Salesforce. When they're ready to send an email, reps pull up the template in Lightning for Outlook, and tweak the content as needed. Reps can even use Merge fields to include Salesforce record details. Using templates with Lightning for Outlook also ensures consistent messaging from your team to your customers. This change applies to Lightning Experience only.

#### SEE ALSO:

Salesforce Help: Use Lightning Email Templates with Your Email Application (can be outdated or unavailable during release preview)

## Choose Which Attachments Are Keepers

Not all email attachments are equally important. That's why Lightning for Outlook now lets reps select the attachments they want to add to Salesforce records. This change applies to both Lightning Experience and Salesforce Classic.

Note: Your reps' Outlook attachments are uploaded as Salesforce Files, not attachments. So, ensure that reps have access to files from their record layouts.

#### SEE ALSO:

Salesforce Help: Add the Files Related List to Page Layouts

## Rev Up Productivity with Enhanced Email

To help reps relate emails to relevant Salesforce records quicker and more easily, turn on Enhanced Email with Lightning for Outlook. As a bonus, the related emails maintain their look and feel in Salesforce. This change applies to both Lightning Experience and Salesforce Classic.

With Enhanced Email:

- Reps can relate an email to all relevant contacts, leads, and users with a single click.
- When reps relate an email to a relevant account, opportunity, case, or custom object, all contacts, leads, and users on the email Lightning for Outlook are automatically related.
- Related emails maintain their rich HTML formatting, so emails have the same look and feel in Salesforce as they did in Outlook<sup>™</sup>.

To set up this feature, first verify that Enhanced Email is enabled for your org. Then, enable Enhanced Email for this feature from your Lightning for Outlook Settings page. Before turning on Enhanced Email for Lightning for Outlook, there are some considerations to think about.

#### SEE ALSO:

Salesforce Help: Lightning for Outlook with Enhanced Email (can be outdated or unavailable during release preview)

## Identify Emails Related to Salesforce Records Easily

Do your reps want an easy way to tell which emails they related to Salesforce? There's a category that does just that. Lightning for Outlook adds all emails that are related to Salesforce records in one category. To identify these emails in Outlook<sup>®</sup> quickly or filter by this category, we recommend that reps add this category to the category list in Outlook. For an eye-catching effect, reps can assign the category a color. This change applies to both Lightning Experience and Salesforce Classic.

# Lightning Sync for Microsoft<sup>®</sup> Exchange: Two-Way Event Sync and Better Calendar Integration

Make your team more productive by setting up contacts and events to sync both ways between Microsoft Exchange and Salesforce. And help your teams get the most out of Salesforce Calendar by setting up some features that work exclusively with Lightning Sync. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft<sup>®</sup> Office 365<sup>®</sup> and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

#### **EDITIONS**

Available to be managed from: both Salesforce Classic and Lightning Experience

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

#### IN THIS SECTION:

#### Sync Events in Both Directions Between Microsoft<sup>®</sup> Office 365<sup>®</sup> and Salesforce

Save your reps time and unnecessary data entry by setting up their events to sync between Microsoft and Salesforce. Reps can create and edit meetings from either application, and you can promote Salesforce adoption by making it easy for reps to relate important meetings to their records. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

#### Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events

Now that meeting organizers can invite prospects, customers, and colleagues to the meetings they schedule from Lightning Experience and Salesforce1, reps can see attendee details and their responses from either system. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

#### Microsoft<sup>®</sup> Contacts and Events Sync More Frequently

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' Microsoft calendars and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience. These changes apply to Lightning Experience, Salesforce Classic, and the Salesforce1 mobile browser app.

## Sync Events in Both Directions Between Microsoft® Office 365® and Salesforce

Save your reps time and unnecessary data entry by setting up their events to sync between Microsoft and Salesforce. Reps can create and edit meetings from either application, and you can promote Salesforce adoption by making it easy for reps to relate important meetings to their records. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

The option to sync events in both directions is designed for customers who are using:

- Microsoft Office 365 for their company's calendar needs
- Lightning Experience and Salesforce1 to create or edit Salesforce events, because events created or edited in Salesforce Classic don't sync with Microsoft Office 365

If that description hits home, you can start syncing your reps' events in both directions. First, make sure you've set up Lightning Sync with an OAuth 2.0 connection to Microsoft Exchange. Next, select **Sync Both Ways** for events from your reps' Lightning Sync configurations.

Keep in mind that selecting Sync Both Ways limits some Calendar functionality in Salesforce Classic. To learn more, check out "Lightning Sync Considerations" in the Salesforce Help.

## USER PERMISSIONS

To prepare Exchange Online to communicate with Salesforce:

 Global administrator access to your company's Office 365 account

To access Lightning Sync setup in Salesforce:

Customize Application

To create, edit, or delete Lightning Sync configurations:

 Manage Exchange Configurations AND Manage Users

SEE ALSO:

*Salesforce Help*: Connect Salesforce and Microsoft<sup>®</sup> Exchange Using OAuth 2.0 (can be outdated or unavailable during release preview) *Salesforce Help*: Define Lightning Sync for Microsoft<sup>®</sup> Exchange Settings for Reps (can be outdated or unavailable during release preview)

*Salesforce Help*: Lightning Sync Considerations (can be outdated or unavailable during release preview)

## Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events

Now that meeting organizers can invite prospects, customers, and colleagues to the meetings they schedule from Lightning Experience and Salesforce1, reps can see attendee details and their responses from either system. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app. This change also requires Microsoft Office 365 and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

Learn more about how to set up your reps to view, invite, and manage event attendees, and how this feature works with Lightning Sync. Check out "Get Event Attendee Details in the Calendar When You Sync Microsoft" Office 365" with Salesforce" in the Calendar section of the Summer '17 release notes.

#### SEE ALSO:

Get Event Attendee Details in the Calendar When You Sync Microsoft<sup>®</sup> Office 365<sup>®</sup> with Salesforce Productivity Features: Lightning Experience Considerations

## Microsoft® Contacts and Events Sync More Frequently

When Salesforce moves faster, you and your reps can move faster, too. We've tinkered under the hood so that contacts and events sync more frequently between your reps' Microsoft calendars and Salesforce. No setup necessary—you can kick back while your reps enjoy an improved sync experience. These changes apply to Lightning Experience, Salesforce Classic, and the Salesforce1 mobile browser app.

## USER PERMISSIONS

To prepare Exchange Online to communicate with Salesforce:

 Global administrator access to your company's Office 365 account

User Permissions Needed To access Lightning Sync setup in Salesforce:

Customize Application

To create, edit, or delete Lightning Sync configurations:

 Manage Exchange Configurations AND Manage Users

## **EDITIONS**

Available to be managed from: both Salesforce Classic and Lightning Experience

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

# Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available

Our installable Microsoft<sup>®</sup> integration product is still available for sales teams working from older versions of Microsoft applications. However, if you meet the system requirements for our latest Microsoft integrations, Lightning for Outlook and Lightning Sync, we encourage you to migrate to those products now. That way, you can take advantage of the latest features and avoid manual upgrades in the future. And if you don't meet the system requirements for our next-generation products, to avoid service disruptions, make sure to read about the pending changes to Salesforce for Outlook system requirements. These changes apply to both Lightning Experience and Salesforce Classic.

## **EDITIONS**

This feature available to manage from: both Salesforce Classic and Lightning Experience

Available in all editions

#### IN THIS SECTION:

#### Critical Upgrade Required to Continue Using Salesforce for Outlook

To avoid service disruption, all Salesforce for Outlook users must be working from version 3.0.0 or later by July 2017. At that time, Salesforce disables TLS 1.0 security encryption protocol, and Salesforce for Outlook v2.9.3 and earlier no longer functions. Reps working from those versions can't sync their Microsoft<sup>®</sup> Outlook<sup>®</sup> items to Salesforce nor can they work with their Salesforce records from the side panel. Make sure that your sales teams upgrade as soon as possible to work through any installation issues before July. This change applies to both Lightning Experience and Salesforce Classic.

#### Retirement for Microsoft® Outlook® 2007 Is Approaching

Microsoft has extended support beyond the previously announced retirement date. To stay aligned, we're extending support, too. However, Outlook 2007 retirement is still pending, and Microsoft has currently scheduled it for October 2017. To continue using Salesforce for Outlook after retirement, start migrating your sales reps to Outlook 2016, 2013, or 2010. Otherwise, reps' items don't sync between Outlook and Salesforce, and the side panel stops working. This change applies to both Lightning Experience and Salesforce Classic.

#### Give Up Manual Upgrades by Migrating to Lightning for Outlook and Lightning Sync

Compare your Microsoft<sup>®</sup> applications with our system requirements to see if you're ready to migrate to our most innovative Microsoft integration products to date. Get access to our coolest features and—better yet—give up manually installing software for good. This change applies to both Lightning Experience and Salesforce Classic.

## Critical Upgrade Required to Continue Using Salesforce for Outlook

To avoid service disruption, all Salesforce for Outlook users must be working from version 3.0.0 or later by July 2017. At that time, Salesforce disables TLS 1.0 security encryption protocol, and Salesforce for Outlook v2.9.3 and earlier no longer functions. Reps working from those versions can't sync their Microsoft<sup>®</sup> Outlook<sup>®</sup> items to Salesforce nor can they work with their Salesforce records from the side panel. Make sure that your sales teams upgrade as soon as possible to work through any installation issues before July. This change applies 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 from Salesforce.

#### SEE ALSO:

*Knowledge Article*: Prepare Your Users to Continue Using Salesforce for Outlook After TLS 1.0 Is Disabled (can be outdated or unavailable during release preview)

*Knowledge Article*: Prepare Your Users to Continue Using Salesforce for Outlook After TLS 1.0 Is Disabled (can be outdated or unavailable during release preview)

Salesforce Help: Track the Versions of Salesforce for Outlook Your Users Run (can be outdated or unavailable during release preview)

## Retirement for Microsoft® Outlook® 2007 Is Approaching

Microsoft has extended support beyond the previously announced retirement date. To stay aligned, we're extending support, too. However, Outlook 2007 retirement is still pending, and Microsoft has currently scheduled it for October 2017. To continue using Salesforce for Outlook after retirement, start migrating your sales reps to Outlook 2016, 2013, or 2010. Otherwise, reps' items don't sync between Outlook and Salesforce, and the side panel stops working. This change applies to both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

Salesforce Help: Salesforce for Outlook System Requirements (can be outdated or unavailable during release preview)

## Give Up Manual Upgrades by Migrating to Lightning for Outlook and Lightning Sync

Compare your Microsoft<sup>®</sup> applications with our system requirements to see if you're ready to migrate to our most innovative Microsoft integration products to date. Get access to our coolest features and—better yet—give up manually installing software for good. This change applies to both Lightning Experience and Salesforce Classic.

Lightning for Outlook and Lightning Sync are just like Salesforce for Outlook because they let your teams see, access, and update Salesforce content directly from Microsoft Outlook<sup>®</sup>. In addition, your teams can sync important records, like contacts and events, that they update from both systems.

Why make the switch? The biggest difference is that our cloud-based products don't require manual upgrades like Salesforce for Outlook does. Instead, we push the latest upgrades to you. And when your reps spend less time maintaining software, they can spend more time doing what's important: making your customers happy. Because Lightning for Outlook and Lightning Sync support the latest Microsoft applications, we continue to introduce the latest most innovative features for those products.

And keep in mind that although Lightning for Outlook and Lightning Sync include a few features that require Lightning Experience, most features are available from both Salesforce Classic and Lightning Experience.

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.

Happy migrating!

SEE ALSO:

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)

*Salesforce Help*: Lightning for Outlook: Set Up Sales Reps to Experience Salesforce from Microsoft<sup>®</sup> Outlook<sup>®</sup> (can be outdated or unavailable during release preview)

Salesforce Help: Lightning Sync for Microsoft<sup>®</sup> Exchange (can be outdated or unavailable during release preview)

*Salesforce Help*: Considerations for Migrating from Salesforce for Outlook to Lightning for Outlook and Lightning Sync (can be outdated or unavailable during release preview)

# Extended Mail Merge: Easier Setup, and Support for More Microsoft® Word File Types

Extended Mail Merge lets reps generate mail merge Word documents with data from contacts, leads, and other Salesforce records. Because Extended Mail Merge generates Word documents, reps can get mail merged content to prospects or customers in whichever format they like. Reps can send letters, create labels, or attach merged communications to emails. These changes apply to Salesforce Classic only.

EDITIONS

Available in: Salesforce Classic

Available in all editions

#### IN THIS SECTION:

#### Set Up Extended Mail Merge from Salesforce Classic Without a Call to Customer Support

Set up Extended Mail Merge to make it easy for reps to stay aligned on brand messaging when they communicate with prospects and customers. And you no longer have to call Salesforce Customer Support to get access to the product. These changes apply to Salesforce Classic only.

#### Extended Mail Merge Supports Microsoft<sup>®</sup> Word .docx Files

Now you can create mail merge templates for your reps in .docx file format and Extended Mail Merge generates a .docx file as the output, too. These changes apply to Salesforce Classic only.

## Set Up Extended Mail Merge from Salesforce Classic Without a Call to Customer Support

Set up Extended Mail Merge to make it easy for reps to stay aligned on brand messaging when they communicate with prospects and customers. And you no longer have to call Salesforce Customer Support to get access to the product. These changes apply to Salesforce Classic only.

To set up Extended Mail Merge, first, enable the feature from Salesforce Setup. Then, create mail merge templates for your reps in Microsoft Word, authored with your preferred company messaging in mind.

After you upload mail merge templates to Salesforce, reps can generate mail merges directly from their Salesforce records.

Follow these steps to set up Extended Mail Merge for your reps.

- 1. From Setup, enter *User Interface* in the Quick Find box, then, under Advanced, select **Enable Extended Mail Merge**.
- 2. To maintain records of mail merged documents in Salesforce, select Save All Extended Mail Merge documents to Salesforce Documents.

Otherwise, Word files under 3 MB are emailed directly to the rep who generates the mail merge.

- 3. From Word, create a mail merge template using Salesforce merge fields.
- 4. Upload the template to Salesforce so that your reps can access it. From Setup, enter *Mail Merge Templates* in the Quick Find box, then click **New Template**.

SEE ALSO:

Create Mail Merge Templates in Salesforce Classic

## Extended Mail Merge Supports Microsoft<sup>®</sup> Word .docx Files

Now you can create mail merge templates for your reps in .docx file format and Extended Mail Merge generates a .docx file as the output, too. These changes apply to Salesforce Classic only.

#### **USER PERMISSIONS**

To set up extended mail merge and upload mail merge templates:

Customize Application

To generate mail merge documents using extended mail merge:

Manage Public Documents

# Other Changes in the Sales Cloud

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

IN THIS SECTION:

#### Cloud Scheduler Is Being Retired

Cloud Scheduler began phased retirement in Winter '17. It's unavailable in Salesforce orgs created in Winter '17 or later. If you enabled Cloud Scheduler before Winter '17, it remains available in your org until Winter '18. This change applies to Salesforce Classic only.

USER PERMISSIONS

To set up Extended Mail Merge:

Customize Application

#### In Hierarchies, Only Parent Records Are Displayed with Icon for Expanding Row

In a hierarchy, such as an account or campaign hierarchy, only parent records are displayed with an icon indicating that the row can be expanded to show children. Previously, rows for records at the end of a branch appeared to be expandable. This change applies to Lightning Experience only.

#### Make It Easier to Create Orders

You can now add Orders as global actions, so you can choose the pages in Salesforce where your reps can create orders. This change applies to both Lightning Experience and Salesforce Classic.

#### Add and Edit Multiple Order Products

In Lightning Experience, reps can now add multiple products to orders and edit multiple order products at the same time. This change applies to Lightning Experience only.

#### Determine Which Order and Order Product Fields Appear

In Setup in Salesforce Classic, you can now create field sets to control which Order and Order Product fields appear on a Visualforce page. This change applies to Salesforce Classic only.

#### Email Quote PDFs with One Click

In Lightning Experience, reps can now email one or more quote PDFs by clicking **Email PDF** in the Quote PDFs related list or list view. This change applies to Lightning Experience only.

#### Preview Quote PDFs in Firefox

In Salesforce Classic, reps can now preview quote PDFs in Mozilla Firefox. Support for Firefox quote PDF previews in Salesforce Classic began in Spring '17. This change applies to Salesforce Classic only.

#### Person Accounts Show All Cases in Related Lists

The Cases related list on person account records now includes cases where the person account is listed in the **Contact Name** field. Previously, only cases where the person account was listed in the **Account Name** field appeared in the Cases related list. This change applies to Lightning Experience only.

#### Duplicate Management Setup Items Consolidated

In Lightning Experience, the Setup items Duplicate Error Logs, Duplicate Rules, and Matching Rules are now grouped under **Administer** > **Data Management** > **Duplicate Management**. In Salesforce Classic, these items, along with Duplicate Record Sets and Duplicate Record Items, are grouped under **Administration** > **Data** > **Duplicate Management**. Previously, in Lightning, these items were found under **Feature Settings** > **Data.com**; in Salesforce Classic, they were found under **Data.com Administration** > **Duplicate Management**. These changes apply to both Lightning Experience and Salesforce Classic.

#### Ineffective Matching Rules Can't Be Activated

Sometimes a matching rule defines matches so broadly that too many records are defined as possible duplicates. Salesforce blocks activation of such a rule and sends an email with more details to the admin who tried to activate it. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Data.com Prospecting Insights in Lightning Separated from News Component

Prospecting Insights is now a separate component in Lightning Experience. Previously, it was included in the News component. In some orgs the News component was moved in Summer '17, but the Prospecting Insights component remains on account and opportunity pages. You can move or remove it any time using the Lightning App Builder. This change applies to Lightning Experience only.

#### Data.com Tab to Be Available Only to Prospector Customers

The Data.com tab in Salesforce Classic will be available only to licensed customers of Data.com Prospector as of Winter '18. Currently, all Salesforce customers can search for companies, contacts, and leads in the tab. Licensed customers of Data.com Prospector can also import records. This change applies to Salesforce Classic only.

#### Data.com Account Data Assessment to Be Retired

Free account data assessments using the Company Info for Accounts data integration rule are scheduled for retirement in Salesforce as of Winter '18. You will no longer have access to assessments that you've run 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.

#### Stay-in-Touch Requests Enter Retirement

Stay-in-Touch Requests are officially retired. This change applies to Salesforce Classic only.

### Cloud Scheduler Is Being Retired

Cloud Scheduler began phased retirement in Winter '17. It's unavailable in Salesforce orgs created in Winter '17 or later. If you enabled Cloud Scheduler before Winter '17, it remains available in your org until Winter '18. This change applies to Salesforce Classic only.

Important: If you remove the New Meeting Request button, you can't add it back. For more information, see Cloud Scheduler to begin phased retirement with Winter '17.

### **EDITIONS**

Available in: **All** Editions Except **Personal Edition** and **Database.com** 

### In Hierarchies, Only Parent Records Are Displayed with Icon for Expanding Row

In a hierarchy, such as an account or campaign hierarchy, only parent records are displayed with an icon indicating that the row can be expanded to show children. Previously, rows for records at the end of a branch appeared to be expandable. This change applies to Lightning Experience only.



### Make It Easier to Create Orders

You can now add Orders as global actions, so you can choose the pages in Salesforce where your reps can create orders. This change applies to both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

Salesforce Help: Global Actions (can be outdated or unavailable during release preview)

### Add and Edit Multiple Order Products

In Lightning Experience, reps can now add multiple products to orders and edit multiple order products at the same time. This change applies to Lightning Experience only.

### SEE ALSO:

Salesforce Help: Add Products to an Order (can be outdated or unavailable during release preview)

### **EDITIONS**

Available in: Lightning Experience

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

### EDITIONS

Orders are available in: Professional, Enterprise, Performance, Unlimited, and Developer Editions

### **EDITIONS**

Orders are available in: Professional, Enterprise, Performance, Unlimited, and Developer Editions

### Determine Which Order and Order Product Fields Appear

In Setup in Salesforce Classic, you can now create field sets to control which Order and Order Product fields appear on a Visualforce page. This change applies to Salesforce Classic only.

### SEE ALSO:

Salesforce Help: About Field Sets (can be outdated or unavailable during release preview)

### Email Quote PDFs with One Click

In Lightning Experience, reps can now email one or more quote PDFs by clicking **Email PDF** in the Quote PDFs related list or list view. This change applies to Lightning Experience only.

### Preview Quote PDFs in Firefox

In Salesforce Classic, reps can now preview quote PDFs in Mozilla Firefox. Support for Firefox quote PDF previews in Salesforce Classic began in Spring '17. This change applies to Salesforce Classic only.

### Person Accounts Show All Cases in Related Lists

The Cases related list on person account records now includes cases where the person account is listed in the **Contact Name** field. Previously, only cases where the person account was listed in the **Account Name** field appeared in the Cases related list. This change applies to Lightning Experience only.

### **EDITIONS**

Orders are available in: Professional, Enterprise, Performance, Unlimited, and Developer Editions

### **EDITIONS**

Available in: **Performance** and **Developer** Editions

In Sales Cloud, also available in: **Professional**, **Enterprise**, and **Unlimited** Editions

### **EDITIONS**

Available in: **Performance** and **Developer** Editions

In Sales Cloud, also available in: **Professional**, **Enterprise**, and **Unlimited** Editions

### EDITIONS

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

### Duplicate Management Setup Items Consolidated

In Lightning Experience, the Setup items Duplicate Error Logs, Duplicate Rules, and Matching Rules are now grouped under **Administer** > **Data Management** > **Duplicate Management**. In Salesforce Classic, these items, along with Duplicate Record Sets and Duplicate Record Items, are grouped under **Administration** > **Data** > **Duplicate Management**. Previously, in Lightning, these items were found under **Feature Settings** > **Data.com**; in Salesforce Classic, they were found under **Data.com Administration** > **Duplicate Management**. These changes apply to both Lightning Experience and Salesforce Classic.

### Ineffective Matching Rules Can't Be Activated

Sometimes a matching rule defines matches so broadly that too many records are defined as possible duplicates. Salesforce blocks activation of such a rule and sends an email with more details to the admin who tried to activate it. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

**Example**: Suppose that you have 1,000 accounts, all in the United States, and your rule determines whether accounts match only by looking for the same billing country. All your accounts are identified as duplicates of one another.

### Data.com Prospecting Insights in Lightning Separated from News Component

Prospecting Insights is now a separate component in Lightning Experience. Previously, it was included in the News component. In some orgs the News component was moved in Summer '17, but the Prospecting Insights component remains on account and opportunity pages. You can move or remove it any time using the Lightning App Builder. This change applies to Lightning Experience only.

SEE ALSO:

 $\odot$ 

See News in a New Way *Salesforce Help*: Prospecting Insights in Lightning (can be outdated or unavailable during release preview)

### Data.com Tab to Be Available Only to Prospector Customers

The Data.com tab in Salesforce Classic will be available only to licensed customers of Data.com Prospector as of Winter '18. Currently, all Salesforce customers can search for companies, contacts, and leads in the tab. Licensed customers of Data.com Prospector can also import records. This change applies to Salesforce Classic only.

### **EDITIONS**

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

### EDITIONS

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

### **EDITIONS**

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

EDITIONS

Available in: Contact Manager, Group, Professional, Enterprise, Performance, and Unlimited Editions

### Data.com Account Data Assessment to Be Retired

Free account data assessments using the Company Info for Accounts data integration rule are scheduled for retirement in Salesforce as of Winter '18. You will no longer have access to assessments that you've run 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.

For details, see Data.com Account Data Assessment will be retired with Winter '18 release.

SEE ALSO:

Salesforce Help: Get an Assessment of Your Account Data (can be outdated or unavailable during release preview)

### Stay-in-Touch Requests Enter Retirement

Stay-in-Touch Requests are officially retired. This change applies to Salesforce Classic only.

For details, see the frequently asked questions.

## Available in all editions

### Pardot: Engagement Studio Enhancements and More Engage Reporting Options

We've improved Salesforce Engage reporting, so you can get more insights into your team's campaigns. We've also added even more options for managing assignments and automation from engagement programs.



**EDITIONS** 

Available in: **All**Pardot Editions

IN THIS SECTION:

Pardot Engagement Studio: Salesforce Queue Assignment and Scoring Category Automation

Save time and use workflows by managing prospect assignments from Engagement Programs. Automate based on scoring category, and adjust scores from Engagement Programs.

### Track and Report on Your Team's Engage Emails

Salesforce Engage Team Reports give sales managers, admins, and marketers insight into the effectiveness of Engage emails. Track usage and impact for your teams and individual reps, and track which templates and campaigns drive the best results.

### Pardot Engagement Studio: Salesforce Queue Assignment and Scoring Category Automation

Save time and use workflows by managing prospect assignments from Engagement Programs. Automate based on scoring category, and adjust scores from Engagement Programs.

EDITIONS

Available in all editions

IN THIS SECTION:

Manage Prospect Assignments from Engagement Programs via Salesforce Queues Push unassigned prospects to your Salesforce queues, and manage prospect assignments using your workflows in Salesforce.

EDITIONS

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

### Adjust Scoring Category Scores Based on Prospect Activity

Increase or decrease a prospect's Scoring Category score. The new Adjust Score in Scoring Category Engagement Program action lets you adjust scores for product lines, regions, and divisions, right from your Engagement Program.

### Check Scoring Category Scores in Engagement Programs

Segment and define paths based on a prospect's score in a specific scoring category. Now you can segment prospects based on different product lines, regions, and divisions, right from your Engagement Program.

### Manage Prospect Assignments from Engagement Programs via Salesforce Queues

Push unassigned prospects to your Salesforce queues, and manage prospect assignments using your workflows in Salesforce.

### Adjust Scoring Category Scores Based on Prospect Activity

Increase or decrease a prospect's Scoring Category score. The new Adjust Score in Scoring Category Engagement Program action lets you adjust scores for product lines, regions, and divisions, right from your Engagement Program.

### Check Scoring Category Scores in Engagement Programs

Segment and define paths based on a prospect's score in a specific scoring category. Now you can segment prospects based on different product lines, regions, and divisions, right from your Engagement Program.

### Track and Report on Your Team's Engage Emails

Salesforce Engage Team Reports give sales managers, admins, and marketers insight into the effectiveness of Engage emails. Track usage and impact for your teams and individual reps, and track which templates and campaigns drive the best results.

Before, managers had no way to report on the effectiveness of their team's Engage emails. With Engage Campaigns or Engage for Gmail and Outlook, managers can now view stats on emails sent, delivered, opened, clicked, unsubscribed, and bounced. Sales managers can also drill in and compare stats for individual sales reps. Marketers can use these reports to identify the top performing templates by opens and clicks, letting them encourage use of these templates to drive better results.

**EDITIONS** 

Available in: **All** Pardot Editions with Salesforce Engage.

### Service: Better Routing, Faster Setup, and More Power to the Field

Route cases and push work to the right agent at the right time with Lightning Omni-Channel. Set up Lightning Knowledge and Communities painlessly with our guided, step-by-step setup flows. And get more done remotely with Field Service Lightning preventative maintenance, parts requests, and stock transfers. Work where your customers are!

#### IN THIS SECTION:

See Where Your Service Cloud Features Stand with Lightning Experience

Curious about Lightning Experience but not sure where to begin? Get specific advice on how to prepare several of your Service Cloud features and customizations for Lightning Experience. Kick off the Lightning Experience Readiness Check, then use the resulting report to start planning a rollout customized for your Salesforce implementation. This change applies to both Lightning Experience and Salesforce Classic.

### EDITIONS

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

### Service Console: Increased Efficiency for All (Generally Available)

The Service Console in Lightning Experience is now generally available and includes a bunch of enhancements. Features like split view, keyboard shortcuts, case hovers, and more are aimed at keeping your support agents productive. With Community 360, agents can see which articles a customer has looked at. But we didn't forget about our awesome admins. Now you can set up service-related features like Lightning Communities and Lightning Knowledge in a jiffy.

### Cases: A Better Compact Feed, Feed Filters, and Case Comments Come to Lightning Experience

Get a quicker view of case activity with the improved compact case feed. Use case feed filters, and log calls faster with a Lightning-optimized Log a Call quick action. Most of these changes apply to Lightning Experience only; however, a few apply to Salesforce Classic and Salesforce1.

### Lightning Knowledge: Generally Available

Lightning Knowledge, now generally available, brings customization capabilities to the Record Home page, the ability to import record types and related files to the Files Object, Knowledge set up in Lightning Experience, support for Communities and much more. This change applies to Lightning Experience only.

### Omni-Channel: Introducing Lightning Omni-Channel Routing and External Routing (Beta)

Route cases and push work to the right agent at the right time, now in Lightning Experience. Plus, use an external routing implementation with Omni-Channel. This change applies to both Lightning Experience and Salesforce Classic.

### Field Service: Part Transfers, Preventive Maintenance, and Timesheets

Generate maintenance service appointments so your customers never miss a beat. Keep track of your parts and van stock and get the right part to the right location. Record your workforce hours with Field Service timesheets. The Field Service Lightning managed package has cluster appointments based on location, emergency scheduling, and an improved scheduler console.

### Mobile Field Service: Field Service Lightning iOS App Turns 2.0, Android App in Beta

The Android app beta brings Field Service Lightning to even more phones. The iOS app celebrates turning version 2.0 with enhancements to the settings page including more branding options and geolocation accuracy. Service reports are more reliable with service report previews that let you verify a report before creating it. Also, finding work orders has never been easier with the location tab and support for multiple service appointment list views. Support for multiday appointments lets you handle long jobs more easily. And users in your Community can also use the Field Service Lightning mobile app too!

#### Social Customer Service: New Lightning Experience Features and Increased Agent Efficiency

Take advantage of the speed and power of Lightning Experience to set up Social Customer Service in Professional Edition, and give agents tools to work faster and more efficiently. You can use the new setup node in Lightning to install Social Customer Service. And your agents can do more with Facebook and Twitter posts and view multiple attachments in their case feed.

#### Snap-ins for Web: Snap-ins for Lightning Communities and Improved Snap-ins Chat Functionality

Snap-ins Chat is bigger and better. There's loads more chat functionality, and you can add your snap-in to a Lightning community using the Community Builder. This change applies to both Lightning Experience and Salesforce Classic.

#### Snap-ins for Mobile Apps SDK: It Just Keeps Getting Better

In the June 2017 release of this SDK, you can customize buttons with the new floating action button API. We also support pre-chat fields for Live Agent and provide more control over the caching behavior of your Knowledge articles.

#### Other Changes in Service Cloud

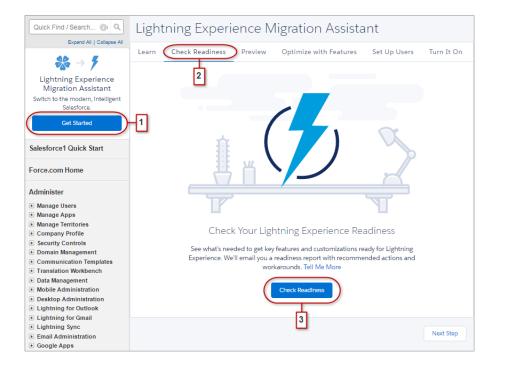
Learn about other changes we've made in the Service Cloud.

### See Where Your Service Cloud Features Stand with Lightning Experience

Curious about Lightning Experience but not sure where to begin? Get specific advice on how to prepare several of your Service Cloud features and customizations for Lightning Experience. Kick off the Lightning Experience Readiness Check, then use the resulting report to start planning a rollout customized for your Salesforce implementation. This change applies to both Lightning Experience and Salesforce Classic.

The Readiness Check gives you insight on how to prepare Service features like Cases, Salesforce Console, and Salesforce Knowledge for Lightning Experience. You also get Lightning Experience roadmap and usage details on features like Live Agent, Omni-Channel, Entitlements, and more.

To evaluate your Salesforce implementation, kick off the Readiness Check from the Lightning Experience Migration Assistant. From Setup, click **Get Started** in the Migration Assistant tile (1). On the Check Readiness tab (2) in the Migration Assistant, click **Check Readiness** (3).



### **EDITIONS**

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

### USER PERMISSIONS

To kick off the Lightning Experience Readiness Check:

Customize Application
 AND

Modify All Data

After kicking off the check, we email you a Readiness Report that includes our most up-to-date recommendations on how you can prepare for Lightning Experience.

SEE ALSO:

Lightning Experience Resources: Readiness Check and Feature Optimization *Salesforce Help*: Kick Off the Lightning Experience Readiness Check (can be outdated or unavailable during release preview)

**EDITIONS** 

### Service Console: Increased Efficiency for All (Generally Available)

The Service Console in Lightning Experience is now generally available and includes a bunch of enhancements. Features like split view, keyboard shortcuts, case hovers, and more are aimed at keeping your support agents productive. With Community 360, agents can see which articles a customer has looked at. But we didn't forget about our awesome admins. Now you can set up service-related features like Lightning Communities and Lightning Knowledge in a jiffy.

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

#### IN THIS SECTION:

### Supercharge Your Productivity in the Lightning Service Console App

To keep your support agents happy and efficient, we're giving them some awesome new features. Keyboard shortcuts and split view let agents manage cases faster and with fewer clicks. Combine all that goodness with the new Omni-Channel utility, and your agents have even more power at their fingertips. These changes apply to Lightning Experience only.

#### More Lightning Service Setup Flows (Beta)

Our setup flows take the guesswork out of enabling core service features. Great for newbies or seasoned admins, setup flows walk you through the setup process without having to consult a help topic. Lightning Service now offers setup flows for Lightning Knowledge and Lightning Communities. In the Recommended Setup window, we've also added an easy way to customize your case statuses. This change applies to Lightning Experience only.

#### Streamline Support for Customers with Community 360 (Pilot)

Help support agents decrease customer frustration, and improve support. Community 360 shows support agents working in the console whether customers have already looked at pertinent documentation, and if they've already filed any cases before calling support. Agents don't suggest articles customers have already accessed, or open duplicate cases. This feature is new in Lightning Experience.

#### SEE ALSO:

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

### Supercharge Your Productivity in the Lightning Service Console App

To keep your support agents happy and efficient, we're giving them some awesome new features. Keyboard shortcuts and split view let agents manage cases faster and with fewer clicks. Combine all that goodness with the new Omni-Channel utility, and your agents have even more power at their fingertips. These changes apply to Lightning Experience only.



Walk Through It: Explore Lightning Console Apps

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1 My Cases 🔹	💼 00001001 🔤 Edward Stam 🗴	Acme x	
3 Items • Updated 26 minutes ago 🔠 • 🕑	Case Details	Sample Case 2: Widgets are wrong size	RELATED KNOWLEDGE
CASE NUMBER 🕇	Case Number Case Owner	FEED DETAILS	• 3 Files (2)
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00001001 Edward Stamos	On Hold / Medlum	Post Log a Call Email	1-01 F
Sample Case 2: Widgets are wrong size On Hold	Subject		widge 🏠
00001002 Edward Stamos Sample Case 3: Cannot track order On Hold	Sample Case 2: Widgets are wrong size Description	Share an update	Shore Drop Files 2
	Widgets don't fit in implementation.	2 pst Recent Activity  Q Search this feed	I C Nove
	Es Contact Details	All Updates Emails Call Logs Text Posts Status Changes	View All
	Name		27m ago 🔻
	Edward Stamos	Case status updated	Activity History (1)
	Title Account Name President and CEO / Acme	Admin User	Call Call 28m ago V Namo: Edward Stamos Assigned To: Admin User Last Modified 3/22/2017 1:48 PM
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	4 Sample Case 3: 0	Annot track order March 22, 2017 at	at 1:48 PM 💌
	00001001 Priority Status	Case Number	
	Subject: Low On Hold Priority:	00001002	
	00001002 Description		
	Subject: Priority: Customer says the tracking number is	t working.	
	Date/Time O. Latest Update		
	Admin User	March 15, 2017 at 12:52 PM still can't get the tracking number to work.	
	-		
	Call Name: Edward Stamos Assigned To: Admin User	•	
⊙ History ₽ Notes (J Omni-Channel (Beta)) 5	Assigned To: Admin User	T	

#### Keep Everything at Hand with Lightning Console Split View (1)

Support agents can expand and collapse a list of records from any record page in the console. Your agents can glance at a list of cases while working on one. Split view is enabled by default.

#### Less Is More—the Compact Case Feed (2)

If you've ever had a case that drags on and on, you know that the Case Feed becomes a very busy place. So we cut out much of the "noise" for your agents in the Service Console app. The Lightning compact case feed is enabled by default.

#### Drag Files onto Files and Attachments Related Lists (3)

To add files, support agents can drag them directly onto a Files or Attachments related list. Agents don't have to use a menu to add files anymore. This feature is enabled by default.

#### Preview Case Details with Case Hovers (4)

Support agents can take a sneak peek at the details of a case, including the latest update. Talk about a time saver! Instead of opening a case to see the latest update in the case feed, agents simply hover over the case link. Case hovers are enabled by default.

#### Add the Omni-Channel Utility to the Service Console (Beta) (5)

To let your support agents work with Omni-Channel, add the utility to the Service Console app. Keep in mind that this utility has limitations.

#### Boost Productivity with Keyboard Shortcuts for Lightning Console Apps

Support agents can search for, edit, save, and close a case without touching a mouse! We've even got shortcuts to navigate tabs, open utilities, go to the publisher, list view, and even the item menu. With keyboard shortcuts, agents have more power at their fingertips. Talk about an efficiency and productivity boost! Keyboard shortcuts are enabled by default.

#### Work with Person Accounts in Lightning Console Apps

Support agents can view person accounts in the Service Console because they're now fully supported in Lightning console apps.

#### Customize Console Apps with the Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps.

This API brings the benefits of the Console Integration Toolkit, which works only in Salesforce Classic, to Lightning Experience and integrates with Lightning components used in Lightning console apps and the utility bar.

### SEE ALSO:

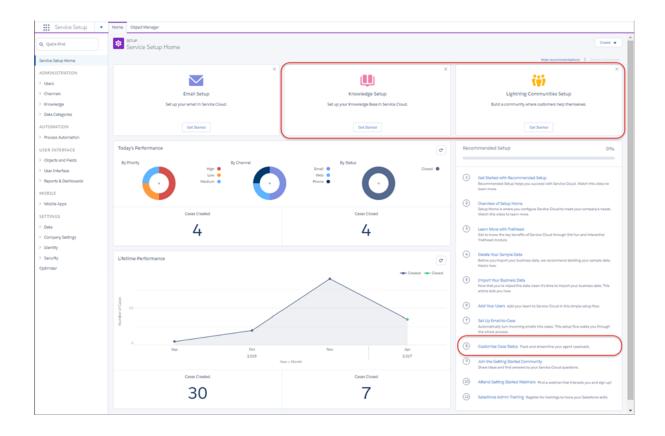
Salesforce Help: Lightning Experience Console Limitations (can be outdated or unavailable during release preview)

### More Lightning Service Setup Flows (Beta)

Our setup flows take the guesswork out of enabling core service features. Great for newbies or seasoned admins, setup flows walk you through the setup process without having to consult a help topic. Lightning Service now offers setup flows for Lightning Knowledge and Lightning Communities. In the Recommended Setup window, we've also added an easy way to customize your case statuses. This change applies to Lightning Experience only.

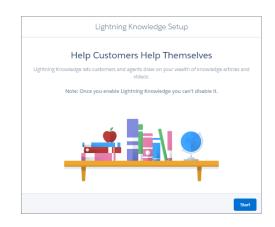
Note: This release contains beta versions of Lightning Service setup flows, which means they are high-quality features with known limitations. Lightning Service setup flows aren't generally available in documentation or press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features.

Tip: To use the setup flows, open the Service Console app. In the header, click op and select Service Setup.



### Lightning Knowledge Setup Flow

Use a setup flow to enable Lightning Knowledge. From the Service Setup home page, click **Get Started** under the Knowledge Setup tile.



Follow a few prompts, and before you know it, you've created the framework for your business's knowledge base.

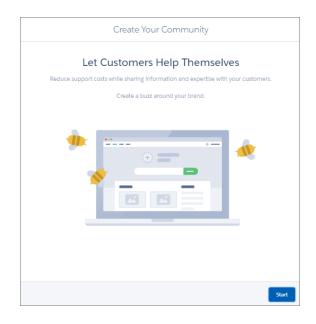
Behind the scenes, the flow enables Lightning Knowledge, verifies licenses and users, creates the required permission sets, assigns users, and creates data categories.

At the end of the flow, you can opt to set up other features or access helpful setup topics.

### Lightning Communities Setup Flow

You can also use a setup flow to enable Lightning Communities. Like the other Service Setup flows, they've all got at least one thing in common—an *easy* setup experience!

Note: We recommend setting up Lightning Knowledge before going through the Lightning Communities setup flow. If Knowledge isn't enabled before starting the Lightning Communities setup, Data Categories aren't created during the Communities setup flow.



From the Service Setup home page, click **Get Started** under the Lightning Communities Setup tile. The setup flow builds your community using the Customer Service (Napili) template. In the setup flow, you name your community, create the URL, add navigational and featured

topics, and assign articles to topics. At the end of the flow, you can opt to set up other features or access helpful setup topics. When you're done, you can preview your community with co-workers before it goes live.

### Access Customize Case Status from the Recommended Setup Window

Service Cloud offers various case statuses that your support agents can use. But what if your support managers want to invent some on their own? That's where Customize Case Status comes in. Click **Customize Case Status** under Recommended Setup to open a pop-up where you can add new case statuses, toggle them on and off, and assign Default or Closed statuses.

	Customize ( Track and streamline )		ads.	
Active	Status Name	Closed	Default	
$\checkmark$	New Status		۲	•
$\checkmark$	Closed		•	\$
	Another Status			\$
	Normal Processing	~	•	<b>‡</b>
	ADD NEV	V STATUS		
Status Na	ame			Add
				Finish

Take advantage of the drag-and-drop functionality, or use the arrows to arrange the order of case statuses.

### Streamline Support for Customers with Community 360 (Pilot)

Help support agents decrease customer frustration, and improve support. Community 360 shows support agents working in the console whether customers have already looked at pertinent documentation, and if they've already filed any cases before calling support. Agents don't suggest articles customers have already accessed, or open duplicate cases. This feature is new in Lightning Experience.

() Important: We provide Community 360 to customers through a pilot program that requires agreement to specific terms and conditions. To participate in the program, contact Salesforce. Pilot programs are subject to change, and we can't guarantee acceptance. Community 360 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.

REL	ATED	COMMUNITY 360
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To use Community 360, contact Salesforce to enroll in the public pilot program. Then you can enable it in the communities where you want to gather information and give the profile permissions to your support agent.

To enable it in the community, select Gather Community 360 data preference in the Administration workspace.

Settings	Preferences
Preferences	
Members	General
wembers	Show nicknames
Tabs	Give access to public API requests on Chatter
Desertion -	Community 360 data include most recently
Branding	Users can send and receive prival viewed articles. Make sure this type of data gathering complex with your company
Login & Registration	Let guest users view asset files or     privacy policies.
	🖾 Gather Community 360 data 🗞
Emails	Use custom Visualforce error pages 1
Pages	Show all settings in Workspaces

Then, assign the View Community 360 profile permission to the customer support profiles that require it.

You can set up Community 360 in the Lightning App Builder. Drag and drop the Community 360 component on any case or contact page layout.

**EDITIONS** 

# Cases: A Better Compact Feed, Feed Filters, and Case Comments Come to Lightning Experience

Get a quicker view of case activity with the improved compact case feed. Use case feed filters, and log calls faster with a Lightning-optimized Log a Call quick action. Most of these changes apply to Lightning Experience only; however, a few apply to Salesforce Classic and Salesforce1.

#### IN THIS SECTION:

#### Less Is More—the Compact Case Feed

If you've ever had a case that drags on and on, you know that the case feed becomes a very busy place. So we've cut out much of the "noise" for your agents using Lightning Service Console. This change applies to Lightning Experience only.

#### Filter Your Case Feed in Lightning Experience

Support agents can find what they're looking for in a case faster by using filters in feed-based case page layouts. This change applies to Lightning Experience only.

#### View, Create, Edit, and Delete Case Comments

View complete case comments in the case feed for Lightning Experience. You can also see complete case comments in the Case Comments related list, where you can edit or delete them. And you can create a Lightning Experience quick action for creating case comments that you can add to a page layout. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### See Email Attachments in the Case's Attachment Related List

We've made it easier for your agents to identify attachments that originated from customer emails or that were sent to customers via email. On any case page that includes the Attachments related list, agents see email attachments in the related list. Previously, email attachments weren't displayed. This feature is enabled by default. This change applies to Lightning Experience only.

#### Send Snazzier Emails with a Better Rich-Text Toolbar

Our email publisher just got a touch-up. If you've added the HTML Body to the Lightning-optimized Case Email quick action layout, your agents see a cleaner toolbar for formatting rich text. This change applies to Lightning Experience only.

#### The Send Email Quick Action Is Renamed Email

We've shortened the label of the Lightning Experience *Send Email* quick action to *Email*. Why? Because the label was often getting cut off (ouch). This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Log a Call Action Available for Lightning Experience

Lightning Experience has a new Log a Call quick action optimized for the case feed. You're no longer limited to the global action, which didn't have all the features of Log a Call in Salesforce Classic, such as autopopulating the case contact and autolinking the call log to the case. Now, Log a Call actions for Lightning and Classic work the same: yay. This change applies to both Lightning Experience and Salesforce Classic.

#### Reply to Social Posts in the Case Feed

Support agents can reply to social posts directly in the case feed for Lightning Experience. Previously, you could reply to social posts only in Salesforce Classic. This change applies to Lightning Experience only.

### Less Is More—the Compact Case Feed

If you've ever had a case that drags on and on, you know that the case feed becomes a very busy place. So we've cut out much of the "noise" for your agents using Lightning Service Console. This change applies to Lightning Experience only.

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

Feed posts below the first one are now condensed by default, so you can scan the page and quickly get the gist of what's happened on

a case. Need more info on a post? Just click > or the post header to see the details. Or click 🔳 to expand all visible posts and get the full picture.

All Updates	Emails C	all Logs	Text Posts	
~ 0	Test User To: Internal		March 17, 2	017 at 1:17 PM 💌
f	Prudence, indeed, will dictate or light and transient causes nore disposed to suffer, whil he forms to which they are a Comment	; and accordingly a e evils are sufferab	II experience hath shewr	n, that mankind are
> <b>0</b>	est User That whenever any Form	of Government be		017 at 1:16 PM 💌 ese ends, it is th
> 8	<b>Test User</b> That to secure these righ	ts, Governments a		017 at 1:16 PM 💌 , deriving their
> 0	<b>Test User</b> We hold these truths to b	oe self-evident, tha		017 at 1:15 PM 💌
> 0	Test User and to assume among th	e powers of the ea		017 at 1:15 PM 💌 ual station to w
> 0	Test User When in the Course of h	uman events, it be		017 at 1:14 PM 💌 people to disso

### Filter Your Case Feed in Lightning Experience

Support agents can find what they're looking for in a case faster by using filters in feed-based case page layouts. This change applies to Lightning Experience only.

For support agents, Lightning Experience feed filters work just like Salesforce Classic filters. Lightning Experience users see any custom feed filters created in your instance of Salesforce.

Latest Posts 🔻			Q Search	this feed	<u>•</u>
All Updates	Emails	Call Logs	Text Posts	Status Changes	More
	User Case status updat	ed		April 3, 2017	7 at 9:18 AM

You can't use Tasks and Events, Live Chat Transcripts, or Community Answers case feed filters in Lightning Experience. If you add them to the Case Feed Publisher layout, they won't render on the page.

Chatter REST API and Chatter in Apex support case feed custom filters.

### View, Create, Edit, and Delete Case Comments

View complete case comments in the case feed for Lightning Experience. You can also see complete case comments in the Case Comments related list, where you can edit or delete them. And you can create a Lightning Experience quick action for creating case comments that you can add to a page layout. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

Note: If you already have a Case Comments related list on a record page, users can see complete case comments, and edit and delete them, by default. To enable users to create case comments from the publisher, create a quick action.

Post	Poll	Email	Update Case	Case Comment	
* Body Here's Public	s a new ca	ase commer	nt		6
					Save

To create a Case Comment quick action in Setup, enter *Object Manager* in the Quick Find box, then select **Case**. Select **Buttons**, **Links**, and Actions, then click **New Action**. When creating a Case Comment quick action, use the following settings:

- Object Name: Case
- Action Type: Create a Record
- Target Object: Case Comment
- Standard Label Type: None
- Label: Case Comment (suggested)
- Name: (auto populates)
- Create Feed Item: Selected (default)

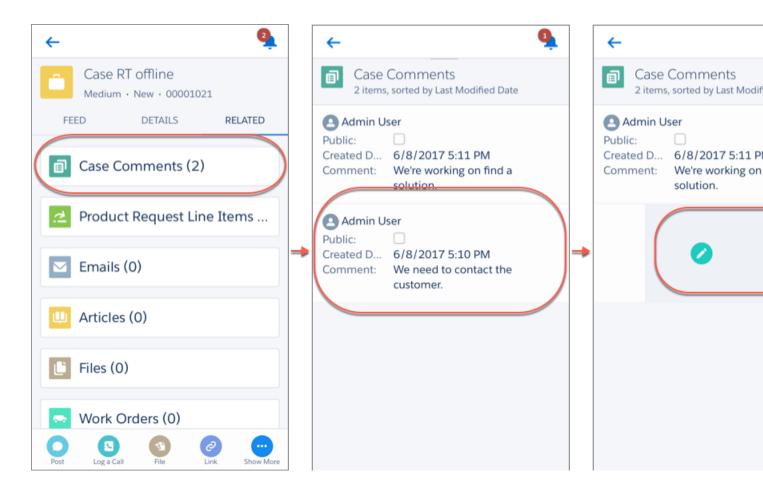
Clicking **Save** takes you to the Edit Layout page, where you can customize the fields displayed by the quick action. There are some known issues with Edit Layout (the same as in Salesforce Classic):

- The Body field is always required, even if Required isn't selected in its Field Properties dialog (invoked by double-clicking the field).
- The Public field is available only if you have Communities enabled.
- The Public field is labeled Published in the quick action layout editor.

You can add a Case Comments related list using the page layout editor. Your agents can view, edit, and delete comments from the related list.

Some things to let your users know about:

- If you edit or delete a comment from a Case Comments or an Email related list, the feed doesn't automatically refresh. You need to refresh the page (or the tab in the console) to see your changes.
- If you sort a Case Comments related list and then refresh it or close and return to it, your sort preferences aren't saved. •



#### SEE ALSO:

Salesforce Help: Create Object-Specific Quick Actions (can be outdated or unavailable during release preview)

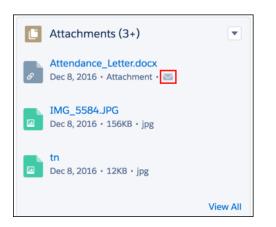
### See Email Attachments in the Case's Attachment Related List

We've made it easier for your agents to identify attachments that originated from customer emails or that were sent to customers via email. On any case page that includes the Attachments related list, agents see email attachments in the related list. Previously, email attachments weren't displayed. This feature is enabled by default. This change applies to Lightning Experience only.



Tip: Let your agents know that they can also drag files onto the related list!

Attachments from emails are displayed with an email icon.



When an agent clicks View All on the Attachments related list, the Source column lists from where the file originated.

Att	ES > 00001000 achments ems • Sorted by Source • Up	dated a few seconds ago			Upload Files C <sup>4</sup>
	TITLE	LAST MODIFIED	CREATED BY	CONTENT SIZE	SOURCE ↓
1	Screen Shot 20.	. 3/2/2017 5:43 PM	Kumar` K	84KB	RE: Test [ ref:_00 💌
2	Attendance_Le.	. 12/8/2016 6:24 AM	Kumar` K	-	RE: Test [ ref:_00 💌
3	IMG_5584.JPG	12/8/2016 6:12 AM	Kumar` K	156KB	<b>00001000</b>
4	🖻 tn	12/8/2016 6:12 AM	Kumar` K	12KB	<b>00001000</b>
5	pastedImage0	. 12/8/2016 6:12 AM	Kumar` K	276KB	<b>00001000</b>

If you're using Email-to-Case, make sure that your agents know about this productivity booster.

If you don't want to see email attachments, disable the Show Email Attachments in Case Attachments Related List preference on the Support Settings page in Setup.

#### SEE ALSO:

Drag Files onto Files and Attachments Related Lists

### Send Snazzier Emails with a Better Rich-Text Toolbar

Our email publisher just got a touch-up. If you've added the HTML Body to the Lightning-optimized Case Email quick action layout, your agents see a cleaner toolbar for formatting rich text. This change applies to Lightning Experience only.

Subject	RE: I'm such	n a happy	customer!							
<u>I</u> <sub>x</sub> <u>A</u>	B- B	ΙU	<del>S</del> 🖬	8	R 🎮	E 3	1	:= ;	]= <u>.</u>  E	t)E
Font	- Size	•	Format	•						
Dear Ms.	Нарру:									
We are th	We are <i>thrilled</i> to have you as a customer!									

Some added features in this new formatting toolbar:

- Text color
- Background color
- Anchors
- Font menu
- Size menu
- Format (paragraph) menu

#### SEE ALSO:

Salesforce Help: Action Layout Editor (can be outdated or unavailable during release preview)

### The Send Email Quick Action Is Renamed Email

We've shortened the label of the Lightning Experience *Send Email* quick action to *Email*. Why? Because the label was often getting cut off (ouch). This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

This change affects only the Label field. The API Name field remains SendEmail. If you want to You can change or customize the label in Setup.

The Lightning-optimized Email quick action resides in the case page layout editor under Salesforce1 & Lightning Actions *and* under Quick Actions. You have two Email actions under Salesforce1 & Lightning Actions, and you might see three under Quick Actions.

Oh boy. How can you tell which one you want?

Hover over each to check the attributes. The Name and Create Feed Item attributes help identify which is which.

Salesforce Classic Case Email Quick Action	Global Email Quick Action	Lightning-Optimized Case Email Quick Action	
(Salesforce Classic UI only)	(All page layout editors, but is suppressed when case pages are rendered)	(Appears in All Uls)	
Email     Label: Email       Email     Name: Case.Email       Email     Action Type: Email       File     Log a 0	Email       Link         Email       Log a Call         Email       Label: Email         File       Name: SendEmail         Action Type: Send Email       Target Object: Outgoing Email         Create Feed Item: Yes       Create Feed Item: Yes	Email     Link       Email     Log a Call       Email     Log a Call       File     Label: Email       Action Type: Send Email       Target Object: Email Message       Create Feed Item: Yes       This Item is currently in use (click to locate)	
Name: Case.Email	Name: SendEmail	Name: Case.SendEmail	
(creates feed item by default)	Create Feed Item: Yes	Create Feed Item: Yes	

Salesforce Classic Case Email Quick Action	Global Email Quick Action	Lightning-Optimized Case Email Quick Action
(To use, Enable Case Feed Actions and Feed Items must be enabled under Support settings.)		(To use in Classic, Enable Case Feed Actions and Feed Items must be disabled under Support settings.)

### Log a Call Action Available for Lightning Experience

Lightning Experience has a new Log a Call quick action optimized for the case feed. You're no longer limited to the global action, which didn't have all the features of Log a Call in Salesforce Classic, such as autopopulating the case contact and autolinking the call log to the case. Now, Log a Call actions for Lightning and Classic work the same: yay. This change applies to both Lightning Experience and Salesforce Classic.

The Lightning-optimized Log a Call action resides in the case page layout editor under Salesforce1 & Lightning Actions *and* under Quick Actions. You now see two Log a Call actions under Salesforce1 & Lightning Actions, and three under Quick Actions.

So how can you tell which one you want?

Hover over each to check the attributes. The Name and Create Feed Item attributes show what's different.

Salesforce Classic Case Log a Call Quick Action	Global Log a Call Quick Action	Lightning-Optimized Case Log a Call Quick Action	
(Salesforce Classic UI only)	(All UIs)	(All Uls)	
Email     Log a Call       File     Log a Call       Link     Mobile Smart Actions       Log a Call     New Account       Label: Log a Call     Name: Case.LogACall       Action Type: Log a Call     Fright Target Object: Task       This Item is currently in use (click to locate)	Email Log a Call New Case File Log a Call Label: Log a Call Label: Log a Call Link Mobile Smi Name: LogACal = Log a Call New Acceut Action Type: Log a Call Target Opticat Task Create Feed Item: Yes	Email Log a Call New Case File Log a Call New Child Mobile Sm Label: Log a Call Case LogACall A Log a Call New Accor Name: Case LogACall a Action Type: Log a Call Target Opgo: Task Create Feed Item: Yes	
Name: Case.LogACall	Name: LogACall	Name: LogACall <sup>2</sup>	
(creates feed item by default)	Create Feed Item : <b>Yes</b> <sup>1</sup>	Create Feed Item : <b>Yes</b> <sup>1</sup>	
	Note: the Target Object field doesn't display under Salesforce1 & Lightning Actions.		

<sup>1</sup> An admin can change the Create Feed Item value for the Global and Lightning-optimized Case quick actions. So what you see in your org might not match what's listed above.

<sup>2</sup> When creating this action, "Case." is appended to the name when you save it.

Some other things to know:

- In new orgs, the Lightning-optimized action is on the case page layout by default.
- When creating case page layouts, use the Lightning-optimized action.

• If your org is using the Salesforce Classic Case quick action, manually replace it with the Lightning-optimized one using the page layout editor.

#### SEE ALSO:

Salesforce Help: Create Object-Specific Quick Actions (can be outdated or unavailable during release preview)

### Reply to Social Posts in the Case Feed

Support agents can reply to social posts directly in the case feed for Lightning Experience. Previously, you could reply to social posts only in Salesforce Classic. This change applies to Lightning Experience only.

### Lightning Knowledge: Generally Available

Lightning Knowledge, now generally available, brings customization capabilities to the Record Home page, the ability to import record types and related files to the Files Object, Knowledge set up in Lightning Experience, support for Communities and much more. This change applies to Lightning Experience only.

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Note: Currently, Lightning Knowledge is best for orgs new to Knowledge or for existing orgs that only have one article type, have few data categories, and use single-language mode. Enabling Lightning Knowledge changes your Org's 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:

### One-Stop Shop for Lightning Knowledge Setup

You can set up Knowledge within the setup node in Lightning Experience. No more switching to Salesforce Classic for Lightning Knowledge setup tasks. This change applies to Lightning Experience only.

#### Take Action with Knowledge Articles in the Sidebar

Users can edit, publish, and archive articles in the Knowledge sidebar from the Service Console. This change applies to Lightning Experience only.

#### View Knowledge Articles, No Clicks Needed

Knowledge users can read article details and perform authoring actions like edit, publish, and archive in a preview panel by hovering over an article in the Knowledge component of the Service Console. Agents can now stay in the case while looking for information. You can even vote on published articles and take authoring actions on the article. This change applies to Lightning Experience only.

#### A Record Home of Your Own—Configure Lightning Knowledge Record Home

Admins can customize record home components to match user workflows, allowing you to present different Knowledge data to different user groups. This change applies to Lightning Experience only.

#### Lightning Knowledge Is Now Supported in Communities

Lightning Knowledge is available in the Customer Service (Napili) template.

### 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 extra cost in: **Professional, Enterprise**, and **Unlimited** Editions.

### Create Engaging Articles with Enhancements to the Lightning Knowledge Rich Text Editor

Create effective articles with features like inserting and formatting text, tables, links, images, and the ability to directly edit source content with the Lightning Knowledge rich text editor. In addition to the new plug-in options, the enhanced Rich Text Editor is compatible with LockerService. This change applies to Lightning Experience only.

#### No Files Left Behind with Lightning Knowledge

Quickly and efficiently import your Knowledge articles with related files into Lightning Experience from the standard article import node in Setup. The files related list lets you link files or other documents to your Lightning Knowledge ArticlesThis change applies to Lightning Experience only.

### Move Them in, Move Them out: Import and Export with Record Types

Lightning Knowledge supports importing and exporting articles with record types for your Knowledge base. You can import articles and specify record types in the article import tool, ensuring that record types assignments in Salesforce Classic remain with your article in Lightning Knowledge. This change applies to Lightning Experience only.

#### Lightning Knowledge Shows Knowledge, Not Articles

In Lightning Knowledge global search results, Salesforce1, and the App Builder, you see Knowledge instead of Articles. This change applies to Lightning Experience only.

### Get Answers on the Go With Knowledge Articles in Salesforce1

Lightning Knowledge is available in Salesforce 1! Search for and view Knowledge articles from anywhere, anytime in all versions of the Salesforce 1 mobile app. You can also access your Article Chatter feed to collaborate with others in your org on article quality and content.

### Find What You Need with Search Layouts in Lightning Knowledge

Summer '17 brings the ability to configure which fields display in search layouts in Lightning Knowledge. This change applies to Lightning Experience only.

### Query Quickly with Updates to SOQL Queries for Knowledge Article Version (KAV)

You are no longer required to specify the language and the published status as a filter when using SOQL to query Knowledge Article Version. If you don't set these filters, they default to the users language and the publish status of "online." This change applies to Lightning Experience only.

#### Check Out New Derived Fields for Knowledge

With new derived fields, the Knowledge Article Version (KAV) object has access to fields from Knowledge Article object. These fields are available for Listviews, Page Layouts, Compact Layouts, Search Layouts, and APIs, enabling you to see the total view count for an article when viewing a version record in a listview or a report. This change applies to Lightning Experience only.

#### Set Up Knowledge in the Lightning Service Setup

You can create a new knowledge base from Lightning Service Setup using a Lightning Knowledge setup flow. This feature is new in Lightning Experience.

#### Considerations for Lightning Knowledge

Lightning Knowledge has some limitations. Consider the following as you decide whether to enable Lightning Knowledge. This change applies to Lightning Experience only.

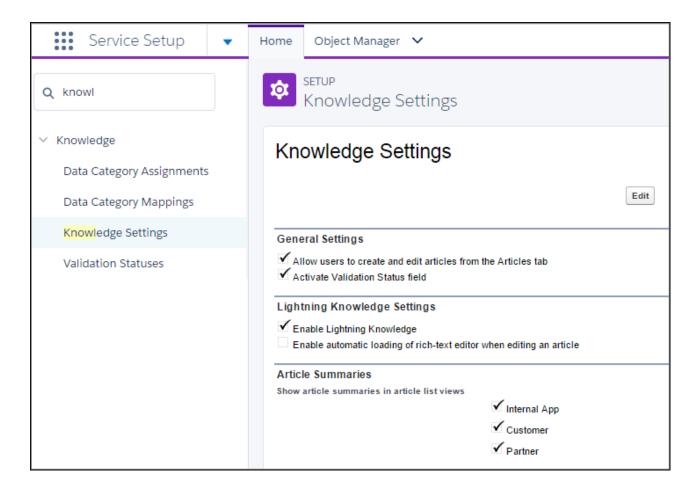
### Knowledge Search: Enhanced Relevance, More Control over Suggested Articles

Experience the improved Knowledge article search. Search for articles by their attached files to find the right article faster. Admins also get more control over article suggestions with increased character limits.

### One-Stop Shop for Lightning Knowledge Setup

You can set up Knowledge within the setup node in Lightning Experience. No more switching to Salesforce Classic for Lightning Knowledge setup tasks. This change applies to Lightning Experience only.

Lightning Knowledge now appears in the setup node where you can enable Lightning Knowledge, assign data categories and much more. Use the Object Manager in Lightning Setup to set up fields, field sets, record types, page layouts, compact layouts, validation rules, and other object metadata.



### Take Action with Knowledge Articles in the Sidebar

Users can edit, publish, and archive articles in the Knowledge sidebar from the Service Console. This change applies to Lightning Experience only.

The Knowledge Sidebar component (previously called the "Article Search" component in the Spring '17 Beta release of Lightning Knowledge), comes with new authoring actions that let agents easily edit, publish, and archive any visible articles in the Knowledge sidebar from the Service Console. The visible authoring actions (Archive, Edit, Delete, Publish) depend on draft status of the article (Draft, Published, Archive). Agents see this feature if they are Knowledge users and have the necessary authoring permissions in their User Profile or Perm Set.

### View Knowledge Articles, No Clicks Needed

Knowledge users can read article details and perform authoring actions like edit, publish, and archive in a preview panel by hovering over an article in the Knowledge component of the Service Console. Agents can now stay in the case while looking for information. You can even vote on published articles and take authoring actions on the article. This change applies to Lightning Experience only.

Hovers give agents a convenient way to view article details in the Lightning Console Sidebar. The hover component has four sections. The highlights panel shows the first four fields defined in compact layout. The body shows the record detail. The bottom left is where users can vote on a published article, and the bottom right includes authoring actions: publish, edit draft, edit as draft, archive, restore. Hovers are automatically enabled in Lightning orgs.

Cases	✓ III m 00001004 ✓ ×	
	FEED DETAILS	KNOWLEDGE RELATED
	Send Email Post Log a Call Social Update Case	Knowledge
1	To Carl KNOWLEDGE Microwave Issues	Search Results (Back to Suggestions) 4 Results - Sorted by Relevance
e plate 🥒	000001009     FAQ     1       Most Recent Activity         Noah Richar      Information	How to write a good Knowledge Article v 000001001 - Not Validated - Last Published 9/22/2016 Tips and tricks for creating a good Knowledge Article
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er) 💌	Microwave-Issues       Lik       Summary       Things to check if your microwave       doesn't work.	Microwave Issues  O00001009 • Validated • Last Published 11/30/2016 Microwave Issues: What to Check Is it plugged in? Did you nuke a CD? How are you feeling?
Name Actors 🖋	Article Content      Question      Account[] ac     for(Integer i	Dryer will not heat up 000001003 · Work In Progress · Last Published 11/21/2016 A service call will be required to determine how to fix this issue. Please call our Service
8-9034 🖉	Account a accts.addl	

### A Record Home of Your Own—Configure Lightning Knowledge Record Home

Admins can customize record home components to match user workflows, allowing you to present different Knowledge data to different user groups. This change applies to Lightning Experience only.

The same concepts for customizing the record homes of other objects in Lightning App Builder are available for customizing Knowledge record home. You can build record homes that match the specific needs of Knowledge users. In addition to out-of-the-box components, you can use components built by partners and developers from the AppExchange. You can even build your own components. The record home functionality gives you the flexibility to move the Ratings, Files, Versions, Data Category Viewer, and Data Category Chooser components to the areas of the page that work best for your users, ensuring they have the right data in the right place at the right time.

### Lightning Knowledge Is Now Supported in Communities

Lightning Knowledge is available in the Customer Service (Napili) template.

## Create Engaging Articles with Enhancements to the Lightning Knowledge Rich Text Editor

Create effective articles with features like inserting and formatting text, tables, links, images, and the ability to directly edit source content with the Lightning Knowledge rich text editor. In addition to the new plug-in options, the enhanced Rich Text Editor is compatible with LockerService. This change applies to Lightning Experience only.

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### No Files Left Behind with Lightning Knowledge

Quickly and efficiently import your Knowledge articles with related files into Lightning Experience from the standard article import node in Setup. The files related list lets you link files or other documents to your Lightning Knowledge ArticlesThis change applies to Lightning Experience only.

To import articles with attached files, use the standard article import node in Setup. The files then appear in the Files related list in Lightning Knowledge.

Considerations when importing files into Lightning Knowledge:

- To ensure that your files show up in the right place, add a header called "Files" in your csv file for import.
- File names can't exceed 255 characters.
- If you want to attach multiple files to an article, use "+" in between file names in the import. For example: Directory/MyFile1.txt + Directory/NewFile1.jpg.
- Wildcard file name matching is supported:
  - '?' Matches any single character.
  - '\*' Matches any sequence of characters (including the empty sequence).

- The valid wildcard pattern must be Directory/wildcardFileName (Directory is optional and does not support wildcard match).
- If the wildcardFileName is matched, the file is associated to the article.

### Move Them in, Move Them out: Import and Export with Record Types

Lightning Knowledge supports importing and exporting articles with record types for your Knowledge base. You can import articles and specify record types in the article import tool, ensuring that record types assignments in Salesforce Classic remain with your article in Lightning Knowledge. This change applies to Lightning Experience only.

With the move from article types to record types in Lightning Knowledge, imported articles can have record types assigned through the article import tool. The record type import capability means you will no longer have to add record types one-by-one on each record after import.

Considerations when importing with Record Types into Lightning Knowledge:

- Make sure that Record Types have been configured in your org.
- In your csv file for import, add a header "RecordTypeld" to specify the Record Type that you want to assign to each Article.
- Add only one Record Type for each article.
- Insert the ID for the Record Type into the csv file.
- To locate the record type id: Salesforce Classic UI => Setup => Knowledge Object Setup => click a specific Record Type to see the ID in the URL.

### Lightning Knowledge Shows Knowledge, Not Articles

In Lightning Knowledge global search results, Salesforce1, and the App Builder, you see Knowledge instead of Articles. This change applies to Lightning Experience only.

### Get Answers on the Go With Knowledge Articles in Salesforce1

Lightning Knowledge is available in Salesforce1! Search for and view Knowledge articles from anywhere, anytime in all versions of the Salesforce1 mobile app. You can also access your Article Chatter feed to collaborate with others in your org on article quality and content.

### Find What You Need with Search Layouts in Lightning Knowledge

Summer '17 brings the ability to configure which fields display in search layouts in Lightning Knowledge. This change applies to Lightning Experience only.

From the Object Manager in Setup, you can control what fields appear with different search results in Lightning. In addition, admins can customize which buttons display in list views and search results. The configurable options for Lightning Knowledge Search Layouts include:

- Listview admins can configure whether the New button shows on the Listview, except for Recently Viewed listview.
- Search Results affects the fields that show in Knowledge Object Home's "Recently Viewed" list view.

Note: Search Filter Fields and Tabs are not currently available in the Search Layout functionality for Lightning Knowledge.

### Query Quickly with Updates to SOQL Queries for Knowledge Article Version (KAV)

You are no longer required to specify the language and the published status as a filter when using SOQL to query Knowledge Article Version. If you don't set these filters, they default to the users language and the publish status of "online." This change applies to Lightning Experience only.

### Check Out New Derived Fields for Knowledge

With new derived fields, the Knowledge Article Version (KAV) object has access to fields from Knowledge Article object. These fields are available for Listviews, Page Layouts, Compact Layouts, Search Layouts, and APIs, enabling you to see the total view count for an article when viewing a version record in a listview or a report. This change applies to Lightning Experience only.

You can access the total view count as a field of the KAV object through SOQL, UI and the Rest API. The data can also be added to page layouts and compact layouts, and used in validation rules. Overall we've added five derived fields, including:

- ArticleArchivedBy
- ArticleArchivedDate
- ArticleCaseAttachCount
- ArticleCreatedBy
- ArticleMasterLanguage

It's important to note that certain features are not supported yet, including Report (CRT), Email templates, and Search layouts. In addition, ArticleCreatedBy and ArticleArchivedBy are not supported in validation rules, list views, and reports.

### Set Up Knowledge in the Lightning Service Setup

You can create a new knowledge base from Lightning Service Setup using a Lightning Knowledge setup flow. This feature is new in Lightning Experience.

To start on your company's new knowledge base, go to the Service Setup home page and click **Get Started** under the Knowledge Setup card.

### SEE ALSO:

More Lightning Service Setup Flows (Beta)

### Considerations for Lightning Knowledge

Lightning Knowledge has some limitations. Consider the following as you decide whether to enable Lightning Knowledge. This change applies to Lightning Experience only.

- Note: Currently, Lightning Knowledge is best for orgs new to Knowledge or for existing orgs that only have one article type, have few data categories, and use single-language mode. Enabling Lightning Knowledge changes the Data Model of your org to use Record Types instead of Article Types. Orgs with multiple articles types require data migration to consolidate Article types before they can enable Lightning Knowledge. Currently, no migration tools are available for this process. IMPORTANT: Once Lightning Knowledge is enabled, it can't be disabled. Test in a Sandbox or Trial org before enabling in production.
- If you have multiple article types in Classic Knowledge, you can't enable Lightning Knowledge currently.
- Lightning Knowledge doesn't support multiple languages and translation. If multi-language is enabled in your org, you cannot enable Lightning Knowledge currently.
- We recommend using Lightning Knowledge only if you have fewer than 300 data categories. If you have more, you can experience slower performance.

### Knowledge Search: Enhanced Relevance, More Control over Suggested Articles

Experience the improved Knowledge article search. Search for articles by their attached files to find the right article faster. Admins also get more control over article suggestions with increased character limits.

IN THIS SECTION:

### Find the Right Article for a Case with Higher Character Limits

We increased the character limit from 100 characters to 250 so that your users can more precisely describe the article that they're looking for. You can also choose which case fields to consider when suggesting articles. This change applies to both Lightning Experience and Salesforce Classic.

### Search by Attached Files to Find Articles Faster

You can search for a Knowledge article by its attached files. For example, service reps search for an article using the search term *F-12345*, which is the name of the file attached to the article they're looking for. This change applies to Lightning Experience only.

### Find the Right Article for a Case with Higher Character Limits

We increased the character limit from 100 characters to 250 so that your users can more precisely describe the article that they're looking for. You can also choose which case fields to consider when suggesting articles. This change applies to both Lightning Experience and Salesforce Classic.

By default, the **Subject** field is considered when suggesting articles. You can now also choose up to five available short text fields. Short text fields return more relevant results. The **Description** field is always considered when suggesting articles for cases and does not count toward the character limit.

Note: This update also applies to suggested articles for work orders and work order line items.

SEE ALSO:

Build Your Knowledge Base

### Search by Attached Files to Find Articles Faster

You can search for a Knowledge article by its attached files. For example, service reps search for an article using the search term *F-12345*, which is the name of the file attached to the article they're looking for. This change applies to Lightning Experience only.

**Note:** This feature is not immediately available to orgs. Once all records of an org get reindexed, the feature is available to that org. This per-org feature enablement is occurring throughout the release.

The attached file's content, including title, is searchable.

SEE ALSO:

Searchable Fields by Object in Lightning Experience

# Omni-Channel: Introducing Lightning Omni-Channel Routing and External Routing (Beta)

Route cases and push work to the right agent at the right time, now in Lightning Experience. Plus, use an external routing implementation with Omni-Channel. This change applies to both Lightning Experience and Salesforce Classic.

### IN THIS SECTION:

### Route Work to Agents in Lightning Experience (Beta)

Support agents can use Omni-Channel in a Service Console app to change their presence status and accept and decline work requests. Agents see different visual notifications in Lightning Experience, but they keep the sonic notifications we introduced in Spring '17. Keep in mind that you can't route certain objects, and Omni-Channel Supervisor isn't currently supported in Lightning Experience. This change applies to Lightning Experience only.

### Use an External Routing Implementation with Omni-Channel (Beta)

When external routing is enabled, use the newest version (40.0) 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. But keep in mind, you can't assign agents to queues of both types—they must either handle work from Omni-Channel routing or external routing. This change applies to Salesforce Classic only.

### Route Work to Agents in Lightning Experience (Beta)

Support agents can use Omni-Channel in a Service Console app to change their presence status and accept and decline work requests. Agents see different visual notifications in Lightning Experience, but they keep the sonic notifications we introduced in Spring '17. Keep in mind that you can't route certain objects, and Omni-Channel Supervisor isn't currently supported in Lightning Experience. This change applies to Lightning Experience only.

Note: This release contains a beta version of the Omni-Channel utility, which means it's a high-quality feature with known limitations. The Omni-Channel utility 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.

To use Lightning Omni-Channel Routing, you must have Omni-Channel enabled in your org. Then add the Omni-Channel utility to a Service Console app using the App Manager.

### Let Agents Accept and Decline Work in the Omni-Channel Utility

When you add the Omni-Channel utility to the Service Console app, agents can accept or decline incoming work requests based on their presence status settings. You can enable push time-out, and auto-accept or decline reasons. You can also set an agent's presence status to change to an offline status when declining a request or a request times out.

Agents can set their presence status using the Omni-Channel utility.

### EDITIONS

Available in: Salesforce Classic, Lightning Experience

Omni-Channel is available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

🥑 Omni-Channel (Beta)	_	🔊 Omni-Channel (Beta) 📃
○ Offline	•	<ul> <li>Available - All</li> </ul>
Your status is set to offline.	×	Billed twice X ✓ Medium   New   00001006 33 s
		Customer network timed out Medium   On Hold   00001003 10 s
Omni-Channel (Beta)		<ul> <li>Omni-Channel (Beta)</li> </ul>

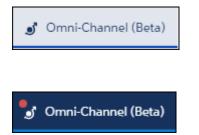
If decline and decline reasons are enabled, agents can decline work and provide a configured decline reason.

<ul> <li>Omni-Channel (Beta)</li> </ul>
Available - All
Billing issue Medium   New   00001008 4 min 26 s
Select a reason for declining
Not right for me
🔊 Omni-Channel (Beta)

### Agents See Different Omni-Channel Notifications with Lightning Experience

Visual Omni-Channel notifications are different in the Lightning Experience Service Console app.

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.

### **Considerations for the Omni-Channel Utility**

The Omni-Channel utility is a beta feature with known limitations. Objects that aren't supported in Lightning Experience can't be routed with Omni-Channel in the Lightning Service Console. Also, active time tracking and Omni-Channel Supervisor aren't supported in Lightning Experience. To use Omni-Channel Supervisor, switch to Salesforce Classic.

You can't route the following objects with Lightning Omni-Channel Routing because they aren't currently supported in Lightning Experience:

- Live Agent chats
- SOS calls

Active Time tracking is unavailable for agents using Lightning Experience. You can see active time data only for agents using Salesforce Classic.

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

### SEE ALSO:

Salesforce Help: Omni-Channel Utility for Lightning Console Apps (can be outdated or unavailable during release preview)

### Use an External Routing Implementation with Omni-Channel (Beta)

When external routing is enabled, use the newest version (40.0) 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. But keep in mind, you can't assign agents to queues of both types—they must either handle work from Omni-Channel routing or external routing. 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 with Omni-Channel 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.

Multiple routing options, one console. Integrate an external routing implementation with your current Omni-Channel implementation to make routing in Salesforce even better.

Contact Salesforce to enable external routing with Omni-Channel.

### Field Service: Part Transfers, Preventive Maintenance, and Timesheets

Generate maintenance service appointments so your customers never miss a beat. Keep track of your parts and van stock and get the right part to the right location. Record your workforce hours with Field Service timesheets. The Field Service Lightning managed package has cluster appointments based on location, emergency scheduling, and an improved scheduler console.

Note: Users need a Field Service Lightning permission set license to access field service features other than work orders. Work orders don't require a special permission set license.

#### IN THIS SECTION:

#### Get Ahead of the Game with Preventive Maintenance

An ounce of prevention is worth a pound of cure. Keep your business and your customers up and running with preventive maintenance plans.

### **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features and managed package are available in Enterprise, Performance, Unlimited, and Developer Editions. Work orders are also available in Professional Edition.

### Get the Right Tool to the Job with Parts Requests and Stock Transfers

Ensure your mobile workforce has the right parts in stock to get the job done every time. Manage your inventory and all transfers throughout a part's life cycle. Track movements from requests to customer. Whether the parts are transferred from the warehouse to the customer or between technicians, your field service center has it covered.

#### Manage Your Mobile Workforce with Time Sheets

Track how much time your field service employees are spending on which tasks.

#### Optimize Scheduling with the Field Service Lightning Managed Package

The Field Service Lightning managed package version 2.0 is available. The package builds on Salesforce's standard field service features to deliver a rich, highly customizable experience for dispatchers and technicians. You can download the package if you have the Service Cloud and a Field Service license.

#### Enjoy Profile-Based Access to Field Service Features

The Field Service Standard permission set license is a thing of the past! Users no longer need the Standard license to access field service objects. The Dispatcher, Scheduling, and Mobile licenses are remaining the same.

#### Resource Absences Can Now Overlap

Previously, it wasn't possible to create a service resource absence whose time period overlapped with another absence. Now, it's okay for absences to overlap.

### Do More with Field Service in the Process Builder

The list of field service objects available in the Lightning Process Builder is growing! You can now use eight more objects in your field service processes.

### Get Ahead of the Game with Preventive Maintenance

An ounce of prevention is worth a pound of cure. Keep your business and your customers up and running with preventive maintenance plans.

To prevent product breakdowns, generate work orders and service appointments based on your product and window for maintenance so your customers never miss a beat.

A maintenance plan has start and end dates, determines how frequently maintenance occurs, and allows you to automatically generate future work orders. It can relate to customers (Accounts), work types, assets (Maintenance Assets), and service contracts (only available in Salesforce Classic). You can generate work orders from a maintenance plan's detail page or via the API.

Note: To generate work orders, you must have "Read" access to assets and "Create" access to work orders and service appointments.

MAINTENANCE				_
MP-0004	+ Follow	New Contact	New Opportunity	New Case 🛛 🔻
			Ne	w Lead
RELATED DE	TAILS		Ed	it 1
			De	lete
✓ General Informa	ation		Cic	one v
Maintenance Plan Numb	er	Start Date	Ch	ange Owner
MP-0004		4/17/2017	Ge	nerate Work Orders
Work Type		End Date	Cu	stomButton
Tune up				T
Account		Date of the firs batch	t work order in the next	Next
Acme Machines		4/17/2017		No ne
Service Contract		Status_Custom	Field 🕕	
Maintainance Contract				Past /
Work Order Ger	neration			No pa
Frequency		Generation Tin	neframe	
1		6		1
Frequency Type		Generation Tin	neframe Type	
Months		Months		1

For example, suppose you have a maintenance plan with two assets that need service every month (frequency). You decide to generate your work orders six months in advance (generation timeframe). Each time you generate work orders, 12 work orders are created: six for each asset.

Note: You can't generate more than 2,500 work orders at a time. You can decrease the number of work orders generated by increasing the frequency, decreasing the generation timeframe, or decreasing the number of assets related to the maintenance plan.

A maintenance asset is a part or product covered by the maintenance plan. The Maintenance Assets related list on maintenance plan detail pages lists all assets related to the maintenance plan.

MP-0004				+
ELATED DETA	ILS			
- Work Orders (2	2)			New
WORK ORDER NUMBER	ASSET	STATUS	SUGGESTED MAINTENA	ANCE D
0000046	Car_1	New	5/17/2017	V
00000047	Car_1	New	6/17/2017	¥
				View All
S Assets (1)				New
ASSET C	CONTRACT	LINE ITEN	1	
Car_1 0	0000001			•
				View All

### Get the Right Tool to the Job with Parts Requests and Stock Transfers

Ensure your mobile workforce has the right parts in stock to get the job done every time. Manage your inventory and all transfers throughout a part's life cycle. Track movements from requests to customer. Whether the parts are transferred from the warehouse to the customer or between technicians, your field service center has it covered.

Inventory management in Field Service Lightning starts with a product request. Technicians or mobile workers can make requests when they find defective parts in their trucks or their stock has run out. Dispatchers or service managers can create part requests for their technician's inventory location when they see the stock getting low. Schedulers can create part requests when they schedule work orders needing specific parts not normally in a technician's van stock.

Part Requests and Transfers consist of the Product Request, Shipment, and Product Transfer objects and the Product Request Line Items related list.

A Product Request represents an order for a part or parts.

PRODUCT				
Status Wo				
RELATED	DETAILS			
✓ Informatio	n			
Product Request N PR-0012	lumber		Status Draft	1
Owner Admin User		£	Shipment Type Rush	1
Work Order 00000041		/	Need By Date	/
Destination Location	n		Ship To Address	ľ
Description				
✓ System Infe	ormation			
Created By Admin User, 4/17/2017 11:16			Last Modified By	2017 2:07 AM

Product Request Line Item and Product Transfer are related lists on a Product Request. A Product Request Line Item represents an ordered part.

Note: Currently, you can't create product transfers for product items with serial numbers.

🔄 PR-0012				
				View A
Approval History (0)				
Product Request Line	e Items (2)			New
PRODUCT REQUEST LINE IT	QUANTITY REQUES	STED	QUANTITY UN	IT OF MEASU
PRLI-0001	1.00			
PRLI-0002	1.00			
				View A
Product Transfers (1)	)			New
PRODUCT TRANSFER NUMB	PRODUCT NAME	SOUR	CE PRODUCT II	TEM QUAN
PT-0004	Iphone			
				View A

Note: You can create a new product transfer from its related list on the product request. However, the product request isn't automatically associated. To associate it, select the corresponding product request line item from the drop down list of the Product Request Line Item field.

A Product Transfer records a part's transfer to its new location.

PRODUCT TR PT-0004	ANSFER		
Product Name Iphone	Quantity Sent 1.00	Received	Quantity Received
RELATED	DETAILS		
✓ Information			
Product Name		Product Requ	est
Iphone	1	PR-0012	
Quantity Sent		Quantity Unit	Of Measure
1.00	1	Each	1
Source Product Item		Destination Lo	ocation
	1	SF	
Source Location		Received By	
Dublin	1		1
Received		Shipment	
	1		1
Quantity Received			
	1		
✓ Description			

A Shipment tracks the part while it is in transit.

RELATED	DETAILS			
✓ Information	n			
Destination Locatio	n		Source Location	
SF		1	Dublin	1
ShipTo Address			ShipFrom Address	
ShipTo Name				
Yashwant				
✓ Tracking Inf	formation			
Tracking Number			Expected Delivery Date	
		1		1
Tracking URL			Actual Delivery Date	
		1		1
Shipping Provider			Status	
FedEx		1	Shipped	1
Delivered To				

## Manage Your Mobile Workforce with Time Sheets

Track how much time your field service employees are spending on which tasks.

Time sheets relate service resources with their time and attendance. Add the time sheet related list to the service resource and track the resource's time. Service resources add time sheet entries to time sheets. Time sheets may cover a longer period time (week, month) whereas time sheet entries record specific tasks.

Service Resource John Doe		Time Sheet 5/1/2017	Start Date	Time Sheet End 5/5/2017	Date	Status New
RELATED	DET	AILS				
I Time	Sheet En	tries (2)			New	
NAME	SUBJECT	START TIM	E	END TIME		
TSE-0002	Repair	5/4/2017	8:00 AM	5/4/2017 12:00 PM	•	
TSE-0001	lunch	5/4/2017	' 12:00 PM	5/4/2017 2:30 PM	•	
					View All	
Time	Sheet Hi	story (1)				
DATE		FIELD	USER	ORIGINAL VALUE	NEW VALUE	
5/4/2017	12:04 PM	Created.	Admin Use	er		

Time sheet entries can track individual tasks, travel time, and break time.

TIME SHE		¢.	
Time Sheet TST-0014	Start Time 5/4/2017 8:00 AM	End Time 5/4/2017 12:00 PM	
RELATED	DETAILS		
∽ Informatio	n		
Time Sheet		Subject	
TST-0014		Repair	1
Start Time		End Time	
5/4/2017 8:00 #	AM 🥖	5/4/2017 12:00 PM	1
Status		Туре	
New	1	Direct	1
Work Order		Work Order Line Item	
	1		1
Description			
	1		

## Optimize Scheduling with the Field Service Lightning Managed Package

The Field Service Lightning managed package version 2.0 is available. The package builds on Salesforce's standard field service features to deliver a rich, highly customizable experience for dispatchers and technicians. You can download the package if you have the Service Cloud and a Field Service license.

The managed package comes with:

- Scheduling and optimization: With a robust toolbox of work rules and scheduling policies, the scheduling engine optimizes resource assignments, considering skills, location, and your business objectives.
- **Dispatcher Console:** With appointment lists, scheduling actions, Gantt chart, and an interactive map, the console gives dispatchers and supervisors a bird's-eye view of all service appointments.
- Administration app: A one-stop-shop for integrating and maintaining scheduling policies, global actions, sharing tools, and optimization rules.
- Automatic user permission setup and updates: Set up your field service user permissions and keep them updated with the click of a button.

The Field Service Lightning Dispatcher Console lets dispatchers manage and monitor your mobile workforce to improve the efficiency and productivity in the field. Now you can ensure that the right job is routed to the right mobile employee and immediately see alerts for issues that need attention and take action. The Dispatcher Console helps you automatically schedule bulk jobs with just one click and monitor the service delivery in real time on a map or Gantt chart to give you better visibility and control of what's happening in the field.

Version 2.0 has new features and usability improvements. The Fix Overlaps feature identifies conflicting appointments and reschedules them accordingly. Fill-in Schedule makes use of last-minute cancellation gaps so your mobile workforce isn't left twiddling their thumbs. Street Level Routing, which is in beta, calculates more realistic travel times.

### Enjoy Profile-Based Access to Field Service Features

The Field Service Standard permission set license is a thing of the past! Users no longer need the Standard license to access field service objects. The Dispatcher, Scheduling, and Mobile licenses are remaining the same.

If Field Service Standard permission set licenses were already in use in your org, you'll see the number of licenses listed as a negative value in your settings.

Existing permission set assignments will continue to work as before\*. However, we now recommend that you grant access to field service objects via user profiles.

To add field service access to a user profile:

- 1. In Setup, navigate to the profile you want to update and click Edit.
- 2. Under Administrative Permissions, select Field Service Standard. (If you have the enhanced profile page, this setting appears under System Permissions.)
- 3. Click Save.
- 4. Under Standard Object Permissions on the profile, define the access level to field service objects.
- 5. Click Save.

\*If your org has a custom profile that includes access to the Location object, users with that profile now cannot access locations unless they have the "Field Service Standard" user permission. And in orgs created in Summer '17 or later, field service permission set licenses can no longer include access to opportunities.

## Resource Absences Can Now Overlap

Previously, it wasn't possible to create a service resource absence whose time period overlapped with another absence. Now, it's okay for absences to overlap.

We've made this change to minimize any pesky calendar syncing issues. However, you can always set up your own validation rules to prohibit overlapping absences.

## Do More with Field Service in the Process Builder

The list of field service objects available in the Lightning Process Builder is growing! You can now use eight more objects in your field service processes.

The following objects became available in the Process Builder in Summer '17:

- Assigned Resource
- Resource Preference
- Service Resource
- Service Resource Capacity
- Service Resource Skill
- Service Territory Member
- Skill Requirement
- Time Slot

For example, you can build a process that references the Assigned Resource and Service Appointment objects to notify service resources when the status of a service appointment changes.

# Mobile Field Service: Field Service Lightning iOS App Turns 2.0, Android App in Beta

The Android app beta brings Field Service Lightning to even more phones. The iOS app celebrates turning version 2.0 with enhancements to the settings page including more branding options and geolocation accuracy. Service reports are more reliable with service report previews that let you verify a report before creating it. Also, finding work orders has never been easier with the location tab and support for multiple service appointment list views. Support for multiday appointments lets you handle long jobs more easily. And users in your Community can also use the Field Service Lightning mobile app too!

Important: Field Service Lightning iOS version 2.0 is available from the App Store the week of 7/05/17. With this update all users must have Read access to the Work Type and Service Report fields on the Service Appointment object.

#### EDITIONS

Field Service Lightning features are available in: **Enterprise, Performance, Unlimited**, and **Developer** Editions with the Service Cloud.

#### IN THIS SECTION:

#### View Work Orders Based on Location in iOS

You asked for it, and it's here. Technicians can find other work orders that share a location with their current appointment's location. That way, they can complete other jobs while they're already there!

#### Finalizing Jobs Is More Reliable in iOS

Before finalizing a job, your mobile workforce can view a service report preview to check for accuracy and completeness. And service report previews work offline.

#### Bring the Schedule Screen Under Control in iOS

Sorting the schedule screen has never been easier with support for multiple service appointment list views. And the number of supported list view columns goes from 2 to 4, giving you greater control over which fields are displayed on the schedule screen. You can also display reference fields on list view columns.

#### New Branding Options and Geolocation Accuracy in the Field Service Mobile Settings Page for iOS

The settings page has additional branding tokens to further personalize the UI, while new settings let you control the calendar range of the date picker. Opt for greater accuracy with service resource geolocation tracking, or less accurate geolocation polling for greater battery life.

#### Dependent Picklists Supported in iOS

The Field Service Lightning mobile app just got more flexible. Dependent picklists are supported in all contexts, letting you use the data model that works best for you and your use case.

#### Community Users Gain Access to the iOS App

Members of your Salesforce Community can be given access to the Field Service Lightning mobile app, letting you broaden your mobile workforce to include contractors more easily into your field service operation.

#### Multi-day Appointments in iOS

Service appointments that have Scheduled Start and Scheduled End on different dates are now supported with an intuitive progress bar of on the schedule screen.

#### Good News, Android Lovers! The Field Service Lightning Mobile App for Android Is on the Horizon (Beta)

The Android app has most of the functionality that technicians know and love from the iOS app, including offline capability, navigation services, and Chatter integration. All within a beautiful and highly configurable interface. The Android app doesn't yet support all the same features as the iOS mobile app but it includes a detailed parts tracking system with van stock, parts consumed, parts requests, and stock transfers. The app also supports multi-language flows, multiple signatures on service reports, and more.

## View Work Orders Based on Location in iOS

You asked for it, and it's here. Technicians can find other work orders that share a location with their current appointment's location. That way, they can complete other jobs while they're already there!

The location tab, accessible from the carousel on the work order overview page, displays work orders that share a location with the currently opened work order. The work orders are sorted by their status. You can configure work order search layout in setup to control how records are displayed in the location tab.

## Finalizing Jobs Is More Reliable in iOS

Before finalizing a job, your mobile workforce can view a service report preview to check for accuracy and completeness. And service report previews work offline.

Important: The 2.0 update to the Field Service Lightning iOS app has an additional field level security requirement than previous versions. Verify that your users have "Read" permissions for the Service Report field on the Service Appointment object or service reports won't work.

Service report previews let your mobile workforce review a service report before generating it. That way they can verify that there are no loose ends before they finalize a job. This service report preview can be generated from offline, but will have a watermark indicating that it is an offline service report preview. This watermark warns that the preview may not have the most current Salesforce data or layouts.

## Bring the Schedule Screen Under Control in iOS

Sorting the schedule screen has never been easier with support for multiple service appointment list views. And the number of supported list view columns goes from 2 to 4, giving you greater control over which fields are displayed on the schedule screen. You can also display reference fields on list view columns.

Support for multiple list views means you can create list views for different use cases, so technicians can easily populate the schedule screen with the records they need. Your mobile workforce is able to use the list view picker at the top of the schedule screen to easily change from one list view to another. The default service appointment list view is the only list view which is primed for offline availability however.

List view columns are also more robust with the number of list view columns going from 2 to 4. The list view columns also support reference fields although you can't open one by tapping it from the schedule screen.

## New Branding Options and Geolocation Accuracy in the Field Service Mobile Settings Page for iOS

The settings page has additional branding tokens to further personalize the UI, while new settings let you control the calendar range of the date picker. Opt for greater accuracy with service resource geolocation tracking, or less accurate geolocation polling for greater battery life.

Give the app an aesthetic that fits your brand with these new branding tokens.

- Feedback Selected: Controls the color of various elements in the user interface that indicate the user's current selection.
- **Navbar Inverted**: Controls the color of various text elements that guide the user through the app, including the date picker, map button, and list view picker.

We also added settings to control the calendar range for mobile app users, so users see only the parts of their schedule that they need. These settings limit how many days into the past and future your mobile workforce is able to select from the date picker on the schedule screen.

• Past days in the date picker

#### • Future days in the date picker

Enhancements to Service Resource Geolocation Accuracy settings let you choose to poll geolocation more accurately, or with less accuracy for enhanced battery performance.

- Fine: Accurate to within 10 meters of the service resource
- Medium: Accurate to within 100 meters of the service resource
- **Coarse**: Accurate to within 1 kilometer of the service resource

## Dependent Picklists Supported in iOS

The Field Service Lightning mobile app just got more flexible. Dependent picklists are supported in all contexts, letting you use the data model that works best for you and your use case.

Add dependent picklists to page layouts of objects and use them in any context including flows and other actions.

## Community Users Gain Access to the iOS App

Members of your Salesforce Community can be given access to the Field Service Lightning mobile app, letting you broaden your mobile workforce to include contractors more easily into your field service operation.

Give members of your Salesforce Community access to the Field Service Lightning iOS app. Just like any other user, they need a license to be able to use the app. They also must be given the permissions in the object permissions table, and have API access.

Tip: Flow actions are disabled for Community users. Consider creating quick actions for them to use instead.

Table 1. Object Permissions						
<b>Object Permission Needed</b>	Field Permission Needed					
Read	Email, Name, Phone, Title					
Read, Create, Edit	Absence Number, End Time, Start Time, Resource, Type					
Read, Edit	Address, Appointment Number, Contact, Created By, Created Date, Owner, Parent Record, Parent Record Type, Parent Record Status, Category, Scheduled Start, Scheduled End, Status, Work Type					
Read, Edit	Active, User					
Read, Create, Edit						
	Object Permission Needed         Read         Read, Create, Edit         Read, Edit         Read, Edit					

#### Table 1: Object Permissions

The initial login in as a community user is slightly different in the app than it is for standard users. On the initial login screen, community users will need to click the gear in the top right of the screen, then click the + to add the URL of your Salesforce Community. The URL can be found in Setup under Communities. When inputting the community URL, omit the prefix https://.

## Multi-day Appointments in iOS

Service appointments that have Scheduled Start and Scheduled End on different dates are now supported with an intuitive progress bar of on the schedule screen.

Using both the Scheduled Start and Scheduled End fields on service appointments causes that appointment to appear on the schedule for every day between those two dates and show a visual progress bar representing the job's scheduled completion.

Setting a service appointment to have a Scheduled End time but not a Scheduled Start time will cause the appointment to appear on the schedule for every day until the Scheduled End date.

Setting a service appointment to have a Scheduled Start time but not a Scheduled End time will have that appointment appear on the schedule for every day past the Scheduled Start until that appointment is completed.

# Good News, Android Lovers! The Field Service Lightning Mobile App for Android Is on the Horizon (Beta)

The Android app has most of the functionality that technicians know and love from the iOS app, including offline capability, navigation services, and Chatter integration. All within a beautiful and highly configurable interface. The Android app doesn't yet support all the same features as the iOS mobile app but it includes a detailed parts tracking system with van stock, parts consumed, parts requests, and stock transfers. The app also supports multi-language flows, multiple signatures on service reports, and more.

To learn more about the Field Service Lightning Android mobile app and how to participate in the beta, contact your Salesforce account representative.

# Social Customer Service: New Lightning Experience Features and Increased Agent Efficiency

Take advantage of the speed and power of Lightning Experience to set up Social Customer Service in Professional Edition, and give agents tools to work faster and more efficiently. You can use the new setup node in Lightning to install Social Customer Service. And your agents can do more with Facebook and Twitter posts and view multiple attachments in their case feed.

#### IN THIS SECTION:

#### Get Social Customer Service in Professional Edition

If you have Professional Edition and want to set up Social Customer Service for the first time, you can do so easily and more economically than before. This change applies to both Lightning Experience and Salesforce Classic.

#### Do More with Facebook Posts

Empower your agents with features that extend their ability to handle Facebook posts. Agents can see star ratings, reply to reviews, and respond privately to posts and comments. This change applies to both Lightning Experience and Salesforce Classic.

#### Do All Your Socializing in Lightning Experience

Now you can set up and administer Social Customer Service without ever touching Salesforce Classic.

#### Boost Productivity with New Twitter Actions in the Redesigned Case Feed

The sleek, versatile case feed now includes new actions that let agents respond to tweets and keep tabs on people on Twitter. This change applies to Lightning Experience only.

#### Get the Big Picture with Attachments in the Case Feed

Give agents access to more customer details, letting them see multiple attachments on a social post within a case feed. This change applies to both Lightning Experience and Salesforce Classic.

## Get Social Customer Service in Professional Edition

If you have Professional Edition and want to set up Social Customer Service for the first time, you can do so easily and more economically than before. This change applies to both Lightning Experience and Salesforce Classic.

A new connected app links Salesforce with Social Studio without requiring API enabled access to your org. And API calls don't count towards your API limits.

The first time you set up Social Customer Service for Professional Edition:

- Integrate Twitter or Facebook through the setup flows for the Lightning Service Console. If you previously installed the Social Customer Service package, using the Service Setup flow or through Social Customer Service itself, uninstall the package before using the setup flow.
- After you implement Twitter or Facebook integration from the setup flows, a new permission set named **Social Customer Service Inbound Automation** is added to your org. Don't delete the permission set or change its API name (Salesforce\_Social\_Customer\_Service\_Run\_As\_User).
- The new permission set is defaulted on for the Run As User, which during setup, is the admin. If you change the Run As User in your org, make sure that the new user has the permission set.

SEE ALSO:

More Lightning Service Setup Flows (Beta)

## Do More with Facebook Posts

Empower your agents with features that extend their ability to handle Facebook posts. Agents can see star ratings, reply to reviews, and respond privately to posts and comments. This change applies to both Lightning Experience and Salesforce Classic.

Agents can see star ratings that accompany reviews in their case feed.

<u> </u>	Star • Review from:	Pete Mitche	11	+ Follow -
FEED	DETAILS			
Social	Post Poll			
Create	new			Add
Latest Posts	•	Q Search	this feed	I C
All Updat	es Call Logs	Text Posts	Status Changes	
~ 🛞	Pete Mitchell CUSTOMER Review * * * * * The Cliff Corpo an inverted dive with a Mig		e through on my Tomcat	017 at 1:59 PM ▼ , I was able to do
	← Reply D <sup>n</sup> View Source	ce 🔊 Comme	int	

Agents can reply to reviews.

<u> </u>	Star • Review from	n: Pete Mitche	ell	+ Follow
FEED	DETAILS			
Social	Post Poll			
Create	new			Add
Latest Posts	•	Q Search	this feed	EC
All Updat	es Call Logs	Text Posts	Status Changes	
~ 📚	Pete Mitchell CUSTOM			017 at 1:59 PM 💌
	an inverted dive with a		e through on my Tomca lations.	t, I was able to do
(	← Reply B <sup>R</sup> View Set	ource 🍙 Comm	ent	

Agents can respond privately to comments.

🛅 P	ost from Pete Mitchell	+ Follow -
FEED	DETAILS	
Social	Post Poll	
Y	To Tete Mitchell Pete Mitchell  Cliff Corporation(CliffCorporation ou guys are awesome, when is the new and improved Tomcat of Social Account Message Type	
Cliff C Content	orporation(CliffCorporation)	•
	ou are such a valued customer of ours, we wanted to send a pr plan to release this next year!	rivate message to inform
		Post to Facebook

Note: Agents can only respond privately once.

## Do All Your Socializing in Lightning Experience

Now you can set up and administer Social Customer Service without ever touching Salesforce Classic.

From Setup, enter *social customer* in the Quick Find box. Then click **Social Customer Service**.

<b>*</b>	Q. Search Salesforce			🔂 🖬 ? 🌣 A 🤮
III Service Setup 🔹 🕨	lome Object Manager 🗸			
Q. Quick Find	Social Customer Service			
Service Setup Home				
ADMINISTRATION		Social Cus	tomer Service	
> Uses			f learn to respond to customers or local detects like	
~ Channels	and the second second	Facebook, Teeter, Instagram, Googles and Service Cloud and the social lettering capel	I Sine Webs: We a powerful imagnation of Saleshone billine of Social Studio. West: His <u>schoo</u> to learn more.	
) Communities				
> Gmail	BETTINGS	500AL A000UN75	INDOUND SCITINGS	ERROR LOG
> Prote	Social Customer Service Settings			
Sociel				
Social Customer Service		te Social Customer Service		
> Web		like approvals for social posts 3. No notice al of parent posts for added corrised		
AUTOMATION				
> Process Automation	Radiant Credentials			
USER INTERFACE		Burnmar Your Social Curry	oner Service starter account is active.	
> Objects and Fields		Already here a Radia	rdamour? Logi.3c.Relact	
). User Interface				

## Boost Productivity with New Twitter Actions in the Redesigned Case Feed

The sleek, versatile case feed now includes new actions that let agents respond to tweets and keep tabs on people on Twitter. This change applies to Lightning Experience only.

Insert a link to set up a private Twitter direct message conversation.

	itchell @goosesmaver orp when does my ne		poration @CliffCorp arrive? #buzzthetowe	r
Managed Socia	al Account		Message Type	
@CliffCorp		*	Reply	•
-0	verick hi Pete, please er.com/messages/co		elow and DM us your or	4 der #

Follow people on Twitter.

AII U	Update	s	Call	Logs	; Te	xt	Post	s		Statu	us (	Change	es	
~	۲		oosesmave Tweet	rick	CUSTOMER								Today at 2:49	PM 💌
		00	liffcorp whe	n do	es my new fi	ght	er pla	ine ari	iv	e? #buzz	the	tower		
		4	Reply	tā Ro	etweet	4	Like			Follow		More 👻	,	

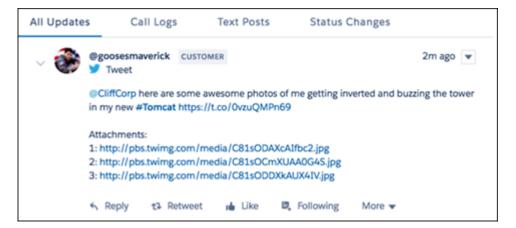
Note: When an agent follows someone on Twitter, the **Follow** label changes to **Following**. After you refresh the page, the label switches back to **Follow**.

For details about the new case feed layout, see Less Is More—the Compact Case Feed.

## Get the Big Picture with Attachments in the Case Feed

Give agents access to more customer details, letting them see multiple attachments on a social post within a case feed. This change applies to both Lightning Experience and Salesforce Classic.

Click the link to display images in another window. Videos play in a new tab.



Note: If your org uses 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.

## Snap-ins for Web: Snap-ins for Lightning Communities and Improved Snap-ins Chat Functionality

Snap-ins Chat is bigger and better. There's loads more chat functionality, and you can add your snap-in to a Lightning community using the Community Builder. This change applies to both Lightning Experience and Salesforce Classic.

IN THIS SECTION:

Add Snap-ins to Your Lightning Communities

Use Snap-ins Chat to let your community members quickly solve their questions and issues with live chat support. You can customize the button labels and branding from the Community Builder. This change applies to Lightning Experience only.

#### EDITIONS

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

#### Say Goodbye to Dropped Chats for Wandering Visitors

Chat visitors can navigate to subdomains within a top-level domain while they chat. Upgrade your code snippet and set a top-level domain. Make sure that your code snippet is placed on all pages that you want visitors to be able to navigate to during a chat. This change applies to Lightning Experience only.

#### Supply Notifications and Chat Options in an Informational Chat Window Header

Chat notifications and actions stand out in their new home at the top of the chat window. The chat header prominently shows visitors when their chat is timing out, when they're being transferred, or other need-to-know information. Plus, they can save their transcript of end the chat. This change applies to Lightning Experience only.

#### Let Agents Call for Backup with Chat Transfer

Sometimes agents receive a chat request for an issue that another team needs to handle. Or they know their colleague just handled a similar question. Let them pass a chat along by enabling chat transfer in the Live Agent configuration. With chat transferring, your visitors get their questions answered faster. And they don't have to recount their issue when they start chatting with their new agent—the new agent receives the chat transcript and any associated objects, like a case. This change applies to both Lightning Experience and Salesforce Classic.

#### Help Your Agents Get More from Chat Visitors with File Transfer

They say a picture is worth a thousand words. Let your agents request a file transfer from your chat visitors to get the whole picture of what's going on. Enable Agent File Transfer in the Live Agent configuration assigned to the agents who handle chats from your snap-ins. This change applies to both Lightning Experience and Salesforce Classic.

#### Speak the Language: Customize and Translate Labels for Chat Visitors

You can customize and translate button labels, messages, and errors in your Snap-ins Chat deployment. Change your mind on a label? No problem. You don't need to get a new code snippet each time you update a label, and your deployment can support multiple languages. Just specify the language you want in your code snippet to translate the snap-ins experience for that language. This change applies to Lightning Experience only.

#### Don't Make Agents Wait for a Long-Lost Chat Visitor

When your chat visitor forgets to end a chat or gets distracted, your agents can get stuck waiting for a response. Set a time-out so that visitors have to respond within a certain amount of time before they lose the chat and have to try again. This change applies to both Lightning Experience and Salesforce Classic.

#### Your Chat Visitors Can Save Their Chat Transcripts

Your chat visitors might want to hang onto their chat transcripts to refer to all those juicy nuggets your agent shared during the chat. Good news! They can save the chat transcript during the chat or when it ends from the new chat window header (as long as there isn't a notification in the header). The transcript is saved to the visitor's computer or mobile phone, or in a new browser window for iOS users. This change applies to Lightning Experience only.

#### Direct Chat Visitors to Other Resources

Ending a chat with no next step is a missed opportunity for getting valuable feedback for your support team. Or maybe you want to send your chat visitors to more information instead of leaving them high and dry. With post-chat, you can display a custom button that links to a survey or webpage. This change applies to both Lightning Experience and Salesforce Classic.

#### Resize Your Chat Window and Font

Set the height, width, and base font size for your chat window in your code snippet. This change applies to Lightning Experience only.

#### See Visitor Information with Incoming Chats

When a new chat comes in, agents can see the information the visitor provided on the pre-chat page. They can also see the visitor's current page, the original referrer, and up to five recently viewed pages. This information is also available for chats launched from a Lightning community. This change applies to Salesforce Classic only.

#### Use Pre-Chat APIs to Send Nonstandard Pre-Chat Details

Looking to do more with pre-chat in your snap-in? You can use the pre-chat APIs to send nonstandard pre-chat details along with what's available in setup. This change applies to Lightning Experience only.

#### Upgrade Your Snap-ins Chat Code Snippet to Use More Chat Features

Some of the newly-available chat features work only with the newest code snippet version. To use file transfer and visitor time-out, get more visitor information, and to let users move between subdomains, upgrade your Snap-ins code snippet to version 2.0. This change applies to Lightning Experience only.

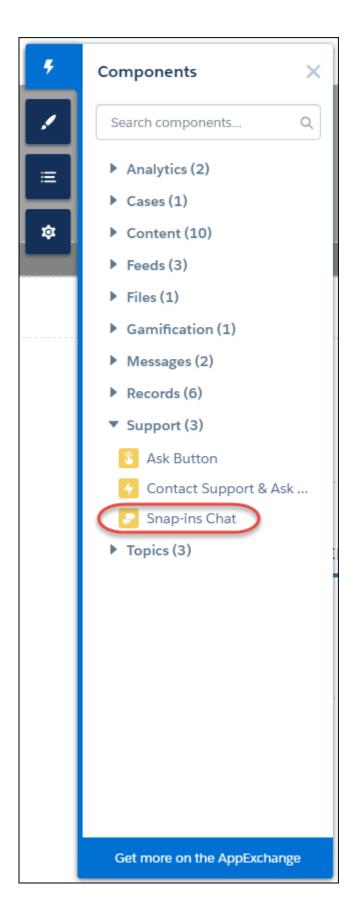
#### Bye-Bye, Send Button!

We've removed the send button for chat visitors using desktop, so they can send messages without lifting their fingers from the keyboard. They can send messages with the Enter key. This change applies to Lightning Experience only.

## Add Snap-ins to Your Lightning Communities

Use Snap-ins Chat to let your community members quickly solve their questions and issues with live chat support. You can customize the button labels and branding from the Community Builder. This change applies to Lightning Experience only.

Set up Live Agent and Snap-ins Chat, then use the Community Builder to add the Snap-ins Chat component to your Customer Service (Napili) template. You can find it under Support components.



Drag the component into your template and configure your branding colors, labels, and other customizations, like an agent avatar. The branding you apply here overrides the branding you chose in your snap-ins setup.

SNAP-INS CHAT $\times$
The chat window is always in the bottom-right of the page.
Chat Deployment (1)
Bluth_Community_Chat 🗸
<ul> <li>Display chat button</li> </ul>
Button Label
Chat with an Expert
Offline Button Label
Agent Offline
Chat Waiting Message
Loading
Chat Waiting Background Image URL
Agent Avatar Image URL
Pre-Chat Background Image URL
Company Logo URL

To customize your branding colors even more, use the CSS option in the branding palette to edit the color for your chat header. Just add the CSS style .sidebarHeader {background-color: #HEX}.

We recommend using only one snap-in component per page view when you want to use different chat deployments across your community. If you want to use the same chat deployment for your community, it's best to add the component to the footer.

#### SEE ALSO:

Using Templates to Build Communities

## Say Goodbye to Dropped Chats for Wandering Visitors

Chat visitors can navigate to subdomains within a top-level domain while they chat. Upgrade your code snippet and set a top-level domain. Make sure that your code snippet is placed on all pages that you want visitors to be able to navigate to during a chat. This change applies to Lightning Experience only.

You must set the top-level domain for your Snap-ins Chat deployment in your upgraded code snippet. For example, if you set MyAwesomeWebsite.com for your top-level domain, your chat visitors can navigate to subdomains like help.MyAwesomeWebsite.com while they chat.

Add the following to your snippet to set your domain (but replace MyAwesomeWebsite with your domain, of course!).

embedded\_svc.settings.storageDomain = 'MyAwesomeWebsite.com';

### Important:

- The storageDomain parameter is available only for version 2.0 code snippets, and it's required. It's included as a code comment in your generated code snippet.
- Follow the format mywebsite.com for your domain. Don't include a protocol (http://mywebsite.com or https://mywebsite.com) or a trailing slash (mywebsite.com/).

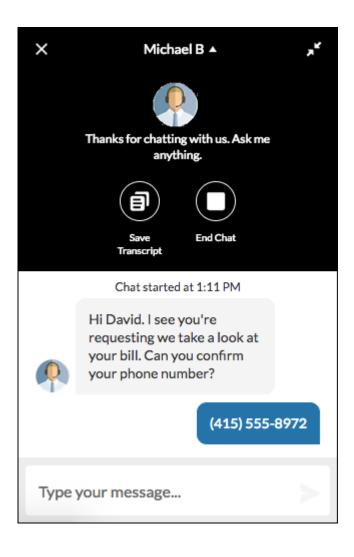
#### SEE ALSO:

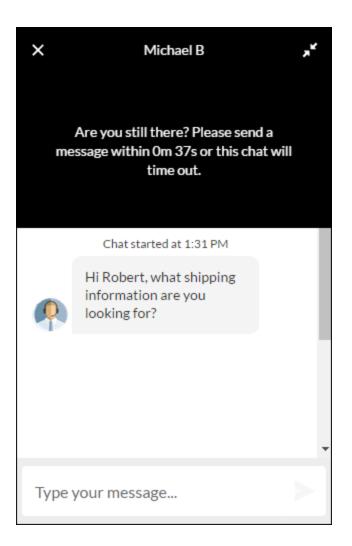
Salesforce Help: Customizable Parameters in the Snap-ins Chat Code (can be outdated or unavailable during release preview)

## Supply Notifications and Chat Options in an Informational Chat Window Header

Chat notifications and actions stand out in their new home at the top of the chat window. The chat header prominently shows visitors when their chat is timing out, when they're being transferred, or other need-to-know information. Plus, they can save their transcript of end the chat. This change applies to Lightning Experience only.

You can customize the look of the header in the branding panel of your Snap-ins deployment setup. You can change the colors, font, font size, and add a background image. For visitors using a desktop browser, you can display a welcome message in the header.





The header also conveniently disappears as the visitor scrolls, because it does take space away from their chat. Visitors can scroll up to open it or scroll down to close it, unless there's a notification.

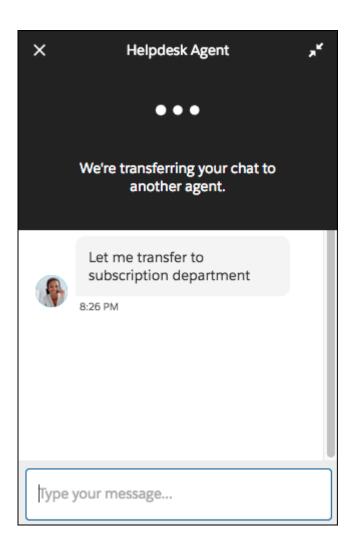
×	Michael B 👻 🦼
	phone plans
	Is the family plan deal still going on?
	1:16 PM
P	Yes, the promotion is still in effect until the 18th.
	Thanks a lot
P	Is there anything else I can help you with today?
	Nope that's it thank you Chat Ended by Agent
	Close Chat

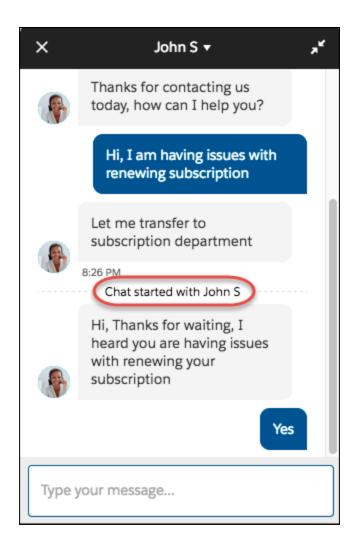
## Let Agents Call for Backup with Chat Transfer

Sometimes agents receive a chat request for an issue that another team needs to handle. Or they know their colleague just handled a similar question. Let them pass a chat along by enabling chat transfer in the Live Agent configuration. With chat transferring, your visitors get their questions answered faster. And they don't have to recount their issue when they start chatting with their new agent—the new agent receives the chat transcript and any associated objects, like a case. This change applies to both Lightning Experience and Salesforce Classic.

Message to Agents	OPENED CASE OWN	CASE OWNER ALIAS			
	08 AM sa				
User is having issues with renewing subscription	17 AM sa				
Transcript Preview		- 2			
	(1) Requests	Online •			
Helpdesk Agent: Thanks for contacting us today, how can I help you? Deepa: Hi, I am having issues with renewing subscription	SubscriptionButto MyFirstDeploymentNa Accept Deepa				
Helpdesk Agent: Let me transfer to subscription department					
Custom Details					
Page 1 of 1					

And your chat visitor is kept in the loop the entire time. As soon as the first agent initiates the transfer, the visitor gets a notification in the chat header. When the new agent accepts the chat, the visitor is introduced to the agent, and the chatting can continue!



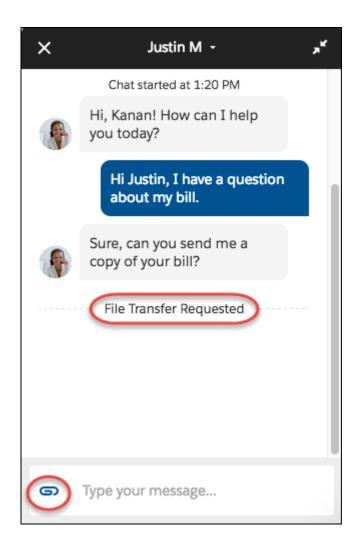


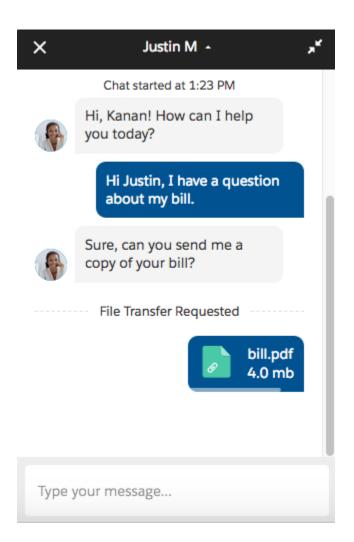
Note: For chats transferred directly to another agent, the first agent can keep chatting with the visitor until the new agent accepts the chat. For chats transferred to another button, the first agent drops off. The visitor can't send messages until the new agent arrives.

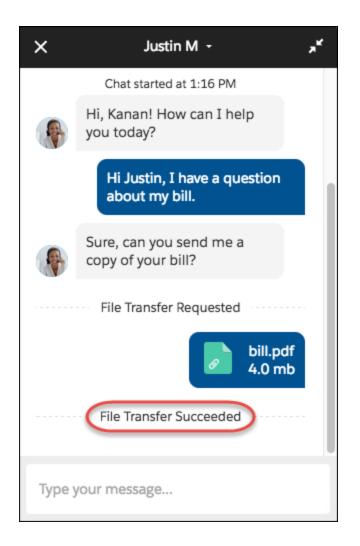
## Help Your Agents Get More from Chat Visitors with File Transfer

They say a picture is worth a thousand words. Let your agents request a file transfer from your chat visitors to get the whole picture of what's going on. Enable Agent File Transfer in the Live Agent configuration assigned to the agents who handle chats from your snap-ins. This change applies to both Lightning Experience and Salesforce Classic.

To upload a file, the visitor uses the paperclip icon to select a file and then clicks **Send**. A progress indicator shows the visitor that the upload is in the works.







## Speak the Language: Customize and Translate Labels for Chat Visitors

You can customize and translate button labels, messages, and errors in your Snap-ins Chat deployment. Change your mind on a label? No problem. You don't need to get a new code snippet each time you update a label, and your deployment can support multiple languages. Just specify the language you want in your code snippet to translate the snap-ins experience for that language. This change applies to Lightning Experience only.

# Customize your labels in Setup > User Interface > Rename Tabs and Labels (or in Classic Setup, go to Customize > Tab Names and Labels > Rename Tabs and Labels).

To set a language for your deployment, add the following parameter to your code snippet. By default, the language is set to English.embedded svc.settings.language = "en-US"

You also need to take care of some other settings to make sure translation works properly. See Localization and Translation for Snap-ins Chat in the Salesforce Help.

Note: We don't support an underscore format for languages (like en\_US). Use http locale format (like en-US or en).

## Don't Make Agents Wait for a Long-Lost Chat Visitor

When your chat visitor forgets to end a chat or gets distracted, your agents can get stuck waiting for a response. Set a time-out so that visitors have to respond within a certain amount of time before they lose the chat and have to try again. This change applies to both Lightning Experience and Salesforce Classic.

Set Customer Time-Out in your associated Live Agent chat button. Specify a time period and when to send a warning to the visitor. For example, you can have the chat time out after 2 minutes, but send the visitor a notification after 90 seconds. The warning has a countdown, so the visitor knows exactly when the chat times out.

×	Michael B					
	Are you still there? Please send a essage within 0m 37s or this chat will time out.					
	Chat started at 1:31 PM					
P	Hi Robert, what shipping information are you looking for?					
		•				
Туре	your message	>				

If the chat times out, visitors can see what happened in the chat window, so they don't think their agent left without saying goodbye!

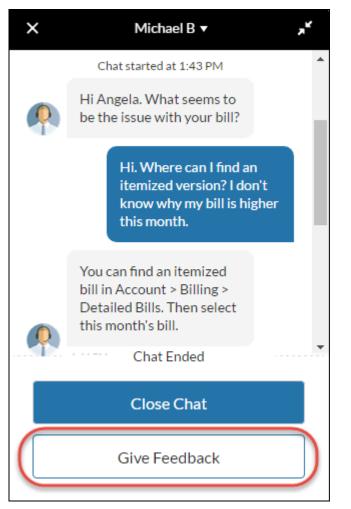
×	Michael B 🔺 🦼				
Thanks for chatting with us. Ask me anything.					
	Save End Chat Transcript				
	Chat started at 1:31 PM				
	Hi Robert, what shipping information are you looking for?				
	1:32 PM				
	Chat ended due to timeout				
Close Chat					
	Give Feedback				

## Your Chat Visitors Can Save Their Chat Transcripts

Your chat visitors might want to hang onto their chat transcripts to refer to all those juicy nuggets your agent shared during the chat. Good news! They can save the chat transcript during the chat or when it ends from the new chat window header (as long as there isn't a notification in the header). The transcript is saved to the visitor's computer or mobile phone, or in a new browser window for iOS users. This change applies to Lightning Experience only.

## Direct Chat Visitors to Other Resources

Ending a chat with no next step is a missed opportunity for getting valuable feedback for your support team. Or maybe you want to send your chat visitors to more information instead of leaving them high and dry. With post-chat, you can display a custom button that links to a survey or webpage. This change applies to both Lightning Experience and Salesforce Classic.



Add a post-chat URL to the Live Agent chat button associated with your Snap-ins Chat configuration. By default, the post-chat button is labeled Give Feedback. You can change the button's label in **Setup** > **User Interface** > **Rename Tabs and Labels** (or in Classic Setup, go to **Customize** > **Tab Names and Labels** > **Rename Tabs and Labels**).

## Resize Your Chat Window and Font

Set the height, width, and base font size for your chat window in your code snippet. This change applies to Lightning Experience only.

This sample uses the default window and base font sizes.

```
embedded_svc.settings.widgetWidth = '320px';
embedded_svc.settings.widgetHeight = '498px';
embedded_svc.settings.widgetFontSize = '16px';
```

Keep the following in mind when setting sizes.

- You can enter values in px or percent (%), or em or rem.
- When you set the width in your code snippet, the max-width is set to none. Similarly, when you set the height, the max-height is set to none. This action prevents the chat window from auto-sizing if the browser window's height or width changes to less than the set height or width of the chat window.
- If the height of the browser window is less than 498px, the height defaults to 90% of the browser window's height.



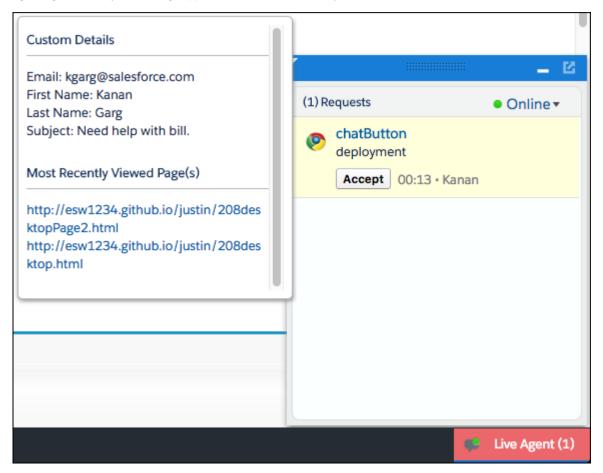
Tip: We recommend choosing a base font size no lower than 12 px and no higher than 24 px. If you don't specify font size, it will default to a base size of 16 px.

#### SEE ALSO:

Salesforce Help: Customizable Parameters in the Snap-ins Chat Code (can be outdated or unavailable during release preview)

## See Visitor Information with Incoming Chats

When a new chat comes in, agents can see the information the visitor provided on the pre-chat page. They can also see the visitor's current page, the original referrer, and up to five recently viewed pages. This information is also available for chats launched from a Lightning community. This change applies to Salesforce Classic only.



## Use Pre-Chat APIs to Send Nonstandard Pre-Chat Details

Looking to do more with pre-chat in your snap-in? You can use the pre-chat APIs to send nonstandard pre-chat details along with what's available in setup. This change applies to Lightning Experience only.

For more information, see Override Default Behavior or Create Custom Entities Using Snap-Ins Pre Chat API.

## Upgrade Your Snap-ins Chat Code Snippet to Use More Chat Features

Some of the newly-available chat features work only with the newest code snippet version. To use file transfer and visitor time-out, get more visitor information, and to let users move between subdomains, upgrade your Snap-ins code snippet to version 2.0. This change applies to Lightning Experience only.

You can see if you have the 2.0 version in your code snippet.

Chat Code Snippet	
This code snippet adds the snap-in chat widget to your web page. You can customize some of the code parameters.	
Paste this code immediately before the closing body tag () for each web page where you want the chat widget to be available:	
 <script src="https://service.force.com/embeddedservice/2.00 sw.min.js" type="text/javascript"></script> <script type="text/javascript"></td><td>*</td></tr><tr><td>var initESW = function(gslbBaseUrl) {</td><td>•</td></tr><tr><td>Copy to Clipboard</td><td></td></tr></tbody></table></script>	

## Bye-Bye, Send Button!

We've removed the send button for chat visitors using desktop, so they can send messages without lifting their fingers from the keyboard. They can send messages with the Enter key. This change applies to Lightning Experience only.

## Snap-ins for Mobile Apps SDK: It Just Keeps Getting Better

In the June 2017 release of this SDK, you can customize buttons with the new floating action button API. We also support pre-chat fields for Live Agent and provide more control over the caching behavior of your Knowledge articles.

Check out the Snap-ins for Mobile Apps site for the latest information. Or give our Trailhead module a spin to get started with Snap-ins for Mobile Apps.

## Other Changes in Service Cloud

Learn about other changes we've made in the Service Cloud.

#### IN THIS SECTION:

#### See the Assignment Checkbox in Salesforce1

Salesforce1 mobile app users can now see the Assignment checkbox on cases and leads. When you enable this feature, users can trigger assignment rules manually when cases and leads are created or edited. This change applies to all versions of the Salesforce1 mobile app.

#### Changes to the Open CTI for Lightning Experience saveLog Method

We made some changes to how the Open CTI for Lightning Experience saveLog method works.

#### Chatter Answers Retires in Spring '18

Start planning that retirement party for Chatter Answers! After years of faithful service helping users find answers to their pressing questions, Chatter Answers is calling it quits in Spring '18. Salesforce will no longer support Chatter Answers, and users of Chatter Answers will no longer be able to post, answer, comment, or view any of the existing Chatter Answers data. Chatter Answers is passing the torch to Chatter Questions, an eager young thing ready to take up the self-service mantle.

#### EDITIONS

Available in: **Enterprise**, **Unlimited**, and **Developer** Editions Work with Your Support Entitlements in Lightning Experience

Entitlements are available in Lightning Experience with some limitations.

#### View Asset Level at a Glance

Quickly learn an asset's position in a hierarchy of assets by glancing at its Asset Level field.

Criteria-Based Sharing for Work Orders (Generally Available)

Criteria-based sharing for work orders, previously in Beta, is now generally available.

Changes to the Web-to-Case and Web-to-Lead Endpoint URL

To improve performance, we've changed the Web-to-Case and Web-to-Lead endpoint URL. To continue receiving new cases or leads, update the Web-to-Case and Web-to-Lead forms on your websites. This change applies to both Lightning Experience and Salesforce Classic.

## See the Assignment Checkbox in Salesforce1

Salesforce1 mobile app users can now see the Assignment checkbox on cases and leads. When you enable this feature, users can trigger assignment rules manually when cases and leads are created or edited. This change applies to all versions of the Salesforce1 mobile app.

To enable your users to trigger assignment rules, add the Assignment checkbox to the case or lead page layout.

## Changes to the Open CTI for Lightning Experience saveLog Method

We made some changes to how the Open CTI for Lightning Experience saveLog method works.

For more information, see Open CTI API.

## Chatter Answers Retires in Spring '18

Start planning that retirement party for Chatter Answers! After years of faithful service helping users find answers to their pressing questions, Chatter Answers is calling it quits in Spring '18. Salesforce will no longer support Chatter Answers, and users of Chatter Answers will no longer be able to post, answer, comment, or view any of the existing Chatter Answers data. 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 Chatter Answers to Retire in Spring '18.

## Work with Your Support Entitlements in Lightning Experience

Entitlements are available in Lightning Experience with some limitations.

- The Case Milestone related list isn't available on cases.
- The Milestones related list isn't available on work orders.
- The Milestones' related list isn't available on work orders.
- The Milestone Tracker isn't available on work orders and cases.
- The Entitlement Template related list isn't available on products.
- The Contact related list isn't available on entitlements.
- The Entitlement related list isn't available on contacts.

## View Asset Level at a Glance

Quickly learn an asset's position in a hierarchy of assets by glancing at its Asset Level field.



Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions with the Service Cloud On assets that don't have a parent or child assets defined, the asset level is 1. Assets that have settled down and started an asset family, on the other hand, list an asset level that reflects their position in the hierarchy: 1 for the root asset, 2 for the child assets of the root asset, 3 for their children, and so forth.

You can always see an asset's child assets in the Child Assets related list, and its parent and root assets in the Parent Asset and Root Asset fields.

Note: On assets created before Summer '17 that are part of an asset hierarchy, the asset level defaults to –1. Once the asset record is updated, the asset level is calculated and automatically updated for all assets in the hierarchy.

## Criteria-Based Sharing for Work Orders (Generally Available)

Criteria-based sharing for work orders, previously in Beta, is now generally available.

You can define up to 50 criteria-based sharing rules to control who can view and update work orders. To learn more, see Criteria-Based Sharing Rules.

### EDITIONS

Work orders are available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

## Changes to the Web-to-Case and Web-to-Lead Endpoint URL

To improve performance, we've changed the Web-to-Case and Web-to-Lead endpoint URL. To continue receiving new cases or leads, update the Web-to-Case and Web-to-Lead forms on your websites. This change applies to both Lightning Experience and Salesforce Classic.

For information on how to update the endpoint, see the Updating the Web-to-Case and Web-to-Lead Endpoint URL Knowledge Article.

# Analytics: Collaborative Reports and Dashboards and Einstein Analytics (Wave)

Drive decisions with insights from reports and dashboards and Wave Analytics. Lightning Experience reports and dashboards get more collaborative with dashboard filters, improvements to report subscriptions, and other enhancements. With Einstein Discovery and the new Wave features, analytics become more accessible for both admins and business users.

#### IN THIS SECTION:

#### Reports and Dashboards: Data-Driven Collaboration

Lightning Experience reports and dashboards get more collaborative with dashboard filters, improvements to report subscriptions, and other enhancements.

#### Einstein Analytics (Wave): Einstein Discovery, Easier Data Management and Exploration, and Wave Templates

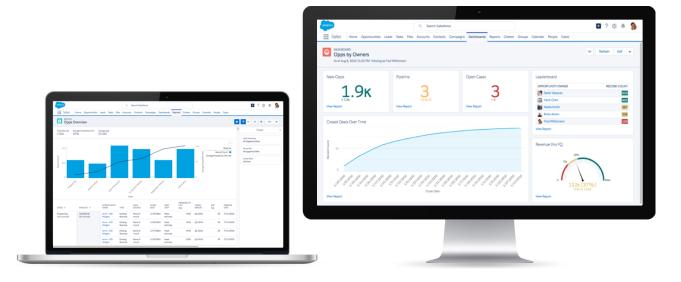
Einstein Discovery proactively answers complex business questions and enables deeper dives into your data. Intuitive data integration and preparation features make it easier to get your data ready for those deep dives. Find your own deeper insights and visualize them more easily in the redesigned explorer. And turn your Wave platform app into a template that others can use for building new apps with their own data.

# Reports and Dashboards: Data-Driven Collaboration

Lightning Experience reports and dashboards get more collaborative with dashboard filters, improvements to report subscriptions, and other enhancements.

#### **EDITIONS**

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



#### IN THIS SECTION:

#### Add Dashboard Filters in Lightning Experience

Add, edit, or remove filters from your Lightning Experience dashboard directly from the lightning dashboard builder. Filters let people choose different views of a dashboard, so one dashboard does the job of many. Without dashboard filters, you'd have to create multiple dashboards, each with its own set of filtered reports. For example, add a filter on the industry field to track opportunities by industry. This feature is new in Lightning Experience.

#### Find Reports More Easily While Adding or Editing Dashboard Components

Instead of just searching by report name, find reports in the dashboard component editor just like you do on the reports tab. Flip through views (like Recent, Private, and Public) and folders. Of course, you can still search by report (and folder) name. This feature is new in Lightning Experience.

#### Add Combination Charts to Dashboards in Lightning Experience

Combination charts plot two or more sets of data on a single chart, making charts "multimetric." For example, show the average probability and number of opportunities by stage. This feature is new in Lightning Experience.

#### Subscribe Other People to Reports

You subscribed to the Opportunity Overview report and receive the report by email each morning. Now you can subscribe your whole team to the report, so everyone is up-to-date for the morning sync-up meeting. Either run the report as yourself, or as someone else. Recipients see emailed report data as the person running the report. Consider that they may see more or less data than they normally see in Salesforce. This change applies to Lightning Experience only.

#### Create Report and Dashboard Folders in Lightning Experience

Folders are key to sharing and organizing reports and dashboards. Now you can create them in Lightning Experience. Switch to Salesforce Classic to grant other people access to folders. This feature is new in Lightning Experience.

Other Enhancements to Reports and Dashboards in Lightning Experience

We've made some small-but-notable improvements to reports and dashboards. These changes apply to Lightning Experience only.

## Add Dashboard Filters in Lightning Experience

Add, edit, or remove filters from your Lightning Experience dashboard directly from the lightning dashboard builder. Filters let people choose different views of a dashboard, so one dashboard does the job of many. Without dashboard filters, you'd have to create multiple dashboards, each with its own set of filtered reports. For example, add a filter on the industry field to track opportunities by industry. This feature is new in Lightning Experience.

To add a dashboard filter, click + Filter.

		Ad	d Filt	er				
* Field								
Industry×								
Display Name								
Industry								
Filter Values (3)								
Agriculture	×							
Energy, Engineering	×							
Healthcare	×							
Add Filter Value								
					Can	cel	Ad	ld

## Find Reports More Easily While Adding or Editing Dashboard Components

Instead of just searching by report name, find reports in the dashboard component editor just like you do on the reports tab. Flip through views (like Recent, Private, and Public) and folders. Of course, you can still search by report (and folder) name. This feature is new in Lightning Experience.

After adding a dashboard component by clicking + **Component**, the Select Report window opens and prompts you to select a source report.

Select Report						
REPORTS	Q Search Reports and Folders   Reports and Folders   ▼					
Recent	Closed Opps					
Created by Me	Fred Williamson · Apr 7, 2017 2:39 PM · Private Reports					
Private Reports	Top Opps Fred Williamson · Apr 7, 2017 2:39 PM · Private Reports	l				
Public Reports		-				
All Reports	Opps_Classic Fred Williamson · Mar 20, 2017 1:38 PM · Private Reports					
FOLDERS	Opportunity Report	1				
Created by Me	Fred Williamson · Mar 27, 2017 9:47 AM · Private Reports					
Shared with Me	Opp Overview Fred Williamson · Mar 27, 2017 9:46 AM · Private Reports					
All Folders	Opps Over Time					
	Cancel Select					

## Add Combination Charts to Dashboards in Lightning Experience

Combination charts plot two or more sets of data on a single chart, making charts "multimetric." For example, show the average probability and number of opportunities by stage. This feature is new in Lightning Experience.

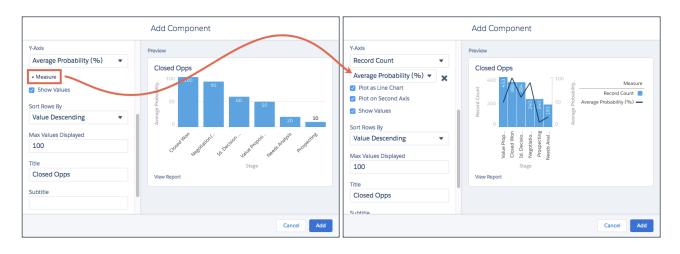
You can add these types of combination charts to dashboards in Lightning Experience:

- Vertical bar chart with an added line chart
- Vertical chart with up to four bars

To add these types of combination charts to dashboards, switch to Salesforce Classic:

- Stacked or grouped vertical bar chart with an added line chart
- Line chart with an added line chart

To add a combination chart, first display a component as a vertical bar chart. Then, under Y-Axis, click + **Measure** to add a measure to your chart.



## Subscribe Other People to Reports

You subscribed to the Opportunity Overview report and receive the report by email each morning. Now you can subscribe your whole team to the report, so everyone is up-to-date for the morning sync-up meeting. Either run the report as yourself, or as someone else. Recipients see emailed report data as the person running the report. Consider that they may see more or less data than they normally see in Salesforce. This change applies to Lightning Experience only.

To start or edit a report subscription, from the reports tab or from the report run page, click 💌 > Subscribe.

To subscribe other people, under Send To, click **Select People** and add recipients. You are included by default, but you can remove yourself once you add at least one other person.

- **Me** Only you receive the report.
- **Select People** People you specify receive the report. You are included by default, but you can remove yourself once you add someone else.

Under Run Report As, specify who runs the report.

- Me You run the report, and recipients see report data in the emailed report as you.
- Another Person Specify someone who has permission to run reports and who has access to the report.

When subscribed recipients receive report results by email, the email notes who they view the data as.

#### USER PERMISSIONS

- To subscribe to reports:
- "Subscribe to Reports"
- To subscribe other people to reports:
- "Subscribe to Reports: Add Recipients"

To specify who runs the report in a report subscription:

 "Subscribe to Reports: Set Running User"

		E	dit Sut	oscript	ion		
Schedul	e						
Frequency							
Daily	Weekly	Mont	hly				
Days							
SUN	MON	TUE	WED	THU	FRI	SAT	
Time (Ame Angeles)	rica/Los						
8:00 AN	A	*					
Send To Me Select	People						
🔼 Fre	ed Williams	on ×					
🔼 Sa	rah Vasque	z ×					
	pients see en they may see						ider
Run Report	t As						
O Me	-						
	er Person						
👱 Ha	ank Chen				×		
						Car	

# Create Report and Dashboard Folders in Lightning Experience

Folders are key to sharing and organizing reports and dashboards. Now you can create them in Lightning Experience. Switch to Salesforce Classic to grant other people access to folders. This feature is new in Lightning Experience.

To create a folder, from the reports or dashboards tab, click **New Folder**.

# USER PERMISSIONS

To create report folders:

"Create Report Folders"

To create dashboard folders:

• "Create Dashboard Folders"

-	Q Search Dashboards and n	nore		* 🖬 ? 🌣 🌲 象
Sales	lome Opportunities 🗸 Leads 🔪	🗸 Tasks 🗸 Files	Accounts 🗸 Contacts 🗸	Dashboards 🗸 More 🗸
DASHBOARDS Created by Me 1 item - Sorted by Folde	e r Name			New Dashboard New Folder
DASHBOARDS	FOLDER NAME	CREATED BY	LAST MODIFIED BY	CREATED ON
Recent	Company Dashboards	Fred Williamson	Fred Williamson	7/6/2016 10:08 AM
Created by Me				
Private Dashboards				
All Dashboards				
FOLDERS				
Created by Me				
Shared with Me				
All Folders				

# Other Enhancements to Reports and Dashboards in Lightning Experience

We've made some small-but-notable improvements to reports and dashboards. These changes apply to Lightning Experience only.

#### Line and Bar Charts in Dashboards Display Up to 500 Groupings

For line and bar charts, including cumulative line charts and stacked bar charts, we've upped the number of displayed groupings from 200 to 500! All other chart types still show 200 groupings.

#### Dashboards Display a "Last Refreshed" Warning

If you haven't refreshed a dashboard in more than 24 hours, the dashboard now lets you know with a helpful warning message.

<b>*</b>	Q	Search Salesfo	orce								*	•	Ð	? :	ġ.	Ļ.	S,
Sales	Home	Opportunities	~	Leads	~	Tasks	~	Files	Accounts	~	Contacts	s 🗸	Car	mpaig	gns 🔪	~	More 🔻
🛕 Last ref	Anage	r Dashboar	this d		d to s	ee the late	est da	ata.		✓ Fo	llowing	*	Refr	esh	Ed	it	•

#### Dashboard Components Support Source Reports with Row Limit Filters

Show your top 10 opportunities in a dashboard by adding a component based on a report with a row limit filter. For more information about row limit filters, see "Filter a Report" in the Salesforce help.

#### In the Lightning Experience Dashboard Builder, the +Add Button is now the + Component Button

Because we've introduced a new button to add dashboard filters, + Filter, we've renamed the button to better reflect what it does.



# Einstein Analytics (Wave): Einstein Discovery, Easier Data Management and Exploration, and Wave Templates

Einstein Discovery proactively answers complex business questions and enables deeper dives into your data. Intuitive data integration and preparation features make it easier to get your data ready for those deep dives. Find your own deeper insights and visualize them more easily in the redesigned explorer. And turn your Wave platform app into a template that others can use for building new apps with their own data.

Note: The supported browsers for Analytics are Microsoft<sup>®</sup> Edge, Microsoft<sup>®</sup> Internet Explorer<sup>®</sup> version 11, and the most recent stable versions of Mozilla<sup>®</sup> Firefox<sup>®</sup> and Google Chrome<sup>™</sup>. Analytics isn't supported with Apple<sup>®</sup> Safari<sup>®</sup>.

#### **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

Wave Analytics is now "Einstein Analytics." Einstein Analytics includes Einstein Data Discovery, which is now "Einstein Discovery." The prebuilt Wave apps also have modified names.

#### Wave: Einstein Discovery

Einstein Discovery finds relevant facts and themes in your data without building sophisticated software and statistical models. When it has finished analyzing your data, Einstein Discovery generates unbiased answers, explanations, and recommendations to help you learn what, why, and how to act on it. And results are easy for business users to understand. Now anyone can tap into the power of data science and do statistical and predictive analytics.

#### Wave: Personalize Your Analytics Home and Apps

With the upgrades to Wave Analytics home and app navigation, it's easier to make pathways through Wave that are optimized for different business needs. In addition, you can now create and track notifications on any chart, and include lenses in curated apps.

#### Wave: Redesigned Exploration, New Charts, and Dashboard Inspector

Analyze your data with more Wave charts and the new, streamlined, feature-packed explorer. Analyze and optimize dashboard performance with the dashboard inspector.

#### Wave: Updated Data Manager, New Connectors to External Sources, Dataflow Enhancements

Take your data from source to Wave dataset with nothing but clicks. Hook up internal and external data in an instant with connectors, and prepare it visually in the dataset editor or in a recipe. Fine-tune when these data jobs run with the flexible scheduler. And do it all in just one place: the redesigned data manager.

#### Wave: Action Menu Customization, More Bindings, and Embedding in Communities

Adding Salesforce action menus to dashboard tables or chart legends is now a snap. Do more with bindings, like dynamically set initial selections. And the latest way to embed dashboards is now via templates in the Community Builder.

#### Wave: Trend Data

Maintaining trending dashboards is easier with new automated cleanup of unused dashboards. And with embeddable trending dashboards, there's no need to access Wave your trending dashboards.

#### Wave: Accelerate with Prebuilt Wave Apps

We continually broaden the prebuilt Wave apps product offering to make it easier to bring the power of Wave to your Salesforce data. Our latest additions include a new app—Field Service Analytics, a new version of Sales Analytics, and new dashboards in Service Analytics and Event Monitoring Analytics apps.

#### Wave: Analytics on Mobile

Access data insights anywhere with Wave Analytics for iOS or Android.

#### Wave: New APIs, SDKs, and Templates

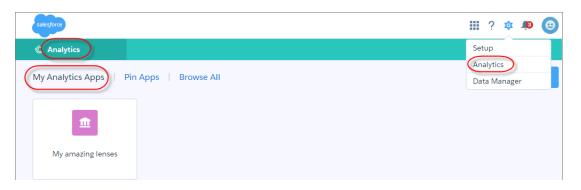
The Wave platform continues to grow with additional REST API support, new SDKs, and Wave Templates APIs.

# Einstein Analytics, the New Name for Wave Analytics

Wave Analytics is now "Einstein Analytics." Einstein Analytics includes Einstein Data Discovery, which is now "Einstein Discovery." The prebuilt Wave apps also have modified names.

The Einstein Analytics documentation and interface use the shortened product name "Analytics." We'll apply the new name throughout the product and translate the documentation in phases, starting now and continuing through the Winter '18 release.

To open Analytics, click **Analytics** in the app picker—the option is no longer "Wave Analytics." You'll find similar label changes in the Analytics interface, like the ones shown here.



Prebuilt Analytics apps all have new names, too, as the table shows.

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

# Wave: Einstein Discovery

Einstein Discovery finds relevant facts and themes in your data without building sophisticated software and statistical models. When it has finished analyzing your data, Einstein Discovery generates unbiased answers, explanations, and recommendations to help you learn what, why, and how to act on it. And results are easy for business users to understand. Now anyone can tap into the power of data science and do statistical and predictive analytics.

#### IN THIS SECTION:

#### Set Up Einstein Discovery

Set up your org to use Einstein Discovery by creating and assigning permission sets and enabling Einstein Discovery. Each Einstein Discovery user needs an Einstein Discovery - Analyst or Einstein Discovery - User permission set license.

#### Bring Your Data into Einstein Discovery

Import your data into Einstein Discovery and easily create datasets from Salesforce data, CSV files, Oracle, Microsoft SQL Server, Postgres, MySQL, Hadoop, SAP, and Netezza. Get suggestions on how to improve the quality of your dataset, review the suggested changes, and make data improvements.

#### Find the Stories Buried in Your Data

Einstein Discovery quickly sifts through huge amounts of data to find important correlations and make accurate predictions. Create a story to start uncovering the relationships between a business relevant metric and the explanatory variables that are potential influencers of that metric.

#### Better Understand Your Data Through Visualizations

Einstein Discovery surfaces causes and correlations to point your investigations in the right direction. It suggests unbiased answers so that you can focus on the metrics that matter. You learn why, not just what happened, and then what to do about it. Get answers to key business questions like, "What happened? Are there relevant patterns in the data that explain the behavior of the outcome variable?", "Why did it happen? What's the diagnosis behind the facts?", "What will happen? Based on historical behavior, what can we predict about future behavior?", and "What are effective options for dealing with the situation?"

#### Dig Deeper into the Data

After the initial analysis, provide feedback to improve the mathematical models. Einstein Discovery analytics empowers amazing predictive insights that might never be found using manual analysis techniques. This workflow improves productivity, when compared to manual techniques. You can act on insights, stay on top of changes, and iterate.

#### Share or Export the Story

Getting insights is only half the adventure; the other half is acting on them. To involve others, share the story or export it to Wave Analytics. You can also export customizable reports as Microsoft Word documents or PowerPoint slides. All reports include speaker notes written in plain language, so you can stop spending hours building and curating your reports.

#### Display Einstein Discovery Recommendations in a Salesforce Object

For Salesforce objects that support triggers, you can use Apex code and custom fields to import an Einstein Discovery recommendation. With the help of professional services, you can add fields like Outcome, Explanation, and Prescription.

# Set Up Einstein Discovery

Set up your org to use Einstein Discovery by creating and assigning permission sets and enabling Einstein Discovery. Each Einstein Discovery user needs an Einstein Discovery - Analyst or Einstein Discovery - User permission set license.

## **Create Permission Sets**

Create permission sets consisting of Einstein Discovery user permissions.

The Einstein Discovery - Analyst permission set license makes these user permissions available for provisioning.

User Permission	What It Enables
Connect Einstein Discovery Model	Not currently available.
Create and Update Einstein Discovery Datasets	Import data into Einstein Discovery and easily create datasets from Salesforce data, CSV files, Oracle, Microsoft SQL Server, Postgres, MySQL, Hadoop, SAP, and Netezza.
Create and Update Einstein Discovery Stories	Create stories to discover relationships between a business-relevant metric and the explanatory variables that are potential influencers of that metric.
Manage Einstein Discovery	Access all Einstein Discovery features, and see all datasets and stories created by users.
Share Einstein Discovery Stories	Allow user to export Einstein Discovery stories to Word, PowerPoint, R, and Wave.
Use Einstein Discovery	Use Einstein Discovery, and view the datasets and stories that you have permission to view.
View Einstein Discovery Recommendations	View Einstein Discovery recommendations that are connected to a Salesforce object.

USER PERMISSIONS

#### To create permission sets:

• Manage Profiles and Permission Sets

## USER PERMISSIONS

To enable Einstein Discovery:

Manage Einstein
 Discovery

The Einstein Discovery - User permission set license makes these user permissions available for provisioning.

User Permission	What It Enables
View Einstein Discovery Recommendations	View Einstein Discovery recommendations that are connected to a Salesforce object.

Create a Manage Einstein Discovery permission set for users who create and administer Einstein Discovery.

- 1. In the Setup menu, select Manage Users | Permission Sets and then click New.
- 2. For Label, enter *Manage Einstein Discovery*. The API name is filled in automatically.

- 3. For License, select **Einstein Discovery Analyst PSL**. When you select a permission set license, all users assigned to the permission set are assigned the permission set license. If you leave the default of **None**, you must manually assign the permission set license to users before you can add them to the new permission set.
- 4. Click Save. The Permission Set details page shows the new permission set.
- 5. Click System Permissions to open the list of user permissions enabled by the Einstein Discovery Analyst PSL license.
- 6. Click Edit.
- 7. Select Manage Einstein Discovery, and then click Save. You've successfully created a permission set that enables users to create and administer Einstein Discovery. You can now assign it to users.

You can build other permission sets out of the individual permissions enabled by the Einstein Discovery Analyst license, depending on the needs of users in your company.

To create a different permission set for other kinds of users, repeat the steps with these exceptions:

- Name the permission set something different.
- Select the appropriate user permissions and click Save.

### Assign Permission Sets to Users

Assign the appropriate permission sets to users. Although you can assign a permission set to an individual user, for efficiency, you can assign it to a group of users. You can assign multiple permission sets to a user.

- 1. From Setup, select Manage Users | Permission Sets.
- 2. Click the permission set you want to assign to users.

Note: Assign the Manage Einstein Discovery permission set only to users who administer or manage the app.

- 3. Click Manage Assignments, and click Add Assignments.
- 4. Select the users, and click Assign.
- 5. Click Done.

#### **Enable Einstein Discovery**

Enable Einstein Discovery in your org.

- 1. From Setup, enter *Einstein Discovery* in the Quick Find box, then select **Getting Started**.
- 2. Use the toggle button to enable Einstein Discovery.

## Bring Your Data into Einstein Discovery

Import your data into Einstein Discovery and easily create datasets from Salesforce data, CSV files, Oracle, Microsoft SQL Server, Postgres, MySQL, Hadoop, SAP, and Netezza. Get suggestions on how to improve the quality of your dataset, review the suggested changes, and make data improvements.

#### Import Data

You create datasets by importing data using one of the many data connectors.



When finished, you see your dataset. The message, "Data Improvements Detected," means that ways to improve the quality of your dataset have been identified.

APdist	•
Data Improvements Detected	
Review Changes	

Click Review Changes to see the ways that Einstein Discovery can improve your data.

dataset APdist	â Delete
Columns Rows 7 32213	Einstein identified ways to improve the quality of your dataset. Please review these recommendations.
Dataset Improvements Original Dataset Improved Datas	et Action
The following values occurred very rarely on the column: Ball Bea-rings	Delete Rows (2 ro * 2 rows will be dropped
Discount Level (Col 5) The following values occurred very rarely on the column: null	Find And Replace 💌 Add

Review the list of issues that were identified, and select the action to take to improve your dataset.

## Find the Stories Buried in Your Data

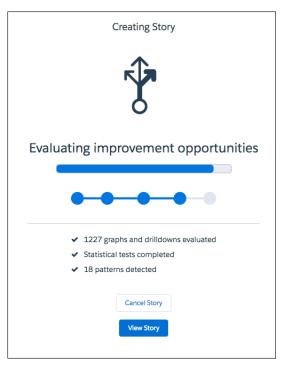
Einstein Discovery quickly sifts through huge amounts of data to find important correlations and make accurate predictions. Create a story to start uncovering the relationships between a business relevant metric and the explanatory variables that are potential influencers of that metric.

You suggest a story based on the data in your dataset on the Story Setup page. Design the story to answer a question about an outcome variable that you want to investigate. In this example, the story is "Maximize the variable Margin."

STORY SETUP APdist					Create Story
Maximize		Margin	•	in APdist	
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	Model ✓ Enable Predi	Settings ictive Analytics		<b>and Values</b>	

You can modify the story by selecting different measure variables to analyze and configure other settings for the model.

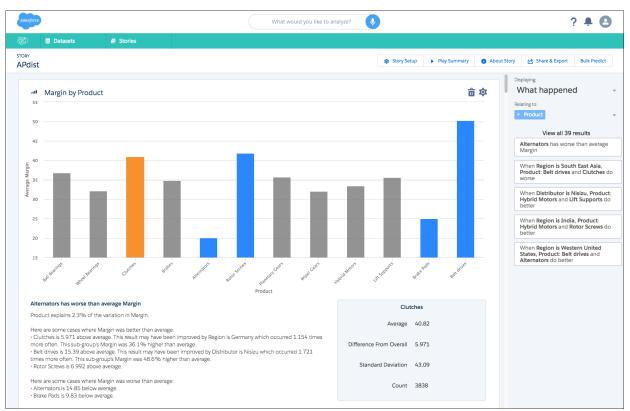
When you click **Create Story**, Einstein Discovery analyzes hundreds, thousands, or millions of variable combinations to find hidden, statistically significant insights in your dataset.



# Better Understand Your Data Through Visualizations

Einstein Discovery surfaces causes and correlations to point your investigations in the right direction. It suggests unbiased answers so that you can focus on the metrics that matter. You learn why, not just what happened, and then what to do about it. Get answers to key business questions like, "What happened? Are there relevant patterns in the data that explain the behavior of the outcome variable?", "Why did it happen? What's the diagnosis behind the facts?", "What will happen? Based on historical behavior, what can we predict about future behavior?", and "What are effective options for dealing with the situation?"

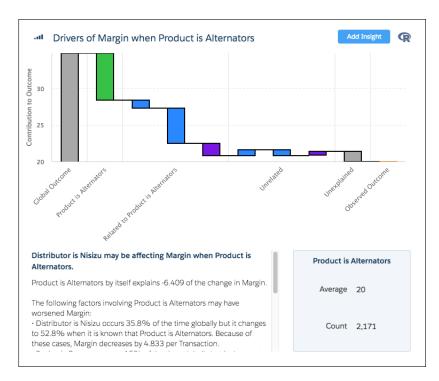
The first visualization is a bar chart that presents the insights in the order of influence on the outcome variable that you specified on the Story Setup page.



The Displaying section on the right lists the graphs in your story that you choose to view. Stories contain different graph types.

- What happened
- What changed over time
- Why it happened
- What could happen
- How can I improve it

Interact with the graphs to explore the story.



# Dig Deeper into the Data

After the initial analysis, provide feedback to improve the mathematical models. Einstein Discovery analytics empowers amazing predictive insights that might never be found using manual analysis techniques. This workflow improves productivity, when compared to manual techniques. You can act on insights, stay on top of changes, and iterate.

## Add More Graphs to Your Story

Einstein Discovery presents the graphs with the highest statistical importance and highlights the areas to focus on. You can further explore the data by changing the filters in the Relating to section. As you explore, you can add insights to your story.



# Modify Story Settings and Rerun the Analysis

To run the analysis with different settings, click **Story Setup**. On the Story Setup page, modify the story settings, and click **Create Story**.

# Share or Export the Story

Getting insights is only half the adventure; the other half is acting on them. To involve others, share the story or export it to Wave Analytics. You can also export customizable reports as Microsoft Word documents or PowerPoint slides. All reports include speaker notes written in plain language, so you can stop spending hours building and curating your reports.

# Display Einstein Discovery Recommendations in a Salesforce Object

For Salesforce objects that support triggers, you can use Apex code and custom fields to import an Einstein Discovery recommendation. With the help of professional services, you can add fields like Outcome, Explanation, and Prescription.

To enable this feature, your Salesforce administrator must install a managed package provided by Salesforce.

## USER PERMISSIONS

To read, create, update, or delete connected apps:

 Customize Application AND either Modify All Data OR Manage Connected Apps

# Wave: Personalize Your Analytics Home and Apps

With the upgrades to Wave Analytics home and app navigation, it's easier to make pathways through Wave that are optimized for different business needs. In addition, you can now create and track notifications on any chart, and include lenses in curated apps.

IN THIS SECTION:

#### Experience Wave Via Streamlined Pathways for Business Users and Builders

We optimized the Wave experience based on the user's environment. Users can take either a business user path or a Wave builder path, depending on what they want to do, and they can switch paths at any time. These informal paths don't restrict access but do help users with different goals to go where they want fast.

#### Include Lenses in Your Wave Apps

Curate your Wave apps to include both dashboards and lenses. Users can explore, undo, redo, see history, present, and share lenses in the running app.

#### Get Notified About Changes to Any Dashboard Widget

You're no longer limited to setting notifications only on number widgets. Now you can create notifications on most widgets and select which metrics to track.

#### Track and Manage Notifications on Your Wave Home Page like a Pro

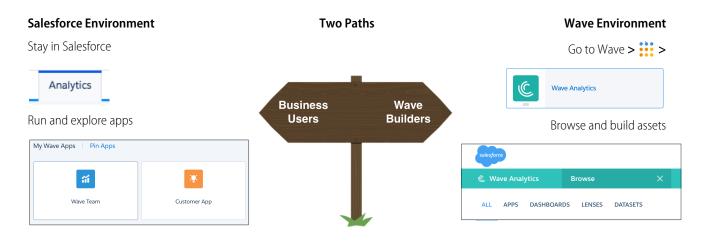
Choose whether to track each notification on your Wave Analytics home page. If tracking is on, progress toward your goal is shown in either a bar chart or flat gauge. Also on your Wave home, you can delete notifications directly from the dropdown delete option on the notification tracking tiles.

#### Delete a Dashboard from Its Tile or List View

With the new Delete option on browse pages, it's easier to clean up your Wave dashboard collection.

## Experience Wave Via Streamlined Pathways for Business Users and Builders

We optimized the Wave experience based on the user's environment. Users can take either a business user path or a Wave builder path, depending on what they want to do, and they can switch paths at any time. These informal paths don't restrict access but do help users with different goals to go where they want fast.



The business user path, generally for those with Use Wave Analytics permission, leads to ready-to-explore dashboards and lenses in curated apps. For this path, direct your users to the Analytics tab in Lightning Experience or Salesforce Classic. Within the Analytics tab, clicking an app tile starts the app running with the first dashboard or lens in its organized navigation.

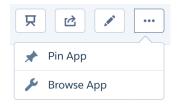
In a running app, the navigation panel control (📃) is now located left of the app name. Builder actions, such as edit, clip, clone, and

save, aren't available. To perform these actions, users switch to the builder path by clicking the **Open in Wave** ( ) control.

The builder path, generally for users with permission to create Wave assets, leads to ready-to-explore datasets and ready-to-edit apps, dashboards, and lenses. For this path, direct your users to the Wave Analytics environment. Within Wave, clicking an app tile opens the app's browse page, giving builders quicker access to all app assets. The option to run the app is available from the Run App button or the dropdown action list on the tile.

, , , ,		os Browse Al
	य़ Run App	
My	amazing lenses	

When running an app in the Wave environment, the share and edit actions are available as icon controls rather than hidden in the dropdown action list. The builder or app manager can organize the navigation that will be seen in the Analytics tab. And the option to browse is available from the dropdown list.



# Include Lenses in Your Wave Apps

Curate your Wave apps to include both dashboards and lenses. Users can explore, undo, redo, see history, present, and share lenses in the running app.

Remember that exploration you lovingly crafted and saved as a lens? Sure, you clipped it to the designer and added it to a dashboard, but now you can recreate your journey for others by including the lens in an app. The history is stored, so viewers can follow along by clicking through the different stages of the exploration.

In the app navigation, the first 20 assets appear alphabetically by name, including both dashboards and lenses. Click the navigation

control () in the upper left of your app. Add more assets by clicking the **Organize** button and the plus sign and then selecting from the lists of dashboards and lenses.

			Q Se	arch Salesforce	2						X		? 🏚 🗳	9
Sales	Home	Analytics	Opportunities 🗸	Leads 🗸	Tasks 🗸	Files	Accounts 🗸	Contacts 🗸	Dashboards	✓ Reports	s 🗸 Ch	atter C	Groups 🗸	More 🔻
≅ 2RR Cases	s by Prio	ority						Data u Today a	odated: at 8:01 AM	5 ĉ O	C	ਸ	r C	•••
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While you can explore, present, and share lenses from the running app, to save or clip to designer, click the edit ( ) or the open in Wave ( ) control.

# Get Notified About Changes to Any Dashboard Widget

You're no longer limited to setting notifications only on number widgets. Now you can create notifications on most widgets and select which metrics to track.

Click the dropdown list on any dashboard widget, except timeline and values table.

salesforce						🏭 ? 🌣 🐥 🙆
© Wave Analytics					n Test Dashb 🗙	
Notification Test Das	hboard + Follo	w		Data updated: Tod	ay at 8:01 AM	× H R & • • •
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0 Chat	es by Channel Count of Rows 500 602	١ĸ		Zases by Product & Re Product C Charge H Hex Z D U e Z D U e Z D C D e Z D C D e	<ul><li>Set Notification</li><li>Annotate</li></ul>	Create notifications by selecting Set Notification from the drop-down list on any widget (except a time line or values table). You can create up to 5 notifications.
Portal Social	582	1.2K	Account Settings Battery Installation Lost/Stolen Store & Shipping Syncing		<ul> <li>Show Details</li> <li>I™ Share</li> <li>I™ Explore</li> </ul>	

Depending on the chart, the setup panel provides relevant options to select for creating a notification. You can include up to four groupings. If the chart has multiple measures, select the one you want from the list of options.

salesforce				III ? 🌣 🐥 🙆
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Chat Email Phone Social	s by Channel Count of Rows 500 1x 602 582	, P	by Product & Reason roduct Count of Rows	Notify me when any Reason > Productc         Count of Rows         Is greater than         340

Notifications read generally like a sentence. For example, "Notify me when any channel's sum of open cases is less than 20" or "Notify me when any product or reason's count of cases is greater than 20."

# Track and Manage Notifications on Your Wave Home Page like a Pro

Choose whether to track each notification on your Wave Analytics home page. If tracking is on, progress toward your goal is shown in either a bar chart or flat gauge. Also on your Wave home, you can delete notifications directly from the dropdown delete option on the notification tracking tiles.

The notification edit panel now gives you the option to track the progress toward the conditions set in the notification on your Wave Analytics home page.

🗹 Activ	/e	
🗹 Trac	k on Wave Anal	ytics home page
	Save	Save and Run

Depending on the widget's groupings, a gauge or bar chart shows you progress toward your goal.



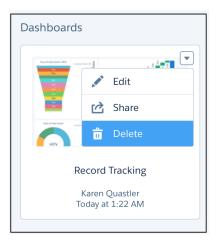
Click a notification tracking tile on the home page to go directly to the dashboard where the notification is set. If you're finished with a notification, delete it with the dropdown list on the home page notification tile.



# Delete a Dashboard from Its Tile or List View

With the new Delete option on browse pages, it's easier to clean up your Wave dashboard collection.

Previously, you opened the dashboard to access the delete action. Now we've added **Delete** to the dropdown on tiles and list views of dashboards. Whether on the Browse All or app browse page, the dropdown action list includes a delete option if you have permissions and sharing rights to delete.



# Wave: Redesigned Exploration, New Charts, and Dashboard Inspector

Analyze your data with more Wave charts and the new, streamlined, feature-packed explorer. Analyze and optimize dashboard performance with the dashboard inspector.

#### IN THIS SECTION:

#### Reach the Heights of Productivity with the New Explorer

The updated explorer offers a streamlined look and integrated functionality accessible from both lenses and the Wave dashboard designer. From the latest Wave charts to mode switching, the new explorer is a data-lover's dream.

#### Access More Wave Charts and Configure Them in More Ways

More Wave charts have been added, giving you an unprecedented choice in how to best visualize your data. With more ways of configuring and fine-tuning charts, it's even easier to create beautiful and effective visualizations.

#### Run Your Dashboards Faster with the Dashboard Inspector

The dashboard inspector shows how fast Wave executes each step, allowing you to identify query bottlenecks to make them run faster. It also shows how Wave modifies step queries based on global filters, faceting, and bindings.

#### Tailor the Results to the User Viewing the Dashboard

You can modify a step query based on the logged-in user. For example, you can filter opportunity records and show only those opportunities owned by this user. Previously, you could only apply user tokens to the start value.

#### Show Totals and Maximize the Display in Tables

Show totals in value and compare tables to see how well your business or team is performing. Configure table column widths to minimize whitespace and ensure widget alignment in a dashboard.

#### Wave Designer Labels Have Changed

We changed the labels to distinguish between selections and filters.

#### Get Familiar with Dashboard JSON Changes for Wave Designer

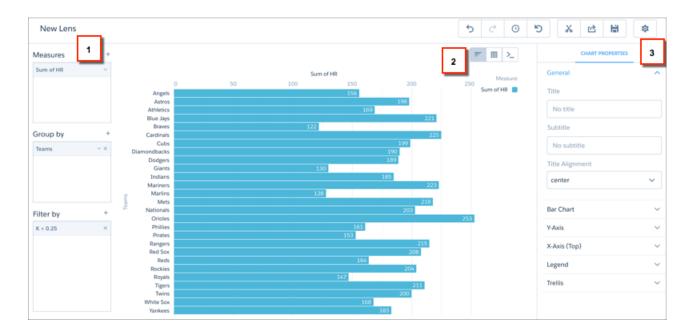
The dashboard JSON contains new parameters that impact users who create the JSON from scratch.

## Reach the Heights of Productivity with the New Explorer

The updated explorer offers a streamlined look and integrated functionality accessible from both lenses and the Wave dashboard designer. From the latest Wave charts to mode switching, the new explorer is a data-lover's dream.

#### Explore Easily with a New Look

Explorer has been redesigned into a work area where you can easily view and edit all selections and properties affecting your exploration.



Your chosen measures, dimensions, and filters are more visible in dedicated panels (1). Use the new mode-switching buttons to quickly move between charts, data tables, and editing SAQL (2). (Yes, editing SAQL with the push of a button!) The gear menu displays or hides the properties panel related to the current visualization or table in the display area (3).

All the actions you've come to know and love, and some new ones that you're going to love, are well-placed in menus or bars. They're accessible but also out of the way when you don't need them.

New Lens			2 5	¢ ©	5	ኤ 🖻	\$
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Sum of HR	↓ Sort descending	R	SUM OF AVG	SUM OF BB	SUM OF K	SUM OF OFF	3
Sum of AVG V ×	↑ Sort ascending	6	0.26	0.08	0.16	-18.4	_
Sum of BB V X	<ul><li>Sort within groups (desc)</li><li>Sort within groups (asc)</li></ul>	8	0.247	0.09	0.23	-9.9	
Group by +	× Clear sort	9	0.246	0.07	0.19	-90.2	
Teams ~ ×	+ Add a column	1	0.248	0.1	0.22	8.5	
	💉 Edit this column	2	0.255	0.08	0.2	-111.3	
	Show as bars	-	0.244	0.1	0.26	-67.3	
Filter by	Show as values	5	0.255	0.09	0.21	11.9	
Sum of HR + K < 0.25 ×	∧ Move Up	9	0.256	0.1	0.21	61.6	
	✓ Move Down	о	0.261	0.07	0.23	-37.5	
Sum of AVG +	💋 Hide	9	0.249	0.09	0.21	-12.9	
Sum of BB Filter by +	Giants 1	30	0.258	0.09	0.18	-17.5	

Each measure or dimension has its own actions menu (1) with choices appropriate to the current context. The action bar (2) provides easy access to familiar controls, including a context-sensitive gear menu. The Show Totals option for tables is now in a dedicated menu (3).

## Choose Charts from a Unified Menu

Remember when the charts you used for presenting visualizations in a dashboard weren't available for exploring data? With the new explorer, there's a seamless data exploration and presentation experience.

Explorer now uses Wave charts, which means you get the same experience in explorer and Wave dashboard designer. All your favorite charts from explorer, such as calendar heat map and parallel coordinates, are now united with your favorite charts from dashboard designer, such as pyramid and waterfall.

## Drill into Data with the Push of a Button

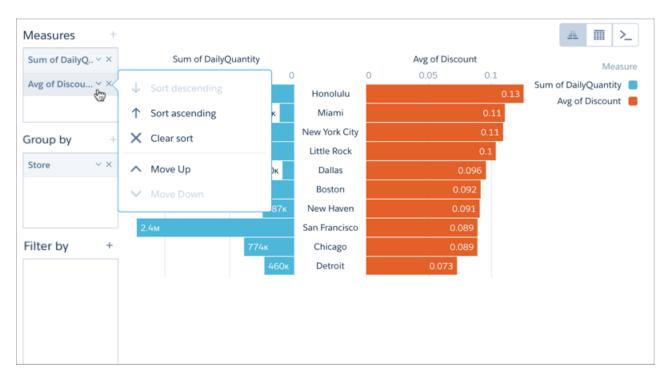
A new drill-down button appears when you make selections on a chart.

New lens: all_1		ে ত চ	د 🖄 🛱 🌣
Measures +		Drill Into This By	
Count of Rows		Search for dimensions.	Measure
	0	🕂 Item	Зк Count of Rows
	Boston	- Month	Зк
	Chicago		3.1к
Group by +	Dallas	· Promotion	3.1ĸ
	Detroit	Store	Зк
Store ~ ×	Honolulu		3.1к
St	Little Rock		Зк
	Miami		3.1к
	New Haven		3.1к
Filter by +	New York City		3.1к
	San Francisco	View Data Table	3.1к

If buttons aren't your thing, you can still drill down by clicking a value along the axis, or right-clicking a selected element in the chart.

## Sort by Any Measure

Instead of being locked into sorting only by the first measure, you can sort by any measure. Open the measure's action menu and select the sort direction.



## Other Changes in Explorer

Lenses clip from explorer to the Wave dashboard designer with visual settings intact. Your carefully configured visualization appears the same in the dashboard designer as it did while you were exploring.

You can now view SAQL-form steps from a dashboard in read-only mode in explorer. Previously, you could only open steps in compact form. To enable users to open a step in explorer, enable the Show Explore Icon widget property.

If you access explorer from within a dashboard, you can reference multiple datasets in the SAQL for the step you are exploring. The datasets must already be used in the dashboard by other steps. The simplest way to achieve that is to add a step to your dashboard for every dataset you intend to use, then copy the load "{alias}" in these steps to your target step's SAQL.

In SAQL steps, the parser now identifies grouped and non-grouped dimensions (strings) separately. The grouped dimensions are included in your visualizations by default, but the string dimensions are not. You can manually add the string dimensions into a visualization by editing the underlying SAQL.

Copy, paste, and focus commands are no longer available in explorer.

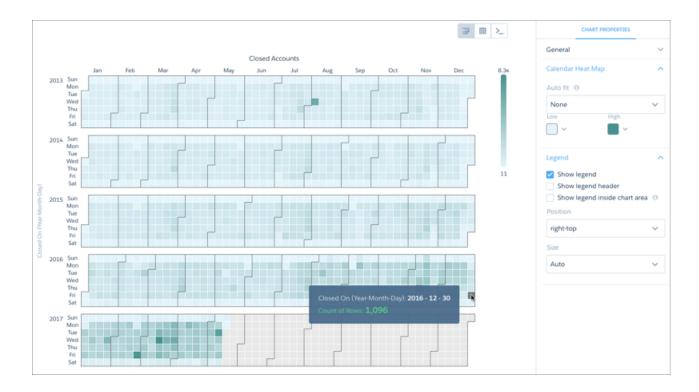
## Access More Wave Charts and Configure Them in More Ways

More Wave charts have been added, giving you an unprecedented choice in how to best visualize your data. With more ways of configuring and fine-tuning charts, it's even easier to create beautiful and effective visualizations.

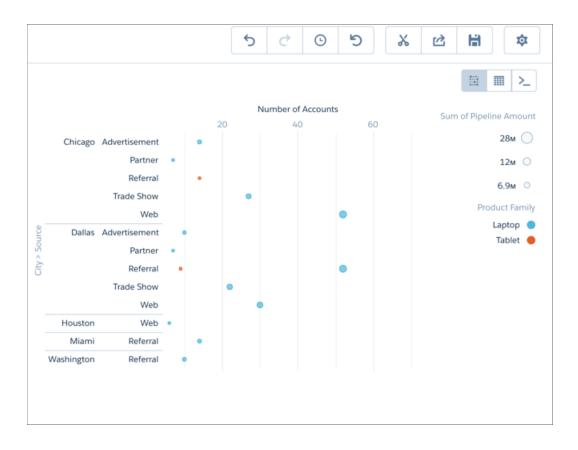
## Visualize Data with New Wave Charts

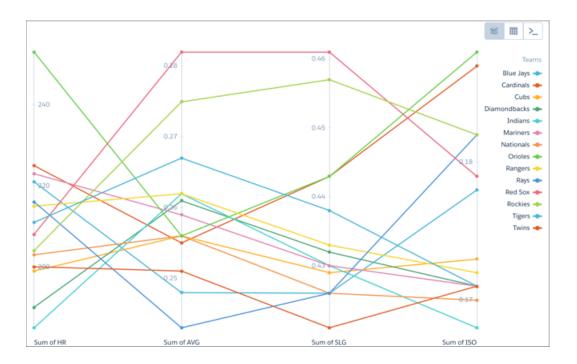
Wave charts now include calendar heat map, horizontal and vertical dot plots, the familiar line chart, and parallel coordinates, all of which used to be available only in explorer. Geo map and the angular gauge (available in Reports and Dashboards) are newely available in Wave.

Calendar heat maps are useful for visualizing recurring discrete activities, such as closing accounts, over long periods of time. In this chart, you can easily change the granularity of the time-based grouping, such as from month to week or day.



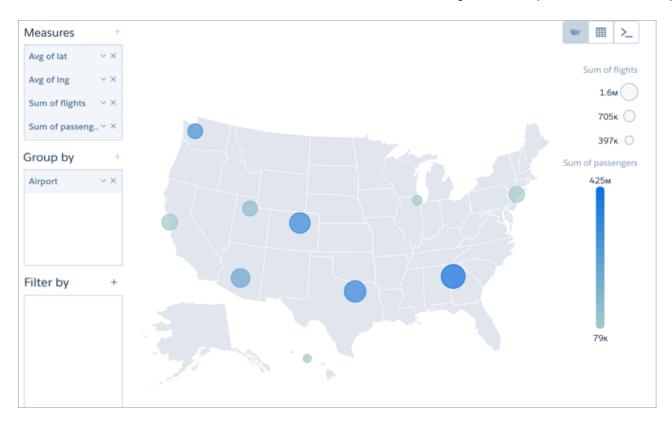
Horizontal and vertical dot plots use the size and coloring of bubbles to visualize multiple dimensions and measures.



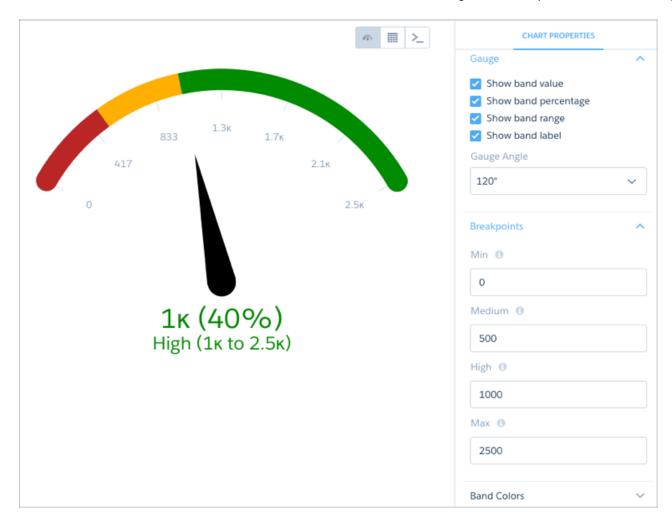


Parallel coordinates is useful in displaying how data elements in a grouping stack up against each other using one to four measures.

Geo maps allow you to visualize data that contains geographical coordinates (latitude and longitude). For example, in a U.S. map you can display airport data with bubbles centered on actual airport locations instead of just home states.

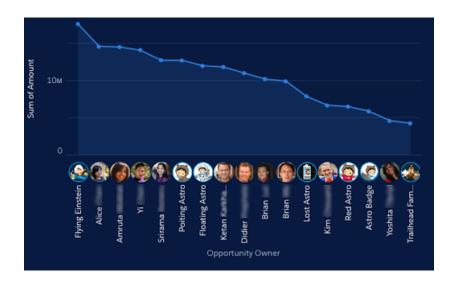


Use the angular gauge chart to track progress along a single measure, such as how much revenue has been realized versus the target.



## Enhance Charts with Icons

Add character to your charts by adding faces, flags, or other images to the numbers they display.



All you need is a dataset with an ungrouped URL dimension whose values are URLs to the icon images. For example, each row in the following dataset has a URL that points to a flag image stored in your org:

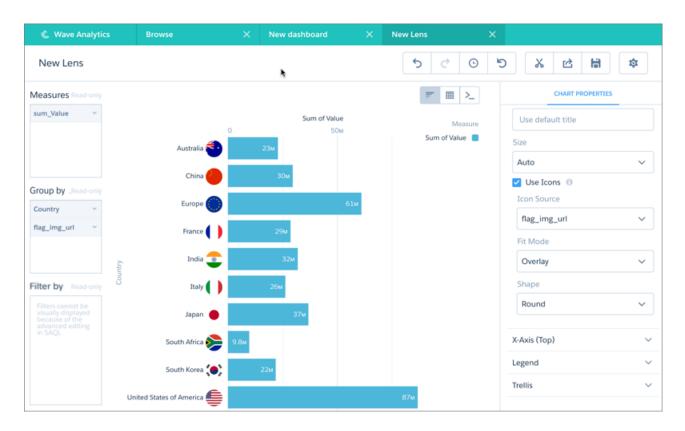
Country, Country_code, Region, flag_img_url, Accounts, Value
Australia, aus, South
Pacific, https://myorg.content.force.com/file-asset/flagaustraliapng,1898,22930651
China, chn, East Asia, https://myorg.content.force.com/file-asset/flagchinapng, 2051, 29754009
<pre>Europe,eur,Europe,https://myorg.content.force.com/file-asset/flageuropepng,4668,61238042</pre>
<pre>France,fra,Europe,https://myorg.content.force.com/file-asset/flagfrancepng,2303,28746829</pre>
<pre>India, ind, Asia, https://myorg.content.force.com/file-asset/flagindiapng, 2721, 32037499</pre>
Italy, ita, Europe, https://myorg.content.force.com/file-asset/flagitalypng, 1722, 26340986
<pre>Japan,jpn,East Asia,https://myorg.content.force.com/file-asset/flagjapanpng,2872,36916012</pre>
Russian Federation, rus, East
Europe, https://myorg.content.force.com/file-asset/flagrussiapng,1847,27387456
South
Africa, zaf, Africa, https://myorg.content.force.com/file-asset/flagsouthafricapng, 879, 9794857
South Korea,kor,East
Asia, https://myorg.content.force.com/file-asset/flagsouthkoreapng,1643,21934785
United States of America, usa, North
America, https://myorg.content.force.com/file-asset/flagusapng,6527,87044191

You can import that dataset into Wave, then query it in SAQL mode:

C Wave Analytics	Browse		New dashboard		New Lens			
New Lens					5	· · ·	<u>አ</u> מ	<b>a</b>
								<b>₹ 11 ≻</b>
Query								Run Query
2 q = group q by 'Cou	ate 'Country' as 'Count	ry', firs	t('flag_img_url') as	'flag_img	g_url', sum('Valu	e') as 'sum_Value'	;	
5 q = cance q 2000,								
COUNTRY	FLAG_IMG_URL		SUM OF VA	LUE				
Australia	https://gusc.gus.conte	ent.force.o	com/file 22,930,0	651				
China	https://gusc.gus.conte	ent.force.o	com/file 29,754,0	009				
Europe	https://gusc.gus.conte	ent.force.	com/file 61,238,0	042				
France	https://gusc.gus.conte	ent.force.o	:om/file 28,746,8	829				
India	https://gusc.gus.conte	ent.force.d	com/file 32,037,	499				

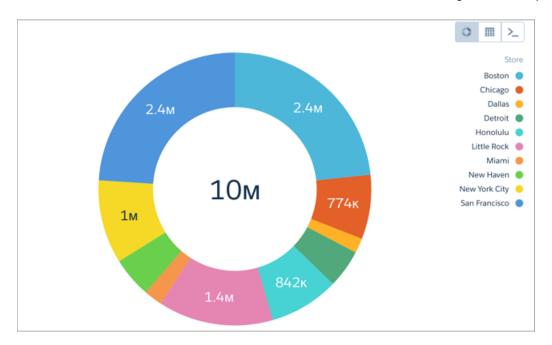
The image URLs are queried using some non-grouping SAQL function: first('flag\_img\_url') as 'flag\_img\_url'.

Returning to chart mode, you can then add the icons and configure their properties using a simple set of chart properties right from Wave.

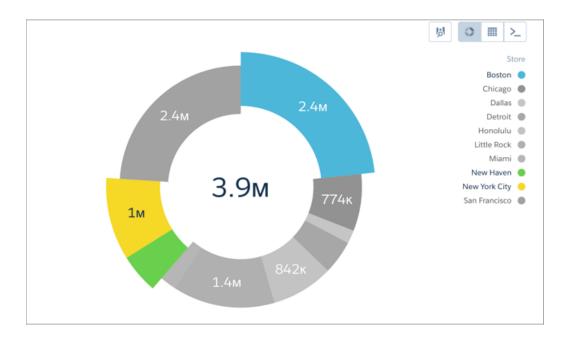


## Get More out of Donut Charts

Large slices of donut charts now display their values.

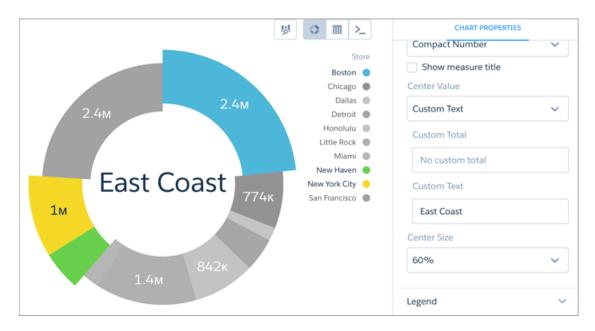


What's more, you can customize the center value. Normally, the center value reflects the value of selected slices.



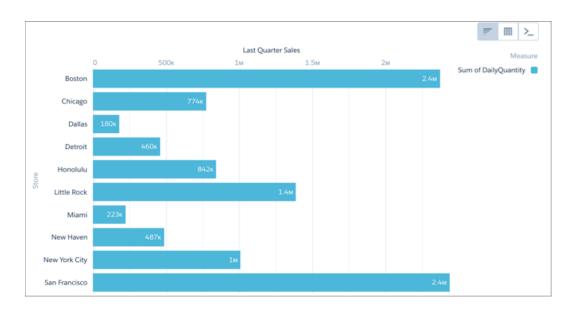
With the new customizable center value, you decide what's shown in the donut chart's center.

#### Einstein Analytics (Wave): Einstein Discovery, Easier Data Management and Exploration, and Wave Templates



## Change the Range to Zoom In

Custom domain lets you determine which portion of a chart to focus on. For example, a bar chart can show you store sales.



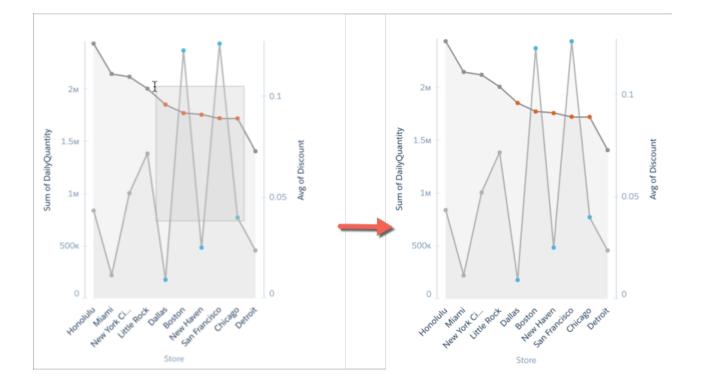
To focus only on stores that performed above a certain sales total, set the low value for the custom domain to the minimum sales total required. The updated bar chart shows only the bars with totals that fall in the new range.

#### Einstein Analytics (Wave): Einstein Discovery, Easier Data Management and Exploration, and Wave Templates

						ll.		CHART PI	ROPERTIES	
		500ĸ		arter Sales 1.5м 2i	м		Measure	X-Axis (Top)		^
	Boston				2.4м	Sum of DailyQ	Quantity 📒	Log Scale		
	Chicago	774к						<ul> <li>Show axis</li> <li>Add custom do</li> </ul>	main 🕕	
	Dallas							500000	High Value	
	Detroit							Show title		
e	Honolulu	842ĸ						Title		
Store	Little Rock		1.4м					Last Quarter Sale	s	
	Miami							+ Reference Line		
	New Haven							Legend		~
N	New York City		lm					Trellis		~
5	San Francisco				2.4м			Trens		~

# Select Data by Dragging the Mouse Pointer

Selecting data points is as easy as click and drag.



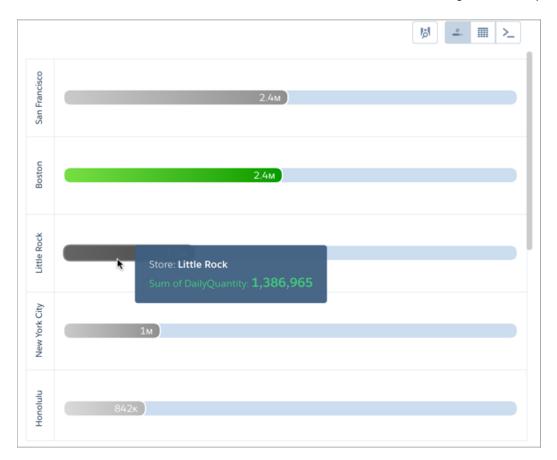
Or, click individual data elements, and keep clicking to continue to select multiple elements. Go back to the default selection (all selected) by clicking outside the chart on any white space in the chart.

## Other Updates to Wave Charts

You can adjust the bubble size on scatter charts and maps that use bubbles.



Charts that use bubbles, such as dot plots and bubble map, now have a legend that correlates value to bubble size. Flat and polar gauges have tooltips and can be selected in a trellis display.



# Run Your Dashboards Faster with the Dashboard Inspector

The dashboard inspector shows how fast Wave executes each step, allowing you to identify query bottlenecks to make them run faster. It also shows how Wave modifies step queries based on global filters, faceting, and bindings.

Because dashboard layouts can contain different widgets (and steps), run the inspector on each layout. To open the dashboard inspector, preview the dashboard while browsing the app, select the right layout, and then click **Dashboard Inspector**.

Top Deals - DEMO + Follow	Data updated: Yesterday at 9:01 AM	5		H	모	Ċ	<b>#</b> *	۵	•••
Bonjour Jean-Michel!			Y	′ou are ba	ased in	ð	Clone i	n New T	ab
You last logged in: 2017-04-12T15:02:08.00	0+0000.					Ô	Delete		
	Open Amount					151	Dashbo	oard Ins	pector
	177M								
	View by Owner	~							
	Su	n of Amount							
	5м		10м				15м		18м
Flying Einstein			_			45			18M
Alice						15			
Amruta 🚺						15	1		
VI VI					_	14м			
် Srirama 🙀					13м				
Yi Wi Srirama Vi Poiting Astro					13м				
G Floating Astro				12м					

🕜 Note: The dashboard inspector isn't available while running the app or previewing an embedded dashboard outside of Wave.

The dashboard inspector provides the following information.

#### **Query Metrics**

Use the query metrics to determine which step queries are taking the longest time to run. If needed, tune the step queries to increase dashboard performance.

The inspector shows the following metrics for every step included in the dashboard layout.

Dashboard Inspector ×						
Q  Şearch Ste	ps					
STEP	# RUNS	FIRST ( 🗸	AVG (MS)			
Details lens_1	2	926	615			
Open Amount Amount_1	2	852	563			
Select a step in the list above to view details						

Metric	Description
# Runs	Number of times Wave executed the step query.
First (MS)	Number of milliseconds that Wave took to execute the step query for the first time.
Avg (MS)	Average number of milliseconds that Wave took to execute the query.

For tips about tuning SAQL queries, see Query Performance.

#### **Step Details**

To view the details, select a step in the inspector. The step details summarize different parts of the query, like measures, filters, groupings, and the dataset on which its built. Use the metrics in the Last Run Metrics section to identify other events that contribute to the total time required to populate the results of a step.

Open Amount Amount_1	
• Measures Sum of Amount	
🕒 Last Run Metrics (ms)	
Metadata: 976ms Waiting: Oms Query: 162ms	

Metric	Description
Metadata	Number of milliseconds that Wave took to retrieve the extended metadata.
Waiting	Number of milliseconds that Wave took to resolve bindings.
Query	Number of milliseconds that Wave took to run the query.

#### **Executed Query**

Wave modifies step queries based on interactions with other widgets. If you have questions about why a step doesn't show all

expected results or behaves in an unexpected manner, click  $\blacksquare$  .

Query Details			×
	ORIGINAL QUERY	FINAL QUERY	
<pre>1 q = load "Opp_Icons"; 2 q = filter q by 'Billing_ 3 q = group q by 'Opportuni' 4 q = foreach q generate 'O sum('Amount') as 'sum 5 q = order q by 'sum_Amount'</pre>	ty_Owner'; oportunity_Owner' as 'Oppor _Amount';	rtunity_Owner', first(	'Image.ImageUrl') as 'ImageUrl'
✓ BINDINGS TRACE			RESULT

The Query Details page allows you to compare the query defined in your dashboard against the actual query executed when the dashboard is viewed. You can see what additional filters are applied due to faceting and global filters, and the resolved values of bindings, if applicable. If bindings are used in the query, the bindings tracer provides a step-by-step breakdown of each bindings function and the resolved value. The bindings tracer allows you to see if the resulting data—including both content and format—is what you intended.

# Tailor the Results to the User Viewing the Dashboard

You can modify a step query based on the logged-in user. For example, you can filter opportunity records and show only those opportunities owned by this user. Previously, you could only apply user tokens to the start value.

You can specify user tokens in any query parameter in saq1, soq1, and aggregateflex step types. To specify a token, use the following syntax: ! {user.<User object field name>}. Valid tokens are: user.Id, user.name, user.roleid, and user.rolename.

The following saq1-type step uses the user.Id token as a query filter so that opportunity owners viewing the dashboard can only see their opportunities.

```
"My_Opportunities_1": {
    "type": "saql",
    "query": "q = load "GeoOpp";q = filter q by 'OwnerId' == \"!{user.Id}\;q = group q by
'Type';q = foreach q generate 'Type' as 'Type', count() as 'count';q = order q by 'Type'
asc;q = limit q 2000;",
    "isFacet": true,
    "useGlobal": true,
    "numbers": [],
    "groups": [],
    "strings": [],
    "label": "My Opportunities"
}
```

# Show Totals and Maximize the Display in Tables

Show totals in value and compare tables to see how well your business or team is performing. Configure table column widths to minimize whitespace and ensure widget alignment in a dashboard.

Modify the widget properties to show totals and configure the column size.

1.0							Wit	OGET STEP	
1	ACCOUNTTYPE	FORECAST CATEGORY	CLOSED	AMOUNT	OPPOR		General		
Summary				940,000	•		Action Menu (	5	
1	Prospect	Closed	true	50,000	006Bt		Show explore icon  Show custom action		
2	Prospect	Pipeline	false	40,000	0068				
3	Prospect	Pipeline	false	140,000	0068(		Table Options		_
4	Prospect	Pipeline	false	70,000	00686		Column Size		
5	Prospect	Pipeline	false	20,000	00680	- >	Fit to Data		~
l.e	Contrastor	Beales I.			onedi		Column Width		
							Minimum	Maximum	
							40	300	
						_ (	Show Totals		
							Widget Style		

Note: The Show Totals field appears in the widget properties only if the Show Totals option is enabled in the step. While creating the step in Table mode, select **Options** > **Show Totals**.

Opportunities							
Opportunity Det	ails ,	/					
New Lens							t 0 5
Columns	/						F = 2_ (
Account.Type	×		ACCOUNTTYPE	FORECAST CATEGORY	CLOSED	AMOUNT	OPPORTUNITY ID
Forecast Category	×	Summary				940,000	
Closed	×	1	Prospect	Closed	true	50.000	006800000027CkBIAU
Amount	×	*	Prospect	Closed	orue	30,000	000000000000000000000000000000000000000
Opportunity ID	×	2	Prospect	Pipeline	false	40,000	006800000027CkCIAU
		3	Prospect	Pipeline	false	140,000	006800000027CkDIAU
		4	Prospect	Pipeline	false	70,000	006800000027CkEIAU
Filters	+	5	Prospect	Pipeline	false	20,000	006800000027CkFIAU
		6	Customer	Pipeline	false	100,000	006800000027CkGIAU
		7	Customer	Pipeline	false	20,000	006800000027CkHIAU
		8	Prospect	Pipeline	false	0	006800000028t171AI

You can set the table column size to the following.

#### Fit to Data

Dynamically set the column widths based on the length of the data. You can also set a minimum and maximum width to ensure that the column isn't too wide or narrow.

## **Fixed Width**

Set each column to the same width.

## Fit to Widget

Fit the columns to the size of the widget. Use this setting to ensure that no empty space appears at the right side of the table, as shown here.

	INDUSTRY	ACCOUNT TYPE	BILLING COUNTRY	BILLING CITY	ACCOUNT SOURCE	ANNUAL REVENUE	
1	Banking	Customer	France		Employee Referral	9,337,343,000	
2	Healthcare	Partner	Brazil	-	Partner	6,009,291,000	-
3	Technology	Customer	Turkey		Web	4,737,854,000	
4	Engineering	Customer	Korea	-	Partner	2,774,262,000	
5	Biotechnology	Customer	United Kingdom		Employee Referral	802,499,000	

# Wave Designer Labels Have Changed

We changed the labels to distinguish between selections and filters.

Old Label	New Label	Where Does Label Appear?
Pick Initial Filters	Pick Initial Selections	Dashboard option (For more information, see initial selections help.)
Initial Filters	Initial Selections	Step property
Apply Selected Filters	Apply Selections and Filters	Link widget property (For more information, see link widget help.)

# Get Familiar with Dashboard JSON Changes for Wave Designer

The dashboard JSON contains new parameters that impact users who create the JSON from scratch.

Description
<pre>Required. Indicates the method used to determine the column size for a table widget. Valid values are:     variable—If you specify this mode, you must also specify minColumnWidth and maxColumnWidth.     fixed—If you specify this mode, you must also specify fixedColumnWidth.     fittocontainer For more information, see Show Totals and Maximize the Display in Tables. Sample JSON:     "steps": {         "lens_1": {         "</pre>
7. - - -

JSON Parameter	Description
	<pre>"visualizationParameters": {     "options": {},     "type": "table",     "parameters": {         "customBulkActions": [],         "mode": "variable",         "minColumnWidth": 40,         "maxColumnWidth": 300,         "totals": true     }     }   } }, "widgets": {     "type": "table",     "parameters": {         "type": "table",         "parameters": {         "customBulkActions": [],         "mode": "fittocontainer",         "exploreLink": true,         "totals": true,         "totals": true,         "totals": true,         "step": "lens_1"     } },</pre>
visualizationParameters	<pre>Optional.(For saq1 step type only.)Contains chart properties defined in the step. When you associate the step with a widget, the widget chart properties override these settings. JSON sample: "steps": { "lens_1": { "type": "saq1", "isFacet": true, "useGlobal": true, "numbers": [], "groups": [], "groups": [], "gtrings": [], "groups": [],</pre>

JSON Parameter	Description
	"align": "center"
	},
	"theme": "wave",
	"showValues": true,
	"axisMode": "multi",
	"binValues": false,
	"bins": {
	"breakpoints": {
	"low": 0,
	"high": 100
	},
	"bands": {
	"low": {
	"label": "",
	"color": "#B22222"
	},
	"medium": {
	"label": "",
	"color": "#ffa500"
	},
	"high": {
	"label": "",
	"color": "#008000"
	}
	}
	},
	"dimensionAxis": {
	"showAxis": true,
	"showTitle": true,
	"title": "",
	"customSize": "auto",
	"icons": {
	"useIcons": false,
	"iconProps": {
	"column": "",
	"fit": "cover",
	"type": "round"
	}
	}
	},
	"measureAxis1": {
	"sqrtScale": false,
	"showAxis": true,
	"customDomain": {
	"showDomain": false,
	"low": null,
	"high": null
	},
	"showTitle": true,
	"title": "",

JSON Parameter	Description
	},
	"measureAxis2": {
	"sqrtScale": false,
	"showAxis": true,
	"customDomain": {
	"showDomain": false,
	"low": null,
	"high": null
	},
	"showTitle": true,
	"title": "",
	"referenceLine": null
	},
	"legend": {
	"show": true,
	"showHeader": true,
	"inside": false,
	"position": "right-top",
	"customSize": "auto"
	},
	"trellis": {
	"enable": false,
	"showGridLines": true,
	"flipLabels": false,
	"type": "x",
	"chartsPerLine": 4
	}
	}
	}
	}

# Wave: Updated Data Manager, New Connectors to External Sources, Dataflow Enhancements

Take your data from source to Wave dataset with nothing but clicks. Hook up internal and external data in an instant with connectors, and prepare it visually in the dataset editor or in a recipe. Fine-tune when these data jobs run with the flexible scheduler. And do it all in just one place: the redesigned data manager.

# IN THIS SECTION:

## Work Smarter in the Data Manager

The data manager is home for all your data tasks: connect, replicate, and prepare. And now, with new tools such as connectors and the dataflow editor, it's more important than ever that you can quickly find what you need. So we reorganized the data manager and renamed tabs to make it easier to find your way around.

## Connect to External Data with Clicks, Not Code (Generally Available)

Wave connectors give you an easy way to connect to data inside and outside of your Salesforce org and bring it into Wave. Quickly connect to data in your local org, another Salesforce org, or Marketing Cloud. Or connect to popular web-based services: Amazon Redshift and Heroku Postgres. And did we mention: No code required.

#### Create Dataflows with Clicks, Not Code

Create and edit your dataflows visually without a single line of code, using the dataflow editor. Add fields and objects in seconds; create complete dataflows in minutes. No more downloading, editing, and uploading JSON files.

#### Extract Replicated Data with the Digest Transformation

Use the new digest transformation in a dataflow to extract data replicated through local and external connections.

#### Learn About Dataflow Validation Enhancements

Wave now validates your dataflows when you upload the definition files. Previously, validation on upload occurred only when you had replication enabled. Without replication, you only learned of errors when the dataflow ran. Too late!

#### Learn About Changes to Dataflow Limits

We updated dataflow limits to get more out of your dataflows.

#### Enable New Fields for Replication with Ease

You know how it goes. The sales operations team at your company wants to see extra opportunity fields in their dashboards. You have replication enabled in your org, so you know that you have to update the dataflow to enable these fields. Not anymore. Use the new field picker to enable fields with just a few clicks. No dataflow required!

#### Add More Flavor to Your Data with New Recipe Ingredients

Dataset recipes include a smorgasbord of new features to help you get even more out of your data. Bucket date fields to analyze data by whatever periods you choose. Extract components from dates to get a yearly view, or zoom in for a second-by-second look. Free numbers from their dimension fields with the dimension-to-measure transformation, and then do math on them. And when you've done all that, edit field names and labels so that your explorers really know what their data's telling them.

#### Get On Track with the Flexible Scheduler

With dependent replications, recipes, and dataflows all running on separate schedules, timing has never been more important. The new flexible scheduler in gives you more precise control over when and how often your data jobs run, and how you receive notifications.

#### Create Datasets, Avoid Clutter

We decluttered and streamlined how you get to what you love most: creating datasets.

#### Use Your Salesforce Sharing Settings in Wave

Sharing inheritance creates a bridge between your Salesforce security model and Wave. For supported objects, sharing is now an option instead of security predicates.

# Work Smarter in the Data Manager

The data manager is home for all your data tasks: connect, replicate, and prepare. And now, with new tools such as connectors and the dataflow editor, it's more important than ever that you can quickly find what you need. So we reorganized the data manager and renamed tabs to make it easier to find your way around.

Open the data manager in Wave from the gear icon.

salesfor	ræ						III ? 🔯 🖡 🕻	9
© Wa	ave Analyt	tics	Browse				Setup	
							Developer Console	<b>^</b>
ALL	APPS	DASHBOARI	DS LENSES	DATASETS	Q Search Wave Analytics	16 results	Wave Analytics	
							Data Manager	

The Monitor tab is probably the one you visit most often, to check the progress of your data jobs and dataflows. So we left it unchanged at the top as your landing tab. If you've enabled replication, we've moved the **Create** button from Dataflow View to the new Dataflows & Recipes tab.

💥 Data Manager				
Monitor Dataflows & Recipes	Monitor Data Ta Track data jobs and data			
Datasets	Jobs View 🔻	Last refresh: Today at	10:20 AM C <sup>I</sup> File Uploads	: Show Hide
🔯 Setup	DATAFLOW	START TIME	<ul> <li>DURATION</li> </ul>	STATUS
	Default Salesforce Dataflow	Today at 10:18 AM	6 seconds	Successful

Dataflows and recipes are your two key data preparation tools, so it makes sense to put them together on the same tab: Dataflows & Recipes.

🔀 Data Manager		
Monitor	Prepare Datasets with Dataflo Cleanse, transform, and combine data from	Create Datanow
<ul> <li>Datasets</li> </ul>	DATAFLOWS DATASET RECIPES	2
🔅 Setup	CED Default Salesforce Dataflow Last Modified By: Admin User	The next run is Apr 16, 2017 at 12:00 PM SalesEdgeEltWorkflow · Run by Integration User

On the Dataflows & Recipes tab, each tool has its own subtab (1). The Dataflows subtab brings dataflow management to the surface; no more digging deep into the Monitor tab to do it. All your usual dataflow tasks are accessible here, through the actions button (2). So make this is your new go-to place for creating, editing, scheduling, and running dataflows. And, just a click away, continue your data preparation on the Dataset Recipes subtab, where you can create, edit, and keep track of all your recipes.

Datasets have been given what they deserve: a tab of their own.

🔀 Data Manager			
<ul> <li>Monitor</li> <li>Dataflows &amp; Recipes</li> <li>Datasets</li> </ul>	Manage Datasets View and manage datasets, and DATASETS REPLICATED DATA	d prepare them in recipes.	
🔯 Setup	NAME	APP	LAST UPDATED
	Opportunities	Shared App	Today at 11:03 AM
	OppsAccsUsers	My Private App	Today a Delete Dataset

If you have replication enabled, there's a Replicated Data subtab here too (1). Datasets and replicated data are your starting points for new recipes, so having them all in one place makes it easier to just grab one and go. Start a recipe in just two clicks through the actions button (2), from any dataset or replicated data you see on these tabs.

If you've enabled replication in your org, the Setup tab is the new home for all things replication. Go here to set up and run replication and create connections using the new Wave connectors.

🔀 Data Manager								
Monitor Dataflows & Recipes		p Source Data F e data from a source to			ows.	S	et Up Replicati	on
Datasets	Sauras Data Dar	liestiene (b		E-l's D-	- Karal Cale	tuta Dua	Deelle Mee N	
🔯 Setup	Source Data Rep	olications (Number of C	Dbjects : 3)	Edit Re	plication Scheo		Replication No	DW
	Salesforce							
	NAME	CONNECTION	FIELDS	FILTER	INCREM	MODIFI	REFRESH	
	User	Salesforce Local (SFDC_LOCAL)	3		~	Admin Use Today at 10:1	Today a	•
	Opportunity	Salesforce Local (SFDC_LOCAL)	9			Admin Use Today at 10:1	Today a	•

# Connect to External Data with Clicks, Not Code (Generally Available)

Wave connectors give you an easy way to connect to data inside and outside of your Salesforce org and bring it into Wave. Quickly connect to data in your local org, another Salesforce org, or Marketing Cloud. Or connect to popular web-based services: Amazon Redshift and Heroku Postgres. And did we mention: No code required.

Connectors were introduced as a pilot feature in the Spring `17 release, but are now generally available and already turned on for you if you have replication enabled.

Think of a Wave connector as a cable, with different types of cables available to connect to different data sources. You can connect to a new data source and bring in data with just a few steps.

1. Choose a connector for your data source.



2. Create a connection to the data source by providing login details and other settings.

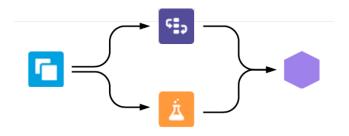


- 3. When you're connected to the data source, select the table or object you want to bring into Wave and the associated fields.
- **4.** Run replication. The data comes into Wave as a replicated object.



Note: You can reuse a connection to bring in data from other tables or objects in the same data source.

After the data is replicated, you can use it in dataflows and recipes to create or update datasets.



## What Types of Connectors Can I Use?

Five types of connectors are available: one for bringing in data from your local org, and four for external data. Let's look at how an example company, Blue Sky Solar, uses each connector. Blue Sky Solar sells and installs solar panels in California and Arizona.

#### Salesforce Local Connector

Big Sky Solar already uses replication to bring its California sales data into Wave. The company uses the Salesforce Local connector to replicate additional objects without having to add them to the dataflow.

#### Salesforce External Connector

To qualify for state issued grants, the company operates as separate entities in Arizona and California. Each entity operates its own Salesforce org. Senior leadership wants to understand the state of the business across both entities. The company uses the Salesforce external connector to connect the California org Wave instance to the Arizona org opportunity data. This data is then merged with the California Salesforce org opportunity data in Wave to create a unified view of the opportunity pipeline.

## **Marketing Cloud Connector**

Blue Sky Solar tracks prospects in Marketing Cloud. The company plans to enter the Southern California market and wants to launch a personalized marketing campaign. The Wave Marketing Cloud connector allows the marketing team to load prospect data from previous campaigns into Wave and use Wave dashboards to target select companies and households.

## Heroku Postgres Connector

Prospect customers interested in installing a solar system can download the Blue Sky Solar mobile app. The app helps the prospect identify suitable rooftop spaces for a solar system. This data is stored in a Heroku Postgres database, and the marketing team uses it for targeted campaigns. The Wave Heroku Postgres connector lets the team to move this data into Wave for analysis.

## Amazon Redshift Connector

Each installed solar system constantly monitors the generated electricity. Blue Sky Solar has a Salesforce Community page that provides an account overview for each customer, using Wave-driven widgets to show the generated electricity. The raw data is initially stored in Amazon Redshift, from where aggregated views are created and brought into Wave using the Amazon Redshift connector.

# I'm Ready to Connect. How Do I Turn On Connectors?

Wave Connectors are enabled when you enable replication. If you haven't enabled replication, you can do it from Setup. Enter *Analytics* in the Quick Find box, then click **Settings**. Select **Enable Replication**, and then click **Save**.

() Important: There are a few things to consider before you enable replication. We recommend that you read Understand What Happens When You Enable Replication first.

With replication enabled, head to the data manager in Wave.

salesforce			III ? 🔯 🖡 🙆
© Wave Analytics Bro	owse		Setup
			Developer Console
ALL APPS DASHBOARDS	LENSES DATASETS	Q Search Wave Analytics 16 results	Wave Analytics
			Data Manager

You create and manage connections on the Setup tab, along with your existing replicated data.

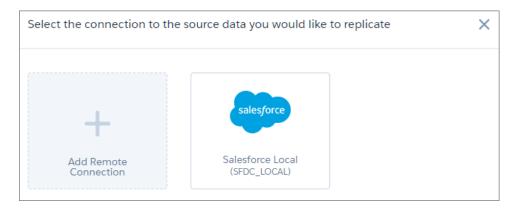
🔀 Data Manager	Default Salesford	e Dat X									
Monitor Mataflows & Recipes		p Source Data F e data from a source to			flows.	3 s	et Up Replicati	on			
Datasets	Course Data Da										
🔯 Setup	Source Data Rep	olications (Number of C	Objects : 6)	Edit	Replication Scheo	Run	Replication N	ow			
	Salesforce										
	NAME	CONNECTION	FIELDS	FILTER	INCREM	MODIFI	REFRESH				
	User	Salesforce Local (SFDC_LOCAL)	3		~	Admin Use Apr 13, 2017	Today a	•			
	Opportunity	Salesforce Local (SFDC_LOCAL)	9			Admin Use Today at 2:41	Today a	•			
	Account	Salesforce Local (SFDC_LOCAL)	14		~	Admin Use Apr 13, 2017	Today a	•			
	Salesforce E	xternal									
	NAME	CONNECTION	FIELDS		MODIFIED	REFRES	HED				
	User	Arizona Sales (Arizona_Sales)	4		Admin User Today at 2:31 PM	Today	at 2:42 PM	•			
2	Account	Arizona Sales (Arizona_Sales)	2		Admin User Apr 24, 2017 at 4:12 Pi	M Today	at 2:42 PM	•			
	Opportunity	Arizona Sales (Arizona_Sales)	11		Admin User Apr 24, 2017 at 10:25	AM Today	at 2:42 PM	•			

The Setup tab displays all your replicated data in one place, organized by connection type. Local Salesforce objects (1) replicated through the dataflow or the Salesforce Local connector appear first. External replicated objects appear by connection type below (2). Click **Set Up Replication** (3) to create, edit, or delete connections, or create replications.

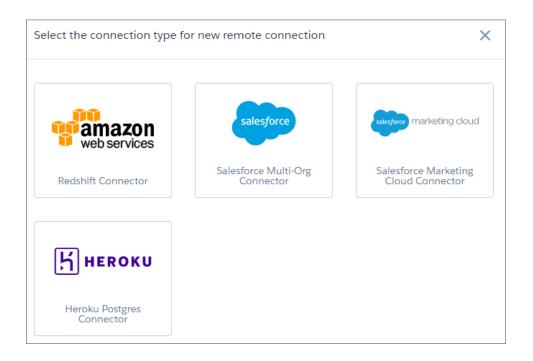
Imagine you are the Wave admin at Blue Sky Solar. Let's walk through connecting to the company's remote Arizona org, and selecting data to bring into Wave. Your first step is to create the connection.

# Create a Connection

To create a connection, click **Set Up Replication**. A Salesforce Local connection is already set up, ready for you to connect to objects in your local org. Other connections that you create appear here, too.



Click Add Remote Connection. The available connectors appear.



Click the connector you need, and enter the connection settings for that connection. For Blue Sky Solar, you select the Salesforce Multi-Org connector to connect to the remote Arizona org. All connections require a name, developer name, and description. The remaining settings differ depending on the connector you choose. See Create a Remote Connection to learn more about each connector's settings.

Set up your remote connection	×
Connection Name*	
Developer Name* Arizona_Sales	
Description* Use to load sales data from the Arizona Salesforce org	

When you save the connection settings, the new connection appears on the select connection page, ready for use.

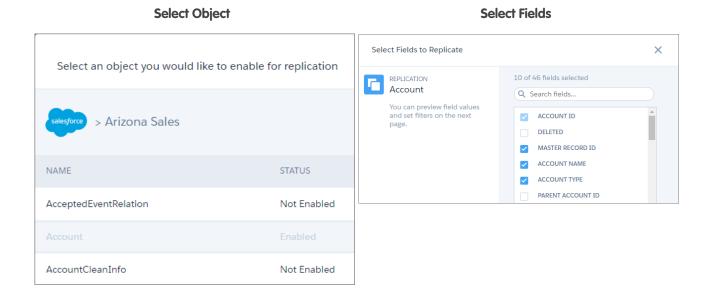
Select the connection to the s	source data you would like t	to replicate
+	salesforce	salesforce
Add Remote Connection	Arizona Sales (Arizona_Sales)	Salesforce Local (SFDC_LOCAL)

# Use a Connection to Replicate an Object

Now you can start using your new connection to bring data into Wave. For Blue Sky Solar, you want to bring in Account, Opportunity, and User data from the Arizona org, so click the Arizona Sales Connection. You start with accounts, so, from the list of available objects, select Account. Continue on to select the fields from this object.

#### **Select Object**

**Select Fields** 



After selecting fields, you get the chance to preview the data you're replicating before you save. When you save, the selected object appears on the Setup tab of the data manager with other objects using the same connector.

Salesforce Ex	kternal				
NAME	CONNECTION	FIELDS	MODIFIED	REFRESHED	
Account	Arizona Sales (Arizona_Sales)	7	Admin User Today at 3:09 PM	Never	•

Repeat this process for other objects you want to replicate.

() Important: You must run replication before new replicated objects are available for use in dataflows and recipes.

3 Note: Each time you run replication, all data in an external replicated object is refreshed. Incremental refreshes and filtering are not available for external connections.

## Use Replicated Objects in Dataflows and Recipes

After replication has run, you can prepare your replicated data in dataflows and recipes. For dataflows, use the new digest transformation

to extract data from the replicated object. If you're using the new dataflow editor, look for the digest node button (.). If you're working in JSON, add a digest node to your dataflow definition file.

To prepare replicated data in a recipe, head to the Datasets tab in the data manager. Open the Replicated Data tab, and select **Create New Recipe** from the actions list next to the data you want to prepare.

🔀 Data Manager			
<ul> <li>Monitor</li> <li>Dataflows &amp; Recipes</li> <li>Datasets</li> </ul>	DATASETS       Manage Datasets         View and manage datasets, and prep         PATASETS       REPLICATED DATA	are them in recipes.	
🔯 Setup	NAME	CONNECTION NAME	LAST UPDATED
	User	SFDC_LOCAL	Today at 10:15 AM
	Opportunity	SFDC_LOCAL	Today at 10:15 AM
	Account	SFDC_LOCAL	Create New Recipe Today a Delete Dataset

Note: You can also add replicated data as lookup data in a recipe.

## Considerations for Using Wave Connectors

Before using Wave connectors, review these considerations.

- You can create up to 20 connections, regardless of type. This limit does not include Salesforce local connections.
- Wave can extract up to either 20 million rows or 10 GB from an object, depending on which limit is reached first.
- You can replicate data from up to 50 objects in Wave. This total includes local and external objects.
- Incremental extracts and filters are only available with the Salesforce Local connector.

#### SEE ALSO:

Extract Replicated Data with the Digest Transformation

# Create Dataflows with Clicks, Not Code

Create and edit your dataflows visually without a single line of code, using the dataflow editor. Add fields and objects in seconds; create complete dataflows in minutes. No more downloading, editing, and uploading JSON files.

To use the editor, head over to the data manager and locate your dataflow on the Dataflows & Recipes tab. Open the actions menu, and click **Edit**.

🔀 Data Manager		
<ul> <li>Monitor</li> <li>Dataflows &amp; Recipes</li> <li>Datasets</li> </ul>	DATAFLOWS DATASET RECIPES	Cleate Datanow
🏚 Setup	Contemporary Contemporary Default Salesforce Dataflow Last Modified By: Admin User	The next run is Apr 23, 2017 at 12:00 PM SalesEdgeEltWorkflow · Run by Integration User
		💉 Edit
		🛃 Download
		📩 Upload
		Start
		📅 Schedule
		Ø Unschedule

If you're creating a new dataflow, you're taken to the editor automatically.

**Mote:** You can create multiple dataflows if you have enabled replication.

The dataflow editor visually displays the dataflow you're editing.

🔀 Data Manager	Default Salesforce Dat $ imes$	4	
DATAFLOW Default Salesford	e Dataflow		1 Update Dataflow
<b>* *</b>	●ਨੇ ₿ <u>\</u> <i>f× f</i> ≈ <b>@</b> .	± ▼ IX 5 Ø 3	
Extract Users sfdcDigest		٩ 2	
Extract Accour sfdcDigest	its		
Extract Opport sfdcDigest	unti , AugmentOppsA	Accs , AugmentOppsAccs. , augment	RegisterOppsAccsU sfdcRegister

The canvas (1) shows the individual nodes in your dataflow and the links between them. If you can't find a node, enter the node name in the search box (2) to focus on that node. The node palette (3) has buttons for each type of node. Click one to add it to the canvas. Use the buttons at the top of the editor (4) to work with the dataflow JSON. Preview and download the underlying JSON or upload an existing JSON file to work with it in the editor.

The dataflow in this example extracts data from the Salesforce Opportunity, Account, and User objects, joins it together, and creates a registered dataset.

## Here Are Some Dataflow Essentials to Get You Started

Use a dataflow to extract data into Wave, transform it, and load it into a dataset. Each step in this process is performed by a node, with data flowing from one node to the next through links. Each node performs one of three main functions.

• Extract nodes bring in data from a Salesforce object, a replicated object, or an existing dataset. Start your dataflow with one or more of these.



These nodes output data to other nodes. In the editor, look for the output arrow on the right of these nodes.



Prepare nodes transform the data. For example, you can join data from different nodes, add calculated fields, and filter rows.



These nodes receive data from and output data to other nodes. Look for the input and output arrows at each end of these nodes.





- Note: The delta transformation is not available in the dataflow editor.
- The register node creates a dataset with the resulting data and makes it available for use. End your dataflow with one of these.



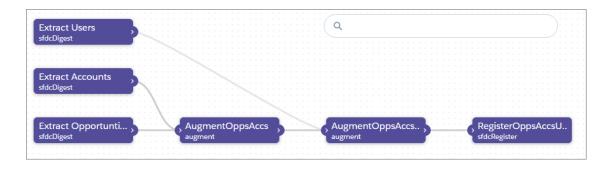
This node receives data from one other node only. Look for the input arrow on the left of this node.



## Take a Walk Through Editing a Dataflow

Imagine you're the Wave admin at Blue Sky Solar, a company selling and installing solar panels in California and Arizona. You're using Wave connectors to replicate opportunity data from your Arizona org, and you want to merge this with your local California data. These are the steps you take.

1. You start editing your dataflow, and the first thing you see is the new visual view. Here, your dataflow is already extracting sales data from your local California org.



- 2. In the node palette, click the digest node button ( ). This node extracts data from replicated objects.
- **3.** Give the node a unique name and click **Continue**.
- 4. Complete the node attributes and click Save.

Extract AZ Opport	unities: digest	×
	ATTRIBUTES OUTPUT FIELDS	
Connection Name		
["Arizona_Sales"]		
Source Object		
["Opportunity"]		
Fields		
["CloseDate","Amo	unt","StageName","Name"]	
-		

Note: Attributes that reference connections, objects, fields, or other nodes let you search and select values from a list. Say goodbye to dataflows failing because you mistyped a field name!

Tip: See Transformations for Wave Dataflows to learn more about the specific attributes for each node.

5. Add an append node in the same way. The append node has a Sources attribute where you select the input nodes.

Append AZ ar	nd CA Opportun	ities: append	×
	ATTRIBUTES	OUTPUT FIELDS	
Sources			
["Extract AZ C	pportunities","Ext	ract Opportunties"]	

The nodes are connected on the canvas.

Extract Opportunti	$\langle$														
Extract AZ Opportu , digest				Ap ap		d /	A7	Za	ar	nd	I S	Ą	¢	}	

🕐 Tip: You can drag the output arrow of a source node to draw a link to another node on the canvas.

6. Add a register node, specifying the append node as the source.

Register AZ & CA	Opportunit	ies: sfdcRegister	×
	ATTRIBUTES	OUTPUT FIELDS	
Source Node			
Q Search nodes	5		
<ul> <li>Append AZ an</li> </ul>	d CA Opportuni	ities	
<ul> <li>AugmentOpp:</li> </ul>	sAccs		

- 7. Stand back and marvel at how quickly you edited your dataflow to extract and append external data, and register the result as a new dataset. And no code!
- Tip: When you add a node to the canvas, it doesn't always land where you want it. Just drag it to wherever you want. As you add more nodes, it can get crowded on the canvas. If your browser supports it, use your scroll wheel to zoom in and out, or drag the canvas to move nodes into view.

# Don't Forget to Update the Dataflow

When you're done editing, click **Update Dataflow** to update the definition file with your changes. Wave validates your dataflow to ensure that you provided all the required attribute values, and you can't continue if there are errors. Correct the errors it finds before trying again.

Updating the dataflow does not run it. You only see the results when the dataflow next runs.

2

Important: Updating a dataflow overwrites the existing dataflow.

Z	Note: If you haven't quite finished, click the Download JSON button (🛃) to save your work as a JSON file without updating
	the dataflow. When you're ready to resume, click the Upload JSON ( 🔔 ) button to load the dataflow back into the editor.

# Extract Replicated Data with the Digest Transformation

Use the new digest transformation in a dataflow to extract data replicated through local and external connections. Here's an example. Let's say you're extracting opportunity data from your company's org in Arizona using a Salesforce external connection.

Salesforce E	xternal				
NAME	CONNECTION	FIELDS	MODIFIED	REFRESHED	
Copportunity	Arizona Sales (Arlzona_Sales)	4	Admin User Today at 4:15 PM	Today at 4:16 PM	•
Account	Arizona Sales (Arlzona_Sales)	7	Admin User Today at 3:09 PM	Today at 4:16 PM	•

You want to append this data to opportunity data from your local California org using the dataflow. Add a digest node in the dataflow editor or the dataflow definition file, specify the connection name, object, and fields, and you're done.

## digest Node in Dataflow Editor

digest	Node	in	Dataflow	JSON
--------	------	----	----------	------

Extract AZ Opportunities: digest	×	"Extract Arizona Opportunities": {
ATTRIBUTES OUTPUT FIELDS Connection Name ["Arizona_Sales"]		<pre>"action": "digest", "parameters": {     "connectionName": "Arizona_Sales",     "object": "Opportunity",     "fields": [     {"name": "CloseDate"},</pre>
Source Object ["Opportunity"]		<pre>{"name": "Amount"}, {"name": "StageName"}, {"name": "Name"}],</pre>
Fields ["CloseDate","Amount","StageName","Name"]		} },

Tip: The connection name is the API name of the connection used to replicate the data. On the Setup tab of the data manager, look for the name in parentheses next to the replicated object that you are extracting from.



You can then use an append node in the dataflow to merge opportunities from your California and Arizona orgs.

Note: The digest transformation is available only if you have enabled replication.

# Learn About Dataflow Validation Enhancements

Wave now validates your dataflows when you upload the definition files. Previously, validation on upload occurred only when you had replication enabled. Without replication, you only learned of errors when the dataflow ran. Too late!

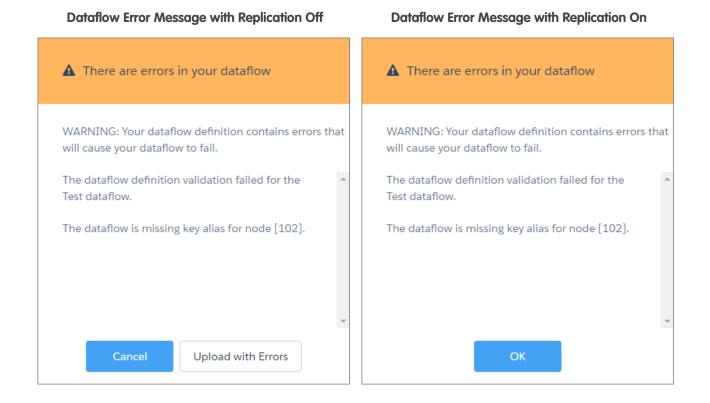
Here's what Wave validates when you upload your dataflow.

- Are the parameters in each node valid?
- Are the node references valid? For example, do you have duplicate node names or circular references?
- Does the Integration User have access to the extracted objects?

Wave alerts you if it finds errors and provides a description to help you fix them. If you don't have replication enabled, you have the option to continue the upload with errors. Take this option if you want to fix the dataflow later, or review it in the dataflow editor. Wave doesn't let you upload a dataflow with errors if you have replication enabled.

Dataflow Error Message with Replication Off

Dataflow Error Message with Replication On



Note: Wave alerts you at the first error it finds and only provides details of that error, so your dataflow could contain more errors.

# Learn About Changes to Dataflow Limits

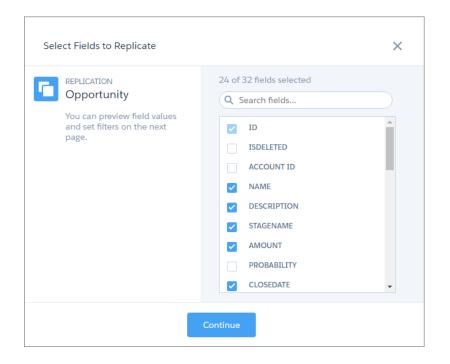
We updated dataflow limits to get more out of your dataflows.

- If you have replication enabled, you can now create up to 20 dataflows.
- Dataflows that take less than 2 minutes to run don't count toward your daily dataflow run limit.
- Replication jobs don't count toward your daily dataflow run limit.

# Enable New Fields for Replication with Ease

You know how it goes. The sales operations team at your company wants to see extra opportunity fields in their dashboards. You have replication enabled in your org, so you know that you have to update the dataflow to enable these fields. Not anymore. Use the new field picker to enable fields with just a few clicks. No dataflow required!

In the data manager, on the Setup tab, click the Salesforce object that you want to enable fields for. The field picker shows the fields available for the object.



Fields already enabled for replication are already selected. Select the additional fields you want, and click **Continue**. Preview the new data on the next page.

Preview Source Data					
Replication Settings SFDC_LOCAL > Opportunity					
A ID	<u>A</u> isdeleted	×	ACCOUNT ID		
006R00000023bQdIAI	false IsDeleted		001R0000001of7gIAA		
006R00000023bQeIAI	false		001R0000001of7hIAA		

If you change your mind, hover over a field's column header and click X to disable it. When you're ready, click **Save** and the new fields are enabled.

Note: You can't use the field picker or preview page to disable fields that are included in an object's sfdcDigest node. To disable them, remove these fields from the sfdcDigest node.

# Add More Flavor to Your Data with New Recipe Ingredients

Dataset recipes include a smorgasbord of new features to help you get even more out of your data. Bucket date fields to analyze data by whatever periods you choose. Extract components from dates to get a yearly view, or zoom in for a second-by-second look. Free numbers from their dimension fields with the dimension-to-measure transformation, and then do math on them. And when you've done all that, edit field names and labels so that your explorers really know what their data's telling them.

# **Bucket Date Fields**

Bucketing lets you create values based on existing values in another field. Previously, you could only do this for measure and dimension fields. But now it's available for date fields too.

In a lens or dashboard, you can group the data by regular periods, such as quarter and month. But what if you wanted to view data by some other period, like season or trimester? That's where date bucketing comes in.

Let's say your company wants to analyze support cases by season. Now you can open up your cases dataset in a recipe and add a bucket field to show the season in which each case was opened.

📅 CREATED DATE 💋	A CREATED DATE DATEBUCKET
2017-03-20T08:06:18.000Z	Spring
2017-03-20T08:06:18.000Z	Spring
2017-03-20T08:06:18.000Z	Spring

To bucket a date field, click the field column header, and then click the Add Bucket ( ) button to open the bucket field dialog. The default mode is Absolute, which lets you specify a date range and name for each bucket. In this example, each bucket is a season.

Enter date ranges for new Bu	cketed Fi	eld			×
Ranges for 'Created Date'					
12/1/2016	<b>=</b>	2/28/2017	▦	Winter	
3/1/2017	<b>#</b> -	5/31/2017	▦	Spring	
6/1/2017	<b>=</b>	8/31/2017	Ħ	Summer	
9/1/2017	<b>=</b> -	11/30/2017	苗	Fall	+
Map remaining values to		Cancel Create Bucketed F	Field		

When you're done, the new field appears alongside the date field you're bucketing.

In Relative mode, each bucket is a period of time relative to the date that the recipe runs. You can create bucket periods based on days, weeks, months, quarters, or even years. For example, create a bucket field from the case created date to categorize cases by when they were opened. This takes a lot of work in the dataflow, but not in a recipe!

CREATED DATE	A CREATED DATE DATEBUCKET
2017-03-20T08:06:18.000Z	Last 7 days
2017-03-20T08:06:18.000Z	Last 7 days
2017-03-20T08:06:18.000Z	Last 7 days

When you create a relative date bucket field, enter the start and end of each period, or use the sliders.

Absolute            • Relative             By Day              7 Day(s) Ago - Current Day             14 Day(s) Ago - 8 Day(s) Ago             14 Day(s) Ago - 8 Day(s) Ago             To the end of             14 days ago ×             8 days ago ×             6 - 5 - 4 - 3 - 2 - 1 TODAY + 1 - 2 - 4 3 - 4 - 5 - 6             Relative to now is 3/27/2017 - 4/2/2017	Enter date ranges for new	Bucketed Field		×
14 Day(s) Ago - 8 Day(s) Ago       To 14 Day         From the start of       To the end of         14 days ago ×       8 days ago ×         -6       -5       -4       -3       -2       -1       TODAY( +1       +2       +3       +6       +6       Field	Absolute     Relative			
From the start of       To the end of         14 days ago ×       8 days ago ×         -6       -5       -4       -3       -2       -1       TODAY +1       +2       +3       +6       +5       +6       Field	7 Day(s) Ago - Current Day	~	Last 7 Days	
14 days ago × 8 days ago ×	14 Day(s) Ago - 8 Day(s) Ag	• •	7 to 14 Day	+
-6 -5 -4 -3 -2 -1 TODAY +1 +2 +3 +4 +5 +6	From the start of	To the end of		
	14 days ago 🗙	8 days ago 🗙		
Relative to now is 3/27/2017 - 4/2/2017	-6 -5 -4 -3 -2 -1 1	ODAY +1 +2 +3 +4 +5 +6	ed Field	
	Relative to now is 3/27/2017 -	4/2/2017		

Again, when you're done, the new field appears alongside the date field you're bucketing.

# Find a Perfect Match with Composite Key Augments

When you add data in a recipe, you can now match rows using up to five pairs of lookup keys. For example, imagine you are adding contact information to lead data in a recipe. Using names alone to match can result in duplicate matches when leads have the same name. Now, you can match on name *and* company to ensure you're matching the right data.

To use composite keys, click the Add Data button ( ) and select the lookup dataset. Wave still suggests the first pair of keys if it can, but now you also have the **+ Add Another** option. Click this to select additional keys.

Select the fields that will act	Select the fields that will act as the Lookup Keys for the Base Dataset and the Lookup Dataset						
Full Name     Account Name     + Add Another       Full Name     + Add Another							
		Q Search Fields	LOOKUP DATASET Contacts 3/4	Fields, 7 Rows 🖋	Q Search Fields		
ACCOUNT ID	A FULL NAME		A ACCOUNT NAME	A CONTACT ID	A FULL NAME		
001R0000002OmvpIAC	Carole White	Global Media	Global Media	003R0000001XLhGIAW	Carole White		
001R0000002OmvpIAC	Jon Amos	Global Media	Global Media	003R0000001XLhHIAW	Jon Amos		

# New Transformations and Changes

The Truncate transformation, which lets you create a field by taking characters from another field, is now called Substring to better reflect what it does. We also added the Extract Date Component and Convert Dimension to Measure transformations. To use these transformations,

click the column header of the field you want to transform, and then click the Transform Suggestions ( ) button. Extract Date Component creates a field using a date or time component from a date field in the recipe.

Extract Date C	omponent	Apply
Year	•	
Year		
Quarter		
Month		
Week		
Day		
Hour		
Minute		
Second		
Day Epoch		
Second Epoch		

For example, you can extract the hour component from the case created date to analyze case creation by hour of the day.

CREATED DATE	A CREATED DATE HOUR
2017-03-20T08:06:18.000Z	8
2017-03-20T08:06:18.000Z	8
2017-03-20T08:06:18.000Z	8

The Convert Dimension to Measure transformation takes numerical data in a dimension field to create a measure field.

Convert Dimension To Measure	Apply

Convert numerical data so that it can be used in calculations in recipes, dataflows, lenses, and dashboards. For example, you extracted the hour from the case created date to analyze metrics such as the average or earliest times of day cases are opened. But the extracted hour is sitting in a dimension field! Use the Convert Dimension to Measure transformation to free it up for statistical analysis in lenses and dashboards.

A CREATED DATE HOUR	Q., CREATED DATE HOUR DIMEN
23	23
23	23
23	23

# Change Field API Names and Labels

You can now edit the API name and label of new fields you create in a recipe, and the labels of existing fields. When you create fields, for example, when using bucketing or transformations, Wave creates the field name for you from the source field and the action. But *CreatedDate\_grain\_Hour\_dimensionToMeasure* "*CloseDate\_delimitedSplit\_1* is not all that helpful. You can edit these generated names to make them more meaningful to the people exploring the dataset.

To change a field name or label, click the field's column heading, and then click the Navigate Fields ( ) button. In the field navigator, click the Attributes tab to change the API name and field label.

Created Date Hour dimensionT X			
Attributes			
API Name			
CreatedDate_grain_Hour_dimensionToM			
Created Date Hour dimensionToMeasure			
Field Type			
Measure			

Note: You can edit the API name only for new fields added in the recipe. API names for existing fields aren't editable.

# Get On Track with the Flexible Scheduler

With dependent replications, recipes, and dataflows all running on separate schedules, timing has never been more important. The new flexible scheduler in gives you more precise control over when and how often your data jobs run, and how you receive notifications.

You're no longer limited to scheduling data jobs by the hour or once a day. Now you're free to schedule by hour, week, or month, on specific days of the week or dates in the month. The new scheduler is there for you whenever you edit your replication schedule, create a dataset from a recipe, or schedule a dataflow.

# Schedule by Hour

Schedule by hour to run the data job at specified hourly intervals. You can specify what time the job starts each day, and on which days.

Schedule for 'Default Salesforce Dataflow'	×
Schedule by Hour V	
Start at 6:00 am V America/Los_Angeles	
Stop queuing at a specific time	
5:00 pm V America/Los_Angeles	
Run every 1 V Hour(s)	
_ Su ♥ M ♥ Tu ♥ W ♥ Th ♥ F _ Sa Send email notifications	

Select **Stop queuing at a specific time** to stop the data job from running after a certain time each day. For example, set a job to start at 6:00 am, run every hour, and stop after 5:00 pm to restrict runs to just office hours. Why run a job when nobody needs it?

# Schedule by Week

Schedule by week to run the data job on a specific day or days each week.

Schedule for 'Default Salesforce Dataflow'	×
Schedule by Week V	
Start at 6:00 am V America/Los_Angeles	
_ Su 🗹 M 🗹 Tu 🗹 W 🗹 Th 🗹 F _ Sa _ Send email notifications	

# Schedule by Month

Schedule by month to run the data job on a specific day or days each month. By default, you can schedule the job to run on a relative day each month, for example, the first Monday. If you want the job to run on a specific date or dates, click **Select specific dates** and then select from the list.

## **Select Relative Dates**

#### **Select Specific Dates**

Schedule for 'Default Salesforce Dataflow'	X Schedule for 'Default Salesforce Dataflow' X
Schedule by Month ~	Schedule by Month ~
Start at 6:00 am V America/Los_Angeles	Start at 6:00 am V America/Los_Angeles
On the 1st V Monday V of every month	on dates 2 Date(s) Selected v every month
Or select specific dates Send email notifications	Or select r $2$ es cations

# Stay Updated with Dataflow Notifications

When you schedule a dataflow, you also have the option to email notifications to the dataflow creator when the dataflow runs. You can send a notification every time the dataflow runs, only when there are warnings, or only when the dataflow fails.

## Salesforce Summer '17 Release Notes

Or select re	Or select relative dates		
🗹 Send e	mail notifications		
То	ham@salesforca.com		
Notify on	Warnings 🗸		
	Warnings 🗸		
	Always		
	Failures		



Note: Email notifications are only available for dataflows.

# Create Datasets, Avoid Clutter

We decluttered and streamlined how you get to what you love most: creating datasets.

Take your usual route by clicking Create on the Wave home page and select Dataset.



Now, all your dataset creation options are displayed in a clear, simple list.

Choose Data Source		×
CSV	CSV File Upload data from a CSV file directly into a dataset.	*
salesforce	Salesforce Create a dataset from Salesforce objects using the dataset builder.	
	Salesforce Report Create a trending dataset to track changes in your Salesforce data.	
	Continue	

Choose your data source, click **Continue**, and away you go!

# Use Your Salesforce Sharing Settings in Wave

Sharing inheritance creates a bridge between your Salesforce security model and Wave. For supported objects, sharing is now an option instead of security predicates.

As a Salesforce admin, you have likely labored over security, setting up sharing rules so that your users have access to data appropriate to their role. Setting up a working security model for your org is no small feat. Your company has invested a lot of time and money to get this right. But what about Wave Analytics?

Wave Analytics has its own row-level security solution—security predicates. They work well, but Wave administrators have to carefully replicate their Salesforce security settings. But who wants to set up security twice?

For support objects, Wave administrators no longer need to use security predicates to replicate row-level security settings in Salesforce. Now you can enable the sharing inheritance feature in Wave and specify which objects use it when creating datasets during the Extract Load and Transform process. Your Salesforce sharing settings are honored in Wave, and you don't have the overhead of maintaining two distinct security models.

# Is Sharing Right for My Wave Org?

As with any new feature, we recommend that you thoroughly test sharing inheritance in a sandbox environment before rolling out to production. Test against your org's security model, data and use cases. Complex security models in which users have access to a large number of rows can have performance implications. It's important to test your particular use cases to make sure sharing inheritance works for you.

In this first stage of a phased roll out of sharing for Wave, we support five of the most heavily used objects: Accounts, Opportunities, Orders, Cases, and custom objects. Other objects—such as Campaign, Idea, Site, and so on—still need to use security predicates.

Sharing isn't automatically applied to all datasets, and it isn't applied by default to new datasets. You must apply the sharing feature to each dataset manually. If an existing dataset has a security predicate, sharing won't override it. A dataset can use either sharing or a

security predicate, but not both. You can inherit sharing settings from only one object, regardless of how many source objects are used in creating a dataset.

## **Getting Started**

To enable sharing in Wave:

- 1. From Setup, enter Analytics in the Quick Find box, then select Settings under Analytics.
- 2. Select Enable Wave Sharing Inheritance and click Save.

# Wave Analytics Settings

Configure Wave Analytics Settings

Save			
Settings	= Required Information		
Enable Replication 1			
Show preview thumbnails for lenses and dashboards with row level-security enabled i			
Enable Wave Analytics for Communities 1			
Enable the Wave API for all Wave users i			
Enable Wave Dashboard Designer 1			
Enable Wave Template Support i			
Enable Wave Sharing Inheritance			

3. For each dataset that you want to inherit sharing, specify the "source" object from which this sharing comes. You can do this in three ways.

#### Through the Dataflow (When Creating New Datasets Only)

Add the "rowLevelSharingSource" parameter to the "sfdcRegister" node parameters for the dataset.

The rowLevelSharingSource parameter takes a string, which should be the API name for the object from which sharing is inherited. In the following example, the parameter specifies that the Salesforce sharing rules on the Opportunity object should be inherited.

```
"Register_Opportunity":{
    "action":"register",
    "parameters":{
    "label":"Opportunity with Security",
    "name":"Opportunity_with_Security",
    "rowLevelSharingSource":"Opportunity"
    },
    "sources":[
    "Extract_Opportunity"
    ]
    }
}
```

## Through the Dataset Edit Page (For Existing Datasets)

Edit the dataset, and enter the API name for the object in the Sharing Source field.

	Update Extended Metadata	
	Add Extended Metadata File (JSON)	
	Opp_Trend.xmd.json	2
	Select file or drag file here	
	The extended metadata file must use XMD 2.0 syntax.	Learn More
	Update Data	
Dataset Name	Add External Data File (CSV) (Max: 500 MB)	
Opp Trend	Select file or drag file here	
Арр	Add Metadata File (JSON)	
My Private App 🗸 🗸	Select file or drag file here	
System Name: Opp_Trend	Use the metadata file to specify the field type: text, nur	nber, or date.
Owner: Admin User		
Created On: Feb 23, 2017	Security	Preview Dat
Configure Actions	Security Predicate	
Delete Dataset	Enter a security predicate	
	Sharing Source	
	Opportunity	

See Edit a Dataset for help with editing a dataset.

- Note: Consider the following when adding a sharing source through the dataset edit page.
  - Sharing inheritance is not supported for datasets created from CSV files. Specifying a sharing source generates an error.
  - Don't specify both a security predicate *and* a sharing source. This generates an error.
  - Specifying an incorrect name or an unsupported object generates an error. Account, Opportunity, Order, Case, and custom objects are supported.

## Through the REST API (For Existing Datasets)

The sharingSource property on the /wave/datasets/\${datasetId}/versions/\${versionId} endpoint specifies the object from which sharing rules are inherited for that dataset version.

## SEE ALSO:

Analytics Security Implementation Guide Transformations for Analytics Dataflows Sharing Settings

# Wave: Action Menu Customization, More Bindings, and Embedding in Communities

Adding Salesforce action menus to dashboard tables or chart legends is now a snap. Do more with bindings, like dynamically set initial selections. And the latest way to embed dashboards is now via templates in the Community Builder.

## IN THIS SECTION:

## Enable Actionable Insights with Clicks Not Code

With actions, users can act on insights directly from Wave. You no longer have to edit the extended metadata (XMD) file to display Salesforce standard and custom actions in Wave dashboards and lenses. Now you can quickly and easily set them up with just a few clicks.

#### Define Richer Widget Interactions with Enhanced Bindings Support

Dynamically set the initial selection in a step based on a binding. Use bindings to generate custom titles for the chart, date, link, list, number, and range widgets. To create more intricate logic, nest bindings.

#### Embed Wave Dashboards in Communities the Easy Way with Community Builder

Use the Customer Service (Napili) template to add Wave dashboards via the new Wave component available in Community Builder. Previously, to incorporate Wave into communities, you created Visualforce pages and added tabs to your community. Now you can point and click your way to Wave in Communities.

# Enable Actionable Insights with Clicks Not Code

With actions, users can act on insights directly from Wave. You no longer have to edit the extended metadata (XMD) file to display Salesforce standard and custom actions in Wave dashboards and lenses. Now you can quickly and easily set them up with just a few clicks.

Add an action menu to any dataset field except a measure. Action menus allow users to open URLs, open Salesforce records, or perform Salesforce actions, like create an account. These actions appear in Wave chart legends and table cells.

My Opportur	nities			5 Č O	5 X B	H	\$
Columns	/					<b>F</b>	2 -
Account.Type	×	"	NAME	ACCOUNT.INDUSTRY	OPPORTUNITY TYPE	WON	ACCOUNT.NAME
Description	×	4	Opportunity for Adams [1716]	Utilities	New Business / Add-or		Stone Inc [569
Owner.Name	×	5	Opportunity for Adams [490]	Biotechnology	New Business / Add-or		Perkins Inc [81
Amount	×	6	Opportunity for Adams [54]	Technology	Existing Business		Houston Inc [7
Probability (%)	×	0	Opportunity for Adams [54]	rechnology	Existing business		Houston Inc [/
Stage	×	7	Opportunity for Adkins [1176]	Open Record	usiness	-	Riley Inc [963]
Forecast Category	×	8	Opportunity for Aguilar [1420]	Post	usiness / Add-or	n -	Holloway Inc [
Close Date	×	9	Opportunity for Aguilar [1890]	S File	usiness		Andrews Inc [6
Filters	+	10	Opportunity for Aguilar [576]	New Note	usiness		Graves Inc [67
		11	Opportunity for Aguilar [911]	Communications	Existing Business		Butler Inc [633

Actions appear in Wave chart legends and table cells based on the field. For instance, if you set up an action on the Opportunity Name field, a user can click an opportunity name in a Wave table to perform the action on a record in Salesforce.

To set up actions in Wave, follow these steps.

1. Select **Edit** from the dropdown list on the dataset.

	Update Extended Metadata
	Add Extended Metadata File (JSON)
	Opportunities2.xmd.json
	Select file or drag file here
	The extended metadata file must use XMD 2.0 syntax. Learn More
	Update Data
Dataset Name	Add External Data File (CSV) (Max: 500 MB)
Opportunities	Select file or drag file here
Арр	Add Metadata File (JSON)
[208] Sales App Manag 🗸	Select file or drag file here
System Name: Opportunities2 Dwner: Jean-Michel Jarr Created On: Apr 6, 2017	Use the metadata file to specify the field type: text, number, or date.
Configure Actions	Preview Data
Delete Dataset	Security Predicate
	Enter a security predicate

## 2. Click Configure Actions.

3. In the left pane of the Configure Actions in Wave screen, select the dimension (a qualitative dataset field) where you want the action menu to appear.

Configure Actions in Wave	? ×
My amazing lenses Account	Actions for: Name Record ID Field
Q Search fields	×
Contact_First_Name	Display Fields
Day	×
ID	CONFIGURE ACTIONS
Industry	Open Salesforce record 🕕
Month	Perform Salesforce actions ()
Name	
Phone_Number	
State	
Туре	
Veer	
	Cancel Save

- 4. For Record ID Field, select the dataset field that contains the record ID of the object that you want to perform the action on. For instance, if the dataset has Opportunity ID and Account ID fields, select Account ID to perform actions on the account records. Wave uses the ID to identify the Salesforce object and record to perform the action on.
- 5. For Display Fields, choose which dataset fields to show users to help them pick the correct record. When a user invokes the action from Wave, the action can apply to multiple Salesforce records, so the user needs to choose a record. Specifying the dataset fields limits the choices.

For example, if you enable actions on opportunity records, you can show the opportunity name, account name, and opportunity owner name to help users pick the right opportunity.

6. To enable users to open a Salesforce record or URL, select **Open Salesforce record**, choose the action in the Open field, and then enter a tooltip. Users see the tooltip when they hover over the action. Choose one of the following actions.

CONFIGURE ACTIONS	
Open Salesforce record (1)	
Open	
Salesforce Record	~
Tooltip 📵	

Action	Description
Salesforce Record	Opens the Salesforce record. Wave searches for the record in the same org in which it's running.
Salesforce Record (Multiple Orgs)	Opens a Salesforce record from another org. If the dataset contains records from multiple orgs, select this option. In the Org ID Field, select the dataset field that contains the org ID. To enable Wave to connect to each org, select <b>Manage Orgs</b> and specify the URL for each org.
URL	Opens a URL. Use the following syntax to pass a dataset field as a parameter in the URL:
	{{row. <dataset_field_dev_name>}}</dataset_field_dev_name>
	For example, http://www.google.com?q={ {row.AccountName} } If you don't specify the URL, Wave uses the org's URL. For example, you can just specify the following parameter to open the Account record in Salesforce:
	/{{row.AccountId}}
	Wave retrieves the Account ID from the AccountId field in the dataset record.

7. To enable users to perform actions on a Salesforce record, select **Perform Salesforce actions** and then choose the actions. The list of actions varies based on the object specified in Record ID Field.

Option	Description
All actions	Adds all actions defined in the page layout for this object, including new ones created later.
Choose actions	<ul><li>Select from the list of currently available actions.</li><li>Note: The list contains a superset of all actions defined in all page layouts for the Salesforce object.</li></ul>

Perform Salesforce action	ns 📵
<ul> <li>All actions</li> </ul>	
<ul> <li>Choose actions</li> </ul>	
Each user can only see action	ns assigned to their page layout.
,	
Salesforce Actions	
Q	
LABEL	API NAME
🗌 🛗 New Event	NewEvent
New Task	NewTask

Note: A Wave user sees only the actions that you select and that are assigned to the user's page layout. If the predefined actions on the Salesforce1 and Lightning Experience pages are overridden, Wave displays only the actions that are added to both the Quick Actions in Salesforce Classic Publisher and Salesforce1 and Lightning Experience Actions sections of the page layout.

uttons		ick Action Name		
	Email	Mobile Smart Action	New Event	New Opportunity
Quick Actions	File	New Account	New Group	New Task
alesforce1 & Lightning Actions kpanded Lookups	Link	New Case	New Lead	Poll
elated Lists	Log a Call	New Contact	New Note	Post
eport Charts				
	lew Task Log	a Call New Case	New Note	New Event
Post File N Thanks Link	Poll Questio	n		
Thanks Link	Poll Question	n		
	Poll Question	n		
Thanks Link	Poll Question	n		
Thanks Link Salesforce1 and Lightning	Poll Question	n		
Thanks Link Salesforce1 and Lightning	Poll Question		id actions to set a cu	istomized list of action
Thanks Link Salesforce1 and Lightning Experience Actions	Poll Question	ou can override the predefine		
Thanks Link Salesforce1 and Lightning Experience Actions	Poll Question			

8. Click Save.

## Define Richer Widget Interactions with Enhanced Bindings Support

Dynamically set the initial selection in a step based on a binding. Use bindings to generate custom titles for the chart, date, link, list, number, and range widgets. To create more intricate logic, nest bindings.

### Control the Initial View of a Dashboard with Bound Selections

You can use a results binding to dynamically set the initial filter selection in a staticflex-, saql-, or soql-type step. For example, to focus the dashboard on the logged-in user's country, configure the list widget to select the country when the dashboard first opens.

Bonjour Jean-Michel!		You are b	ased in USA	×
You last logged in: 2017-04-12T15:02:08.000+0000.				
	Open Amount			
	177M			
	View by Owner	~		
	Sun	of Amount		
	5м	10м	15м	
Flying Einstein 🔬				18м
Alice			15м	
Amruta 🕢 👔			15м	
e vi 🏟			14м	
Yi Srirama Srirama Polting Astro			13м	
Poiting Astro 🧑			13м	
G Floating Astro		12м		

To enable this behavior, first, create a step that retrieves the country of the logged-in user from the Salesforce User object.

Next, bind the initial selection in the list widget's step to the logged-in user's country.

```
"Billing_Country_2": {
    "groups": [],
    "isFacet": true,
    "label": "Billing Country",
    "numbers": [],
    "query": "q = load \"Opp_Icons\";\n
        q = group q by 'Billing_Country';\n
        q = foreach q generate 'Billing_Country' as 'Billing_Country', sum('Amount')
```

## Use Nested Bindings to Show Results Based on Dependent Widgets

Nested bindings create deeper dependencies among widgets. For example, the following pie chart shows the number of opportunities for each segment. It filters the results based on the selected grouping in the toggle widget and selected value from that grouping in the horizontal bar chart.



To enable the pie chart to filter based on the value of the selected grouping, the step query contains a nested binding.

#### Convert Binding Results to an Array

When a binding function requires the input to be an array, use the toArray data manipulation binding function. For example, use this function to convert the scalar result of a cell function to an array, which is required by compact-form measures, groups, and order clauses.

The toArray function uses the following syntax:

```
toArray (input1, input2, . . .)
```

The input for the toArray function must be scalars (including static values) or one-dimensional arrays. This function converts scalars to a one-dimensional array and one-dimensional arrays to a two-dimensional array. The function returns an error if the input is a series of static one-dimensional arrays, a two-dimensional array, or a mix of scalars and one-dimensional arrays.

To better understand this function, consider the following Opportunities step.

Oppty_Name	Owner	Region	Amount	Created_Date
Alpha	Danny	Americas	1000	2/20/2017
Bravo	Danny	Americas	500	4/15/2017
Charlie	Jeff	EMEA	2000	5/1/2017

Now let's look at some binding examples that use the Opportunities step as a source.

Binding	Result
<pre>toArray( cell(Opportunities.selection, 0, "Region") )</pre>	["Americas"]
toArray( "APAC" )	["APAC"]
<pre>toArray( cell(Opportunities.selection, 0, "Region"), "APAC" )</pre>	["Americas", "APAC"]
<pre>toArray( column(Opportunities.selection, ["Oppty_Name"]), column(Opportunities.selection, ["Region] )</pre>	[["Alpha", "Bravo", "Charlie"], ["Americas", "Americas", "EMEA"]]
<pre>toArray( column(Opportunities.selection, ["Oppty_Name", "Region"]) )</pre>	Error. The column binding function returns a two-dimensional array, which is an invalid input.
toArray( [1, 2, 3], [4, 5, 6] )	Error. The input can't be a series of static one-dimensional arrays.

## Embed Wave Dashboards in Communities the Easy Way with Community Builder

Use the Customer Service (Napili) template to add Wave dashboards via the new Wave component available in Community Builder. Previously, to incorporate Wave into communities, you created Visualforce pages and added tabs to your community. Now you can point and click your way to Wave in Communities.

To add a dashboard to your community, use the new Wave Dashboard component in the Community Builder.



In addition to the height, you can configure the following attributes of the embedded Wave Analytics dashboard.

- Show Sharing Icon—Add the Share icon on the dashboard. Users can click the icon to open the Share dialog, where they can post to Chatter and download images and data.
- Show Title—Control the visibility of the dashboard title.
- Open Links in New Windows—Specify where links from the dashboard to other assets are opened.
- Hide On Error— Control whether the Wave Analytics dashboard appears if there is an error, such as the dashboard can't be found.
- **Filter**—Configure the embedded dashboard to show only the data that's relevant for the record being viewed. The **Filter** attribute links data fields in the dashboard to the object's fields. In this example, the dashboard is filtered by the account name on the record page and shows only data related to that account name.

```
{'datasets':{'account':[{'fields':['Name'], 'filter':{'operator': 'matches',
'values':['$Name']}}]
```

This example applies the account name as a selection. With the selection option, the dashboard displays all its data, and the specified values are highlighted.

```
{'datasets' : {'account': [ {'fields': ['Name'], 'selection': ['$Name']}]}}
```

# Wave: Trend Data

Maintaining trending dashboards is easier with new automated cleanup of unused dashboards. And with embeddable trending dashboards, there's no need to access Wave your trending dashboards.

IN THIS SECTION:

#### Delete Inactive Trending Dashboards

No more obsolete or unneeded trending dashboards piling up and requiring attention. Trending dashboards that aren't being updated or accessed are deleted to free up space for the ones you really need. This feature is enabled by default, but you can disable it in Setup.

#### Embed Trending Dashboards into Lightning Reports

You can embed trending dashboards in Lightning Experience to view them without having to go to Wave.

# Delete Inactive Trending Dashboards

No more obsolete or unneeded trending dashboards piling up and requiring attention. Trending dashboards that aren't being updated or accessed are deleted to free up space for the ones you really need. This feature is enabled by default, but you can disable it in Setup.

By default, trending dashboards that haven't been viewed in 100 days are considered inactive. You can change the number of days a dashboard can remain inactive before it's removed along with its underlying Wave dataset. The dashboard owner receives an email warning a week before deletion. When the dashboard and dataset are deleted, the owner receives an email confirmation.

# Embed Trending Dashboards into Lightning Reports

You can embed trending dashboards in Lightning Experience to view them without having to go to Wave.

When you trend a report, an embedded dashboard is created. To view the dashboard while remaining in Lightning Experience, click **View Trend** in the report.

202		
	Updated Apr 9, 2017 at 5:01 AM	
alesforce_ReportRunDate (date) All	Tech Schedule	L
Count of Rows		
Aggregate Trend		
Aggregate Trend		

To return to the report, click the Report button (1). To view the report in Wave, click the Wave button (2).

# Wave: Accelerate with Prebuilt Wave Apps

We continually broaden the prebuilt Wave apps product offering to make it easier to bring the power of Wave to your Salesforce data. Our latest additions include a new app—Field Service Analytics, a new version of Sales Analytics, and new dashboards in Service Analytics and Event Monitoring Analytics apps.

#### IN THIS SECTION:

#### Lenses Added to Sales App Give You Fine-Grained Data Insights

New Sales Analytics app lenses give you greater detail about opportunities and where your deals stand in the sales process.

Sales Analytics: Smarter Selling and Sales Process Optimization, Now Faster than Ever

The new version of the app features fast app creation, easy inclusion of quotas data with collaborative forecasts, and the new Team Activities dashboard.

#### Introducing Field Service Analytics

The Field Service Analytics app brings the power of Wave Analytics to Field Service Lightning on any device that supports Wave.

#### Optimize Sales Processes With the Latest Sales Wave Dashboard

The Sales Stage Analysis dashboard that's just been added to the Sales Analytics app lets you stay on top of every phase of the sales process.

#### Keep Your Team Productive and Customers Happy with New Service Wave Dashboard

The Service Omni dashboard, just added to Service Analytics, helps you assure that you're using your service agents as effectively as possible.

#### SEE ALSO:

Updated Event Monitoring Analytics App Lets You Visualize Your Users' Actions in Lightning Experience

## Lenses Added to Sales App Give You Fine-Grained Data Insights

New Sales Analytics app lenses give you greater detail about opportunities and where your deals stand in the sales process.

In Salesforce Analytics, a lens is a particular view into a subset of your data. Think of it as the smallest unit of your data exploration, usually containing a single visualization resulting from a simple exploration of a dataset.

We've introduced lenses to the Sales Analytics prebuilt app to give you more fine-grained control over the business intelligence you can glean from your Salesforce data.

## **Explore** Opportunities

#### Use Wave Analytics Templated Apps

**USER PERMISSIONS** 

To use Wave apps:

 Additional permission as specified for each app

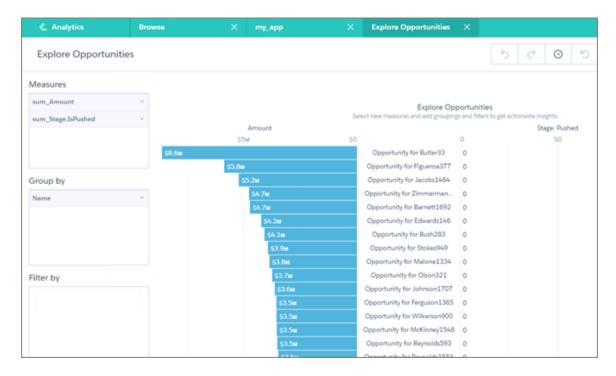
To create and manage Wave apps:

- Manage Wave Analytics Templated Apps
- Edit Wave Analytics Dataflows

## USER PERMISSIONS

To use Sales Analytics:

- Use Analytics Cloud Templated Apps
- Access Sales Cloud Templates and Apps



This lens helps you get actionable insights from your opportunities data, starting with pushed opportunities. You can narrow the time period to look at pushed opportunities for a year, quarter, month, and so on. Or select a new grouping, such as by team or by opportunity owner. You can also filter by a different stage, status, product, or any other way you break down opportunities to get a more refined view of opportunities in your pipe.



Sales Stage Details

#### 5 0 0 6 日 と Count of Ro Deals moving through sales stages Count of Rows 19 🔵 8 🔘 5 O Group by Cosed Lost Count of Rows StageName 52 Closed Wor . Historical Stage N . Negotiation Neoritation / Deuleus ater by . on Analysis ٠ Stage\_isUpdated: 1 al/Price Quote ٠ ٠ Proposal/Quote Prospecting ..... .

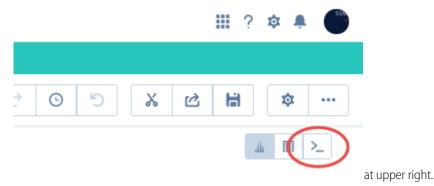
#### Einstein Analytics (Wave): Einstein Discovery, Easier Data Management and Exploration, and Wave Templates

The Sales Stage Details augments the app's Sales Stage Analysis dashboard by showing where specific deals stand in the sales process. The dashboard shows numbers of deals in each stage without breaking out individual deals. Select a bubble in the chart, then click the drill-down button that appears at top right to learn the specifics about a deal, such as its forecast category, stage, owner, and age.

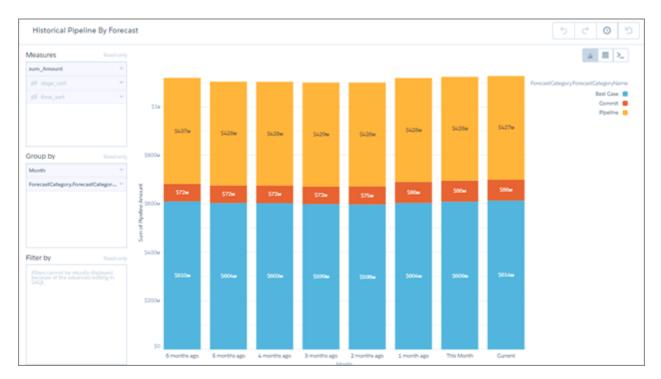


## Historical Pipeline By Stage

This lens augments the Team Trending dashboard with detail about the pipeline for the past six months broken out by sales stage. This lens is read only; you can only explore its data further by editing queries with SAQL. To do that, click the SAQL mode button



Historical Pipeline By Forecast



This lens augments the Team Trending dashboard with detail about the pipeline for the past six months broken out by forecast status. This lens is read only; you can only explore its data further by editing queries with SAQL. To do that, click the SAQL mode button

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					>_)

# Sales Analytics: Smarter Selling and Sales Process Optimization, Now Faster than Ever

The new version of the app features fast app creation, easy inclusion of quotas data with collaborative forecasts, and the new Team Activities dashboard.

We've just added a Basic creation option to Sales Analytics that lets you get started fast. Additionally, the app supports the Sales Cloud Collaborative Forecasts feature, which lets you include quotas data in dashboards without manually importing a .CSV file. And the app now includes the Sales Stage Analysis and Team Activities dashboards to give you more insight into sales processes.

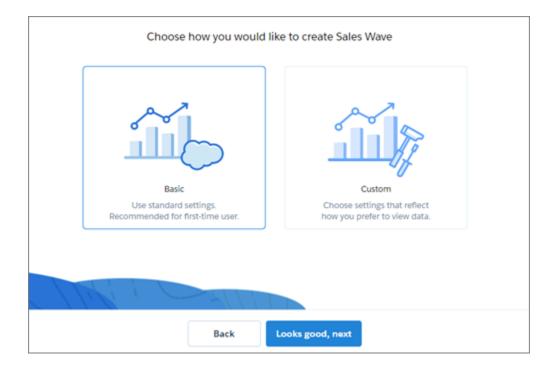
Sales Analytics helps your entire sales team unlock the full power of Sales Cloud data. With the app's interactive dashboards based on best practice templates, KPIs, and pipeline trending, it's never been easier to build a winning sales team.

# USER PERMISSIONS

To use Sales Analytics:

- Use Analytics Cloud Templated Apps
- Access Sales Cloud Templates and Apps

## Your Choice: Basic (Fast) or Custom App Creation



Sales Wave now gives you a choice of how you create your app:

- **Basic creation.** Create the app with one click without using the configuration wizard. Basic creation uses standard, default settings.
- **Custom creation.** Use the configuration wizard to choose your own, custom settings to reflect the way you and others on your team want to view data. If you choose this option, the wizard asks you to choose Salesforce objects to add to Sales Analytics. Select the ones you want based on how you use Salesforce and what data you want to see in the app.

	Checking your org compatibility
	Minimum requirements met
SID.	Field access verified
	Salesforce configuration validated
ALA!	Data looks good
	Back Looks good, next

When you create your app, Sales Analytics first checks your org to be sure it has the required data to successfully create all 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 determines the following:

- Default settings to use for Basic app creation.
- The questions and possible answers you see in the configuration wizard you use for Custom app creation.
- The objects you can choose to add to the app.

## **Collaborative Forecasting**

Support for collaborative forecasting gives you a great way to get quotas data in the app's dashboards. It also makes it easier to drill into forecast data in Sales Analytics dashboards.

If you use the Sales Cloud Collaborative Forecasts feature to store quotas, you no longer have to manually upload a quota .CSV file to Sales Analytics for quotas to be shown in Sales Wave dashboards. During the compatibility check, the app checks to see if your org uses Collaborative Forecasts. If it does, Sales Analytics automatically adds data from the Forecasts object during Basic creation. If you choose Custom create, Sales Analytics includes a question that lets you add Forecasts data.

What if your org doesn't use Collaborative Forecasts, or if you don't store quotas data using the feature? Create a .CSV file based on quotas data you store outside Salesforce and import it into your app. See #bi\_app\_sales\_wave\_update\_dataset\_bi\_app\_sales\_wave\_update\_dataset.xml.

Collaborative forecasting also makes it easier to visualize forecasts in Sales Analytics dashboards. That can help you more easily fine-tune forecasting metrics, for example by comparing opportunity forecasts to forecast adjustments. The app also supports the Salesforce Collaborative Forecasting Hierarchy, and you see forecast manager names instead of role names in dashboard widgets.

## Team Activities Dashboard

The new Team Activities dashboard gives team leaders insight into what reps have been doing to keep on top of their accounts. Look at each rep's total, completed, and overdue tasks for a given period. Review each member's calls, events, emails, and tasks. And review details for accounts.

# Introducing Field Service Analytics

The Field Service Analytics app brings the power of Wave Analytics to Field Service Lightning on any device that supports Wave.

#### USER PERMISSIONS

To use Field Service Analytics:

- Use Analytics Cloud Templated Apps
- Access Service Cloud Templates and Apps

Work Order Overview		Work Order Overview	Technician Performance
Territory         Account         Resource         Priority           All          All          All			Date Range Last 30 Days V
Total Number of Work Orders	Work Order Volume		By Account 🤍 🗸
1,073	o so Bechtel	100 150	200
155%       21       23       25       27       29       31       Apr       04       06       05       10         Work Order Status         Canceled       Canceled<	Deter Casino Royale Minage 31 Unided Partners Canograpies 24 Group System Casino 22 Deanna Colline 22 Danna Colline 22 Styles and Sound Soc Casino Social Soci Ferry Building 28 Casino Hostian Headh Assorth 201 Headh Assorth 201 Headh Assorth 201 Benlagio 17		243
* Metrics compare	d to prior period		
Avg Travel Time (minutes) First Time Fix		Mean Time to Repair (min	utes)
19 99%6 -18%6 Earliet Start Permitted 3%6 0	W13 W16 W15 vriest Start Permitted	2004 C	W13 W14 W15 lest Start Permitted

With intuitive visualizations based on your field service data, the app provides actionable insights for field service managers and dispatchers. You get a clear picture of your data to optimize service for every on-site appointment. Field Services Wave Analytics empowers managers with answers to help their technicians deliver personalized, actionable customer service.

To use Field Service Wave, your org must be enabled to use Field Service Lightning. Wave datasets are based on Field Service Lightning's new object model. The app is bundled with the Service Analytics app.

App creation is easy: Select the template and click Create. Wave does the rest and creates two dashboards based on your Field Service Lightning data. The Work Order Performance dashboard summarizes field service KPIs, including work order volume, average work time, and first-time fix rates. The Technician Performance dashboard focuses on each technician's work order volume, including prioritization, travel time, and mean time to repair. Managers can also measure and monitor Due date and SLA violations.

Get started with Field Service Analytics today.

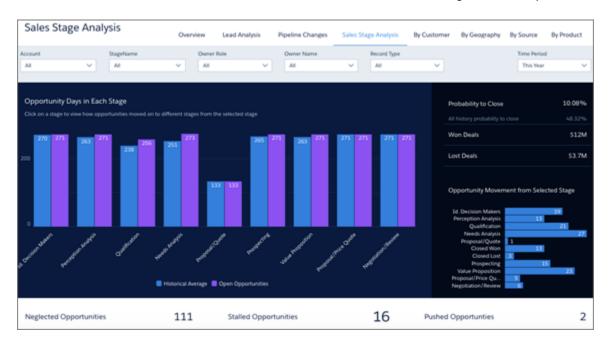
## Optimize Sales Processes With the Latest Sales Wave Dashboard

The Sales Stage Analysis dashboard that's just been added to the Sales Analytics app lets you stay on top of every phase of the sales process.

#### **USER PERMISSIONS**

To use Sales Analytics:

- Use Analytics Cloud
   Templated Apps
- Access Sales Cloud Templates and Apps



To maximize efficiency, sales ops managers need to analyze each phase of the process. Are deals moving smoothly? Where are the bottlenecks? What's happening to speed up or slow down closing?

The answers can be hidden in your Salesforce data. Now, the Sales Stage Analysis dashboard we just added to the Sales Wave app uncovers that data to help you optimize sales processes. The dashboard gives you a clear picture of your sales data to give you answers to questions like:

- What's the average time a deal spends in each stage of the sales process?
- How many opportunities do I have at each stage of the process?
- What opportunities are either stalled or being neglected?
- What's the probability to close in each sales stage?
- At what stage is the process most efficient and where is it broken?

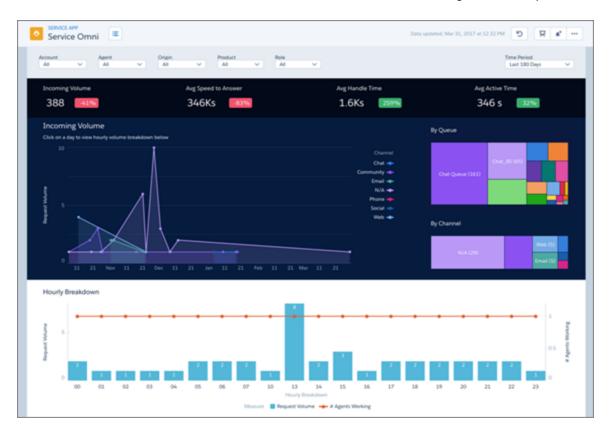
As with the other Sales Analytics dashboards, Sales Stage Analysis gives you actionable insights from your Sales Cloud data to help you create a winning sales team. Learn more about the Sales Analytics app.

## Keep Your Team Productive and Customers Happy with New Service Wave Dashboard

The Service Omni dashboard, just added to Service Analytics, helps you assure that you're using your service agents as effectively as possible.

#### **USER PERMISSIONS**

- To use Service Analytics:
- Use Analytics Cloud Templated Apps
- Access Service Cloud Templates and Apps



Like all the app's interactive dashboards, the latest Service Wave dashboard helps managers and agents better understand customers and what makes them happy. The Service Omni dashboard gives managers insight into agent utilization based on Omni-Channel work record tracking. The dashboard tracks information about the assignments your agents work on, including the queue, channel, status, and speed to answer. Key performance indicators can help you allocate resources to meet demand and break up any logjams. You can also learn how long agents are active and how long they take to handle cases.

Service Omni and the other recently added Live Agent Chat dashboard round out the service manager's experience, and help you discover actionable insights to improve every channel and customer conversation.

# Wave: Analytics on Mobile

Access data insights anywhere with Wave Analytics for iOS or Android.

#### IN THIS SECTION:

Experience the Latest Wave for iOS

Wave Analytics is available for devices running iOS 9 and later.

Get the Latest for Wave Analytics for Android

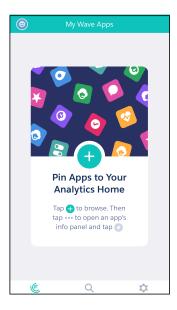
Wave Analytics is available for devices running Android 5 or later.

## Experience the Latest Wave for iOS

Wave Analytics is available for devices running iOS 9 and later.

For the latest enhancements, download Wave Analytics from the App Store. Here's what's new.

• Pin your most-used apps to our new Home screen!



- View your data geographically with choropleth map visualizations.
- Find data hot spots with heatmap visualization.
- Employ features in dashboards created using the new Dashboard Designer, like SAQL step types, connected data sources, customized display values in lists and toggles, and the new image and link widgets.
- Aggregate your data with our new functions, including Median, Standard Deviation, and Variance.
- Apply more chart parameters on mobile, including Title and Subtitle.
- Design mobile dashboards faster with layout engine enhancements that render native dashboards more like their web previews.
- Use fewer taps! Jump directly to a dashboard or lens with improved in-app navigation.



• Track your progress with the new Polar and Flat gauges.

• See how your data flows into the new Funnel chart!

# Get the Latest for Wave Analytics for Android

Wave Analytics is available for devices running Android 5 or later.

For the latest enhancements, download Wave Analytics from Google Play<sup>™</sup>. Here's what's new.

- Support for the new Wave Dashboard Designer! Enjoy dashboards auto-formatted for your device's screen, or create custom layouts for any device size.
- Support for features in dashboards created using the new Dashboard Designer, including SAQL step types, connected data sources, customized display values in lists and toggles, and the new image and link widgets.

Note: In version 0.9, these devices are excluded: Samsung Galaxy S5, S6, and S6 Edge.

# Wave: New APIs, SDKs, and Templates

The Wave platform continues to grow with additional REST API support, new SDKs, and Wave Templates APIs.

#### IN THIS SECTION:

#### Introducing Wave Templates

Turn your Wave platform app into a template that colleagues, partners, and customers can use to create new versions of the app built from their own data.

#### Updates to the REST API

Review the latest updates to the REST API and associated representations. The APIs for data connectors and recipes are now generally available.

#### Query your Dataset with the Wave Apex SDK

Query your data in Wave from any Apex class. Construct well-formed queries using the query builder. The Wave Apex SDK makes using Wave from Apex much easier.

#### Communicate with Wave Dashboards Using the Web SDK

Easily interact with Wave in custom applications. Use Lightning Components for Visualforce, or your preferred development environment.

## Introducing Wave Templates

Turn your Wave platform app into a template that colleagues, partners, and customers can use to create new versions of the app built from their own data.

What if you create a Wave app from scratch and you want others use it, but populate it with their own data? Maybe you've developed a great app with dashboards that track time-to-close for new accounts, and you want to make it available to partners and other divisions of your company. Or an app that pinpoints the efficiency of phone sales and service teams and you want to sell it to customers.

Wave Templates lets you do just that. After creating an app, developers can create a template based on the app using Wave Templates. You can use the template to distribute your Wave platform app the same way that Salesforce markets the Sales Analytics and Service Analytics prebuilt apps.

The template's like a floorplan for a house: The plan determines the overall layout of the rooms, their shape, size, and so on, and others get to figure out what to put in the rooms and exactly how they're used. Your template sets the organization and components of an

#### USER PERMISSIONS

To develop with Wave Templates:

- Use Wave Analytics Templated Apps
- Manage Wave Analytics Templated Apps
- Manage Wave Analytics

app—dashboards, widgets, queries, look and feel, and so on. Others can use it to create an app that uses their own data. Then, depending on the flexibility you've built in to the app template, they can customize it to meet their own requirements.

### Create a Template: Process at a Glance

An app you build using the Wave platform can become the "master app"—the basis for your template. Once you have your app, develop a template using the following general process:

- 1. Create a WaveTemplate object for the app by making an API POST call to the /services/data/v39.0/wave/templates endpoint of the Wave REST API. This creates JSON files that are the basis of the template.
- 2. Export the WaveTemplate object's JSON files from the Metadata API.
- 3. Edit the JSON files to determine the user interface for the app's configuration wizard (if it includes one) as well as to determine template variables, conditions, and rules. Leave the JSON as is to create a template that's identical to the master app. You can use the result to test that the template was created correctly. Or edit the JSON to add any user options you'd like to maximize the flexibility.
- 4. Deploy the WaveTemplate object with calls to the Metadata API that push the changed files back into the database.
- 5. Test the template by retrieving the object from the Metadata API.
- 6. Distribute the template to users, partners, and customers who can then build their own apps from it.

#### Prerequisites

Your org needs the following for you to use Wave Templates:

- 1. Preference settings. Set your org preferences to enable Wave Templates. In the Admin Setup page, under Wave Settings, select Enable Wave Templates. You'll need this to create Wave Template assets in the form of JSON files.
- 2. Wave REST API access. Refer to the documentation on Authentication to the Wave REST API to access and use the API.
- 3. Metadata API access. Refer to the Metadata API Developer's Guide to access and use the Metadata API.

See the Wave Templates Developer Guide for complete details.

## Updates to the REST API

Review the latest updates to the REST API and associated representations. The APIs for data connectors and recipes are now generally available.

#### Import Data with Wave Data Connectors

Wave data connectors for importing data from non-Salesforce sources are now supported in the API through the following endpoints.

#### /wave/dataConnectors

A collection of Wave Data Connectors.

#### /wave/dataConnectors/\${connectorld}

Returns data connection properties.

#### /wave/dataConnectorTypes

A collection of Wave data connector types.

#### /wave/dataConnectors/\${connectorId}/sourceObjects/\${sourceObjectName}/fields

A list of source fields of a particular source object.

#### /wave/dataConnectors/\${connectorId}/sourceObjects

A list of all source objects that the named data connector knows about.

#### /wave/dataConnectors/\${connectorld}/sourceObjects/\${sourceObjectName}/data

Source object data represents data that the data connector knows about. When a source object is replicated into Wave, it can be used to create datasets.

#### /wave/dataConnectors/\${connectorId}/sourceObjects/\${sourceObjectName}

A source object represents a specific category or type of data that the data connector knows about. When a source object is replicated into Wave, it can be used to create datasets.

#### /wave/dataConnectors/\${connectorId}/sourceObjects/\${sourceObjectName}/dataPreview

A Source Object Data represents data that the Data Connector knows about. When a Source Object is replicated into Wave, it can be use to create Datasets.

#### /wave/dataConnectors/\${connectorId}

Returns data connection properties.

#### Prepare Datasets with Recipes

Data preparation recipes are now supported in the API. A dataset recipe is a saved set of transformations, or steps, to perform on a specific source dataset or replication.

#### /wave/recipes

A list of data prep recipes.

#### /wave/recipes/\${id}/file

The recipe's file content.

#### /wave/recipes/\${id}

A data prep recipe.

#### **General Updates**

For more information about updated representations and properties, see the Wave REST API Developer Guide.

#### Query your Dataset with the Wave Apex SDK

Query your data in Wave from any Apex class. Construct well-formed queries using the query builder. The Wave Apex SDK makes using Wave from Apex much easier.

Is your company one of the gazillion making use of custom code in Apex, the server-side programming language for Force.com? Would you like it to be easier to query data in Wave directly from your Apex code? Say hello to the Wave Apex SDK and send well-formed SAQL queries to Wave.

This first phase of the Wave Apex SDK lets developers build SAQL queries and execute them in the security context of the logged-in user, ensuring that security settings are honored. API versioning is supported to avoid breaking applications as the SDK evolves. The SDK also offers Wave.InvalidParameterException to help catch bad values supplied to the class methods.

#### **Digging Deeper**

#### ConnectApi.Wave.executeQuery

At its simplest, use the executeQuery function (exposed through the ConnectApi namespace) to pass a SAQL query from an Apex page to Wave, and get a response in the form of JSON. For example, this sample sends 'your SAQL query' to Wave.

```
String query = '[your SAQL query]';
ConnectApi.LiteralJson result = ConnectApi.Wave.executeQuery(query);
String response = result.json;
```

Sending queries like this is very useful, but relies on the developer coding well-formed SAQL queries. Wouldn't it be great if a class constructed the queries for you?

#### Wave.QueryBuilder

Exposed through the Wave namespace, the QueryBuilder class is the most convenient, preferred, and safest way to construct a SAQL query string for execution. It's not an exhaustive implementation of all possible SAQL queries—so sometimes you need to write your own—but it does cover the vast majority of use cases, including:

- load dataset statement
- foreach statement
- group statement
- order statement
- limit statement
- filter statement
- functions such as min, max, count, avg, unique, as, sum

Use QueryBuilder and its associated classes, Wave.ProjectionNode and Wave.QueryNode, to incrementally build your SAQL statement. For example:

```
Wave.ProjectionNode[] projs = new Wave.ProjectionNode[]{
    Wave.QueryBuilder.get('State').alias('State'),
    Wave.QueryBuilder.get('City').alias('City'),
    Wave.QueryBuilder.get('Revenue').avg().alias('avg_Revenue'),
    Wave.QueryBuilder.get('Revenue').sum().alias('sum_Revenue'),
    Wave.QueryBuilder.count().alias('count')};
ConnectApi.LiteralJson result = Wave.QueryBuilder.load('OFbD0000004DSzKAM',
'OFcD0000004FEZKA2')
    .group(new String[]{'State', 'City'})
    .foreach(projs)
    .execute('q');
String response = result.json;
```

#### Examples

QueryBuilder is the core of this first phase of the Wave Apex SDK, so let's take a closer look. Here's a simple count query.

```
Wave.ProjectionNode[] projs = new
Wave.ProjectionNode[]{Wave.QueryBuilder.count().alias('c')};
String query = Wave.QueryBuilder.load('datasetId',
'datasetVersionId').group().foreach(projs).build('q');
```

The resulting SAQL query looks like this:

```
q = load "datasetId/datasetVersionId";
q = group q by all;
q = foreach q generate count as c;
```

Here's a more complex example that uses a union statement.

```
Wave.ProjectionNode[] projs = new Wave.ProjectionNode[]{Wave.QueryBuilder.get('Name'),
Wave.QueryBuilder.get('AnnualRevenue').alias('Revenue')};
```

```
Wave.QueryNode nodeOne =
Wave.QueryBuilder.load('datasetOne', 'datasetVersionOne').foreach(projs);
Wave.QueryNode nodeTwo = Wave.QueryBuilder.load('datasetTwo',
'datasetVersionTwo').foreach(projs);
String query = Wave.QueryBuilder.union(new List<Wave.QueryNode>{nodeOne,
nodeTwo}).build('q');
```

The resulting SAQL query has two projection streams, qa and qb.

```
qa = load "datasetOne/datasetVersionOne";
qa = foreach q generate Name,AnnualRevenue as Revenue;
qb = load "datasetTwo/datasetVersionTwo";
qb = foreach q generate Name,AnnualRevenue as Revenue;
q = union qa, qb;
```

#### Resources

For more information on using the Wave Apex SDK, see the Apex Developer Guide and the Wave SDK Developer Guide.

# Communicate with Wave Dashboards Using the Web SDK

Easily interact with Wave in custom applications. Use Lightning Components for Visualforce, or your preferred development environment.

Would you like your application to communicate with your Wave dashboards, whether your application is built with the Lightning SDK, Visualforce, or mobile? How about from an application outside of Salesforce? Wouldn't it be great if your application could apply filters or know about dashboard selections and filters made by a user?

Your application could take actions specific for your business if values fall outside of defined ranges. Or you could have an application that is a viewpoint for dashboards made available by different parts of your business application ecosystem. Imagine that: a single information source to present to your executive staff!

Salesforce introduces the Wave Analytics Web SDK. The events we're making available in this release are the foundation for a new way of thinking about Wave applications. Coupled with the LockerService, you can even code your application outside of Salesforce—you can interact with Wave from any JavaScript application.

## SDK Events

#### wave:update

Use this event to dynamically set the filter on a Wave dashboard or interact with the dashboard by dynamically changing the selection. It has three attributes: the unique ID of the Wave asset on which to apply the filter, the payload, and the asset type (currently only dashboard). The payload is a JSON string that identifies the datasets and any dimensions and field values.

#### wave:selectionChanged

This event is fired by a Wave dashboard for consumption by custom Lightning components. It provides the following attributes: the ID of the dashboard that fired the event and the payload. The payload object contains the selection information—the name of the step involved when changing the selection and an array of objects representing the current selection. Each object in the array contains one or more attributes based on the selection.



Note: To use these events, you need the Wave platform license Insights Builder PSL.

## Setting a Filter

This is a Lightning component example, where a component has already been defined, handlers have been set, and the update event has been registered in the custom component markup. But the controller is where the exciting stuff happens. The code shows how to construct the payload for the update event—in this case, setting StageName to Close Won in the oppty\_test dashboard.

```
{{
    doInit: function(component, event, helper) {
        component.set('v.filter', '{"oppty_test": {"StageName": ["Closed Won"]}}');
    },
    handleSendFilter: function(component, event, helper) {
        var filter = component.get('v.filter');
        var dashboardId = component.get('v.dashboardId');
        var evt = $A.get('e.wave:update);
        evt.setParams({
            id: dashboardId,
            value: filter,
            type: "dashboard"
        }); evt.fire();
    }
}
```

## Reacting to a Selection

Here's another Lightning component example. The component has already been defined and everything is registered, so this code shows the fun stuff in the controller—how to receive and iterate through the payload. The payload is an array of objects representing the current selection.

```
( {
 handleselectionChanged: function(component, event, helper) {
   var params = event.getParams();
   var payload = params.payload;
    if (payload) {
     var step = payload.step;
      var data = payload.data;
      data.forEach(function(obj) {
        for (var k in obj) {
          if (k === 'Id') {
            component.set("v.recordId", obj[k]);
          }
        }
      });
    }
  }
})
```

Payload data can contain other objects, each in turn containing key-value pairs. For example, aside from the ld, you can also get the noun (for example, "dashboard") and the verb (for example, "selection").

#### Resources

This is just a taste. For more information about the new Web SDK events, see the Lightning Components Developer Guide and the Wave SDK Developer Guide.

# Communities: Partner Central Solution, CMS Connect, Notifications, and More

Communities makes a splash this summer with a slew of flexible new features. Extend Salesforce CRM to your partner network, and drive channel sales with the native Lightning Partner Central solution. Use CMS Connect to render content from your content management system (CMS) in your community for consistent branding and easier maintenance. Switch between communities and see real-time notifications with App Launcher and Notifications support. We've got lots more to show you, so dive in!

Tip: There's lots of Lightning striking 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 community 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:

#### Critical Update Activation: LockerService in Communities

LockerService, which has been a critical update since Summer '16, is enforced for all orgs in Summer '17. However, to reduce the impact on existing communities, we adjusted the activation process. *If your community uses custom Lighting components or head markup, make sure that you read the related release notes to learn how these important changes affect your community.* 

#### Extended Deadline for TLS 1.0 Disablement in Communities

On July 22, 2017, Salesforce is disabling support for TLS 1.0 (Transport Layer Security protocol) for all orgs in production. **To give** admins more time to prepare community users, the TLS 1.0 disablement deadline for Salesforce Communities has been extended to March 2018. The extended March 2018 deadline applies to both Lightning and Visualforce communities.

#### Announcing Partner Central—The New Partner Community Solution

Recruit, onboard, and manage your partner relationships from a central location built on the new, native Lightning solution: Partner Central. Extend your CRM tools and data to channel partners in a responsive, flexible community that is powered by Lightning and the Salesforce platform. Welcome to the new way to drive channel sales!

#### Connect Your Content Management System (CMS) to Your Community (Beta)

Is your company's website built in Adobe Experience Manager (AEM)? CMS Connect lets you bring your AEM content, such as headers, footers, and banners, into your community. Dynamically render your components, CSS, and JavaScript on community pages for consistent branding, authentication, and ease of maintenance. CMS Connect is available in communities that are based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

#### Get More Criteria-Based Audiences

Criteria-Based Audiences work with page variations to let you target specific audiences with specific pages. Previously, you had to create a whole bunch of different page variations and set criteria on each one. Now, you can create a set of criteria for an audience, and apply the same audience to multiple page variations. Starting Summer '17, we're making some major tweaks and vast improvements on how you set up audiences. This functionality is available in communities that are based on the Customer Service (Napili), Partner Central, and Lightning Bolt solutions.

#### Community 360 Empowers Support Agents to Better Help Customers (Pilot)

Community 360 shows support agents working in the console which articles and cases customers have accessed in the community. Agents can use this information to check if customers have already looked at pertinent documentation, or already filed a case before calling support.

#### Protect Your Secrets by Adding a Login Form to Your Website

Enable users to log in before accessing a web page, such as your shopping cart, or your entire website with the Salesforce Identity Embedded Login feature. This feature is new in both Lightning Experience and Salesforce Classic.

#### Move Communities Between Orgs with Change Sets

You asked and we delivered! Change sets are now available for Lightning communities and Salesforce Tabs + Visualforce communities, making it easy to move your community between orgs that have a deployment connection. Create, customize, and test your community in your sandbox environment and then migrate the community to production when testing is complete.

#### Upgrade Community User Licenses in a Blink

Upgrade users with customer licenses to either the Customer Community Plus or the Partner Community license. Yes, you no longer have to create entirely new users and migrate their data. Yes, you're very welcome!

#### Lightning Bolt: Package More Easily and Distribute on AppExchange

Exported and packaged Lightning Bolt solutions now include branding properties and Navigation Menu items, making it easier to reuse solutions. And if you're a consulting partner or ISV, you can distribute Lightning Bolt solutions on the Salesforce AppExchange to connect customers to your custom offering.

#### Usability, Design, and Performance Improvements: Do More, More Easily

Workspaces and centralized branding let you design and manage more efficiently, while the App Launcher and Notifications provide ease of access and seamless collaboration for your users. And with the Community Page Optimizer, you can quickly assess and improve the performance of your community.

#### Lightning Communities: Improved Search, Updated and New Components, and More

Include topics and results from all feeds in global search, refine your content with dedicated Rich Content and HTML editors, add language support to any page, and much more.

#### Files in Lightning Communities: Promoting Productivity

We improved files in Communities with efficiency in mind. Now you can add multiple files to libraries, take action on files from related lists and the feed, and unshare files.

#### Chatter in Lightning Communities: Direct Message Enhancements, Feed View Count Reports, and More

Add and remove people from direct messages, filter groups by unread posts, and get a weekly report on the top 100 posts in your community.

#### Custom Lightning Components: Develop for Communities

Use the Lightning Component framework to build custom components for Communities.

#### Community Analytics: Service Community Scorecard, New User Participation Reports, and Sentiment Analysis

Service Community Scorecard is a community manager's complete view of a self-service community. From measuring engagement to tracking search efficiency, the Service Community Scorecard helps you keep your community in tip-top shape. We've also added new reports to track the daily participation of community members. Turn on Sentiment Analysis to track the general mood of posts and comments in your community (pilot).

#### Take Action from the Flagged Discussions Moderation Queue

Moderating your community is now easier and faster with our new Flagged Discussions moderation queue. Optimized for productivity, you can now work through flagged posts and comments quickly while getting all the information you need in context.

#### Other Changes in Communities

Learn about smaller changes that improve your experience with Communities.

#### SEE ALSO:

Salesforce Help: How Communities Use Lightning (can be outdated or unavailable during release preview)

# Critical Update Activation: LockerService in Communities

LockerService, which has been a critical update since Summer '16, is enforced for all orgs in Summer '17. However, to reduce the impact on existing communities, we adjusted the activation process. *If your community uses custom Lighting components or head markup, make sure that you read the related release notes to learn how these important changes affect your community.* 

# LockerService Enforcement Is Dependent on the API Version

LockerService, a powerful security architecture for custom Lightning components, is enforced for all Lightning components created in Summer '17 (API version 40.0) and later. LockerService isn't enforced for components with API version 39.0 and lower, which covers any component created before Summer '17.

See LockerService Critical Update Activation.

# Stricter Content Security Policy (CSP) Restrictions Aren't Enforced

The stricter CSP restrictions, which mitigate the risk of cross-site scripting attacks, have been decoupled from LockerService and aren't enforced in production orgs in Summer '17. Instead, the stricter CSP changes are available in two new critical updates—one for Communities and one for other contexts—which you can activate in sandbox or Developer Edition orgs. These critical updates give you more time to update your code to work with stricter CSP.

See Critical Updates for Stricter CSP Restrictions.

# Extended Deadline for TLS 1.0 Disablement in Communities

On July 22, 2017, Salesforce is disabling support for TLS 1.0 (Transport Layer Security protocol) for all orgs in production. **To give admins** more time to prepare community users, the TLS 1.0 disablement deadline for Salesforce Communities has been extended to March 2018. The extended March 2018 deadline applies to both Lightning and Visualforce communities.

Note: Partner portals, customer portals, and Force.com and Site.com sites are still subject to the July 2017 deadline as previously announced.

As a result of this change, browser access, inbound API integrations, and call-out integrations are required to be compliant with TLS 1.1 or above. We encourage you to inform and educate your community users this transition. All licensed and unlicensed community users (guest users) must upgrade to browsers that are compliant with TLS 1.1 or above.

To prepare for this change ahead of time:

- Add appropriate messaging to your communities to inform your users about TLS 1.0 disablement. Educate both licensed and guest users about browser requirements for TLS version compatibility.
- Encourage users to check their browsers for compatibility with our test site. If their browser is compliant, the web site displays a "Test passed" message.
- Ensure that the TLS 1.1 or above is enabled for your API integrations.

If you'd like to turn off TLS 1.0 for communities along with your Salesforce org or ahead of the March 2018 deadline, we've got you covered! In Setup, type *Critical Update* in the Quick Find search box and select **Critical Updates**. Activate the critical update that disables TLS 1.0 support for Salesforce Communities. You can deactivate this critical update to restore support for TLS 1.0 connections.

For detailed information TLS 1.0 disablement, see this knowledge article.

# Announcing Partner Central—The New Partner Community Solution

Recruit, onboard, and manage your partner relationships from a central location built on the new, native Lightning solution: Partner Central. Extend your CRM tools and data to channel partners in a responsive, flexible community that is powered by Lightning and the Salesforce platform. Welcome to the new way to drive channel sales!

Partner Central	<b>New</b>
Contra A sun.	\$ Ø*
	Automa and any and any
Onboarding • Channel Collaboration & Support • Build and grow a PRM solution that ev	Analytics
of business with Lightning Componer	

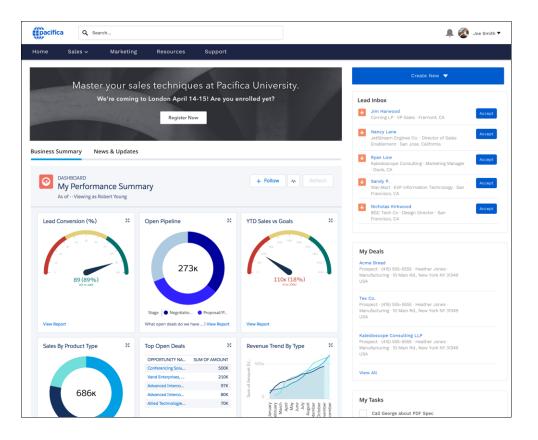
Partner Central is designed with partner relationship management (PRM) workflows in mind, so you can:

- Get a 360-degree view of your entire partner life cycle and track your pipeline, deal closures, and conversion rates with dashboards and reports.
- Manage partner recruitment, onboarding, channel sales, and channel marketing from a single location.
- Automate lead distribution and pass leads to partners in the intuitively designed Lead Inbox, all with a few clicks and no code.
- Configure quick actions to let partners register deals, get insights into your channel sales pipeline, and manage channel conflicts.
- Share onboarding and sales collateral with all your partners in a central repository.
- Integrate Service Cloud features to let partners file cases, including on behalf of customers.
- Customize global search to display only the objects shared with your partners.

Partner Central also has the same flexibility and extensibility that you're accustomed to with other Lightning communities, so you can:

- Build custom pages and use custom branding.
- Expose more CRM objects and data that suit your sales needs, such as marketing campaigns and cases.
- Use audience targeting by geolocation, and create personalized content for your channel partners by their geographical location.
- Take advantage of the new Summer '17 features, such as global notifications and the App Launcher.

Partner Central is your one-stop shop for your partner relationship management needs. Go ahead and extend your CRM to channel partners in a rich, modern, and responsive experience. Sounds too good to be true? Check it out for yourself.



# Important:

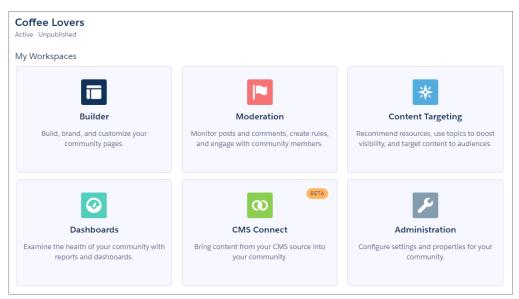
- To use Partner Central, you must have at least one Partner Community license in your org.
- We're retiring the Lightning Partner Management package announced in Spring '17 in favor of the Partner Central solution. We recommend that you use Partner Central for your PRM needs starting with Summer '17.
- Partner Central doesn't support some features that you get out of the box with Customer Service (Napili), such as direct messaging and self-service support. That said, you can still configure and expose cases and other Salesforce objects as you like to configure more functionality. For a full list of features that aren't supported, see the Salesforce Help.

# Connect Your Content Management System (CMS) to Your Community (Beta)

Is your company's website built in Adobe Experience Manager (AEM)? CMS Connect lets you bring your AEM content, such as headers, footers, and banners, into your community. Dynamically render your components, CSS, and JavaScript on community pages for consistent branding, authentication, and ease of maintenance. CMS Connect is available in communities that are based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

# A Whole New Workspace

Look no further than your Community Workspaces to get started with CMS Connect. (Not using the new Community Workspaces yet? Just go to your Community Settings in Setup to enable it.)



# Serving All Servers

Got multiple AEM servers? You can connect them to your community. Set their load order according to their dependencies on each other. Load order is mostly relevant for CSS and JavaScript.

O CMS Connect Coffee Lovers		CMS Connect					?	🔞 Brenda Carlsor
CMS Con 3 connections - Sort		0						New
NAME	CMS SOURCE	с	SS	JAVASCRIPT	LANGUAGE	LOAD ORDER		
Southern Growers	AEM		/	$\checkmark$	$\checkmark$	1		•
Food & Beverage	AEM		/	_	$\checkmark$	2		•
Coffee Enthusiasts	AEM	-	_	_	$\checkmark$	з		•

# **Streamlined Paths**

## **Component Paths**

When setting up a CMS connection, enter the root path for the directory where components are stored on your AEM server. This saves time later when adding components in the Builder. You can include placeholders in your path for language and component.

	CMS Connection to your content management system.	
Connection Details		
Name 🜖	* API Name 🕦	
Coffee Lovers	Coffee_Lovers	
CMS Source	* Server URL	
AEM	▼ https://www.coffeelovers.com	
Root Path content/coffeelovers/{language}/{compo	onent)	

#### **Header and Footer Paths**

Enter paths to your header and footer in Settings in Community Builder so that you don't need to add them to each page. Add them once and you're good to go!

۶	Settings						
1	General	CMS Connect BETA	nect BETA				
=	Theme CMS Connect Header and Footer						
	Languages	Use a header and footer from a connected CMS source in your community.					
\$	Advanced	Header Source	Header Path				
	CMS Connect	Coffee Lovers *	content/coffeelovers/site/header.html				
		Footer Source	Footer Path				
	Updates	Coffee Lovers *	content/coffeelovers/site/footer.html				
номе	Developer						

# Language Support

We provide language mapping for your AEM connections, so you can display your content in multiple languages. Add all your languages when setting up a connection. For each Salesforce language you add, enter the name of the corresponding language directory from AEM.

Language Mapping 🚯			
<ul> <li>Enable language mapping</li> </ul>			
Salesforce Language		* CMS Language	
French	•	fr	×
Salesforce Language		* CMS Language	
English	•	en	×
Add Language			

# CSS and JavaScript

You can include CSS and JavaScript from your CMS. Add up to 10 of each per connection. If your CSS is scoped, you can specify that to prevent rule collision with other CSS on your community pages.

# If You Build It, They Will Come

After your CMS connection is set up, you're ready to use it in Community Builder. Drag a CMS Connect component to your page, and add the source and component path in the property editor. Your community will soon be looking consistent with your website, with very little effort after the initial configuration.

Components X
Search components Q
▼ Analytics (2)
Oashboard
🗹 Report Chart
Cases (1)
🕑 Create Case Form
<ul> <li>Content (10)</li> </ul>
O CMS Connect
Featured Topics & Feeds
Headline
HTML Editor
🗖 Language Picker

**Note:** CMS Connect requires an HTTP server that can serve HTML fragments. All URLs in HTML fragments must be absolute URLs. All connected CMS servers must be accessible via HTTPS to retrieve HTML and JavaScript. Not all tags are supported. See the product documentation for details.

This release contains a beta version of 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.

# Get More Criteria-Based Audiences

Criteria-Based Audiences work with page variations to let you target specific audiences with specific pages. Previously, you had to create a whole bunch of different page variations and set criteria on each one. Now, you can create a set of criteria for an audience, and apply the same audience to multiple page variations. Starting Summer '17, we're making some major tweaks and vast improvements on how you set up audiences. This functionality is available in communities that are based on the Customer Service (Napili), Partner Central, and Lightning Bolt solutions.

Let's take a look at how we've improved the page variation and audience experience.

- If you had page variations and their criteria already set up in your community, we've now moved them into Criteria-Based Audiences. They are now labeled as Audience 1, Audience 2, and so forth. Hover over an audience to see its criteria, and give it the name it deserves.
- We've added new criteria (domain and city) to help you set hyper-local and hyper-specific audiences (if that floats your boat).
- The new domain criteria shows your page variation just to users of the selected community domain or domains.



Note: Domain criteria is not available in sandbox or Developer orgs.

• We've updated the user interface so creating and managing audiences is a cinch.

•	Pages	×	PROPERTIES PAGE VA	RIATIONS			
/	Q. Find a page		Page Variations let you quickly create alternative versions of a page. Try out different page layouts New Page Va				
-	Home		and styles or create variations aimed at specific audiences. Hover over a page variation's audience to see its criteria.				
-	Article Detail		You can start with a blank page variation or duplicate an existing one to jump-start the process.				
	Contact Support		NAME	AUDIENCE	STATUS	ACTIONS	
	Error Feed Detail Messages Question Detail Search		Home for Admins and Tier 1 Cafe	Default	Published (changes pending)		
			Owners Home for Tier 2 Cafe Owners	Profile			
					Published (changes pending)	ě	
					PAGE VARI	ATION	
					D) Edit		
	Topic Detail				B Dupli		
	User Settings				Previo		
	OBJECT PAGES				音 Delet	e	
	Account Detail				AUDIENCE		
	Account List				as Mana	ige Audience	
	+ New Page	_			— Set A	udience to Default	

- **Note:** Here are some best practices to keep in mind to get the best performance from your page variations and audiences:
  - Think big picture. For example, if you have a page variation for a city that you don't think will get much traffic, expand the location area (to state or country).
  - Combine, combine, combine. Instead of creating separate audiences for low traffic areas, try combining criteria to increase the traffic to your page. For example, let's say you want audiences for the same profile criteria but different locations. Instead of having separate audiences for Seattle, Bellevue, and Redmond, create one audience and add all three in the location criteria. The result targets users in Seattle, Bellevue, or Redmond.
  - Stick to big differences. While it's tempting create super-specific audiences and page variations, limit yourself to those variations that are significantly different. If there are minimal differences in pages, such as content of a component, use actions to dynamically vary the component content instead.

# Community 360 Empowers Support Agents to Better Help Customers (Pilot)

Community 360 shows support agents working in the console which articles and cases customers have accessed in the community. Agents can use this information to check if customers have already looked at pertinent documentation, or already filed a case before calling support.

SEE ALSO:

Streamline Support for Customers with Community 360 (Pilot)

# Protect Your Secrets by Adding a Login Form to Your Website

Enable users to log in before accessing a web page, such as your shopping cart, or your entire website with the Salesforce Identity Embedded Login feature. This feature is new in both Lightning Experience and Salesforce Classic.

Embedded login extends the login experience configured for your community to deliver the same capabilities on your website. Your web developers can add login capabilities to a web page with just a few lines of HTML. Salesforce handles authentication so that your web developers can focus on what they do best—delivering an amazing user experience.

SEE ALSO:

Embedded Login Enables Users to Log In to Your Website

# Move Communities Between Orgs with Change Sets

You asked and we delivered! Change sets are now available for Lightning communities and Salesforce Tabs + Visualforce communities, making it easy to move your community between orgs that have a deployment connection. Create, customize, and test your community in your sandbox environment and then migrate the community to production when testing is complete.

To create an outbound change set for a community, go to **Outbound Change Sets** in Setup and choose the Network component type. Add your community to the change set and include the dependent components. We recommend selecting all the dependencies listed.

Keep the following considerations and limitations in mind when migrating a community with change sets.

- For Communities, you can only make updates with change sets, which means that you can't create a new community directly from an inbound change set. Instead, in the destination org, first create a community with the same name and then deploy the inbound change set.
- When you deploy an inbound change set, it completely overwrites the community in the destination org. For example, let's say you delete pages from a community in sandbox and then create an updated outbound change set. When you redeploy the change set in a destination org, such as production, the pages are deleted there also.
- Navigation Menu items are supported. However, for menu items that link to objects, list views are reset to the default list view. Also, custom list views for standard objects aren't included as dependencies.
- Only the following Administration settings (in Workspaces or Community Management) are supported:
  - Change password page
  - Forgot password page
  - Home page
  - Login page
  - Allow internal users to log in directly to the community option
- The following items aren't supported:
  - Page variations and audience targeting
  - Navigational and featured topics
  - Languages

Community migration is also supported via the Metadata API.

# Upgrade Community User Licenses in a Blink

Upgrade users with customer licenses to either the Customer Community Plus or the Partner Community license. Yes, you no longer have to create entirely new users and migrate their data. Yes, you're very welcome!

Previously, you had to create another user identity, migrate the user's existing data over, and associate it with the new user identity. Now, you can upgrade the user with a few button clicks. Aside from being quicker, the new license upgrade approach offers many advantages.

- You no longer need to re-create users in the system or migrate their data.
- Users can keep their existing usernames and passwords. A license upgrade also preserves historical record and Chatter data. Ensure that users have access to the same objects via their new license and profile.

Plus, with the new licenses, users can take advantage of advanced sharing features, reports and dashboards, and role-based data access.

#### Who Is Eligible for a License Upgrade?

In general, we support upgrades from most customer licenses to the Customer Community Plus or Partner Community license. More specifically, for users whose UserType equals CSPLitePortal, we support license upgrades to PowerPartner or PowerCustomerSuccess (in the Salesforce API).

You can upgrade the following licenses to the Customer Community Plus or Partner Community license without any loss of data access.

- Customer Community
- High Volume Customer Portal
- Overage High Volume Customer Portal
- Authenticated Website User Overage
- Authenticated Website User
- External Identity
- Warning: Other customer licenses associated with the CSPLitePortal user type also support license upgrades, but with some loss of data access. For example, users could lose access to some objects they previously had access to. In other cases, the new license might not include one or more user permissions available with the previous license.

# We strongly recommend that you explore which permissions are affected before you upgrade a user's license. The user's new license, profile, and permission set assignments should ideally provide at least the same or comparable level of data access as previous assignments.

#### How Do I Upgrade Users?

To change a user's license in Salesforce, go to their user detail page and click Edit. Specify a new license, profile, and role.

And if you want to upgrade users via the Salesforce API, for a single user or multiple users, we've got you covered! Use the update () method on the User object and specify the required ProfileId and RoleId values. That's it.

#### Important Considerations

A few things to bear in mind before you upgrade a user's license.

- The Customer Community Plus and Partner Community licenses require the user to have a role, which imposes certain restrictions.
  - An upgrade to a license that requires a role is irreversible.
  - If you don't specify a role during the license upgrade, we assign the lowest role in the account hierarchy to the user. If no roles exist on the account, we create one for you and assign it to the user.
  - Automatic role assignments always use the lowest role associated with the user's account: Partner <Account Name> User or Customer <Account Name> User. So if you want to move them up in the role hierarchy, you can easily do so later.
- Before upgrading a user to a Partner Community license, enable the user's account as a partner account.

() Tip: A partner account can have both customer and partner users, so customer users on the account aren't affected when you enable it as a partner account.

- A license upgrade removes sharing sets, permission sets, and permission set license assignments previously associated with the user.
- License upgrades are subject to org limits that apply to user creation, such as license and role limits and username uniqueness requirements.

After you upgrade a user's license:

• Changes in profiles and permission sets can affect community membership. Ensure that upgraded users have access to the intended communities.

- We recalculate sharing rules that apply to upgraded users, for example through their public groups, criteria-based sharing, and record ownership (implicit sharing).
- Users upgraded to the Customer Community Plus license are automatically associated with the All Customer Portal Users public group. Similarly, users upgraded to the Partner Community license are associated with the All Partner Users public group.

SEE ALSO:

Salesforce Help: Communities User Licenses (can be outdated or unavailable during release preview) SOAP API Developer Guide: User Upgrade Community User Licenses in a Blink Salesforce Help: Communities Limits (can be outdated or unavailable during release preview)

# Lightning Bolt: Package More Easily and Distribute on AppExchange

Exported and packaged Lightning Bolt solutions now include branding properties and Navigation Menu items, making it easier to reuse solutions. And if you're a consulting partner or ISV, you can distribute Lightning Bolt solutions on the Salesforce AppExchange to connect customers to your custom offering.

Tip: Lightning Bolt solutions and community 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.

To export a solution, go to **Settings** > **Developer** in Community Builder.

When you export a solution, we now include the following items, so there's less to configure when it's used to create a new community.

- Navigation Menu items
- Branding panel properties
- Administration settings (in Workspaces or Community Management) for the:
  - Change password page
  - Forgot password page
  - Home page
  - Login page
  - Allow internal users to log in directly to the community option

If you're a consulting partner or ISV, you can publish your custom Lightning Bolt solution as a managed package to AppExchange. Market your solution with an AppExchange listing in the same way you list any other app, component, or consulting service. Describe your solution, pricing, support, and other details so that customers can determine whether your offering is right for them.

Note:

- Before you can export a solution, you must first unify your branding properties.
- For Navigation Menu items that link to objects, list views are reset to the default list view. Also, custom list views for standard objects aren't included.
- Custom styles in the CSS editor aren't included.

# Usability, Design, and Performance Improvements: Do More, More Easily

Workspaces and centralized branding let you design and manage more efficiently, while the App Launcher and Notifications provide ease of access and seamless collaboration for your users. And with the Community Page Optimizer, you can quickly assess and improve the performance of your community.

#### IN THIS SECTION:

#### Get More Out of Communities with Community Workspaces

If you haven't checked it out yet, we encourage you to try the new Community Workspaces. Community Workspaces is your one place to access everything to build and support your community.

#### Easily Switch Between Your Salesforce Org and Communities

If you use Lightning communities and Lightning Experience, you can now use the App Launcher to switch back and forth between your Salesforce org and your communities. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

#### Stay on Top of What Happens in Your Communities with Global Notifications

With Global Notifications, your members receive messages wherever they are working, whether in their communities or in their apps. Members receive notifications on any screen—mobile, tablet, and desktop. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

#### Simplify Your Style with Centralized Branding Properties

To streamline how you style your community, we provide an update that unifies the branding properties of the login pages with the rest of the pages in your community. Now, instead of styling the login pages separately in Community Builder, you can modify the appearance of all your pages from a single, centralized Branding panel. This functionality is available in communities based on Customer Service (Napili), Partner Central, and Lightning Bolt solutions.

#### Analyze and Improve Community Performance (Developer Preview)

The 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 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.

#### Components—Use 'Em Where You Need 'Em

Add out-of-the-box components to any page in Community Builder, regardless of type. This advanced feature is ideal for developers who are comfortable working with component parameters.

#### Improve SEO Results by Setting Your Preferred Domain

Multiple domains for the same community can dilute search engine results and lower page ranking. Now you can choose which domain to use for indexing your community's pages and make duplicate search engine results a thing of the past.

# Get More Out of Communities with Community Workspaces

If you haven't checked it out yet, we encourage you to try the new Community Workspaces. Community Workspaces is your one place to access everything to build and support your community.

#### Go to Community Settings > Community Management Settings and select Enable Community Workspaces.

Community Settings	
General Settings	Save
Domain Name	
The default domain name for Communities in	n your organization is modws.mobile1.t.force.com
Sample Domain Name MyCompany.force.com	Sample Community URLs MyCompany.force.com/customers MyCompany.force.com/developers MyCompany.force.com/partners
Community Management Settings	
Enable Community Workspaces	

The following features are only available using Community Workspaces:

- Flagged Discussions
- CMS Connect
- Automatic Topic Assignment

With every release, more features are created exclusively for Community Workspaces, so don't delay and make the switch today.

### SEE ALSO:

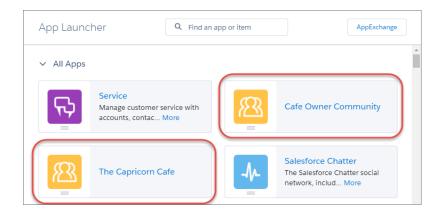
Take Action from the Flagged Discussions Moderation Queue Salesforce Help: Manage Your Community with Community Workspaces (can be outdated or unavailable during release preview) Salesforce Help: Access Community Workspaces (can be outdated or unavailable during release preview)

## Easily Switch Between Your Salesforce Org and Communities

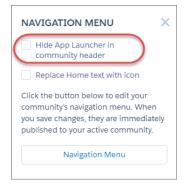
If you use Lightning communities and Lightning Experience, you can now use the App Launcher to switch back and forth between your Salesforce org and your communities. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

Search	Search	
S ▼		

In Lightning Experience, the App Launcher displays a tile for every published community along with your apps. In Lightning communities, the App Launcher displays a tile for every published community and app but the All Items area and AppExchange link aren't available. Members see only the communities and apps that they're authorized to see according to their profile or permission sets.



By default, the App Launcher is hidden in existing communities and displayed in new communities. To show or hide the App Launcher for your users, select **Hide App Launcher in community header** in the Navigation Menu component properties.



To let users see the App Launcher, you must also enable the Show App Launcher in Communities permission in user profiles in Setup.

Note: The App Launcher is not available in the Salesforce1 mobile app or in Salesforce Tabs + Visualforce communities. Users of these communities can use the global header to switch between their Salesforce org and their communities.

### SEE ALSO:

Add App Launcher and Notifications Components to Lightning Components in Communities

## Stay on Top of What Happens in Your Communities with Global Notifications

With Global Notifications, your members receive messages wherever they are working, whether in their communities or in their apps. Members receive notifications on any screen—mobile, tablet, and desktop. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

		Search	Search	0
номе	TOPIC	5 ▼		

All events that trigger notifications (@mentions and group posts) are supported. Members can even trigger notifications on record feeds. For example, an internal member can trigger a notification from the Salesforce org by @mentioning an external member on a lead or

opportunity. When a member clicks a notification, the originating detail page or other appropriate location is displayed for seamless collaboration across communities and apps.

By default, the Notifications icon is hidden in existing communities and displayed in new communities. For the default Customer Service theme layout, show or hide Notifications for your members by selecting **Hide Notifications icon in community header** in **Settings** > **Theme** in Community Builder.

4	Settings				×
	General	Theme			
	Theme	Control the appearance of each p layout of multiple pages from one	· · ·	e layouts and theme layou	t types. Quickly update the
لت	Languages				
ŵ	Advanced	THEME LAYOUT TYPE	THEME LAYOUT		
	CMS Connect	Login	Login Body Layout	Ŧ	/
	Updates	Home	Customer Service	¥	1
	Developer	Hide the header region an Hide the Notifications icon in			

SEE ALSO:

Add App Launcher and Notifications Components to Lightning Components in Communities

## Simplify Your Style with Centralized Branding Properties

To streamline how you style your community, we provide an update that unifies the branding properties of the login pages with the rest of the pages in your community. Now, instead of styling the login pages separately in Community Builder, you can modify the appearance of all your pages from a single, centralized Branding panel. This functionality is available in communities based on Customer Service (Napili), Partner Central, and Lightning Bolt solutions.

Some old branding properties aren't included in the updated Branding panel, and others map to different properties. Let's take a closer look.

	Old properties		Updated proper	ties	
4	Branding 🛷	×	4	Branding 🛷	×
	Background Color 1	•		Text Color 3	
1	Button Color 2		1	Detail Text Color	
	Button Border Color	- 11		Action Color 2	
	Button Hover Color			Link Color	
₽	Button Hover Border Color	- 11	\$	Overlay Text Color	
_	Font Color 3		_	Border Color	
	Error Font Color 4			Images	
				Company Logo	
	Images				
	Background Image 5				
				Header Image	,
	1717			Fonts	
	Clear	-		Primary Font 7	
				Lato	v
	Card			Header Fonts	
	Card Background Color 6			Montserrat	v
	Card Border Color			Text Case	
	Card Border Color			Uppercase	v
	Card Transparency			Login	
	0 No Unit 🔻			Background Color	
	Fonts			Card Background Color 6	
	Font Family			Error Text Color 4	
	Open Sans	· ·		Background Image 5	
				Glear	

These old login branding properties	Map to these updated branding properties
Background Color (1)	Background Color (1)
Button Color (2)	Action Color (2)
Button Border Color	
Button Hover Color	
Button Hover Border Color	
Font Color (3)	Text Color (3)
Error Font Color (4)	Error Font Color (4)
Background Image (5)	Background Image (5)

These old login branding properties	Map to these updated branding properties
Card Background Color (6)	Card Background Color (6) Also controls card transparency
Card Border Color	
Card Transparency	
Font Family (7)	Primary Font (7)

To apply the update and unify your community's branding properties, go to Settings > Updates and click Update.

Warning: When you apply the update, your login pages lose several branding properties, but all other customizations are retained. After you update the template, reconfigure missing properties to make sure that the login pages are styled correctly.

Note: To export a Lightning Bolt solution, you must first update your template.

## Analyze and Improve Community Performance (Developer Preview)

The 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 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.

The Salesforce Community Page Optimizer is available as a developer preview. The Community Page Optimizer isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. 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.

The Community Page Optimizer is located with your other Chrome extensions.



## Insights

To analyze your community, navigate to your published community, load the page, and then launch the Community Page Optimizer.



The Insights tab (1) evaluates your page based on best practices for web applications developed using the Lightning framework. This tab displays an overall performance score (3) along with individual scores (5) for various analysis rules. To view details and suggested actions, click each rule. Click **Popout** (2) for more room to work.

Click **Clear** (4) to remove collected metrics. Perform some user actions on the page to collect new metrics and then reopen the Community Page Optimizer. For example, to gather performance metrics for liking a feed item, clear performance metrics, click Like, and reopen the Community Page Optimizer.

The Insights tab is conservative in providing recommendations. For further insights, consider reviewing the raw data presented on the Waterfall, Timeline, Charts, Cost, and Actions tabs.

## Waterfall

The Waterfall tab displays all network requests and performance instrumentation data. Click a row to view contextual information in the sidebar. Click the arrow to the left of each row to expand the information for each row.

	INSIGHTS WATERFALL TIMEI	LINE CHAR	10 1	ORKSPAC		OMPONENT			TIONS				
S	earch (filter e.g. q:callTime>200)	▼ ACTIONS · RE	QUESTS - C	YCLES			D	ownload (P	NG)	Options	Hide Sidebar >		
1	Home								Co	ONTEXT			
	Name	Туре	Os	28	4.1s	101.1s	101.2s	101.2s		transaction: {} 11 keys memory: 21700000			
	bootstrap	framework		<b>→</b> 3.17									
1	error:storage	aura	<b>→</b> 0							biectCount: 1			
	performance:cryptoStorage-keymi	aura	<b>→</b> 0							omponentCou			
	error:storage	aura	<b>→</b> 0							reatedAt: 149			
	2	cycle	1	<b>→</b> 0.47					id	: "Itng:bootsti	ap"		
	interaction	ltng	1	→ 0					e	pt: null			
	home S(2.72) B(1.66) E(2.87)	pageView	- I	-	2.87					tart: 0 nd: 3174 ctionsStorageSize: 142.85693 375			
	3	cycle		<b>→</b> 0.1									
	cryptoStorage-keymismatch	performance		<b>→</b> 0					a				
	cryptoStorage-keymismatch	performance		<b>→</b> 0									
	cryptoStorage-keymismatch	performance		<b>→</b> 0						axActionsStorageSize: 10240 vent: "transaction"			
	8	cycle		<b>→</b> 0.1						vent: "transaction" amespace: "aura" vcle: 4			
	storage-indexeddb-walkInternal-rea	performance		<b>→</b> 0									
	Name	Туре	Os	2s	4.1s	101.1s	101.2s	101.2s		: 0			
	document	document	→ 1.4	4					p	ageStartTime	1491350612669		
	inline.js?aura.attributes={"sche	auraScript	l→ 0.	13					► n	narks: {} 2 ke	eys		
	app.js	auraScript	l→ 0.0	04					u	nixTS: false			
	bootstrap.js?aura.attributes={"s	auraScript		+ 1.28						ventType: "bo			
	aura?preloadActions&i=0	auraXhr		→ 0.75						ventSource: "			
	aura?r=0&i=1	auraXhr		I→ 0.14						ttributes: {} 2			
	aura?r=1&i=2	auraXhr		<b>I</b> → 0.19					S	chemaType:	LightningPerforma		
	aura?r=2&i=3	auraXhr		→ 0.2					ie	e" sMetricsServiceTransaction: tru			
	aura?r=3&i=4	auraXhr		→ 1					l "				
	aura?r=4&i=5	auraXhr		I→ 0.18					-				
	aura?r=5&i=6	auraXhr		l→	0.2								
	aura?r=6&perf=true&i=7	perfXhr			→ 0.42								
	aura?r=7&i=8	auraXhr		- I-	→ 0.1								
	aura?r=8&i=9	auraXhr				1	-	→ 0.08					

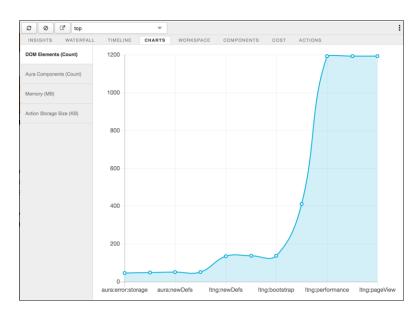
## Timeline

The Timeline tab provides a profile of each component's rendering life cycle. The timeline view is optimized for displaying Lightning framework metrics, so it's easier to interpret than Chrome DevTools.

<i>℃</i> Ø 🕑 top		*			
INSIGHTS WATER		HARTS WORKSPACE		ACTIONS	
🗹 Network / Mark 🛛 E	vent / Action 🗹 Transactio	n 🗹 Component / Cycle	Search by text or .* regex		
500 ms	1000 ms	1500 ms	2000 ms	2500 ms	3000 ms
		· · · · · · · · · · · · · · · · · · ·	an and any series the		
		1	All the second second	in a second s	
500 ms	1000 ms	1500 ms	2000 ms	2500 ms	3000 ms
Network / Mark	1	xh.	) x)	xhr@st	
r Event / Action	get	g) MessagingqueueActio	getMotion handletion init:2ction		
Transaction	ltng:pag	geView (transaction)			
Component / Cycle					
	2 (cycle) site"ete sitetee au)	3e) 4 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 11 (cycle) forceeate auraffeate auraffeate auraffeate auraffeate forceeate auraffeate forceeate auraffeate forceeate auraffeate	i       forr)         aurr)       aurr)         aurr)       aurr)         forr)       aurr)	I

## Charts

The Charts tab displays trending information about memory and components as customers use your page.



## Components

The Components tab displays the life cycle counts for each component on the page. This view helps you identify potential component leaks and unexpected rendering behavior. Use the Component tab along with the Cost tab for an overall view of component performance.

			Pul	I Clear Exp	port Import	Popout Pus	h Simple 🕨
INSI	HTS WATERFALL CHARTS	COMPONENTS	TIMELINE V	ORKSPACE C	OST ACTIONS	RAW HEL	P
Ena	ble 🗹 Cycles						
@cum	ent	× 👻	Select head			•	Take Snapshot
× 1	× 2 × 3 × 5 × 8 × 9 ×	10	× 🔻 Sele	ct head cycle			~
				Search			Options
ld	Name	Create	Render	Rerender	Unrender	AfterRender	Destroy
	siteforce:napiliApp	1	1	-	-	1	
	siteforce:baseApp	1	1	-	-	1	
	siteforce:routerInitializer	1	1			1	
	force:toastManager	1	1			1	-
-	force:toastMessageQueue	1	1			1	
	force:hoverPrototypeManager	1	1		-	1	-
	one:actionsManager	1	1			1	
	force:targetInteractionHandler	1	1			1	
-	siteforce:panelsContainer	1	1			1	
-	siteforce:spinnerManager	1	1	-	-	1	
-	siteforce:loadingBalls	2	2			2	
	siteforce:panelManager	1	1			1	
	one:panelManager	1	1			1	
-	forceContent:filesManager	1	1	-	-	1	
-	forceContent:modalPreviewManager	1	1			1	
-	force:hostConfig	1	1	2		1	
	siteforce:qb	1	1			1	
-	instrumentation:beacon	1	1	-	-	1	-
-	force:quickActionManager	1	1			1	-
-	notes:editPanelManager	1	1			1	

## Cost

The Cost tab displays the amount of time each component was busy processing its logic. The lower the time, the better the performance.

2 Ø 🖻 top	~					:
INSIGHTS WATERFALL	TIMELINE CHARTS	WORKSPACE	COMPONENTS	COST ACTIONS		
Search		Total Component Jav	aScript: 1327.28 ms		Copy to clipboard	Options
		Self			Aggregate	
Name	Count	Average	Total	Avera	ge	Total
siteforceNapiliApp	1	24.23ms	24.23ms 1.83%	303.6	ims	303.6m
siteforceBaseApp	1	0.92ms	0.92ms 0.07%	279.37	'ms	279.37m
siteforceRouterInitializer	1	12.05ms	12.05ms 0.91%	12.71	ms	12.71m
auraComponent	372	0.48ms	84.59ms 6.37%	13.1ms (nest	ed) 3,805.2	2ms (nested)
uiAsyncComponentManager	1	1.37ms	1.37ms 0.10%	2.06	ims	2.06ms
uiContainerManager	1	2.85ms	2.85ms 0.21%	9.37	'ms	9.37ms
auraHtml	684	0.8ms	232.07ms 17.48%	<del>10.75ms</del> (nest	ed) 6,188.2	2ms (nested)
forceToastManager	1	1.39ms	1.39ms 0.10%	12.11	ms	12.11ms
forceToastMessageQueue	1	4.84ms	4.84ms 0.36%	9.49	Ims	9.49ms
auralteration	19	1.98ms	33.26ms 2.51%	41.88ms (nest	ed) 655.3	2ms (nested)
auraExpression	327	0.56ms	65.44ms 4.93%	<del>15.46ms</del> (nest	ed) <del>1,813.9</del>	2ms (nested)
auralf	340	0.73ms	175.6ms 13.23%	21.04ms (nest	ed) 2,387.8	5ms (nested)
forceHoverPrototypeMana	1	5.34ms	5.34ms 0.40%	8.03	Bms	8.03ms
forceHoverPrototype	1	1.95ms	1.95ms 0.15%	2.35	ims	2.35ms
oneActionsManager	1	2.11ms	2.11ms 0.16%	5.7	'ms	5.7ms
forceTargetInteractionHand	1	3.26ms	3.26ms 0.25%	3.44	lms	3.44ms
siteforcePanelsContainer	1	0.53ms	0.53ms 0.04%	10.07	'ms	10.07ms
siteforceSpinnerManager	1	0.68ms	0.68ms 0.05%	3.5	ims	3.5ms
siteforceLoadingBalls	2	1.67ms	3.33ms 0.25%	3.47	ms	6.94ms
siteforcePanelManager	1	1.48ms	1.48ms 0.11%	5.75	ims	5.75ms
onePanelManager	1	2.66ms	2.66ms 0.20%	4.14	lms	4.14ms
uiPanelManager2	1	0.71ms	0.71ms 0.05%	1.48	Bms	1.48ms
forceContentFilesManager	1	3.59ms	3.59ms 0.27%	8.01	ms	8.01ms

## Actions

The Actions tab displays a list of all actions performed on the page, along with their timing information.

## Export

Export your analysis to a file to share with your development and support teams.



# Components-Use 'Em Where You Need 'Em

Add out-of-the-box components to any page in Community Builder, regardless of type. This advanced feature is ideal for developers who are comfortable working with component parameters.

By default, we filter the components available in the Components panel according to each page's purpose. For example, the Case Comments Publisher is available only for the Case Details page. Now you can remove component filtering and add a component to any page by selecting **Show All Components** in **Settings** > **Advanced**. When you open the Components panel for any page (except login pages), you see the complete list of components.

4	Settings	Advanced
1	General	Track page traffic or add head markup to customize your pages.
=	Theme	Google Analytics™
	Languages	Enter your Google Analytics Tracking ID to track page views.
\$	Advanced	UA-YYYYY-XX
	CMS Connect	Let Google Analytics access your Salesforce data for deeper insights into
	Updates	search activity. • Head Markup
	Developer	Add markup to the <head> of every community page except for any login pages.</head>
		Edit Head Markup
	(	Components Panel
	l	Show All Components

Note: Even after you enable Show All Components, you can still only add:

- The Related Questions List component to the Question Detail page
- The Related Articles List component to the Article Detail page

Important: Some components require the page to pass specific parameters. When you remove component filtering, you can add a component that relies on a passed parameter to a page that doesn't pass any values. For the component to work correctly, you must manually configure the component's parameters.

For example, some components that take { !recordId} as a parameter expect to get this value from the page's URL. If you add the component to a page that doesn't pass this value through the URL, you must manually provide it.

Similarly, let's say you add the Group Detail component, which requires a { !recordId} value, to the Case Detail page instead of the Group Detail page. Although both pages pass a { !recordId} value, the ID that Case Detail passes is incorrect.

## Improve SEO Results by Setting Your Preferred Domain

Multiple domains for the same community can dilute search engine results and lower page ranking. Now you can choose which domain to use for indexing your community's pages and make duplicate search engine results a thing of the past.

In Community Builder, go to **Settings** > **General** and select your preferred domain.

<b>F</b>	Settings	General
	General	View and edit the main properties of your community.
	Theme	Community Details
	Languages	Community Template Customer Service (Napili) Summer '17
\$	Advanced	Public Access
	CMS Connect	Public can access the community
	Updates 1	Community Title
	Developer	Customer Service Published Status Not published
		Preferred Domain   http://mydomain.com

## Note:

- The Preferred Domain dropdown list appears in Community Builder only after you set up domains and associate them with your community in Setup.
- If the Require Secure Connections (HTTPS) option is enabled in Site Configuration in Site.com Studio, you can set only HTTPS preferred domains.

# Lightning Communities: Improved Search, Updated and New Components, and More

Include topics and results from all feeds in global search, refine your content with dedicated Rich Content and HTML editors, add language support to any page, and much more.

### IN THIS SECTION:

### Refine Your Content with a Streamlined Rich Content Editor and Dedicated HTML Editor

To improve how you edit your page content, we moved HTML editing to a dedicated HTML Editor component. No need to upgrade your existing Rich Content Editor components unless you want to edit the content. In that case, we prompt you to move the content to the appropriate new editor, either Rich Content or HTML.

## Koa and Kokua Templates No Longer Available for New Communities

We're starting a phased retirement of the Koa and Kokua templates. As of this release, you can no longer use these templates to create communities. Salesforce still supports existing communities that were built using Koa and Kokua. 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.

## Include Topics and Feeds in Community Global Search Results

Community searches now include topics and all feed posts in search results, making it easy for your customers to find the answers they need. This functionality is available in communities based on Customer Service (Napili) and Lightning Bolt solutions.

## Organize Your Community's Top Articles by Topic

Give your customers more direction when they're browsing your knowledge articles. Using the Top Articles by Topic component, you can organize topics in one view. Articles populate under the topics, ranked by view count.

### Search and Sort Specific Feeds in Communities

Search for information in community feeds on records, groups, topic pages, user profiles, and on the home tab. A contextual feed search is helpful when you want to confirm whether something was once discussed in that specific feed. This functionality is available in communities based on the Customer Service (Napili) template.

## Assign Topics Automatically to Articles in Communities

Make the most of all your hard work organizing Salesforce Knowledge by mapping topics to data categories in your community. All articles published with a specific data category are tagged with the topics you specify. And future articles added to the data category will also be tagged.

### Help Customers Discover and Interact with Content Using the Improved Article Detail Page

A slew of improvements on the article detail page help community members follow articles, discover new ones, and give a simple up or down vote.

### Add the Language Picker to Any Lightning Community Page

Previously, the Language Picker component was available only in Customer Service (Napili). Now it's available in every template and you can also add it to the login pages.

### Case Detail Page Variation and Components to Retire Summer '19

In a phased retirement plan and after years of service, a host of components and pages used for case creation are strolling off into the sunset in Summer '19. Starting this release, Summer '17, you can no longer use some case-specific components and page variations.

### Set Up a Community in Lightning Service Setup

You can create a new community from Lightning Service Setup using a Lightning Communities setup flow. This feature is new in Lightning Experience.

## Use the Snap-ins Component to Add Live Agent to Lightning Communities

Quickly integrate Live Agent into the Customer Service (Napili) template with the Snap-ins component. Set up Live Agent and Snap-ins Chat to use this component.

## Refine Your Content with a Streamlined Rich Content Editor and Dedicated HTML Editor

To improve how you edit your page content, we moved HTML editing to a dedicated HTML Editor component. No need to upgrade your existing Rich Content Editor components unless you want to edit the content. In that case, we prompt you to move the content to the appropriate new editor, either Rich Content or HTML.

We position the new editor right below the original, so it's easy to compare and adjust your content. When you're sure it looks good in the new editor, delete the old Rich Content Editor component.

Not sure which editor to choose? Try both! Compare the moved content to the original content in Preview and then delete the components you don't need. Your changes are not live until you publish your community.

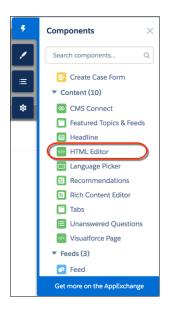
## New Rich Content Editor

To create and edit simple rich content and quickly add links, images, and videos, use the updated Rich Content Editor. No need to edit the HTML directly. There are new tools to underline and add background color to text. If you prefer more formatting control and are comfortable working with HTML, use the HTML Editor instead.

	в	I	U	ę	Ix	E	÷	Ξ	1 2 2	Ξ	Form	nat	•	Fon	nt	•	Size	)	•	A	•	•	Ø	9	
Replace	this t	ext v	vith	conte	nt of y	our c	wn.																		

## New HTML Editor

Did you work with source code in the original Rich Content Editor component? If so, you probably want to move to the dedicated HTML Editor. The moved content is more likely to display exactly like your original content.



HTML Editor Add and edit custom markup. Learn more.	
<pre>1 Use this HTML Editor to add your own markup.</pre>	
Cancel	Save

The HTML Editor component supports most HTML tags, attributes, and values. Any exceptions are flagged in your markup.

## Koa and Kokua Templates No Longer Available for New Communities

We're starting a phased retirement of the Koa and Kokua templates. As of this release, you can no longer use these templates to create communities. Salesforce still supports existing communities that were built using Koa and Kokua. 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.

## Include Topics and Feeds in Community Global Search Results

Community searches now include topics and all feed posts in search results, making it easy for your customers to find the answers they need. This functionality is available in communities based on Customer Service (Napili) and Lightning Bolt solutions.

To see topics in search results, add the topics object to the Global Search Results component. The system searches topic names, not descriptions.

	GLOBAL SEARCH RESULTS	×
	* Search Term	
Edit Tab Properties	{!searchString}	
Object 0	Show the All results tab	0
Topics 🔻	↑↓ Articles	×
Publicly available	↑↓ Discussions	×
Cancel Save	↑↓ Accounts	×
	↑↓ Contacts	×
	†↓ Cases	×
	↑↓ Leads	×
	Add	

To see results from all feed types in a community (including questions and posts on records), select **Show search results from all feeds, including questions, posts, and comments**. If you choose to not include searches from all feeds, the search results use a condensed form of the feed (compact feed).

	GLOBAL SEARCH RESULTS	×
	* Search Term	
	{!searchString}	
Edit Tab Properties Dbject	Show the All results tab	0
Discussions 💌	↑↓ Articles	×
Publicly available	↑↓ Discussions	×
Show search results from all feeds, including questions, posts, and comments	↑↓ Accounts	×
ancel	↑↓ Contacts	×
Save	†↓ Cases	×
	↑↓ Leads	×
	Add	

# Organize Your Community's Top Articles by Topic

Give your customers more direction when they're browsing your knowledge articles. Using the Top Articles by Topic component, you can organize topics in one view. Articles populate under the topics, ranked by view count.

Note: You can use this component if you've already set up topics in your community and have mapped articles to topics.

In Community Builder, create a standard page for your community. Although the component is responsive and works with any page layout, we recommend the page layout with one full-width column. After you create a page, drag the Top Articles by Topic component into the content area of the page. The component lists the first three topics it finds in the system alphabetically. You can add up to 21 topics in one component, and each topic can show up to 10 articles.

f Top Articles		A STREET STREET
Capricorn Coffee	Coffee Solutions	Espresso Machines
Coffea arabica	Coffea arabica	Caring for your Espresso Machine
Coffee Machine Maintenance	Caring for your Espresso Machine	Espresso Machines - Understand the Capricorn
Mechanical Harvesting Process	Grinder Care & Maintenance	Industrial Hardware Care
Caring for your Espresso Machine	Coffee Solutions for your Ohio Coffee Steamer	Seriously. It's Espresso, not Expresso. There's no.
Grinder Care & Maintenance	Coffea robusta	Brew it Right with Brewmaster 9500
View All (20+)	View All (20)	View All (7)
Tea Ware	Coffee Accessories	Brewing & Recipes
Tea Solutions from Capricorn	Coffee Machine Cleaning	Coffea arabica
Tea Brewing Best Practices	Grinder Care & Maintenance	Coffea robusta
Recommended Coffee Accessories for Your Cafe	Coffee Accessory Cleaning and Care	Industrial Hardware Care
Tea for Victory!	Industrial Handware Care	Coffea liberica
Tea Steeping Time by Type	Recommended Coffee Accessories for Your Cafe	Tea Brewing Best Practices
	View All (9)	View All (10)
	Show More	

## Search and Sort Specific Feeds in Communities

Search for information in community feeds on records, groups, topic pages, user profiles, and on the home tab. A contextual feed search is helpful when you want to confirm whether something was once discussed in that specific feed. This functionality is available in communities based on the Customer Service (Napili) template.

To turn on search and sorting in feeds, select the **Let members search feeds** and **Let members sort feeds** options in the Feed component properties in Community Builder.

When feed search is enabled, community members can click the magnifying glass icon above the feed to enter search terms. They can sort feeds by latest posts or most recent activity.

Most Recent Activity 💌		Q. Search this feed	<b>T C</b>
	his record. M		Ŧ
	rel		
ı 🖞 Like 🌒 Comment			
Write a comment.			

## Assign Topics Automatically to Articles in Communities

Make the most of all your hard work organizing Salesforce Knowledge by mapping topics to data categories in your community. All articles published with a specific data category are tagged with the topics you specify. And future articles added to the data category will also be tagged.

Here's how it works.

Enable Automatic Topic Assignment in Content Targeting.

🕜 Note: To use automatic topic assignments, you must first enable **Community Workspaces** in Community Settings.

* Content Targeting	Topics	Recommendations
Topic Management	A	lesth seine teolee to so sitiste when it's autilities of within a data
Navigational Topics	category	ically assign topics to an article when it's published within a data
Featured Topics	Automa	te Topic Assignment
Article Management		Disabled
Automatic Topic Assignment		

Select a data category group and a data category.

* Content Targeting	Topics	Recommendations
Topic Management Navigational Topics Featured Topics Article Management	category	tically assign topics to an article when it's published within a data te Topic Assignment Enabled
Automatic Topic Assignment	Data C	ategory Group Select V Data Category Select V
		Movies
		Articles

Then add the topics that you want to assign to the articles under that data category.

* Content Targeting	Topics Recommendations
Topic Management Navigational Topics	Automatically assign topics to an article when it's published within a data category.
Featured Topics Article Management Automatic Topic Assignment	Automate Topic Assignment
	Horror X ADD TOPIC Add above topic(s) to all existing articles in the data category Save Cancel

You can also select the option to add the topics to existing articles in the data category. The topics are then assigned to all articles in all data categories under the data category group. If you don't select this option, the topics are added only to new articles added to the data category, and the existing articles remain unchanged.

After you click **Save**, it takes a few minutes to add the topics to existing articles. Topic assignments are community-specific. If you use the same article in two different communities, set up automatic assignments in both communities.

How does this work for translated articles? If a translation of a topic is available in Salesforce, the translated article is tagged with the corresponding translated topic. If there's no translated topic in the system, localized articles are tagged with the base language topic.

Note: You can't automatically remove topics from articles. Instead, you must manually remove topics.

Chatter REST API and Chatter in Apex support topic and article assignment.

# Help Customers Discover and Interact with Content Using the Improved Article Detail Page

A slew of improvements on the article detail page help community members follow articles, discover new ones, and give a simple up or down vote.

Out-of-the-box article detail pages now include a follow button and a related articles component. At the bottom of an article, members can now see all the topics that have been assigned to it. Members can also click a topic to see all the articles associated with it.

Voting on articles is also simplified. When you select **Allow voting on articles** in the Article Content component, your community sees the prompt **Was this article helpful?** with a thumbs up or down button on the bottom of each article. Community members vote on the helpfulness of the article, and admins can analyze the results and change articles as needed.

# Add the Language Picker to Any Lightning Community Page

Previously, the Language Picker component was available only in Customer Service (Napili). Now it's available in every template and you can also add it to the login pages.

# Case Detail Page Variation and Components to Retire Summer '19

In a phased retirement plan and after years of service, a host of components and pages used for case creation are strolling off into the sunset in Summer '19. Starting this release, Summer '17, you can no longer use some case-specific components and page variations.

Components:

- Case Attachments
- Case Banner
- Case Comments
- Case Details
- Case Feed
- Case Feed Publisher
- Case List

Page variations on the Case Detail page:

- Basic Case Detail
- Chatter Case Detail

Existing communities with these page variations and components can still use them. However, if you delete the pages or components, you can't use them again. Rather than using these case-specific page variations and components, use generic record pages and components and associate them with the case object.

# Set Up a Community in Lightning Service Setup

You can create a new community from Lightning Service Setup using a Lightning Communities setup flow. This feature is new in Lightning Experience.

To start building your new community, go to the Service Setup home page and click **Get Started** under the Lightning Communities setup card. This setup flow builds you a community that uses the Customer Service (Napili) template.

SEE ALSO:

More Lightning Service Setup Flows (Beta)

## Use the Snap-ins Component to Add Live Agent to Lightning Communities

Quickly integrate Live Agent into the Customer Service (Napili) template with the Snap-ins component. Set up Live Agent and Snap-ins Chat to use this component.

### SEE ALSO:

Add Snap-ins to Your Lightning Communities

# Files in Lightning Communities: Promoting Productivity

We improved files in Communities with efficiency in mind. Now you can add multiple files to libraries, take action on files from related lists and the feed, and unshare files.

### IN THIS SECTION:

### Take Action on Files Right from the Feed

You no longer have to open a file preview to copy a link or share or download a file—you can do it right from Chatter. Your favorite file actions are available directly from the feed. You can easily download, upload a new version, and delete files from Chatter posts and comments. This feature is available in Lightning communities.

### Take Action on Files from the Related List

Take quick action on your files from Files home or from a record. We're making it easier for you to complete essential tasks so you can collaborate efficiently in your community. From the action menu in Files home, you can download, upload a new version, and delete a file. You can also create a public link to share the file with anyone inside or outside of your community. This feature is available in Lightning communities.

### Share Public Links to Your Files

For users with access, sharing files just got even easier. Create a public link to a file, then distribute the URL to anyone you want. Public link sharing was already available in Salesforce Classic and Lightning Email. Now it's available as a Files action in Lightning Experience and Communities.

### Unshare a File in Communities

In Lightning Communities, you can unshare a file from a library or from a record. This feature is available in Lightning communities.

## Add Multiple Files to Libraries

Make the best use of your time by adding multiple files at once! You can add up to 10 files at a time to a library, a record, or Files home.

# Take Action on Files Right from the Feed

You no longer have to open a file preview to copy a link or share or download a file—you can do it right from Chatter. Your favorite file actions are available directly from the feed. You can easily download, upload a new version, and delete files from Chatter posts and comments. This feature is available in Lightning communities.

# Take Action on Files from the Related List

Take quick action on your files from Files home or from a record. We're making it easier for you to complete essential tasks so you can collaborate efficiently in your community. From the action menu in Files home, you can download, upload a new version, and delete a file. You can also create a public link to share the file with anyone inside or outside of your community. This feature is available in Lightning communities.

These same options are available on records in the Files related list.

SEE ALSO: Share Public Links to Your Files

## Share Public Links to Your Files

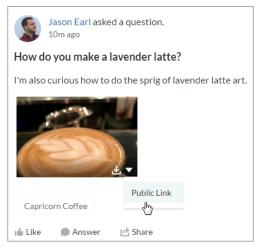
For users with access, sharing files just got even easier. Create a public link to a file, then distribute the URL to anyone you want. Public link sharing was already available in Salesforce Classic and Lightning Email. Now it's available as a Files action in Lightning Experience and Communities.

Do you have files you'd like to share with prospects, customers, leads, or others outside of your community? Or do you sometimes want to share files by copying and pasting a link in a chat message, email, or social media? If so, public link sharing is for you!

When you create a public link to a file, anyone who has the link can view and download the file. You can delete the link at any time. If you later decide to make it public again, just create a new link. Only people with the new link can access it.

## Create a Link from Chatter or Files List

It's easy to create a public link to a file that's attached to a question post. Just use the Public Link file action on the thumbnail in the feed.



From your Files list, choose **Public Link** for the file you want to create a link to.

LAST MODIFIED	SIZE	
9/6/2016 3:27 PM	1.7MB	Y
9/6/2016 3:27 PM	3.8MB	Download
8/10/2016 2:24 PM	245KB	Public Link
8/10/2016 2:18 PM	403KB	Delete

Create the link, copy it, and you're done! Share it wherever you like.

Public Link	Sharing		
Anyone with the link can view and downloa	d the file.	Create Link	0
No public link created		Create Link	

## Unshare a File in Communities

In Lightning Communities, you can unshare a file from a library or from a record. This feature is available in Lightning communities.

SEE ALSO:

Unshare a File

## Add Multiple Files to Libraries

Make the best use of your time by adding multiple files at once! You can add up to 10 files at a time to a library, a record, or Files home.

Files upload is now context-aware for libraries. When you select a library folder and then click Upload Files, the new files are uploaded to that library. When uploading to a library or a record, you can add up to 10 local files (1), Salesforce files (2), and files from external sources (3). When you're in the Owned by Me, Shared with Me, Recent, and Following filters, you can add up to 10 local files, which are added to the Owned by Me filter.

1	Select Files
t Upload Files	Q Search Files
Owned by Me Shared with Me	✓ Lyon Mar 29, 2017 • 177KB • jpg
Recent	mp4F Маг 29, 2017 • 17В • mp4
Following	AmbroseInc_sales_strategy Mar 28, 2017 • 193KB • png
Libraries	image_plaidswatch_Rooney Mar 27, 2017 • png • GDrive 🕹
🝐 GDrive	Q4_media_vertical. Mar 27, 2017 · sh · GDrive &
	✓ FigFile.reg Mar 27, 2017 · reg · GDrive ▲
	psdFile
2 of 10 files selected	Cancel Add (2)

When you upload multiple files, you can view the progress of individual files and cancel uploads in progress.

	Uploa	d Files	
PPT	AmbroseInc_sales_strategy.pptx 9.4 MB		0
РРТ	DRAFT_Employee Training v2.pptx 9.4 MB		8
РРТ	GlobalMedia_sales_strategy.pptx 9.4 MB		8
	image_plaidswatch_Rooney.jpg 217 KB		8
DOC	Q3_review_Americas.docx 107 KB		8
XLS	Q4_goals_region.xlsx 43 KB		8
XLS	Q4_media_vertical.xlsx 43 KB		8
1 of 7 fil	es uploaded		

# Chatter in Lightning Communities: Direct Message Enhancements, Feed View Count Reports, and More

Add and remove people from direct messages, filter groups by unread posts, and get a weekly report on the top 100 posts in your community.

### IN THIS SECTION:

### New Editor Brings Better Topics, Mentions, and Comments

We updated the editor in the Chatter publisher for enhanced security and faster performance. But they're not the only benefits. For one thing, you now have styles, images, and formatting in comments and answers. For another, mentions work more efficiently in the new editor. When you start to mention someone, the selection list opens right where your cursor is instead of at the bottom of the publisher. Topics gets the same treatment. When you add a topic to a post, the topic selection list opens at your cursor rather than at the bottom of the publisher. This feature is available in Lightning communities.

### Sort Discussion Global Search Results by Relevance

There's a new sorting option for the discussion results you get from a global search: Top Questions. Top questions are the most relevant community questions based on your search query. This feature is available in Lightning communities.

### Filter Community Groups to Show Unread Posts

Your community's groups have a new feed filter, Unread Posts, to get you to unread content quickly. To see this filter, you must be a member of the group. What's considered read? Posts you've liked, commented on, edited, scrolled through, or viewed in detail. This feature is available in Lightning communities.

### Share Posts with a Community Group

Share a feed post with a group in your community. Click the **Share** link to see the new **Share with Group** option. Select **Share with Group**, and search in the share dialog for the group you're interested in. This feature is available in Lightning communities.

### Create a Report on the Top 100 Feed Item Views

Here's another opportunity to get great insight into current trends in your community. A new primary object, Interaction Count Reports, is available for creating custom reports on the top 100 feed item views in your community. This feature is available in Lightning communities.

### Direct Messages Has Better Membership Management and Navigation

Direct Messages is more fully featured with new controls for adding and removing people. If someone doesn't have to be in the conversation, you can easily remove them. Removal cuts down on their social networking noise and yours. Also, when you navigate from a direct message notification, you're taken right to the related message. These changes are available in Lightning communities and in Lightning Bolt solutions.

### **Poll Your Community**

Want to get a quick tally of opinions in your community? With polling, you can. Use the Poll tab in the Chatter publisher to add a poll to a record, group, or profile feed. This feature is available in Lightning communities.

## Manage Group Members in One Place

Instead of going to different pages, community members can add or remove group members, or even change their role in Manage Members. Manage Members is available in Lightning Experience and communities based on the Customer Service (Napili) template.

### Change Your Email Notifications While in Your Group

Your community members can now manage email notifications right from the group page by clicking a button next to the group name. This feature is available in Lightning Experience and communities based on the Customer Service (Napili) template.

### Get and Do More with Group Tiles

Viewing list views of groups as tiles now offers more information about each group: how big it is, what type it is, when it was last active, and who owns it. You can even join (or ask to join) right from the tile. Group tiles are available in Lightning Experience and communities based on the Customer Service (Napili) template.

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FEED	ENGAGE	MENT		
Post	Announcement	Poll Question		
Shar	re an update		Sha	re
Most R	Recent Activity 🔻	Q Sear	rch this feed	C
	Pizza Rocks — V T Just Now		SHOW	v
The ral	ly is in the plaza at r	noon. Looking forwar	All Updates	
👈 Like	Comment	🖄 Share	✓ Unread Posts	
	Write a comment	t	All Questions	
			Unanswered Questions	
			Questions with No Best Answer	
			Questions with Best Answer	

SEE ALSO:

Filter Groups to Show Unread Posts

# Share Posts with a Community Group

Share a feed post with a group in your community. Click the **Share** link to see the new **Share with Group** option. Select **Share with Group**, and search in the share dialog for the group you're interested in. This feature is available in Lightning communities.

V T to Arnold Carte Edited Just Now	r:	Y
Looks like we're placing hig on chill :)	n in the Collateral competition this year. I've put the first-place champagne	
COLLATERAL COMPETITIO	N PLACE CHAMPAGNE	
🖬 Like 🌑 Comment	Share 2 view Share with Group	NS
L	Share with Followers Send as Message Share with Group	~
	- Shale with Group	
	Group Name  \$earch Groups	
	Share an update, @mention someone, add a file B $I \ \underline{\vee} \ \underline{-} \ $	
	VT to Arnold Carter: Edited Just Now Looks like we're placing high in the Collateral competition this year. I've put the first-place champagne on chill :)	
	®	
	Cancel Share	

Note: When you search for a group to share with, private groups with external users don't appear in your search results.

# Create a Report on the Top 100 Feed Item Views

Here's another opportunity to get great insight into current trends in your community. A new primary object, Interaction Count Reports, is available for creating custom reports on the top 100 feed item views in your community. This feature is available in Lightning communities.

Home	Chatter	Accounts	Contacts	Cases	Solutions	Reports	Dashboards	Policies A	gent Roles
Top Feed Post Interactions									
Report Generation Status: Complete									
Report Op	tions:			-1	ime Frame				
Summarize	e informatio		eraction count re		ate Field Created Date	R	ange Current FQ		
		All	eracion count rej			F	rom To	0/2017	
Run Repo	rt 🔻 His	de Details	Customize Sav	ve Save As	Delete	Printable View	Export Details		
Count +	Commer	t Count Like	e Count Feed I	tem ID	Network	Scope	Start interval date	Days for interva	FeedElement parent
126		25	3 0D5x0	000006AL3S	0DBx000	0000080Qs	4/3/2017		7 005x000000ZST3
117		0	0 0D5x0	000006AMVg	0000000	00000000	4/3/2017	3	7 001x000002HW9q
99		0	0 0D5x0	000006AMTr	0000000	00000000	4/3/2017		7 001x0000002HXXU

SEE ALSO:

Salesforce Help: Create a Custom Report Type (can be outdated or unavailable during release preview)

## Direct Messages Has Better Membership Management and Navigation

Direct Messages is more fully featured with new controls for adding and removing people. If someone doesn't have to be in the conversation, you can easily remove them. Removal cuts down on their social networking noise and yours. Also, when you navigate from a direct message notification, you're taken right to the related message. These changes are available in Lightning communities and in Lightning Bolt solutions.

A new user permission, Add People to Direct Messages, is available to enable a user to add others to direct messages the user is in.

Chatter REST API and Chatter in Apex support direct message membership management.

## **Poll Your Community**

Want to get a quick tally of opinions in your community? With polling, you can. Use the Poll tab in the Chatter publisher to add a poll to a record, group, or profile feed. This feature is available in Lightning communities.

### FEED ENGAGEMENT

Post Announcement	Poll	Question	
To Pizza Rocks			
Question			
What would you like	to ask?		
Choice 1			
Choice 2			
+ Add new choice			Ask

## Manage Group Members in One Place

Instead of going to different pages, community members can add or remove group members, or even change their role in Manage Members. Manage Members is available in Lightning Experience and communities based on the Customer Service (Napili) template.

SEE ALSO:

Manage Members with Ease

# Change Your Email Notifications While in Your Group

Your community members can now manage email notifications right from the group page by clicking a button next to the group name. This feature is available in Lightning Experience and communities based on the Customer Service (Napili) template.

SEE ALSO:

See Group Email Notifications on the Group Page

## Get and Do More with Group Tiles

Viewing list views of groups as tiles now offers more information about each group: how big it is, what type it is, when it was last active, and who owns it. You can even join (or ask to join) right from the tile. Group tiles are available in Lightning Experience and communities based on the Customer Service (Napili) template.

SEE ALSO:

Get Group Info (and Even Join) in the Tile View

# Custom Lightning Components: Develop for Communities

Use the Lightning Component framework to build custom components for Communities.

IN THIS SECTION:

## Add App Launcher and Notifications Components to Lightning Components in Communities

You can use the forceCommunity: appLauncher and forceCommunity:notifications components to add the App Launcher and Notifications to any Lightning component in communities. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

Integrate Your Custom Apps into the Chatter Publisher (Pilot)

Use Chatter Rich Publisher Apps to integrate your custom apps into the Chatter publisher and to view the app's payload in a feed. Pop images into a post, launch a form from the publisher—create these and other useful apps. Then use Rich Publisher Apps to integrate your work into the Chatter publisher. This feature is available in Lightning communities.

# Add App Launcher and Notifications Components to Lightning Components in Communities

You can use the forceCommunity:appLauncher and forceCommunity:notifications components to add the App Launcher and Notifications to any Lightning component in communities. This functionality is available in communities based on Customer Service (Napili), Partner Central, and any Lightning Bolt solutions.

For example, you can create a custom theme layout component that uses the default Navigation Menu, but includes a forceCommunity:appLauncher component. Remember to hide the App Launcher that's included in the default Navigation Menu by selecting **Hide App Launcher in community header** in the Navigation Menu property editor in Community Builder.



Alternatively, you can create a custom navigation menu that includes a forceCommunity:appLauncher component. Then you use this menu in a custom theme layout and include a forceCommunity:notifications component separately.

SEE ALSO:

Lightning Components Developer Guide: forceCommunity:notifications Easily Switch Between Your Salesforce Org and Communities Stay on Top of What Happens in Your Communities with Global Notifications

## Integrate Your Custom Apps into the Chatter Publisher (Pilot)

Use Chatter Rich Publisher Apps to integrate your custom apps into the Chatter publisher and to view the app's payload in a feed. Pop images into a post, launch a form from the publisher—create these and other useful apps. Then use Rich Publisher Apps to integrate your work into the Chatter publisher. This feature is available in Lightning communities.

Note: We provide Chatter Rich Publisher Apps to selected customers through a pilot program that requires agreement to specific terms and conditions. Rich Publisher Apps 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.

For proof of concept, we created an app for adding a quotation to a feed post.

Post	Poll Question
To My	/ Followers
Shar	e an update, @mention someone, add a file
В	I <u>∪</u> <del>;</del> I <sub>x</sub> ≔ ≟≣ ⊠
6	B 🕑 😰 Share
	×
	Select a Quote
	Whether you think that you can, or that you can't, you are usually right. Henry Ford
	Get next Quote
	Cancel Add

Today's d	V T Just Now quote.	
v	Vhether you think th	nat you can, or that you can't, you are usually right. Henry Ford
ı <b>b</b> Like	Diament	1 Share
	Write a comment	

To integrate our custom app, we used two new interfaces and a new event.

### Interfaces

- lightning:availableForChatterExtensionComposer—Enables a component to be used as an extension for the Chatter publisher.
- lightning:availableForChatterExtensionRenderer—Enables a component to be used as an extension for the Chatter feed item.

### Event

• lightning:sendChatterExtensionPayload—Updates the payload and metadata that must be saved during extension composition.

Consider the following when you use Rich Publisher Apps.

- If you remove your custom app or its components, because of caching, users might see your app's icon and make a selection. But they can't post it. To prevent lingering UI after you remove your custom app, clear the cache to remove the app's icon and selections.
- The accessibility of your custom app is in your hands. Users can tab through the parts that Salesforce provides—Cancel and Add buttons and the Close icon on the selector. The rest is up to you.

Chatter REST API and Chatter in Apex support Extensions, which are Chatter Rich Publisher Apps.

# Community Analytics: Service Community Scorecard, New User Participation Reports, and Sentiment Analysis

Service Community Scorecard is a community manager's complete view of a self-service community. From measuring engagement to tracking search efficiency, the Service Community Scorecard helps you keep your community in tip-top shape. We've also added new reports to track the daily participation of community members. Turn on Sentiment Analysis to track the general mood of posts and comments in your community (pilot).

### IN THIS SECTION:

### Keep Track of Community Health with the Service Community Scorecard

Understanding the health of your self-service community takes more than just keeping up with spam. Are members of your community actively contributing? Are members completing their user profiles, such as uploading a profile picture? What are the top articles that people are looking at? What search terms are being used most, and are they returning any results?

## Create a Custom Report Type to See Click-Through Rates for Related Articles

Find out how often members click related articles suggested by Salesforce Einstein in your community. Create a custom report type using **Related Content Metrics** as the primary object and monitor click-through rates of related articles. You have a daily tracker of the number of times a related article was shown in the community (impressions), how often it was clicked, and the ratio between the two.

## Track Community Activity with New Participation Reports

Want to track which types of your community members log in regularly? Want to know how many of them are active participants and how many are more interested in just looking around? We've added new reports to the Activity folder that track the types of customers that log in to your community and their activity level. With this information, you can better determine what to emphasize in your community to get engagement, new members, and content on track.

## Mark the Sentiment of Your Feed Posts and Comments (Pilot)

Turn on Sentiment Analysis to give your feed posts and comments a positive, neutral, or negative sentiment score. Sentiments are then stored in Salesforce so that you can track and report on the general mood of your community.

## Detect Spam with Einstein (Pilot)

Your community is the place customers go to get answers and talk to other customers. It's also the place where your customers get to know you. The last thing you want is spam getting in the way, but it can be hard to keep up. The new and improved Einstein Spam Detection steps in and intelligently protects your customer community from spam using community moderator activity as a guide.

## Embed Wave Analytics with the Wave Dashboard Component

No more coding to add Wave dashboards to your community! Embed them using the new Wave Dashboard component in the Customer Service (Napili) template.

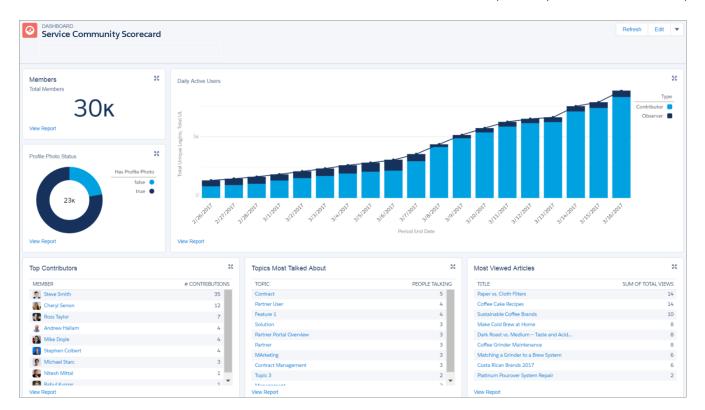
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Understanding the health of your self-service community takes more than just keeping up with spam. Are members of your community actively contributing? Are members completing their user profiles, such as uploading a profile picture? What are the top articles that people are looking at? What search terms are being used most, and are they returning any results?

Now you can track member activity, daily use, service metrics, search activity, and results in one place with the Service Community Scorecard. Go to **Dashboards** > **Home** in Community Management or Community Workspaces to access the Service Community Scorecard.



**Note:** The Service Community Scorecard is only available in the Summer '17 version of the Community Management AppExchange package, which is available shortly after the release.



Visit AppExchange to install or upgrade to the Summer '17 version of the Community Management AppExchange package to access the Community Service Scorecard. If it's your first time installing the package, the Service Community Scorecard automatically shows up in **Dashboard** > **Home** in Community Management or Community Workspaces. If you've installed a previous version, upgrade the package and then manually map the Home dashboard to the Service Community Scorecard from **Dashboards** > **Settings**. Click the down arrow to the right of the dashboard mapped to Home and select the Service Community Scorecard.

Perhaps your employee or partner community tracks different information? You can customize and rename your scorecard. Go to your internal org and click the **Dashboard** tab. Search for Service Community Scorecard and click **Edit** to add or remove reports or change the name of your scorecard.

Note: The 'Manage Dashboards' and 'View All Data' permissions are required to edit this dashboard.

# Create a Custom Report Type to See Click-Through Rates for Related Articles

Find out how often members click related articles suggested by Salesforce Einstein in your community. Create a custom report type using **Related Content Metrics** as the primary object and monitor click-through rates of related articles. You have a daily tracker of the number of times a related article was shown in the community (impressions), how often it was clicked, and the ratio between the two.

Use the click-through rates to create content around the most accessed articles, empowering your customers to find the information they need. This functionality is available in communities based on Customer Service (Napili) and Lightning Bolt solutions.

## Track Community Activity with New Participation Reports

Want to track which types of your community members log in regularly? Want to know how many of them are active participants and how many are more interested in just looking around? We've added new reports to the Activity folder that track the types of customers that log in to your community and their activity level. With this information, you can better determine what to emphasize in your community to get engagement, new members, and content on track.

The Community User's Daily Participation Metrics reports show the type of customers visiting your community and whether they asked or answered a question, or left a comment.

These reports are available in the Community Management Package on AppExchange. The Summer '17 version of the Community Management package will be available on the AppExchange package soon after the release.

# Mark the Sentiment of Your Feed Posts and Comments (Pilot)

Turn on Sentiment Analysis to give your feed posts and comments a positive, neutral, or negative sentiment score. Sentiments are then stored in Salesforce so that you can track and report on the general mood of your community.

Go to Administration > Preferences and select Enable Sentiment Analysis on Posts and Comments to turn on tracking.

- Note: During the pilot of this feature, not all Sentiment Analysis functionality is available. For this release, Sentiment Analysis categorizes and stores sentiments.
- Important: We provide Sentiment Analysis 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. Sentiment Analysis 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.

# Detect Spam with Einstein (Pilot)

Your community is the place customers go to get answers and talk to other customers. It's also the place where your customers get to know you. The last thing you want is spam getting in the way, but it can be hard to keep up. The new and improved Einstein Spam Detection steps in and intelligently protects your customer community from spam using community moderator activity as a guide.

Einstein Spam Detection classifies incoming posts and comments in your community, based on a pre-trained model, based on real community activity. If the comment is spam, it's marked "Flagged by Einstein".

Content collected by Einstein Spam Detection is stored for 365 days.

- Note: For this release, Einstein Spam Detection classifies only feed posts and comments.
- Important: We provide Einstein Spam Detection 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. Einstein Spam 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 based on generally available products and features.

# Embed Wave Analytics with the Wave Dashboard Component

No more coding to add Wave dashboards to your community! Embed them using the new Wave Dashboard component in the Customer Service (Napili) template.

Note: If you don't already have Wave for Communities, this feature requires setup. For more information, see Enable Wave Analytics for Communities.

Previously, to incorporate Wave into your community, you created Visualforce pages and possibly added tabs to your community. Now you can add the Wave component directly to your pages in Community Builder.

Look for Wave Dashboard in the Analytics section of the Components panel.

## **EDITIONS**

Wave Analytics is available for an extra cost in: **Enterprise**, **Performance**, and **Unlimited** Editions

Wave Analytics is also available in: **Developer** Edition



**1** Tip: After your community is set up with Wave, don't forget to give access to community members by clicking **Share** in your Wave app and selecting **Enable sharing with Communities**.

### SEE ALSO:

Embed Wave Dashboards in Communities the Easy Way with Community Builder

# Take Action from the Flagged Discussions Moderation Queue

Moderating your community is now easier and faster with our new Flagged Discussions moderation queue. Optimized for productivity, you can now work through flagged posts and comments quickly while getting all the information you need in context.

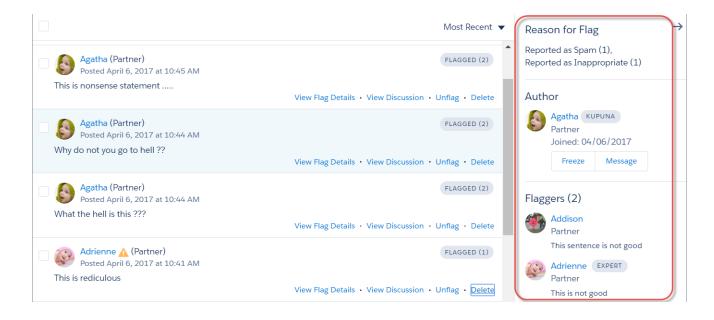
Sort, research, act on member activity, and select multiple items directly from Flagged Discussions in the Moderation workspace.

Moderation The Capricorn Cafe	Home	Moderate Rules				
Moderation Overview Take a look at the moderation activity in your community.						
Flagged Discussions		Flagged Comments				
Flagged Direct Messages	1.0	Flagged Files				

• Want to stop an escalation in its tracks? Sort flagged posts and comments by most recent activity. Or if you want to handle all your outstanding flags first, sort them by oldest.

FLAGGED Flagged Discussions	Unflag Delete
11 Items Selected	C
	Most Recent 🔻
Agatha (Partner) Posted April 6, 2017 at 10:45 AM	FLAGGED (2)
This is notsetse statement	View Flag Details • View Discussion • Unflag • Delete
Agatha (Partner) Posted April 6, 2017 at 10:44 AM Why do not you go to hell ??	FLAGGED (2)
, , , ,	View Flag Details + View Discussion + Unflag + Delete
Agatha (Partner) Posted April 6, 2017 at 10:44 AM What the hell is this ???	FLAGGED (2)
	View Flag Details $\cdot$ View Discussion $\cdot$ Unflag $\cdot$ Delete

- I'm sure by now you can spot spam a mile away. Want to delete it all at once and move on to more important stuff? You can select multiple items (or even all of them) and delete or unflag them at the same time.
- Need more information about a flagged item? Click the post or comment to open up a contextual panel to see how it has been flagged and who flagged it.



• You can also see the entire discussion history by clicking View Discussion.

	View Discussion Here are all the comments and flags associated with this discussion.	•	Re
a la	Agatha (Partner) April 6, 2017 at 10:44 AM		Re Au
How ar	e you doing today ?? Comment Comment 2 comments Adrienne (Partner)		
and the second	This is nonsense Like • 🍽 • April 6, 2017 at 10:39 AM		6
<b>*</b>	Addison ▲ (Partner)       ▼         This is not expected       Like • ■ • April 6, 2017 at 10:39 AM		

• You can see how many of the author's posts or comments have been deleted in the past. You can also freeze the author or send a message, all from the same page.



Note: The Flagged Discussions queue is available only in orgs that have enabled Community Workspaces and for users who have the appropriate moderation permissions.

Chatter REST API and Chatter in Apex support moderation flag details and audit statistics.

For a holistic view of your community's activity, install or upgrade your Community Management AppExchange package. The Summer '17 version of the package will be available soon after the release.

SEE ALSO:

*Salesforce Help*: Assign a Community Moderator (can be outdated or unavailable during release preview) *Salesforce Help*: Community Moderation Criteria (can be outdated or unavailable during release preview) *Salesforce Help*: Community Moderation Rules (can be outdated or unavailable during release preview)

# Other Changes in Communities

Learn about smaller changes that improve your experience with Communities.

## IN THIS SECTION:

Mass Actions Available for External Members

Sometimes the best way to help someone is to let them help themselves. That includes external members who can now perform mass actions in list views, such as adding multiple contacts to a campaign.

Lightning Knowledge Is Now Supported in Communities

Fab news! If you're using Lightning Knowledge in your org, you can now expose your knowledge articles in communities.

Object Detail Pages Now Redirect to SEO-Friendly URLs

To create a user-readable URL for the detail page of a standard or custom object, we append the value of the object's Name field to the URL. For example, for AW Computing's Account Detail page, we redirect

https://mycommunity.com/s/account/001R0000002NzuaIAC to

https://mycommunity.com/s/account/001R0000002NzuaIAC/aw-computing.

#### Use More Rel Attribute Values in Head Markup

We added mask-icon to the list of allowed values for the rel attribute of the <link> tag.

#### The Builder Link Is Back!

Back by popular demand! Now when you enable Community Workspaces, you can get to Builder with one click.

#### More Accurate Label on Administration Preference in Community Workspaces

Last release, we added the **Let guest users view asset files on public pages** setting in **Administration** > **Preferences** in Workspaces. This setting is enabled if public access is enabled in Community Builder at the page or community level. It also lets guest users see images on login pages. To better reflect its purpose, we changed the name to **Let guest users view asset files on public and login pages**.

#### The Moderation Perm for Direct Messages Has Changed

We changed the permissions required to moderate Direct Messages to give the administrator greater control over who can moderate direct messages. Previously, you needed the 'Manage Chatter Messages' and 'Moderate Communities Feeds' permissions to moderate direct messages. Now you need the 'Moderate Communities Chatter Messages' and 'Moderate Communities Feeds' permissions.

#### Customer Community Plus Users Can Change Case Statuses

Control whether users with the Customer Community Plus license can update case statuses in communities.

#### Manage External Users Permission Allows Account Merges

To give you more flexibility with manage partner and customer community users, users with the Manage External Users permission can now merge accounts.

### Mass Actions Available for External Members

Sometimes the best way to help someone is to let them help themselves. That includes external members who can now perform mass actions in list views, such as adding multiple contacts to a campaign.

### Lightning Knowledge Is Now Supported in Communities

Fab news! If you're using Lightning Knowledge in your org, you can now expose your knowledge articles in communities.

SEE ALSO:

Lightning Knowledge: Generally Available

### Object Detail Pages Now Redirect to SEO-Friendly URLs

To create a user-readable URL for the detail page of a standard or custom object, we append the value of the object's Name field to the URL. For example, for AW Computing's Account Detail page, we redirect

https://mycommunity.com/s/account/001R0000002NzuaIAC to

https://mycommunity.com/s/account/001R0000002NzuaIAC/aw-computing.

Where the Name field isn't available, we use the Subject or Title fields. Otherwise, we append "detail" to the URL.

Note: The Case, Dashboard, Group, Report, and User Profile objects aren't supported.

### Use More Rel Attribute Values in Head Markup

We added mask-icon to the list of allowed values for the rel attribute of the <link> tag.

# The Builder Link Is Back!

Back by popular demand! Now when you enable Community Workspaces, you can get to Builder with one click.

Click **Builder** from **All Communities** to quickly navigate to Community Builder.

Communities					
The list shows all communities in your organization. Clicking on the URL takes you dir Maximum number of communities: 100 i					
All Communities		New Commun	ity		
Action	Community Name	Description	URL		
Workspaces   Builder	Urban Farmers		https://bz0		

## More Accurate Label on Administration Preference in Community Workspaces

Last release, we added the **Let guest users view asset files on public pages** setting in **Administration** > **Preferences** in Workspaces. This setting is enabled if public access is enabled in Community Builder at the page or community level. It also lets guest users see images on login pages. To better reflect its purpose, we changed the name to **Let guest users view asset files on public and login pages**.

For login pages, this setting is required whether the community is public or private.

Administration cs2061116	
Settings	Preferences
Preferences	
	General
Members	Show nicknames i
Tabs	Give access to public API requests on Chatter i
	Enable direct messages i
Branding	Users can send and receive private messages i
Login & Registration	Let guest users view asset files on public and login pages i)
E No	Use custom Visualforce error pages i
Emails	Show all settings in Workspaces 👔

# The Moderation Perm for Direct Messages Has Changed

We changed the permissions required to moderate Direct Messages to give the administrator greater control over who can moderate direct messages. Previously, you needed the 'Manage Chatter Messages' and 'Moderate Communities Feeds' permissions to moderate direct messages. Now you need the 'Moderate Communities Chatter Messages' and 'Moderate Communities Feeds' permissions.

# Customer Community Plus Users Can Change Case Statuses

Control whether users with the Customer Community Plus license can update case statuses in communities.

In Setup, enter *Communities* in the Quick Find box and select **Communities Settings**. Under Community Role and User Settings, select the **Allow customer users to change case statuses** option. This setting only enables this functionality for users with Customer Community Plus licenses.

## Manage External Users Permission Allows Account Merges

To give you more flexibility with manage partner and customer community users, users with the Manage External Users permission can now merge accounts.

Previously, only users with the Manage Users permission could merge accounts. Now, users can merge accounts if they:

- Are internal users of your Salesforce org.
- Have the Manage External Users permission.
- Have permissions to delete accounts and edit related records such as opportunities and contacts.

Delegated admins can't merge accounts.

#### SEE ALSO:

*Salesforce Help*: Guidelines and Considerations for Merging Duplicate Accounts (can be outdated or unavailable during release preview)

# Chatter: Topics, Streams Enhancements, Better Group Member Management, and Top Users Reports

Organize feeds with topics, enjoy the new streams home, manage group membership with ease, and see who's been most active in Chatter.

#### IN THIS SECTION:

Chatter Overall: Topics and Einstein Recommendations

Organize your feeds and discover relevant people to follow and groups to join.

Feeds: Enhanced Streams, Search, and Publisher

Streams have a new home, actions, and notifications. Sort feed global search results by relevance. The Chatter publisher has improved security, speed, and rich-text options for comments and answers.

Groups: Improved Member Management, Notification Settings, and Group Information

Enjoy consolidated member management, updating your notification settings with ease in the group page, and seeing and doing more in the group tile view.

User Profiles: Report on Top Users, Identify External Users, and Indicate Out-of-Office Status (Pilot) See who's most active in Chatter, more easily identify external users, and indicate whether you're out of the office from your profile.

# Chatter Overall: Topics and Einstein Recommendations

Organize your feeds and discover relevant people to follow and groups to join.

EDITIONS

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

#### IN THIS SECTION:

#### Use Topics to Organize Your Content in Chatter

You most definitely asked, and we most definitely answered by introducing topics in Lightning Experience. No need to set up anything, as our Lightning Experience org is automatically updated to support topics. View a topic detail page, edit the topic description, see how many people are discussing the topic, see trending and related topics, follow topics that interest you...in short, enjoy organizing the heck out of your Chatter feed. Topics even show up in global search results. So go on...tag away! This feature is new in Lightning Experience.

#### Discover People to Follow and Groups to Join

Personalized Einstein Recommendations on the Chatter home page help you find the people and groups that most closely relate to your job and interests. The more recommendations you accept, the more relevant your feed becomes. This feature is new in Lightning Experience.

### Use Topics to Organize Your Content in Chatter

You most definitely asked, and we most definitely answered by introducing topics in Lightning Experience. No need to set up anything, as our Lightning Experience org is automatically updated to support topics. View a topic detail page, edit the topic description, see how many people are discussing the topic, see trending and related topics, follow topics that interest you...in short, enjoy organizing the heck out of your Chatter feed. Topics even show up in global search results. So go on...tag away! This feature is new in Lightning Experience.

A post can have up to 10 topics, including topics added in comments. Assigned topics are associated permanently to the post in the system, even if you remove them visibly by editing the post. You can use topics on a record's feed, but topics on objects aren't available in Lightning Experience.

	James McGuire        May 23, 2016 at 11:06 AM				
I'm planning to attend; are you? Can't wait!					
Q	Dreamforce! https://www.sales	force.com/			
ı Like	Comment	🖻 Share	5 views		
Kevin Ba	ailey and Karen Adams	s like this.			
	#Dreamforce				
	Dreamforce	Press ENTER to add			
	В І Ц Э				
	6		Comment		

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Personalized Einstein Recommendations on the Chatter home page help you find the people and groups that most closely relate to your job and interests. The more recommendations you accept, the more relevant your feed becomes. This feature is new in Lightning Experience.

Einstein Recommendations include people who:

- Follow the same people as you
- Are in your management hierarchy, such as your manager, people who report to your manager, and people who report to you
- Have many followers
- Are new to Chatter
- Are interested in the same records as you
- Are often followed together with people and topics you already follow

For example, let's say that you follow Madison Rigsby. Many people who follow Madison also follow Suzanne Powell, so Einstein recommends Suzanne to you.

Einstein Recommendations include groups that:

- Have many members
- Have many members that you follow

#### • Are new

The Groups, Files, Followers, and Following lists that previously appeared on the Chatter home page now appear on your profile page.

#### Second Example:

🛞 Recomn	nendations	6	
	McDonald ecutive Office	r	
Your manager		+ Follow	Skip
Team B 6 memb	uilding Group bers	)	
Group with me follow	mbers you	+ Join	Skip
Ann We Sales Ex			
Popular user: 4	followers	+ Follow	Skip

# Feeds: Enhanced Streams, Search, and Publisher

Streams have a new home, actions, and notifications. Sort feed global search results by relevance. The Chatter publisher has improved security, speed, and rich-text options for comments and answers.

#### IN THIS SECTION:

#### There Are Lots of Shiny New Features for Streams

Streams have a new home page, new actions and filters, and a higher limit. Create up to 100 streams. Your Chatter home lists the five you most recently viewed. Set the frequency of notifications for Stream activity when you create a stream or from the stream itself. These changes are available in Lightning Experience.

#### Use a Record's Follow Action to Add It to a Stream

When you create a stream, the **Follow** button that appears on profile and record detail pages changes. A plus sign is added to it. It indicates that you can use the **Follow** button not only to follow, but also to add that person or record to a stream. You can also add them to a stream that you create on the spot. Groups get a new Follow in Stream action for adding the group feed to an existing stream. This feature is available in Lightning Experience.

#### Get a Richer Experience with the New Editor in Chatter

We updated the editor in the Chatter publisher for faster performance and compatibility with Locker Service. But they're not the only benefits. We improved mentions. When you start to mention someone, the selection list opens right where your cursor is instead of at the bottom of the publisher. And topics gets the same treatment (Yes! Topics in Lightning Experience!). These changes are available in Lightning Experience and Lightning communities.

#### Sort Feed Global Search Results by Relevance

Chatter results have a new sorting option when you do a global search: Top Posts. Top posts are the most relevant posts based on your search query. This feature is available in Lightning Experience.

#### Company Highlights Is the Default Feed for New Users

The default feed on the Chatter home page is shown when a user navigates to the page, returns to it, or refreshes the Chatter home. Up to now, the default for everyone was the What I Follow feed. From now on, if someone is following fewer than 10 things, the Company Highlights feed becomes their default. New users now have a chance to see what's most active in their org and to get ideas about more things to follow. When a user follows more than 10 things, the default feed changes to What I Follow. This feature is available in Lightning Experience.

#### Filter Groups to Show Unread Posts

Groups have a new feed filter, Unread Posts, to get you to unread content quickly. To see this filter, you must be a member of the group. What's considered read? Posts you've liked, commented on, edited, scrolled through, or viewed in detail. This feature is available in Lightning Experience and Lightning communities.

#### Filter a Profile to See a User's Posts

When you visit someone's profile, you can filter their profile feed to show just the posts that they added. You can filter your own profile, too. Select the **Posts by This User** filter to show only posts from the user whose profile you're visiting, including when you visit your own. It's a quick way to get to the information you're most interested in. This feature is available in Lightning Experience.

#### The What I Follow Feed Gets Some New Filters

We added a little volume control to your What I Follow Feed. Use the **All Updates** and **Fewer Updates** filters to include or omit Feed Tracked Changes in your feed. This feature is available in Lightning Experience

#### Is Your Post Reaching the Right People?

Posts in private and unlisted Chatter groups have a seen-by count that shows the number of people who have seen a post. Click the count to see the names of the people. This feature is available in Lightning Experience.

#### Share a Post with a Group in Lightning Experience

In Lightning Experience, besides sharing a Chatter post with your followers, you can also share it with a group. Click the **Share** link next to **Like** and **Comment** to see the new **Share with Group** option. Select **Share with Group**, and search in the share dialog for the group you're interested in. This feature is available in Lightning Experience and Lightning communities.

#### Create a Report on the Top 100 Feed Item Views

Here's another opportunity to get great insight into current trends in your company. A new primary object, Interaction Count Reports, is available for creating custom reports on the top 100 feed item views in your organization or community. This feature is available in Lightning Experience and Lightning communities.

#### Encryption for Chatter Gets Updates (Pilot)

The encryption for Chatter pilot continues to protect sensitive information in your Chatter feed. We added link URLs and poll choices to the body of encrypted content. Encryption for Chatter isn't ready for production, but you can safely try it out in a dedicated sandbox environment. This feature is available in Lightning Experience, Lightning communities, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### There Are Lots of Shiny New Features for Streams

Streams have a new home page, new actions and filters, and a higher limit. Create up to 100 streams. Your Chatter home lists the five you most recently viewed. Set the frequency of notifications for Stream activity when you create a stream or from the stream itself. These changes are available in Lightning Experience.

Navigate to the new streams home by clicking the Streams heading on the Chatter home page. The new streams home lists all your streams and shows the people and records that you added. Each stream has its own row and its own set of row actions, including **Edit** and **Delete**.

Streams		New
NAME	RECORDS FOLLOWED	
Management	3 records including Bonnie Real, Bud Stamp, Rita Baker	•
Dailies	Petrus	
Green Opportunities	3 records including Edge Emergency Generator, Lags Green, Leds Green	Edit
		Delete

Click the number of records on a row to see a full list of people and records that you added to the stream.

Click a stream name to open it. The stream page has some new actions of its own. Use them to edit the stream, set up stream notifications, and delete the stream.

Management	Edit Notifications Delete
Latest Posts 🔻 Q Search this feed	C.
Bud Stamp 15m ago	
Hey @Bonnie Real, Tilden has shown significant interest ir Alabama conference. I say we let 'em! ᅌ	n co-hosting the
ᡖ Like 🌘 Comment 🖻 Share	Seen by 1
Write a comment	
Bonnie Real Edited March 27, 2017 at 3:13 PM	

There are a couple of new filters, too. Choose **All Updates** to see everything, including Feed Tracked Changes (FTCs) in the stream. Choose **Fewer Updates** to omit FTCs from the stream.

Latest P	Posts 🔻	Q Search this feed	i 🔽	
	Bonnie Real Edited March 27, 2017 at 3:13 PM		All Updates	
I'm inte		Western Division. Does anyone else see	→ Fewer Updates	
u Like	Domment 🛛 🔂 Share			

Note: Feed tracking tracks changes to objects and fields and posts them as updates in Chatter. Users who follow a record see the feed updates in their Chatter feed.

When you create a stream, new notification options are available in the New Stream dialog. The default is to send a notification for every new post (**Every Post**). The great thing is that you can now get notifications for new posts to record feeds. Streams notifications offer a brand new way to stay on top of active records! Notifications are sent to you via email and are pushed to your in-app notifications. If you like, you can change the default in the New Stream dialog or in the stream feed.

New Stream				
Create your own flow of feed pos	sts from records, people, and groups you choose.			
Green Opportunities				
Records to Follow <b>1</b>				
Notify Me Every Post Never				
	Cancel			

See Use a Record's Follow Action to Add It to a Stream to learn more about how to add a record to a stream from the record home. Chatter REST API supports stream notifications.

SEE ALSO:

Salesforce Help: Feed Tracking (can be outdated or unavailable during release preview)

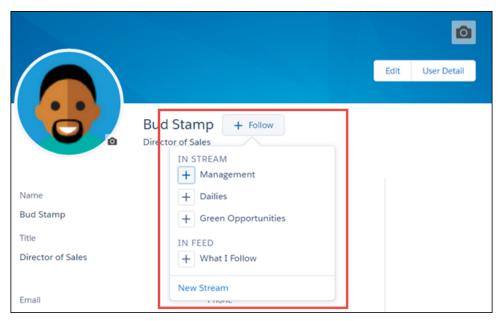
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When you create a stream, the **Follow** button that appears on profile and record detail pages changes. A plus sign is added to it. It indicates that you can use the **Follow** button not only to follow, but also to add that person or record to a stream. You can also add them to a stream that you create on the spot. Groups get a new Follow in Stream action for adding the group feed to an existing stream. This feature is available in Lightning Experience.

Don't see the stream options on the Follow menu? Create a stream! Here's what the changed Follow button looks like.



Here's how Follow options look on a profile.



Here's how they look on an opportunity.

Sales	Home	Opportunities 💙	Leads 🗸	Tasks 💙 File	es Accounts 💙 Contacts 💙	Campaigns 💙 More 🔻
Edge S					+ Follow Edit	New Case New Note 🔻
Account Name Edge Communica	ations	Close Date 3/3/2015	Amount 60000	Opportunity		Change Closed Stage
ACTIVITY	CHA	TTER DETA	ILS		IN FEED + What I Follow	)
Log a Call	New Task	New Event	Email		New Stream	tachments (0) 💌
Recap your o	all			Add		

Here's the Follow in Stream action on a group.

New Contact	New Opportunit	y Nev	w Case	•
		New Lead		
		Manage Notifications		
		Edit Group		
		Delete Group		
			Members	
		Invite Pe		
	Follow in Stream			
Follow in Stream				
+	Management			
+ (	+ Green Opportunities			
	✓ Dailies			

You can still simply follow a person or a record. Use the **What I Follow** option to show the profile or record's activities in your What I Follow feed. To follow a group, join it.

# Get a Richer Experience with the New Editor in Chatter

We updated the editor in the Chatter publisher for faster performance and compatibility with Locker Service. But they're not the only benefits. We improved mentions. When you start to mention someone, the selection list opens right where your cursor is instead of at the bottom of the publisher. And topics gets the same treatment (Yes! Topics in Lightning Experience!). These changes are available in Lightning Experience and Lightning communities.

Post	Poll Question			
To Bo	onnie Real			
Hey,	, @В			
	Bonnie's Private Group (Private) For discussing private matt			
В	B Bonnie Real			
Share Bud Stamp Director of Sales				
Post I	Poll Question			
To Bonni	nie Real			
I'm inter	erested in the new #sales data           sales data         Press ENTER to add			
в і				
6		Share		

Here are a few other things to know about the new editor. You can start a numbered list by entering 1. You can start a bullet list by entering a hyphen. When you copy bold text, the bold remains when you paste.

#### SEE ALSO:

Use Topics to Organize Your Content in Chatter

# Sort Feed Global Search Results by Relevance

Chatter results have a new sorting option when you do a global search: Top Posts. Top posts are the most relevant posts based on your search query. This feature is available in Lightning Experience.

# Company Highlights Is the Default Feed for New Users

The default feed on the Chatter home page is shown when a user navigates to the page, returns to it, or refreshes the Chatter home. Up to now, the default for everyone was the What I Follow feed. From now on, if someone is following fewer than 10 things, the Company Highlights feed becomes their default. New users now have a chance to see what's most active in their org and to get ideas about more things to follow. When a user follows more than 10 things, the default feed changes to What I Follow. This feature is available in Lightning Experience.

# Filter Groups to Show Unread Posts

Groups have a new feed filter, Unread Posts, to get you to unread content quickly. To see this filter, you must be a member of the group. What's considered read? Posts you've liked, commented on, edited, scrolled through, or viewed in detail. This feature is available in Lightning Experience and Lightning communities.

Post Poll Question Announcement	
Share an update	Share
Latest Posts 🔻	Q Search this feed
Bonnie Real March 22, 2017 at 11:53 AM	SHOW
I'm interested in seeing the Seen by count and list.	✓ All Updates
💼 Like 🗊 Comment	Unread Posts
Write a comment	All Questions
	Unanswered Questions
	Questions with No Best Answer
	Questions with Best Answer

Chatter REST API and Chatter in Apex support unread posts.

# Filter a Profile to See a User's Posts

When you visit someone's profile, you can filter their profile feed to show just the posts that they added. You can filter your own profile, too. Select the **Posts by This User** filter to show only posts from the user whose profile you're visiting, including when you visit your own. It's a quick way to get to the information you're most interested in. This feature is available in Lightning Experience.

Post	Poll	Questio	'n				
Share an update Share							
Latest Posts 🔻 🔍 Search this feed						T	C'
	Bud Stam March 28,	<b>p</b> 2017 at 5:1	15 PM	\$	SHOW		•
Hey @Bo	nnie Real,	Tilden has	shown significa	nt	All Updates		
Alabama conference. I say we let 'em! ♀ Liked ● Comment M Share					✓ Posts by This Us	er	
0	Write a c	comment					

Chatter REST API and Chatter in Apex support filtering profile feeds by the profile owner.

### The What I Follow Feed Gets Some New Filters

We added a little volume control to your What I Follow Feed. Use the **All Updates** and **Fewer Updates** filters to include or omit Feed Tracked Changes in your feed. This feature is available in Lightning Experience

Note: Feed tracking tracks changes to objects and fields and posts them as updates in Chatter. Users who follow a record see the updates in their Chatter feed.

Post	Poll Question			
Shar	e an update		Share	
Latest P	osts 🔻	Q Search this feed		C,
	Bud Stamp March 28, 2017 at 5:15 PM		All Updates	•
Hey @B	onnie Real, Tilden has shown significant interest in co-h i Domment (것) Share	osting the Alabama conferenc	✓ Fewer Updates	
	Write a comment			

SEE ALSO:

Salesforce Help: Feed Tracking (can be outdated or unavailable during release preview)

## Is Your Post Reaching the Right People?

Posts in private and unlisted Chatter groups have a seen-by count that shows the number of people who have seen a post. Click the count to see the names of the people. This feature is available in Lightning Experience.

	i i i i i i i i i i i i i i i i i i i	3
	Seen by 1 Person	
	Bud Stamp Director of Sales	
Bonnie Re 2m ago	əl	· • • •
I'm thinking this gro	up is very timely, and I'm looking forward to staying on top of any issues brought to light!	Seen by 1
Bud Stamp likes this		5000 OJ X
<b>A</b> Write a c	omment	

What counts as being seen? Liking, commenting, editing, and viewing in detail. The actions you take in Salesforce Classic are tracked and counted, but only Lightning Experience shows the seen-by count and list.

A user permission, Hide the Seen By List, is available to disable this feature. Admins can use this permission to control which users see the count and the list.

Permission Sets		
Field Service Standard		Give users access to all standard Field Service Lightning features.
Hide Option to Duiteb to Colosforce Classic	08	Always use Lightning Experience; comeuse the Cultabas on its not people to suitable Colorforce (135
Hide the Seen By List		Increases privacy in a private group by hiding the count and names of those who view its posts.
Import Oustom Objects	0	Allows non-odmin-users to import Quatern Objects using Data Import Histord
Insert System Field Values for Chatter Feeds		Set the author or creation date for a Chatter post or comment.
Invite Customers To Chatter		Invite Customers To Chatter
Lightning Console User		Gives the user access to Lightning console apps.
Lightning Experience User		Access Lightning Experience and switch between Lightning Experience and Salesforce Classic.

Note: With a few exceptions, only people with access to a private or unlisted group see seen-by information. Users with Modify All Data or View All Data permission can get seen-by information using API calls. That is, their access is the same as with any feed item. If Hide the Seen By List is enabled for a user with Modify All Data or View All Data permission, the user doesn't see seen-by information. Seen-by information is not available in any reports.

Chatter REST API and Chatter in Apex support seen-by information.

# Share a Post with a Group in Lightning Experience

In Lightning Experience, besides sharing a Chatter post with your followers, you can also share it with a group. Click the **Share** link next to **Like** and **Comment** to see the new **Share with Group** option. Select **Share with Group**, and search in the share dialog for the group you're interested in. This feature is available in Lightning Experience and Lightning communities.

Bonnie Real Edited March 27, 20:	■ 17 at 3:13 PM	<u>·</u> ]
I'm interested in the new #se	les data from the Western Division. Does anyone else see a particularly interesting #trend?	
🔥 Like 🛛 🗩 Comment	1 Share	
Write a comment.	Share with Group	
	Share with Followers	
	Share with Group	٦
	Group Name	
	Search Groups	
	Share an update, @mention someone, add a file	
	B I ⊻ ⊕ I, ≡ 15 🖪 2₀	
	Bonnie Real Edited March 27, 2017 at 3:13 PM	
	I'm interested in the new #sales data from the Western Division. Does anyone else see a	
	particularly interesting #trend?	
	Cancel Share	

Note: When you search for a group to share with, private groups with external users don't appear in your search results.

# Create a Report on the Top 100 Feed Item Views

Here's another opportunity to get great insight into current trends in your company. A new primary object, Interaction Count Reports, is available for creating custom reports on the top 100 feed item views in your organization or community. This feature is available in Lightning Experience and Lightning communities.

Home	Chatter	Accounts	Contacts	Cases	Solutions	Reports	Dashboards	Policies	Agent Roles
Top Feed Post Interactions Report Generation Status: Complete									
Report Op	tions:			-1	ime Frame -				
Summariz	informatio	n by: Show			ate Field	F	Range		
None			raction count re	ports •	Created Date	F	Current FQ from To 1/1/2017 6/3	• 0/2017	
Run Repo	rt 💌 Hid	e Details Cu	stomize	ve Save As	Delete	intable View	Export Details		-
Count +	Comment	t Count Like	Count Feed	Item ID	NetworkSo	ope	Start interval date	Days for interv	al FeedElement parent
126		25	3 0D5x	0000006AL3S	0DBx0000	00080Qs	4/3/2017		7 005x000000ZST3
117		0	0 0D5x	000006AMVg	00000000	0000000	4/3/2017		7 001x000002HW9q
99		0	0 0D5x	0000006AMTr	00000000	0000000	4/3/2017		7 001x0000002HXXU

#### SEE ALSO:

Salesforce Help: Create a Custom Report Type(can be outdated or unavailable during release preview)

# Encryption for Chatter Gets Updates (Pilot)

The encryption for Chatter pilot continues to protect sensitive information in your Chatter feed. We added link URLs and poll choices to the body of encrypted content. Encryption for Chatter isn't ready for production, but you can safely try it out in a dedicated sandbox environment. This feature is available in Lightning Experience, Lightning communities, Salesforce Classic, and all versions of the Salesforce1 mobile app.

In addition to the new fields, encryption for Chatter encrypts feed posts, questions and answers, link names, comments, and poll questions. Encryption for Chatter is an all-or-nothing encryption in that you can't choose to encrypt some fields but not others.

To encrypt the new fields, from Setup, enter *Platform Encryption* in the Quick Find box. Then deselect and reselect **Encrypt Chatter**.

Note: We provide encryption for Chatter 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. Encryption for Chatter 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 encryption for Chatter in the Chatter Product group in the Success Community.

# Groups: Improved Member Management, Notification Settings, and Group Information

Enjoy consolidated member management, updating your notification settings with ease in the group page, and seeing and doing more in the group tile view.

#### IN THIS SECTION:

#### Manage Members with Ease

In the spirit of consolidation and streamlining, we improved member management. No longer do you need to go to multiple places to take care of member business. Add or remove members right from Manage Members, or change them from member to manager (or back)—kind of like one-stop shopping but easier. This change applies to Lightning Experience only.

#### Create New Groups from Chatter Home

You're looking at your recently visited groups and thinking, "I wish there was a group for this one thing. I know, I'll create one!" Create one starting right where you're at. Click **New** and you can begin to bring your dream group to life. This change applies to Lightning Experience only.

#### See Group Email Notifications on the Group Page

The type of email notifications you are currently receiving for a group display on a button next to the group image. Not getting enough notifications? Getting too many? Click it and change the setting. This change applies to Lightning Experience only.

#### Get Group Info (and Even Join) in the Tile View

You know how you can switch the groups list view so that groups display as tiles? We thought tiles were so much fun that we decided to make them even more useful. Now you can see how many members are in a group, what type of group it is, when the last activity took place, who owns it, if you are a member, and even join or leave the group right from the tile. This change applies to Lightning Experience only.

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Mana	age Members	
مع	Search People	
0	Bud Stamp Director of Sales	+ Add
C	Chatter Expert	+ Add
8	Rita Baker Director Operations	+ Add
		More

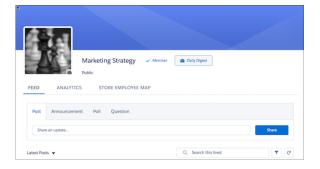
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screenshot tbd

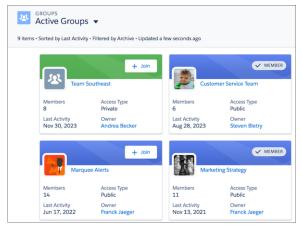
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# User Profiles: Report on Top Users, Identify External Users, and Indicate Out-of-Office Status (Pilot)

See who's most active in Chatter, more easily identify external users, and indicate whether you're out of the office from your profile.

#### IN THIS SECTION:

#### See Who's Most Active in Chatter with the Top Users Report

Curious about which users in your org are the most active in Chatter? Or think you know but want hard facts to back you up? We've got your solution: Top Users report. Pick from different metrics, such as posts, rank, and comments received, and get your answers. This change applies to both Lightning Experience and Salesforce Classic.

#### Identify External Users at a Glance

Sometimes you want to know a bit more about Chatter users, like if they are part of your org or not. To make that easier, we added an orange border and the word external to the user's profile photo if the user is not part of your org. This change applies to Lightning Experience only.

#### Flaunt Your Vacation with Out-of-Office Messages for Your Profile (Pilot)

Many of you have asked and now you've got it: a way to mark your profile with out-of-office information. The message displays next to your profile picture and next to your name in feeds and when you're @mentioned. This change applies to Lightning Experience only.

### See Who's Most Active in Chatter with the Top Users Report

Curious about which users in your org are the most active in Chatter? Or think you know but want hard facts to back you up? We've got your solution: Top Users report. Pick from different metrics, such as posts, rank, and comments received, and get your answers. This change applies to both Lightning Experience and Salesforce Classic.

To set up the report, go to New Custom Report Type and choose User Metrics as the primary object. In Field Layout Properties, choose the fields you want to include in your report, and save and run it.

To get the report, install or upgrade your Community Management AppExchange package. The Summer '17 version of the package will be available soon after the release.

## Identify External Users at a Glance

Sometimes you want to know a bit more about Chatter users, like if they are part of your org or not. To make that easier, we added an orange border and the word external to the user's profile photo if the user is not part of your org. This change applies to Lightning Experience only.

### Flaunt Your Vacation with Out-of-Office Messages for Your Profile (Pilot)

Many of you have asked and now you've got it: a way to mark your profile with out-of-office information. The message displays next to your profile picture and next to your name in feeds and when you're @mentioned. This change applies to Lightning Experience only.

	Out of Office	
Set Out-of-Office message		
Start Date	Apr 24, 2017	
End Date	Apr 28, 2017	
• Message	Out of Office: Apr 24 - Apr 28	

Setting it up is a snap. The Out of Office setting button is at the upper right corner on your profile. You can check Set Out-of-Office message, choose your dates, customize your message as needed, and save.

Note: We provide Out of Office 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. Out of Office 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.

# Files: Add Multiple Files to Libraries, Share Files via Public Link, and Customize Files Detail Page

Libraries are available in Lightning Experience, even for users without Salesforce CRM Content licenses. Multiple upgrades to libraries help you work better in Lightning Experience: add multiple files to a library, customize your file detail pages, and take action on files right from your Chatter feed.

#### IN THIS SECTION:

#### Consciously Uncoupling: Libraries and Content

Libraries are joining the Files family, and Salesforce CRM Content is no longer required to access Libraries. Previously, Content and Libraries were a power couple who worked together to let

#### **EDITIONS**

Files and Files Connect for cloud-based external data sources are available in: **Professional, Enterprise, Performance, Unlimited,** and **Developer** Editions

you upload, organize, and share your files. Now you no longer need Content to get the benefits of Libraries. In Lightning Experience, you can make libraries available to all users or a subset of users without assigning them Salesforce CRM Content licenses. In Salesforce Classic, users without Content licenses can now view libraries and access files from libraries. This change applies to both Lightning Experience and Salesforce Classic.

#### Updates to Libraries

Folders in libraries are now generally available, and we've made some updates to improve your experience using files and folders in libraries. You can now add multiple files to a library, update and delete library files, and move folders within a library. These changes apply to Lightning Experience only.

#### Customize the Files Detail Page

Make files work better for you by customizing the fields and layout of the Files detail page. Choose from standard fields to show when the file was last updated, file size, file type, and more. Create custom fields and buttons to track metadata specific to your business, to use in validation rules, and provide data for searches and reports. This change applies to Lightning Experience only.

#### Validation Rules Improve File Data

To ensure the quality of the information in your libraries, create validation rules for files added to libraries, records, and Files home, such as requiring users to follow naming conventions or fill in mandatory fields. Combine validation rules with customized file detail pages and record types to turbocharge the quality of the file data in your org. This feature is new in Lightning Experience.

#### Share Public Links to Your Files

Sharing your files just got even easier. Create a public link to a file, then distribute the URL to anyone you want. Public link sharing was already available in Salesforce Classic and Lightning Email. Now it's available as a Files action in Lightning Experience and Communities.

#### Get Better Performing, More Secure Content Previews with Lightning Delivery Player

When someone shares a file with you via a public link, you open a preview of that file in the Lightning Delivery Player. The new Lightning Delivery Player runs on HTML5 instead of Flash, improving security. The images are based on vector graphics, which provide higher quality renditions and better performance as they load page by page. The Lightning Delivery Player retains the ability to protect content deliveries with a password and delivery expiration, so content is seen by the right recipients at the right time. This change applies to Lightning Experience only.

#### Unshare a File

You can now remove sharing settings on a file from a library or record. Because sometimes when you giveth, you later need to taketh away. This change applies to Lightning Experience only.

#### Right-Click to Open a File in a New Tab

Sometimes it's the littlest changes that make the biggest impact in your daily work. Right-click a file to open it in a new tab. Now you can open multiple files at once and work on them in the order you choose. This feature is new in Lightning Experience.

#### Drag Files onto Files and Attachments Related Lists

We made adding files to records super easy. Just drag them onto a Files or Attachments related list for any object. You can also click the **Upload Files** button to add files. You get this new functionality automatically— there's nothing to enable. This change applies to Lightning Experience only. It doesn't work in Salesforce Classic.

#### Take Action on Files Right from the Feed

Access the most important file actions directly from the feed. You no longer have to open the file preview to copy a link or share or download a file—you can do it right from Chatter. This change applies to Lightning Experience only.

#### Files Transfer to Related Records Automatically When Leads Are Converted

When a lead is converted, files attached to the lead are attached to the associated contact, account, and opportunity. This change applies to Lightning Experience only.

#### Convert Attachments to Files

You want to use the Files related list in Lightning Experience, but you've still got legacy attachments on your records. What to do? Convert them to files with the new Attachments to Files app from Salesforce Labs!

#### Authenticate Effortlessly to External File Sources in Salesforce

Does your org have external file sources like Google Drive enabled? If you're not logged in, click the banner notification to sign in with one click. When you post a link to a Google Drive document in a feed post when you're not logged in, a prompt displays immediately after you post. These prompts get you authenticated quickly right where you are so you can get on with your work. This change applies to Lightning Experience only.

#### Enjoy More Room for Files

You're moving away from documents and attachments in favor of Salesforce Files. Image and video files are more popular (and bigger) than ever. And Salesforce Files get more versatile and more shareable all the time. You need more room for files, and we're giving you more. So go ahead and add files, convert attachments, and make updates to the files you already have without fear of hitting limits. This change applies to both Lightning Experience and Salesforce Classic.

# Consciously Uncoupling: Libraries and Content

Libraries are joining the Files family, and Salesforce CRM Content is no longer required to access Libraries. Previously, Content and Libraries were a power couple who worked together to let you upload, organize, and share your files. Now you no longer need Content to get the benefits of Libraries. In Lightning Experience, you can make libraries available to all users or a subset of users without assigning them Salesforce CRM Content licenses. In Salesforce Classic, users without Content licenses can now view libraries and access files from libraries. This change applies to both Lightning Experience and Salesforce Classic.

Keep Content enabled for your org so that admins and library managers can continue to create and maintain libraries in Salesforce Classic.

Note: Libraries and library memberships can now be created and managed from the API.

Settings for Libraries without Content are available in two places in Setup. Both options are enabled by default.

- To control global access, from Setup, enter *General Settings* in the Quick Find box, then select **General Settings**. Select **Libraries in Salesforce Files**.
- To enable or disable libraries for a subset of users, use the Access Libraries permission, available for profiles and permission sets on most standard user licenses.

Libraries and Content remain unavailable for users with High Volume Customer Portal, Customer Community, and Chatter Free licenses.

# Updates to Libraries

Folders in libraries are now generally available, and we've made some updates to improve your experience using files and folders in libraries. You can now add multiple files to a library, update and delete library files, and move folders within a library. These changes apply to Lightning Experience only.

# Add Multiple Files to Libraries

Make the best use of your time by adding multiple files at once! You can add up to 10 files at a time to a library, a record, or Files Home.

Files upload is now context-aware for libraries. When you select a library folder and then click **Upload Files**, the new files are uploaded to that library. When uploading to a library or a record, you can add up to 10 local files (1), Salesforce files (2), and files from external sources (3). When you're in the Owned by Me, Shared with Me, Recent, and Following filters, you can add up to 10 local files, which are added to the Owned by Me filter.

When you upload multiple files, you can view the progress of individual files and cancel uploads in progress.

# Update and Delete Files from Libraries and Files Home

From the files list view and file detail page, use row-level actions to edit file details or delete the file. We're making it faster and easier to make the changes that keep your file information accurate and your libraries tidy.

## Move Folders in Libraries

You can now move a library folder into another folder within the library. Create subfolders, make subfolders within subfolders, go crazy!

# Customize the Files Detail Page

Make files work better for you by customizing the fields and layout of the Files detail page. Choose from standard fields to show when the file was last updated, file size, file type, and more. Create custom fields and buttons to track metadata specific to your business, to use in validation rules, and provide data for searches and reports. This change applies to Lightning Experience only.

Use record types to customize the layouts of different record types based on what's needed for that type of file. Combine customized file detail pages and record types with validation rules to turbocharge the quality of the file data in your org.

Edit Ninja			
Title			
Ninja 650 ABS			
Description			
649cc Orange	6		
Vehicle Details			
* Brand	Mileage (in mph)		
Kawasaki	>50 *		
* Price (\$)			
\$7,799			
	Cancel		

🗹 Note: To see the Files Detail Page, set up at least one custom record type in addition to General, the default type.

#### SEE ALSO:

Validation Rules Improve File Data

# Validation Rules Improve File Data

To ensure the quality of the information in your libraries, create validation rules for files added to libraries, records, and Files home, such as requiring users to follow naming conventions or fill in mandatory fields. Combine validation rules with customized file detail pages and record types to turbocharge the quality of the file data in your org. This feature is new in Lightning Experience.

Uploading a file is a two-step process. The validation takes place in step two.

- 1. In the first step, you see the status of the upload—a green check indicates success. When you also see "Enter details on next page", click **Next**.
- 2. In the second step, error messages alert you to required fields or validation errors. Fix the errors and click Save.

A success toast displays when all files have posted.

Validation rules for files are managed from Setup. Enter Files in the Quick Find box, then select Validation Rules.

# Share Public Links to Your Files

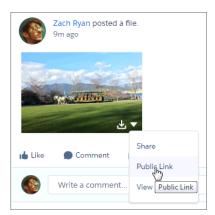
Sharing your files just got even easier. Create a public link to a file, then distribute the URL to anyone you want. Public link sharing was already available in Salesforce Classic and Lightning Email. Now it's available as a Files action in Lightning Experience and Communities.

Do you have files you'd like to share with prospects, customers, leads, or others outside of your Salesforce org? Or do you sometimes want to share files by copying and pasting a link in a chat message, email, or social media? If so, public link sharing is for you!

When you create a public link to a file, anyone who has the link can view and download the file. You can delete the link at any time. If you later want to make it public again, just create a new link. Only people with the new link can access it.

### Create a Link from Chatter or Files Home

It's easy to create a public link to a file that's attached to a post in Chatter. Just use the Public Link file action on the thumbnail in the feed.



From Files home, choose Share or Public Link for the file you want to create a link to.

4/13/2017 12:14 AM	•
10/13/2016 12:47 PM	<b></b>
10/13/2016 12:47 PM	Download
10/10/2016 4:14 PM	Public Link
10/10/2016 4:14 PM	View File Details
	Upload New Version

Create a link in the **Who Can Access** > **Public Link Sharing** section when sharing a file. (Note: this method is available only in Lightning Experience.)

Share 2017HolidaySo	chedule	
Share With		
Search People	Viewer	•
∽ Who Can Access		
Zach Ryan	Owner	•
Sanjay Gupta	Viewer	<b>▼</b> ×
Creating a public link to the file generates a URL that you can copy and share.	Viewer	• ×
PUBLIC LINK SHARING		
Anyone with the link can view and download the file.		
No public link created	Create	Link
		Done

Or, go straight to Public Link Sharing.

Create the link, copy it, and you're done! Share it wherever you like.

# Get Better Performing, More Secure Content Previews with Lightning Delivery Player

When someone shares a file with you via a public link, you open a preview of that file in the Lightning Delivery Player. The new Lightning Delivery Player runs on HTML5 instead of Flash, improving security. The images are based on vector graphics, which provide higher quality renditions and better performance as they load page by page. The Lightning Delivery Player retains the ability to protect content deliveries with a password and delivery expiration, so content is seen by the right recipients at the right time. This change applies to Lightning Experience only.

The Lightning Delivery Player is available automatically in Lightning Experience. In Salesforce Classic, the Lightning Delivery Player is available automatically in orgs created in Summer '17 or later if Lightning Experience is enabled. Although it's disabled by default in existing orgs in Salesforce Classic, we encourage you to enable Lightning Experience so that it becomes your default player.

# Unshare a File

You can now remove sharing settings on a file from a library or record. Because sometimes when you giveth, you later need to taketh away. This change applies to Lightning Experience only.

Maybe you've updated information on a file and it's no longer relevant to a record, oror the file no longer belongs in a library. Whatever your reasons, you now have the ability to unshare a file.

1. On the file preview page or from the file actions list, select Share.

#### 2. Expand Who Can Access.

3. Click the X next to the person or library with whom you want to stop sharing.

In order to unshare a file from a library, the file needs to be shared with more than one library. Sharing can be revoked from the secondary library, but not the primary library.

Admins can add the **Prevent others from sharing and unsharing** option to page layouts, letting users prevent further sharing of the file from the file detail page.

Share tree	
Share With	Viewer -
✓ Who Can Access	
Admin User	Owner 💌
👱 Acme - 200 Widgets	Viewer • ×
All AW	Viewer
PUBLIC LINK SHARING 🕚	
Anyone with the link can view and download the file.	
No public link created	Create Link
OWNER SETTINGS 🕕	
Prevent others from sharing and unsharing	
	Done

# Right-Click to Open a File in a New Tab

Sometimes it's the littlest changes that make the biggest impact in your daily work. Right-click a file to open it in a new tab. Now you can open multiple files at once and work on them in the order you choose. This feature is new in Lightning Experience.

# Drag Files onto Files and Attachments Related Lists

We made adding files to records super easy. Just drag them onto a Files or Attachments related list for any object. You can also click the **Upload Files** button to add files. You get this new functionality automatically— there's nothing to enable. This change applies to Lightning Experience only. It doesn't work in Salesforce Classic.

Related list without any files:

🚺 File	s (0)	
	▲ Upload Files	
	Or drop files	

Related list while dragging files:

F	iles (1)
finan f	brop Files Move
	View All

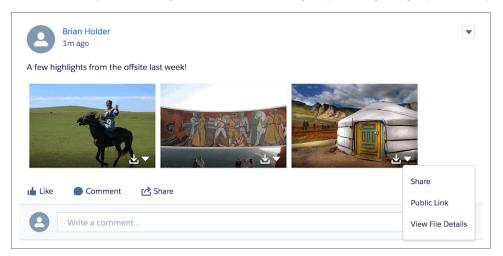
We recommend that you use the Files related list instead of the older Attachments related list. Depending on which type of record page you're on, you might see the Attachments related list displayed as Notes and Attachments.

Ø

Note: You can drag multiple files, but you can't drag a folder. You also can't drag files onto read-only related lists.

# Take Action on Files Right from the Feed

Access the most important file actions directly from the feed. You no longer have to open the file preview to copy a link or share or download a file—you can do it right from Chatter. This change applies to Lightning Experience only.



# Files Transfer to Related Records Automatically When Leads Are Converted

When a lead is converted, files attached to the lead are attached to the associated contact, account, and opportunity. This change applies to Lightning Experience only.

SEE ALSO:

Keep Related Files and Records When Reps Convert Leads

# **Convert Attachments to Files**

You want to use the Files related list in Lightning Experience, but you've still got legacy attachments on your records. What to do? Convert them to files with the new Attachments to Files app from Salesforce Labs!

Attachments are the floppy disks of the files world, and they're on their way out. You've probably already stopped using attachments in favor of the more versatile and powerful Salesforce Files. You can access files in Files home for collaboration, advanced sharing options, searching, and adding to libraries. Take the next step and convert your legacy attachments to files. You reward? You can say goodbye to the Notes & Attachments related list and display the Files related list instead.

You can use the Attachments to Files tool to run bulk jobs that convert large numbers of attachments. Attachments are organized by the object they're associated to. After the conversion, you can delete the attachments from the org to free up space.

ttad	hments to Co	nvert 👔		Refresh	Convert	Converted Att	tachments 主		Refresh
onve umb mits	rt attachments to fi er of content docun	les by object. Note da nents and versions. So	aily limits for the ee Salesforce Files			Files. Delete these	ts are now available in you converted attachments t elete converted attachme	o free up storage	
	OBJECT	QUANTITY	APPROX SIZE (MB)	то со	INVERT	OBJECT	OUANTITY	APPROX SIZE (MB)	
	Asset	14	1			Asset	16	1	â
•	Contact	49	1	49		Case	28	1	÷
	Contract	18	1			Contact	20	1	<u>ت</u>
	Lead	17	1					-	-
	Opportunity	27	1	27		Lead	1	1	â
	Product2	5045	9			Solution	45	1	â

Users who have private attachments can also convert them to files. Because Lightning Experience doesn't support private files on records, users can make a converted file public and keep it attached to the record. They can also choose to keep it as a private file, but it's no longer attached to the record. Private files are located in Files home.

rivate Attachments			Refresh Conver
you convert to files can be found in Files home in the Ow • To keep an attachment connected to the record, edit the attachment to a file.It will stay on the record, but will no	It will no longer be connected to the record. Private attachments that		
□ NAME	RECORD NAME	TYPE	
Advertising First Call Deck	Global Media LLC	Account	
C Knowledge Article 67349	00001081	Case	
Warranty Agreement 61868	00001081	Case	
Customer Contract 10321	00001082	Case	
C Knowledge article 92956	00001082	Case	
	00001082		

Attachments to Files will be available on the App Exchange later this summer.

# Authenticate Effortlessly to External File Sources in Salesforce

Does your org have external file sources like Google Drive enabled? If you're not logged in, click the banner notification to sign in with one click. When you post a link to a Google Drive document in a feed post when you're not logged in, a prompt displays immediately after you post. These prompts get you authenticated quickly right where you are so you can get on with your work. This change applies to Lightning Experience only.

Users who are set up for an external file source but aren't logged in are prompted to get authenticated. The **Connect Now** link initiates the one-click login process, and authentication is quickly taken care of. The banner prompt is available for external data sources: SharePoint Online, OneDrive for Business, Google Drive, Box, and Quip.

	Log in to Google Drive to get the most out of Salesforce. <u>Connect Now.</u> ×
Q Search Chatt	er and more 13.01 s 2382 KB 🔄 🔹 😩 🚨
Salesforce Chatte	r Chatter People V Groups V Files
What I Follow To Me Bookmarked	Brian Holder (Out Of Office: Mar 29 - Mar 31) posted a file.
Company Highlights STREAMS +	Christedd V
You don't have any streams yet. Try creating one!	ji Like 🗩 Comment 😰 Share
RECENT GROUPS + Standard grp	Write a comment

When an unauthenticated user pastes a Google Drive link in Chatter, they see a prompt to get connected. The link initiates the same one-click authentication that lets users get back to work with minimal interruption.

ō M	y Followers	
	s://docs.google.com/document/d/10F- Drv15Zmafmh8PD_0kYyxRFLj3nR8szsPIGIjs/edit	
В	$I \ \cup \ \ominus \ T_x$ $\models :=$	
ø	https://docs.google.co ×	
It look	like you're not logged in to GDrive. Connect Now.	

These notifications affect users with the Per User authentication setting on their external data source.

# Enjoy More Room for Files

You're moving away from documents and attachments in favor of Salesforce Files. Image and video files are more popular (and bigger) than ever. And Salesforce Files get more versatile and more shareable all the time. You need more room for files, and we're giving you more. So go ahead and add files, convert attachments, and make updates to the files you already have without fear of hitting limits. This change applies to both Lightning Experience and Salesforce Classic.

Previously, the maximum number of files per org was 10 million. We've tripled this limit, raising it to 30 million. The number of daily content versions (files that you can add or modify in a 24-hour period) has increased from 36,000 to 200,000. The delivery bandwidth limit has doubled from 10 GB to 20 GB.

# Salesforce Integrations: Taking Salesforce to the Next Level

Empower your users to be more productive by connecting Salesforce to some of the industry's leading business applications. Most of these integrated apps are available in both Salesforce Classic and Lightning Experience, but a few are available in only one or the other.

#### IN THIS SECTION:

# Skype for Salesforce (Beta) in Lightning Experience: Simplified Administration Between Microsoft 365° and Salesforce

Skype for Salesforce lets users chat and start video calls with Skype without leaving the Salesforce app. Previously, you needed to wait for your org's Microsoft 365<sup>®</sup> administrator to authorize Skype for Business to integrate with Salesforce. Now you have more options to get you up and running with Skype for Salesforce.

#### Google Integration: General Availability for Lightning for Gmail and Lightning Sync

Do your sales reps live in Google applications like Gmail and Google Calendar<sup>™</sup>, but want to get sales data from emails, contacts, and events into Salesforce easily? No need to wait any longer: Set up our Google integration products, which are now generally available. Let reps view relevant Salesforce records from their Gmail inboxes and relate emails to Salesforce records using Lightning for Gmail. And when you introduce Lightning Sync for Google, reps can sync contacts between Gmail and Salesforce, and events from Google Calendar to Salesforce.

#### Microsoft<sup>®</sup> Integration: More Improvements, Increased Productivity

Help reps maximize productivity directly from their Microsoft email and calendars. Now Lightning for Outlook integrates with more features, like Email Experience and Email Templates. Reps can take advantage of even more Salesforce content from the comfort of Microsoft Outlook<sup>®</sup>. And for Microsoft Office 365<sup>®</sup> and Lightning Experience users, now Lightning Sync can sync reps' events both ways between their Microsoft and Salesforce calendars.

# Skype for Salesforce (Beta) in Lightning Experience: Simplified Administration Between Microsoft $365^{\ensuremath{\mathbb{R}}}$ and Salesforce

Skype for Salesforce lets users chat and start video calls with Skype without leaving the Salesforce app. Previously, you needed to wait for your org's Microsoft 365<sup>®</sup> administrator to authorize Skype for Business to integrate with Salesforce. Now you have more options to get you up and running with Skype for Salesforce.

Now, you have a couple of options to authorize Salesforce to access Skype for Business:

- Your Microsoft 365<sup>®</sup> administrator can authorize Skype to integrate with Salesforce on behalf of everyone within the company.
- Users can consent to let Salesforce access their Skype for Business accounts before logging in.

### EDITIONS

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

# Google Integration: General Availability for Lightning for Gmail and Lightning Sync

Do your sales reps live in Google applications like Gmail and Google Calendar<sup>™</sup>, but want to get sales data from emails, contacts, and events into Salesforce easily? No need to wait any longer: Set up our Google integration products, which are now generally available. Let reps view relevant Salesforce records from their Gmail inboxes and relate emails to Salesforce records using Lightning for Gmail. And when you introduce Lightning Sync for Google, reps can sync contacts between Gmail and Salesforce, and events from Google Calendar to Salesforce.

#### EDITIONS

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

#### Lightning for Gmail: General Availability and Improved Efficiency

Lightning for Gmail is now generally available, and with our latest features, your team gets a boost in productivity. And reps get to relate emails to Salesforce before sending them. Crafting emails is faster with the use of Lightning email templates. If you're using Group or Professional editions, Lightning for Gmail is available within 24 hours after the Summer '17 release. Otherwise, there's no wait. You can manage Lightning for Gmail from both Lightning Experience and Salesforce Classic.

#### Lightning Sync for Google: Two-Way Contact Sync, General Availability

Make your teams more productive by setting up contacts to sync between Google Contacts and Salesforce, and events to sync from Google Calendar<sup>™</sup> to Salesforce. You can manage Lightning Sync from both Lightning Experience and Salesforce Classic

# Microsoft<sup>®</sup> Integration: More Improvements, Increased Productivity

Help reps maximize productivity directly from their Microsoft email and calendars. Now Lightning for Outlook integrates with more features, like Email Experience and Email Templates. Reps can take advantage of even more Salesforce content from the comfort of Microsoft Outlook<sup>®</sup>. And for Microsoft Office 365<sup>®</sup> and Lightning Experience users, now Lightning Sync can sync reps' events both ways between their Microsoft and Salesforce calendars.

#### Lightning for Outlook: Improved Efficiency and Integration with Salesforce

See reps step up their efficiency with our latest features. With the new pin option, Lightning for Outlook stays open, so reps can work through their emails faster. Reps can also relate their emails to Salesforce before sending them. Crafting emails is faster with Lightning email templates. To jazz up those emails and make quick work of relating them to Salesforce records, use Enhanced Email with Lightning for Outlook. You can manage Lightning for Outlook from both Lightning Experience and Salesforce Classic.

#### Lightning Sync for Microsoft<sup>®</sup> Exchange: Two-Way Event Sync and Better Calendar Integration

Make your team more productive by setting up contacts and events to sync both ways between Microsoft Exchange and Salesforce. And help your teams get the most out of Salesforce Calendar by setting up some features that work exclusively with Lightning Sync. These changes apply to Lightning Experience and all versions of the Salesforce1 mobile app. These changes also require Microsoft<sup>®</sup> Office 365<sup>®</sup> and Lightning Sync set up with an OAuth 2.0 connection and the sync direction Sync Both Ways.

#### Salesforce for Outlook: Critical Upgrade Required, Next-Generation Products Available

Our installable Microsoft<sup>®</sup> integration product is still available for sales teams working from older versions of Microsoft applications. However, if you meet the system requirements for our latest Microsoft integrations, Lightning for Outlook and Lightning Sync, we encourage you to migrate to those products now. That way, you can take advantage of the latest features and avoid manual upgrades in the future. And if you don't meet the system requirements for our next-generation products, to avoid service disruptions, make sure to read about the pending changes to Salesforce for Outlook system requirements. This change applies to both Lightning Experience and Salesforce Classic.

#### Extended Mail Merge: Easier Setup, and Support for More Microsoft<sup>®</sup> Word File Types

Extended Mail Merge lets reps generate mail merge Word documents with data from contacts, leads, and other Salesforce records. Because Extended Mail Merge generates Word documents, reps can get mail merged content to prospects or customers in whichever format they like. Reps can send letters, create labels, or attach merged communications to emails. These changes apply to Salesforce Classic only.

# Mobile: Improved Search and Approvals, Updated Requirements, and Mobile Classic Retirement

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. Salesforce1 offers improvements to search, approvals, and many other sales features, so sales professionals can take care of even more business from their phones.

#### IN THIS SECTION:

#### Salesforce1: Work Smarter with Better Search and Approvals

The Salesforce1 mobile app helps your team work smarter, not harder. The upgraded search experience gives your team more information about records before they tap. A secondary field now appears below the primary record name in instant results for lookups. This field gives your team more contextual information to pick the right record. Mistype a search term on that tiny mobile device keyboard? No need to retype because spell correction now shows your team matches for search terms with similar spellings. And your team can better manage their approvals with enhancements to reassign or recall approval requests right from their mobile device.

#### Salesforce Authenticator: More Backup and Version Help

We know it can be difficult to remember to back up your Authenticator accounts, so we provided more in-app messaging to help keep your backups current. You can also see the version of Authenticator that you have installed right in the app.

#### 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 the Salesforce1 app. 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 the Salesforce1 downloadable apps or deploying custom mobile apps that address your current and future mobile needs.

#### SalesforceA: More Resource Options for Android and iOS Users

Version 3.1 of SalesforceA for Android, and version 3.4 for iOS is now generally available. You can now do more from the Resources page in SalesforceA!

#### Salesforce Chatter: A New Way to Work with Windows 10

Version 1.0 of Salesforce Chatter is generally available the week of May 29, 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.

#### SEE ALSO: Wave: Analytics on Mobile Snap-ins for Mobile Apps SDK: It Just Keeps Getting Better

# Salesforce1: Work Smarter with Better Search and Approvals

The Salesforce1 mobile app helps your team work smarter, not harder. The upgraded search experience gives your team more information about records before they tap. A secondary field now appears below the primary record name in instant results for lookups. This field gives your team more contextual information to pick the right record. Mistype a search term on that tiny mobile device keyboard? No need to retype because spell correction now shows your team matches for search terms with similar spellings. And your team can better manage their approvals with enhancements to reassign or recall approval requests right from their mobile device.

**EDITIONS** 

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

#### IN THIS SECTION:

#### Access the Salesforce1 Mobile App

Your users have several options for accessing Salesforce1 on mobile devices that meet minimum platform requirements.

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

The latest release of the Salesforce1 downloadable apps is version 13.0. At a glance, here's what's new in the version 13.0 apps.

#### Salesforce1: Everything That's New

Our latest round of new and improved Salesforce1 features makes it easier to access Salesforce on the go.

#### Summer '17 Features That Are Different or Not Available in Salesforce1

The Salesforce1 mobile app doesn't include all the functionality that's available in the full Salesforce site, whether you're using Lightning Experience or Salesforce Classic. Review the Summer '17 Salesforce enhancements that aren't available in Salesforce1, have functional gaps compared to the full site, or work differently in the mobile app.

#### Salesforce1 App Development Overview

Several Force.com platform enhancements support Salesforce1 development.

## Access the Salesforce1 Mobile App

Your users have several options for accessing Salesforce1 on mobile devices that meet minimum platform requirements.

- Install the Salesforce1 downloadable app on Android <sup>™</sup> and Apple<sup>®</sup> mobile devices. Users can download the app from Google Play<sup>™</sup> or the App Store.
- Access the Salesforce1 mobile browser app from a supported mobile browser on Android and Apple devices or select Windows mobile phones. This option doesn't require anything to be installed.

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

The latest release of the Salesforce1 downloadable apps is version 13.0. At a glance, here's what's new in the version 13.0 apps.

### Salesforce1 for iOS, Version 13.0

Beginning the week of 6/12/17, the App Store starts serving up Salesforce1 for iOS, version 13.0.

Here's what's new in Salesforce1 for iOS.

- Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events
- See Which Campaigns Accounts Are Responding To
- Get Answers on the Go With Knowledge Articles in Salesforce1
- View, Create, Edit, and Delete Case Comments

### Salesforce1 for Android, Version 13.0

The Salesforce1 downloadable app for Android, version 13.0 will be released to Google Play the week of 6/26/17 and gradually rolled out to customers over a couple of weeks.

Here's what's coming in Salesforce1 for Android.

- New Search Experience in Salesforce1 for Android
- Invite, View, Manage, and Sync Meeting Attendees on Salesforce Events
- See Which Campaigns Accounts Are Responding To
- Get Answers on the Go With Knowledge Articles in Salesforce1
- View, Create, Edit, and Delete Case Comments

# Salesforce1: Everything That's New

Our latest round of new and improved Salesforce1 features makes it easier to access Salesforce on the go.

The Salesforce1 mobile app is available for all editions, except Database.com, without an extra 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 Salesforce1 user.

Salesforce1 Enhancements and Changes	Android Downloadable App	iOS Downloadable App	Mobile Browser App	Setup in the Full Site
Device and Browser Support				
Updated Salesforce1 Requirements	~	~	~	
Data Access and Views				
Improved Support for Picklist and Multi-Select Picklist Fields on External Objects	~	~	~	~
New Rate Limit Applied to External Object Search Results	~	~	~	
Navigation and Actions				
Navigate to a Record Directly from an Action Success Message	~	~	~	
Search				
Get More Information About Records Before You Tap	~	~	~	
Search for Opportunities Using the Account Name	~	~	~	
Get Search Results for More Objects			~	
New Search Experience in Salesforce1 for Android	~			
	(New in v13.0)			
Sales Features				
Navigate Easily to Person Accounts	~	<	<	
Create Contacts Quicker from Account Records	~	✓	~	
See Which Campaigns Accounts Are Responding To	~	~	~	
Add Members to Campaigns from Accounts	~	~	~	
Track Campaign Field History	~	~	~	
Other Changes to Campaigns	~	~	~	
Productivity Features				
Get Event Attendee Details in the Calendar When You Sync Microsoft <sup>®</sup> Office 365 <sup>®</sup> with Salesforce	~	~	~	~
Create Tasks and Activities with New Buttons	~	~	~	
Delete Charts from List Views			~	
Turn Off Feed Tracking for Notes	~	~	~	~

Salesforce1 Enhancements and Changes	Android Downloadable App	iOS Downloadable App	Mobile Browser App	Setup in the Full Site
Person Accounts Show All Notes in Related Lists	~	~	~	
Convert Old Notes to Lightning Experience with the Salesforce API	~	~	~	~
Microsoft Integration				
Microsoft <sup>®</sup> Contacts and Events Sync More Frequently	~	~	~	
Google Integration				
Sync Contacts Between Salesforce and Google Contacts	~	~	~	~
Google <sup>®</sup> Contacts and Events Sync More Frequently	~	~	~	
Customer Service Features				
The Send Email Quick Action Is Renamed Email	~	~	~	~
Get Answers on the Go With Knowledge Articles in Salesforce1	~	~	~	
Reports and Dashboards				
Legacy Charts in Salesforce1 Will Retire in Spring '18 (Phased Retirement)	~	~	~	~
Chatter				
Tag Posts and Comments with Topics	~	~	~	
Sort Feed and Discussion Global Search Results by Relevance			~	
Salesforce Communities				
Poll a Community from Your Mobile Device			~	
Business Logic and Process Automation				
Embed Your Flows in Lightning Pages (Generally Available)	~	~	~	~
Reassign Approval Requests	~	~	~	
Recall Submitted Approval Requests	~	~	~	
View Approval Comments	~	~	~	
Other Enhancements				
Rich Text Editors for Custom Fields Get a New Look	~	~	~	~
See the Assignment Checkbox in Salesforce1	~	~	~	

### Updated Salesforce1 Requirements

Salesforce1 is available on many popular mobile platforms as a downloadable app and a mobile web app. Salesforce is revising the requirements for using Salesforce1. Learn about the mobile platform requirements for using the app and the devices that we use for feature and performance testing as we continue improving the Salesforce1 experience.

#### Mobile Platform Requirements

Users can run Salesforce1 on phones and tablets that meet these mobile platform requirements.

Operating System and Version Requirements	Mobile Browser Requirements*
Android 4.4 or later	Google Chrome on Android
iOS 10.0 or later	Apple Safari on iOS
Windows 10 (Mobile browser app only)	Microsoft Edge on Windows 10
Windows 8.1 (Mobile browser app only)	Internet Explorer 11 on Windows 8.1 (Support ends December 17, 2017)

\* The latest mobile browser version is required. Mobile browser requirements apply to the Salesforce1 mobile browser app only.

To allow for innovation and to keep Salesforce1 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 Salesforce1 Testing

Salesforce performs automated and manual testing of the Salesforce1 downloadable and mobile browser apps on a select set of mobile devices. For the Summer '17 release, this is the list of devices used for Salesforce1 testing.

Platform	Phones	Tablets
Android	<ul> <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> <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>
iOS	<ul> <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> <li>iPad Pro 12.9"</li> <li>iPad Pro 9.7"</li> <li>iPad Air 2</li> <li>iPad Mini 4</li> </ul>
<b>Windows</b> (Mobile browser app only)	<ul><li>Nokia 1020 (with Windows 8.1)</li><li>Lumia 950 (with Windows 10)</li></ul>	• n/a

Customers aren't blocked from using Salesforce1 on untested devices that meet current platform requirements.

To allow for innovation and to keep Salesforce1 current in the rapidly evolving mobile market, the list of Salesforce1-tested devices is subject to change at the sole discretion of Salesforce, with or without advance notice.

#### Salesforce1 Updates

Customers whose devices meet current minimum platform requirements are eligible to receive Salesforce1 feature updates and fixes.

Our goal is to release Salesforce1 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.

#### Mobile Browser App

Enhanced features and functionality are automatically available with each Salesforce major release.

#### **Downloadable Apps**

Enhanced features and functionality are provided in major version updates. We aim to release a new major version of the downloadable apps 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 Saleforce'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 of the downloadable apps 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 Salesforce1 don't appear in the app stores.

#### Customer Support Services for Salesforce1

Salesforce Customer Support uses commercially reasonable efforts to troubleshoot issues with Salesforce1, provided:

- A user's device meets current minimum platform requirements
- Downloadable app users have the most recent version of Salesforce1 installed

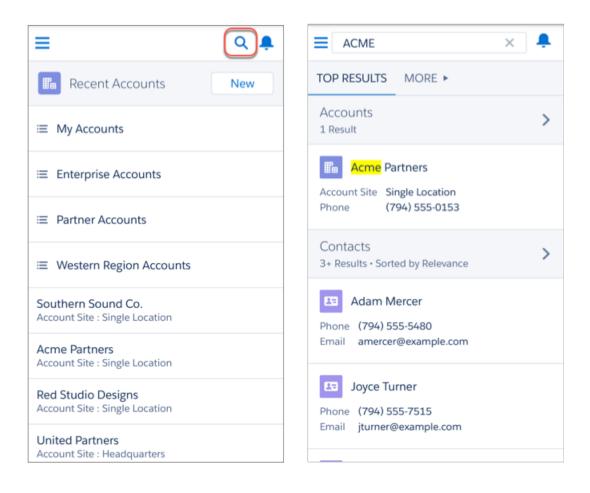
When customers run Salesforce1 on Salesforce-tested devices, it's more efficient for us to troubleshoot issues with the mobile app. For customers using untested devices, even those meeting minimum platform requirements, we might not be able to replicate some issues due to device manufacturer–specific customizations.

Running Salesforce1 on older devices or devices with low computation and memory capabilities can adversely impact performance of the app, as compared to performance on Salesforce-tested devices.

### New Search Experience in Salesforce1 for Android

It's easier than ever to find records and other entities using the new and improved search experience in Salesforce1 for Android. The new search experience is based off the Lightning Experience in the full Salesforce site. Users who are familiar with Lightning Experience search should find the new search experience in Salesforce1 for Android intuitive and easy to use. This new feature is available in the Salesforce1 downloadable app for Android, version 13.0 or later.

The new search experience is now accessible anywhere in the app. Users can tap  $\mathbf{Q}$  anywhere in the app to kick off a search.



### Get More Information About Records Before You Tap

A secondary field appears below the primary record name in instant results for lookups. The field provides more contextual information to help users select the right record. For example, the location *San Francisco* appears under the company *Acme* to help users distinguish similar record names. Or a phone number appears under account and contact records. This feature is new in all versions of the Salesforce1 mobile app.

Carrier 🗢	3:23 PM	-
Cancel	Parent Accou	unt
Search Accou	unt	Q
Accour	its	
Acme (212) 555-555	5	
salesforce.co (415) 901-700		
Global Media (905) 555-121		

You can determine which secondary field appears to users by customizing the search layout. The second usable field in the Search Results layout appears as the secondary field in instant results. Examples of unusable fields are formula fields, HTML-formatted fields, inline image fields, picklists, or long-text fields.

#### SEE ALSO:

Salesforce Help: Configure Lookup Search in Lightning Experience

#### Navigate Easily to Person Accounts

We know you're in a hurry to get where you're going. So when you're trying get to a person account from a contact field (like the Name field on an activity record), you now go straight to a person account page layout with all the fields, related lists, and actions you expect from person account records. This change applies to all versions of the Salesforce1 mobile app.

#### Create Contacts Quicker from Account Records

When sales reps create contacts from either the Contacts or Related Contacts related list on account records, the mailing address, phone number, and fax number from the account record are autopopulated on the new contact. This change applies to all versions of the Salesforce1 mobile app.

#### **EDITIONS**

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

### Legacy Charts in Salesforce1 Will Retire in Spring '18 (Phased Retirement)

Legacy Charts have been part of the Salesforce1 experience for many years, but let's bid them farewell. Enhanced Charts (the mobile version of Lightning Experience charts) have replaced Legacy Charts in all versions of the Salesforce1 mobile app. Not ready to switch? Revert Salesforce1 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 Salesforce1 mobile app.

Here's what the Legacy Charts retirement means for your org.

- In Spring '18, Salesforce1 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 Salesforce1. 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 Salesforce1 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.

### Tag Posts and Comments with Topics

Tag your Chatter posts and comments with hashtag topics in Salesforce1. Adding topics to posts and comments increases their visibility and helps organize them. Users can tap on a hashtag topic to find posts that contain the same topic. This change applies to all versions of the Salesforce1 mobile app.

Note: On Android devices, users can't access the topic detail page by tapping on the hashtag topic in a feed.

#### Sort Feed and Discussion Global Search Results by Relevance

Users have two new sorting options for feed and discussion results when they run a global search in the Salesforce1 mobile browser app: Top Posts (Lightning Experience) and Top Questions (Lightning communities). Top Posts and Top Questions are the more relevant posts and questions based on the search query. This feature is available in Lightning Experience and Lightning communities that users access through the Salesforce1 mobile browser app.

### Poll a Community from Your Mobile Device

When users access communities through the Salesforce1 mobile browser app, they have one more publishing option in the feed: polls. Users can create polls in groups, profiles, and record feeds. This feature is available in the Lightning communities that users access through the Salesforce1 mobile browser app.

### Summer '17 Features That Are Different or Not Available in Salesforce1

The Salesforce1 mobile app doesn't include all the functionality that's available in the full Salesforce site, whether you're using Lightning Experience or Salesforce Classic. Review the Summer '17 Salesforce enhancements that aren't available in Salesforce1, have functional gaps compared to the full site, or work differently in the mobile app.

**EDITIONS** 

Enhanced Charts available in: Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions Note: For the complete list of differences between Salesforce1 and the full site, see What's Different or Not Available in the Salesforce1 Mobile App in Salesforce Help.

#### **Sales Features**

#### **Contact Hierarchy**

Contact hierarchy is unavailable.

#### Orders

User can't perform these actions.

- Add or edit multiple products at the same time.
- Create reduction orders or select products to reduce.

#### **Productivity Features**

#### **Events and Calendars**

- Event attendees are available in Salesforce1 for Microsoft<sup>®</sup> Office 365<sup>®</sup> and Lightning Sync users set up with an OAuth 2.0 connection and the sync direction Sync Both Ways. Meeting organizers can see, invite, or remove contacts, leads, and other Salesforce users on their events from Salesforce1. Meeting attendees can see contacts, leads, and other Salesforce users. To get access to event attendees, Salesforce admins have to add the Attendees field to the Event page layout for events, and meeting organizers have to create or edit their events from Lightning Experience or Salesforce1. Selecting Sync Both Ways limits some Salesforce Classic functionality. To learn more, see Lightning Sync Considerations in the Salesforce Help.
- The Attendees field isn't supported for Compact Layouts. However, adding attendees to the Event page layout lets your users view, invite, or remove attendees from Salesforce1 events.
- Meeting attendees can't see other attendees' meeting responses from the related tab on events in Salesforce1, but can see responses from the details tab in the Attendees field.
- Meeting attendees can't respond to event invitations from Salesforce1—users can only accept or decline from their Microsoft Office 365 calendars.

#### Chatter

#### Topics

Topics are now available in all Salesforce1 apps, with the following limitations:

- See trending topics.
- Edit topic details (name and description).
- Tag favorite topics.
- Assign topics to records.
- View records assigned to a topic.
- See these related lists: Related Topics, Related Groups, Knowledgeable on Topics, Recent Files.
- See topics in auto-complete options when searching.
- Delete topics.
- Access the topic detail page by tapping on a hashtag topic from a feed (on Android devices).

#### Search

#### **Federated Search**

Not available in any of the Salesforce1 mobile apps.

### Data Quality and Enhancement

#### **Duplicate Management**

Salesforce1 doesn't alert users to existing duplicate records, either on the same object or across accounts, contacts, and leads.

#### Data Assessment

Data Assessment isn't available, either for Account Data Assessment (based on the Data.com Company Info for Accounts rule) or for data in AppExchange packages.

### Salesforce1 App Development Overview

Several Force.com platform enhancements support Salesforce1 development.

• API Support

### **API Support**

The Force.com APIs support Salesforce1 development. Unless otherwise noted, these enhancements for Salesforce1 development were made available in API version 40.0.

#### **REST API**

In the Search Suggested Records resource, use the useSearchScope parameter to get suggested records from the user's search scope, which contains the user's most frequently used objects. Provide users with more relevant results without having to provide a list of objects for each request.

# Salesforce Authenticator: More Backup and Version Help

We know it can be difficult to remember to back up your Authenticator accounts, so we provided more in-app messaging to help keep your backups current. You can also see the version of Authenticator that you have installed right in the app.

#### IN THIS SECTION:

#### Get More Reminders to Keep Your Authenticator Account Backups Current

Sure, backups aren't glamorous, but they're important. Salesforce Authenticator helps you keep your account backups current with more messaging and shortcuts in the app.

#### Find Your App Version in Salesforce Authenticator

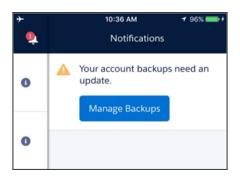
Expert trailblazers always use up-to-date maps while trekking in the wilderness. Salesforce Authenticator has added the app version so you always know where you are. In the app, tap and look at the bottom of the page. If you don't have the latest version of the app, hike over to the App Store or Google Play and download the latest version for free.

### Get More Reminders to Keep Your Authenticator Account Backups Current

Sure, backups aren't glamorous, but they're important. Salesforce Authenticator helps you keep your account backups current with more messaging and shortcuts in the app.

Here's what we added.

- Notification when your account backups are out of date if there's a problem, such as lack of a network connection
- Status indicator to tell you when your account backups are out of date
- Extra confirmation when you try to disable backups



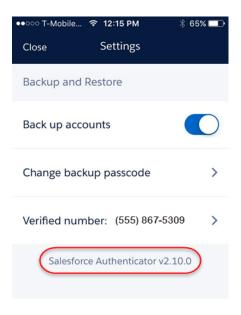
The account backup out-of-date notification is displayed if the app is unable to sync your backup after you add or remove an account, change your backup and restore settings, or change your passcode.

#### SEE ALSO:

*Salesforce Help*: Back Up Your Connected Accounts in the Salesforce Authenticator Mobile App *Salesforce Help*: Restore Connected Accounts in the Salesforce Authenticator Mobile App

### Find Your App Version in Salesforce Authenticator

Expert trailblazers always use up-to-date maps while trekking in the wilderness. Salesforce Authenticator has added the app version so you always know where you are. In the app, tap and look at the bottom of the page. If you don't have the latest version of the app, hike over to the App Store or Google Play and download the latest version for free.



# 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 the Salesforce 1 app. 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 the Salesforce1 downloadable apps 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 the Salesforce1 Mobile App Success group in the Success Community.

# SalesforceA: More Resource Options for Android and iOS Users

Version 3.1 of SalesforceA for Android, and version 3.4 for iOS is now generally available. You can now do more from the Resources page in SalesforceA!

#### IN THIS SECTION:

#### Check Your Lightning Experience Readiness with SalesforceA

Curious about what your company needs to do to get ready for Lightning Experience? Evaluate some of the key features and customizations you've implemented, to see if they're Lightning-ready. Then, use our findings to see what you need to address and how to develop a rollout plan to get users into the new interface. Lightning Experience Readiness Check is available in SalesforceA for Android version 3.1, and SalesforceA for iOS version 3.4.

#### Kick Off Optimizer with SalesforceA

Optimizer evaluates your implementation to determine how your company uses certain Salesforce features, then identifies ways that you can improve your implementation for your

company. You can run Optimizer in sandbox or production environments to receive recommendations to improve features, clean up customizations, reduce complexity, and drive feature adoption. Optimizer is available in SalesforceA for Android version 3.1, and SalesforceA for iOS version 3.4.

#### SalesforceA Connected App Splits into Two

Prior to this latest release, SalesforceA security and permission settings were managed by one single connected app that supported both Android and iOS. Security and permission settings for the new SalesforceA for Android version 3.1 and SalesforceA for iOS version 3.4 are controlled by each separate connected app, respectively.

## Check Your Lightning Experience Readiness with SalesforceA

Curious about what your company needs to do to get ready for Lightning Experience? Evaluate some of the key features and customizations you've implemented, to see if they're Lightning-ready. Then, use our findings to see what you need to address and how to develop a rollout plan to get users into the new interface. Lightning Experience Readiness Check is available in SalesforceA for Android version 3.1, and SalesforceA for iOS version 3.4.

To start your evaluation, go to the resources page to kick off the Lightning Experience Readiness Check. Next, we email you a personalized Readiness Report with advice and recommendations about what you need to do to get ready for Lightning Experience.

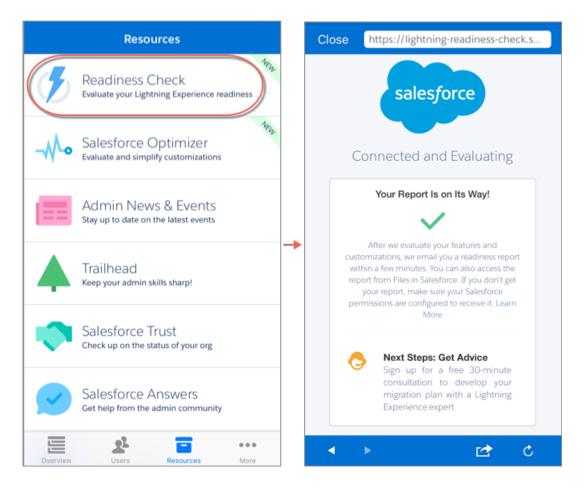


Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### USER PERMISSIONS

#### To use SalesforceA:

"Manage Users"



After we email you your readiness report, review our guidelines about how to use the report to develop your rollout plan.

For guidelines about Lightning Experience Readiness Check, see Evaluate Your Lightning Experience Readiness in the Salesforce Help for more information.

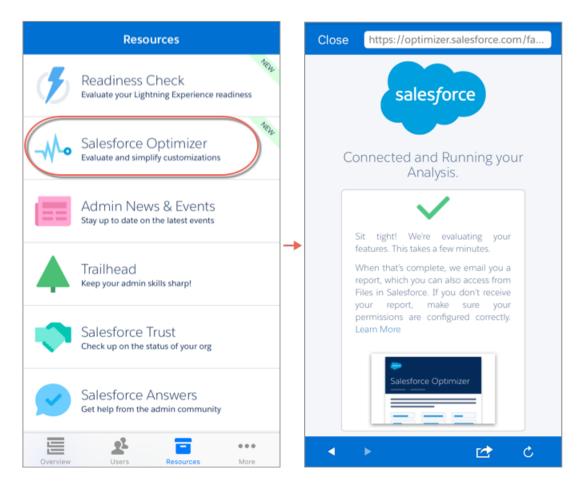
#### SEE ALSO:

Get Expanded Analysis When You Check Your Lightning Experience Readiness

### Kick Off Optimizer with SalesforceA

Optimizer evaluates your implementation to determine how your company uses certain Salesforce features, then identifies ways that you can improve your implementation for your company. You can run Optimizer in sandbox or production environments to receive recommendations to improve features, clean up customizations, reduce complexity, and drive feature adoption. Optimizer is available in SalesforceA for Android version 3.1, and SalesforceA for iOS version 3.4.

To start your evaluation, go to the Resources page to kick off Optimizer. After our analysis is complete, we email you a personalized Optimizer report with advice and recommendations about how to improve your implementation.



After we email you your Optimizer report, use the recommendations in your report to tweak features and settings to improve your implementation.

For guidelines about Optimizer, see Improve Your Salesforce Implementation with Optimizer in the Salesforce Help for more information.

### SalesforceA Connected App Splits into Two

Prior to this latest release, SalesforceA security and permission settings were managed by one single connected app that supported both Android and iOS. Security and permission settings for the new SalesforceA for Android version 3.1 and SalesforceA for iOS version 3.4 are controlled by each separate connected app, respectively.

Note: Earlier versions of the SalesforceA will continue to have security and permission settings controlled by the original single connected app.

Separating the single SalesforceA connected app into two dedicated connected apps for both Android and iOS lets you control security and permission settings for each platform individually. These benefits include more clarity to login history, OAuth usage, and better accommodation for future enhancements.

The new SalesforceA connected apps for both Android and iOS are automatically installed with default security and permission settings (for example, refresh token valid until revoked and PIN lock disabled) upon first use of SalesforceA for Android version 3.1 and SalesforceA for iOS version 3.4. No action is necessary if your org doesn't require custom connected app security and permission settings.

If your org has custom security and permission settings in place through the original single SalesforceA connected app, you can replicate those settings at any time in the separate SalesforceA connected apps for Android and iOS.

See SalesforceA Connected Apps Administration on the App Exchange to install the new separate connected apps before the first use of SalesforceA for Android version 3.1 and SalesforceA for iOS version 3.4.

For more information about SalesforceA, see the SalesforceA Overview Knowledge Article in the Salesforce Help.

# Salesforce Chatter: A New Way to Work with Windows 10

Version 1.0 of Salesforce Chatter is generally available the week of May 29, 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.

#### 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.

# Financial Services Cloud: Lightning Components in Communities, Client Profile Builder, Individual and Relationship Group Enhancements

Share the wealth of Financial Services Cloud Lightning components that are now available in Communities. Get on the fast track to creating individuals and adding them to groups with the new Client Profile Builder. Take advantage of guick actions in Wave for Financial Services Cloud.

#### IN THIS SECTION:

#### Build a Digital Portal for Independent Advisors with Lightning Components

Build and empower your independent advisor network with an advisor partner portal. Connect

directly with independent advisors to share client data—including financial accounts, goals, and relationships—in a secure, branded location. Speed up your implementation and supercharge independent advisor productivity with Financial Services Cloud Lightning components and user profiles.

#### Access Financial Services Cloud in Communities

You can now create custom branded portals on Community Cloud so independent advisors or your clients can access and interact with the data that they need from Financial Services Cloud.

#### Create an Individual with the Client Profile Builder

Now an advisor can create an individual and add that individual to a relationship group with the new Client Profile Builder.

#### Take Action in Einstein Analytics for Financial Services Cloud

Actionable Client Insights with Wave Analytics lets advisory teams take quick action on client data. Advisors can log a call, task, or event in five Wave dashboards and surface key insights across the entire book of business, all without the need for supporting analysis or multiple spreadsheets.

#### Unlock Member Details on Relationship Groups

You now have the flexibility to display the most relevant information to your business by configuring the Group Member Detail component.

#### Configure Account and Contact Information

You now have the flexibility to configure account and contact information to fit the way advisors like to work. In Lightning App Builder, show contact details at the top of the client record page and account information at the bottom. Or vice versa. You can also rearrange Account and Contact Related Lists on the Related tab.

#### Let the Last Name Be First

To support languages that order names differently, you can now change the order of how an individual's first name and last name appear on the details page.

#### Other Changes in Financial Services Cloud

Learn about smaller changes that improve your experience with Financial Services Cloud.

# Build a Digital Portal for Independent Advisors with Lightning Components

Build and empower your independent advisor network with an advisor partner portal. Connect directly with independent advisors to share client data—including financial accounts, goals, and relationships—in a secure, branded location. Speed up your implementation and supercharge independent advisor productivity with Financial Services Cloud Lightning components and user profiles.

### EDITIONS

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

 HOME		ACCOUNT	FINANCIAL ACCOUNT	CONTACT				
WELCOME! A place where you can easily find solutions and ask questions								
a) Upco	oming RM	Ds (3)			ASK A QUESTION			
G <mark>ordon Gek</mark> Jays Away: 9				\$0.00				
ohn Conne Jays Away: 9				\$0.00				
arah Conn Jays Away: 9				\$0.00				
				View All				

Create an Advisor Partner user and assign the required permissions so an independent advisor can access Financial Services Cloud Communities. The Advisor Partner profile includes field-level security settings for standard objects and standard fields from the Advisor profile.

After you configure an Advisor Partner profile, you can add these Financial Services Cloud Lightning components with Community Builder.

- Birthday Card
- Financial Accounts
- Financial Summary
- Lead Card
- Opportunities
- RMD Card
- Task Card

Lightning components for Financial Services Cloud Communities are supported in a mobile experience. You can also customize the branding of these components for your community.

#### SEE ALSO:

Salesforce Help: Financial Services Cloud Upgrade Guide (can be outdated or unavailable during release preview)

## Access Financial Services Cloud in Communities

You can now create custom branded portals on Community Cloud so independent advisors or your clients can access and interact with the data that they need from Financial Services Cloud.

To set up Financial Services Cloud Communities, make sure that you have user licenses for Financial Services Cloud and Communities.

# Create an Individual with the Client Profile Builder

Now an advisor can create an individual and add that individual to a relationship group with the new Client Profile Builder.

Instead of completing this information in two separate flows, the Client Profile Builder lets an advisor enter the same information in a connected set of steps.

- Account details
- Contact details
- Relationship Group record type (optional)

• Relationship group details (optional)

New Account: Individual							
	Complete Your Cl Contact Det		<b>^</b>				
Contact Details							
*Name		Preferred Name					
* Last Name							
	۵						
First Name							
Salutation			- 1				
None	•						
Account Name		Tax ID					
Search Accounts							
Age		Birthdate					
		<b></b>					

To access the Client Profile Builder, click **New** from the Create Individual component on the Home page.

To get this feature on existing custom Lightning pages in Financial Services Cloud, make sure that you add the Create Individual component to the Lightning page.

#### SEE ALSO:

Salesforce Help: Financial Services Cloud Upgrade Guide (can be outdated or unavailable during release preview)

# Take Action in Einstein Analytics for Financial Services Cloud

Actionable Client Insights with Wave Analytics lets advisory teams take quick action on client data. Advisors can log a call, task, or event in five Wave dashboards and surface key insights across the entire book of business, all without the need for supporting analysis or multiple spreadsheets.

Clier	nt Details				
#	¢ Client Name	Category	Risk Tolerance	Market	ting Segment
4	Gregory Hunt	Silver	Aggressive	Mass Aff	fluent
5	Gregory Owens		oen Record		: Worth
6	Linda Bailey	F			vestor
7	Bob Stanley	s 🛅 N	lew Event		al
8	Aaron Thompson	5 IC L	og a Call		luent
9	Anthony Wallace	F Contraction	- 0		Worth
10	John Putnam	s 籠 N	al		
11	Anne Tucker	Silver	None	Femal Ir	nvestor

**EDITIONS** 

Available in: **Enterprise** and **Unlimited** Editions

# Unlock Member Details on Relationship Groups

You now have the flexibility to display the most relevant information to your business by configuring the Group Member Detail component.

To change the information that appears, create your own field set to contain the information that you want to display and then configure the new group member details Lightning component.

Page > Group Members (Configurable)	
Field Set Name	
FSC_Group_Members_Field_Set	

# Configure Account and Contact Information

You now have the flexibility to configure account and contact information to fit the way advisors like to work. In Lightning App Builder, show contact details at the top of the client record page and account information at the bottom. Or vice versa. You can also rearrange Account and Contact Related Lists on the Related tab.

```
Page > Client Record Detail
```

# Let the Last Name Be First

To support languages that order names differently, you can now change the order of how an individual's first name and last name appear on the details page.

Edit the Industries Application Config custom setting for Account Name Format and enter one of the two supported formats:

- {firstname} {lastname}
- {lastname} {firstname}

Note: If a format is not entered correctly, the {firstname} {lastname} format is used by default.

Save your changes and then edit an individual's name. The updated account name format is applied for all individuals.

For the {lastname} {firstname} format only, change the org's Default Locale to the appropriate locale so that the {lastname} {firstname} format appears in the Contact Details section for all individuals.

# Other Changes in Financial Services Cloud

Learn about smaller changes that improve your experience with Financial Services Cloud.

IN THIS SECTION:

#### Assign a Permission Set License

Control access to Financial Services Cloud by assigning the Financial Services Cloud Standard permission set license to each user. Starting with the Summer '17 release, you are required to assign a Financial Services Cloud Standard permission set license to each user. This requirement includes Financial Services Cloud packages installed in a production or sandbox org after the Summer '17 release. This step is optional for managed packages installed before the Summer '17 release until further notice.

### Assign a Permission Set License

Control access to Financial Services Cloud by assigning the Financial Services Cloud Standard permission set license to each user. Starting with the Summer '17 release, you are required to assign a Financial Services Cloud Standard permission set license to each user. This requirement includes Financial Services Cloud packages installed in a production or sandbox org after the Summer '17 release. This step is optional for managed packages installed before the Summer '17 release until further notice.



**Note:** Financial Services Cloud Communities users don't require the Financial Services Cloud Standard permission set license. The Wave Embedded App permission set license is required for access to Einstein Analytics for Financial Services Cloud.

#### SEE ALSO:

*Salesforce Help*: What Are Permission Set Licenses? (can be outdated or unavailable during release preview)

# Health Cloud: Integrated Analytics Lists, Concurrent Care Plans, Health Cloud Empower Lightning Components, and More

We've streamlined the care of patients with chronic or long-term medical conditions by allowing them to have multiple, concurrent care plans and more than one care manager. And now patient lists created from the Einstein Analytics for Health Cloud app can be sent to and used in the Health Cloud console. To make your life easier as an admin, we've packaged up three new Lightning components that let you create patient communities in no time at all.

#### IN THIS SECTION:

#### Create Concurrent Care Plans

Managing care for patients with multiple conditions just got a lot easier. Care coordinators can create concurrent care plans to view and manage patient problems, goals, and tasks in a condensed view in the console.

#### Use Health Cloud Empower Lightning Components to Build a Patient Community

Health Cloud Empower Lightning components let you easily build a patient community in no time at all. Use the Health Cloud Empower components and the Customer Service (Napili) template to quickly roll out a patient community with easy customization using Community Builder.

#### Send a Patient List from the Analytics App to Health Cloud

Integrated Analytics lists let you use the intuitive Einstein Analytics for Health Cloud app to create a patient list and export it to the Health Cloud console. In the console, care coordinators can use these highly segmented lists to more effectively manage patients.

#### Control the Sort Order of Items in Care Plans

Care coordinators can now specify the order in which problems, goals, and tasks appear in a care plan so that the most critical items are listed first.

#### **EDITIONS**

Health Cloud is available in Salesforce Classic

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

#### Create Care Plans That Fit Your Patients

Create custom care plan record types to give care coordinators flexibility in tracking and managing their patients by using different types of care plans.

#### Get Timeline Details at Your Fingertips

Give your users more information about patient timeline events by adding extra information to the hover text. And console users can now click an event to open the related record in another tab so that all the details of the event are available.

#### Procedures and Procedure Requests Added to the Timeline

Now care coordinators can see a patient's medical procedures and requests for medical procedures on the timeline.

#### **Delete Patient Lists**

Now care coordinators can keep their patient lists neat and manageable by deleting obsolete and unwanted lists. Care coordinators can delete the custom patient lists that they created. And if they have the appropriate permissions, they can also delete patient lists created by others.

#### Archived Tasks Are Available in Health Cloud Console

Tracking a patient's care can be an ongoing process that spans many years. To help care coordinators with long-term planning and management, we've given them full access to view and edit archived care plan tasks. You can see and manage archived tasks on the patient's timeline, in the care plan, and on the Today page.

#### Assign a Permission Set License

Control access to Health Cloud by assigning the Health Cloud permission set license to each Health Cloud console user. Starting with the Summer '17 release, you must assign the Health Cloud permission set license to each user. This requirement includes Health Cloud packages installed in a production or sandbox org after the Summer '17 release. If you installed the Health Cloud managed package before the Summer '17 release, this step is optional until further notice.

#### Add Visualforce Page Access to Console Users

Orgs created before Summer '17 must add HcFilterLogicValidationPage access to the permission set of users who create patient lists in the Health Cloud console.

### Health Cloud Has New Custom Objects

These custom objects are new.

#### Changed Health Cloud Object

Do more with the FilterCriterion\_\_\_c object.

## **Create Concurrent Care Plans**

Managing care for patients with multiple conditions just got a lot easier. Care coordinators can create concurrent care plans to view and manage patient problems, goals, and tasks in a condensed view in the console.

health cloud				Q Search Sales								? \$	X
Patients	<ul> <li>Charles</li> </ul>	Green	+			·							
OPEN NEW TAB Engagement All Care Plans Timeline	▼ ?		All Care are Plans closed	Plans Timeli	ne Charles Green	s Ca ) +					New Care	Plan 🔻	•
NT, Care Plans New Care Plan GJ Charles Green's Care Pla Case # 00001027	n		Charles Gree ase Number 0001027	status New	Owner Mellinda Smith		odified Date 2017 3:15:41 AM	Created Da Mar 31, 20	te 017 3:22:45 AM				
UIC Diabetes Type II Case # 00001030			Diabetes Typ ase Number 0001030	status New	Owner Mellinda Smith		odified Date L, 2017 4:57:14 PM	Created Da Mar 31, 20	te 017 4:57:14 PM				
ERGIES			PROBLEMS 8	GOALS TASKS	CARE TEAM						New Problem	▼ ?	
ENCOUNTER atient Full, 2017-03-08 23::	13:007 2		✓ Bloo	d Glucose Control							HIGH	•	
atient Puil, 2017-05-06 25.	13.002		~	Make lifestyle cha	nges					HIGH	0% COMPLETE	•	
				SUBJECT		DUE DATE	PRIORITY	STATUS	TASK OWNER	EXTERNAL	ME		
				Attend training for	home diabetes manag	Mar 22, 2017	Normal	Not Started	Mellinda Smith	Charles Gre	en 🖌		
				Meet with dietitiar	n for diet plan	Apr 11, 2017 1	Normal	Not Started	Mellinda Smith	Charles Gre	en 🖋		
				Create written self	care plan to go over wi	Apr 12, 2017 1.	Normal	Not Started	Mellinda Smith	Charles Gre	en 🖌		

The patient card menu (1) provides quick access to any open care plan. The All Care Plans view helps care coordinators manage care plans, view plan details (2), and work on each care plan in its own tab (3).

Initially, only a patient's primary care plan appears in the All Care Plans view. You can determine the primary care plan by viewing the value in the Care Plan field on the patient's Account record. Care plans appear in the order in which they were created. Custom care plan record types give care coordinators flexibility in tracking and managing their patients.

During the conversion process, a primary care plan is created for every patient and added to the patient account. The Care Plan field on Account autopopulates, but you can add different care plans later on. Finally, you can create workflows to help care coordinators manage concurrent care plans more efficiently.

This option is enabled by default in new orgs. For existing orgs, you can enable the feature using the Feature Toggles setting in Health Cloud Custom Settings. You can disable the setting to allow only a single care plan per patient, if preferred.

# Use Health Cloud Empower Lightning Components to Build a Patient Community

Health Cloud Empower Lightning components let you easily build a patient community in no time at all. Use the Health Cloud Empower components and the Customer Service (Napili) template to quickly roll out a patient community with easy customization using Community Builder.

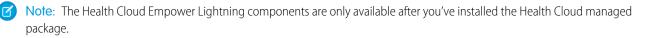
The Health Cloud Empower Lightning components are also available to use in the Lightning App Builder.

Q Search		۲
≡		
Charles Green - 1967-04-19 - Diabetes Type II		: H
ALL TASKS 🔻		
Attend training for home diabetes management Owner Charles Green Status Not Started		
<ul> <li>Help Charles create written self-care plan to go ove Owner Mellinda Smith Status In Progress</li> </ul>	r with doctor	1
<ul> <li>Take diabetes management class with Charles</li> <li>Owner Shawna Creen</li> <li>Status Not Started</li> </ul>		
<ul> <li>Test blood sugar three times a day</li> <li>Owner Charles Green</li> <li>Status In Progress</li> </ul>		
Charles Green		
Birthdate April 19, 1967		
Andy Molina Role Primary Care Physician	- 3	
Role Care Coordinator		
Shawna Green Role Care Giver		
	1	

The Health Cloud Empower Lightning components lets you create a patient community that include these elements.

- The Care Plan Selector for Health Cloud Empower component (1) lets Health Cloud community users select a patient's care plan. Only users who are members of the care team with access to the care plan can see it in the picklist.
- The Care Plan Tasks for Health Cloud Empower component (2) lets Health Cloud community users see tasks associated with a care plan. Members can see their own tasks, and when they have access to other members of the team, they also can see tasks assigned to those members.
- Use the Care Team for Health Cloud Empower component (3) to display fields from the User and Contact objects for the patient and care team. You can change the order in which the fields appear. Access to the Care Team for Health Cloud Empower component is available only to members of a patient's care team.

And if you want a more custom experience, you can create custom pages, add components to pages, use custom Lightning components, and expose more Salesforce objects. See the Salesforce Help and the Using Templates to Build Communities guide to get your community launched in no time at all.



#### IN THIS SECTION:

#### Give Care Team Members Access to Care Plans from the Community

The Care Plan Selector for Health Cloud Empower component is a picklist that lets community users select a patient's care plan. Only users who are members of the care team with access to the care plan can see it in the picklist.

#### Access the Care Team in Communities

Now your users can access a patient's care team in a Health Cloud community. You can add fields from the User and Contact objects to display basic information about the patient and the care team members. You can also change the order in which fields appear. Access to the Care Team for Health Cloud Empower component is available only to members of a patient's care team.

#### Give Care Team Members Access to Tasks from the Community

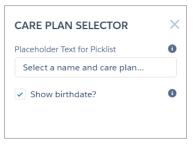
The Care Plan Tasks for Health Cloud Empower component lets community users see tasks associated with a care plan. Members can choose to see either their incomplete or complete tasks.

### Give Care Team Members Access to Care Plans from the Community

The Care Plan Selector for Health Cloud Empower component is a picklist that lets community users select a patient's care plan. Only users who are members of the care team with access to the care plan can see it in the picklist.

You can customize the component by adding or removing the patient's birthdate from the patient information shown in the picklist.

Sample: Sample Care Plan Selector for Health Cloud Empower (property editor and component)



Select a name and care plan	ŧ
Select a name and care plan	
Charles Green - 1967-04-19 - Charles Green's Care Pl	an
Charles Green - 1967-04-19 - Diabetes Type II	2

### Access the Care Team in Communities

Now your users can access a patient's care team in a Health Cloud community. You can add fields from the User and Contact objects to display basic information about the patient and the care team members. You can also change the order in which fields appear. Access to the Care Team for Health Cloud Empower component is available only to members of a patient's care team.

#### Important: Legal Disclaimer for Care Team for Health Cloud Empower Component

Admins can configure the Care Team for Health Cloud Empower component to display patient contact information to users of Health Cloud and Salesforce Communities. Ensure that only authorized users have access to this contact information and that all communications with patients are conducted in compliance with HIPAA regulations.





### Give Care Team Members Access to Tasks from the Community

The Care Plan Tasks for Health Cloud Empower component lets community users see tasks associated with a care plan. Members can choose to see either their incomplete or complete tasks.

Example: Sample Care Plan Tasks for Health Cloud Empower (property editor and component)

RE PLAN TASKS FOR ALTH CLOUD EMPOWER	× 9		Μ	ly Tasks l <mark>y Tasks</mark> ly Completed T	▼
cCommunityTaskFields	0	) )		Owner: Melline Status: In Prog	da Smit
Show all tasks	0			Help patient cr Owner: Melling Status: In Prog	da Smit

🗹 Note: The Show all tasks property is currently unavailable. Enabling it doesn't do anything.

### Send a Patient List from the Analytics App to Health Cloud

Integrated Analytics lists let you use the intuitive Einstein Analytics for Health Cloud app to create a patient list and export it to the Health Cloud console. In the console, care coordinators can use these highly segmented lists to more effectively manage patients.

Use the Einstein Analytics for Health Cloud: Risk Stratification app to fine-tune and select a subset of the people in your care. Then select the option to have that list appear among the other patient lists in the Health Cloud console.



You can choose to create a list or add to an existing one.

When you send a list to the console, the list's name is added as a topic to the Account record for every person included in the list. Topics are words or phrases that you can use to group Salesforce records by a common theme. You can use topics to filter list views.

You own the lists that you create. You can add a list to any other Analytics list that you have access to. For lists that you add to, the current ownership doesn't change. So when you add to someone else's list, they still own the list.

	Send List to Health Cloud								
•	Create new list List Name								
C	Add to ex								
		LIST NAME Diabetes and Chronic Kidney Disease Comorbidity	CREATED DATE Apr 6, 2017 8:47:09 PM						
		Diabetes patients 0-34 years of age	Apr 28, 2017 8:28:53 PM						
		Diabetes patients over 65 years of age	Apr 6, 2017 8:46:33 PM						
		Patients for folowup	Apr 6, 2017 8:48:38 PM						
		Patients ready for follow up today	Apr 7, 2017 12:54:03 AM						
	Send List to Health Cloud								

After you export the list, it's available from the Select a List dropdown in the Health Cloud console.

# Control the Sort Order of Items in Care Plans

Care coordinators can now specify the order in which problems, goals, and tasks appear in a care plan so that the most critical items are listed first.

Problems, goals, and tasks are sorted based on priority. If multiple items have the same priority, those items are displayed according to the assigned sort order. So if two goals both have a high priority, the goal with the highest sort order appears before the other in the care plan.

For existing orgs, you must add the **Sort Order** field to the Tasks page layout before the field is available to care coordinators or others who create tasks. The field set for Problems and Goals is automatically upgraded.

# Create Care Plans That Fit Your Patients

Create custom care plan record types to give care coordinators flexibility in tracking and managing their patients by using different types of care plans.

Health Cloud comes with a default care plan that's ready to use. But care coordinators can manage patients that have vastly different needs and concerns. Using custom metadata, you can create different types of care plans that care coordinators can apply to their patients and provide customized care.

During the lead to patient conversion, users select a care plan record type to use as the primary care plan for the patient. When you let users create several care plans per patient, care coordinators can select the type of care plan record type that they want to use.



**Note:** Make sure to use record types that are associated with a care plan record when creating custom care plans. Record types based on standard case records aren't supported for care plans.

To use multiple care plan record types, existing orgs with cloned permission sets must add Read and Edit permissions to the Care\_Plan\_Record\_Type\_Name and Care\_Plan\_Record\_Type\_Namespace fields on the Lead object. Users without permissions on these fields can access the default care plan record type only.

You can use the Lead to Patient API to convert leads to patients. Specify a care plan record type name and namespace in the Lead custom fields that matches an active record type name and namespace. If there the fields don't match or the current user doesn't have access to that record type, the default record type is used. If a default hasn't been specified or the user can't access the record type, then the lead is converted using the delivered default record type.

# Get Timeline Details at Your Fingertips

Give your users more information about patient timeline events by adding extra information to the hover text. And console users can now click an event to open the related record in another tab so that all the details of the event are available.

wategore health cloud	Q Search Salesforce ?	\$ <b>\$</b>
Patients ▼ Charles G	Green +	
OPEN NEW TAB     ?       Charles Green April 4, 1961 ( 55 Years 3 Months ) Male	Details       Timeline       Collaboration         Health Timeline       Select All Events-       Start Date       Jan 27, 2016       Days to Show       3	38 ?
AGENT/GLARDIAN/GLARANTOR Amanda Green   Shawma Green LANGLAGES English   English ALLERGIES Peanuts   Penicillin CONDITIONS Obstructive sleep apnea   Type 2 dia Show More MEDICATIONS Avandia   Lisinoprii   Nategilinide IMMUNIZATIONS	Insulin     I	
DPT   Influenza LAST ENCOUNTER 30 min consultation, 2016-04-19 07:05:00Z	1/31/2016 2/7/2016 2/7/2016 2/21/2016 2/21/2016 2/21/2016 2/21/2016 1/1/2016 1/1/2017	() History

Two new fields to the Timeline View Configurations tab let you add more information to the items and events that appear on the timeline.

- The contents of the Detail Field appear on the timeline to identify the event. For example, to display the name of a task, use the Subject field on the Task object. The text from the Subject field shows on the timeline along with the icon that you select for that type of timeline event.
- In the Hover Field Name field, enter up to seven comma-separated field names from the object you want to display. The values from this field appear as hover text for an event on the timeline. Make sure to use the API field name and not the field label. You can show fields from the underlying object as long as they are valid date, number, text, picklist, or combo box fields.

# Procedures and Procedure Requests Added to the Timeline

Now care coordinators can see a patient's medical procedures and requests for medical procedures on the timeline.

EHR Procedure and EHR Procedure request let you expose information about what a practitioner has ordered and what procedure has been performed for a patient.

Details Collaboration Care Plan Timelir	ne 🙂 ProcRequest-1	🖖 Proc-0 🚝	Make biopsy follo
Health Timeline	Select All Events  Start Date	Jan 15, 2017  🎬	Days to Show 31
Request for biop	Engagement Data		
🔑 In-office biopsy	✓ Events		
Run More	✓ Tasks		
	Medical Data		
	Encounters		
	<ul> <li>Prescriptions</li> </ul>		
	Procedures		
	Procedure Requests		
Jan 22, 2017 Jan			Feb 12, 2017
	My Custom Objects		
	TimelineTest		0
ec 18, 2016 Dec 25, 2016 Jan 1, 2017 Jan 8, 2017 Jan 15,		5, 2017 Feb 12, 2	017 Feb 19, 2017

### **Delete Patient Lists**

Now care coordinators can keep their patient lists neat and manageable by deleting obsolete and unwanted lists. Care coordinators can delete the custom patient lists that they created. And if they have the appropriate permissions, they can also delete patient lists created by others.

The new Delete Current List options are now available from the gear button 🔹 dropdown list.

salesforce health cloud	Q Search	Salesforce					?	¢	
8 Patients	•	ŀ							•
Patients Who N	leed Insulir	~		Search	Q	\$ <b>\$</b>	Ac	tion 🔻	?
5 items Refresh				Crea	te New	/ List			
PATIENT	NAME		EMAIL		Curren	t List ent List			
Elizabet	h Bain		elizabeth.j.bain@spambob.com	Dele	te cun	ent List	/		•
Richard	Smith		richard.s.smith@spambob.com						•
Michael	Orr		michael.j.orr@trashymail.com						•
Margare	t Raymond		margaret.a.raymond@trashymail.com						•
Priscilla	Melton		priscilla.c.melton@pookmail.com						•

# Archived Tasks Are Available in Health Cloud Console

Tracking a patient's care can be an ongoing process that spans many years. To help care coordinators with long-term planning and management, we've given them full access to view and edit archived care plan tasks. You can see and manage archived tasks on the patient's timeline, in the care plan, and on the Today page.

Salesforce regularly archives tasks that meet the following age and status criteria.

- Events that ended more than 365 days ago
- Closed tasks due more than 365 days ago
- Closed tasks created more than 365 days ago, if they have no due date

Note: Although you can view and edit archived tasks, archived tasks don't appear in reports.

# Assign a Permission Set License

Control access to Health Cloud by assigning the Health Cloud permission set license to each Health Cloud console user. Starting with the Summer '17 release, you must assign the Health Cloud permission set license to each user. This requirement includes Health Cloud packages installed in a production or sandbox org after the Summer '17 release. If you installed the Health Cloud managed package before the Summer '17 release, this step is optional until further notice.

Note: Only Health Cloud console and Salesforce internal users are required to have the Health Cloud permission set license

#### SEE ALSO:

Health Cloud Implementation Guide: Use the Health Cloud Permission Set License

# Add Visualforce Page Access to Console Users

Orgs created before Summer '17 must add HcFilterLogicValidationPage access to the permission set of users who create patient lists in the Health Cloud console.

The requirement to enable HcFilterLogicValidationPage access is a result of implementing LockerService in Health Cloud. LockerService is a powerful new security architecture for Lightning components. LockerService enhances security by isolating individual Lightning components in their own containers.

# Health Cloud Has New Custom Objects

#### These custom objects are new.

#### Procedure\_\_c

A medical action that is or was performed on a patient. This can be a physical intervention like an operation, or less invasive like counseling or hypnotherapy.

#### ProcedurePerformer\_\_\_c

A junction object that relates Procedure\_\_c and Practitioner\_\_c.

#### ProcedureRequest\_\_c

Represents a request for a procedure to be performed. It can be used to represent a procedure that is planned, proposed, or ordered.

#### **EDITIONS**

Health Cloud is available in Salesforce Classic

Available in: Enterprise, Performance, and Unlimited Editions

# Changed Health Cloud Object

Do more with the FilterCriterion\_\_\_c object.

#### FilterCriterion\_\_\_c

The following field has been added.

#### IsWaveList\_\_c

Indicates whether a patient list originated from the Einstein Analytics for Health Cloud app.

# Customization: Smarter Lightning Pages, More Efficient Setup Navigation, More Options for Flows in Lightning Experience

#### EDITIONS

Health Cloud is available in Salesforce Classic

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

Make your Lightning pages smarter by adding the new Einstein Recommendations component. Navigate more quickly around the Object Manager and other parts of Setup in Lightning Experience. And get more done in Lightning Experience with enhanced approvals and Lightning flow runtime. If that's not enough, check out the usability improvements to our data import tools and global picklists.

Customization features help you extend your org by enhancing your objects, data, and fields, updating your org's look and feel, augmenting your business processes, creating websites, and creating apps—all by using point-and-click tools and maybe some code. Customization features also include tools to administer and secure your org.

#### IN THIS SECTION:

#### Lightning App Builder: New Lightning Page Components

Put Einstein to work for your users, embed active flows in a Lightning page, and add the App Launcher to your apps' Home pages with three new Lightning page components. The Lightning App Builder is available in both Lightning Experience and Salesforce Classic. Unless otherwise noted, the feature changes are only for Lightning Experience.

#### Setup: Right-Click to Navigate, Shorter Load Times in Object Manager

Are you ready to get around Lightning Experience Setup faster? We now support opening new tabs with a right-click, and we gave the Object Manager a makeover that shortens your load times. In addition, we gave rich text editors in your custom fields a new look and added a couple new platform-only languages.

#### Approvals: More Functionality for Lightning Experience and Salesforce1 Users

We want your approvers to have the same experience, no matter if they're using Lightning Experience, Salesforce Classic, or Salesforce 1. These enhancements were available in Salesforce Classic before this release. Some enhancements are new to Salesforce 1, some are new to Lightning Experience, and some are new to both experiences.

#### Visual Workflow: Improved Lightning Component and Lightning Runtime

It's now easier to distribute your flows in Lightning Experience. The Flow component in Lightning App Builder is generally available and no longer has deployment limitations. Lightning runtime supports redirects and being launched from custom buttons, custom links, and web tabs. These changes apply to both Lightning Experience and Salesforce Classic.

#### Data Import Wizard: External IDs, Search, and Other Enhancements

You can now select specific External IDs, choose from multiple field separators, and search which fields to map when you import with the Data Import Wizard. We also changed the way the Data Import Wizard handles invalid field values. These changes apply to both Lightning Experience and Salesforce Classic.

#### Custom Field and Picklist Administration: New Field Type, Field Defaults, Higher Limits, and Promotion to Global Picklists

Custom fields and picklists are easier to use. Set a field-level default to complement a value-level default, and promote restricted picklists to global picklists for reuse. We also increased the number of values allowed in a global value set.

#### Permission Sets: Session-Based Permission Sets Generally Available, Permission Set Metadata Behavior Change

Session-based permission sets are now generally available, and you can even use declarative tools with them. Also check out the behavior change when using metadata for permission sets. These changes apply to both Lightning Experience and Salesforce Classic.

Salesforce Connect: Event Monitoring Pilot, Cross-Org Picklists, Rate Limit for External Object Search Results, and Temporary Salesforce IDs

Track callouts that access external object data. Picklist and multi-select picklist fields on external objects now behave more like you expect. You're also less likely to exceed rate limits when accessing external objects. And make sure that your code and integrations don't require search-retrieved external object records to have permanent Salesforce record IDs.

#### Process Builder: Access Encrypted Data, Stop Suppressing Email Notifications

When you build processes, you now have access to fields that you've protected with Shield Platform Encryption. The only place that encrypted data is off-limits: the filters in an Update Records element. We also released a critical update to prevent processes from suppressing email notifications.

# Lightning App Builder: New Lightning Page Components

Put Einstein to work for your users, embed active flows in a Lightning page, and add the App Launcher to your apps' Home pages with three new Lightning page components. 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:

Power Up Your Lightning Pages with the Flow Component (Generally Available) Welcome a new component to the Lightning App Builder. Use the Flow component to embed active flows in your Lightning page.

Personalize Home and Record Pages with Einstein Recommendations

Add the new Recommendations component so that your users can see relevant people to follow and groups to join.

#### Add a Launch Pad for All Your Third-Party Apps on Your Home Pages

We added an App Launcher component to the Lightning App Builder. Now you can make all your third-party apps available from the first page that your users see. With a Home page, you can combine various components on a single page to present key information to your user in one place. But until now, you couldn't add any third-party apps to Home pages. By adding an App Launcher component to the Home page, users can access all their third-party apps and items in a single click. This feature is new in Lightning Experience.

### Power Up Your Lightning Pages with the Flow Component (Generally Available)

Welcome a new component to the Lightning App Builder. Use the Flow component to embed active flows in your Lightning page.

**EDITIONS** 

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

SEE ALSO:

Embed Your Flows in Lightning Pages (Generally Available) Lightning Experience Features in This Release

### Personalize Home and Record Pages with Einstein Recommendations

Add the new Recommendations component so that your users can see relevant people to follow and groups to join.

 $\bigcirc$ 

Example: Recommendations component properties pane and recommendations on a custom home or record page

0
0

ØD 1	Recommendations		
8)	Francis McDonald Chief Executive Officer		
Your n	nanager	+ Follow	Skip
- av	Team Building Group 6 members		
Group follow	with members you	+ Join	Skip
9	Ann Weill Sales Executive		
Popula	ar user: 4 followers	+ Follow	Skip

SEE ALSO: Lightning Experience Features in This Release

### Add a Launch Pad for All Your Third-Party Apps on Your Home Pages

We added an App Launcher component to the Lightning App Builder. Now you can make all your third-party apps available from the first page that your users see. With a Home page, you can combine various components on a single page to present key information to your user in one place. But until now, you couldn't add any third-party apps to Home pages. By adding an App Launcher component to the Home page, users can access all their third-party apps and items in a single click. This feature is new in Lightning Experience.

When you open the Lightning App Builder and select Home Page, the App Launcher appears on the list of components. Combine the App Launcher with other useful components to give your users all the tools they need directly on their home page. For example, add a notification banner, chatter feed, and task list.

📕 Lightning App Builder - My App		
<b>ち</b> ご ~ ご 自	🖵 Desktop Shrink To View 🔻 🧭 Refresh	Save
Lightning Components		Page
Search components Q	Constants     Constants	• Label
Standard (18)     App Launcher	Stand     Stand     Criter     Mathematics       Stand     Stand     Stand     Stand	My App  • Developer Name
<ul> <li>Assistant</li> <li>Chatter Feed</li> <li>Chatter Publisher</li> </ul>	Man Anger and Anger	My_App Page Type
Filter List	Lever hun • Q. Insch trick hun @	Home Page
Flow Items to Approve Quarterly Performance	Santa spicificati for Santa Non-banet Santa spice faith spice spice shares the Santa set Santa spice faith spice shares	Template Standard Home Page
<ul> <li>Recent Items</li> <li>Recommendations</li> </ul>		Description

The App Launcher is also now available with the Community Service (Napili) Community template. Before this release, the App Launcher was available only with the Salesforce Identity Aloha template.

#### SEE ALSO:

Lightning Experience Features in This Release

# Setup: Right-Click to Navigate, Shorter Load Times in Object Manager

Are you ready to get around Lightning Experience Setup faster? We now support opening new tabs with a right-click, and we gave the Object Manager a makeover that shortens your load times. In addition, we gave rich text editors in your custom fields a new look and added a couple new platform-only languages.

**EDITIONS** 

Available in: All Editions

#### IN THIS SECTION:

#### Open More Tabs from Setup with Right-Click

What's better than 10 web browser tabs full of cat videos? Answer: not losing your place in your workflow. Setup now lets you open new tabs from List and Details views with right-click. Keep track of a multi-step process, like setting up new users, or keep a page open when taking multiple actions from that page. This change applies to Lightning Experience only.

#### Find Your Way to Object Manager More Quickly

Object Manager in Lightning Experience has a new look and helps you shorten load times. With a dedicated tab at the top of the Setup window, you can access quick actions, recent list views, and recent items. Details about your objects are easier to see on the screen, too. This change applies to Lightning Experience only.

#### Efficiency Features at Your Fingertips in Setup

Get ready, get to Setup, and go check out the efficiency features that are at your fingertips. Einstein Readiness Check, Salesforce Optimizer, and Lightning Experience Migration Assistant are easier to find in Setup. This change applies to Lightning Experience only.

#### Rich Text Editors for Custom Fields Get a New Look

We revived rich text editors in custom fields so that you can continue to work with formatted content in records. Rich text editors had been disabled when the LockerService critical update was active. The new version has some visual and formatting differences from the rich text editor that you were familiar with. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### Show Custom Apps in Lightning Experience

There's no time like now to make the switch to Lightning Experience. If your org is still using Salesforce Classic, we're changing your custom app settings so users can use Classic apps in Lightning Experience when you make the switch. This change applies only to orgs that haven't enabled Lightning Experience. If you've already enabled Lightning Experience, your current custom app settings are retained.

#### Disable Lookup Record Preview in Lightning Experience for Accessibility

When you're viewing a record in Lightning Experience, you can hover over links to related records to preview lookup record details. For example, while viewing an Opportunity, you can view the cases and other opportunities associated with the account by hovering over the account name. You can disable this feature to ensure that Lightning Experience is accessible for visually impaired users employing screen readers. To disable lookup record preview, contact Salesforce Support.

#### Supported Languages Changed and Added

Dutch (Belgium) and German (Belgium) are now platform-only languages. You and your customers can access Salesforce and your custom applications in more languages.

#### Delegated Admins: View and Assign Public Groups with More Ease

On the Assignable Public Groups page, you can view up to 1,000 groups at a time and page through the list as you go. If you have many public groups to assign, your life just got easier. We also updated the label on a button. Instead of **Cancel** the button is now **Close**. These changes apply to both Lightning Experience and Salesforce Classic.

#### Block Execution of JavaScript in the HYPERLINK Function (Critical Update)

Previously, you could use JavaScript to prepare the URL argument in a HYPERLINK function. However, this approach introduces a security vulnerability because JavaScript can include cross-site scripting and make the URL execute on behalf of users. This critical update blocks the execution of JavaScript used to specify a URL in the HYPERLINK function.

#### SEE ALSO:

Get Better Assistance with the Restyled Lightning Experience Migration Assistant Switch More Users to Lightning Experience Make Lightning Experience the Only Experience

## Open More Tabs from Setup with Right-Click

What's better than 10 web browser tabs full of cat videos? Answer: not losing your place in your workflow. Setup now lets you open new tabs from List and Details views with right-click. Keep track of a multi-step process, like setting up new users, or keep a page open when taking multiple actions from that page. This change applies to Lightning Experience only.

For example, to update several picklist value sets, you can open each one in its own tab while preserving the Global Value Set page in your browser. You can make your changes and check your work before heading off to another task.

ADMINISTRATION	Picklist Value Sets
/ Osers	
> Data	Picklist Value Sets
> Email	Global picklist value sets let you share the values across objects. Base custon users can't add unapproved values through the API.
PLATFORM TOOLS	View: All   Create New View
> Apps	A   B
> Feature Settings	Global Value Sets
<ul> <li>Objects and Fields</li> </ul>	Action Label ↑
objects and ricits	Edit   Del Account Type
Object Manager	Edit   Del Acc Open Link in New Tab
Picklist Value Sets	Edit Del Reg Deleted Global Val Open Link in New Window
Schema Builder	Save Link As
> User Interface	Copy Link Address
> Custom Code	Copy Search Google for "Region" Print

You can access these new tabs in Lightning Experience and embedded Aloha pages.

# Find Your Way to Object Manager More Quickly

Object Manager in Lightning Experience has a new look and helps you shorten load times. With a dedicated tab at the top of the Setup window, you can access quick actions, recent list views, and recent items. Details about your objects are easier to see on the screen, too. This change applies to Lightning Experience only.

The Object Manager tab lets you access quick actions, recent list views, and recent items. It also gives you a shortcut to create a new object.

Object Manager 🗸	
+ New Object	
RECENT RECORDS	
Book	ŝ
Priority Accounts	

When you select an object from the Object Manager list (1), all related lists for that object display on the left side (2). This pane stays visible while you drill into your related lists (3). Information from the related list displays in an easy-to-scan horizontal format. No more scrolling up and down the page to find information. We even added infinite scroll on your objects' related lists to kick even more load time to the curb.

	Q Search Sales	sforce			? 🅸 🌲 🙆
Setup Home Object Manager V					
SETUP > OBJECT MANAGER					
Details 2	Fields & Relationsh 24 Items, Sorted by Field Label		Q Find in page	New Field Dependencies	s Set History Tracking
	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts	Account Name	Name	Name		~
Lightning Record Pages	Account Number	AccountNumber	Text(40)		
Buttons, Links, and Actions	Account Owner	OwnerId	Lookup(User)		~
Compact Layouts	Account Site	Site	Text(80)		
Object Limits Related Lookup Filters	Account Source	AccountSource	Picklist		•
	Annual Revenue	AnnualRevenue	Currency(18, 0)		
Search Layouts	Billing Address	BillingAddress	Address		
Triggers	Created By	CreatedById	Lookup(User)		
Validation Rules	Data.com Key	Jigsaw	Text(20)		
Hierarchy Columns	Description	Description	Long Text Area(32000)		
	Employees	NumberOfEmployees	Number(8, 0)	•	
	Fax	Fax	Fax		

### Efficiency Features at Your Fingertips in Setup

Get ready, get to Setup, and go check out the efficiency features that are at your fingertips. Einstein Readiness Check, Salesforce Optimizer, and Lightning Experience Migration Assistant are easier to find in Setup. This change applies to Lightning Experience only.

- Einstein Readiness Check shows you which Einstein features you can start using now, and which features require some additional setup. From Setup, enter *Sales Cloud Einstein* in the Quick Find box, then select **Readiness Check** under Sales Cloud Einstein.
- Salesforce Optimizer evaluates your implementation to determine how your company uses certain Salesforce features. It then identifies ways that you can improve your implementation for your company. In Setup, enter *Optimizer* in the Quick Find box, then select **Optimizer**.
- Lightning Experience Migration Assistant is more concise and easier to navigate. It has a new wizard-style interface to help you assess your readiness, set up features and users, and flip the switch. You can easily access the Readiness Check as well.

SEE ALSO:

Assess Your Sales Cloud Einstein Readiness

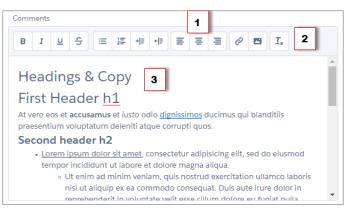
Get Better Assistance with the Restyled Lightning Experience Migration Assistant

## Rich Text Editors for Custom Fields Get a New Look

We revived rich text editors in custom fields so that you can continue to work with formatted content in records. Rich text editors had been disabled when the LockerService critical update was active. The new version has some visual and formatting differences from the rich text editor that you were familiar with. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

No changes have been made to rich text editors in Salesforce Classic. You get the following features in Lightning Experience and Salesforce 1.

- Format text as bold, italicized, underlined, or strikethrough
- Create bulleted and numbered lists
- Change paragraph indentation
- Insert a hyperlink
- Insert an image
- Remove formatting



The new rich text editors for custom fields in Lightning Experience and Salesforce1 have the following differences, as compared to the rich text editors in Salesforce Classic.

- The text alignment buttons (1) are displayed after the list and indentation buttons.
- The Remove Formatting button (2) clears text formatting.
- The default font family (3) is Salesforce Sans, Arial, sans-serif, instead of Arial, Verdana, Trebuchet MS, sans-serif.
- The Undo and Redo buttons are no longer available. You can use keyboard shortcuts to undo and redo content formatting. In Windows, undo your last action by pressing Ctrl+Z, and reverse your last undo by pressing Ctrl+Y. On Mac OS, use Cmd+Z and Cmd+Y. Alternatively, use the Edit menu in your browser to undo or redo your changes.

Note: We recommend using the toolbar to format your content. The rich text editor provides only a WYSIWYG interface. You can't edit HTML tags. When you copy content from a web page or another source and paste it into the editor, unsupported tags are removed. Text that was enclosed in unsupported tags is preserved as plain text.

### Formatting Support

The power of the rich text editor is in its WYSIWYG interface, therefore type in the editor and use the toolbar to format your content as much as you can. When you paste formatted content from another source, you can expect some formatting differences in Lightning Experience and Salesforce1. Here are formatting considerations to look out for.

Warning: If you add a custom rich text area field in Salesforce Classic and edit it in Lightning Experience, you can also expect the formatting differences. Saving your changes in Lightning Experience overwrites the original formatting you had in Salesforce

Classic and conversely. Alternatively, you can fix some of the formatting using the toolbar or switch to Salesforce Classic to perform your edits.

#### **Definition lists**

Formatting for definition lists is preserved, but the styling appears different in Lightning Experience and Salesforce 1. Definition terms are not bold.

#### Fonts

Pasting text with a predefined font face, color, or size converts the font tag into a span tag with the style attribute.

#### Headings

Inline styles on h1, h2, h3, h4, h5, and h6 tags are not supported and are ignored.

#### Hyperlinks

Hyperlinks always open in a new window or tab in Lightning Experience and Salesforce 1. If you enter a hyperlink with a different target value in Salesforce Classic and edit the rich text field in Lightning Experience or Salesforce 1, the target value is converted to \_blank.

#### **Inline styles**

In Salesforce Classic, inline styles are supported on div, span, p, br, and hr tags. In Lightning Experience and Salesforce 1, inline styles are supported only on span tags.

#### Lists

Nesting a bulleted list within a numbered list and nesting a numbered list within a bulleted list are not supported. Nesting a numbered list within a bulleted list (4) converts the numbered list into a bulleted list (5) when it's pasted into the editor, while nesting a bulleted list within a numbered list (6) converts the bulleted list into a numbered list (7).

Coffee     1. America	no	<ul> <li>CoffeeAmeri</li> <li>Cafe mocha</li> </ul>		1. Coffee • Americano	1. CoffeeAmerio 2. Cafe mocha	cano
2. Cafe mo 3. Cappucin	no	<ul><li>Cappucino</li><li>Espresso</li></ul>		<ul><li>Cafe mocha</li><li>Cappucino</li></ul>	3. Cappucino 4. Espresso	
4. Espresso • Tea • Milk	4	• Tea • Milk	5	• Espresso 2. Tea 3. Milk 6	5. Tea 6. Milk	7

Warning: If you edit an existing rich text area field containing a nested list of a different type in Lightning Experience and Salesforce1, the nested list is converted to the same type as its parent list as described previously. Look for continued improvements for nested lists in future releases.

Nested lists of the same type are supported. However, pasting a nested list into the editor flattens the list into one list in Lightning Experience and Salesforce1. For example, a nested bulleted list within a bulleted list (8) becomes a single bulleted list (9) when pasted. For nested lists of the same type, as shown by (8) and (9), use the toolbar to adjust your list formatting. You can also press the Tab key or Shift+Tab to create a nested list item or remove a nested list item.



Note: In Lightning Experience and Salesforce 1, pasting lists that are copied from Microsoft<sup>®</sup> Word is not supported and results in list items getting converted into paragraphs. Although they look visually like lists, they are pasted as p tags.

#### Paragraphs

Pressing the Enter key creates a paragraph, which adds padding to the text when saved in Lightning Experience and Salesforce1.

#### Tables

In Salesforce Classic, Lightning Experience, and Salesforce1, pasting of tables is supported but you can edit only the content within the tables.

#### **Text-level markup**

- Addresses with address tags cause enclosing list formatting to be removed.
- Nested quotes using q tags are not supported.
- Strikethrough text with strike tags are converted to s tags.
- Teletype text with tt tags are converted to code tags.

This table lists supported HTML tags and formatting considerations in Lightning Experience and Salesforce1. When you edit a rich text field or paste text with unsupported tags Lightning Experience and Salesforce1, those tags are removed. Text that was enclosed in unsupported tags is preserved as plain text.

HTML Tags Supported in Salesforce Classic	Supported in Custom Fields in Lightning Experience and Salesforce1?	Comments for Lightning Experience and Salesforce1
a	✓	The <code>target</code> attribute is always set to <code>_blank</code> . This tag is removed if <code>href</code> has no value.
abbr	~	
acronym		This tag is converted into an abbr tag.
address	A	When text with this tag is nested in a list and pasted in the editor, the list tags,ol, li, and ul, are removed. Some tags before the address tag get nested in address.
b	~	
bdo	<	
big	<	
blockquote	<	Consecutive block quotes are merged.
br	<	
caption	<	
cite	<	
code	<	
col	<	
colgroup	<	
dd	~	

HTML Tags Supported in Salesforce Classic	Supported in Custom Fields in Lightning Experience and Salesforce1?	Comments for Lightning Experience and Salesforce1
del	<	
dfn	<	
div	<	
dl	<	
dt	<	Definition terms are not bold.
em	~	
font		Pasting text with a predefined font face, color, or size converts the font tag into a span tag with the style attribute.
h1	<	Inline styles on headings are not supported.
h2	<	Inline styles on headings are not supported.
h3	<	Inline styles on headings are not supported.
h4	<	Inline styles on headings are not supported.
h5	<	Inline styles on headings are not supported.
h6	<	Inline styles on headings are not supported.
hr	<	
i	<ul><li>✓</li></ul>	
img	<	
ins	<ul><li>✓</li></ul>	
kbd	<	
li	✓	Pasting a nested list of the same type flattens the list into one list for example, a nested bulleted list within a bulleted list. Use the toolbar to adjust your list formatting.
ol	~	Nesting an ordered list (numbered) in an unordered list (bulleted converts the ordered list into an unordered list.
р	<	
pre	<	
q	<	Nested quotes are not supported.
S	<	
samp	<	
small	~	

HTML Tags Supported in Salesforce Classic	Supported in Custom Fields in Lightning Experience and Salesforce1?	Comments for Lightning Experience and Salesforce1
span	~	This tag is nested in a $_{\mathrm{P}}$ tag, which adds extra padding around the text.
strike	~	This tag is converted into an $ { { m s}} $ tag and is visually the same.
strong	~	
sub	~	Nested sub tags are merged.
sup	~	Nested sup tags are merged.
table	~	
tbody	~	
td	~	
tfoot	~	
th	~	
thead	~	
tr	~	
tt		This tag is converted into a code tag.
u	~	
ul	~	Nesting an unordered list (bulleted) in an ordered list (numbered) converts the unordered list into an ordered list.
var	<	

## Show Custom Apps in Lightning Experience

There's no time like now to make the switch to Lightning Experience. If your org is still using Salesforce Classic, we're changing your custom app settings so users can use Classic apps in Lightning Experience when you make the switch. This change applies only to orgs that haven't enabled Lightning Experience. If you've already enabled Lightning Experience, your current custom app settings are retained.

Here's what to expect when you add a custom Classic app after the Summer '17 release.

- If you haven't enabled Lighting Experience for your org, Show in Lightning Experience is enabled by default.
- If you've enabled Lightning Experience for your org, Show in Lightning Experience is disabled by default.

Don't worry. This change has no impact on the functionality of your custom apps, and the setting doesn't affect custom Classic apps that are part of a managed package.

## Disable Lookup Record Preview in Lightning Experience for Accessibility

When you're viewing a record in Lightning Experience, you can hover over links to related records to preview lookup record details. For example, while viewing an Opportunity, you can view the cases and other opportunities associated with the account by hovering over the account name. You can disable this feature to ensure that Lightning Experience is accessible for visually impaired users employing screen readers. To disable lookup record preview, contact Salesforce Support.

**EDITIONS** 

Available in all editions

#### SEE ALSO:

Salesforce Help: Accessibility Standards (can be outdated or unavailable during release preview)

## Supported Languages Changed and Added

Dutch (Belgium) and German (Belgium) are now platform-only languages. You and your customers can access Salesforce and your custom applications in more languages.

When you specify Dutch (Belgium) or German (Belgium) as a language, labels for standard objects and fields fall back to Dutch or German, respectively.

#### SEE ALSO:

Salesforce Help: Supported Languages (can be outdated or unavailable during release preview)

### Delegated Admins: View and Assign Public Groups with More Ease

On the Assignable Public Groups page, you can view up to 1,000 groups at a time and page through the list as you go. If you have many public groups to assign, your life just got easier. We also updated the label on a button. Instead of **Cancel** the button is now **Close**. These changes apply to both Lightning Experience and Salesforce Classic.

#### EDITIONS

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

# Block Execution of JavaScript in the HYPERLINK Function (Critical Update)

Previously, you could use JavaScript to prepare the URL argument in a HYPERLINK function. However, this approach introduces a security vulnerability because JavaScript can include cross-site scripting and make the URL execute on behalf of users. This critical update blocks the execution of JavaScript used to specify a URL in the HYPERLINK function.

Before activating this update, we recommend that you review the use of JavaScript in HYPERLINK functions in your Salesforce org and begin migration toward alternative solutions. Here are some possible workarounds.

- Custom button or link to execute onClick JavaScript. See Custom Buttons or Links. Supported in Salesforce Classic only.
- Lightning Experience Quick Action button. Create JavaScript in a Lightning Experience component executed through a Quick Action button. Supported in Lightning Experience only.
- 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 to determine the URL in the controller method, to perform the redirect.

#### EDITIONS

Available in: **Personal**, **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, **Developer**, **Contact Manager**, and **Database.com** Editions 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 CRUC, see Using Apex Code in Workbench to Find JavaScript.

SEE ALSO:

Tips for Working with Text Formula Fields Formula Operators and Functions A–H

# Approvals: More Functionality for Lightning Experience and Salesforce1 Users

We want your approvers to have the same experience, no matter if they're using Lightning Experience, Salesforce Classic, or Salesforce1. These enhancements were available in Salesforce Classic before this release. Some enhancements are new to Salesforce1, some are new to Lightning Experience, and some are new to both experiences.

#### **EDITIONS**

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

IN THIS SECTION:

#### Reassign Approval Requests

If you receive an approval request that someone else should approve, you can now reassign it to the person from any Salesforce experience. Previously, you could reassign approval requests only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### **Recall Submitted Approval Requests**

If you want to pull back an approval request that you submitted, you can now recall it from any Salesforce experience. Previously, you could recall approval requests only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### **View Approval Comments**

When you receive an approval request on your mobile device, you can now view the comments left by other approvers. Previously, you had to use the full Salesforce site to view approval comments.

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If you receive an approval request that someone else should approve, you can now reassign it to the person from any Salesforce experience. Previously, you could reassign approval requests only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce 1 mobile app.

SEE ALSO:

Salesforce1: Everything That's New Lightning Experience Features in This Release

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If you want to pull back an approval request that you submitted, you can now recall it from any Salesforce experience. Previously, you could recall approval requests only in Salesforce Classic. This change applies to Lightning Experience and all versions of the Salesforce1 mobile app.

#### SEE ALSO:

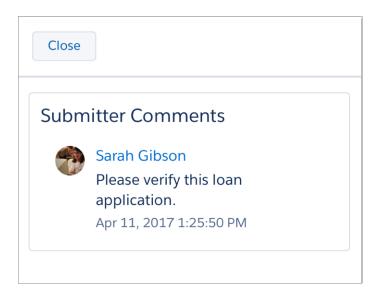
Salesforce1: Everything That's New Lightning Experience Features in This Release

## **View Approval Comments**

When you receive an approval request on your mobile device, you can now view the comments left by other approvers. Previously, you had to use the full Salesforce site to view approval comments.

You can view comments from two places in Salesforce1.

- From a notification or the Pending Approvals navigation item, open an approval request. Tap **Comments** to see all comments for the associated record.
- From a record's Approval History related list, open an approval request. Tap **Comments** to see the full comment for that approval request.



SEE ALSO:

Salesforce1: Everything That's New

# Visual Workflow: Improved Lightning Component and Lightning Runtime

It's now easier to distribute your flows in Lightning Experience. The Flow component in Lightning App Builder is generally available and no longer has deployment limitations. Lightning runtime supports redirects and being launched from custom buttons, custom links, and web tabs. These changes apply to both Lightning Experience and Salesforce Classic.

#### **EDITIONS**

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

#### IN THIS SECTION:

#### Embed Your Flows in Lightning Pages (Generally Available)

We're rolling out a Flow component for the Lightning App Builder. You can now add flows to any Lightning page. All Lightning pages are available in Lightning Experience. App pages are available in all versions of the Salesforce1 mobile app.

#### Launch Flows in Lightning Runtime from Buttons, Links, and Custom Tabs

Lightning flow runtime now plays nicer with custom buttons, custom links, and web tabs. Say goodbye to blank screens and tabs where you were expecting a flow to render.

#### Redirect Flows That Render in Lightning Runtime

The URL parameter retURL lets you control what happens when a flow interview finishes. Lightning runtime now respects the URL parameter retURL. Previously, only the Classic runtime respected the parameter. This change applies to both Lightning Experience and Salesforce Classic.

#### Now You See Me, Now You Don't: Dynamically Update Flow Screen Fields (Pilot)

The fewer times your users have to click **Next**, the better. If you agree, keep reading! Use field rules to control when to show or hide particular screen fields. Turn your flows into guided UIs that respond to users' inputs and selections. Save your users time by showing only what they need when they need it. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app. However, it takes effect only for flows that use Lightning runtime.

#### Access Encrypted Data in Your Flows (Beta)

Flows now support encrypted fields, except in filters and sorting. This change applies to both Lightning Experience and Salesforce Classic.

#### Get Extended Error Details for Flows in the Tooling API

Do you use the Force.com Tooling API to build flows? In most places, we replaced the dreaded UNKNOWN\_EXCEPTION error code with FLOW\_EXCEPTION. And we added extended error details to most flow errors. That way, you can craft the right error message for your client.

#### 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.

#### SEE ALSO:

Activate or Deactivate a Session-Based Permission Set Using a Flow

## Embed Your Flows in Lightning Pages (Generally Available)

We're rolling out a Flow component for the Lightning App Builder. You can now add flows to any Lightning page. All Lightning pages are available in Lightning Experience. App pages are available in all versions of the Salesforce1 mobile app.

Add the Flow component to your Lightning pages just like you would any other component.

Your flow might need the ID of the record that it's operating on, but don't worry! When you configure the Flow component for a record page, you can identify to which Text variable to pass the record ID.

Section 2. Construction of the section of the secti

Acme	+ Follow Edit New Contact New Case 🔻		
Survey Customers 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? Customer Response	New Task     New Event     Log a Call     Email       Subject		
Ves No	No next steps. To get things moving, add a task or set up meeting. Past Activity No past activity. Past meetings and tasks marked as don show up here.		
Learn More Using Twitter Sign in to link a Twitter profile, find people in common, and quickly access recent tweets.			

#### Changes Since Last Release

The Flow component is now supported for deployment, including with:

- Packages
- Change sets
- Sandbox copies
- Trialforce templates
- Metadata API

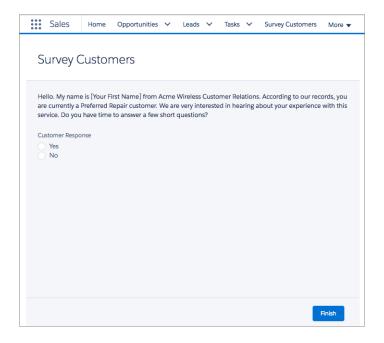
SEE ALSO:

Lightning Experience Features in This Release

## Launch Flows in Lightning Runtime from Buttons, Links, and Custom Tabs

Lightning flow runtime now plays nicer with custom buttons, custom links, and web tabs. Say goodbye to blank screens and tabs where you were expecting a flow to render.

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## Redirect Flows That Render in Lightning Runtime

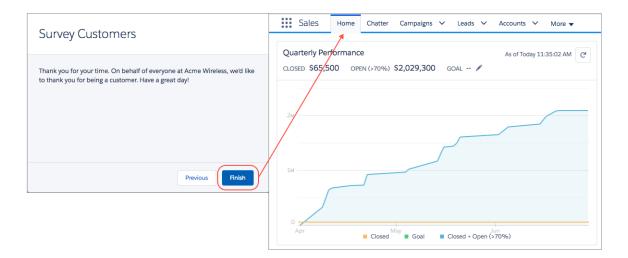
The URL parameter retURL lets you control what happens when a flow interview finishes. Lightning runtime now respects the URL parameter retURL. Previously, only the Classic runtime respected the parameter. This change applies to both Lightning Experience and Salesforce Classic.

Note: In Lightning Experience, you can redirect a flow in a web tab only to a Visualforce page.

Example: You create a custom button called "Survey Customers" with this URL.

/flow/Survey\_Customers?retURL=home/home.jsp

When a user clicks Survey Customers, the flow runs. When the user clicks Finish, Salesforce redirects the user to the home page.



## Now You See Me, Now You Don't: Dynamically Update Flow Screen Fields (Pilot)

The fewer times your users have to click **Next**, the better. If you agree, keep reading! Use field rules to control when to show or hide particular screen fields. Turn your flows into guided UIs that respond to users' inputs and selections. Save your users time by showing only what they need when they need it. This feature is available in Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app. However, it takes effect only for flows that use Lightning runtime.

Each field rule consists of conditions (1) and field settings (2). The conditions specify when to execute the rule. The field settings let you control whether the field is visible, hidden, required, or optional.

Field Rule		×			
Control settings for selected fie this screen.	Ids on this screen. Enter a unique na	me to help you distinguish this rule from other field rules for			
Name * if Text or Call, sho	w Phone				
Conditions					
Resource	Operator	Value			
1 {!Call_Me}	was selected	▼ {!\$GlobalConstant.True} ▼ □			
OR {!Text_Me}	▼ was selected	▼ {!\$GlobalConstant.True} ▼			
Add Condition   One condition must be true (OR)					
▼ Field Settings					
Control what happens to selec	ted fields when the conditions are me	L			
Field	Setting	Value			
2 {!Phone}	▼ Visible	▼ Yes ▼			
Add Field		¥			
	OK	Icel			

**Example**: You want to ask your users how they prefer to be contacted. Reveal the Phone Number textbox only if they prefer calls or texts, and reveal the Email Address textbox only if they prefer emails.



Contact Preference	
Call Me	
<ul> <li>Text Me</li> </ul>	
Email Me	
Email Address	

## Access Encrypted Data in Your Flows (Beta)

Flows now support encrypted fields, except in filters and sorting. This change applies to both Lightning Experience and Salesforce Classic.

**Note:** This release contains a beta version of encryption support in flows and processes that is production quality but has known limitations. To access this feature, contact Salesforce. To provide feedback and suggestions, go to IdeaExchange.

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:

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Access Encrypted Data with Flows and Process Builder (Beta)

### Get Extended Error Details for Flows in the Tooling API

Do you use the Force.com Tooling API to build flows? In most places, we replaced the dreaded UNKNOWN\_EXCEPTION error code with FLOW\_EXCEPTION. And we added extended error details to most flow errors. That way, you can craft the right error message for your client.

#### Stample:

Error Message in Version 40.0	Error Message in Version 39.0	
<pre>[ {    "message" : "myRecordUpdate (Record Update) - Your org doesn't support encrypted fields in flows. Remove the reference to "AccountName".",    "errorCode" : "FLOW_EXCEPTION",    "fields" : [ ],    "extendedErrorDetails" : [ {       "extendedErrorCode" :    "OBJECT_ENCRYPTED_FIELDS_NOT_SUPPORTED",       "formulaExpression" : "AccountName"     } ] } ]</pre>	<pre>[ {    "message" : "myRecordUpdate (Record Update) - Your org doesn't support encrypted fields in flows. Remove the reference to "AccountName".",    "errorCode" : "UNKNOWN_EXCEPTION",    "fields" : [ ], } ]</pre>	

## 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.

**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.

If you're an existing pilot customer, nothing has changed since the last release.

Here are some of the 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.

Would you like to hear more about future deals and promotions?		Would you like to hear more about future deals and promotions?
Yes, by email		Yes, by email
Yes, by text		Yes, by text
No, thank you		No, thank you
Required		Required
Email		Phone
NEXT PAUSE		NEXT PAUSE

SEE ALSO:

New Resources: Flows and Flow Interviews (Pilot)

# Data Import Wizard: External IDs, Search, and Other Enhancements

You can now select specific External IDs, choose from multiple field separators, and search which fields to map when you import with the Data Import Wizard. We also changed the way the Data Import Wizard handles invalid field values. These changes apply to both Lightning Experience and Salesforce Classic.

#### **EDITIONS**

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

Your edition determines the types of objects you can import.

#### IN THIS SECTION:

#### Search for Fields When Mapping

Mapping fields in the Data Import Wizard can be confusing, especially when you have objects with many fields. So we made it easier. You can now search for fields to map instead of scrolling through a long list of fields.

#### Separate Data in Your Import File

You can now import files with fields separated by either a comma or tab in the Data Import Wizard.

#### The Handling of Errors During Import Has Changed

Previously, when you imported a CSV file with an invalid value, the row was imported, but the invalid field was dropped and you were not notified of the error. Now the row does not import and the error shows on the import notification email as failed. Also, when your file contained duplicate rows, those rows did not import but you were not alerted to the error. Now duplicate rows show as rejected on the import notification email.

#### Match Look-Up Fields with an External ID

The Data Import Wizard now supports matching by specific external IDs in look-up and master-detail fields.

## Search for Fields When Mapping

Mapping fields in the Data Import Wizard can be confusing, especially when you have objects with many fields. So we made it easier. You can now search for fields to map instead of scrolling through a long list of fields.

To map fields using the search function in the Data Import Wizard, select the CSV field to map or change and search in the Find Field box.

Edit Field Mapping: Accounts and Contacts Your file has been auto-mapped to existing Salesforce fields, but you can edit the mappings if you wish. Unmapped fields will not be imported.			Map your field: <b>Rating</b> Map to: [Salesforce Field <b>v</b> ]
Edit	Mapped Salesforce Object	CSV Header	Select field
Change	Account: Account Name	Account Name	Find field
Change	Account: Type	Туре	Account: Account Name
Map	Unmapped 9	Rating	Account: Type Account: Parent Account
Change	Account: Billing State/Province	Billing State/Province	Account: Billing Street
			Account: Billing City
			Account: Billing Zip/Postal Code 👻
			Cancel Map

To remove an incorrectly mapped field, delete it from the Find Field box.

Edit Field Mapping: Accounts and Contacts Your file has been auto-mapped to existing Salesforce fields, but you can edit the mappings if you wish. Unmapped fields will not be imported.			Map your field: <b>Type</b> Map to: [Salesforce Field <b>V</b> ]
		Select field	
Change	Account: Account Name	Account Name	Account: Type × Find field
Change	Account: Type	Туре	Account: Account Name
Мар	Unmapped 9	Rating	Account: Type
Change	Account: Billing State/Province	Billing State/Province	Account: Parent Account
			Account: Billing City
			Account: Billing Zip/Postal Code
			Cancel Map

## Separate Data in Your Import File

You can now import files with fields separated by either a comma or tab in the Data Import Wizard.

Make sure that the CSV file contains only one delimiter character. Otherwise, your data can be split up incorrectly. To set a delimiter in the Data Import Wizard, select **Comma** or **Tab** from the Values Separated By dropdown.

CSV		
File		
Choose File No file chosen		
Character Code 🔞		
ISO-8859-1 (General US & Western European, ISO-LATIN-1) ▼		
Values Separated By		
Comma 🔻		
Comma		
Tab		

## The Handling of Errors During Import Has Changed

Previously, when you imported a CSV file with an invalid value, the row was imported, but the invalid field was dropped and you were not notified of the error. Now the row does not import and the error shows on the import notification email as failed. Also, when your file contained duplicate rows, those rows did not import but you were not alerted to the error. Now duplicate rows show as rejected on the import notification email.

For example, imported text fields have a character limit. If your field exceeds the limit, the row does not import. Your import notification email lets you know when a row doesn't import, and details are available on the Bulk Job monitoring page.

# Match Look-Up Fields with an External ID

The Data Import Wizard now supports matching by specific external IDs in look-up and master-detail fields.

When you're importing an object with multiple external IDs and you choose to match the look-up file by external ID, you're prompted to select one.

Import your D You can import up to 5			
What kind of data are	e you importing? 🔞		What do you want to do? 🕖
Standard objects	Custom objects		Add new records
Accounts and Conta	acts	×	Match Contact by: <sup>1</sup> None- ▼
Leads		>	Match Account by:
Solutions		>	Which Custom Object field in your file do you want to match against to set the Account: Custom Object lookup field?
Campaign Members	S	>	-None- Custom Object Name Salesforce.com ID Custom Number (External ID) Custom Text (External ID) Custom Email (External ID) -None- Ins @
			Assign contacts to campaigns

# Custom Field and Picklist Administration: New Field Type, Field Defaults, Higher Limits, and Promotion to Global Picklists

Custom fields and picklists are easier to use. Set a field-level default to complement a value-level default, and promote restricted picklists to global picklists for reuse. We also increased the number of values allowed in a global value set.



Available in all editions

IN THIS SECTION:

#### Track Time with the New Time Field Type (Pilot)

Sometimes you require a time of day that is not specific to a single date, or you want to compare times of the day to calculate a duration. The Time type tracks time or indicates date-independent time. The Time type is useful for time management, event planning, and project management. You can use it to indicate business hours, preferred contact times, repeated event times, like a hotel check-in time, or track a call waiting time.

#### Define Default Values at the Field Level

Up until now, the same default field value applied for all users, and to change it, you had to update the default from Setup. Now you can also define a default value at the field level. The new field-level default has precedence over the values-level default. The field-level default value can be a constant or a formula.

#### Promote Your Picklist Fields to Global Value Sets

Global Picklists became generally available Winter '17. Since then, we've been busy adding features, and now you can migrate existing picklist fields into global value sets.

#### Global Value Sets Get Higher Limits

The number of entries in picklist global value sets has doubled from 500 to 1,000. You can have up to 500 picklist global value sets in an org. Each global value set, or restricted picklist, can contain a mix of 1,000 active and inactive values. Unrestricted picklists can have up to 1,000 active values. There's no limit on the number of custom picklists that use global picklist value sets.

## Track Time with the New Time Field Type (Pilot)

Sometimes you require a time of day that is not specific to a single date, or you want to compare times of the day to calculate a duration. The Time type tracks time or indicates date-independent time. The Time type is useful for time management, event planning, and project management. You can use it to indicate business hours, preferred contact times, repeated event times, like a hotel check-in time, or track a call waiting time.

Note: We provide access to the Time type 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. 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. Base your purchase decisions only on generally available products and features. You can provide feedback and suggestions for this feature in the Custom Time Field group in the Success Community.

The Time type is essentially a timestamp without the date included. You can select the Time field type when you create a new custom field.

Be aware of these behaviors when using the Time type.

- The Time type uses a 24-hour notation.
- You can display time in HH:MM, for example, 14:40.
- Time values are not localized or associated with a time zone. For example, if you enter 15:00, for 3 pm, all users see the same value.

## Define Default Values at the Field Level

Up until now, the same default field value applied for all users, and to change it, you had to update the default from Setup. Now you can also define a default value at the field level. The new field-level default has precedence over the values-level default. The field-level default value can be a constant or a formula.

Let's say you want a custom picklist field on an Opportunity object to track the priority of a particular opportunity. In addition, you want to have a default priority for the opportunities that are being created.

Values			New Reorde	er Replace Printable View Chart Colors 🔻
Action	Values	API Name	Default	Chart Colors
Edit   Del   Deactivate	High	High		Assigned dynamically
Edit   Del   Deactivate	Medium	Medium	1	Assigned dynamically
Edit   Del   Deactivate	Low	Low		Assigned dynamically

But what if you want to set up a different default priority for another group of users? Imagine that you have a fast response sales team in your org. You want all opportunities created by them to be treated with a higher priority. It's now possible with new formula-based default field values. To add a default value formula:



Available in all editions

**EDITIONS** 

Available in all editions

	Select Field Type	Insert Field	Incard Occurring W	All Function Categori
	Select field type 😒 Insert Merge Field 😒 💾	Insert Operator *	ABS	
	<pre>IF(\$Profile.Name =</pre>	"Fast Response Sales",	"High", "")	AND BEGINS BLANKVALUE BR CASE Insert Selected Function
			tes : ("the_text"), include numbers without lations in the standard format: (Today() +	]

So, if the user profile is Fast Response Sales, then priority is set to High, but for everyone else it remains Medium. How is this magic possible? It's possible because now we have two levels of default values:

- Field-level default—Defined by the formula
- Value-level default—The way you used to set up default values

When there's no formula for a default value, or when a formula does not resolve to an existing value's API name, the value-level default is applied. In our example, that's how Medium remains the default for profiles other than Fast Response Sales.

The new formula-based default values also let you have different default values for each field that uses the same Global Value Set. Previously, all fields had the same value, defined on a value set. Now for different default values you just set up individual default formulas for each field.

#### SEE ALSO:

IdeaExchange: Default Values on Picklist Fields

## Promote Your Picklist Fields to Global Value Sets

Global Picklists became generally available Winter '17. Since then, we've been busy adding features, and now you can migrate existing picklist fields into global value sets.

#### EDITIONS

Available in all editions

Promote a single picklist field into a global value set by editing your picklist field and clicking **Promote to Global Value Set**.

Edit Account Custom Field						Help for	this Page 🕜
Custom Field Defin	ition Edit	Change Field Type	Promote to Gl	obal Value Set	Save Cancel		
Field Information						= Required	Information
Field Label Field Name Description	Active Active			Data Type F	Picklist		
Help Text							i

A new global value set is created, and the promoted field now references it. You can also use the new global value set for other fields.

There are a few limitations to be aware of:

• You can only promote fields that have fewer than 1,000 values (both active and inactive).

- You can only promote restricted picklists. If you want to promote an unrestricted picklist, first convert it to a restricted picklist.
- You cannot promote a field to an existing global value set. But check out this Salesforce Lab App for some help.
- After a field is promoted, you can't demote it back.

## Global Value Sets Get Higher Limits

The number of entries in picklist global value sets has doubled from 500 to 1,000. You can have up to 500 picklist global value sets in an org. Each global value set, or restricted picklist, can contain a mix of 1,000 active and inactive values. Unrestricted picklists can have up to 1,000 active values. There's no limit on the number of custom picklists that use global picklist value sets.

Custom single-select picklists can have:

- Up to 1,000 values
- Up to 255 characters per value

Custom multi-select picklists can have:

- Up to 500 values
- Up to 255 characters per value

Users can select up to 100 values at a time on a record.

#### EDITIONS

Available in all editions

# Permission Sets: Session-Based Permission Sets Generally Available, Permission Set Metadata Behavior Change

Session-based permission sets are now generally available, and you can even use declarative tools with them. Also check out the behavior change when using metadata for permission sets. These changes apply to both Lightning Experience and Salesforce Classic.

#### IN THIS SECTION:

#### Session-Based Permission Sets Are Generally Available

Session-based permission sets apply to a specific session. Use a session-based permission set to allow functional access during a predefined session type. For example, let's say your org has a custom object called Conference Room. A mobile app called Conference Room Sync has read and update access to the object. You can create a permission set to allow updates to the object only when the Conference Room Sync connected mobile app generates the user's session.

#### Activate or Deactivate a Session-Based Permission Set Using a Flow

If you need to give particular users permissions to access functionality during specific times or under certain conditions, session-based permission sets are the way to go. But until now, you had to use code to activate a session-based permission set. Now you can activate one easily and declaratively by using a flow.

#### Create More Permission Sets in Professional Edition

If you use Professional Edition, you can now create up to 10 permission sets. The previous limit was 2.

#### Permission Set Metadata Behavior Change

In API 40.0 and later, when you deploy the output of a retrieval to another org, the target org metadata is now replaced by the metadata in the deployment. In API 39.0 and earlier, when you deploy your retrieved permission set output to another org, the deployment contents are merged with your current org data.

#### **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

Available in: Contact Manager, Professional, Group, Enterprise, Performance, Unlimited, Developer, and Database.com Editions

## Session-Based Permission Sets Are Generally Available

Session-based permission sets apply to a specific session. Use a session-based permission set to allow functional access during a predefined session type. For example, let's say your org has a custom object called Conference Room. A mobile app called Conference Room Sync has read and update access to the object. You can create a permission set to allow updates to the object only when the Conference Room Sync connected mobile app generates the user's session.

#### **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

Available in: Contact Manager, Professional, Group, Enterprise, Performance, Unlimited, Developer, and Database.com Editions

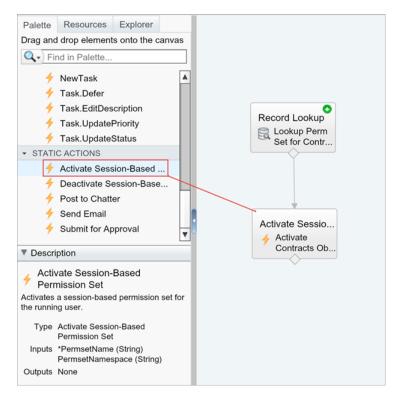
# Activate or Deactivate a Session-Based Permission Set Using a Flow

If you need to give particular users permissions to access functionality during specific times or under certain conditions, session-based permission sets are the way to go. But until now, you had to use code to activate a session-based permission set. Now you can activate one easily and declaratively by using a flow.

Activating a session-based permission set using a flow is easy. First, when you create your permission set, select **Session Activation Required**. This selection indicates that the permissions in the permission set are available only during specified sessions. Then create a flow using the Activate Session-Based Permission Set action available in the Cloud Flow Designer.

#### **EDITIONS**

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



When a user runs the flow and the action fires, permissions associated with the permission set are enabled for the user.

You can also deactivate the permission set by including the **Deactivate Session-Based Permission Set** action in the flow.

() Important: You can run queries, however, do not make data or object updates in flows that also activate session-based permission sets.

**Example**: You have a junior buyer in your org who occasionally requires access to your Contracts object. Create a permission set with access to the object. Then create a flow that uses the Activate Session-Based Permission Set action available in the Cloud Flow Designer. In the flow, pass the permission name to the action. During runtime, the action checks who's running the flow. When the junior buyer runs the flow, the activation process fires. When the flow completes, the buyer has access to the Contracts object for the current session.

## Create More Permission Sets in Professional Edition

If you use Professional Edition, you can now create up to 10 permission sets. The previous limit was 2.

#### **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

Available in: Contact Manager, Professional, Group, Enterprise, Performance, Unlimited, Developer, and Database.com Editions

## Permission Set Metadata Behavior Change

In API 40.0 and later, when you deploy the output of a retrieval to another org, the target org metadata is now replaced by the metadata in the deployment. In API 39.0 and earlier, when you deploy your retrieved permission set output to another org, the deployment contents are merged with your current org data.

We simplified the metadata packaging definition needed to produce consistent permission set outputs. The consistent output lets changes be trackable in standard version control systems. Now transfers of permission set content between production, sandbox, and other related orgs is easier and more predictable. See Updated Metadata Types.

**Example:** In API version 39.0 and earlier, if your permission set contains the Manage Roles user permission and you deploy a metadata file without this user permission, Manage Roles remains enabled. However, in API version 40.0 and later, if you deploy a metadata file without this user permission, Manage Roles is disabled in the target org.

#### **EDITIONS**

Available in: Salesforce Classic and Lightning Experience

Available in: Contact Manager, Professional, Group, Enterprise, Performance, Unlimited, Developer, and Database.com Editions

# Salesforce Connect: Event Monitoring Pilot, Cross-Org Picklists, Rate Limit for External Object Search Results, and Temporary Salesforce IDs

Track callouts that access external object data. Picklist and multi-select picklist fields on external objects now behave more like you expect. You're also less likely to exceed rate limits when accessing external objects. And make sure that your code and integrations don't require search-retrieved external object records to have permanent Salesforce record IDs.

# EDITIONS

Available in: **Developer** Edition

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

#### IN THIS SECTION:

#### Track External Object Data Callouts with Event Log Files (Pilot)

We added event types to the EventLogFile standard object to track Salesforce Connect callouts to external systems. Now you can 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. These events are available in the API, but not yet in the Event Monitoring Analytics app.

#### Improved Support for Picklist and Multi-Select Picklist Fields on External Objects

With the cross-org adapter for Salesforce Connect, your users can interact with picklist and multi-select picklist fields on external objects just as they do with custom objects. Syncing no longer converts multi-select picklist fields on the provider org into text fields on the subscriber org's external objects. We now support picklist fields that use a global picklist value set on the provider org. Also, inactive picklist values on the provider org are no longer blank on external object records. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### New Rate Limit Applied to External Object Search Results

External data rows that are retrieved as search results now count toward a separate and much higher rate limit from rows retrieved by other means. So good news: Your org is unlikely to exceed rate limits when searching, reading, or writing to external objects. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Prepare for Temporary Salesforce IDs for External Object Records

In a near future release, temporary Salesforce record IDs will be assigned to external object records that are retrieved by SOSL and Salesforce searches, rather than permanent IDs. To prepare for this change, don't create code or use third-party integrations that require these record IDs to remain associated with the same external data rows. For existing code and integrations, we recommend removing dependencies on external object record IDs to avoid issues when this change is rolled out. This change applies to both Lightning Experience and Salesforce Classic.

## Track External Object Data Callouts with Event Log Files (Pilot)

We added event types to the EventLogFile standard object to track Salesforce Connect callouts to external systems. Now you can 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. These events are available in the API, but not yet in the Event Monitoring Analytics app.



**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 Success Community.

We've added three event types to the EventLogFile object.

- 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 that 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 the Product external object was accessed by three users over 12 callouts.

EVENT_TYPE	TIMESTAMP	REQUEST_ID	ORGANIZATION_ID	USER_ID	ENTITY
ExternalODataCallout	20170330012053.7	4A13D2OiGX0eAF0FKffKqk	00D00000000123	005D0000001WIP0	Category
ExternalODataCallout	20170330012114.7	4A13E7gSW_n7fV0FKeNEp-	00D00000000123	005D0000001WIP0	Category
ExternalODataCallout	20170330012121.3		00D00000000123	005D0000001WQP2	Category
ExternalODataCallout	20170330012049.8	4A13Cgvio8KKs-0FKfceaV	00D00000000123	005D0000001AIP5	Product
ExternalODataCallout	20170330012053.1	4A13CxJpheAF0FKffKqk	00D00000000123	005D0000001AIP5	Product 🖌
ExternalODataCallout	20170330012055.0	4A13D78xgnKKs-0FKfceaV	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012059.3	4A13DNO6xM_Ks-0FKfceaV	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012059.6	4A13DNO6xM_Ks-0FKfceaV	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012106.7	4A13DneUiX0eAF0FKffKqk	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012107.2	4A13DneUiX0eAF0FKffKqk	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012111.7	4A13E5dBcgWKsF0FKfceaV	00D00000000123	005D0000001WIP0	Product
ExternalODataCallout	20170330012115.4	4A13EIfILaE7fV0FKeNEp-	00D00000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330012123.2		00D00000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330041759.5	4A1CsAEVRrO7zF0FKfceaV	00D00000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330041821.0	4A1CtdfegQTcV-0FKfdnFV	00D00000000123	005D0000001WQP2	Product
ExternalODataCallout	20170330012121.4		00D000000000123	005D0000001WIP0	Supplier

SEE ALSO: Changed Objects Force.com REST API Developer Guide: Using Event Monitoring Trailhead: Event Monitoring

## Improved Support for Picklist and Multi-Select Picklist Fields on External Objects

With the cross-org adapter for Salesforce Connect, your users can interact with picklist and multi-select picklist fields on external objects just as they do with custom objects. Syncing no longer converts multi-select picklist fields on the provider org into text fields on the subscriber org's external objects. We now support picklist fields that use a global picklist value set on the provider org. Also, inactive picklist values on the provider org are no longer blank on external object records. These changes apply to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

Some special behaviors and limitations still apply.

- Picklist and multi-select picklist fields are available only on external objects that are associated with an external data source of type Salesforce Connect: Cross-Org.
- You can't edit picklist values on external objects, and changes to fields on the provider org aren't automatically reflected in the subscriber org. To reflect changes on the subscriber org, resync the external object, or manually delete and recreate the picklist field on the external object.

If you don't resync or recreate the picklist field on the external object:

When an active picklist value is added to the provider org, the subscriber org doesn't display it as an available picklist value on
external object records.

- When an active picklist value is deleted from or made inactive on a restricted picklist on the provider org, the subscriber org can't create or edit external object records with that value.
- Global picklist value sets aren't synced. If a provider org's picklist field uses a global picklist value set, syncing creates a local picklist field on the subscriber org. A local picklist field has its own set of values.
- Inactive picklist values aren't synced. If the subscriber org accesses an external object record that contains an inactive picklist value, the inactive value is added to the picklist field on the external object.
- Syncing converts restricted picklists on the provider org into unrestricted picklists on the subscriber org's external objects.
- We recommend having only unrestricted picklists on external objects, even when they're associated with restricted picklists on the provider org. Restricted picklists on the provider org block unapproved values from the subscriber org, eliminating the need to restrict picklists on external objects.

#### SEE ALSO:

Salesforce Help: Subscriber and Provider Orgs in Salesforce Connect—Cross-Org Adapter

## New Rate Limit Applied to External Object Search Results

External data rows that are retrieved as search results now count toward a separate and much higher rate limit from rows retrieved by other means. So good news: Your org is unlikely to exceed rate limits when searching, reading, or writing to external objects. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

Maximum new rows retrieved by SOSL and Salesforce searches per hour. This limit doesn't apply to 100,000 high-data-volume external data sources.		100,000
Μ	aximum new rows retrieved or created per hour. This limit doesn't apply to:	50,000
•	High-data-volume external data sources	
•	Rows that are retrieved only as search results and aren't opened or edited	
•	Other rows that have already been retrieved	

Previously, this limit also applied to rows retrieved via SOSL and Salesforce searches.

# Prepare for Temporary Salesforce IDs for External Object Records

In a near future release, temporary Salesforce record IDs will be assigned to external object records that are retrieved by SOSL and Salesforce searches, rather than permanent IDs. To prepare for this change, don't create code or use third-party integrations that require these record IDs to remain associated with the same external data rows. For existing code and integrations, we recommend removing dependencies on external object record IDs to avoid issues when this change is rolled out. This change applies to both Lightning Experience and Salesforce Classic.

SEE ALSO: Salesforce Help: Record IDs for Salesforce Connect External Objects

# Process Builder: Access Encrypted Data, Stop Suppressing Email Notifications

When you build processes, you now have access to fields that you've protected with Shield Platform Encryption. The only place that encrypted data is off-limits: the filters in an Update Records element. We also released a critical update to prevent processes from suppressing email notifications.

IN THIS SECTION:

#### Access Encrypted Data in Process Builder (Beta)

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.

#### Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)

For various operations, such as assigning a task to someone, you can choose to notify the affected user by email. This update stops processes, workflow rules, and Apex triggers from suppressing these email notifications. This change applies to both Lightning Experience and Salesforce Classic.

#### SEE ALSO:

Do More with Field Service in the Process Builder

## Access Encrypted Data in Process Builder (Beta)

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.

Note: This release contains a beta version of encryption support in flows and processes that is production quality but has known limitations. To access this feature, contact Salesforce. To provide feedback and suggestions, go to IdeaExchange.

**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 (Beta)

## Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)

For various operations, such as assigning a task to someone, you can choose to notify the affected user by email. This update stops processes, workflow rules, and Apex triggers from suppressing these email notifications. This change applies to both Lightning Experience and Salesforce Classic.

Sexample:

- You change a case's owner and choose to notify the new owner by email.
- You create a user and choose to welcome the user by email.
- You create a task and choose to notify the task owner by email.
- You create an assignment rule and choose to notify users when they've been assigned a case.

EDITIONS

Available in: **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions Prior to Summer '17, those emails didn't always go through. If the change triggered a process, workflow rule, or Apex trigger that updated the same record, Salesforce suppressed the email. When you activate this critical update, Salesforce no longer suppresses the notification emails.

Until now, the workaround has been to add your own email notifications, such as with an Email Alert in a process or workflow rule. If you used this workaround to make up for the missing emails, your users receive duplicate emails. Remove your workarounds so that your users receive only one notification.

### Test This Critical Update

We recommend testing the critical update in a sandbox. If you must work in your production org, do so during off-peak hours.

- 1. Identify customizations that are sending the email notifications.
- 2. Remove the supplemental email notifications from the customization components.
- 3. Activate the Stop Automated Field Updates from Suppressing Email Notifications critical update.
- 4. Test your customizations to make sure that Salesforce doesn't send duplicate emails.

#### SEE ALSO:

Critical Updates

# Security and Identity: More Lightning Support, Encryption for Formulas, Embedded Login

Transaction Security has a handy new Lightning Experience interface, formulas now work with encrypted fields, and you can connect your website to your backend CRM with Embedded Login.

#### IN THIS SECTION:

Authentication and Identity: Improved Verification Requirements, More OAuth Options, Connected Apps Enhancements

We've made it so your users can adopt Lightning Login easily and quickly. The Embedded Login feature extends Salesforce authentication to your websites—you can now require your customers to log in to access your web pages. We added Single Logout (SLO) as a beta feature, and you can now export profile definitions to reduce compliance burden. You can require identity verification for 2FA and email address changes. You can track blocked apps more easily when the API whitelisting feature is enabled. Users can enable browser notifications to be forewarned when their Salesforce sessions are about to expire. The endpoints for Tooling API are now included as part of the urls array for Salesforce Identity.

Security Health Check: General Availability of Custom Baselines and Setting Changes

We changed some settings in Health Check and enabled the ability to import custom baselines for all customers.

Salesforce Shield: More Event Log Data in Wave, Encryption for Leads and Search Indexes

Salesforce Shield now offers Lightning Experience event log data in Wave to visualize user adoption and performance. You can encrypt standard lead records, and your search index files can have their own separate encryption keys.

# Authentication and Identity: Improved Verification Requirements, More OAuth Options, Connected Apps Enhancements

We've made it so your users can adopt Lightning Login easily and quickly. The Embedded Login feature extends Salesforce authentication to your websites—you can now require your customers to log in to access your web pages. We added Single Logout (SLO) as a beta feature, and you can now export profile definitions to reduce compliance burden. You can require identity verification for 2FA and email address changes. You can track blocked apps more easily when the API whitelisting feature is enabled. Users can enable browser notifications to be forewarned when their Salesforce sessions are about to expire. The endpoints for Tooling API are now included as part of the urls array for Salesforce Identity.

#### IN THIS SECTION:

#### Embedded Login Enables Users to Log In to Your Website

Salesforce introduces the Embedded Login feature to authenticate your website's visitors. Your web developers can add login capabilities to the website with just a few lines of HTML. Embedded Login connects your website with Salesforce. This feature works for communities created with either our Communities or Salesforce Identity products. This feature is new in both Lightning Experience and Salesforce Classic.

#### Get More Control over Connected App Access

Salesforce offers an API client whitelisting feature that blocks all OAuth connected app connections to your org until you explicitly approve the connected app. This approval mechanism is commonly referred to as API client or app whitelisting. We improved the process for managing and whitelisting apps. This change applies to both Lightning Experience and Salesforce Classic.

#### Export Profile Password Policies

To demonstrate regulation compliance, admins must often report Salesforce profile settings, such as to show that all Salesforce users meet the minimum password requirements. Previously, you took screenshots of your profiles to document settings. Now you can reduce your compliance burden by using the Metadata API to export profile definitions for your auditors or to deploy them to another environment. This feature is new in both Lightning Experience and Salesforce Classic.

#### Bookmark Redirection Is Supported Even When Chatter Is Disabled

For compliance or security reasons, some customers require Chatter to be disabled. However, until this release, when Chatter was disabled, bookmark redirections didn't work either. We removed that dependency. This change applies to both Lightning Experience and Salesforce Classic.

#### Command Your Brand with Dynamic Branding

If you create custom login pages with Visualforce and Apex controllers, you can now control how your login page appears and behaves to users at run time. For example, you can specify which logo appears depending on whether the user is an employee or customer. Or you can invoke different registration processes or different consent flows. This change applies to both Lightning Experience and Salesforce Classic.

#### Remove the Surprise of Session Timeout

For security reasons, Salesforce logs off users after a period of inactivity. Users get a warning when their Salesforce session is about to expire and can choose to continue working. However, users didn't see the warning if their Salesforce session was buried behind the current tab, so they were logged out without knowing it. Now, no more unfortunate surprises. When a user's session is about to expire, a browser notification pops up in the foreground. This feature is new in Lightning Experience.

#### Tooling API Endpoints Now Included for Salesforce Identity

The SOAP and REST endpoints for Tooling API are now included as part of the urls array for Salesforce Identity. Users developing tools to display available services or endpoints can now see the Tooling API endpoints available to them.

#### Require Identity Confirmation When Adding Two-Factor Authentication

Previously, users could add two-factor authentication, such as Salesforce Authenticator, without confirming their identities. To enhance the security of your org, require users to verify their identity before allowing them to add the authentication method. This option is enabled by default. This change applies to both Lightning Experience and Salesforce Classic.

#### Require Identify Verification When Changing Email Address

You can require users to confirm their identities when they change their email address. Previously, users could change their addresses by just logging in with a password. To enhance the security of your org, require identity verification before allowing the address change. This option is disabled by default in existing orgs and enabled by default in orgs created in Summer '17 and later. This change applies to both Lightning Experience and Salesforce Classic.

#### Deprecating loginURL Query Parameter

We are deprecating the query parameter for loginURL in the Winter '18 release.

#### Enable Lightning Login for All Users

Internal users are now eligible for Lightning Login. If you choose to enable Lightning Login, your users can change their settings so that they don't need to enter a password during future logins. We take them through the process step-by-step. This change applies to both Lightning Experience and Salesforce Classic.

#### Avoid Using Path Prefixes Reserved by Salesforce

We have reserved more path prefixes for Salesforce use. Do not use these prefixes for your site or community paths, unless you are currently using them. These changes apply to both Lightning Experience and Salesforce Classic.

#### SAML Single Logout (SLO) Is Available (Beta)

When you enable SLO, your users are logged out from all connected apps (service providers) when they log out of Salesforce. Likewise, when your users log out from a service provider, they are logged out of Salesforce and all service providers. Salesforce supports only front-channel SAML Single Logout for which Salesforce is the identity provider and service providers are registered for Single Logout.

#### SAML Signing Certificate Is Being Retired

As previously communicated in Default Certificate to Retire on August 7, 2017, we are deprecating our SAML proxy certificate. If your Salesforce organization has a Single Sign-On configuration that uses this certificate, take action to prevent a possible interruption of service for login requests initiated from Salesforce.

#### Streamline Connected App Access with Improved IP Relaxation

Your users can have more streamlined access to Salesforce and connected apps because of improved IP relaxation. IP relaxation is now available for client apps that use OAuth and SAML for single sign-on, including Salesforce1. You can also relax IP restrictions during refresh token exchange. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

## Embedded Login Enables Users to Log In to Your Website

Salesforce introduces the Embedded Login feature to authenticate your website's visitors. Your web developers can add login capabilities to the website with just a few lines of HTML. Embedded Login connects your website with Salesforce. This feature works for communities created with either our Communities or Salesforce Identity products. This feature is new in both Lightning Experience and Salesforce Classic.

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Embedded Login is another option for customers who want to authenticate their users through Salesforce, but their website doesn't support user authentication through SAML or OpenID Connect.

To add Embedded Login to your websites, create your community with your desired branding. Then configure identity providers, such as Facebook, Twitter, Instagram, Google, Amazon, or PayPal.

When the community is set up, web developers can add a login form to any web page on your site. Visitors log in using their credentials from any identity provider that you configured for your community.

Salesforce handles the login, brokering protocol with social sign-on providers and SAML identity providers, and integration with Salesforce. Meanwhile, your web developers determine the customer experience. For example, they can customize the styling on the login form and personalize their users' experience with information retrieved from the login process.

# Get More Control over Connected App Access

Salesforce offers an API client whitelisting feature that blocks all OAuth connected app connections to your org until you explicitly approve the connected app. This approval mechanism is commonly referred to as API client or app whitelisting. We improved the process for managing and whitelisting apps. This change applies to both Lightning Experience and Salesforce Classic.

Before now, when whitelisting was enabled on your org, connected apps were blocked if you hadn't explicitly whitelisted them. However, it wasn't easy to tell when an app was blocked due to whitelisting and also difficult to add the app to the whitelist.

Now you can go to the Connected Apps OAuth Usage page in Setup and see the connected apps that your users have tried against your org. If appropriate, you can install and whitelist them.

From Setup, enter *connected apps* in the Quick Find box, then select **Connected Apps OAuth Usage**. To whitelist the app, click **Install** next to the connected app to install it locally. Then click **Edit Policies**, and under the OAuth policy, select **Admin approved users are pre-authorized**. Select which users can access the connected app through permissions.

Whitelisting API connected apps isn't enabled by default. Request Salesforce to enable the feature.

# **Export Profile Password Policies**

To demonstrate regulation compliance, admins must often report Salesforce profile settings, such as to show that all Salesforce users meet the minimum password requirements. Previously, you took screenshots of your profiles to document settings. Now you can reduce your compliance burden by using the Metadata API to export profile definitions for your auditors or to deploy them to another environment. This feature is new in both Lightning Experience and Salesforce Classic.

You can export these profile session settings.

- How many minutes of inactivity elapse before a user's authenticated session times out
- Session security level required at log in
- Whether a user must be logged out immediately when the session times out
- Whether a user receives a warning when the session is about to expire

You can export these profile password policy settings.

- Number of days until a password expires
- Number of previous passwords to save to ensure that users reset their password to a new, unique password
- Minimum password length
- Type of characters required in a user's password (alphanumeric, number, special characters, uppercase, or lowercase)
- Whether an answer to a hint can contain the password
- Whether a user can change a password more than once in a 24-hour period
- Maximum invalid login attempts until the user is locked out
- Lockout period duration
- Whether answers to security questions are hidden when typed

## Bookmark Redirection Is Supported Even When Chatter Is Disabled

For compliance or security reasons, some customers require Chatter to be disabled. However, until this release, when Chatter was disabled, bookmark redirections didn't work either. We removed that dependency. This change applies to both Lightning Experience and Salesforce Classic.

The ability to redirect bookmarks is important to implementing My Domain. When you create a subdomain, let's say companydomain.my.salesforce.com, you want to ensure that all users use the subdomain URL rather than the instance URL. If users have bookmarks to the instance URL, like nal.my.salesforce.com, you can now redirect them to your subdomain, companydomain.my.salesforce.com.

If you're planning to enable MyDomain and don't have Chatter enabled, contact Salesforce to enable this feature.

# Command Your Brand with Dynamic Branding

If you create custom login pages with Visualforce and Apex controllers, you can now control how your login page appears and behaves to users at run time. For example, you can specify which logo appears depending on whether the user is an employee or customer. Or you can invoke different registration processes or different consent flows. This change applies to both Lightning Experience and Salesforce Classic.

To implement the user's dynamic login experience, retrieve the value of the Experience ID cookie (*expid*) stored in the user's browser. You retrieve the *expid* value with the getExperienceId Apex method of the System.Site class.

Set the value of the *expid* cookie by either:

- Passing in the *expid* dynamic parameter on the login page
- Extending a supported endpoint with the *expid\_value*

You can extend these endpoints:

- community-url/services/oauth2/authorize/expid\_value
- community-url/idp/endpoint/HttpPost/expid\_value
- community-url/idp/endpoint/HttpRedirect/expid\_value

#### **EDITIONS**

Available in: Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions • **Example**: This example passes expid\_expid\_value as a hint in the OAuth endpoint, where expid\_value is expid\_printer.



The getExperienceId method returns printer—excluding "expid\_." To signal the app's printer signal, you pass it as expid\_printer. The value retrieved is printer.

The getExperienceId method appears in the login controller.

```
global CustomLoginController()
{
    orgId = UserInfo.getOrganizationId();
    if (startURL == null) startURL = `/';
    expId = Site.getExperienceId();
}
```

The custom login page contains the code to get the value of the Experience ID.

```
</div>
<div class="{!expId}" id="brand">
<apex:outputText value="Expid: {!expId}"></apexoutputText>
</div>
<div class="links">
```

### Remove the Surprise of Session Timeout

For security reasons, Salesforce logs off users after a period of inactivity. Users get a warning when their Salesforce session is about to expire and can choose to continue working. However, users didn't see the warning if their Salesforce session was buried behind the current tab, so they were logged out without knowing it. Now, no more unfortunate surprises. When a user's session is about to expire, a browser notification pops up in the foreground. This feature is new in Lightning Experience.

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You can turn off Salesforce notifications from your browser.

Session notifications work on all browser versions supported by Lightning Experience, except Internet Explorer version 11.

## Tooling API Endpoints Now Included for Salesforce Identity

The SOAP and REST endpoints for Tooling API are now included as part of the urls array for Salesforce Identity. Users developing tools to display available services or endpoints can now see the Tooling API endpoints available to them.

## Require Identity Confirmation When Adding Two-Factor Authentication

Previously, users could add two-factor authentication, such as Salesforce Authenticator, without confirming their identities. To enhance the security of your org, require users to verify their identity before allowing them to add the authentication method. This option is enabled by default. This change applies to both Lightning Experience and Salesforce Classic.

Session Settings
Identity Verification
<ul> <li>Enable the SMS method of identity verification i</li> <li>Require security tokens for API logins from callouts (API version 31.0 and earlier)</li> <li>Let users use a security key (U2F) i</li> </ul>
Require identity verification during two-factor authentication registration
Require identity verification for change of email address
Allow location-based automated verifications with Salesforce Authenticator Allow only from trusted IP addresses

**EDITIONS** 

Available in all editions

# Require Identify Verification When Changing Email Address

You can require users to confirm their identities when they change their email address. Previously, users could change their addresses by just logging in with a password. To enhance the security of your org, require identity verification before allowing the address change. This option is disabled by default in existing orgs and enabled by default in orgs created in Summer '17 and later. This change applies to both Lightning Experience and Salesforce Classic.



Available in all editions

Note: A user who no longer has access to the original email address used can't receive the email notification to confirm identity.



# Deprecating loginURL Query Parameter

We are deprecating the query parameter for loginURL in the Winter '18 release.

Begin using the custom logout URL setting instead.

# Enable Lightning Login for All Users

Internal users are now eligible for Lightning Login. If you choose to enable Lightning Login, your users can change their settings so that they don't need to enter a password during future logins. We take them through the process step-by-step. This change applies to both Lightning Experience and Salesforce Classic.

You can decide whether to make Lightning Login available for all users. You can determine user eligibility by using the Lightning Login User user perm.

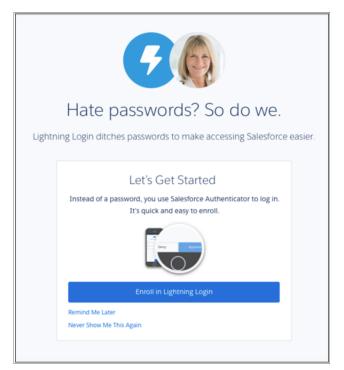
Users in Developer Edition orgs, and admin users created in Summer '17 or later and have Salesforce Authenticator enabled, see the Lightning Login Enrollment Assistant to guide them through enrollment. Users who don't see the assistant enroll through the Advanced User Details page.

#### **EDITIONS**

Available in all editions

**EDITIONS** 

Available in all editions



Change the Lightning Login settings for your org on the Session Settings Setup page.

	4
Session Settings	
	21
Lightning Login	
Allow Lightning Login	

Lightning Login is available only for internal users. External users, like guest users or Community users, aren't able to use it.

## Avoid Using Path Prefixes Reserved by Salesforce

We have reserved more path prefixes for Salesforce use. Do not use these prefixes for your site or community paths, unless you are currently using them. These changes apply to both Lightning Experience and Salesforce Classic.

EDITIONS

Available in all editions

The reserved prefixes are:

- /id/
- /idp/
- /saml/

If you try to save a path that includes these prefixes, you get an error.

If you are already using these prefixes, we recommend changing the path of your site or community to use a different prefix. Otherwise, you could run into an issue when using multiple authentication endpoints or future endpoints.

# SAML Single Logout (SLO) Is Available (Beta)

When you enable SLO, your users are logged out from all connected apps (service providers) when they log out of Salesforce. Likewise, when your users log out from a service provider, they are logged out of Salesforce and all service providers. Salesforce supports only front-channel SAML Single Logout for which Salesforce is the identity provider and service providers are registered for Single Logout.

**EDITIONS** 

Available in all editions

**Note**: This release contains a beta version of Single Logout, which means it's a high-quality feature with known limitations. Single Logout 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 Single Logout in the Salesforce Identity group in the Success Community.

Logging users out of all connected apps can improve security and usability. Previously, when Salesforce was the identity provider, your users had to log out of each connected app separately.

SEE ALSO:

Salesforce Help: Single Logout (Beta)

## SAML Signing Certificate Is Being Retired

As previously communicated in Default Certificate to Retire on August 7, 2017, we are deprecating our SAML proxy certificate. If your Salesforce organization has a Single Sign-On configuration that uses this certificate, take action to prevent a possible interruption of service for login requests initiated from Salesforce.



Available in all editions

If your organization has a Single Sign-On configuration that uses a certificate that's being retired, and has the ability to initiate SAML login requests from Salesforce, we strongly encourage you to enable **Multiple SAML Configurations** on the Single Sign-On Settings page. Make sure you read and understand the information on the page. Consider the following scenarios:

- Even if you aren't currently using SAML, enabling multiple configurations can prevent possible problems with SAML Single Sign-On in the future.
- If you are using SAML with your Single Sign-On configuration, to continue initiating SAML login requests from Salesforce, you must enable **Multiple SAML Configurations** and select a certificate for those requests. Make the necessary changes to your Identity Provider, also. If you don't initiate SAML login requests from Salesforce, you can remove the Identity Provider Login URL from your Single Sign-On Setting instead. However, you can't add one back until you enable **Multiple SAML Configurations**. If you don't act by the Winter '18 release, we'll switch you to a new certificate, and your ability to initiate SAML login requests from Salesforce can be affected.
- If you already have **Multiple SAML Configurations** enabled, to continue initiating SAML login requests from Salesforce with those settings, you must select a new Request Signing Certificate for each one. Go to Single Sign On-Settings and update any SAML Single Sign-On configurations that have an Identity Provider Login URL and are currently using the default certificate as the Request Signing Certificate. If your Identity Provider validates signatures for SAML login requests initiated by Salesforce, upload the new certificate to your Identity Provider Your ability to initiate SAML login requests from Salesforce can be affected until you do. If you don't act by the Winter '18 release, we'll switch you to a new certificate, and your ability to initiate SAML login requests from Salesforce can be affected.

## Streamline Connected App Access with Improved IP Relaxation

Your users can have more streamlined access to Salesforce and connected apps because of improved IP relaxation. IP relaxation is now available for client apps that use OAuth and SAML for single sign-on, including Salesforce1. You can also relax IP restrictions during refresh token exchange. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

**EDITIONS** 

Available in all editions

For starters, connected apps using a SAML and OAuth single login now have IP bypass behavior like OAuth connected apps do. Now users can have relaxed IP restrictions when logging in to Salesforce1.

You can relax IP restrictions when an app sends a refresh token to obtain a new access token from anywhere. For example, users initially log in from your company's network or VPN with IP restrictions. They can continue to use the app from anywhere even after the initial session is expired.

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	Start URL	i Mobile Start URL	
OAuth po	blicies		
Permitted Users Enable Single Logout	All users may self-authorize	<ul> <li>P Relaxation</li> <li>Enforce IP restrictions</li> <li>Enforce IP restrictions, but relax for refresh tokens</li> <li>Relax IP restrictions with second factor</li> <li>Relax IP restrictions</li> <li>Immediately expire refresh token</li> </ul>	

# Security Health Check: General Availability of Custom Baselines and Setting Changes

We changed some settings in Health Check and enabled the ability to import custom baselines for all customers.

#### IN THIS SECTION:

Import a Custom Security Baseline into Health Check (Generally Available)

Security Health Check custom baselines, which were beta in Spring '17, are now released to all customers. You can customize the Health Check security baseline to compare your org's security settings with your industry standards. This change applies to both Lightning Experience and Salesforce Classic.

#### Health Check Has New and Changed Security Settings

The Health Check page now has four risk categories and new names for risk statuses, so it's easier to use. We also added, deleted, and changed some security settings.

## Import a Custom Security Baseline into Health Check (Generally Available)

Security Health Check custom baselines, which were beta in Spring '17, are now released to all customers. You can customize the Health Check security baseline to compare your org's security settings with your industry standards. This change applies to both Lightning Experience and Salesforce Classic.

To create a custom baseline, export an existing baseline, like the Salesforce Baseline Standard. After you modify it, save the XML file and import it into Health Check.

From Setup, enter *Health Check* in the Quick Find box, then select **Health Check**.

🕸 Health Check	
How well does your org meet Salesforce	e security standards? Reduce your security risk and limit data loss by optimizing the areas below.
Salesforce Baseline Standa 78% of the standard met How did we calculate this score?	

#### **EDITIONS**

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

Select either the Salesforce Baseline Standard or a custom baseline (1). Choose whether to export or import an XML file, or delete a custom baseline (2).

**Note:** Due to changes in the Health Check tool, some settings in custom baselines have changed since the beta version. To use the custom baselines that you created in Spring '17, recreate them by exporting a current version of the Salesforce Baseline Standard.

#### SEE ALSO:

Salesforce Help: Create a Custom Baseline for Health Check Salesforce Help: Custom Baseline File Requirements

## Health Check Has New and Changed Security Settings

The Health Check page now has four risk categories and new names for risk statuses, so it's easier to use. We also added, deleted, and changed some security settings.

The four security settings categories are High-Risk, Medium-Risk, Low-Risk, and Informational. The Informational settings aren't factored into the Health Check score, but the others are. Regardless of category, each setting has a status of either compliant, warning, or critical, based on your current setting values.

The following high-risk security settings have been added:

- Require Secure Connections
- Require HttpOnly attribute

The following settings have been removed:

- Disable Session Timeout Warning Popup
- Lock Session to IP address from which they originated

#### EDITIONS

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

- Enable Caching and autocomplete on login pages
- Trusted IP Ranges

The Lockout Effective Period setting has changed. The Salesforce standard baseline recommended compliant value is now 30 minutes or greater. A value less than 30 minutes shows as a warning.

# Salesforce Shield: More Event Log Data in Wave, Encryption for Leads and Search Indexes

Salesforce Shield now offers Lightning Experience event log data in Wave to visualize user adoption and performance. You can encrypt standard lead records, and your search index files can have their own separate encryption keys.

#### IN THIS SECTION:

#### Platform Encryption: Support for Flows, Formulas, Leads, and More

You can bring your own encryption key to protect your search index, and take more detailed control of your HSM-protected certificates. You can use flows and processes with encrypted data (beta). You can encrypt standard Lead fields (beta) and more elements in your Chatter feed (pilot).

#### Event Monitoring: Lightning Experience Event Data in Wave and Improved Setup

Lightning Experience event type data is now available in Wave, with two prebuilt dashboards that show user adoption and performance. Use the new standard permission set to set up Wave faster.

#### Transaction Security: Lightning Experience, Chatter, Apex Examples

Introducing Transaction Security Lightning Experience. It's a new way to create policies against real-time events. The new user interface incorporates an easy to use setup wizard and a carousel with relevant information and statistics about your Salesforce org. We also improved policy views and Apex editing and added a carousel with useful information and statistics. With the new UI, you can create policies that check Chatter resources, and we've added more Apex examples to learn how.

#### Other Security Changes: New Session Setting

We made changes that impact security, including securing connections for all third-party domains.

## Platform Encryption: Support for Flows, Formulas, Leads, and More

You can bring your own encryption key to protect your search index, and take more detailed control of your HSM-protected certificates. You can use flows and processes with encrypted data (beta). You can encrypt standard Lead fields (beta) and more elements in your Chatter feed (pilot).

#### ur Chatter ree

#### IN THIS SECTION:

#### Retrieve Encrypted Data with Custom Formula Fields (Generally Available)

Get more value out of the Shield Platform Encryption service by referencing encrypted fields in formulas. Quickly and securely reference just the right data, even when it's encrypted. This feature is available to all Shield Platform Encryption customers. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### EDITIONS

Available as add-on subscription in: **Enterprise**, **Performance**, and **Unlimited** Editions. Requires purchasing Salesforce Shield. Available in **Developer** Edition at no charge for organizations created in Summer '15 and later.

Available in both Salesforce Classic and Lightning Experience.

#### Apply BYOK Tenant Secrets to Search Index Files

Designate which type of data you want to encrypt with your customer-supplied tenant secrets, just like you can with Salesforce-generated tenant secrets. Shield Platform Encryption Bring Your Own Key (BYOK) customers can now apply their customer-supplied tenant secrets to search index files and data stored in the core Salesforce database. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Granular Control of Certificates with the New Manage Certificates Permission

The Manage Certificates permission lets you separate certificate management from the other security functions. The Manage Certificates permission, which allows you to create, edit, delete, upload, or download certificates, is now enabled by default in the System Administrator profile. However, you don't need the System Administrator profile to get the Manage Certificates permission. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Access Encrypted Data with Flows and Process Builder (Beta)

The Shield Platform Encryption service now extends to data referenced in flows and processes. You can access encrypted data from most elements in flows and processes except when filtering or sorting records. 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. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Encrypt More Data in Chatter Feeds (Pilot)

In addition to Chatter posts, questions and answers, link names, comments, and poll questions, you can now encrypt link URLs and poll choices. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Encrypt Standard Lead Fields (Beta)

You've already been able to encrypt custom Lead fields, but now you can encrypt standard Lead fields as well. This can help protect personally identifiable information (PII) in the Leads object. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Encryption for Wave (Beta)

Add yet another layer of security and protection to your Wave analytics data by extending the Shield Platform Encryption capabilities to Wave data at rest. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Mass Encryption Now Includes Existing Email Attachments

When you contact Salesforce for help mass-encrypting your data, we encrypt your existing data with your organization-specific data encryption key, according to your organization encryption policy. We can now mass-encrypt your existing email attachments, not just your selected fields and files.

#### Critical Update: Encrypted Data Is Visible to Authenticated Users

Encrypted data is visible onscreen—that is, it's not hidden by masking characters—when you activate this critical update. To hide data from unauthorized users, you must use field-level and object-level security, regardless of whether the data is encrypted. The View Encrypted Data permission is not available. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

### Retrieve Encrypted Data with Custom Formula Fields (Generally Available)

Get more value out of the Shield Platform Encryption service by referencing encrypted fields in formulas. Quickly and securely reference just the right data, even when it's encrypted. This feature is available to all Shield Platform Encryption customers. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

You can use several operations and functions, including concatenate (& and +), isBlank, isNull, if, hyperlink, and image. You can reference Quick Actions and render encrypted data in text, date, and date/time formats.

SEE ALSO:

Salesforce Help: Retrieve Encrypted Data with Formulas

### Apply BYOK Tenant Secrets to Search Index Files

Designate which type of data you want to encrypt with your customer-supplied tenant secrets, just like you can with Salesforce-generated tenant secrets. Shield Platform Encryption Bring Your Own Key (BYOK) customers can now apply their customer-supplied tenant secrets to search index files and data stored in the core Salesforce database. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.



### Granular Control of Certificates with the New Manage Certificates Permission

The Manage Certificates permission lets you separate certificate management from the other security functions. The Manage Certificates permission, which allows you to create, edit, delete, upload, or download certificates, is now enabled by default in the System Administrator profile. However, you don't need the System Administrator profile to get the Manage Certificates permission. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

The Manage Certificates permission is separate from, and not coupled to, the Manage Encryption Keys permission. This is helpful if you want an admin to be able to manage certificates, but not manage encryption keys. The person in charge of your tenant secrets still needs both permissions to generate the HSM-protected Certificates in the BYOK process.

### Access Encrypted Data with Flows and Process Builder (Beta)

The Shield Platform Encryption service now extends to data referenced in flows and processes. You can access encrypted data from most elements in flows and processes except when filtering or sorting records. 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. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

Note: This release contains a beta version of encryption support in flows and processes that is production quality but has known limitations. To access this feature, contact Salesforce. To provide feedback and suggestions, go to IdeaExchange.

SEE ALSO:

Access Encrypted Data in Your Flows (Beta) Access Encrypted Data in Process Builder (Beta)

### Encrypt More Data in Chatter Feeds (Pilot)

In addition to Chatter posts, questions and answers, link names, comments, and poll questions, you can now encrypt link URLs and poll choices. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

To encrypt these additional fields, go to the Platform Encryption page from Setup and deselect **Encrypt Chatter**, then reselect **Encrypt Chatter**.

Note: This release contains a pilot version of encryption for Chatter in Developer Edition and in Sandboxes for Enterprise, Unlimited, and Performance Editions. 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.

As in previous releases, you can't choose to encrypt some fields in Chatter but not others.

You can provide feedback and suggestions for encryption for Chatter in the Chatter Product group in the Success Community.

### Encrypt Standard Lead Fields (Beta)

You've already been able to encrypt custom Lead fields, but now you can encrypt standard Lead fields as well. This can help protect personally identifiable information (PII) in the Leads object. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.



**Note:** This beta version of encryption support in Leads is production quality but has known limitations. Contact Salesforce to activate it. To provide feedback and suggestions, go to IdeaExchange.

You can encrypt these standard Lead fields:

- Name (First Name, Middle Name, Last Name)
- Email
- Phone
- Mobile Phone
- Fax
- Address (Street, City)
- Title
- Website
- Description
- Company

SEE ALSO:

Salesforce Help: Platform Encryption Limitations and Tradeoffs

### Encryption for Wave (Beta)

Add yet another layer of security and protection to your Wave analytics data by extending the Shield Platform Encryption capabilities to Wave data at rest. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

The Wave Encryption at Rest services are built natively into the Wave platform. The solution applies strong, probabilistic encryption on data stored at rest. Platform encryption is based on the Advanced Encryption Standard (AES) with 256-bit keys using CTR mode and an initialization vector (IV) for every write. All operations, including sort and group-by, work the same as without encryption, except for key management.

The data you add to the database is encrypted on the Salesforce service, but archived data is not encrypted.

Note: This release contains a beta version of encryption support for Wave analytics that is production quality but has known limitations. Contact Salesforce to activate it.

### Mass Encryption Now Includes Existing Email Attachments

When you contact Salesforce for help mass-encrypting your data, we encrypt your existing data with your organization-specific data encryption key, according to your organization encryption policy. We can now mass-encrypt your existing email attachments, not just your selected fields and files.

### Critical Update: Encrypted Data Is Visible to Authenticated Users

Encrypted data is visible onscreen—that is, it's not hidden by masking characters—when you activate this critical update. To hide data from unauthorized users, you must use field-level and object-level security, regardless of whether the data is encrypted. The View Encrypted Data permission is not available. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

This update gives you a more consistent experience for users when they access encrypted data, and reduces confusion between data that's masked and data that's encrypted.

Some organizations don't have to do anything to get this change.

- Beginning with Spring '17, View Encrypted Data is automatically decoupled from masking when you generate your first tenant secret.
- If you started generating tenant secrets before Spring '17, you must activate this critical update.

The View Encrypted Data permission still applies to Classic Encryption.

# Event Monitoring: Lightning Experience Event Data in Wave and Improved Setup

Lightning Experience event type data is now available in Wave, with two prebuilt dashboards that show user adoption and performance. Use the new standard permission set to set up Wave faster.

#### IN THIS SECTION:

#### Updated Event Monitoring Analytics App Lets You Visualize Your Users' Actions in Lightning Experience

Two new dashboards give you the data you need to measure Lightning Experience and Salesforce1 adoption and page performance. And Event Monitoring Analytics dashboards now let you set thresholds on your KPI measures.

#### Streamlined Permission Setup for Event Monitoring Analytics Apps

Give your users access to the Event Monitoring Analytics app quickly and easily by using two new standard permission sets. Previously, you had to create your own permission sets. As a bonus, any user you assign to the permission set also gets a permission set license.

#### Identify Users Who Download Large Reports

The Report event type now includes the ROW\_COUNT and AVERAGE\_ROW\_SIZE fields to detect when users export large amounts of data. High row counts and size can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor.

#### Track User Actions in Lightning Experience More Comprehensively with New Fields

To give you a 360-degree view of user behavior during a login session, we added new fields and renamed one in Lightning Error, Lightning Interaction, Lightning Page View, and Lightning Performance event types. We also added a field for Event Monitoring Wave app compatibility.

#### Use Async SOQL and UniqueKey for More Flexibility in Login Forensics

You can run Async SOQL queries and filter them on any field in the LoginEvent object, giving you flexibility in how you construct your queries. With Async SOQL, you can run queries in the background and retrieve results when you're ready. The new UniqueKey field is used as the primary key instead of Id.

#### Prevent Identity Fraud in Government Cloud with Login Forensics

Login forensics helps you better determine which user behavior is legitimate to prevent identity fraud in Salesforce. This feature is now available in government pods.

#### Track Salesforce Connect Callouts with Event Log Files (Pilot)

We added event types to the EventLogFile standard object to track Salesforce Connect callouts to external systems. Now you can audit the historical activity of your org's access to external object data.

#### Prepare Your Org for UI Tracking Event Type Retirement

In this release, the UI Tracking event type isn't populated with data. In the Winter '18 release, it will be removed completely.

### Updated Event Monitoring Analytics App Lets You Visualize Your Users' Actions in Lightning Experience

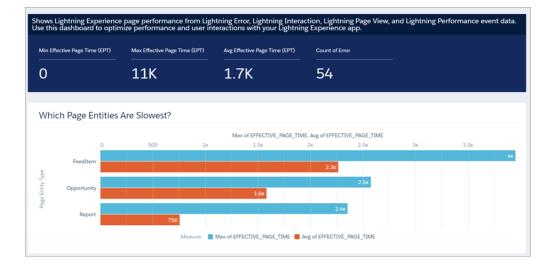
Two new dashboards give you the data you need to measure Lightning Experience and Salesforce1 adoption and page performance. And Event Monitoring Analytics dashboards now let you set thresholds on your KPI measures.

#### Visualize Lightning Experience and Salesforce1 Adoption and Performance

The Event Monitoring Analytics app has four Lightning Experience event types:

- Lightning Error
- Lightning Interaction
- Lightning Page View
- Lightning Performance

To view this data in Wave, use the new prebuilt Lightning Adoption and Lightning Performance dashboards or create your own.



The Lightning Adoption and Lightning Performance dashboards replace the Lightning dashboard and UI Tracking dataset, which were retired in this release.

#### Get Notified When Your KPIs Miss the Boat

Detect performance problems early, such as queries taking too much time, by getting notifications when a KPI value exceeds your established threshold. For more information, see Set Smart Notifications for Your Most Important Business Metrics.

Apex Executions					Data updated: 2 Days Ago at 1	10:45 PM 5	¢
Shows Apex class pe	erformance from Apex E	xecution event data. Us	e this dashboard to in	nprove performance a	nd load time of the cus	stom parts of your app.	
Total Transactions	Total Classes	Slowest Run Time (ms)	Max CPU Time (ms)	Max DB Time (ms)	Avg # Querles		
1	<ul> <li>Show Details</li> </ul>	0	0	0	0		
	🔥 Share						
	de Explore						

### EDITIONS

#### **Understand Dashboards More Easily**

The following dashboards provide more informative descriptions, helping you understand the data that the dashboard shows.

- Apex Executions
- API
- Dashboard
- Files
- Login-As
- Page Views (URIs)
- Report Downloads
- RestAPI
- User Logins
- Wave Adoption

SEE ALSO:

Wave: Accelerate with Prebuilt Wave Apps

### Streamlined Permission Setup for Event Monitoring Analytics Apps

Give your users access to the Event Monitoring Analytics app quickly and easily by using two new standard permission sets. Previously, you had to create your own permission sets. As a bonus, any user you assign to the permission set also gets a permission set license.

The new standard permission sets are:

- Event Monitoring Wave Admin—For users who create and customize Event Monitoring Analytics apps and dataflows.
- Event Monitoring Wave User—For users who view Event Monitoring Analytics apps.

Both permission sets contain Event Monitoring user permissions that you enable to give your users access to Event Monitoring Analytics (for example, Use Wave Analytics Templated Apps). To access the permission sets, from Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets**.

You're not required to use the new permission sets. You can still create your own permission sets as long as they use the Event Monitoring Wave permission set license and include Event Monitoring Wave user permissions.

### Identify Users Who Download Large Reports

The Report event type now includes the ROW\_COUNT and AVERAGE\_ROW\_SIZE fields to detect when users export large amounts of data. High row counts and size can indicate that a user is downloading information for fraudulent purposes. For example, a salesperson who downloads all sales leads before departing for a competitor.

**EDITIONS** 

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

### EDITIONS

**EDITIONS** 

### Track User Actions in Lightning Experience More Comprehensively with New Fields

To give you a 360-degree view of user behavior during a login session, we added new fields and renamed one in Lightning Error, Lightning Interaction, Lightning Page View, and Lightning Performance event types. We also added a field for Event Monitoring Wave app compatibility.

#### **New Fields**

- LOGIN\_KEY—The string that ties together all events in a given user's login session. It starts with a login event and ends with either a logout event or the user session expiring.
- USER\_ID\_DERIVED—The 18-character case-insensitive ID of the person using Salesforce services through the UI or the API.

#### **Renamed Field**

- SESSION\_ID now named SESSION\_KEY—The string that ties together all events for a particular activity session. For example, URI events while the user is interacting with an Accounts page.
- **Example**: This example is an excerpt from Lightning Page View event logs, which shows users' click paths in Salesforce. To see a comprehensive view of what each user is doing in Lightning Experience and Salesforce1, use LOGIN\_KEY as an identifier across the various events and actions to tie them together.

USER_ID	IOGIN_KEY	ESSION_KEY	<pre>@ ORGANIZATION_ID</pre>
www.energenergenergenergenergenergenergener	processor to consider the same	1	
005B0000001xhK5	j8Bw3NJRdCcRr+dL	/s+3g8nd7BUCwgyw	00DB0000003P7w
005B0000001xhK5	j8Bw3NJRdCcRr+dL	/ + 3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/ + 3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/ + 3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/++3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/ + 3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/i+3g8nd7BUCwgyw	00DB0000003P7w
00580000001xhK5	j8Bw3NJRdCcRr+dL	/i+3g8nd7BUCwgyw	00DB0000003P7w
00580000001sNGh	PemvEhA9UFwX8ZXX	/ GDXmizYu+fKkSn	00DB0000003P7w
0058000001sNGh	PerrvEhA9UFwX8ZXX	Lc1OeTO10a6JRc8	00DB0000003P7w
005B0000001sNGh	PernvEhA9UFwX8ZXX	S AzuhOQIyQA927b	00DB0000003P7w
005B0000001sNGh	Kes2kr11GY6zpam/	V BwP2H6re5GF8Gg	00DB0000003P7w
005B0000001sNGh	Kes2kr11GY6zpam/	3 // 3wW1f84gUKSVnv	00DB0000003P7w
005B0000001sNGh	Kes2kr11GY6zpam/	ItNnH+IsMck6eaYq	00DB0000003P7w

### Use Async SOQL and UniqueKey for More Flexibility in Login Forensics

You can run Async SOQL queries and filter them on any field in the LoginEvent object, giving you flexibility in how you construct your queries. With Async SOQL, you can run queries in the background and retrieve results when you're ready. The new UniqueKey field is used as the primary key instead of Id.

You can filter Async SOQL queries on any field, not just EventDate or Id. You can also use all operators, including comparison operators such as <= and =>.

#### Example: Get Yesterday's Last 10 Successful Logins

SELECT Application, Browser, EventDate, UniqueKey, LoginUrl, UserId FROM LoginEvent WHERE EventDate>Yesterday LIMIT 10 AND Status='Success'

There are limits on the number of Async SOQL queries you can run in a given period. For details, see the Async SOQL Guide (Pilot).

Important: The UniqueKey field in the LoginEvent object is now the unique identifier for each record. Use this field as the primary key in your queries instead of the Id field because Id isn't populated in API version 40.0 and later. Also, as a result of

### **EDITIONS**

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

modifications made to this release, LoginEvent data in your org from previous releases isn't immediately available. It will be available within 7 days of the Summer '17 release.

#### SEE ALSO:

Salesforce Help: Monitor Login Activity with Login Forensics Async SOQL Guide (Pilot)

### Prevent Identity Fraud in Government Cloud with Login Forensics

Login forensics helps you better determine which user behavior is legitimate to prevent identity fraud in Salesforce. This feature is now available in government pods.

SEE ALSO:

Salesforce Help: Monitor Login Activity with Login Forensics

### Track Salesforce Connect Callouts with Event Log Files (Pilot)

We added event types to the EventLogFile standard object to track Salesforce Connect callouts to external systems. Now you can audit the historical activity of your org's access to external object data.

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 Success Community.

SEE ALSO:

Track External Object Data Callouts with Event Log Files (Pilot)

### Prepare Your Org for UI Tracking Event Type Retirement

In this release, the UI Tracking event type isn't populated with data. In the Winter '18 release, it will be removed completely.

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.



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

#### **EDITIONS**

Available in: **Developer** Edition

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

### **EDITIONS**

• If you built custom visualizations, update your integration to pull in the new Lightning Experience event types and prepare to stop using the UI Tracking event type. For information on how to use the Event Monitoring API, see the Force.com REST API Developer Guide.

#### SEE ALSO:

Knowledge Article: New Event Types for Shield Monitoring

# Transaction Security: Lightning Experience, Chatter, Apex Examples

Introducing Transaction Security Lightning Experience. It's a new way to create policies against real-time events. The new user interface incorporates an easy to use setup wizard and a carousel with relevant information and statistics about your Salesforce org. We also improved policy views and Apex editing and added a carousel with useful information and statistics. With the new UI, you can create policies that check Chatter resources, and we've added more Apex examples to learn how.

IN THIS SECTION:

#### New Wizard Guides You Through Creating Policies

The new Lightning Experience interface for Transaction Security incorporates a wizard for creating basic policies, a new way to look at policy views, and a carousel.

#### Monitor Chatter Posts with New Resources and Actions

Chatter resources are now available for Entity policies, and Cases have been added to Data Export policies. The new Freeze User action is available for Entity policies for Chatter resources. For example, policies can examine the contents of feed comments and questions and then freeze the user or block the resource if the content doesn't meet the policy. Freezing a user completely blocks the user that triggered the policy from accessing their account.

#### Get Comfortable Writing Chatter Policies with New Examples

We've added an example on how to write Chatter resource policies to the Apex Developer Guide.

### New Wizard Guides You Through Creating Policies

The new Lightning Experience interface for Transaction Security incorporates a wizard for creating basic policies, a new way to look at policy views, and a carousel.

When you use Transaction Security in Lightning Experience, it's an entirely new experience.

Lea Pol	d Data Export	Lead	DataExport	Block, Email Notification, In-App Notification	DataLo	aderLeadE	xportCondition		•
	ncurrent User ision Limit Policy	LoginHistory	Login	End a session to log in, Email Notification, In-App Notification	Concur	rrentSessior	nsPolicyCondition		•
РО	LICY NAME	EVENT NAME	EVENT TYPE	ACTION	APEX F	POLICY		ENABLED	
✓ Ti	ransaction Secu	rity Policies (2	)				Edit Preferences	Create Poli	cy
				• •					
	-	policies to moni user and API logi		Create policies to limit the numi of multiple logins per user.	ber		average number of enly spikes, it can ir potential risk.		
		2		10					
	Users	Logged In		Total Concurrent Session	s	Avera	ge Concurrent	Sessions	
	Transaction	Security							

On the main page, the carousel cards provide information and statistics to help you decide which policies you need. Some cards include links to help and training. Your list of policies has been reorganized to show only the most important components, making the list easier to scan.

### Monitor Chatter Posts with New Resources and Actions

Chatter resources are now available for Entity policies, and Cases have been added to Data Export policies. The new Freeze User action is available for Entity policies for Chatter resources. For example, policies can examine the contents of feed comments and questions and then freeze the user or block the resource if the content doesn't meet the policy. Freezing a user completely blocks the user that triggered the policy from accessing their account.

You can monitor various aspects of your Chatter posts. The new entity resource types for Chatter are:

- Chatter Message
- Feed Comment
- Feed Item
- Idea
- Question

Salesforce Classic supports all Chatter resources, while Lightning Experience supports only the Feed Comment and Feed Item resources.

#### Get Comfortable Writing Chatter Policies with New Examples

We've added an example on how to write Chatter resource policies to the Apex Developer Guide.

You can scan or filter for specific words in posts. This example looks for a post containing the specific word "Salesforce" and blocks those posts. You can also write conditions that loop through a list of words or keep a running total of the occurrence of the words.

```
global class ChatterMessageWordFilterPolicyCondition implements TxnSecurity.PolicyCondition
{
    public boolean evaluate(TxnSecurity.Event event) {
```

```
String body = event.data.get('Body');

if(body.containsIgnoreCase('Salesforce')) {
   return true;
   }
   return false;
}
```

SEE ALSO:

Salesforce Help: Apex Policies for Transaction Security Notifications Apex Developer Guide: TxnSecurity Namespace

# Other Security Changes: New Session Setting

We made changes that impact security, including securing connections for all third-party domains.

IN THIS SECTION:

#### Secure HTTPS Connections for Third-Party Domains

To improve security, we added a session setting that ensures secure connections to all third-party domains. External assets, such as images and JavaScript files, automatically load over HTTPS to prevent interception by a malicious party. This feature is enabled by default on all accounts created after the Summer '17 release.

### Secure HTTPS Connections for Third-Party Domains

To improve security, we added a session setting that ensures secure connections to all third-party domains. External assets, such as images and JavaScript files, automatically load over HTTPS to prevent interception by a malicious party. This feature is enabled by default on all accounts created after the Summer '17 release.

To enable this security feature for existing accounts, from Setup, enter *Session Settings* in the Quick Find box. Then select **Require secure connections (HTTPS) for all third-party domains**.

# Deployment: New Components Now Available in Change Sets, Deployment Permission Dependency Now Selected Automatically

#### IN THIS SECTION:

New Change Set Components

The components available for a change set vary by edition. These components are now available for change sets.

#### Modify All Data Permission Is Automatically Selected When You Select Deploy Change Sets

The Modify All Data user permission is now selected automatically when you select the Deploy Change Sets permission. Users must have the Modify All Data permission in addition to the Deploy Change Sets permission to deploy or validate inbound change sets and to edit deployment connections. Salesforce admins have the Modify All Data permission enabled by default.

# New Change Set Components

The components available for a change set vary by edition. These components are now available for change sets.

#### ChatterExtensions

Represents the metadata used to describe a Rich Publisher App (pilot) that is integrated with the Chatter publisher. ChatterExtensions is a pilot feature in API version 40.0.

#### Network

Represents a community, which is a customizable public or private space for employees, customers, and partners to connect.

### **EDITIONS**

Available in **Enterprise**, **Performance**, **Unlimited**, and **Database.com** Editions

# Modify All Data Permission Is Automatically Selected When You Select Deploy Change Sets

The Modify All Data user permission is now selected automatically when you select the Deploy Change Sets permission. Users must have the Modify All Data permission in addition to the Deploy Change Sets permission to deploy or validate inbound change sets and to edit deployment connections. Salesforce admins have the Modify All Data permission enabled by default.

The following table lists the permissions needed for change sets.

User Permissions Needed				
To edit deployment connections:	Deploy Change Sets AND Modify All Data			
To use outbound change sets:	Create and Upload Change Sets,			
	Create AppExchange Packages,			
	AND			
	Upload AppExchange Packages			
To use inbound change sets:	Deploy Change Sets AND Modify All Data			

# Development: Create Your Own Salesforce App

Whether you're using Lightning components, Visualforce, Apex, or our APIs with your favorite programming language, these enhancements to Force.com help you develop amazing applications, integrations, and packages for resale to others.

### IN THIS SECTION:

Lightning Components: Security, Developer Productivity, and App Reach

The Lightning Component framework powers Lightning Experience and Salesforce1. Use the framework to build mobile apps and pages in Lightning Experience, Salesforce1, Salesforce Classic, and Communities. Enhancements in this release are focused on LockerService and Content Security Policy changes, new ways to make your Lightning components available, performance and error handling improvements, and other new features for developers.

#### Einstein Vision: Image Recognition and Deep-Learning Models

Not a data scientist or machine-learning expert, but still want to integrate AI into your apps? Use the Einstein Vision API to easily AI-enable your apps with image recognition. Leverage pre-trained classifiers, or train your own custom classifiers to solve a vast array of specialized image recognition use cases. With the Einstein Vision API, developers can build their own deep-learning models via a standard REST API. You can use these models to implement image-recognition functionality, such as visual search, brand detection, and object identification. Make your apps smarter and look like a genius at the same time.

#### Visualforce: Access to Page Metrics and Improved Security

Develop apps to customize your org using Visualforce. Changes in this release are focused on giving you access to Visualforce page metrics and improving the security of your pages. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

#### Lightning Design System

The major change in this release is an update to the BEM notation to make it easier to work with comments in markup.

#### Salesforce DX (Beta)

With a focus on source-driven development, Salesforce DX makes it easier for developers to build together and continuously deliver using the tools that make them most productive.

#### Apex Code: Improved Performance and Security

Access metadata types and components in Apex. Safely manage cached values with the new Cache.CacheBuilder interface. Access controls on Apex controller methods securely from managed packages.

#### API: New Objects and Types, Search Enhancements, and User Interface API

Access new and updated metadata types, data objects, and API calls in API version 40.0. Refine your searches with new SOSL clauses. Use the new User Interface API to create native mobile apps and custom web apps with your own branding

#### Custom Metadata Types: Relationship Field Enhancements, Long Text Areas

Build better apps with custom metadata types, and base your apps on types of metadata rather than just data. Check out the features that you've been waiting for, including metadata relationships to field definitions and long text areas in custom metadata types. These changes apply to both Lightning Experience and Salesforce Classic.

#### ISV force: Channel Order App in Lightning Experience, New Channel Order Apex API, Push Upgrade Enhancements, and More

ISVforce tools make it easy to build, distribute, and manage AppExchange products. Get more control over your orders with version 2.0 of the Channel Order App, newly redesigned for Lightning Experience. If you want to automate order submission, the new Channel Order Apex API provides classes for sending, editing, recalling, and cloning orders. You can now exclude subscribers from push upgrades, and you get better performance when pushing upgrades to large numbers of subscribers via the API. Apps can also access metadata using Apex.

# Lightning Components: Security, Developer Productivity, and App Reach

The Lightning Component framework powers Lightning Experience and Salesforce1. Use the framework to build mobile apps and pages in Lightning Experience, Salesforce1, Salesforce Classic, and Communities. Enhancements in this release are focused on LockerService and Content Security Policy changes, new ways to make your Lightning components available, performance and error handling improvements, and other new features for developers.

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:

#### LockerService Critical Update Activation

LockerService, which has been a critical update since Summer '16, is enforced for all orgs in Summer '17. However, to reduce the impact on existing components, we adjusted the activation process.

#### 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 Summer '17. 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.

#### Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)

This release includes a critical update that affects access to server-side Apex controller methods from your Lightning components. If you've written Lightning component code that calls non-global Apex methods in a managed package, you have some work to do.

#### Override Standard Actions with Lightning Components

At long last, you can override four of the standard actions on objects—View, New, Edit, and Tab—using Lightning components. You can override these actions on standard and custom objects. Overriding standard actions allows you to customize your org using Lightning components, including completely customizing the way you view, create, and edit records.

#### Lightning Data Service (Beta)

Lightning Data Service is now in beta. Use Lightning Data Service to load, create, edit, or delete a record in your component, without using Apex code. Lightning Data Service handles sharing rules and field-level security for you. Lightning Data Service also improves performance and user-interface consistency.

#### Find Component Markup Errors Faster with Improved Error Messages

We display more details for more Lightning component errors. It's now easier for your users to report errors they encounter, and for you to find and fix those errors. This change affects all users, and doesn't depend on debug mode being enabled.

#### Browser Console Warnings for JavaScript and Apex Actions with the Same Name

The framework logs a browser console warning if your component has a JavaScript function (client-side action) with the same name as an Apex method (server-side action). The warning is logged only in debug mode and can help in troubleshooting an otherwise hard-to-debug issue.

#### Use the aura:valueRender Event Instead of a Custom Renderer

When a component is rendered or rerendered, the aura:valueRender event, also known as the render event, is fired. Handle this event to perform post-processing on the DOM or react to component rendering or rerendering. The event is preferred and easier to use than the alternative of creating a custom renderer.

### **EDITIONS**

Available for use in: **Contact Manager**, **Group**, **Professional**, **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

Create Lightning components using the UI in **Enterprise**, **Performance**, **Unlimited**, **Developer** Editions or a sandbox.

#### Streamlined Validity Checks for Components

If a component is invalid, cmp.get() returns null. Previously, the framework returned an InvalidComponent error. The new behavior is more typical of standard JavaScript behavior and reduces framework memory usage.

#### Use the force:hasSObjectName Interface with Quick Actions

Add the force:hasSObjectName interface to a Lightning component to enable the component to be assigned the API name of current record's sObject type. The sObject name is useful if the component can be used with records of different sObject types, and needs to adapt to the specific type of the current record.

#### Use force:createRecord to Prepopulate Fields on the Record Create Panel

The force:createRecord event supports a new attribute, defaultFieldValues. The defaultFieldValues attribute lets you prepopulate the create record form with default or calculated field values. Prepopulated values can accelerate data entry, improve data consistency, and otherwise make the process of creating a record easier. Specify default field values as name-value pairs in a JavaScript object.

#### Choose a CSP Level for lightning:container (Developer Preview)

The lightning:container component allows you to upload an app developed with a third-party framework as a static resource, and host the content in a Lightning component. You can specify the Content Security Policy (CSP) and the landing page of your content with a JSON file in your static resource, giving you more fine-grained control over the security of your content.

#### Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods

The locale parameter is deprecated for several methods in the AuraLocalizationService object. The validation for the locale parameter has also been tightened to allow locale values to match only the user's Language or Locale settings in Salesforce. If the locale parameter is set to another value, it defaults to the user's Language setting.

#### Deprecated useAppcache Attribute in aura:application

Browser vendors have deprecated AppCache, so we followed their lead. Remove the useAppcache attribute in the <aura:application> tag of your standalone apps (.app resources) to avoid cross-browser support issues due to deprecation by browser vendors. If you don't currently set useAppcache in an <aura:application> tag, you don't have to do anything because the default value of useAppcache is false.

#### Removed LockerService Restriction on instanceof in JavaScript

Previously, we advised against using the instanceof operator in JavaScript code when LockerService is activated. This restriction has been removed, except when checking arrays.

#### New and Changed Lightning Components

We added several new components and made improvements to others so that you can create apps faster.

#### 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.

#### New JavaScript API Methods

Use JavaScript API methods in your component's client-side controller, helper, or renderer.

### LockerService Critical Update Activation

LockerService, which has been a critical update since Summer '16, is enforced for all orgs in Summer '17. However, to reduce the impact on existing components, we adjusted the activation process.

#### LockerService Enforcement Is Dependent on the API Version

LockerService is enforced for all Lightning components created after Summer '17 (API version 40.0). LockerService isn't enforced for components with API version 39.0 and lower, which covers any component created before Summer '17.

#### Stricter Content Security Policy (CSP) Restrictions Aren't Enforced

The stricter CSP restrictions, which mitigate the risk of cross-site scripting attacks, have been decoupled from LockerService and aren't enforced in production orgs in Summer '17. The stricter CSP changes are available only in sandbox and Developer Edition orgs and can be activated in two new critical updates, one for Communities and one for other contexts. The critical updates give you more time to update your code to work with stricter CSP.

### LockerService Features Activated

LockerService enforces some security features and encourages best practices to make your code more supportable.

#### JavaScript ES5 Strict Mode Enforcement

JavaScript ES5 strict mode is implicitly enabled. You don't need to specify "use strict" in your code.

JavaScript strict mode makes code more robust and supportable. For example, it throws some errors that would otherwise be suppressed.

A few common stumbling points when using strict mode are:

- You must declare variables with the var keyword.
- You must explicitly attach a variable to the window object to make the variable available outside a library.
- The libraries that your components use must also work in strict mode.

For more information about JavaScript strict mode, see the Mozilla Developer Network.

#### **DOM Access Containment**

A component can only traverse the DOM and access elements created by a component in the same namespace. This behavior prevents the anti-pattern of reaching into DOM elements owned by components in another namespace.

Note: It's an anti-pattern for any component to "reach into" another component, regardless of namespace. LockerService only prevents cross-namespace access. Your good judgment should prevent cross-component access within your own namespace as it makes components tightly coupled and more likely to break.

#### **Restrictions to Global References**

LockerService applies restrictions to global references. LockerService provides secure versions of non-intrinsic objects, such as window. For example, the secure version of window is SecureWindow. You can interact with a secure wrapper in the same way as you interact with the non-intrinsic object, but the secure wrappers filter access to the object and its properties. The secure wrappers expose a subset of the API of the underlying objects.

The LockerService API Viewer shows the DOM APIs exposed by LockerService. The API Viewer app lists the API for SecureDocument, SecureElement, and SecureWindow.

The current UI for the API Viewer is unpolished. Bear with us while we improve it. There's a lot of information but the main takeaway is that a background green color means that the DOM method is supported.

#### Access to Supported JavaScript API Framework Methods Only

You can access published, supported JavaScript API framework methods only. These methods are published in the reference doc app at https://<myDomain>.lightning.force.com/auradocs/reference.app, where <myDomain> is the name of your custom Salesforce domain. Previously, unsupported methods were accessible, which exposed your code to the risk of breaking when unsupported methods were changed or removed.

### Disabling LockerService for a Component

When a component is set to at least API version 40.0, which is the version for Summer '17, LockerService is enabled. LockerService is disabled for any component created before Summer '17 because these components have an API version less than 40.0. To disable LockerService for a component, set its API version to 39.0 or lower.

Component versioning enables you to associate a component with an API version. When you create a component, the default version is the latest API version. In Developer Console, click **Bundle Version Settings** in the right panel to set the component version.

LockerService is enabled for a component or an application purely based on component version. The containment hierarchy within an application or a component doesn't factor into LockerService enforcement.

Let's look at an example where Component A contains Component B. If Component A has API version 40.0, LockerService is enabled. If Component B has API version 39.0, LockerService is disabled for Component B even though it's contained in a component, Component A, that has LockerService enabled.

For consistency and ease of debugging, we recommend that you set the same API version for all components in your app, when possible.

### LockerService Setting for Managed Packages Has Been Removed

In Spring '17, there was a separate setting to control whether LockerService was enforced for components installed from a managed package. This Enable LockerService for Managed Packages setting has been removed from the **Lightning Components** page under **Setup**.

Components installed from a managed package are treated the same as any other component and are subject to LockerService restrictions.

New AppExchange security reviews and periodic re-reviews will require components to be version 40.0 or higher so that LockerService is enabled. The version requirement ensures that components installed from managed packages follow the security best practices that are enforced by LockerService.

### What Does LockerService Affect?

LockerService enforces security and best practices for custom Lightning components you use in:

- Lightning Experience
- Salesforce1
- Lightning Communities
- Standalone apps that you create (for example, myApp.app)
- Any other app where you can add a custom Lightning component, such as Salesforce Console in Lightning Experience
- Lightning Out

LockerService doesn't affect the following except for usage of Lightning components in Visualforce in these contexts:

- Salesforce Classic
- Visualforce-based communities
- Any apps for Salesforce Classic, such as Salesforce Console in Salesforce Classic

# 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 Summer '17. 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	Enable Stricter CSP for Lightning Components	OFF by default	Activated for all orgs			
orgs	Enable Stricter CSP for Lightning Components in Communities	OFF by default				
Duaduatian	Enable Stricter CSP for Lightning Components	N/A ON by default				
Production orgs	Enable Stricter CSP for Lightning Components in Communities	N/A		OFF by defaul	t	

#### Summer '17

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
- Salesforce1

• Standalone apps that you create (for example, myApp.app)

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.

# Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)

This release includes a critical update that affects access to server-side Apex controller methods from your Lightning components. If you've written Lightning component code that calls non-global Apex methods in a managed package, you have some work to do.

As a reminder, the Apex methods behind your Lightning components server actions have the following access modifier requirements.

- Apex methods in the same namespace as your component must be marked public or global.
- Apex methods in a different namespace from your component must be marked global.

See the details, including changes you might need to make to your code, in the Apex release note Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update).

SEE ALSO:

Lightning Components Developer Guide: Apex Server-Side Controller Overview

# Override Standard Actions with Lightning Components

At long last, you can override four of the standard actions on objects—View, New, Edit, and Tab—using Lightning components. You can override these actions on standard and custom objects. Overriding standard actions allows you to customize your org using Lightning components, including completely customizing the way you view, create, and edit records.

The ability to override standard actions has long been possible using Visualforce pages. It's also long been a top request for Lightning components. We're thrilled to be adding this feature, and we hope you find it just as exciting. (This isn't just a feature, it's an adventure.)

All of that said, there's a lot you need to know to successfully use action overrides with Lightning components. On the surface, adding an action override that uses a Lightning component is almost exactly the same as using a Visualforce page. You simply choose a different item, and away you go.

Override Sta	ndard Button or Li	nk Help for this Page 😯					
page, a bro	Overriding standard buttons and links changes the meaning of the salesforce.com URL and any calls to that URL such as a salesforce.com page, a browser shortcut, or an external system. You can replace the salesforce.com URL for a standard button or link with a custom s-control, Visualforce Page or lightning component.						
Select the	custom s-control	Visualforce Page or lightning component to use in place of the salesforce.com URL for this standard button or link.					
Overrid	e Properties	Save					
	Label	View					
	Name	View					
	Default	Standard Salesforce.com Page					
	Override With	No Override (use default)					
		O Lightning Component Bundle c:expenseView S					
		OVisualforce PageNone €					
	Comment	View expense records using the expenseView Lightning component.					

However, there are important differences from Visualforce in how you create Lightning components that can be used as action overrides, and significant differences in how Salesforce uses them. You'll want to read the details thoroughly before you get started, and test carefully in your sandbox or Developer Edition org before deploying to production.

### Standard Actions and Overrides Basics

Save

Cancel

There are six standard actions available on most standard and all custom objects: Tab, List, View, Edit, New, and Delete. In Salesforce Classic, these are all distinct actions.

Lightning Experience and Salesforce1 combine the Tab and List actions into one action, Object Home. However, Object Home is reached via the Tab action in Lightning Experience, and the List action in Salesforce1. In this release, you can only override the Tab action with a Lightning component, so you can't use a component to override the List action for Salesforce1. Finally, Salesforce1 has a unique Search action (reached via Tab). (Yes, it's a bit awkward and complicated.)

This table lists the standard actions you can override for an object as the actions are named in Setup, and the resulting action that's overridden in the three different user experiences.

Override in Setup	Salesforce Classic	Lightning Experience	Saleforce1	
Tab	object tab	object home	search	

Override in Setup	Salesforce Classic	Lightning Experience	Saleforce1
List	object list	n/a	object home
View	record view	record home	record home
Edit	record edit	record edit	record edit
New	record create	record create	record create
Delete	record delete	record delete	record delete

### Note:

- "n/a" doesn't mean you can't access the standard behavior, and it doesn't mean you can't override the standard behavior. It means you can't access the override. It's the override's functionality that's not available.
- There are two additional standard actions, Accept and Clone. These actions are more complex, and overriding them is an advanced project. Overriding them with Lightning components isn't supported.

### How and Where You Can Use Lightning Component Action Overrides

Lightning components can be used to override the View, New, Edit, and Tab standard actions in Lightning Experience and Salesforce1. Unlike Visualforce, overrides that use Lightning components don't affect Salesforce Classic. That is:

- If you override a standard action with a Visualforce page, it overrides the action in Salesforce Classic, Lightning Experience, and Salesforce 1.
- If you override a standard action with a Lightning component, it overrides the action in Lightning Experience and Salesforce1, but the standard Salesforce page is used in Salesforce Classic.

A Lightning record page for an object takes precedence over an override of the object's View action. That is, if you override the View action for an object, and you also create and assign a Lightning record page for the object, the Lightning record page is used. The override has no effect. This is true whether the override uses a Lightning component or a Visualforce page.

Action overrides aren't supported in Lightning console apps, and are silently ignored when invoked. If a Lightning console app user triggers an action that has been overridden, they see the standard action instead. If they trigger the same action outside of a Lightning console app, they see the overridden action. This behavior can result in an inconsistent user experience, which you should warn users about. Also ensure that you meet your data validation requirements using triggers and validation rules, rather than code that only runs in the action override. This strategy ensures that your data is valid, whether it's changed using a standard action or an action override.

### Override a Standard Action with a Lightning Component

You can override a standard action in both Salesforce Classic and Lightning Experience. While the destination is the same, the navigation paths are different.

#### **Lightning Experience**

- 1. From Setup, enter *object* in the Quick Find box.
- 2. Select Object Manager.
- **3.** Click the name of the object for which you want to override a standard action.
- 4. Select Buttons, Links, and Actions.

#### Salesforce Classic

- 1. From Setup, navigate to the object for which you want to override a standard action.
  - For standard objects, navigate to **Build** > **Customize**, and find the object.
  - For custom objects, navigate to **Build** > **Create** > **Objects**, and find the object.
- 2. Click the name of the object.
- 3. Scroll to the Buttons, Links, and Actions section.

Once you're viewing the object's Buttons, Links, and Actions list, select **Edit** for the action you want to override. From here, the steps are the same.

- 1. For Override With, select Lightning Component Bundle.
- 2. From the drop-down menu, select the name of the Lightning component to use as the action override.
- 3. Click Save.

Note: Users won't see changes to action overrides until they reload Lightning Experience or Salesforce1.

### Creating a Lightning Component for Use as an Action Override

Add the lightning:actionOverride interface to a Lightning component to allow it to be used as an action override in Lightning Experience or Salesforce1. Only components that implement this interface appear in the **Lightning Component Bundle** menu of an object action Override Properties panel.

```
<aura:component
   implements="lightning:actionOverride, force:hasRecordId, force:hasSObjectName">
   <article class="slds-card">
     <div class="slds-card header slds-grid">
       <header class="slds-media slds-media--center slds-has-flexi-truncate">
          <div class="slds-media body">
            <h2><span class="slds-text-heading--small">Expense Details</span></h2>
          </div>
        </header>
        <div class="slds-no-flex">
            lightning:button label="Edit" onclick="{!c.handleEdit}"/>
       </div>
     </div>
     <div class="slds-card_ body">(expense details go here)</div>
    </article>
</aura:component>
```

In Lightning Experience, the standard Tab and View actions display as a page, while the standard New and Edit actions display in an overlaid panel. When used as action overrides, Lightning components that implement the <code>lightning:actionOverride</code> interface replace the standard behavior completely. However, overridden actions always display as a page, not as a panel. Your component displays without controls, except for the main Lightning Experience navigation bar. Your component is expected to provide a complete user interface for the action, including navigation or actions beyond the navigation bar.

Expense Details	Edit
(expense details go here)	

One important difference from Visualforce that's worth noting is how components are added to the **Lightning Component Bundle** menu. The Visualforce Page menu lists pages that either use the standard controller for the specific object, or that don't use a standard controller at all. This filtering means that the menu options vary from object to object, and offer only pages that are specific to the object, or completely generic.

The **Lightning Component Bundle** menu includes every component that implements the lightning:actionOverride interface. A component that implements lightning:actionOverride can't restrict an admin to overriding only certain actions, or only for certain objects. We recommend that your organization adopt processes and component naming conventions to ensure that components are used to override only the intended actions on intended objects. Even so, it's your responsibility as the component developer to ensure that components that implement the lightning:actionOverride interface gracefully respond to being used with any action on any object.

### Access Current Record Details

Components you plan to use as action overrides usually need details about the object type they're working with, and often the ID of the current record. Your component can implement the following interfaces to access those object and record details.

#### force:hasRecordId

Add the force:hasRecordId interface to a Lightning component to enable the component to be assigned the ID of the current record. The current record ID is useful if the component is used on a Lightning record page, as an object-specific custom action or action override in Lightning Experience or Salesforce1, and so on.

#### force:hasSObjectName

Add the force:hasSObjectName interface to a Lightning component to enable the component to be assigned the API name of current record's sObject type. The sObject name is useful if the component can be used with records of different sObject types, and needs to adapt to the specific type of the current record.

#### SEE ALSO:

*Lightning Components Developer Guide*: Override Standard Actions with Lightning Components *Lightning Components Developer Guide*: lightning:actionOverride *Salesforce Help*: Activate Lightning Experience Record Pages (can be outdated or unavailable during release preview)

# Lightning Data Service (Beta)

Lightning Data Service is now in beta. Use Lightning Data Service to load, create, edit, or delete a record in your component, without using Apex code. Lightning Data Service handles sharing rules and field-level security for you. Lightning Data Service also improves performance and user-interface consistency.

With the move to beta, force:recordPreview has been deprecated and replaced with force:recordData.lfyou're using force:recordPreview, you must refactor your components to use force:recordData.

With force:recordData, the targetRecord attribute has been updated to return records in a new shape using the User Interface API. See User Interface API Developer Guide: Response Bodies: Record. The following example shows how lookups have changed.

Old shape:

```
{
    "Lookup_c": "001xx000003DORBAA4",
    "Lookup_r.Id": null,
    "Lookup_r.Name": null,
    "Lookup_r": {
        "Id": "001xx000003DORBAA4",
        "
```

```
"Name": "Test",
    "sobjectType": "Account"
}
```

New shape:

```
{
    "fields": {
        "Lookup_c": {
            "displayValue": "001xx000003DORBAA4",
            "value": "001xx000003DORBAA4"
        },
        "Lookup r": {
            "displayValue": "Test",
            "value": {
                "apiName": "Account",
                "fields": {
                    "Id": {
                         "displayValue": "001xx000003DORBAA4",
                         "value": "001xx000003DORBAA4"
                    },
                     "Name": {
                         "displayValue": "Test",
                         "value": "Test"
                    }
                },
                "id": "001xx000003DORBAA4",
                "recordTypeInfo": null
            }
        }
    }
}
```

force:recordData includes a new attribute called targetFields, which is populated with a simplified view of the record's fields. targetFields is automatically updated whenever Lightning Data Service detects a record change.

v.targetFields.Name is equivalent to v.targetRecord.fields.Name.value.A simple way to update force:recordPreview usage to force:recordData is to change references from targetRecord to targetFields.

The following example shows the targetFields attribute within the force:recordData component.

```
<force:recordData aura:id="forceRecordCmp"
recordId="{!v.recordId}"
layoutType="{!v.layout}"
fields="{!v.fieldsToQuery}"
mode="VIEW"
targetRecord="{!v.record}"
targetFields="{!v.simpleRecord}"
targetError="{!v.error}" />
```

# Find Component Markup Errors Faster with Improved Error Messages

We display more details for more Lightning component errors. It's now easier for your users to report errors they encounter, and for you to find and fix those errors. This change affects all users, and doesn't depend on debug mode being enabled.

Does this feature sound familiar? That's because we're expanding the improved error messages we introduced in Spring '17. In that release, we improved the details and presentation of some kinds of errors—specifically, server-side errors caused by incorrect component markup. This release expands the range to include client-side JavaScript run-time errors. These kinds of errors are far more common, and the lack of meaningful details sometimes made debugging harder.

Expanded Error Panel (Summer '17)	Error Panel With Limited Details (prior releases)
A Component Error has occurred!  Message Uncaught Action failed: c:componentThrowsErrorScontrollerSclickToThrowError [This is custom error message.]  Component Descriptor markup://c:componentThrowsError  File Name  Interps://universalsamples.lightning. Line Column 11 9	Sorry to interrupt         This page has an error. You might just need to refresh it. First, would you give us some details? (We're reporting this as error ID: 1228434537)         What was going on right before this error happened?         Technical Stuff>         Uncaught Action failed: croomponentThrowsError\$controller\$clickToThrowError [This is custom error message.] throws at https://universalsamples.lightning.blit202.soma.force.com/auraFW/javascript/n_MKFyQ1PS Sife:N=21WA/aura_prodebuo;j=1:817109 clickToThrowError(]Enttps://universalsamples.lightning.blit202.soma.force.com/component ts/ofcomponentThrowError.js:13:20 wal(]Phttps://universalsamples.lightning.blit202.soma.force.com/components/lig htming/button.js:23:20 wal(]Phttps:/universalsamples.lightning.blit202.soma.force.com/components/aura/html.
11 9 Stack Trace >	handleClick()@https://universalsamples.lightning.blitz02.soma.force.com/components/lig htning/button.js:23:20
	OK

🗹 Note: The new error panel doesn't have an OK button. To dismiss the panel, click the "X" in the top right.

The error panel appears only when a relevant error occurs in Lightning Experience or Salesforce 1. The expandable stack trace appears only on desktop and tablet form factors—not on a phone.

The improved error reporting affects only your custom components, not standard components provided with the framework. Outside of Lightning Experience and Salesforce1, for example, in Lightning Out or a standalone app, error output can include details that were previously omitted, such as a complete stack trace.

# Browser Console Warnings for JavaScript and Apex Actions with the Same Name

The framework logs a browser console warning if your component has a JavaScript function (client-side action) with the same name as an Apex method (server-side action). The warning is logged only in debug mode and can help in troubleshooting an otherwise hard-to-debug issue.

Here's an example of the browser console warning for a c:dupActionName component that has a JavaScript function and Apex method with the same name, handleDup:

WARNING:	Component	'c:dupActionName'	has	server	and	client	action	name	conflicts:	handleDup
----------	-----------	-------------------	-----	--------	-----	--------	--------	------	------------	-----------

# Use the aura: valueRender Event Instead of a Custom Renderer

When a component is rendered or rerendered, the aura:valueRender event, also known as the render event, is fired. Handle this event to perform post-processing on the DOM or react to component rendering or rerendering. The event is preferred and easier to use than the alternative of creating a custom renderer.

Handling the aura:valueRender event is similar to handling the init hook. Add a handler to your component's markup.

<aura:handler name="render" value="{!this}" action="{!c.onRender}"/>

In this example, the onRender action in your client-side controller handles initial rendering and rerendering of the component. You can choose any name for the action attribute.

# Streamlined Validity Checks for Components

If a component is invalid, cmp.get() returns null. Previously, the framework returned an InvalidComponent error. The new behavior is more typical of standard JavaScript behavior and reduces framework memory usage.

If you call cmp.set() on an invalid component, nothing happens and no error occurs. It's essentially a no op.

The cmp.isValid() call returns false for an invalid component.

You don't need a cmp.isValid() check in the callback in a client-side controller when you reference the component associated with the client-side controller. The framework automatically checks that the component is valid. Similarly, you don't need a cmp.isValid() check during event handling or in a framework lifecycle hook, such as the init event.

If you reference a component in asynchronous code, such as setTimeout() or setInterval(), or when you use Promises, a cmp.isValid() call checks that the component is still valid before processing the results of the asynchronous request. In many scenarios, the cmp.isValid() call isn't necessary because a null check on a value retrieved from cmp.get() is sufficient. The main reason to call cmp.isValid() is if you're making multiple calls against the component and you want to avoid a null check for each result.

# Use the force:hasSObjectName Interface with Quick Actions

Add the force:hasSObjectName interface to a Lightning component to enable the component to be assigned the API name of current record's sObject type. The sObject name is useful if the component can be used with records of different sObject types, and needs to adapt to the specific type of the current record.

Previously, this interface affected only components used on Lightning record pages. Now you can use it in these additional contexts.

- Quick actions—components that implement the force:lightningQuickAction or force:lightningQuickActionWithoutHeader interfaces.
- Standard action overrides—components that implement the lightning:actionOverride interface.

SEE ALSO:

*Lightning Components Developer Guide*: force:hasSObjectName Override Standard Actions with Lightning Components

### Use force: createRecord to Prepopulate Fields on the Record Create Panel

The force:createRecord event supports a new attribute, defaultFieldValues. The defaultFieldValues attribute lets you prepopulate the create record form with default or calculated field values. Prepopulated values can accelerate data entry, improve data consistency, and otherwise make the process of creating a record easier. Specify default field values as name-value pairs in a JavaScript object.

This example displays the record create panel for a contact with two fields prepopulated.

```
var createAcountContactEvent = $A.get("e.force:createRecord");
createAcountContactEvent.setParams({
    "entityApiName": "Contact",
    "defaultFieldValues": {
        'Phone' : '415-240-6590',
        'Account' : '001xxxxxxxxxxx'
    }
});
createAcountContactEvent.fire();
```

SEE ALSO:

Lightning Components Developer Guide: force:createRecord

### Choose a CSP Level for lightning: container (Developer Preview)

The lightning:container component allows you to upload an app developed with a third-party framework as a static resource, and host the content in a Lightning component. You can specify the Content Security Policy (CSP) and the landing page of your content with a JSON file in your static resource, giving you more fine-grained control over the security of your content.

CSP is an added layer of security that helps prevent certain types of attack, like Cross-Site Scripting and data injection attacks. A CSP header specifies a policy that allows certain elements of a web page (such as images, video, or other media) to be loaded from a specified set of domains.

Specify a CSP level and a landing page for your app by adding a manifest.json file to the static resource referenced by lightning:container. The manifest.json file is optional, and represents a JSON array of pages within your app. If you don't include a manifest file in your static resource, the landing page of your app must be named index.html.

This example manifest.json includes three pages: index.html, foo.html, and bar.html.

] }

Each page in your app can have a CSP level of Lightning, minimum, or custom.

SEE ALSO:

Lightning Components Developer Guide: Lightning Container (Developer Preview)

# Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods

The locale parameter is deprecated for several methods in the AuraLocalizationService object. The validation for the locale parameter has also been tightened to allow locale values to match only the user's Language or Locale settings in Salesforce. If the locale parameter is set to another value, it defaults to the user's Language setting.

The locale parameter has been deprecated for these AuraLocalizationService methods:

- formatDate
- formatDateTime
- formatDateTimeUTC
- formatDateUTC
- formatTime
- formatTimeUTC
- parseDateTime
- parseDateTimeUTC

For related locale changes in several date and time components, see New and Changed Lightning Components.

### Deprecated useAppcache Attribute in aura:application

Browser vendors have deprecated AppCache, so we followed their lead. Remove the useAppcache attribute in the <aura:application> tag of your standalone apps (.app resources) to avoid cross-browser support issues due to deprecation by browser vendors. If you don't currently set useAppcache in an <aura:application> tag, you don't have to do anything because the default value of useAppcache is false.

**Note:** We included this information in a patch release for the Spring '17 Release Notes. We're repeating the deprecation notice in case you missed the patch update.

### Removed LockerService Restriction on instanceof in JavaScript

Previously, we advised against using the instanceof operator in JavaScript code when LockerService is activated. This restriction has been removed, except when checking arrays.

Except when checking arrays, feel free to use instanceof in your components or upload static resources for third-party libraries that use instanceof in their internals.

To check if a given object is an array, use Array.isArray(objToTest) instead of instanceof. LockerService uses the standard JavaScript Proxy object. Proxy doesn't support using instanceof with a native array.

# New and Changed Lightning Components

We added several new components and made improvements to others so that you can create apps faster.

### **New Components**

The following components are new.

#### force:recordData (Beta)

Access, modify, create, or delete records in a component using Lightning Data Service. This component replaces force:recordPreview. For more information, see Lightning Data Service (Beta).

#### force:utilityBarAPIAccess (Pilot)

Provides access to the Lightning Console JavaScript API's utility bar library of methods.

#### force:workspaceAPIAccess (Pilot)

Provides access to the Lightning Console JavaScript API's workspace library of methods.

#### forceCommunity:appLauncher

Displays App Launcher in a Lightning component. For more information, see Add App Launcher and Notifications Components to Lightning Components in Communities.

#### forceCommunity:notifications

Displays the Notifications icon in a Lightning component. For more information, see Add App Launcher and Notifications Components to Lightning Components in Communities.

#### forceCommunity:waveDashboard

Adds a Wave Analytics dashboard to a community page. For more information, see Embed Wave Dashboards in Communities the Easy Way with Community Builder.

#### lightning:breadcrumb

An item in the hierarchy path of the page that the user is on.

#### lightning:breadcrumbs

A hierarchy path of the page the user is visiting within the website or app.

#### lightning:buttonStateful

A button that toggles between states.

#### lightning:relativeDateTime

Displays the time difference between the source date-time and the provided date-time. This component was previously named lightning:formattedRelative.

#### lightning:tile

A grouping of related information associated with a record.

### **Changed Components**

The following components have changed.

#### force:recordPreview

This component has been deprecated. Use force:recordData instead. For more information, see Lightning Data Service (Beta).

#### force:recordEdit

This component now uses the Lightning Design System styling. Extend force:slds if you're using force:recordEdit in a standalone app for the component to be styled correctly.

#### force:recordView

This component now uses the Lightning Design System styling. Extend force:slds if you're using force:recordView in a standalone app for the component to be styled correctly.

#### lightning:avatar

The following attributes are new.

- fallbackIconName—The Lightning Design System name of the icon used as a fallback when the image fails to load and initials are not provided. Names are written in the format '\standard:account\' where *standard* is the category, and *account* is the icon to display. Only icons from the standard and custom categories are allowed. An error message is printed in the browser console if you're using an icon that's not part of the standard or custom category.
- initials—If the record name contains two words, like first and last name, use the first capitalized letter of each. For records that only have a single word name, use the first two letters of that word using one capital and one lowercase letter.

#### lightning:buttonMenu (Beta)

The following attribute has changed.

menuAlignment—These values are new: bottom-left, bottom-center, and bottom-right.

#### lightning:card

The following attribute has changed.

- title—The attribute type has been changed from Component[] to Object.
- footer—The attribute type has been changed from Component[] to Object.

#### lightning:icon

The following attribute has changed.

• variant—The bare variant has been renamed inverse. The bare variant still works, but it will be deprecated in the near future.

#### lightning:input (Beta)

The following attributes are new.

- isLoading—Specifies whether the spinner is displayed to indicate that data is loading. The default is false.
- messageToggleActive—Text shown for the active state of a toggle. The default is Active.
- messageToggleInactive—Text shown for the inactive state of a toggle. The default is Inactive.
- variant—The variant changes the appearance of an input field. The values are standard and label-hidden. The default is standard.

The following types have changed.

• search—The onchange event is fired when you press the clear button.

#### lightning:inputRichText (Beta)

This component now supports HTML tags that correspond to the toolbar, including tags for formatting bold, underline, italics, and strikethrough text among others. Although the toolbar doesn't support formatting for tables, links, and images, the corresponding HTML tags are supported.

The following attributes are new.

- messageWhenBadInput—Error message that's displayed when valid is false.
- variant—The variant, bottom-toolbar, changes the appearance of the toolbar.

#### lightning:menultem (Beta)

The following attribute has changed.

• onactive—Deprecated. The onactive attribute still works, but it will no longer be usable in the near future. Use the onselect attribute in the lightning:buttonMenu component instead. event.getParam("value") returns the value of the selected menu item.

#### lightning:select

The following attribute is new.

• variant—The variant changes the appearance of an input field. Accepted variants include standard and label-hidden. The default is standard.

#### lightning:textarea

The following attribute is new.

• variant—The variant changes the appearance of an input field. Accepted variants include standard and label-hidden. The default is standard.

#### lightning:tile

The following attribute is new.

• media—The icon or figure displayed next to the textual information.

#### ui:inputDate

The date picker displays the Today link. Press the link to set today's date on the date field.

The langLocale attribute has been deprecated.

• langLocale—Deprecated. The validation for the langLocale attribute has also been tightened to allow langLocale values to only match the user's Language or Locale settings in Salesforce. If the langLocale attribute is set to another value, it defaults to the user's Language setting.

For related locale changes in several AuraLocalizationService methods, see Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods.

#### ui:inputDateTime

The date picker displays the Today link. Press the link to set today's date on the date field.

The langLocale attribute has been deprecated.

• langLocale — Deprecated. The validation for the langLocale attribute has also been tightened to allow langLocale values to only match the user's Language or Locale settings in Salesforce. If the langLocale attribute is set to another value, it defaults to the user's Language setting.

For related locale changes in several AuraLocalizationService methods, see Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods.

#### ui:outputDate

The langLocale attribute has been deprecated.

• langLocale — Deprecated. The validation for the langLocale attribute has also been tightened to allow langLocale values to only match the user's Language or Locale settings in Salesforce. If the langLocale attribute is set to another value, it defaults to the user's Language setting.

For related locale changes in several AuraLocalizationService methods, see Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods.

#### ui:outputDateTime

The langLocale attribute has been deprecated.

• langLocale—Deprecated. The validation for the langLocale attribute has also been tightened to allow langLocale values to only match the user's Language or Locale settings in Salesforce. If the langLocale attribute is set to another value, it defaults to the user's Language setting.

For related locale changes in several AuraLocalizationService methods, see Deprecated locale Parameter in AuraLocalizationService JavaScript API Methods.

#### ui:scrollerWrapper

The following method is new.

- scrollTo (destination, xcoord, ycoord) Scrolls the content to a specified location.
  - destination—The target location. Valid values: custom, top, bottom, left, and right. For custom destination, xcoord and ycoord are used to determine the target location.
  - xcoord—X coordinate for the custom destination. The default is 0.
  - ycoord—Y coordinate for the custom destination. The default is 0.

### New and Changed Lightning Events

Lightning events facilitate communication between components and increase interactivity in your apps.

#### New Events

The following events are new.

#### aura:valueRender

Indicates that a component has been rendered or rerendered. See Use the aura:valueRender Event Instead of a Custom Renderer.

#### force:tabClosed

Indicates that a tab in a Lightning console app has been closed successfully.

#### force:tabCreated

Indicates that a tab in a Lightning console app has been created successfully.

#### force:tabFocused

Indicates that a tab in a Lightning console app has been focused successfully.

#### force:tabRefreshed

Indicates that a tab in a Lightning console app has been refreshed successfully.

#### force:tabReplaced

Indicates that a tab in a Lightning console app has been replaced successfully.

#### force:tabUpdated

Indicates that a tab in a Lightning console app has been updated successfully.

#### lightning:sendChatterExtensionPayload (Pilot)

Updates the payload and metadata that must be saved during extension composition. See Integrate Your Custom Apps into the Chatter Publisher (Pilot).

#### wave:update

Dynamically sets the filter on a Wave Dashboard, or interacts with the dashboard by dynamically changing the selection.

#### wave:selectionChanged

This event is fired by a Wave dashboard and contains information about the selection made by the user.

### **Changed Events**

The following events have changed.

#### force:showToast

messageTemplate and messageTemplateData attributes support a string containing links.

#### force:createRecord

defaultFieldValues is optional and, if provided, prepopulates fields on a record create panel. See Use force:createRecord to Prepopulate Fields on the Record Create Panel.

# 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.

#### clients:availableForMailAppAppPage

Enables a component to be added to email application panes in Lightning for Outlook and Lightning for Gmail.

#### clients:hasEventContext

Provides component access to an event's date or location in Lightning for Outlook and Lightning for Gmail.

#### clients:hasItemContext

Provides a component access to email or calendar events in Lightning for Outlook and Lightning for Gmail.

#### lightning:actionOverride

Enables a component to be used as an override on standard actions.

#### lightning:availableForChatterExtensionComposer (Pilot)

Enables a component to be used as an extension for the Chatter publisher. See Integrate Your Custom Apps into the Chatter Publisher (Pilot).

#### lightning:availableForChatterExtensionRenderer (Pilot)

Enables a component to be used as an extension for the Chatter feed item. See Integrate Your Custom Apps into the Chatter Publisher (Pilot).

### **Changed Interfaces**

The following interface has changed.

#### force:hasSObjectName

This interface can be added to components used as quick actions.

# New JavaScript API Methods

Use JavaScript API methods in your component's client-side controller, helper, or renderer.

The following methods are new.

#### AuraLocalizationService.isBetween(date, fromDate, toDate, unit)

Checks if a date is between two other dates (fromDate and toDate), where the match is inclusive. Only date formats that the JavaScript Date object can parse are supported. The unit denotes the unit of time to limit granularity, such as second, minute, hour, day, week, month, and year. The default is millisecond. Here are a few examples.

- \$A.localizationService.isBetween("2017-03-07", "March 7, 2017", "12/1/2017") returns true.
- \$A.localizationService.isBetween("2017-03-07 12:00", "March 7, 2017 15:00", "12/1/2017") returns false.
- \$A.localizationService.isBetween("2017-03-07 12:00", "March 7, 2017 15:00", "12/1/2017", "day") returns true.

#### Component.addEventHandler()

Dynamically adds a handler for a component event or application event. Use this method instead of the deprecated addHandler() method.

# Einstein Vision: Image Recognition and Deep-Learning Models

Not a data scientist or machine-learning expert, but still want to integrate AI into your apps? Use the Einstein Vision API to easily AI-enable your apps with image recognition. Leverage pre-trained classifiers, or train your own custom classifiers to solve a vast array of specialized image recognition use cases. With the Einstein Vision API, developers can build their own deep-learning models via a standard REST API. You can use these models to implement image-recognition functionality, such as visual search, brand detection, and object identification. Make your apps smarter and look like a genius at the same time.

#### IN THIS SECTION:

#### Einstein Vision Is Now Generally Available

Sign up for Einstein Vision to receive 1,000 free predictions per calendar month. If you need more predictions, you can purchase them.

#### New UI Makes It Easy to Get a Token

The Einstein Vision API uses OAuth 2.0 JWT bearer token flow for authorization. Each API call must contain a valid OAuth token in the request header. To quickly generate an OAuth access token, just use the token page.

#### Access the API in Heroku Using the Einstein Vision Add-On

The Einstein Vision add-on gives you easy access to the API in your apps running on Heroku.

#### Create a Dataset from a Zip File

You can now create a dataset, add labels, and upload images to the dataset, all in a single API call. When you pass a compressed .zip file to the API, the dataset name, label names, and image names are generated from the .zip file structure. The .zip file can be located in the cloud or on a local drive.

#### Page Through All Examples in a Dataset

A dataset can contain thousands of examples. To make life easier, use the offset and count query parameters to page through them.

#### Monitor API Usage

With the Einstein Vision API, you can make as many calls as needed to create datasets, add images, and create models. However, the number of predictions—any call to the predict resource—is limited. To proactively manage your API prediction limits, you can get your API usage.

### Einstein Vision Is Now Generally Available

Sign up for Einstein Vision to receive 1,000 free predictions per calendar month. If you need more predictions, you can purchase them.



Note: Some services are available at an extra cost. For pricing details, contact your Salesforce account executive.

Getting an Einstein Platform account is the first step to accessing the API. Use the sign-up page to get an account. You can get an account in two ways.

- Heroku—When you provision the Einstein Vision add-on, an Einstein Platform account is created for you.
- Salesforce—Log in with your Salesforce credentials and create an account.

After you create an account, you download your private key file. Use this file to create an access token.

#### SEE ALSO:

*Einstein Vision Developer Guide*: Introduction to Salesforce Einstein Vision *Heroku*: Einstein Vision Add-On *Einstein Vision Developer Guide*: What You Need to Call the API *Einstein Vision Developer Guide*: Rate Limits *Trailhead*: Quick Start: Einstein Vision

# New UI Makes It Easy to Get a Token

The Einstein Vision API uses OAuth 2.0 JWT bearer token flow for authorization. Each API call must contain a valid OAuth token in the request header. To quickly generate an OAuth access token, just use the token page.

In your app, you add code to create an assertion and generate a token by calling the /v1/oauth2/token resource. But if you want to do some testing or first try out the API, this page gives you a quick way to manually generate a token.

To get a token, navigate to the token page, upload your key contained in the .pem file you downloaded when you signed up, and click **Get Token**.

Einstein Platform
Generate an OAuth Token
Email or Account ID
Private Key
BEGIN RSA PRIVATE KEY MIIEogIBAAKCAQEAhLft1owTSpqJPsEzcZwxopl/F
Browse einstein_platform.pem
Expiration in Mins
15
GET TOKEN
Token: 1465a270f01816e035fa53c05c4a503d070f0187
Expires in 860 secs

#### SEE ALSO:

Einstein Vision Developer Guide: Set Up Authorization

# Access the API in Heroku Using the Einstein Vision Add-On

The Einstein Vision add-on gives you easy access to the API in your apps running on Heroku.

Provisioning the add-on is as simple as adding it to your application.

```
heroku addons:create einstein-vision:test --app coral-brook-39111
Creating einstein-vision:test on coral-brook-39111... free
```

After you install the add-on, use these config variables to generate an access token and call the API.

- EINSTEIN\_VISION\_ACCOUNT\_ID—Your account ID
- EINSTEIN\_VISION\_PRIVATE\_KEY—Your RSA key in PEM format
- EINSTEIN\_VISION\_URL—The Einstein Vision API endpoint

SEE ALSO:

Heroku Dev Center: Einstein Vision Add-On Documentation

# Create a Dataset from a Zip File

You can now create a dataset, add labels, and upload images to the dataset, all in a single API call. When you pass a compressed .zip file to the API, the dataset name, label names, and image names are generated from the .zip file structure. The .zip file can be located in the cloud or on a local drive.

You can create a dataset in two ways.

- Call the asynchronous API, and then query the status of the upload to determine when it's complete.
- Call the synchronous API, and receive a response when the upload is complete.

This cURL command creates a dataset asynchronously.

```
curl -X POST -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H
"Content-Type: multipart/form-data" -F "path=http://metamind.io/images/mountainvsbeach.zip"
https://api.metamind.io/v1/vision/datasets/upload
```

After you create the dataset, you can add examples by uploading them in a .zip file. This cURL command adds examples to a dataset.

```
curl -X PUT -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache" -H "Content-Type:
  multipart/form-data" -F "path=http://metamind.io/images/mountainvsbeach.zip"
  https://api.metamind.io/v1/vision/datasets/<DATASET_ID>/upload
```

SEE ALSO:

*Einstein Vision Developer Guide*: Create a Dataset from a Zip File Asynchronously *Einstein Vision Developer Guide*: Create a Dataset from a Zip File Synchronously *Einstein Vision Developer Guide*: Create Examples from a Zip File

# Page Through All Examples in a Dataset

A dataset can contain thousands of examples. To make life easier, use the offset and count query parameters to page through them.

- offset—Index of the example from which you want to start paging. Optional.
- count—Number of examples to return. Optional.

If you omit the count parameter, the call returns 100 examples by default. If you omit the offset parameter, paging starts at 0. This cURL command gets the first 50 examples from the specified dataset.

```
curl -X GET -H "Authorization: BEARER <TOKEN>" -H "Cache-Control: no-cache"
"https://api.metamind.io/v1/vision/datasets/<DATASET_ID/examples?offset=0&count=50</pre>
```

SEE ALSO:

Einstein Vision Developer Guide: Get All Examples

## Monitor API Usage

With the Einstein Vision API, you can make as many calls as needed to create datasets, add images, and create models. However, the number of predictions—any call to the predict resource—is limited. To proactively manage your API prediction limits, you can get your API usage.

You can get prediction usage information from the Einstein Vision API in two ways.

• Response headers—A call to the predict resource returns headers that contain basic rate limit information. You can use the headers to monitor your prediction usage as prediction calls are made and avoid making an explicit API call.

```
X-RateLimit-Limit 1000
X-RateLimit-Remaining 997
X-RateLimit-Reset 2017-05-01 00:00:00.0
```

- X-RateLimit-Limit—Maximum number of prediction calls available for the current plan month.
- X-RateLimit-Remaining—Total number of prediction calls you have left for the current plan month.
- X-RateLimit-Reset—Date on which your predictions are next provisioned. Always the first of the month.
- apiusage resource—This resource contains detailed information about your plans and prediction usage. This cURL call gets your prediction usage and plan information.

```
curl -X GET -H "Authorization: Bearer <TOKEN>" -H "Cache-Control: no-cache"
https://api.metamind.io/v1/apiusage
```

```
{
 "object": "list",
 "data": [
   {
     "id": "108",
     "organizationId": "2",
     "startsAt": "2017-04-01T00:00:00.000Z",
      "endsAt": "2017-05-01T00:00:00.000Z",
      "planData": [
        {
          "plan": "FREE",
          "amount": 1,
          "source": "SALESFORCE"
        }
     ],
      "licenseId": "oxDXJPi7z",
      "object": "apiusage",
      "predictionsRemaining": 997,
      "predictionsUsed": 3,
      "predictionsMax": 1000
   }
 ]
}
```

#### SEE ALSO:

*Einstein Vision Developer Guide*: Get API Usage *Einstein Vision Developer Guide*: Rate Limits

# Visualforce: Access to Page Metrics and Improved Security

Develop apps to customize your org using Visualforce. Changes in this release are focused on giving you access to Visualforce page metrics and improving the security of your pages. This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce1 mobile app.

For more information on features affected by these enhancements, refer to the *Visualforce Developer Guide*.

## EDITIONS

#### Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### IN THIS SECTION:

#### Use Advanced PDF to Render Visualforce Pages as PDF Files (Pilot)

Advanced PDF renders Visualforce pages as PDF files with broader support for modern HTML standards, such as CSS3, JavaScript, and HTML5. This change applies to both Lightning Experience and Salesforce Classic.

#### Prepopulate Fields on a Record Create Panel

Speed up record creation with prepopulated field values. The sforce.one.createRecord function now accepts an optional parameter that provides way to pre-fill form field values in the record creation panel. defaultFieldValues is optional and, if provided, prepopulates fields on a record create panel, including fields not displayed on the panel.

#### Access Visualforce Page Metrics Using the SOAP API

To query metrics on the Visualforce pages in your org, use the VisualforceAccessMetrics object in the Salesforce SOAP API. This change applies to both Lightning Experience and Salesforce Classic.

#### Roll Back Changes in Your Org When Remote JavaScript Methods Throw Exceptions

When a JavaScript method in an Apex class calling a remote action throws an exception, the action isn't completed. Previously, when a method threw an exception, the action was completed. For example, when you created an Apex class that used a remote action to add an account to your org and that method threw an exception, the account was added. Now, the account isn't added. With this enhancement, JavaScript remoting methods that throw exceptions no longer cause changes in your org. This change applies to both Lightning Experience and Salesforce Classic.

#### Allow CSRF Protection on GET Requests to Visualforce Pages Critical Update Postponed

This critical update, released in Spring '17, was scheduled for auto-activation in Summer '17, but has been postponed to October 15, 2017. This critical update gives you the option of ensuring that Visualforce pages receive a CSRF token with a GET request.

#### Add Clickjack Protection for Legacy Browsers to Visualforce Pages Without Page Header Is Now Enforced (Critical Update)

Clickjack protection for legacy browsers was a critical update in Winter '17 and was enforced for all orgs on February 10, 2017. This critical update extends legacy browser-compatible clickjack protection for Visualforce pages that set showHeader="false" and are configured to use API versions 26.0 or earlier.

## Use Advanced PDF to Render Visualforce Pages as PDF Files (Pilot)

Advanced PDF renders Visualforce pages as PDF files with broader support for modern HTML standards, such as CSS3, JavaScript, and HTML5. This change applies to both Lightning Experience and Salesforce Classic.

Note: We provide Advanced PDF 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. Advanced PDF 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.

To use Advanced PDF, set renderAs="advanced\_pdf" in the <apex:page> tag of a Visualforce page with API version 40.0 or later. This process is similar to the existing process for rendering a Visualforce page as a standard PDF file.

PDF pages rendered with Advanced PDF are subject to the same limitations as legacy PDF pages, including the maximum page size and limited number of fetched resources. Advanced PDF pages also time out after rendering for 2 minutes, which includes asynchronous processing time.

## **Preview Your Pages**

Because Advanced PDF is built on Chromium, it's easy to preview your Visualforce pages in Google Chrome. To preview a page, from Chrome, select **File** > **Print**.

## Preserve Background Colors and Images

Because the rendered PDF is optimized for printed pages, by default it does not preserve background colors and images. To preserve background colors and images, add a line to your page's CSS.

@media print { body {-webkit-print-color-adjust: exact; } }

## Customize the PDF Output

Advanced PDF supports the CSS Paged Media specification. Use these standards to set the paper size, margins, and other attributes. To learn more about CSS Paged Media, see the W3C's website.

# Prepopulate Fields on a Record Create Panel

Speed up record creation with prepopulated field values. The sforce.one.createRecord function now accepts an optional parameter that provides way to pre-fill form field values in the record creation panel. defaultFieldValues is optional and, if provided, prepopulates fields on a record create panel, including fields not displayed on the panel.

Users must have create access to fields with prepopulated values. Errors during saving that are caused by field access limitations don't display error messages.

SEE ALSO:

Salesforce1 Mobile App Developer Guide: Navigation with the sforce.one Object Lightning Components Developer Guide: force:createRecord

# Access Visualforce Page Metrics Using the SOAP API

To query metrics on the Visualforce pages in your org, use the VisualforceAccessMetrics object in the Salesforce SOAP API. This change applies to both Lightning Experience and Salesforce Classic.

Make a SOQL query in Workbench to get information from the VisualforceAccessMetrics object. This is a sample SOQL call.

SELECT ApexPageId, DailyPageViewCount, Id, MetricsDate FROM VisualforceAccessMetrics

Each VisualforceAccessMetrics object tracks the daily page view count in the DailyPageViewCount field. The date the metrics were collected is specified in MetricsDate, and the ID of the tracked Visualforce page is specified in ApexPageId. Page views are tallied the day after the page is viewed, and each VisualforceAccessMetrics object is removed after 90 days.

Using VisualforceAccessMetrics, you can track the number of views each Visualforce page in your org receives in a 24-hour time period. To find out how many views a page got over the course of multiple days, you can query multiple VisualforceAccessMetrics objects for the same ApexPageId.

# Roll Back Changes in Your Org When Remote JavaScript Methods Throw Exceptions

When a JavaScript method in an Apex class calling a remote action throws an exception, the action isn't completed. Previously, when a method threw an exception, the action was completed. For example, when you created an Apex class that used a remote action to add an account to your org and that method threw an exception, the account was added. Now, the account isn't added. With this enhancement, JavaScript remoting methods that throw exceptions no longer cause changes in your org. This change applies to both Lightning Experience and Salesforce Classic.

# Allow CSRF Protection on GET Requests to Visualforce Pages Critical Update Postponed

This critical update, released in Spring '17, was scheduled for auto-activation in Summer '17, but has been postponed to 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 checks 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. Click Activate for Allow CSRF Protection on GET Requests to Visualforce Pages.
- **3.** Test links to Visualforce pages that have CSRF protection on GET requests enabled.

# Add Clickjack Protection for Legacy Browsers to Visualforce Pages Without Page Header Is Now Enforced (Critical Update)

Clickjack protection for legacy browsers was a critical update in Winter '17 and was enforced for all orgs on February 10, 2017. This critical update extends legacy browser-compatible clickjack protection for Visualforce pages that set showHeader="false" and are configured to use API versions 26.0 or earlier.

Several security settings add clickjack protection to Visualforce pages. This critical update affects two of these settings. The **Enable** clickjack protection for customer Visualforce pages with headers disabled setting, located in Security > Session Settings in Setup, enables clickjack protection on an org's Visualforce pages that set the page's showHeader attribute to false. The Clickjack Protection Level setting, located in Develop > Sites in Setup, enables clickjack protection for Visualforce pages displayed in Force.com Sites.

Modern browsers are protected from clickjacking by setting the X-Frame-Options HTTP header. Legacy browsers, such as older versions of Internet Explorer, don't respect this header. To enable clickjack protection for older browsers, some HTML markup and JavaScript code are added to the page itself.

However, when rendered without the standard Salesforce page header (by setting the page's showHeader attribute to false), Visualforce pages set to API version 26.0 or earlier don't include the HTML markup and JavaScript code necessary to embed the clickjack protection scripts for legacy browsers. Legacy browser clickjack protection was omitted even when the org or site was configured to include the protection.

With this update enabled, Visualforce ensures that, when necessary, the expected markup and code are added to the page regardless of the page's API setting. This update allows all Visualforce pages to respect the org or site's clickjack protection settings.

This critical update has no effect on pages that set the page's contentType attribute to any value besides "text/html" or "text/xhtml".

# Lightning Design System

The major change in this release is an update to the BEM notation to make it easier to work with comments in markup.

BEM (block, element, modifier) is a well-known method of naming components. Previously, we used the double-dash style for BEM notation (.slds-block--modifier). Double dashes are problematic in markup, which doesn't allow double dashes within comments, so we've upgraded our syntax to use the single underscore style (.slds-block\_modifier). This change is backwards compatible for 18 months. All components going forward use the single-underscore BEM style.

For more information about Lightning Design System's use of BEM, see the Lightning Design System site.

For more information on the BEM notation change and other changes, see the complete Release Notes for Lightning Design System.

The Lightning Design System is a CSS Framework that provides a look and feel that's consistent with Lightning Experience. The component classes enable you to build custom applications with a UI that is consistent with Salesforce, without having to reverse engineer our styles.

# Salesforce DX (Beta)

With a focus on source-driven development, Salesforce DX makes it easier for developers to build together and continuously deliver using the tools that make them most productive.

Note: This release contains a beta version of Salesforce DX, which means it's a high-quality feature with known limitations. Salesforce DX 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 DX in the Salesforce DX Beta group in the Success Community.

Salesforce DX was built upon these core principles:

- Source code drives everything. ٠
- 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 agile distribution model. •
- Processes and tools facilitate continuous integration and continuous delivery.

#### IN THIS SECTION:

#### Access Salesforce DX (Beta)

Can't wait to get started? We have several ways for you to learn all about Salesforce DX.

Second-Generation Packaging (Pilot)

Concurrently with the Salesforce DX Beta release, customers can participate in the Pilot release of Second-Generation Packaging (Packaging 2).

#### Salesforce Development Tools for Visual Studio Code (Beta)

Our open-source extension bundle for Visual Studio Code brings Salesforce DX tooling to a popular lightweight source code editor. This beta version includes basic commands for working with scratch orgs, Apex code tools, and limited support for Lightning components and Visualforce. You can use VS Code's embedded terminal to run the rest of the Salesforce CLI commands.

#### Salesforce Command-Line Interface (CLI)

Look here for changes and new features for the Salesforce CLI for Salesforce DX.

#### Considerations for Salesforce DX (Beta)

Here are some known issues you might run into while using Salesforce DX.

Considerations for Force.com IDE 2 (Beta)

Here are some known issues you might run into while using Force.com IDE 2.

#### Information for Pilot Participants

Read this if you participated in the Salesforce DX Pilot and want to transition to Beta.

# Access Salesforce DX (Beta)

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## Salesforce DX on Trailhead

Like to earn badges? Check out these Salesforce DX modules on Trailhead.

#### Get Started with Salesforce DX trail

Become a Salesforce DX virtuoso by earning all four badges.

#### Salesforce DX Development Model

Learn how Salesforce DX 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 DX command-line interface to create and deploy apps.

#### **Continuous Integration Using Salesforce DX**

See how Salesforce DX, along with Git and Travis CI, provides a quick and easy continuous integration experience.

#### **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 Beta Documentation

Learn about Salesforce DX the traditional way. Read all about it.

#### Salesforce DX Beta Weekly Release Notes

We regularly update Salesforce DX (Beta) to incorporate your feedback and improve the quality. Check the Salesforce DX Beta Community for update announcements and to learn what's new or changed.

#### Salesforce DX Setup Guide

This guide is your first stop in your Salesforce DX journey. It tells you what you need to know 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, and highlights many of the Salesforce CLI commands you'll use every day.

#### Force.com IDE 2 Developer Guide

Force.com IDE 2 is tailor-made for Salesforce DX. It uses the Salesforce CLI plug-in to interact with your scratch orgs and works with version control systems.

## Get Involved

Join the Salesforce DX Beta Community! Tell us what you love, post some questions, and share your ideas about what we should build. We look forward to hearing your feedback.

# Second-Generation Packaging (Pilot)

Concurrently with the Salesforce DX Beta release, customers can participate in the Pilot release of Second-Generation Packaging (Packaging 2).

We've been re-imagining packaging and actively working on how it should work in Salesforce DX. This Pilot of Packaging 2 gives you a chance to see where we're going. Packaging 2 adds several exciting options to Salesforce DX:

• Better organize your source and more easily share Apex code by defining multiple packages within a single namespace. This lets you use public Apex classes to share code across packages rather than using global Apex classes.

- Implement feature branch development and testing.
- Install multiple packages in one transaction, with pre- and post-install scripts.
- Use a command line interface to enable fully API-driven development.
- Develop packages that are source-driven, not org-based.
- Easily develop and distribute dependent packages.

# Salesforce Development Tools for Visual Studio Code (Beta)

Our open-source extension bundle for Visual Studio Code brings Salesforce DX tooling to a popular lightweight source code editor. This beta version includes basic commands for working with scratch orgs, Apex code tools, and limited support for Lightning components and Visualforce. You can use VS Code's embedded terminal to run the rest of the Salesforce CLI commands.

Note: This release contains a beta version of Salesforce Development Tools for Visual Studio Code, which means it's a high-quality feature with known limitations. Salesforce Development Tools for Visual Studio Code 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 Development Tools for Visual Studio Code in the Salesforce DX Beta group in the Success Community.

We will continue to add functionality regularly. Share with us when you add functionality so that we can make even more improvements.

For information about Salesforce Development Tools for Visual Studio Code and how to get started, check out the Visual Studio Code Marketplace: https://marketplace.visualstudio.com/items?itemName=salesforce.salesforcedx-vscode

To peruse the source code for the extension bundle, report issues, or submit contributions, visit GitHub: https://github.com/forcedotcom/salesforcedx-vscode

# Salesforce Command-Line Interface (CLI)

Look here for changes and new features for the Salesforce CLI for Salesforce DX.

## requiresWorkspace Property in Command Definitions Is Now Called requiresProject

Unless you're developing plug-ins for the Salesforce CLI, this change won't affect you at all.

If you are developing CLI plug-ins, read on. We updated our code to rename a command property

from requiresWorkspace to requiresProject. This property determines whether users need to run a command within a Salesforce DX project. Commands with requiresProject: false can be run from any directory.

We won't be writing release notes about most of our behind-the-scenes changes, but we wanted to share this one with you in case you attended Dave Carroll's Become a Salesforce CLI Ninja session at TrailheaDX, which showcased the property as requiresWorkspace. We hope that many of you are already honing your ninja skills!

# Considerations for Salesforce DX (Beta)

Here are some known issues you might run into while using Salesforce DX.

Note: This release contains a beta version of Salesforce DX, which means it's a high-quality feature with known limitations. Salesforce DX 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 DX in the Salesforce DX Beta group in the Success Community.

## Salesforce DX CLI

#### Limited Support for Shell Environments on Windows

**Description:** Salesforce CLI is tested on the Command Prompt (cmd.exe), Powershell, and Windows Subsystem for Linux (WSL) for Ubuntu. There are known issues in the cygwin and Min-GW environments. These environments might be tested and supported in a future release. For now, use a supported shell instead.

#### Workaround: None.

#### The force:apex:test:run Command Doesn't Finish Executing

**Description:** In certain situations, the force:apex:test:run command doesn't finish executing. Examples of these situations include a compile error in the Apex test or an Apex test triggering a pre-compile when another is in progress.

**Workaround:** Stop the command execution by typing control-C. If the command is part of a continuous integration (CI) job, try setting the environment variable SFDX PRECOMPILE DISABLE=true.

## Dev Hub and Scratch Orgs

#### Default Views of ScratchOrgInfo, ActiveScratchOrg, and NamespaceRegistry are "Recently Viewed" Instead of "All"

**Description:** When you click the tabs, you see only items that you recently viewed which gives the impression that data is missing when it's not. This issue applies only to Lightning Experience. It does not affect the CLI.

Workaround: Create a view that lists all the items.

#### Person Accounts Don't Work in Developer Edition Scratch Orgs

Description: Person accounts work only in Enterprise Edition and Professional Edition scratch orgs.

Workaround: When working with person accounts, don't use a DE scratch org.

## Source Management

#### force:mdapi:convert lgnores the -d Parameter

**Description:** If you run force:mdapi:convert with the -d parameter, the command correctly creates the specified directory if it doesn't exist. But the command then incorrectly outputs the converted source into the default directory, as defined by the project-workspace.json file.

Workaround: None.

#### force:source:status and force:source:pull Do Not Work Correctly After Deactivating a Flow

**Description:** Let's say you deactivate a Flow version by changing its state using the scratch org's Setup. The next time you run force:source:status or force:source:pull, the commands correctly recognize that the Flow version has changed. But the commands do not recognize that the FlowDefinition has changed, even though it has. As a result, the source status output or pulled source is incorrect.

**Workaround:** In Setup, edit the Flow's description and rerun the force:source:status or force:source:pull command.

#### Changes to Standard Fields on Standard Objects Not Being Pulled

**Description:** If you change a standard field of a standard object in the scratch org, then run force:source:pull, the field changes are not pulled to your project.

Workaround: None.

#### Pushing After Removing a Permission Set Locally Causes "Unknown" Error

**Description:** If you remove a permission set from your local project, then run the force:source:push command, you see the error message: Unknown.

#### Workaround: None.

#### force:source:pull Shows New Transformed Objects As Changed Instead of Added

Description: The CLI output for force: source: pull displays the state of transformed objects as Changed instead of Added.

Workaround: None.

#### Modified Search Layouts and Compact Layout Assignments on Standard Objects Are Not Tracked

**Description:**Let's say you modify a search layout or compact layout assignment on a standard object in your scratch org. When you next run the force:source:pull command, Salesforce DX does not track the search layout or compact layout assignment. As a result, you don't see the change in the output of the force:source:pull command or in your local project.

**Workaround:** If you make some other change to the standard object, the search layouts and compact layout assignments are tracked and pulled to the Salesforce DX project.

#### Unchanged Standard and Custom Fields Are Pulled to the Project

Description: The force:source:pull command is including unchanged standard and custom fields.

Workaround: None.

#### Lightning Components Not Pulled to Correct Directory

**Description:** Lightning components are not being pulled to the correct directory if they are pushed from a directory other than main/default/aura/ComponentDir.

Workaround: Place Lightning components in a folder under main/default/aura/.

## QuickAction CustomObjectTranslations are not pulled if the original quickAction is not included in the package.xml

Description: The custom object translation that was pulled should include the new translation for the quick action.

**Workaround:** Wait until you have finished creating the quickAction and its customObjectTranslation before doing a force:source:pull.

#### Unable to Push Lookup Filters to a Scratch Org

**Description:** When you execute the force:source:push command to push the source of a relationship field that has a lookup filter, you sometimes get the following error:

duplicate value found: <unknown> duplicates value on record with id: <unknown> at line num, col num.

Workaround: None.

## Package Development

#### New Terminology in CLI for Managed Package Password

**Description:** When you use the CLI to add an installation key to a package version or to install a key-protected package version, the parameter name of the key is --installationkey. When you view a managed package version in the Salesforce user interface, the same package attribute is called "Password".

Workaround: None. The Password field name in the user interface will be changed in a future release.

## Considerations for Force.com IDE 2 (Beta)

Here are some known issues you might run into while using Force.com IDE 2.

Note: This release contains a beta version of Force.com IDE 2, which means it's a high-quality feature with known limitations. Force.com IDE 2 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 Force.com IDE 2 in the Salesforce DX Beta group in the Success Community.

## General Known Issues in Force.com IDE 2

#### Creating Your First Project or Source File Can Fail or Take a Long Time

**Description:** If you use Force.com IDE 2 before installing the Salesforce DX CLI plug-ins, the IDE installs the plug-ins for you when you create a project or source file. This process can slow down source file creation or cause it to fail. If you try to create a project before installing the plug-ins, it fails and you get an error that a class couldn't be instantiated.

**Workaround:** Try again to create the source file or project. Because the IDE has installed the CLI plug-ins for you, the creation request succeeds.

#### Org Status Label for Project Doesn't Refresh Automatically

**Description:** When you authorize a Dev Hub, or create or authorize a scratch org, the label that shows the status of your connected org in the Project Explorer doesn't refresh.

Workaround: To refresh the label, click the name of your project in the Project Explorer.

## Known Issues in Apex Code Analysis

#### **Completion Unavailable for Some Types**

**Description:** The Force.com IDE 2 Apex code analysis is powered by a beta version of the Apex Language Server, which conforms to the Language Server Protocol. This beta version offers code completion only for the following types:

- Standard Apex library
- User-defined types (classes, inner classes, interfaces, inner interfaces, enums, and inner enums) in your project

Code completion for standard objects, custom objects, and the code in managed packages isn't available.

#### Workaround: None

#### Fixed Syntax Errors Sometimes Don't Disappear

**Description:** After you fix a syntax error, the corresponding error indication sometimes still shows up in Problems view and your source file.

Workaround: Restart Force.com IDE 2 by selecting File > Restart.

#### Syntax Highlighting Sometimes Fails on Newly Opened Files

Description: When you open an Apex class or trigger, syntax highlighting sometimes doesn't work.

Workaround: Close and reopen the file.

#### Numerous Errors Are Sometimes Logged

**Description:** When you're editing a file, errors are occasionally logged on each keystroke.

**Workaround:** Restart Force.com IDE 2 by selecting **File** > **Restart**. If the issue persists, in the Error Log view, disable **Activate on new events**. To access this option, click the Error Log view's arrow button.

#### Known Issues in Apex Testing

#### Running Test Classes with No Test Methods Shows a Confusing Error

**Description:** If your test run includes an Apex class that's annotated with @isTest but doesn't contain test methods, the test run fails. The message ERROR running force:apex:test:run: Cannot read property 'message' of undefined. is returned in the error log.

**Workaround:** If your test run fails with a generic error, make sure that all test classes in the run contain at least one method with the @isTest annotation or the testMethod keyword.

#### Test Suites Must Be Hand-Coded or Retrieved via Metadata API

Description: You can't pull Apex test suites from a scratch org.

**Workaround:** Retrieve your test suites using sfdx force:mdapi:retrieve and then convert your project to the Salesforce DX format using sfdx force:mdapi:convert. Or, create your test suites by hand.

- 1. Create a testSuites directory. From the Project Explorer, right-click the directory within tests where you want to store your test suites and select New > Folder.
- 2. Right-click your testSuites directory and select New > File.
- 3. Give your test suite a name that ends in .testSuite. For example, *MySuite.testSuite*.
- 4. Customize your test suite using the XML format specified in ApexTestSuite in the Metadata API Developer Guide.
- To push the test suite to your default scratch org, right-click your project in the Project Explorer and select Salesforce DX > Push Source.
- 6. Set up a test run configuration that includes the suite, as described in Run Apex Tests in Force.com IDE 2.

## Information for Pilot Participants

Read this if you participated in the Salesforce DX Pilot and want to transition to Beta.

## New Features for Beta

#### **Check Out These New CLI Commands**

- force:lightning:test:create
- force:lightning:test:run
- force:package1:version:create:get
- force:package:install:get
- force:project:upgrade

#### Dev Hub Replaces Environment Hub for Managing Scratch Orgs

The Dev Hub gives you and your team the ability to create and manage scratch orgs. It's now easy to link a namespace to your Dev Hub and use it when you build and release your app with managed packages.

#### You Can Now Indicate Scratch Org Definition Values on the Command Line

A scratch org definition file is no longer required. When creating a scratch org, you can indicate scratch org values directly on the command line using key-value pairs.

#### Source Format Changes

- Custom objects and custom object translation are broken down for easier management with your version control system.
- Documents are now stored in their native extensions (instead of .documents) in your Salesforce DX project.

#### You Can Specify an installationkey (Password) When You Create a Managed Package

The installation key supplied in the CLI is equivalent to the password you see when working with managed packages in the Salesforce UI.

#### Automatically Add Package Components to Your Managed Package and Packaging Org

When you convert Metadata API source to Salesforce DX source using force:source:convert, specify the new -packagename option.

#### Output for source:org:list Has a New Look

The output now separates scratch orgs into their own section. It now includes connection status, and which Dev Hub org or scratch org is the default.

#### IN THIS SECTION:

#### Upgrade Your Salesforce DX Pilot to Beta

Upgrade your pilot environment before using the Salesforce DX beta.

#### Beta Changes That Affect the Pilot Salesforce DX Environment

Salesforce DX beta introduces changes that affect your pilot environment. For example, some CLI commands and parameters have been renamed, some have been removed, and the format of JSON files has changed. You now authorize to a Developer Hub rather than an Environment Hub.

#### Force.com IDE 2: Move from Pilot to Beta

Did you use Force.com IDE 2 in Pilot? Here are some notable changes for the Beta release.

## Upgrade Your Salesforce DX Pilot to Beta

Upgrade your pilot environment before using the Salesforce DX beta.

- 1. If you want to continue using your Pilot source code in Beta and you haven't yet converted it to Metadata API format, do it now.
- 2. Check your CLI binary version with the sfdx --version command. If you are using version 5.7.x, go to the next step. If you are using version 5.6.x, do the following
  - a. Uninstall the 5.6 CLI.
  - **b.** Install the beta 5.7 CLI.
- 3. Ensure that you are using the beta version of the Salesforce DX plug-in (40.x).

sfdx update

- 4. Transition your pilot workspace to the new beta project format.
- 5. Enable the Developer Hub (Dev Hub) in your production or business org so that you can create beta scratch orgs. You no longer use the Environment Hub to manage scratch orgs.

You can also request a Trial org that has the Dev Hub enabled. Trial orgs expire after 30 days.

- 6. Authorize the Dev Hub using the force:auth:web:login or force:auth:jwt:grant command.
- 7. Recreate scratch orgs as needed. Your pilot scratch orgs were deleted.
- 8. (Optional) Remove stale pilot scratch orgs from the output of force:org:list by removing their local authorization files. By default, the pilot files are named scratchorgXX@YY.json, but yours might differ if you created scratch orgs with custom usernames.

```
rm <USER_HOME_DIR>/.sfdx/scratch*.json
```

**9.** Start exploring Salesforce DX beta.

#### Convert Your Pilot Source Code to Metadata API Format

1. Check your plug-in version with the sfdx plugins command. If you are on version 40.x, go back to version 39.x with these commands.

```
sfdx plugins:uninstall salesforcedx
sfdx plugins:install salesforcedx@v39.8.1-0
```

2. Change to your pilot workspace directory.

cd <pilot-work-dir>

3. Convert your source code to Metadata API format, and store it in a temporary directory outside of the current one. You refer to this temporary directory later.

```
sfdx force:source:convert -d <converted-pilot-source-dir>
```

#### Transition Your Pilot Workspace to the Beta Project Format

**1.** Back up your pilot workspace.

cp -r <pilot-work-dir> <pilot-work-dir-backup>

2. Change to the pilot workspace directory.

cd <pilot-work-dir>

3. Upgrade your pilot workspace by running force:project:upgrade and answering the prompts. The command renames sfdx-workspace.json to sfdx-project.json. It then uses a pattern to search for JSON files to convert to beta format. Enter D for the default pattern, or enter your own pattern.

sfdx force:project:upgrade

4. Remove the pilot force-app directory. You recreate it in the next step.

rm force-app

5. Convert your pilot source that is in Metadata API format into the new Beta project.

```
sfdx force:mdapi:convert -r <converted-pilot-source-dir>
```

SEE ALSO:

Uninstall the CLI Binary or Plug-In Install the Salesforce DX CLI Enable the Dev Hub in Your Org Authorize an Org Using the Web-Based Flow

## Beta Changes That Affect the Pilot Salesforce DX Environment

Salesforce DX beta introduces changes that affect your pilot environment. For example, some CLI commands and parameters have been renamed, some have been removed, and the format of JSON files has changed. You now authorize to a Developer Hub rather than an Environment Hub.

### **CLI Changes**

• The names of these CLI commands have changed.

Old Name	New Name
<pre>force:workspace:create</pre>	force:project:create
<pre>force:packageversion:install</pre>	force:package:install
force:org:describe	force:org:display

• These CLI parameter names have changed.

Old Parameter Name	New Parameter Name
<pre>force:source:push pullforce</pre>	forceoverwrite
force:data:tree:export-o	-d Note: The long parameter nameoutputdir is unchanged.

- These CLI commands have been removed.
  - force:schema:delete
  - force:testruner:\* Test Runner is not included in Salesforce DX Beta.
- The -j short parameter for JSON output has been removed. Use --json instead.
- The --definitionjson (-j) parameter of force:org:create has been removed.

## JSON File Changes

- Note: The new CLI command force:project:upgrade converts your pilot JSON files to the new beta format. See the upgrade instructions on page 550 for details.
- The Salesforce DX project file (sfdx-workspace.json) is now named sfdx-project.json.
- The UseDecomposition parameter of the Salesforce DX project file has been removed because source transformation is now the default.
- These property names in the scratch org definition file have changed:
  - Company -> orgName
  - Email -> adminEmail
- These properties are no longer supported in the scratch org definition file.
  - FirstName
  - LastName
  - TemplateId
- All JSON files, such as sfdx-project.json and scratch org configuration files now specify properties using lower camel case. For example, PackageDirectories is now packageDirectories.

Org preferences are exceptions to this change. Org preferences must match Metadata API and are still specified using upper camel case, such as ChatterEnabled.

• In the scratch org definition file, the org preferences are now values within an array. For example:

```
"orgPreferences": {
    "enabled": ["S1DesktopEnabled", "ChatterEnabled"],
    "disabled": ["SelfSetPasswordInApi"]
}
```

## Other Changes

- You no longer authorize an Environment Hub to create scratch orgs. You now authorize the new Developer Hub (Dev Hub). However, you still use the Environment Hub to manage your productions orgs.
- All pilot scratch orgs have been deleted. Recreate them as needed.
- The workspace-scratch-def.json sample scratch org configuration files in the GitHub example reposare now project-scratch-def.json.
- JSON output is standardized to { status: 0|1, result: <Object|Array> }. Most JSON output is in lower camel case, unless the data comes from the API.
- The project directory structure has changed. See the Salesforce DX Developer Guide for details.

## Force.com IDE 2: Move from Pilot to Beta

Did you use Force.com IDE 2 in Pilot? Here are some notable changes for the Beta release.

Note: This release contains a beta version of Force.com IDE 2, which means it's a high-quality feature with known limitations. Force.com IDE 2 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 Force.com IDE 2 in the Salesforce DX Beta group in the Success Community.

#### Eclipse Version Upgraded from Neon to Oxygen

The beta version of Force.com IDE 2 uses Eclipse Oxygen. Our downloadable installer installs everything you need. However, if you are using an update site in Eclipse Neon for the Salesforce DX pilot, you must use Eclipse Oxygen instead. To set up the beta version, see Get Started with Force.com IDE 2 (Beta) in the *Force.com IDE 2 Developer Guide (Beta)*.

#### **Command Palette Replaced with Menu Items**

We removed the Salesforce CLI command palette, replacing it with various menu actions. For more information, see Write Code in Force.com IDE 2 in the Force.com IDE 2 Developer Guide (Beta).

#### force> Terminal Removed

We removed the faux terminal that was in the pilot version of Force.com IDE 2. Instead, run Salesforce CLI commands on your computer's terminal, or install an Eclipse terminal plug-in from the Eclipse Marketplace.

If you still see the Force.com Commands view after installing the beta version of Force.com IDE 2, select **Window** > **Perspective** > **Reset Perspective**.

#### **Command Status Messages Now Show in Error Log View**

Command status messages that previously displayed in the faux terminal are now shown in Error Log view in the bottom panel of the IDE. Even when commands are successful, the information that they return appears in the error log. To filter Error Log view messages, use the filter text field at the top of the view. For details about a log entry, double-click the entry.

#### **Problems View Enabled by Default**

The Problems view, which shows syntax errors in your code, now appears automatically in the bottom panel of the IDE. If you don't see the Problems view, select **Window** > **Perspective** > **Reset Perspective**.

# Apex Code: Improved Performance and Security

Access metadata types and components in Apex. Safely manage cached values with the new Cache.CacheBuilder interface. Access controls on Apex controller methods securely from managed packages.

For more information on these enhancements, refer to the *Apex Developer Guide*.

#### IN THIS SECTION:

#### Retrieve and Deploy Metadata in Apex

Salesforce uses metadata types and components to represent org configuration and customization. Metadata is used for org settings that admins control, or configuration information applied by installed apps and packages.

#### Send and Manage Orders with Apex

If you're a Salesforce partner, use the new Channel Order Apex API to automate order submission and management. After you send orders to Salesforce, you can edit, recall, or clone them using methods in the provided Apex classes. The Channel Order Apex API replaces the legacy Partner Order Submit API.

#### Modifying an Apex Class Invalidates Platform Cache

Cache misses can occur when platform cache is invalidated. A new circumstance that invalidates some or all platform cache is modifying an Apex class.

#### Safely Cache Values with the New Cache Builder Interface

The Cache.CacheBuilder interface makes it easy to safely store and retrieve values to a session or org cache. A Platform Cache best practice is to ensure that your code handles cache misses by testing cache requests that return null. You can write this code yourself, or you can use the new Cache.CacheBuilder interface.

#### Cache Operations Supported in Visualforce Controllers

Cache operations made using the put and remove methods in the Cache Namespace are now supported in constructors and getter methods of Visualforce controllers.

#### Handle Attachments Easily with New Messaging Methods

Process forwarded or attached emails in your email service code easily using a new method in the System.Messaging class. Also, we added a method that gives you control over how to handle attachments in the rendering of stored email templates.

#### Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)

This critical update corrects access controls on Apex controller methods in managed packages. When this update is enabled, only methods marked with the global access modifier are accessible by Lightning components from outside the package namespace. These access controls prevent you from using unsupported API methods that the package author didn't intend for global access.

POST Method for runTestsSynchronous Requires View Setup Permission (Critical Update)

View Setup user permission now required to run tests synchronously using the POST method for runTestsSynchronous.

#### Apex: New and Changed Classes and Interfaces

These classes and interfaces 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 read and unread feed elements and enhance direct messages, moderation, and streams.

#### SEE ALSO:

Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)

Available in: **Enterprise**, **Performance**, **Unlimited**, **Developer**, and **Database.com** Editions

# Retrieve and Deploy Metadata in Apex

Salesforce uses metadata types and components to represent org configuration and customization. Metadata is used for org settings that admins control, or configuration information applied by installed apps and packages.

Previously, accessing metadata required using the Metadata API, but you can now use classes in the Metadata namespace to access metadata components from Apex code.

Access metadata from your Apex code to handle tasks such as:

- Customizing app installs or upgrades—During or after an install (or upgrade), your app can create or update metadata to let users configure your app.
- Customizing apps after installation—After your app is installed, you can use metadata in Apex to let admins configure your app using the UI that your app provides rather than having admins manually use the standard Salesforce setup UI.
- Securely accessing protected metadata—Update metadata that your app uses internally without exposing these types and components to your users.
- Creating custom configuration tools—Use metadata in Apex to provide custom tools for admins to customize apps and packages.

Metadata access in Apex is currently limited to custom metadata records and page layouts. You can retrieve, create, or update custom metadata, but you cannot delete metadata through Apex.

For more information and examples of how to deploy and retrieve metadata in Apex, see the Metadata feature documentation and Metadata namespace reference documentation in the *Apex Developer Guide* 

#### SEE ALSO:

Idea Exchange: Ability to update Metadata from Apex (Apex Metadata API)

# Send and Manage Orders with Apex

If you're a Salesforce partner, use the new Channel Order Apex API to automate order submission and management. After you send orders to Salesforce, you can edit, recall, or clone them using methods in the provided Apex classes. The Channel Order Apex API replaces the legacy Partner Order Submit API.



**Note:** This feature is available to eligible Salesforce partners. For more information on the Partner Program, including eligibility requirements, visit www.salesforce.com/partners.

#### SEE ALSO:

Automate Order Processing with the Channel Order Apex API

# Modifying an Apex Class Invalidates Platform Cache

Cache misses can occur when platform cache is invalidated. A new circumstance that invalidates some or all platform cache is modifying an Apex class.

You can directly or indirectly modify an Apex class in a few ways.

- Editing the Apex class from Setup or the Developer Console
- Installing or upgrading a package, which modifies an Apex class
- Deploying metadata using the Metadata API, which modifies an Apex class

To ensure that your Apex code handles cache misses, follow platform cache best practices or use the new Cache.CacheBuilder interface.

SEE ALSO:

Apex Developer Guide: Safely Cache Values with the CacheBuilder Interface Apex Developer Guide: Platform Cache Best Practices

## Safely Cache Values with the New Cache Builder Interface

The Cache.CacheBuilder interface makes it easy to safely store and retrieve values to a session or org cache. A Platform Cache best practice is to ensure that your code handles cache misses by testing cache requests that return null. You can write this code yourself, or you can use the new Cache.CacheBuilder interface.

Rather than declaring what you want to cache in your Apex class, create an inner class that implements the CacheBuilder interface. The interface has a single method, doLoad (var). When you override doLoad (var), you code the logic that builds the cached value based on its argument. But you don't call this method directly. Instead, Salesforce calls it indirectly the first time you reference the class that you created that implements CacheBuilder. Subsequent calls get the value from the cache as long as the value exists. If the value doesn't exist, the doLoad (var) method is called again to build the value.

Let's look at an example. Suppose you have an Apex class in which you often run a SOQL query to look up a User record based on a user ID. SOQL queries can be expensive, and Salesforce user records don't typically change much, so the User information is a good candidate for CacheBuilder. The UserInfoCache class implements CacheBuilder and puts the SOQL query inside the doLoad (var) method with the user ID as its parameter.

```
class UserInfoCache implements Cache.CacheBuilder {
    public Object doLoad(String userid) {
        User u = (User)[SELECT Id, IsActive, username FROM User WHERE id =: userid];
        return u;
    }
}
```

This example shows how to get the User record from the org cache.

User batman = (User) Cache.Org.get(UserInfoCache.class, '00541000000ek4c');

When you run the get () method, Salesforce searches the cache using a unique key that consists of the strings 00541000000ek4c and UserInfoCache (the class that implements CacheBuilder). If Salesforce finds a cached value, it returns it. Following our example, the cached value is a User record associated with the ID 0054100000ek4c. If Salesforce doesn't find a value, it executes the doLoad (var) method of UserInfoCache again (and reruns the SOQL query), caches the User record, and then returns it.

For more information and examples, see the Platform Cache feature documentation and Cache namespace reference documentation in the *Apex Developer Guide* 

#### SEE ALSO:

Apex Developer Guide: Safely Cache Values with the CacheBuilder Interface

## Cache Operations Supported in Visualforce Controllers

Cache operations made using the put and remove methods in the Cache Namespace are now supported in constructors and getter methods of Visualforce controllers.

## Handle Attachments Easily with New Messaging Methods

Process forwarded or attached emails in your email service code easily using a new method in the System.Messaging class. Also, we added a method that gives you control over how to handle attachments in the rendering of stored email templates.

See the following methods.

- extractInboundEmail(source, includeForwardedAttachments)
- renderStoredEmailTemplate(templateId, whoId, whatId, attachmentRetrievalOption)

# Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)

This critical update corrects access controls on Apex controller methods in managed packages. When this update is enabled, only methods marked with the global access modifier are accessible by Lightning components from outside the package namespace. These access controls prevent you from using unsupported API methods that the package author didn't intend for global access.

When added to a managed package, only Apex controller methods marked global should be accessible by Lightning components outside of that managed package's namespace. Methods marked public in their Apex definitions should be accessible only to Lightning components included in the package's same namespace. When this update is enabled, these rules are enforced.

Prior to this update, non-global methods (that is, Apex controller methods that weren't marked with the global access modifier) could be accessed by Lightning components outside of the package namespace.

When this update is enabled, if you've written code that incorrectly depends on non-global Apex methods in a managed package, server actions that call those methods fail. Update your code to use only the supported API methods provided by the package as global methods.

SEE ALSO:

Apex Developer Guide: Access Modifiers Lightning Components Developer Guide: Apex Server-Side Controller Overview Disable Access to Non-global Apex Controller Methods in Managed Packages (Critical Update)

# POST Method for runTestsSynchronous Requires View Setup Permission (Critical Update)

View Setup user permission now required to run tests synchronously using the POST method for runTestsSynchronous.

With this update, running Apex tests synchronously using the POST method for the REST Tooling API /runTestsSynchronous/ without View Setup permission enabled gets an error. View Setup user permission is now required to run tests synchronously.

# Apex: New and Changed Classes and Interfaces

These classes and interfaces 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 Enums

These enumerations were introduced in this release.

#### New Apex Interfaces

These interfaces are introduced in this release.

#### Changed Apex Interface

These classes and interfaces were changed in this release.

## New Apex Classes

These classes were introduced in this release.

#### Classes in the Metadata Namespace

#### AnalyticsCloudComponentLayoutItem Class

The new Metadata.AnalyticsCloudComponentLayoutItem class represents the settings for a Wave Analytics dashboard on a standard or custom layout page. Use this class when accessing org metadata via Apex.

#### ConsoleComponent Class

The new Metadata.ConsoleComponent class represents a custom console component on a section of a layout. Use this class when accessing org metadata via Apex.

#### Container Class

The new Metadata.Container class represents a location and style in which to display more than one custom console component in the sidebars of the console. Use this class when accessing org metadata via Apex.

#### CustomConsoleComponents Class

The new Metadata.ConsoleComponents class represents custom console components on a page layout. Use this class when accessing org metadata via Apex.

#### CustomMetadata Class

The new Metadata.CustomMetadata class represents records of custom metadata types. Use this class when accessing org metadata via Apex.

#### CustomMetadataValue Class

The new Metadata.CustomMetadataValue class represents custom metadata values for a custom metadata component. Use this class when accessing org metadata via Apex.

#### DeployCallbackContext Class

The new Metadata.DeployCallbackContext class represents context information for a deployment job. Use this class when accessing org metadata via Apex.

#### DeployContainer Class

The new Metadata.DeployContainer class represents a container for custom metadata components to be deployed. Use this class when accessing org metadata via Apex.

#### DeployDetails Class

The new Metadata.DeployDetails class contains detailed information for components after a deployment. Use this class when accessing org metadata via Apex.

#### DeployMessage Class

The new Metadata.DeployMessage class represents result information for the deployment of a metadata component. Use this class when accessing org metadata via Apex.

#### DeployResult Class

The new Metadata.DeployResult class represents overall result information for the deployment of a metadata component. Use this class when accessing org metadata via Apex.

#### FeedLayout Class

The new Metadata.FeedLayout class represents the values that define the feed view of a feed-based page layout. Use this class when accessing org metadata via Apex.

#### FeedLayoutComponent Class

The new Metadata.FeedLayoutComponent class represents a component in the feed view of a feed-based page layout. Use this class when accessing org metadata via Apex.

#### FeedLayoutFilter Class

The new Metadata.FeedLayoutFilter class represents a feed filter option in the feed view of a feed-based page layout. Use this class when accessing org metadata via Apex.

#### Layout Class

The new Metadata.Layout class represents the metadata associated with a page layout. Use this class when accessing org metadata via Apex.

#### LayoutColumn Class

The new Metadata.LayoutColumn class represents the items in a column within a layout section. Use this class when accessing org metadata via Apex.

#### LayoutItem Class

The new Metadata.LayoutItem class represents the valid values that define a layout item. Use this class when accessing org metadata via Apex.

#### LayoutSection Class

The new Metadata.LayoutSection class represents a section of a page layout. Use this class when accessing org metadata via Apex.

#### Metadata Class

The new Metadata. Metadata class is an abstract base class that represents a custom metadata component. Use this class when accessing org metadata via Apex.

#### MetadataValue Class

The new Metadata.MetadataValue class is an abstract base class that represents a custom metadata component field. Use this class when accessing org metadata via Apex.

#### MiniLayout Class

The new Metadata.MiniLayout class represents a mini view of a record in the Console tab, hover details, and event overlays. Use this class when accessing org metadata via Apex.

#### **Operations** Class

The new Metadata.Operations class represents a class used to execute metadata operations, such as retrieving or deploying custom metadata. Use this class when accessing org metadata via Apex.

#### PlatformActionList Class

The new Metadata.PlatformActionList class represents the list of actions, and their order, that display in the Salesforce1 action bar for the layout. Use this class when accessing org metadata via Apex.

#### PlatformActionListItem Class

The new Metadata.PlatformActionListItem class represents an action in the platform action list for a layout. Use this class when accessing org metadata via Apex.

#### PrimaryTabComponents Class

The new Metadata.PrimaryTabComponents class represents custom console components on primary tabs. Use this class when accessing org metadata via Apex.

#### ProjectionNode Class

The new Wave.ProjectionNode class is used with the QueryBuilder class to construct well-formed SAQL queries. Use this class when querying data in Wave Analytics via Apex.

#### QueryBuilder Class

The new Wave.QueryBuilder class provides methods for building SAQL queries. Use this class when querying data in Wave Analytics via Apex.

#### QueryNode Class

The new Wave.QueryNode class is used with the QueryBuilder class to construct well-formed SAQL queries. Use this class when querying data in Wave Analytics via Apex.

#### QuickActionList Class

The new Metadata.QuickActionList class represents the list of actions associated with the page layout. Use this class when accessing org metadata via Apex.

#### QuickActionListItem Class

The new Metadata.QuickActionListItem class represents an action in QuickActionList.Use this class when accessing org metadata via Apex.

#### RelatedContent Class

The new Metadata.RelatedContent class represents the Mobile Cards section of the page layout. Use this class when accessing org metadata via Apex.

#### RelatedContentItem Class

The new Metadata.RelatedContentItem class represents an individual item in RelatedContent. Use this class when accessing org metadata via Apex.

#### RelatedList Class

The new Metadata.RelatedList class represents related list custom components on the sidebars of the Salesforce console. Use this class when accessing org metadata via Apex.

#### RelatedListItem Class

The new Metadata.RelatedListItem class represents an item in the related list in a page layout. Use this class when accessing org metadata via Apex.

#### ReportChartComponentLayoutItem Class

The new Metadata.ReportChartComponentLayoutItem class represents the settings for a report chart on a standard or custom page. Use this class when accessing org metadata via Apex.

#### SidebarComponent Class

The new Metadata.SidebarComponent class represents a specific custom console component to display in a container that hosts multiple components in one of the sidebars of the Salesforce console. Use this class when accessing org metadata via Apex.

#### SubtabComponents Class

The new Metadata.SubtabComponents class represents custom console components on subtabs in the Salesforce console. Use this class when accessing org metadata via Apex.

#### SummaryLayout Class

The new Metadata.SummaryLayout class controls the appearance of the highlights panel in a page layout. Use this class when accessing org metadata via Apex.

#### SummaryLayoutItem Class

The new Metadata.SummaryLayoutItem class controls the appearance of an individual field and its column and row position within the highlights panel grid. Use this class when accessing org metadata via Apex.

## **Changed Apex Classes**

These existing classes have new or changed methods or constants.

#### Messaging.EmailFileAttachment Class

#### **New Property**

#### id

Read-Only. Gets the attachment ID.

#### Schema.DescribeFieldResult Class

#### **New Method**

#### isSearchPrefilterable()

Returns true if a foreign key can be included in prefiltering when used in a SOSL WHERE clause, false otherwise.

#### Cache.Org Class

#### **New Methods**

#### get(cacheBuilder, key)

Returns the cached value corresponding to the specified key from the org cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### remove(cacheBuilder, key)

Deletes the cached value corresponding to the specified key from the org cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### Cache.Partition Class

#### **New Methods**

#### get(cacheBuilder, key)

Returns the cached value corresponding to the specified key from the partition cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### remove(cacheBuilder, key)

Deletes the cached value corresponding to the specified key from the partition cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### validateCacheBuilder(cacheBuilder)

Validates that the specified class implements the CacheBuilder interface.

#### Cache.Session Class

#### New Methods

#### get(cacheBuilder, key)

Returns the cached value corresponding to the specified key from the session cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### remove (cacheBuilder, key)

Deletes the cached value corresponding to the specified key from the session cache. Use this method if your cached value is a class that implements the CacheBuilder interface.

#### System. Messaging Class

#### **New Methods**

#### extractInboundEmail(source, includeForwardedAttachments)

Use this method in your email service code to control how to parse and process forwarded or attached emails. Returns an instance of Messaging.InboundEmail from a stream of data that is in RFC822 format. The data stream can be a forwarded email in an attachment to an existing InboundEmail, or a stream from another source.

#### renderStoredEmailTemplate(templateId, whoId, whatId, attachmentRetrievalOption)

Renders a text, custom, HTML, or Visualforce email template that exists in the database into an instance of Messaging.SingleEmailMessage.Provides options for including attachment metadata only, attachment metadata and content, or excluding attachments.

#### System. PageReference Class

#### **New Methods**

#### forResource(resourceName, path)

Create a PageReference for nested content inside a zip static resource, by name and path.

#### forResource(resourceName)

Create a PageReference for a static resource, by name.

#### System.Site Class

#### New Method

#### getExperienceId()

Returns the value of the experience ID (expid). This expid value comes from a cookie in the user's web browser.

#### New Apex Enums

These enumerations were introduced in this release.

#### ${\tt Messaging.AttachmentRetrievalOptionEnum\,Enum}$

Provides options for including attachment metadata only, attachment metadata and content, or excluding attachments.

#### Metadata.DeployProblemType Enum

Describes the problem type for an unsuccessful component deploy. Use this enum when accessing org metadata via Apex.

#### Metadata.DeployStatus Enum

The result status values for a deployment. Use this enum when accessing org metadata via Apex.

#### Metadata.FeedItemTypeEnum Enum

The type of feed item in a feed-based page layout. Use this enum when accessing org metadata via Apex.

#### Metadata.FeedLayoutComponentType Enum

The type of feed layout component. Use this enum when accessing org metadata via Apex.

#### Metadata.FeedLayoutFilterPosition Enum

Describes where the feed filters list is included in the layout. Use this enum when accessing org metadata via Apex.

#### Metadata.FeedLayoutFilterType Enum

The type of feed layout filter. Use this enum when accessing org metadata via Apex.

#### Metadata.LayoutHeader Enum

Represents tagging types used for Metadata.Layout.headers.Use this enum when accessing org metadata via Apex.

#### Metadata.LayoutSectionStyle Enum

Describes the possible styles for a layout section. Use this enum when accessing org metadata via Apex.

#### Metadata.MetadataType Enum

Represents the custom metadata components available in Apex. Use this enum when accessing org metadata via Apex.

#### Metadata.PlatformActionListContextEnum Enum

Describes the different contexts of action lists. Use this enum when accessing org metadata via Apex.

#### Metadata.PlatformActionTypeEnum Enum

The type of action for a PlatformActionListItem. Use this enum when accessing org metadata via Apex.

#### Metadata.ReportChartComponentSize Enum

Describes the size of the displayed report chart component. Use this enum when accessing org metadata via Apex.

#### Metadata.SortOrder Enum

Describes the sort order of a related list. Use this enum when accessing org metadata via Apex.

#### Metadata.SummaryLayoutStyleEnum Enum

Describes the highlights panel style for a SummaryLayout. Use this enum when accessing org metadata via Apex.

#### Metadata.UiBehavior Enum

Describes the behavior for a layout item on a layout page. Use this enum when accessing org metadata via Apex.

#### Metadata.PlatformActionTypeEnum Enum

The type of action for a PlatformActionListItem. Use this enum when accessing org metadata via Apex.

## New Apex Interfaces

These interfaces are introduced in this release.

#### Metadata.DeployCallback Interface

An interface for metadata deployment callback classes. Use this interface when accessing org metadata via Apex.

#### Cache.CacheBuilder Interface

An interface for safely retrieving and removing values from a session or org cache. Use the interface to generate a value that you want to store in the cache. The interface checks for cache misses, which means you no longer need to execute puts because Platform Cache handles them for you.

## **Changed Apex Interface**

These classes and interfaces were changed in this release.

#### TxnSecurity.Event class

#### Changed Property

#### data

The data field now includes PolicyId, the ID of the current policy.

# ConnectApi (Chatter in Apex): New and Changed Classes and Enums

Create custom experiences in Salesforce using Chatter in Apex. In this release, we introduce read and unread feed elements and enhance direct messages, moderation, and streams.

Many Chatter REST API resource actions are exposed as static methods on Apex classes in the ConnectApi namespace. These methods use other ConnectApi classes to input and return information. The ConnectApi namespace is referred to as *Chatter in Apex*.

In Apex, it's possible to access some Chatter data using SOQL queries and objects. However, ConnectApi classes expose Chatter data in a much simpler way. Data is localized and structured for display. For example, instead of making many calls to access and assemble a feed, you can do it with a single call.

Note: To integrate mobile apps, intranet sites, and third-party web applications with Chatter and communities, use Chatter REST API.

#### IN THIS SECTION:

New and Changed Chatter in Apex Classes New and Changed Chatter in Apex Input Classes New and Changed Chatter in Apex Output Classes New and Changed Chatter in Apex Enums

## New and Changed Chatter in Apex Classes

#### **Chatter Feeds**

These methods are in the ConnectApi.ChatterFeeds class.

#### Get information about who read a feed element and when

- getReadByForFeedElement(communityId, feedElementId)
- getReadByForFeedElement(communityId, feedElementId, pageParam, pageSize)

#### Mark a feed element as read for the context user

- setIsReadByMe(communityId, feedElementId, readBy), where readBy is the new ConnectApi.ReadByCapabilityInput
- setIsReadByMe(communityId, feedElementId, isReadByMe)

#### Mark multiple feed elements as read for the context user at the same time

- updateFeedElementReadByCapabilityBatch(communityId, feedElementIds, readBy),where readBy is the new ConnectApi.ReadByCapabilityInput
- updateFeedElementReadByCapabilityBatch(communityId, feedElementIds, isReadByMe)

#### Get the read or unread feed elements for the context user from a group feed

• getFeedElementsFromFeed(communityId, feedType, subjectId, recentCommentCount, elementsPerBundle, density, pageParam, pageSize, sortParam, showInternalOnly, filter), where feedType is Record, subjectId is a group ID, and filter is set to Read or Unread

#### Update the members of a direct message

updateDirectMessage(communityId, feedElementId, directMessage)

#### Get the direct message moderation feed

- getFeed(communityId, feedType)
- getFeed(communityId, feedType, sortParam)

In these methods, feedType is DirectMessageModeration.

#### Get the feed elements from the direct message moderation feed

- getFeedElementsFromFeed(communityId, feedType)
- getFeedElementsFromFeed(communityId, feedType, pageParam, pageSize, sortParam)
- getFeedElementsFromFeed(communityId, feedType, recentCommentCount, density, pageParam, pageSize, sortParam)

• getFeedElementsUpdatedSince(communityId, feedType, recentCommentCount, density, pageParam, pageSize, updatedSince)

In these methods, feedType is DirectMessageModeration.

All these methods have matching set test methods.

#### Search the feed elements in the direct message moderation feed

- searchFeedElementsInFeed(communityId, feedType, q)
- searchFeedElementsInFeed(communityId, feedType, pageParam, pageSize, sortParam, q)
- searchFeedElementsInFeed(communityId, feedType, recentCommentCount, density, pageParam, pageSize, sortParam, q)

In these methods, feedType is DirectMessageModeration.

All these methods have matching set test methods.

#### Get the feed elements authored by the user profile owner from the user profile feed

• getFeedElementsFromFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, filter), where filter is set to AuthoredBy

#### Get sorted feed streams

- getStreams(communityId, sortParam)
- getStreams(communityId, pageParam, pageSize, sortParam)

#### Search feed streams

- searchStreams(communityId, q)
- searchStreams(communityId, q, sortParam)
- searchStreams(communityId, q, pageParam, pageSize)
- searchStreams(communityId, q, pageParam, pageSize, sortParam)

All these methods have matching set test methods.

#### Get the custom filtered feed elements from the case feed

- getFeedElementsFromFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, customFilter)
- getFeedElementsFromFeed(communityId, feedType, subjectId, recentCommentCount, elementsPerBundle, density, pageParam, pageSize, sortParam, showInternalOnly, customFilter)
- getFeedElementsUpdatedSince(communityId, feedType, subjectId, recentCommentCount, elementsPerBundle, density, pageParam, pageSize, updatedSince, customFilter)
- getFeedElementsUpdatedSince(communityId, feedType, subjectId, recentCommentCount, elementsPerBundle, density, pageParam, pageSize, updatedSince, showInternalOnly, customFilter)

All these methods have matching set test methods.

#### Search the custom filtered feed elements in the case feed

 searchFeedElementsInFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, q, customFilter)  searchFeedElementsInFeed(communityId, feedType, subjectId, recentCommentCount, density, pageParam, pageSize, sortParam, q, showInternalOnly, customFilter)
 All these methods have matching set test methods.

Get information about several feeds and a page of feed elements

- getFeedWithFeedElements(communityId, feedType, pageSize)
- getFeedWithFeedElements(communityId, feedType, pageSize, recentCommentCount)

In these methods, valid values for feedType are Company, DirectMessageModeration, DirectMessages, Home, Landing, Moderation, and PendingReview. Landing is valid only when *communityId* is internal.

#### Create a feed element that has an extension (pilot)

- Note: We provide Extensions to selected customers through a pilot program that requires agreement to specific terms and conditions. Extensions 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.
- postFeedElement(communityId, feedElement)

Use this existing method with the new ConnectApi.ExtensionsCapabilityInput class.

#### Get extensions (pilot)

getExtensions(communityId, pageParam, pageSize)

#### **Community Moderation**

These methods are in the ConnectApi.CommunityModeration class.

#### Get more details about flagged posts and comments

- getFlagsOnFeedElement(communityId, feedElementId, pageParam, pageSize)
- getFlagsOnFeedElement(communityId, feedElementId, visibility, pageSize, pageParam)
- getFlagsOnComment(communityId, commentId, pageSize, pageParam)
- getFlagsOnComment(communityId, commentId, visibility, pageSize, pageParam)

#### **Files Connect**

These methods are in the ConnectApi.ContentHub class.

#### **Test your Files Connect methods**

- setTestAddRepositoryItem(repositoryId, repositoryFolderId, file, result)
- setTestAddRepositoryItem(communityId, repositoryId, repositoryFolderId, file, result)
- setTestAddRepositoryItem(repositoryId, repositoryFolderId, file, fileData, result)
- setTestAddRepositoryItem(communityId, repositoryId, repositoryFolderId, file, fileData, result)
- setTestGetAllowedItemTypes(repositoryId, repositoryFolderId, result)
- setTestGetAllowedItemTypes(repositoryId, repositoryFolderId, filter, result)
- setTestGetAllowedItemTypes(communityId, repositoryId, repositoryFolderId, result)

- setTestGetAllowedItemTypes(communityId, repositoryId, repositoryFolderId, filter, result)
- setTestGetFilePreview(repositoryId, repositoryFileId, formatType, result)
- setTestGetFilePreview(repositoryId, repositoryFileId, formatType, startPageNumber, endPageNumber, result)
- setTestGetFilePreview(communityId, repositoryId, repositoryFileId, formatType, result)
- setTestGetFilePreview(communityId, repositoryId, repositoryFileId, formatType, startPageNumber, endPageNumber, result)
- setTestGetItemType(repositoryId, repositoryItemTypeId, result)
- setTestGetItemType(communityId, repositoryId, repositoryItemTypeId, result)
- setTestGetPreviews(repositoryId, repositoryFileId, result)
- setTestGetPreviews(communityId, repositoryId, repositoryFileId, result)
- setTestGetRepositories(result)
- setTestGetRepositories(communityId, result)
- setTestGetRepositories(pageParam, pageSize, result)
- setTestGetRepositories(communityId, pageParam, pageSize, result)
- setTestGetRepository(repositoryId, result)
- setTestGetRepository(communityId, repositoryId, result)
- setTestGetRepositoryFile(repositoryId, repositoryFileId, result)
- setTestGetRepositoryFile(repositoryId, repositoryFileId, includeExternalFilePermissionsInfo, result)
- setTestGetRepositoryFile(communityId, repositoryId, repositoryFileId, result)
- getRepositoryFile(communityId, repositoryId, repositoryFileId, includeExternalFilePermissionsInfo)
- setTestGetRepositoryFolder(repositoryId, repositoryFolderId, result)
- setTestGetRepositoryFolder(communityId, repositoryId, repositoryFolderId, result)
- setTestGetRepositoryFolderItems(repositoryId, repositoryFolderId, result)
- setTestGetRepositoryFolderItems(communityId, repositoryId, repositoryFolderId, result)
- setTestGetRepositoryFolderItems(repositoryId, repositoryFolderId, pageParam, pageSize, result)
- setTestGetRepositoryFolderItems(communityId, repositoryId, repositoryFolderId, pageParam, pageSize, result)
- setTestUpdateRepositoryFile(repositoryId, repositoryFileId, file, result)
- setTestUpdateRepositoryFile(repositoryId, repositoryFileId, file, fileData, result)
- setTestUpdateRepositoryFile(communityId, repositoryId, repositoryFileId, file, result)
- setTestUpdateRepositoryFile(communityId, repositoryId, repositoryFileId, file, fileData, result)

#### Topics

This method is in the ConnectApi.Topics class.

#### Assign topics to or unassign topics from articles in a data category

• updateTopicsForArticlesInDataCategory(communityId, dataCategoryGroup, dataCategory, articleTopicAssignmentJob)

#### Create, get, and reassign topic and article assignment rules

- createTopicDataCategoryRules(communityId, dataCategoryGroup, dataCategory, topicNames)
- getTopicDataCategoryRules(communityId, dataCategoryGroup, dataCategory)
- reassignTopicDataCategoryRules(communityId, dataCategoryGroup, dataCategory, topicNames)

#### executeQuery

This method is in the ConnectApi.Wave class.

#### Send a query string to Wave Analytics and get the results as JSON.

• public ConnectApi.LiteralJson ConnectApi.Wave.executeQuery(String query)

## New and Changed Chatter in Apex Input Classes

#### **Chatter Feeds**

#### ConnectApi.AlternativeInput(Pilot)

This new input class has these properties.

- textRepresentation—Text representation of the extension.
- thumbnailUrl—Thumbnail URL for the extension.
- title—Title of the extension.

#### ConnectApi.DirectMessageCapabilityInput

This input class has one new property.

• membersToRemove—List of user IDs for members to remove from the direct message.

#### ConnectApi.ExtensionInput(Pilot)

This new input class has these properties.

- alternativeRepresentation—Alternative representation of the extension.
- extensionId—ID of the extension.
- payload—Payload associated with the extension.
- payloadVersion—Payload version that identifies the structure of the payload associated with the extension.

#### ConnectApi.ExtensionsCapabilityInput(Pilot)

This new input class is a subclass of ConnectApi.FeedElementCapabilityInput. It has one property.

• itemsToAdd—List of extensions to associate with the feed element.

#### ConnectApi.FeedElementCapabilitiesInput

This input class has one new property.

• extensions—Describes the extensions associated with the feed element.

#### ConnectApi.ReadByCapabilityInput

This new input class is a subclass of ConnectApi.FeedElementCapabilityInput. It has these properties.

- isReadByMe—Specifies to mark the feed element as read (true) for the context user.
- lastReadDateByMe—Specifies the last date when the feed element is marked as read for the context user. If you don't specify a date or you specify a future date, the current system date is used.

#### Topics

#### ConnectApi.ArticleTopicAssignmentJobInput

This new input class has these properties.

- operation—Specifies the type of operation to perform on articles and topics. Values are:
  - AssignTopicsToArticle—Assign topics to articles in a data category.
  - UnassignTopicsFromArticle—Unassign topics from articles in a data category.
- topicNames—List of topic names to assign to or unassign from articles.

## New and Changed Chatter in Apex Output Classes

#### **Chatter Feeds**

#### ConnectApi.AbstractExtensionInformation (Pilot)

This new output class is a superclass of ConnectApi.LightningExtensionInformation. It has one property.

• extensionInformationType—Specifies the information type of the extension.

#### ConnectApi.Alternative (Pilot)

This new output class has these properties.

- textRepresentation—Text representation of the extension.
- thumbnailUrl—Thumbnail URL for the extension.
- title—Title of the extension.

#### ConnectApi.DirectMessageCapability

This output class has these new properties.

- memberChanges—Member activities of the direct message, with the most recent activity first.
- originalMembers—Original members of the direct message.

#### ConnectApi.DirectMessageMemberActivity

This new output class has these properties.

- activityDate—Direct message member activity date.
- actor—User who changed the direct message membership.
- membersAdded—Members added to the direct message as part of the activity.
- membersRemoved—Members removed from the direct message as part of the activity.

#### ConnectApi.DirectMessageMemberActivityPage

This new output class has these properties.

- activities—Collection of direct message member activities.
- currentPageToken—Token identifying the current page.

- currentPageUrl—Chatter REST API URL identifying the current page.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.

#### ConnectApi.Extension (Pilot)

This new output class has these properties.

- alternativeRepresentation—Alternative representation of the extension.
- extensionId—ID of the extension.
- payload—Payload associated with the extension.
- payloadVersion—Payload version that identifies the structure of the payload associated with the extension.

#### ConnectApi.ExtensionDefinition (Pilot)

This new output class has these properties.

- canAccess—Indicates whether users can access the extension when it's associated with a feed element.
- canCreate—Indicates whether users can create a feed element with the extension in the org.
- createdDate—Date when the extension was created.
- description—Description of the extension.
- iconUrl—URL to the icon for the extension.
- id—ID of the extension.
- informationCollection—Collection of extension information.
- isEnabledInCommunity—Indicates whether the extension is enabled in communities.
- isEnabledInLightningPublisher—Indicates whether the extension is enabled in the Lightning publisher.
- name—Name of the extension.

#### ConnectApi.ExtensionDefinitions (Pilot)

This new output class has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- extensionDefinitions—Collection of extension definitions.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- total—Total number of extensions returned.

#### ConnectApi.ExtensionsCapability (Pilot)

This new output class is a subclass of ConnectApi.FeedElementCapability. It has one property.

• items—List of extensions associated with the feed element.

#### ConnectApi.Feed

This output class has these new properties.

- feedElements—Page of feed elements for the feed specified in redirectedFeedType. Otherwise, null.
- redirectedFeedType—Specifies which feed is returned if pageSize is specified. Otherwise, null.

#### ConnectApi.FeedElementCapabilities

This output class has one new property.

• extensions—If a feed element has this capability, it has one or more extension attachments.

#### ConnectApi.LightningExtensionInformation (Pilot)

This new output class is a subclass of ConnectApi.AbstractExtensionInformation. It has these properties.

- compositionComponent—Component to use in compose state.
- headerTextLabel—Label for the extension's header.
- hoverTextLabel—Label for hovering over the extension.
- renderComponent—Component to use in render or preview state.

#### ConnectApi.ReadBy

This new output class has these properties.

- lastReadDateByUser—When the user last read the feed element.
- user—Information about the user who read the feed element.

#### ConnectApi.ReadByCapability

This new output class is a subclass of ConnectApi.FeedElementCapability. It has these properties.

- isReadByMe—Specifies whether the feed element has been read (true) or not (false) by the context user.
- lastReadDateByMe—Last date when the feed element was marked read for the context user. Otherwise, null.
- page—First page of information about who read the feed element and when.

#### ConnectApi.ReadByPage

This new output class has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- items—Collection of read-by information, including users and when they last read the feed element.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- previous Page Token—Reserved for future use.
- previousPageUrl—Reserved for future use.
- total—Total number of users who read the feed element.

#### ConnectApi.SocialPostCapability

This output class has these new properties.

- likedBy—External social account who liked the social post.
- reviewScale—Review scale of the social post.
- reviewScore—Review score of the social post.

#### ConnectApi.UserSettings

This output class has one new property.

• canAccessPersonalStreams—User can access personal stream feeds.

#### **Community Moderation**

#### ConnectApi.ModerationFlagItemDetail

This new output class has these properties.

createdBy—ID of the user who flagged the item.

- createdDate—Date when the item was flagged.
- id—ID of the moderation flag.
- moderationType—Specifies the type of moderation flag. Values are:
  - FlagAsInappropriate—Flag for inappropriate content.
  - FlagAsSpam—Flag for spam.
- note—Note from user who flagged the item.
- visibility—Specifies the visibility behavior of a flag for various user types. Values are:
  - ModeratorsOnly—The flag is visible only to users with moderation permissions on the flagged element or item.
  - SelfAndModerators—The flag is visible to the creator of the flag and to users with moderation permissions on the flagged element or item.

#### ConnectApi.ModerationFlags

This output class has these new properties.

- flagCountByReason—Number of moderation flags categorized by reason.
- flags—Collection of flags.

#### ${\tt ConnectApi.ModerationFlagsCollection}$

This new output class has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- flags—List of flag details.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- pageSize—Number of items per page.

#### Files

#### ConnectApi.Content

This output class has one new property.

• imageDetails—Image details, or null if the file isn't an image.

#### ConnectApi.ContentImageFileDetails

This new output class has these properties.

- height—Image's height in pixels.
- imageFormat—Image's format.
- orientation—Image's EXIF orientation value, if present.
- width—Image's width in pixels.

#### **Files Connect**

#### ConnectApi.ContentHubRepository

This output class has one new property.

• authentication—Repository authentication information.

#### ${\tt ConnectApi.Content Hub Repository Authentication}$

This new output class has these properties.

- authFlowUrl—Depends on the authProtocol.
  - NoAuthentication-null.
  - Oauth—URL to start the OAuth flow.
  - Password—URL to the authentication settings for external systems.
- authProtocol—Specifies the authentication protocol used for the repository.
  - NoAuthentication—Repository doesn't require authentication.
  - Oauth—Repository uses OAuth authentication protocol.
  - Password—Repository uses user name and password authentication protocol.
- userHasAuthSettings—Specifies whether the user has credentials or the administrator configured the external data source to use the same set of credentials for every user (true). Otherwise, false.

#### ConnectApi.FilePreviewCollection

This output class has one new property.

• versionNumber—Version number of the file.

#### Records

#### ConnectApi.EntityLabel

This new output class has these properties.

- label—Localized singular label of the entity.
- labelPlural—Localized plural label of the entity.

#### ConnectApi.RecordSummary

This output class has one new property.

• entityLabel—Label of the record's entity.

#### Users Out of Office (Pilot)

Note: We provide Out of Office 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. Out of Office 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.

#### ConnectApi.MentionCompletion

This output class has one new property.

• outOfOffice—If the record represented by this completion is a user, an additional out-of-office message, if one exists, for the user.

#### ConnectApi.OutOfOffice (Pilot)

This new output class has one property.

• message—Out-of-office message for the user.

#### ConnectApi.User

This output class has one new property.

• outOfOffice—Extra out-of-office message, if one exists, for the user.

## New and Changed Chatter in Apex Enums

For information about these enums, see ConnectApi Enums in Apex Developer Guide.

#### ConnectApi.ArticleTopicJobType

This new enum has these values.

- AssignTopicsToArticle—Assign topics to articles in a data category.
- UnassignTopicsFromArticle—Unassign topics from articles in a data category.

#### ConnectApi.CommunityFlagReasonType

This new enum has these values.

- FlaggedByRule—Moderation rule flagged the item.
- FlaggedBySystem—Einstein flagged the item.
- FlaggedByUserAsInappropriate—User flagged the item as inappropriate.
- FlaggedByUserAsSpam—User flagged the item as spam.

#### ${\tt ConnectApi.ContentHubAuthentication Protocol}$

This new enum has these values.

- NoAuthentication—Repository doesn't require authentication.
- Oauth—Repository uses OAuth authentication protocol.
- Password—Repository uses user name and password authentication protocol.

#### ConnectApi.ExtensionInformationType (Pilot)

This new enum has this value.

• Lightning

#### ConnectApi.FeedElementCapabilityType

This enum has these new values.

- Extensions—The feed element has one or more Chatter extension attachments.
- ReadBy—The context user can mark the feed element as read.

#### ConnectApi.FeedFilter

This enum has these new values.

- AuthoredBy—Feed elements authored by the user profile owner. This value is valid only for the UserProfile feed.
- Read—Feed elements that are older than 30 days or are marked as read for the context user. Includes existing feed elements when the context user joined the group. This value is valid only for the Record feed of a group.
- Unread—Feed elements that are created in the past 30 days and aren't marked as read for the context user. This value is valid only for the Record feed of a group.

#### ConnectApi.FeedSortOrder

This enum has one new value.

• CreatedDateAsc—Sorts by oldest creation date. This sort order is available only for DirectMessageModeration, Moderation, and PendingReview feeds.

#### ConnectApi.FeedType

This enum has these new values.

• DirectMessageModeration—Contains all direct messages that are flagged for moderation. The Direct Message Moderation feed is available only to users with Moderate Communities Chatter Messages permissions.

Note: The Moderation feed type contains all feed items except direct messages that are flagged for moderation. The Communities Moderation feed is available only to users with Moderate Community Feeds permissions.

• Landing—Contains all feed items that best drive user engagement when the feed is requested. Allows clients to avoid an empty feed when there aren't many personalized feed items.

#### ConnectApi.SortOrder

This enum has one new value.

• MostRecentlyViewed—Items are in descending chronological order by view. This sort order is valid only for Chatter feed streams.

# API: New Objects and Types, Search Enhancements, and User Interface API

Access new and updated metadata types, data objects, and API calls in API version 40.0. Refine your searches with new SOSL clauses. Use the new User Interface API to create native mobile apps and custom web apps with your own branding



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

#### IN THIS SECTION:

#### New and Changed Objects

Access more data through these new and changed standard objects.

#### SOSL

Salesforce Object Search Language (SOSL) includes a new WITH SPELL\_CORRECTION clause, and support for custom objects and fields using the WITH HIGHLIGHT clause.

#### **REST API**

REST API includes changed resources and new resources for record counts, flows, and platform schema events.

#### SOAP API

SOAP API includes new and changed calls.

#### Chatter REST API

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. In this release, we introduce read and unread feed elements and enhance direct messages, moderation, and streams.

#### Reports and Dashboards REST API

Reports and Dashboards REST API enhancements include new resources for describing and testing dashboard filters and report fields, new methods for setting dashboard filter values and describing a single analytics notification, and new properties describing analytics notification recipients and running users.

#### Bulk API

The pilot version of Bulk API 2.0 now provides a more efficient process for uploading job data.

#### Enterprise Messaging Platform

Messaging includes a new feature, Platform Events, that is generally available.

#### Tooling API

Tooling API includes new and changed objects and a new REST resource. For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings.

#### Metadata API

Metadata API includes new and changed types and fields.

#### Data Services

Additional features have been added to the BigObjects and Async SOQL pilots.

#### User Interface API (Developer Preview)

User Interface API enables you to create native mobile apps and custom web apps with your own branding and look and feel. A single REST request returns enough metadata, layout information, and data to display, edit, or create a record.

#### Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps. This feature is new in Lightning Experience.

#### Open CTI API

When using the saveLog method, to refresh records after you update or create them, call the refreshView method in the callback method. Previously, the saveLog method automatically refreshed records.

#### Other API Changes

Use the new Federated Search API to access external search connectors.

# 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.

#### CampaignHistory

Represents the history of changes to the values in the fields of a campaign.

#### ContentBody

Represents the body of a file in Salesforce CRM Content or Salesforce Files

#### ContentWorkspaceMember

Represents a member of a content library.

#### ContentWorkspacePermission

Represents a library permission.

#### ForecastingDisplayedFamily

Represents the table in Forecasts Settings where an admin selects the product families that users can forecast on in Lightning Experience.

#### VisualforceAccessMetrics

Represents summary statistics for Visualforce pages.

#### MaintenanceAsset

Represents an asset that is included in a maintenance plan.

#### MaintenancePlan

Represents a service agreement between your company and customers.

#### ProductRequest

Represents a product request in Field Service.

#### ProductRequestLineItem

Represents an individual product request in Field Service.

#### ProductRequestFeed

Represents a single feed item on a product request detail page.

#### ProductRequestHistory

Represents the history of changes to the values of fields of a product request.

#### ProductRequestOwnerSharingRule

Represents the rules for sharing a product request.

#### ProductRequestShare

Represents a sharing entry on a product request.

#### ProductTransfer

Represents an individual product transfer in Field Service.

#### ProductTransferFeed

Represents a single feed item on a product transfer detail page.

#### ProductTransferHistory

Represents the history of changes to the values of fields of a product transfer.

#### ProductTransferOwnerSharingRule

Represents the rules for sharing a product transfer.

#### ProductTransferShare

Represents a sharing entry on an product transfer.

#### Shipment

Represents the method and tracking of a product transfer.

#### ScratchOrgInfo (Beta)

Represents a scratch org and its audit log.

#### ActiveScratchOrg (Beta)

Represents an active scratch org.

#### NamespacePrefix (Beta)

Represents a namespace that you can link to scratch orgs that were created from your org's Dev Hub.

#### VoiceMailMessage

Represents a prerecorded voicemail message.

#### VoiceMailMessageShare

Represents a sharing entry on a VoiceMailMessage.

## **Changed Objects**

These objects have changed.

#### BusinessHours

The object attributes searchable and layoutable have changed to true.

#### ContentDistribution

The ContentDownloadUrl and PdfDownloadUrl fields were added.

#### ConnectedApps

Added the samlIdpSLOBinding and samlSloUrl fields.

#### ContentNote

Added create and delete properties to several fields.

- CreatedById
- CreatedDate
- LastModifiedDate
- OwnerId

These properties are available to users assigned the Set Audit Fields Upon Creation permission.

#### ContentVersion

The ContentBodyId and FirstPublishLocationId fields were added.

#### ContentWorkspace

The object attributes createable, deletable, and updateable have changed to true.

The ShouldAddCreatorMembership field was added.

Added create and update properties to several fields.

- Name
- Description
- DeveloperName

#### EmailTemplate

The fields relatedEntityType and UiType were added.

#### EventLogFile

The following fields were added to the Lightning Error, Lightning Interaction, Lightning Page View, and Lightning Performance event types. One field was renamed.

- LOGIN\_KEY—The string that ties together all events in a user's login session. It starts with a login event and ends with either a logout event or the user session expiring.
- SESSION\_ID now named SESSION\_KEY—The string that ties together all events for a particular activity session. For example, URI events while the user is interacting with an Accounts page.
- USER ID DERIVED—The 18-character case-insensitive ID of the person using Salesforce services through the UI or the API.

The following fields were added to the Report event type to help you detect when users export large amounts of data. High row counts and size can indicate that a user is downloading information for fraudulent purposes.

- AVERAGE\_ROW\_SIZE
- ROW\_COUNT

The EventLogFile object has the following new event types.

- External OData Callout
- External Cross-Org Callout
- External Custom Apex Callout

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 Success Community.

#### LoginEvent

The UniqueKey field was added. Use the UniqueKey field as the primary key in your queries instead of the Id system field. Id isn't populated in API version 40.0 and later.

In API version 40.0 and later, the EventDate field isn't nillable.

#### NetworkActivityAudit

The DeletedPendingReviewItem picklist value was added to the Action field.

#### Quote

The CanCreateQuoteLineItems field was added. This field is not used.

#### QuoteLineItem

The OpportunityLineItemId field was added.

In API version 40.0 and later, the Product2Id field is required, but isn't API-updateable.

#### SlaProcess

The object attributes searchable and layoutable have changed to true.

#### WorkOrder

The following fields have been added:

- MaintenancePlanId
- MaintenanceDueDate

# SOSL

Salesforce Object Search Language (SOSL) includes a new WITH SPELL\_CORRECTION clause, and support for custom objects and fields using the WITH HIGHLIGHT clause.

#### IN THIS SECTION:

WITH HIGHLIGHT Supports Custom Fields and Objects

Highlighting makes it easier for users to identify content. Specify which custom fields and objects are highlighted in search results.

#### Disable Spell Correction on a Search Query with WITH SPELL\_CORRECTION

Use WITH SPELL\_CORRECTION = false to disable spell correction on a search query. When set to true, spell correction is enabled for searches that support spell correction. The default value is true.

## WITH HIGHLIGHT Supports Custom Fields and Objects

Highlighting makes it easier for users to identify content. Specify which custom fields and objects are highlighted in search results.

The following statement returns search results with the search term *salesforce west* highlighted for the custom field BuildingDescription of the custom object Building.

```
FIND {Salesforce West} IN ALL FIELDS RETURNING Building_c(Name, BuildingDescription_c)
WITH HIGHLIGHT
```

## Disable Spell Correction on a Search Query with WITH SPELL\_CORRECTION

Use WITH SPELL\_CORRECTION = false to disable spell correction on a search query. When set to true, spell correction is enabled for searches that support spell correction. The default value is true.

The following SOSL statement disables spell correction on a search of accounts for the term San Francisco.

FIND {San Francisco} IN ALL FIELDS RETURNING Account WITH SPELL\_CORRECTION = false

## **REST API**

REST API includes changed resources and new resources for record counts, flows, and platform schema events.

#### IN THIS SECTION:

#### New Resource: Record Count

Retrieve record counts for objects with this new REST API resource.

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.

#### Changed Resource: Search Suggested Records

Use the useSearchScope parameter to get suggested records from the user's search scope, which contains the user's most frequently used objects. Provide users with more relevant results without listing the objects for each request.

New Resources for Platform Event Schema

Use the event schema resources to obtain the schema of a platform event and determine if the schema changed.

#### Changed Header: Assignment Rule

The AssignmentRule header is now applied to Accounts, in addition to Cases and Leads, when Sforce-Auto-Assign is TRUE.

#### New Resource: Record Count

Retrieve record counts for objects with this new REST API resource.

#### **Record Count**

/vXX.X/limits/recordCount?sObjects=**Object List** 

Lists information about object record counts in your organization. Returns record counts for the comma-delimited list of object names provided for the sobjects parameter. If sobjects is not provided, the resource returns a list of record counts for all objects in the org.

#### Example: Retrieving record counts for Account and Contact

Example request

/services/data/v40.0/limits/recordCount?sObjects=Account,Contact

Example response body

```
{
    "sobjects" : [ {
        "count" : 3,
        "name" : "Account"
    }, {
        "count" : 10,
        "name" : "Contact"
    } ]
}
```

SEE ALSO:

Idea Exchange: Is there a way to access the record counts via the API?

## 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.

/v**XX.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.

/v**XX.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:

Customize the Look and Feel of Flow Interviews with the REST API (Pilot)

## Changed Resource: Search Suggested Records

Use the useSearchScope parameter to get suggested records from the user's search scope, which contains the user's most frequently used objects. Provide users with more relevant results without listing the objects for each request.

This example gets suggested records from a user's search scope for the search term Acme.

 $\dots/\texttt{search}/\texttt{suggestions?q=Acme&useSearchScope=true}$ 

## New Resources for Platform Event Schema

Use the event schema resources to obtain the schema of a platform event and determine if the schema changed.

#### Platform Event Schema by Event Name

/vXX.X/sobjects/Platform\_Event\_Name\_\_e/eventSchema

Gets the definition of a platform event in JSON format for a given event name.

For an example, see Platform Event Schema by Event Name in the Force.com REST API Developer Guide.

#### Platform Event Schema by Schema ID

/v**XX.X**/event/eventSchema/**Schema\_ID** 

Gets the definition of a platform event in JSON format for a given schema ID.

For an example, see Platform Event Schema by Schema ID in the Force.com REST API Developer Guide.

## Changed Header: Assignment Rule

The AssignmentRule header is now applied to Accounts, in addition to Cases and Leads, when Sforce-Auto-Assign is TRUE.

# SOAP API

SOAP API includes new and changed calls.

## New and Changed Calls

#### New Calls

#### findDuplicatesByIds()

Performs rule-based searches for duplicate records. The input is an array of IDs, each of which specifies the records for which to search for duplicates. The output identifies the detected duplicates for each object that supplies the duplicate rules. findDuplicatesByIds () applies the rules to the record IDs to do the search. The output identifies the detected duplicates for each ID.

#### changeOwnPassword()

Allows users to change their own passwords. The call setPassword () can no longer be used to allow users to change their own passwords.

## **Changed Calls**

#### convertLead()

The opportunityId argument is now available to let you specify an existing opportunity to relate to a lead during lead conversion.

#### describeSObjects()

The url field of the ActionOverride subtype under describeSObjects () and DescribeSObjectResult is now nillable. The url field returns null for Lightning page overrides.

The polymorphicForeignKey field had been added. This field indicates whether the foreign key includes multiple entity types (true) or not (false).

The searchPrefilterable field of the fields property now indicates whether a foreign key can be included in prefiltering when used in a SOSL WHERE clause. Prefiltering filters by a specific field value before executing a full search query.

#### getUserInfo() and getUserInfoResult

The chatterExternal field was added to getUserInfoResult. This field indicates whether a user is internal or external to an org.

#### search()

The searchRecordMetadata element appears in the SearchResult object when spell correction is performed on a search term. The element contains the boolean spellCorrected, which appears in the response only when true and indicates that a record matches a spell-corrected search term.

#### search()

The spellCorrectionMetadata element appears in the SearchResult object when spell correction is performed on a search term. The element contains the corrected term and the boolean hasNonCorrectedResults which, when true, indicates that the uncorrected search term returns at least one result.

#### setPassword()

The call setPassword() can no longer be used to allow users to change their own passwords. Use changeOwnPassword() instead.

# Chatter REST API

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. In this release, we introduce read and unread feed elements and enhance direct messages, moderation, and streams.

Note: To create custom Chatter and communities experiences in Salesforce, use ConnectApi (Chatter in Apex): New and Changed Classes and Enums.

#### IN THIS SECTION:

New and Changed Chatter REST API Resources

New and Changed Chatter REST API Request Bodies

New and Changed Chatter REST API Response Bodies

## New and Changed Chatter REST API Resources

#### **Chatter Feeds**

#### Access the read by capability of a feed element

Make a GET request to the new /chatter/feed-elements/feedElementId/capabilities/read-by resource.

#### Mark a feed element as read for the context user

Make a PATCH request to the new /chatter/feed-elements/**feedElementId**/capabilities/read-by resource with the new Read By Capability Input or with the isReadByMe parameter.

#### Mark multiple feed elements as read by the context user at the same time

Makea PATCH request to the new /chatter/feed-elements/batch/*feedElementIds*/capabilities/read-by resource with the new Read By Capability Input or with the isReadByMe parameter.

#### Get information about who read a feed element and when

Make a GET request to the new /chatter/feed-elements/**feedElementId**/capabilities/read-by/items resource.

#### Get all the read or unread feed elements for the context user from a group feed

Make a GET request to the existing /chatter/feeds/record/**recordId**/feed-elements resource with the filter parameter set to Read or Unread. The recordId must be a group ID.

#### Update the members of a direct message

Make a PATCH request to the existing

/chatter/feed-elements/feedElementId/capabilities/direct-message resource with the updated Direct Message Capability Input.

#### Get a page of members of a direct message

Make a GET request to the existing

/chatter/feed-elements/feedElementId/capabilities/direct-message/members resource with the
new page parameter.

#### Get the original members for a direct message

Make a GET request to the new

/chatter/feed-elements/feedElementId/capabilities/direct-message/original-members
resource.

#### Get the membership activities for a direct message

Make a GET request to the new

/chatter/feed-elements/feedElementId/capabilities/direct-message/membership-activity
resource.

#### Get the URL to the communities direct message moderation feed

Make a GET request to the new

/connect/communities/communityId/chatter/feeds/direct-message-moderation resource.

#### Get the direct messages that are flagged for moderation in the community

Make a GET request to the new

/connect/communities/communityId/chatter/feeds/direct-message-moderation/feed-elements
resource.

#### Get the feed elements authored by the user profile owner from the user profile feed

Make a GET request to the existing /chatter/feeds/user-profile/**userId**/feed-elements resource with the filter parameter set to AuthoredBy.

#### Get sorted feed streams

Make a GET request to the existing /chatter/streams resource with the new sort parameter.

#### Search feed streams

Make a GET request to the existing /chatter/streams resource with the new q parameter.

#### Subscribe a user to receive stream subscription notifications

When users opt to receive notifications for their streams, they get an email on every post in the stream.

Make a POST request to the existing /chatter/subscriptions/notification/*entityId*/members/*userId* resource with the Notification Member Input or the notification Frequency parameter and where *entityId* is a stream ID.

#### Get information about the frequency with which a user receives stream subscription notifications

Make a GET request to the existing /chatter/subscriptions/notification/*entityId*/members/*userId* resource, where *entityId* is a stream ID.

#### Unsubscribe a user from receiving stream notifications

Make a DELETE request to the existing /chatter/subscriptions/notification/*entityId*/members/*userId* resource, where *entityId* is a stream ID.

#### Get the custom filtered feed elements from the case feed

Make a GET request to the existing /chatter/feeds/record/**recordId**/feed-elements resource with the new customFilter parameter.

#### Get the URL to the landing feed and a page of feed elements

Make a GET request to the new /chatter/feeds/landing resource with the pageSize parameter.

#### Get a page of feed elements from several feeds

Make a GET request to these existing feeds resources with the new pageSize parameter.

- /chatter/feeds/company
- /chatter/feeds/direct-messages
- /chatter/feeds/pending-review
- /connect/communities/communityId/chatter/feeds/home
- /connect/communities/communityId/chatter/feeds/direct-message-moderation
- /connect/communities/communityId/chatter/feeds/moderation

#### Access the extensions capability of a feed element (pilot)

Note: We provide Extensions to selected customers through a pilot program that requires agreement to specific terms and conditions. Extensions 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.

Make a GET request to the new /chatter/feed-elements/**feedElementId**/capabilities/extensions resource.

#### Create a feed element with an extension (pilot)

Make a POST request to the existing /chatter/feed-elements resource with the Feed Item Input and the new Extensions Capability Input.

#### Get extensions (pilot)

Make a GET request to the new /chatter/extensions resource.

## **Community Moderation**

#### Get audit statistics for a user in a community

Make a GET request to the new

/connect/communities/communityId/chatter/users/userId/audit-actions/counts resource.

#### Get more details about flagged posts, comments, and files

Make GET requests to these existing resources with the new page and pageSize parameters.

- /connect/communities/communityId/chatter/feed-elements/feedElementId/capabilities/moderation
- /connect/communities/communityId/chatter/comments/commentId/moderation-flags
- /connect/communities/communityId/files/fileId/moderation-flags

#### Files

#### Get information about supported previews for a specific version of a file

Make a GET request to the existing /connect/files/*fileId*/previews resource with the new versionNumber parameter.

#### Generate the supported previews for a specific version of a file

Make a PATCH request to the existing /connect/files/*fileId*/previews resource with the new versionNumber parameter.

#### Get the preview of a specific version of a file

Make a GET request to the existing /connect/files/*fileId*/previews/*previewFormat* resource with the new versionNumber parameter.

#### Topics

#### Assign topics to or unassign topics from articles in a data category

Make a POST request to the new

/connect/topics/data-category-groups/*dataCategoryGroup*/data-categories/*dataCategory*/articles resource with the new Article Topic Assignment Job Input.

#### Get topic and article assignment rules

Make a GET request to the new

/connect/topics/data-category-rules/data-category-groups/**dataCategoryGroup**/data-categories/**dataCategory** resource.

#### Create topic and article assignment rules

Make a POST request to the new

/connect/topics/data-category-rules/data-category-groups/*dataCategoryGroup*/data-categories/*dataCategory* resource with the existing Topic Names Input.

#### Reassign topic and article assignment rules

Make a PUT request to the new

/connect/topics/data-category-rules/data-category-groups/**dataCategoryGroup**/data-categories/**dataCategory** resource with the existing Topic Names Input.

## New and Changed Chatter REST API Request Bodies

### **Chatter Feeds**

#### Alternative Input (Pilot)

This new request body has these properties.

- textRepresentation—Text representation of the extension.
- thumbnailUrl—Thumbnail URL for the extension.
- title—Title of the extension.

#### **Direct Message Capability Input**

This request body has one new property.

• membersToRemove—List of user IDs for members to remove from the direct message.

#### **Extension Input (Pilot)**

This new request body has these properties.

- alternativeRepresentation—Alternative representation of the extension.
- extensionId—ID of the extension.
- payload—Payload associated with the extension.
- payloadVersion—Payload version that identifies the structure of the payload associated with the extension.

#### **Extensions Capability Input (Pilot)**

This new request body has one property.

• itemsToAdd—Collection of extensions to associate with the feed element.

#### **Feed Element Capabilities Input**

This request body has one new property.

• extensions—Create one or more extensions to associate with a feed element.

#### **Read By Capability Input**

This new request body has these properties.

- isReadByMe—Specifies to mark the feed element as read (true) for the context user.
- lastReadDateByMe—Specifies the last date when the feed element is marked as read for the context user. If you don't specify a date or you specify a future date, the current system date is used.

#### Topics

#### **Article Topic Assignment Job Input**

This new request body has these properties.

- operation—Specifies the type of operation to perform on articles and topics. Values are:
  - AssignTopicsToArticle—Assign topics to articles in a data category.
  - UnassignTopicsFromArticle—Unassign topics from articles in a data category.
- topicNames—List of topic names to assign to or unassign from articles.

## New and Changed Chatter REST API Response Bodies

## **Chatter Feeds**

#### Alternative (Pilot)

This new response body has these properties.

- textRepresentation—Text representation of the extension.
- thumbnailUrl—Thumbnail URL for the extension.
- title—Title of the extension.

#### Direct Message Capability

This response body has these new properties.

- memberChanges—Member activities of the direct message, with the most recent activity first.
- originalMembers—Original members of the direct message.

#### **Direct Message Membership Activity**

This new response body has these properties.

- activityDate—Direct message member activity date.
- actor—User who changed the direct message membership.
- membersAdded—Members added to the direct message as part of the activity.
- membersRemoved—Members removed from the direct message as part of the activity.

#### **Direct Message Membership Activity Collection**

This new response body has these properties.

- activities—Collection of direct message member activities.
- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.

#### **Extension (Pilot)**

This new response body has these properties.

- alternativeRepresentation—Alternative representation of the extension.
- extensionId—ID of the extension.
- payload—Payload associated with the extension.
- payloadVersion—Payload version that identifies the structure of the payload associated with the extension.

#### Extension Definition (Pilot)

This new response body has these properties.

- canAccess—Indicates whether users can access the extension when it's associated with a feed element.
- canCreate—Indicates whether users can create a feed element with the extension in the org.
- createdDate—Date when the extension was created.
- description—Description of the extension.
- iconUrl—URL to the icon for the extension.
- id—ID of the extension.

- informationCollection—Collection of extension information.
- isEnabledInCommunity—Indicates whether the extension is enabled in communities.
- isEnabledInLightningPublisher—Indicates whether the extension is enabled in the Lightning publisher.
- name—Name of the extension.

#### **Extension Definition Collection (Pilot)**

This new response body has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- extensionDefinitions—Collection of extension definitions.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- total—Total number of extensions returned.

#### **Extensions Capability (Pilot)**

This new response body has one property.

• items—Collection of extensions.

#### Feed

This response body has these new properties.

- feedElements—Page of feed elements for the feed specified in redirectedFeedType. Otherwise, null.
- redirectedFeedType—Specifies which feed is returned if pageSize is specified. Otherwise, null.

#### Feed Element Capabilities

This response body has one new property.

• extensions—If a feed element has this capability, it has one or more extension attachments.

#### Lightning Extension Information (Pilot)

This new response body has these properties.

- compositionComponent—Component to use in compose state.
- extensionInformationType—Value is Lightning.
- headerTextLabel—Label for the extension's header.
- hoverTextLabel—Label for hovering over the extension.
- renderComponent—Component to use in render or preview state.

#### Read By

This new response body has these properties.

- lastReadDateByUser—When the user last read the feed element.
- user—Information about the user who read the feed element.

#### **Read By Capability**

This new response body has these properties.

- isReadByMe—Specifies whether the feed element has been read (true) or not (false) by the context user.
- lastReadDateByMe—Last date when the feed element was marked read for the context user. Otherwise, null.
- page—First page of information about who read the feed element and when.

#### **Read By Collection**

This new response body has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- items—Collection of read-by information, including users and when they last read the feed element.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- previous Page Token—Reserved for future use.
- previousPageUrl—Reserved for future use.
- total—Total number of users who read the feed element.

#### **Social Post Capability**

This response body has these new properties.

- likedBy—External social account who liked the social post.
- reviewScale—Review scale of the social post.
- reviewScore—Review score of the social post.

#### **User Settings**

This response body has one new property.

• canAccessPersonalStreams—User can access personal stream feeds.

#### **Community Moderation**

#### **Moderation Audit Record Count**

This new response body has one property.

• auditActionToCount—The number of actions audited for a user in a community. For String values of audit actions, see NetworkActivityAudit in the Object Reference for Salesforce and Force.com.

#### **Moderation Flag Item Detail**

This new response body has these properties.

- createdBy—ID of the user who flagged the item.
- createdDate—Date when the item was flagged.
- id—ID of the moderation flag.
- moderationType—Specifies the type of moderation flag. Values are:
  - FlagAsInappropriate—Flag for inappropriate content.
  - FlagAsSpam—Flag for spam.
- note—Note from user who flagged the item.
- visibility—Specifies the visibility behavior of a flag for various user types. Values are:
  - ModeratorsOnly—The flag is visible only to users with moderation permissions on the flagged element or item.
  - SelfAndModerators—The flag is visible to the creator of the flag and to users with moderation permissions on the flagged element or item.

#### **Moderation Flags**

This response body has these new properties.

- flagCountByReason—Number of moderation flags categorized by reason.
- flags—Collection of flags.

#### **Moderation Flags Collection**

This new response body has these properties.

- currentPageToken—Token identifying the current page.
- currentPageUrl—Chatter REST API URL identifying the current page.
- flags—List of flag details.
- nextPageToken—Token identifying the next page, or null if there isn't a next page.
- nextPageUrl—Chatter REST API URL identifying the next page, or null if there isn't a next page. Check whether this value is null before getting another page. If a page doesn't exist, a ConnectApi.NotFoundException error is returned.
- pageSize—Number of items per page.

#### Files

#### Content

This response body has one new property.

• imageDetails—Image details, or null if the file isn't an image.

#### **File Preview Collection**

This response body has one new property.

• versionNumber—Version number of the file.

#### Folder

This response body has one new property.

• folderPaths—Collection of folder paths.

#### **Folder Path**

This new response body has these properties.

- folderId—ID of the folder.
- folderName—Name of the folder, or null for the root.

#### **Files Connect**

#### **Files Connect Repository**

This response body has one new property.

• authentication—Repository authentication information.

#### **Files Connect Repository Authentication**

This new response body has these properties.

- authFlowUrl—Depends on the authProtocol.
  - NoAuthentication-null.
  - Oauth—URL to start the OAuth flow.
  - Password—URL to the authentication settings for external systems.
- authProtocol—Specifies the authentication protocol used for the repository.
  - NoAuthentication—Repository doesn't require authentication.
  - Oauth—Repository uses OAuth authentication protocol.

- Password—Repository uses user name and password authentication protocol.
- userHasAuthSettings—Specifies whether the user has credentials or the administrator configured the external data source to use the same set of credentials for every user (true). Otherwise, false.

## Records

#### **Entity Label**

This new response body has these properties.

- label—Localized singular label of the entity.
- labelPlural—Localized plural label of the entity.

#### **Record Summary**

This response body has one new property.

entityLabel—Label of the record's entity.

## Users Out of Office (Pilot)

Note: We provide Out of Office 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. Out of Office 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.

#### **Mention Completion**

This response body has one new property.

• outOfOffice—If the record represented by this completion is a user, an additional out-of-office message, if one exists, for the user.

#### Out of Office (Pilot)

This new response body has one property.

• message—Out-of-office message for the user.

#### **User Detail**

This response body has one new property.

• outOfOffice—Extra out-of-office message, if one exists, for the user.

#### **User Summary**

This response body has one new property.

• outOfOffice—Extra out-of-office message, if one exists, for the user.

# Reports and Dashboards REST API

Reports and Dashboards REST API enhancements include new resources for describing and testing dashboard filters and report fields, new methods for setting dashboard filter values and describing a single analytics notification, and new properties describing analytics notification recipients and running users.

## New Resources: Filter Operators, Filter Options Analysis, Report Fields

The Reports and Dashboards REST API includes new resources that describe and test dashboard filters and report fields.

Resource URI	Supported HTTP Methods	Description
/services/data/v40.0/analytics/reports/ <b><report< b=""> id&gt;/fields</report<></b>	POST	If the request body is empty, the response returns a list of all possible report fields.
		If the request body includes the new intersectWith property, which is an array of report ids, then the response returns only report fields specified reports share.
		Use the fields resource to determine the best fields for use in dashboard filters.
		Here's an example request body:
		<pre>{     "intersectWith": ["<report 1="" id="">", "<report 2="" id="">"] }</report></report></pre>
/services/data/v40.0/analytics/filteroperators and /services/data/v40.0/analytics/filteroperators?forDeshboards=tne	GET	If forDashboards isn't specified or forDashboards=false, the response returns all report filter operators.
/services/cata/v4U.U/analytics/tilteroperators/tonlashcoarcs=true		If forDashboards=true, the response returns all dashboard filter operators.
/ærviæs/data/v40.0/analytics/dashboards/filteroptionsanalysis	POST	Verifies that dashboard filter options are compatible with report fields. Specify the reportId of a dashboard's components' source report.
		<pre>Here's an example request body:  {     "filterColumns" : [{         "reportId":         "000R0000000PIGYMA4",         "name": "ACCOUNT_TYPE"     }],     "options": [{         "alias": "New",         "operation": "contains",         "value": "New",         "startValue": null,         "endValue": null     }] }</pre>

For more information, see the Reports and Dashboards REST API Developer Guide.

# New Methods

The Reports and Dashboards REST API has new methods for getting info about a single analytic notification and setting values for dashboard filters.

Resource	Supported HTTP Method	Description
/services/data/v40.0/analytics/notifications/ <b><notification< b=""> id&gt;</notification<></b>	GET	Return details about an analytic notification.
/servies/data/v40.0/analytics/dashboards/ <b><dashboard< b=""> <b>id&gt;</b>?isStickyFilterSave=true</dashboard<></b>	PATCH	Set a default filter value to apply to a dashboard when you open it. The default filter value you specify applies only to you (other people won't see it when they open the dashboard). If you change the filter value while viewing the dashboard, then the filter value you set in the user interface overwrites the value you set in the API.
		In the request body, set the new "selectedOption" property to the index of the filter option you'd like to apply.
		Here's an example request body:
		<pre>{     "filters" : [ {         "errorMessage" : null,         "id" : "OIBR0000004D4iOAE",         "name" : "Billing City",         "options" : [ {             "alias" : "New York City",             "endValue" : null,             "id" :         "OICR0000004FtQOAU",             "operation" : "equals",             "startValue" : null,             "value" : "New York City"         }, {             "alias" : "Chicago",             "endValue" : null,             "id" :         "OICR0000004FtROAU",             "operation" : "equals",             "startValue" : null,             "id" :         "OICR0000004FtROAU",             "operation" : "equals",             "startValue" : null,             "id" :         "OICR0000004FtROAU",         "operation" : "equals",         "startValue" : null,         "id" :         "OICR0000004FtROAU",         "operation" : "equals",         "startValue" : null,         "value" : "Los Angeles",         "endValue" : null,         "id" :         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR00000004FtSOAU",         "OICR000000004FtSOAU",         "OICR0000000004FtSOAU",         "OICR000000004FtSOAU",         "OICR0000000000004FtSOAU",         "OICR000000004FtSOAU",         "OICR0000000000004FtSOAU",         "OICR00000000004FtSOAU",         "OICR0000000004FtSOAU",         "OICR00000000000000004FtSOAU",</pre>

Resource	Supported HTTP Method	Description
		<pre>"startValue" : null, "value" : "Los Angeles" } ], "selectedOption" : 1 } ]</pre>

For more information about these methods, see the *Reports and Dashboards REST API Developer Guide*.

## Changed Resources: Analytics Notifications and Dashboard Describe

The Reports and Dashboards REST API includes new properties that describe analytic notification recipients and running users.

#### Notifications

The Notifications Results resource contains both new and changed properties.

Property	Туре	Description
recipients	recipients[]	An array of people who receive the analytic notification. Each object in the array has these properties:
		<ul> <li>displayName — The person's first and last name.</li> </ul>
		• id — The person's Salesforce user ID.
		Requires the "Subscribe to Reports: Add Recipients" user perm.
runAs	runAs	The person who runs the report in a report subscription. Report recipients see data in the emailed report that this person has access to in Salesforce. Has these properties:
		• id — The person's Salesforce user ID.
		• name — The person's first and last name.
		Requires the "Subscribe to Reports: Set Running User" user perm.

#### **Table 2: New Properties**

#### **Table 3: Changed Properties**

Property	Туре	Description
configuration	anfigratian[]	Previously, configuration returned null and was reserved for future use. Now, configuration returns a recipients object when an analytic notification has multiple recipients. If the subscription is only sent to the person who sets it up, then configuration still returns null.

#### Dashboard Describe

The Dashboard Describe resource contains new properties.

Table 4: New Properties			
Property	Туре	Description	
reportFormat	String	The format of a dashboard's source report.	
maxFilterOptions	Integer	The maximum number of values allowed in a dashboard filter.	

For more information, see the Reports and Dashboards REST API Developer Guide.

# **Bulk API**

The pilot version of Bulk API 2.0 now provides a more efficient process for uploading job data.

IN THIS SECTION:

Simplified Job Process for Bulk API 2.0 (Pilot)

Bulk API 2.0 provides a simplified process for loading large amounts of data into your Salesforce org.

## Simplified Job Process for Bulk API 2.0 (Pilot)

Bulk API 2.0 provides a simplified process for loading large amounts of data into your Salesforce org.

Note: We provide Bulk API 2.0 to selected customers through a pilot program that requires agreement to specific terms and conditions. Bulk API 2.0 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.

Bulk API 2.0 now has a simplified process for uploading job data. Instead of creating and monitoring separate batches for a given job, simply upload data for a job, and monitor the job state and results. New API calls are available to retrieve data for successfully and unsuccessfully processed records for a job. Additionally, Bulk API 2.0 now supports creating a new job and uploading the job data in a single, multipart request.

SEE ALSO:

Idea Exchange: Bulk API - Download batch job csv files to a single file

# **Enterprise Messaging Platform**

Messaging includes a new feature, Platform Events, that is generally available.

IN THIS SECTION:

Deliver Custom Notifications with Platform Events (Generally Available)

Monitor your systems and communicate changes with platform events. Has your order system shipped a package? Do your printer cartridges need replacing? Whatever you want to be notified

about, Salesforce's enterprise messaging platform provides the delivery of secure and scalable custom notifications within Salesforce and from external sources. This change applies to both Lightning Experience and Salesforce Classic.



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

#### Supported CometD Versions for Streaming API

Use CometD version 3.0.9 or later in your clients to connect to Streaming API. Earlier versions are no longer supported and could result in unexpected behavior. To prevent potential issues with old CometD versions in your clients, upgrade the CometD library to a supported version. For more information, see https://cometd.org/.

## Deliver Custom Notifications with Platform Events (Generally Available)

Monitor your systems and communicate changes with platform events. Has your order system shipped a package? Do your printer cartridges need replacing? Whatever you want to be notified about, Salesforce's enterprise messaging platform provides the delivery of secure and scalable custom notifications within Salesforce and from external sources. This change applies to both Lightning Experience and Salesforce Classic.

Platform events are part of Salesforce's enterprise messaging platform. The platform provides an event-driven messaging architecture to enable apps to communicate inside and outside of Salesforce. Custom data in your events are stored in custom fields that you define. Platform events simplify the process of communicating changes and responding to them without writing complex logic. Publishers and subscribers communicate with each other through events. Multiple subscribers can listen to the same event and carry out different actions.

By using platform events, publishers can send customized event data through Apex or an API. Subscribers can receive custom notifications from Salesforce or an external system using Apex or CometD clients. Based on the event's contents, subscribers can process custom business logic, such as sending an email or logging a case. For example, a software system monitoring a printer can make an API call to publish an event when the ink is low. The printer event can contain custom fields for the printer model, serial number, and ink level. The event is processed in Salesforce by an Apex trigger that places an order for a new cartridge.

## **Define Your Platform Event**

Define your platform event on the Platform Events page in the Salesforce user interface. From Setup, enter *Platform Events* in the Quick Find box, then select **Platform Events**. Create a platform event definition by giving it a name and adding custom fields. The custom fields define the data that is sent in the event messages. Platform events support a subset of field types in Salesforce.

Field Name	Field API Name	Field Type
Printer Model	Printer_Modelc	Text
Serial Number	Serial_Numberc	Text
Ink Percentage	Ink_Percentagec	Number
Manufacturing Date	Manufacturing_Datec	Date

For example, this table lists a definition of custom fields for a printer ink event.

A platform event is a special kind of sObject. An event notification is an instance of the platform event, similar to how a record is an instance of a custom object. Unlike custom objects, you can't view event records in the Salesforce user interface, and platform events don't have page layouts. Platform events aren't transactional and can't be rolled back. Also, platform events are retained for 24 hours and CometD subscribers can retrieve past events using a unique ID (the ReplayId field value).

## **Platform Event Limits**

Description	Performance and Unlimited Editions	Enterprise Edition	All other supported editions
Maximum number of events published per hour	100,000	100,000	1,000
(Events can be published using Apex or APIs.)			
Maximum event message size		5 MB	
Maximum number of events delivered to CometD clients within a 24-hour period <sup>1</sup>	50,000	25,000	10,000
Maximum number of platform event definitions that can be created in an org	100	50	5

<sup>1</sup>To request a higher number of events delivered to CometD clients, contact Salesforce to purchase an add-on license. The add-on license increases your daily limit of delivered events by 100,000 more events. For example, for Unlimited Edition, the add-on license increases the daily limit of delivered events from 50,000 to 150,000 events. You can purchase multiple add-ons to meet your event requirements for CometD clients. To avoid deployment problems and degradation in service, we recommend that the number of events delivered to CometD clients not exceed 5 million per day. If you require additional external events, contact your Salesforce representative to understand how the product can scale to meet your needs.

## Platform Event Changes in Summer '17

In the last release, Platform Events was in beta. In this release, it is generally available, and we made the following improvements and changes.

#### **Non-Transactional Events**

Platform events are processed outside database transactions in the Force.com platform. As a result, they can't be rolled back.

#### Limits

We made various limit changes, including the addition of an add-on license for increased event limits for CometD clients. See Platform Event Limits.

#### Databinding.ObjectMapper No Longer Supported

The Databinding.ObjectMapper class, along with its transform methods, has been removed. The utility methods were deprecated last release.

For more information, see the *Platform Events Developer Guide*.

## Supported CometD Versions for Streaming API

Use CometD version 3.0.9 or later in your clients to connect to Streaming API. Earlier versions are no longer supported and could result in unexpected behavior. To prevent potential issues with old CometD versions in your clients, upgrade the CometD library to a supported version. For more information, see https://cometd.org/.



Note: We upgraded the Visualforce code samples in the Streaming API Developer Guide to use version 3.1.0 of CometD.

# **Tooling API**

Tooling API includes new and changed objects and a new REST resource. For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings.

The Force.com Tooling API Developer's Guide contains all Tooling API information.

#### IN THIS SECTION:

Warnings Returned from Successful Metadata Save Operations

For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings. The default behavior of Tooling API is to fail the operation without returning the warnings.

Improve the Performance of Tools and Apps Built with Tooling API By Using the Composite Resource

Make a POST request to the new /services/data/v**XX**. **X**/tooling/composite resource to improve the performance of development tools or apps built with Tooling API. This new resource minimizes the number of round trips needed between the client and server by executing a series of Tooling API requests in a single call.

#### Tooling API New and Changed Objects

Tooling API includes new and changed objects.

#### SEE ALSO:

Get Extended Error Details for Flows in the Tooling API Get Extended Error Details for Flows in the Tooling API

## Warnings Returned from Successful Metadata Save Operations

For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings. The default behavior of Tooling API is to fail the operation without returning the warnings.

To have an error-free save operation complete successfully and return any generated warnings, specify the header ignoreSaveWarnings in your HTTP request.

## Improve the Performance of Tools and Apps Built with Tooling API By Using the Composite Resource

Make a POST request to the new /services/data/v**XX**. **X**/tooling/composite resource to improve the performance of development tools or apps built with Tooling API. This new resource minimizes the number of round trips needed between the client and server by executing a series of Tooling API requests in a single call.

You can use the output of one request as the input to a subsequent request. The requests' response bodies and HTTP statuses are returned in a single response body. The entire request counts as a single call toward your API limits.

## Tooling API New and Changed Objects

Tooling API includes new and changed objects.

#### New Objects

#### DataAssessmentConfigItem

Represents a saved configuration for a specific vendor's package for data assessment.

#### ForecastingDisplayedFamily

Represents the product families that an admin chooses to allow forecasting on in Lightning Experience.

#### SourceMember (Beta)

Represents a single sObject of all source that you are tracking in a scratch org.

#### **Changed Objects**

#### ActionOverride

The following fields are changed.

#### ContentId

Can reference a Lightning component that implements the lightning:actionOverride interface.

#### ContentName

Can reference the name of a Lightning component that implements the lightning:actionOverride interface.

#### Туре

lightningcomponent is a new valid value.

#### CleanRule

The following field was added.

#### DataAssessmentStatus

The status of the data assessment.

#### FieldDefinition

The following field was added.

#### IsSearchPrefilterable

Indicates whether a foreign key can be included in prefiltering (true) or not (false) when used in a SOSL WHERE clause. *Prefiltering* filters by a specific field value before executing the full search query.

#### Layout

The Layout object now supports the create (), delete (), update (), and upsert () SOAP calls.

#### PathAssistant

The following fields were added.

#### ManageableState

Indicates the manageable state of the specified component that is contained in a package.

#### NamespacePrefix

The namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the namespacePrefix componentName notation.

#### SecurityHealthCheckRisks

The following field was added.

#### SettingRiskCategory

The level of risk of the org's security settings.

# Metadata API

Metadata API includes new and changed types and fields.

## New Metadata Types

These metadata types have been added.

#### BrandingSet

Represents the definition of a set of branding properties for a community, as defined in the Branding Panel in Community Builder.

#### ChatterExtensions

Represents the metadata used to describe a Rich Publisher App (pilot) that is integrated with the Chatter publisher. ChatterExtensions is a pilot feature in API version 40.0.

#### ProfilePasswordPolicy

Represents a profile's password policies. Profile password policies override org-wide password policies for that profile's users. Use ProfilePasswordPolicy to retrieve password policies for a given profile.

#### ProfileSessionSetting

Session security levels control access to certain types of resources based on the type of authentication used for logging in to the current session. For example, username and password authentication requires the standard session security level. Two-factor authentication requires HIGH ASSURANCE.

## Changed Metadata Types and Fields

These metadata types have changed or have fields that have been added or changed.

#### ActionOverride

The type field now supports lightningcomponent as a valid value, and the content field can reference the name of a Lightning component that implements the lightning:actionOverride interface.

#### CaseSettings

The following field has been added.

#### showEmailAttachmentsInCaseAttachmentsRL

Indicates whether the case Attachments related list shows email attachments. If true, the page displays an email icon next to each attachment from an email in the Attachments related list for cases. The related list's list view also includes a Source column that identifies the attachment's origin. If false, email attachments aren't displayed in the Attachments related list for cases.

#### ConnectedApp

The following fields have been added.

#### samlIdpSLOBinding

The SAML HTTP binding type from the service provider used for single logout.

#### samlSloUrl

The SAML single logout endpoint of the connected app service provider (SP). This endpoint is where SAML LogoutResponses are sent when users log out of Salesforce.

#### CommunityTemplateDefinition

The following fields have been added.

#### defaultBrandingSet

The set of branding properties associated with this CommunityTemplateDefinition, as defined in the Branding panel in Community Builder.

#### navigationLinkSet

The navigation menu associated with the CommunityTemplateDefinition. A navigation menu consists of items that users can click to go to other parts of the community.

#### ExternalDataSource

The type field now supports FederatedSearch: OpenSearch as a valid value. 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.

#### FlowActionCall

The following field has been updated with these values.

#### actionType

activateSessionPermSet—Activates a session-based permission set for the running user.

deactivateSessionPermSet—Deactivates a session-based permission set for the running user.

#### ForecastingSettings

The following field has been added.

#### ForecastingDisplayedFamilySettings

The product families that an admin chooses to allow forecasting on in Lightning Experience.

#### Network

The following fields have been added.

#### allowInternalUserLogin

Determines whether internal users can log in with their internal credentials on the community login page.

#### enableTopicAssignmentRules

Enables the org to use rules to automatically assign topics to articles in a community. After it's enabled, admins set up rules in a community to map topics to Salesforce Knowledge data categories.

#### gatherCustomerSentimentData

Gathers data when a customer looks at articles and cases in communities, for use in the Community 360 feature.

#### networkPageOverrides

The settings in the Administration area (in Community Management or Community Workspaces) that control which page type the Change Password, Forgot Password, Home, and Login pages each point to. Page types include:

- Designer—a Community Builder page
- Standard—the default page
- VisualForce—a Visualforce page

#### OrgPreferenceSettings

The following values are now valid for the preferences field.

- AnalyticsSharingEnable
- AsyncSaveEnabled
- NetworksEnabled
- ScratchOrgManagementPref (Beta)
- Translation

#### PermissionSet

In API version 40.0 and later, when you retrieve permission set metadata, all content exposed in Metadata API for the permission sets are retrieved. Retrieval includes Apex associated with the permission set, CRUD, and so on. In API version 39.0 and earlier, retrieving permission set metadata returns only the app and system permissions assigned to the permission set. Junction metadata (such as Apex, CRUD) are included only if the metadata for the related component is also included in the package definition.

#### SecuritySettings

The following field has been added.

#### ${\tt identity} {\tt Confirmation} {\tt OnTwoFactorRegistration {\tt Enabled}$

If true, users are challenged with Identity Conformation during 2FA registration. If false, users are not challenged with Identity Confirmation, and are prompted to log in again.

#### StandardValueSet

The following standard picklist fields were included in the documentation by mistake and have been removed.

- AddressCountryCode
- AddressStateCode
- InvoiceStatus
- OrderStatus

#### TransactionSecurityAction

The following field has been added.

#### freezeUser

If true, the user that triggered the Transaction Security policy is frozen. This action applies only to Chatter resources for Entity events.

#### SessionSettings

The following fields have been added.

#### requireHttpOnly

Sets the HttpOnly attribute on session cookies, making them inaccessible via JavaScript. If true, session ID cookie access is restricted. If false, access is not restricted.

#### requireHttps

Determines whether HTTPS is required to log in to or access Salesforce. However, Force.com sites can still be accessed using HTTP. This option is enabled by default for security reasons. To change to HTTP, contact Salesforce Customer Support.

SEE ALSO:

Get Extended Error Details for Flows in the Tooling API

## **Data Services**

Additional features have been added to the BigObjects and Async SOQL pilots.

#### IN THIS SECTION:

#### Enhancements to BigObjects (Pilot)

BigObjects now support packaging, full delete lifecycles, partial metadata edits, long text area datatypes, Bulk API queries, and the use of IN() clauses in SOQL.

#### Enhancements to Async SOQL (Pilot)

Async SOQL supports granular permissions and field substitutions for TargetValueMap.

## Enhancements to BigObjects (Pilot)

BigObjects now support packaging, full delete lifecycles, partial metadata edits, long text area datatypes, Bulk API queries, and the use of IN() clauses in SOQL.

#### **Packaging Support**

BigObjects can be included in the full lifecycle of a managed or unmanaged package. BigObjects can be added to existing packages or included in new packages. Packages are automatically updated with BigObject fields and indexes. Packages make it easier to distribute your BigObjects to other users and orgs.

## Full Delete Lifecycle

BigObjects support the full entity delete lifecycle via the Setup UI. Deleted BigObjects are soft deleted, meaning there is a 15-day period where they can be recovered or permanently erased. After 15 days, the BigObject is automatically permanently deleted. To restore a BigObject, change the deployment status and set the required flag for any non-index fields as necessary. Fields in the index will automatically be reset to required.

#### Partial Metadata Edit

BigObject names, labels, descriptions, deployed status, and field requiredness for non-index fields can be edited via the Setup UI. BigObject field names and labels can also be edited with the Setup UI.

#### Long Text Area Support

Long text has been added as a valid datatype for BigObjects, allowing BigObjects to store even more kinds of data, like copies of entire standard objects. Long text fields for BigObjects follow the same limits as custom objects.

#### **Bulk API Query Support**

Standard synchronous SOQL can be used to query BigObjects via Bulk API. Synchronous SOQL query limitations still apply, and there are limits to the number of records that can be queried in a single bulk query call.

#### IN() Clause for SOQL

Synchronous SOQL supports the use of a single IN() clause to query BigObject data using multiple criteria. The IN() clause is only supported in synchronous SOQL.

#### Example:

```
SELECT id, CreatedDate, ContactId
FROM AccountHistory_b
WHERE id IN("0001", "0042", "0128", "0404")
```

## Enhancements to Async SOQL (Pilot)

Async SOQL supports granular permissions and field substitutions for TargetValueMap.

#### **Granular Permissions**

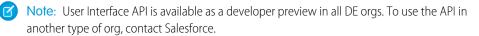
Async SOQL no longer requires the "Modify All Data" permission when running queries. To run queries, "Read" can be set on the source objects and "Create/Update" can be set on the target objects on a per-object basis. The appropriate field permissions are still required.

#### Field Substitution in TargetValueMap

Any field or alias can be used as the TargetValueMap value in the SELECT clause of a query. TargetValueMap can be used to include descriptive text or to concatenate multiple fields as the target external ID for upsert operations.

# User Interface API (Developer Preview)

User Interface API enables you to create native mobile apps and custom web apps with your own branding and look and feel. A single REST request returns enough metadata, layout information, and data to display, edit, or create a record.



EDITIONS

Available in: **Developer** Edition

#### IN THIS SECTION:

#### Lightning API Name Changed to User Interface API

The API name has changed from Lightning API to User Interface API. The new name tells you what to build with the API—UI for custom Salesforce apps. The User Interface API responses are designed to give you everything you need to display Salesforce records.

#### User Interface API Supported Objects

Use User Interface API to get layout information, metadata, and data about custom objects and most objects that are available in Lightning Experience.

#### Object Info Response Body Includes Child Relationships

The Object Info response body, which contains an object's metadata, has a new childRelationships property, which is a collection of the object's child relationships. Relationships are connections between records. Use relationships to display data about related object records on a record's detail page.

Discover Whether a Field Is Required in a Layout

In the Salesforce user interface, an admin with "Customize Application" permission can mark a field required in a layout. When you use User Interface API to create or update a layout, you need to know whether a field is required. The Record Layout Item response body has a new required property that indicates whether a field is required in a layout for create and update.

Record Exception Error Includes Information About Compound Fields and Duplicate Records

When something goes wrong with a record update or create operation, a Record Exception Error response body may be returned. This response body now includes information about errors that occur due to a constituent field of a compound field, and errors that occur due to duplicate records.

## Lightning API Name Changed to User Interface API

The API name has changed from Lightning API to User Interface API. The new name tells you what to build with the API—UI for custom Salesforce apps. The User Interface API responses are designed to give you everything you need to display Salesforce records.

The User Interface API base URL has changed from /lapi to /ui-api.

https://{your\_instance}.salesforce.com/services/data/v{api\_version}/ui-api

To get metadata and data to display a record, your code makes a simple HTTP request to a resource.

GET /ui-api/record-ui/001R0000003GeJ1IAK

Behind the scenes, Salesforce does the heavy lifting.

- Checks field-level security settings, sharing settings, and perms.
- Makes SOQL queries to get record data.
- Gets object metadata and theme information.
- Gets layout information.

You are one happy developer, because Salesforce transforms the results into an easy-to-consume JSON response with all the information you need to display a record.



Tip: The User Interface API Developer Guide contains a step-by-step Quick Start to get you up and running.

## User Interface API Supported Objects

Use User Interface API to get layout information, metadata, and data about custom objects and most objects that are available in Lightning Experience.

User Interface API supports these standard objects.

- Account
- AccountTeamMember
- Asset
- AssetRelationship
- AssignedResource
- AttachedContentNote
- Campaign
- CampaignMember
- Contact
- ContentWorkspace
- Contract
- ContractContactRole
- Entitlement
- EnvironmentHubMember
- LicensingRequest
- MaintenanceAsset
- MaintenancePlan
- MarketingAction
- MarketingResource
- OperatingHours
- ProcessInstanceHistory
- Quote
- ResourceAbsence
- ServiceAppointment
- ServiceResource
- ServiceResourceSkill
- ServiceTerritory
- ServiceTerritoryMember
- ServiceTerritoryLocation
- SkillRequirement
- SocialPost
- Tenant
- TimeSheet
- TimeSheetEntry
- TimeSlotShipment
- UsageEntitlement
- UsageEntitlementPeriod
- WorkOrder
- WorkOrderLineItem
- WorkType

# Object Info Response Body Includes Child Relationships

The Object Info response body, which contains an object's metadata, has a new childRelationships property, which is a collection of the object's child relationships. Relationships are connections between records. Use relationships to display data about related object records on a record's detail page.

The Child Relationship response body contains these properties:

Property Name	Туре	Description	Filter Group and Version	Available Version
childObjectApiName	String	The API name of the child object that contains the reference to the parent object.	Medium, 40.0	40.0
fieldName	String	The field on the child object that contains the reference to the parent object.	Medium, 40.0	40.0
		Instead of defining relationships through primary keys and foreign keys, the Salesforce database uses relationship fields. A relationship field is a custom field that stores the ID of the related parent record.		
junctionIdListNames	String[]	A collection of fields of the type JunctionIdList. A JunctionIdList is a string array of referenced ID values that represent the many-to-many relationship of an underlying junction entity. Each ID in a JunctionIdList is a	Medium, 40.0	40.0
		polymorphic key, which is an ID that can refer to more than one type of object.		
junctionReferenceTo	String[]	A collection of object names that the polymorphic keys in the junctionIdListNames property can reference. You can query these object names.	Medium, 40.0	40.0
relationshipName	String	The name of the relationship. A name for the child relationship that is unique to the parent. The name is the plural form of the child object name. For example, Account has child relationships to Assets, Cases, and Contacts, among other objects. Account has a relationshipName for each	Medium, 40.0	40.0

Property Name	Туре	Description	Filter Group and Version	Available Version
		object: Assets, Cases, and Contacts.		

Requests to these resources return a nested Child Relationship:

- /ui-api/record-ui/{recordIds}
- /ui-api/object-info/{objectApiName}
- /ui-api/record-defaults/clone/{recordId}
- /ui-api/record-defaults/create/{objectApiName}

## Discover Whether a Field Is Required in a Layout

In the Salesforce user interface, an admin with "Customize Application" permission can mark a field required in a layout. When you use User Interface API to create or update a layout, you need to know whether a field is required. The Record Layout Item response body has a new required property that indicates whether a field is required in a layout for create and update.

Requests to these resources return a nested Record Layout Item:

- /ui-api/record-ui/{recordIds}
- /ui-api/object-info/{objectApiName}
- /ui-api/record-defaults/clone/{recordId}
- /ui-api/record-defaults/create/{objectApiName}

## Record Exception Error Includes Information About Compound Fields and Duplicate Records

When something goes wrong with a record update or create operation, a Record Exception Error response body may be returned. This response body now includes information about errors that occur due to a constituent field of a compound field, and errors that occur due to duplicate records.

Duplicate rules control whether and when you can save duplicate records in Salesforce. Duplicate rules tell Salesforce what action to take when you attempt to create a duplicate record. Each duplicate rule requires at least one matching rule to identify which existing records are possible duplicates.

#### Record Exception Errors response body

Property Name	Туре	Description	Filter Group and Version	Available Version
constituentField	l String	If the field is a constituent of a compound field, this property contains the API name of the constituent field, and the field property contains the API name of the compound field.	Small, 40.0	40.0
		If the field is not a constituent of a compound field, or if no field applies to the error, the value is null.		

### Salesforce Summer '17 Release Notes

Property Name	Туре	Description	Filter Group and Version	Available Version
dplicateRecordError	Duplicate Record Error	Information about possible duplicate records. When the error code is DUPLICATES_DETECTED, this property might contain a value.	Small, 40.0	40.0
field	String	A field API name. If no field applies to the error, the value is null.	Small, 39.0	39.0
fieldLabel	String	A field label. If no field applies to the error, the value is null.	Small, 39.0	39.0
message	String	An error message.	Small, 39.0	39.0
statusCode	String	An error status code.	Small, 39.0	39.0

### Duplicate Record Error response body

Property Name	Туре	Description	Filter Group and Version	Available Version
matchResults	Match Result[]	A collection of duplicate rule match results. Each duplicate rule requires at least one matching rule to identify which existing records are possible duplicates.	Small, 40.0	40.0

### Match Result response body

Property Name	Туре	Description	Filter Group and Version	Available Version
apiName	String	The API name of the object.	Small, 40.0	40.0
isAllowSave	Boolean	Indicates whether the rule allows a duplicate to be saved.	Big, 40.0	40.0
matchRecordIds	String[]	The IDs of the matching records.	Small, 40.0	40.0
matchRule	String	The developer name of the matching duplicate rule.	Big, 40.0	40.0

# Lightning Console JavaScript API (Pilot)

The Lightning Console JavaScript API provides JavaScript methods so that developers can programmatically control tabs, subtabs, and the utility bar in Lightning console apps. This feature is new in Lightning Experience.

Ø

**Note**: The Lightning Console JavaScript API is available as a developer preview. The Lightning Console JavaScript 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. 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.

We also provide the Lightning Console JavaScript 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. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for the Lightning Console JavaScript API in the IdeaExchange.

This API brings the benefits of the Console Integration Toolkit, which works only in Salesforce Classic, to Lightning Experience and integrates with Lightning components used in Lightning console apps and the utility bar.

### **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.

The Lightning Console JavaScript API has two libraries, the workspace API and the utility bar API. To use the libraries, include force:workspaceAPIAccess or force:utilitybarAPIAccess in your Lightning component, respectively. These components allow you to use API methods in the JavaScript controller of your component.

This Lightning component uses the workspace API to open a new tab.

```
<aura:component implements="flexipage:availableForAllPageTypes" access="global">
    <force:workspaceAPIAccess aura:id="workspace" />
    lightning:button label="Open Tab" onclick="{! c.openTab }" />
    </aura:component>
```

This is the component's controller.

```
({
   openTab : function(component) {
    var workspaceAPI = component.find("workspace");
    workspaceAPI.openTab({
        url: '#/sObject/001R0000003HgssIAC/view',
        focus: true,
    });
   },
})
```

When this component is added to a Lightning page used in a console app or utility bar, clicking the button will open a new tab with the specified relative URL.

This is what the component looks like as part of a case detail page in a Lightning console app.

-	Q Search Salesforce	🖂 🖬 ? 🌣 🐥 🚨
Console App Cases	✓ 💼 00001002 ✓ ×	
☐ Recently Viewed ▼		
6 items • Updated a few seconds ago	Sample Case 3: Cannot track our order.	+ Follow Edit Delete Change Owner
RECENTLY VIEWED	Priority Status Case Number	
00001002         Sample Case 3: Cannot track our order           On Hold         2/27/2017 1:00 P	Low On Hold 00001002	
00001000 Sample Case: Our Widgets have not been delivere Escalated 2/27/2017 1:00 P	Case Owner Contact Phone Brian Trimboli	Open Tab
00001001 Sample Case 2: The widgets we received are the wrong siz New 2/27/2017 1:00 P	Case Number Contact Email 00001002 info@salesforce.com	Post Log a Call More
00001003 Unclear instructions on produ New 3/16/2017 5:25 P	Contact Name Contact Stamos	Share an update Share
00001005         Problem with new widg           On Hold         4/6/2017 2:29 P	Account Name	Latest Posts Q. Search this fee
00001004 Widgets didn't make it to warehou: Escalated 4/6/2017 2:28 P	✓ Additional Information	
Escarateu 4/0/2017 2.20 P	Status Type On Hold	Collaborate with others No updates here yet.
	Case Origin Case Reason	
	Phone d d	
	Priority	
	Low	
	Subject	
Chatter Feed     O     History		

SEE ALSO:

Customize Console Apps with the Lightning Console JavaScript API (Pilot) Console Developer Guide (can be outdated or unavailable during release preview)

### **Open CTI API**

When using the saveLog method, to refresh records after you update or create them, call the refreshView method in the callback method. Previously, the saveLog method automatically refreshed records.

SEE ALSO:

Open CTI Developer Guide: saveLog for Lightning Experience
Open CTI Developer Guide: refreshView for Lightning Experience

### Other API Changes

Use the new Federated Search API to access external search connectors.

### **EDITIONS**

Available in: Lightning Experience

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

### IN THIS SECTION:

### Federated Search Developer Guide: Connect External Search Providers to Salesforce

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.

### Federated Search Developer Guide: Connect External Search Providers to Salesforce

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 Federated Search Developer Guide follows the OpenSearch specification with more Salesforce extensions. External search providers who conform to this API remain fully compliant to the OpenSearch specification and can be queried by any OpenSearch client at the same URL endpoint.

### EDITIONS

Available in:

**Professional, Enterprise, Unlimited**, and **Developer** Editions

# Custom Metadata Types: Relationship Field Enhancements, Long Text Areas

Build better apps with custom metadata types, and base your apps on types of metadata rather than just data. Check out the features that you've been waiting for, including metadata relationships to field definitions and long text areas in custom metadata types. These changes apply to both Lightning Experience and Salesforce Classic.

### EDITIONS

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

Professional Edition orgs can create, edit, and delete custom metadata records only from types in installed packages.

IN THIS SECTION:

### Add Validation Rules for Custom Metadata Type Fields

You probably already use validation rules, and now you can create them for custom metadata fields. Use validation rules within custom metadata type fields just as you do for non-custom metadata type fields. You can also create validation rules for relationship fields.

Custom Metadata Types Support Long Text Areas (Generally Available)

Configuration data often runs longer than the 255-character text field limit. So in the last release,

we piloted Long Text Area, a new field supported on custom metadata types. The pilot was a success, and the Long Text Area custom field type is now generally available. If you've been using workarounds to store longer strings, such as API keys, specialized markup, or SOQL queries, no more! Use Long Text Area fields instead.

### Still Using Custom Settings? We Have a Usage Button for You

To view the percentage of custom settings data that your org has used, just click **Get Usage**. That's it. Done.

### Add Validation Rules for Custom Metadata Type Fields

You probably already use validation rules, and now you can create them for custom metadata fields. Use validation rules within custom metadata type fields just as you do for non-custom metadata type fields. You can also create validation rules for relationship fields.

For example, let's say you create a custom metadata type named Employee Records. The type contains the relationship field Feedback\_\_\_c, which has an entity relationship. You can create a rule that traverses the relationship to check if the related object is a custom object or field.

```
EQUALS(RIGHT(Feedback_r.QualifiedApiName, 3), '__c')
```

The syntax is like any other validation rule, but instead of choosing a field, you select the entity relationship field that you created.

If you use relationship fields, you can use validation between two custom metadata types. You can also use them on the following targets:

Field	Entity Definition	Field Definition
Data Type	-	*
Developer Name	<ul><li>✓</li></ul>	*
Namespace Prefix	<ul><li>✓</li></ul>	*
Qualified API Name	<	*

### Custom Metadata Types Support Long Text Areas (Generally Available)

Configuration data often runs longer than the 255-character text field limit. So in the last release, we piloted Long Text Area, a new field supported on custom metadata types. The pilot was a success, and the Long Text Area custom field type is now generally available. If you've been using workarounds to store longer strings, such as API keys, specialized markup, or SOQL queries, no more! Use Long Text Area fields instead.

### Still Using Custom Settings? We Have a Usage Button for You

To view the percentage of custom settings data that your org has used, just click **Get Usage**. That's it. Done.

Tip: If you still use custom settings, consider checking out custom metadata types. Custom metadata types save you time and effort. Check out Custom Metadata Types in the Help and Training portal.

# ISVforce: Channel Order App in Lightning Experience, New Channel Order Apex API, Push Upgrade Enhancements, and More

ISVforce tools make it easy to build, distribute, and manage AppExchange products. Get more control over your orders with version 2.0 of the Channel Order App, newly redesigned for Lightning Experience. If you want to automate order submission, the new Channel Order Apex API provides classes for sending, editing, recalling, and cloning orders. You can now exclude subscribers from push upgrades, and you get better performance when pushing upgrades to large numbers of subscribers via the API. Apps can also access metadata using Apex.

### **EDITIONS**

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

### IN THIS SECTION:

### Send and Manage Orders in Lightning Experience

The Channel Order App (COA) is now available in Lightning Experience. We streamlined order submission so it's faster to send orders to Salesforce for billing, activation, and provisioning. You also have more flexibility managing your existing orders with new edit, recall, and clone actions. This change applies to both Lightning Experience and Salesforce Classic.

### Automate Order Processing with the Channel Order Apex API

The Channel Order Apex API automates order submission, making it easy to process orders in bulk. You can also use the API to manage orders you've submitted, with classes for editing, recalling, and cloning orders. The Channel Order Apex API replaces the legacy Partner Order Submit API.

### Exclude Subscriber Orgs from a Push Upgrade

If you push upgrades to your Salesforce managed package, you can now specify a list of subscriber orgs to exclude from any push upgrades. If you also publish the upgrade for subscribers, the excluded orgs can continue to pull the upgrade. This change applies to both Lightning Experience and Salesforce Classic.

### Improved Performance for Managed Package Push Upgrades

If you're an ISV who has thousands of managed package subscribers, you can now get better performance during push upgrades. To take advantage of the improvements, use the queryMore () call in the SOAP API and the Bulk API. This change applies to both Lightning Experience and Salesforce Classic.

### Metadata Access in Apex

If you're an ISV creating apps that use custom metadata components, you can now access metadata using Apex. This change applies to both Lightning Experience and Salesforce Classic.

### Use the Developer Hub to Manage Your Scratch Orgs (Beta)

The Developer Hub (Dev Hub) lets you create and manage scratch orgs. A scratch org is a dedicated, configurable, and short-term Salesforce environment that you can quickly spin up when starting a new Salesforce DX project.

### Send and Manage Orders in Lightning Experience

The Channel Order App (COA) is now available in Lightning Experience. We streamlined order submission so it's faster to send orders to Salesforce for billing, activation, and provisioning. You also have more flexibility managing your existing orders with new edit, recall, and clone actions. This change applies to both Lightning Experience and Salesforce Classic.

Note: This feature is available to eligible Salesforce partners. For more information on the Partner Program, including eligibility requirements, visit www.salesforce.com/partners.

The redesigned order submission wizard (1) makes order entry more efficient. We removed clutter from the interface and show only the details that relate to the type of order you're creating. We also improved how the app validates orders before they're submitted, so the orders you send to Salesforce are more accurate.

EDITIONS

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

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	Ne	w Reducti	on Order		
Customer Type Existing customer	New customer				
Order Type Add On   Reduc	tion CRenewal CUpgrade (	Cancellation	ı		
Customer Informatio	n		Contract Type		
*Company Name	Ursa Major Solar, Inc.	Q	<ul> <li>OEM contract</li> </ul>	CloudPractice_OEM_AUD	
* Org ID	Search org IDs	Q			
Related Opportunity	Search opportunities	Q			
Order Terms & Cond  Standard terms					
Januard terms					

Edit, recall, and clone actions (2) provide more flexibility for managing existing orders. You can edit product, license, and pricing details up to 2 hours after submission. Recalling an order permanently removes it from Salesforce's processing queue. Previously, you had to contact us to edit or recall the orders you submitted. If you want to create an order that's similar to one you submitted previously, you can save time by cloning the existing order.

Ä	service orders Recently View	ed 🔻					New Import
1 iten	n • Last updated a few sec	onds ago				\$ <b>*</b>	<b>■ ▼ ୯ ∕ € 2</b>
	SERVICE ORDER	CUSTOMER	ORG ID	ORDER VALUE	ORDER TYPE	ORDER STATUS	CUSTOM ACTIO
1	SO-0000000	Ursa Major Solar	00DR0000008	\$5,031.54	Initial	Received	Clone   Recall
							Edit
							Delete

### Upgrades to the Latest Version

If you use COA v1.39 or earlier, Salesforce pushes the latest version (v2.0) of the app to your org. When you upgrade, these considerations apply.

### New Permission Set for Access to the COA

In v1.39 and earlier, a custom profile controls access to the COA. In v2.0, you control access with the COA User permission set. When you upgrade, assign the permission set to everyone who needs access to the COA, including users who previously accessed the app using the custom profile.

### **New Customers Tab**

In v2.0, the new Customers tab shows you customer information, including related products and orders. When you upgrade, you must create this tab and configure it to display in the app.

### **Replaced Orders Tab**

In v2.0, the Service Orders tab replaces the Orders tab. When you upgrade, remove the Orders tab from the app and configure the Service Orders tab.

### **Updated Page Layouts**

In v2.0, the customer, service order, partner contract terms, and partner product catalog objects have updated page layouts. When you upgrade, assign the updated layouts to each object.

For more details about upgrading, see the ISV force Guide.

```
SEE ALSO:
```

Lightning Experience: A Modern and Intelligent User Experience ISVforce Guide

### Automate Order Processing with the Channel Order Apex API

The Channel Order Apex API automates order submission, making it easy to process orders in bulk. You can also use the API to manage orders you've submitted, with classes for editing, recalling, and cloning orders. The Channel Order Apex API replaces the legacy Partner Order Submit API.



**Note:** This feature is available to eligible Salesforce partners. For more information on the Partner Program, including eligibility requirements, visit www.salesforce.com/partners.

To submit and manage orders with the Channel Order Apex API, use the classes provided in the CHANNEL\_ORDERS namespace. The classes require Channel Order App v2.0 or later to be installed in your org.

### CHANNEL\_ORDERS.COA\_ServiceOrderSubmit Class

Send orders to Salesforce for billing, activation, and provisioning.

### CHANNEL\_ORDERS.COA\_ServiceOrderEdit Class

Edit orders you've sent to Salesforce but haven't yet been processed.

### CHANNEL\_ORDERS.COA\_ServiceOrderRecall Class

Recall orders you've sent to Salesforce but haven't yet been processed. Recalling an order permanently removes it from the processing queue.

### CHANNEL\_ORDERS.COA\_ServiceOrderClone Class

Clone orders you've sent to Salesforce.

For more details and usage guidelines, see the ISV force Guide.

### Partner Order Submit API Support

Salesforce continues to support orders sent by the Partner Order Submit API. However, we aren't updating the API or adding new functionality.

SEE ALSO: ISVforce Guide

### Exclude Subscriber Orgs from a Push Upgrade

If you push upgrades to your Salesforce managed package, you can now specify a list of subscriber orgs to exclude from any push upgrades. If you also publish the upgrade for subscribers, the excluded orgs can continue to pull the upgrade. This change applies to both Lightning Experience and Salesforce Classic.

On the Package Details page, enter the org IDs, separated by a comma, in the **Push Upgrade Exclusion List**. The next time you push an upgrade for your managed package, the specified org IDs are excluded.

### Improved Performance for Managed Package Push Upgrades

If you're an ISV who has thousands of managed package subscribers, you can now get better performance during push upgrades. To take advantage of the improvements, use the queryMore() call in the SOAP API and the Bulk API. This change applies to both Lightning Experience and Salesforce Classic.

The SOAP API includes the PackagePushRequest object. You can use the queryMore () call with PackagePushRequest to get a list of more than 2,000 subscribers. Then push the upgrade using the Bulk API.

### Metadata Access in Apex

If you're an ISV creating apps that use custom metadata components, you can now access metadata using Apex. This change applies to both Lightning Experience and Salesforce Classic.

During or after an install (or upgrade), your app can create or update metadata to let users configure your app. Use the new Metadata namespace for accessing metadata in Apex code. The Metadata namespace contains classes that represent metadata types and components as well as classes that let you retrieve or deploy metadata components in the subscriber org. For more information, see Retrieve and Deploy Metadata in Apex.

# Use the Developer Hub to Manage Your Scratch Orgs (Beta)

The Developer Hub (Dev Hub) lets you create and manage scratch orgs. A scratch org is a dedicated, configurable, and short-term Salesforce environment that you can quickly spin up when starting a new Salesforce DX project.

SEE ALSO:

Salesforce DX Developer Guide (Beta) ISVforce Guide

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Available in: **Developer** Edition

### **EDITIONS**

Available in: **Developer** Edition

### **EDITIONS**

Available in: **Developer** Edition

EDITIONS

Available in: **Enterprise** and **Unlimited** Editions

# Marketing: Tools to Engage Your Customers Like Never Before

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

### SEE ALSO:

Marketing Cloud Overview Marketing Cloud: June 2017 Release Notes Marketing Cloud: March 2017 Release Notes Marketing Cloud: January 2017 Release Notes Marketing Cloud: Earlier Release Notes Salesforce Marketing Cloud Facebook Page

# **Critical Updates**

This release includes new critical updates for Lightning components, formulas, Apex controllers, and email notifications. We delayed the critical update that allows you to enable CSRF protection on GET requests to Visualforce pages. And we canceled the critical update that disables access to Lightning Experience and Salesforce1 from IE11.

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.

# New Critical Updates

These critical updates are brand new in Summer '17.

### **Stricter CSP Restrictions**

Stricter Content Security Policy (CSP) restrictions have been decoupled from LockerService and aren't enforced in production orgs in Summer '17. 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.

### Block Execution of JavaScript in the HYPERLINK Function

Previously, you could use JavaScript to prepare the URL argument in a HYPERLINK function. However, this approach introduces a security vulnerability because JavaScript can include cross-site scripting and make the URL execute on behalf of users. This critical update blocks the execution of JavaScript used to specify a URL in the HYPERLINK function.

### Disable Access to Non-global Apex Controller Methods in Managed Package

This critical update corrects access controls on Apex controller methods in managed packages. When this update is enabled, only methods marked with the global access modifier are accessible by Lightning components from outside the package namespace. These access controls prevent you from using unsupported API methods that the package author didn't intend for global access.

### Stop Automated Field Updates from Suppressing Email Notifications

For various operations, such as assigning a task to someone, you can choose to notify the affected user by email. This update stops processes, workflow rules, and Apex triggers from suppressing these email notifications.

### POST Method for runTestsSynchronous Requires View Setup Permission

View Setup user permission now required to run tests synchronously using the post method for /runTestsSynchronous/.

# **Pre-Existing Critical Updates**

This critical update was announced in a previous release and is still available.

### Make Encrypted Data Visible to Authorized Users

Encrypted data is visible onscreen—that is, it's not hidden by masking characters—when you activate this critical update. To hide data from unauthorized users, you must use field-level and object-level security, regardless of whether the data is encrypted. The View Encrypted Data permission is not available.

# **Enforced Critical Updates**

### LockerService

LockerService, which has been a critical update since Summer '16, is enforced for all orgs in Summer '17. However, to reduce the impact on existing components, we adjusted the activation process.

#### Add Clickjack Protection for Legacy Browsers to Visualforce Pages Without Page Header

Clickjack protection for legacy browsers was a critical update in Winter '17 and was enforced for all orgs on February 10, 2017. This critical update extends legacy browser-compatible clickjack protection for Visualforce pages that set showHeader="false" and are configured to use API versions 26.0 or earlier.

### Postponed Critical Updates

### Allow CSRF Protection on GET Requests to Visualforce Pages

This critical update, released in Spring '17, was scheduled for auto-activation in Summer '17, but has been postponed to October 15, 2017. This critical update gives you the option of ensuring that Visualforce pages receive a CSRF token with a GET request.

### **Canceled Critical Updates**

#### "Disable Access to Lightning Experience and the Salesforce1 Mobile Browser App from IE11" Critical Update Canceled

The timetable for the end of support date for Internet Explorer version 11 (IE11) for Lightning Experience has changed significantly. As a result, this critical update has been canceled.

# Help and Training

Filter help search results by experience. Check out our Trailhead additions and instructional videos. We also updated our Trust and Compliance documentation.

#### IN THIS SECTION:

### Filter Help Search Results by Experience

Find the help that you need for the experience that you want. When searching in the Help and Training portal, use the new Experience filter to winnow search results to topics just for Lightning Experience or just for Salesforce Classic.

### Walkthroughs

A walkthrough is a series of interactive steps that guide you through a task or feature. Before you start a walkthrough, make sure that you have the correct user permissions and license associated with the feature so you can access the proper pages in Salesforce.

### Videos

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

### Trailhead

Looking for a good way to get started with Salesforce or dive into a new feature? Meet Trailhead, a fun, guided, and interactive tool to learn Salesforce. You can follow guided learning paths for admins or developers, or choose your own adventure with self-paced modules.

### Trust and Compliance Documentation

We made seasonal updates to the Salesforce Trust and Compliance Documents.

# Filter Help Search Results by Experience

Find the help that you need for the experience that you want. When searching in the Help and Training portal, use the new Experience filter to winnow search results to topics just for Lightning Experience or just for Salesforce Classic.

	Q merge duplicate leads	× 🚯	? 💄 Log In
A Home / 🔍 Search			
CONTENT TYPE	TOP RESULTS ANSWERS APPEXCHANGE ARTICLES	DEVELOPERS TR	RECOMMENDED LEARNING
Documentation 35	Experience: Lightning Experience ×	× Clear	Administration Essentials for New Adm ins (ADM-201)
EXPERIENCE X 💬	Language: English ×		Sales Cloud Training for Sales Reps (SLS-101)
Lightning Experience 35	Results 1-10 in 35 in 0.16 second	EVANCE DATE ~	ASK THE COMMUNITY!
TOPICS	Documentation Considerations for Merging Duplic: Keep these considerations in mind when you merge duplic records.		Let our amazing customer community help
Setup and Security 33	Data Merge, Leads and Campaigns • Spring '17 ————————————————————————————————————		Post a Question
Sales Cloud 26	Documentation Let Users View and Merge Existing Records in Lightning Experience	Duplicate	NEED MORE HELP?
General Salesforce Fu 25	Users with permission can merge duplicates of the same	kind (for	Visit the solution finder today
O Development 24	example, <b>duplicate leads</b> ) using Lightning Experience or Classic.	Salesforce	Contact Support

# Walkthroughs

A walkthrough is a series of interactive steps that guide you through a task or feature. Before you start a walkthrough, make sure that you have the correct user permissions and license associated with the feature so you can access the proper pages in Salesforce.

Important: A walkthrough guides you through your own Salesforce account, so you're actually changing the data in your org as you go through the steps. If you're concerned about changing the data, follow the walkthrough in a sandbox account or other test environment.

Links from the release notes to walkthroughs only work in the latest release and don't work in preview orgs.

Feature	Walkthroughs	You'll need	Available in these languages
Lightning console apps	Walk Through It: Explore Lightning Console Apps	To be in a Lightning console app	English
Favorites	Walk Through It: Create Shortcuts to the Things You Use Most with Favorites	Access to Lightning Experience	English
Navigation Bar	Walk Through It: Meet the Lightning Experience Navigation Bar	Access to Lightning Experience	English
App Management	Walk Through It: Manage Your Apps in Lightning Experience	Access to Lightning Experience "View Setup and Configuration"	English
Setup	Lightning Experience: Setup Home	Access to Lightning Experience "View Setup" permission	English

# Videos

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

- The new Solutroduction to Explorer video shows you how to get started with the updated explorer.
- The new Create a Custom Baseline for Security Health Check video introduces the Security Health Check Custom Baseline, a tool for administrators. Learn how to create a custom baseline you can use to evaluate and remediate security risks for your entire org.
- The OUse Tasks to Boost Your Sales Productivity video has been updated to introduce the redesigned activity timeline.

# Trailhead

Looking for a good way to get started with Salesforce or dive into a new feature? Meet Trailhead, a fun, guided, and interactive tool to learn Salesforce. You can follow guided learning paths for admins or developers, or choose your own adventure with self-paced modules.

Check out Trailhead at https://trailhead.salesforce.com and find the right trail for you. Here are the latest modules and trails.

### New Modules

### Summer '17 Release Notes Highlights

Explore highlights from the Summer '17 Release Notes.

### Salesforce Partner Community

Learn how to partner with Salesforce and connect with the Salesforce Partner Community.

#### **Ethics and Integrity for Salesforce Partners**

Learn about legal and ethical expectations for Salesforce partners.

### **ISV App Trial Management**

Convert your prospects to customers with a free trial of your ISV app.

#### **Omni-Channel Basics**

Unify your channels and manage your agent capacity with Omni-Channel and routing rules.

#### **Platform Events Basics**

Deliver custom notifications within the Salesforce platform and in external apps.

### **New Projects**

#### **Build an Instant Notification App**

Design a system to configure and send custom notifications based on platform events.

### **New Trails**

#### **Build Your Practice as a Consulting Partner**

Learn how your firm can make the most of a partnership with Salesforce.

### **Trust and Compliance Documentation**

We made seasonal updates to the Salesforce Trust and Compliance Documents.

### Notices and Licenses

The following changes have been made in the **Notices and Licenses Documentation**:

#### Salesforce

- Services Covered: Updated information
- Account Intelligence Features: Updated information
- Lightning for Gmail or Outlook: Updated information
- Renamed Lightning Voice to Lightning Dialer: Updated information
- Distributed Software: Updated links to Order Form Supplements for distributed software

#### **Analytics Cloud**

• No updates

#### **Commerce Cloud**

- Services Covered: Updated information
- Third Party Features: Updated information

#### Data.com

• Services Covered: Updated information

#### Desk.com

• Added External-Facing Services

### Einstein Data Discovery (formerly known as BeyondCore)

• Removed External-Facing Services Policy

### **Einstein Vision**

New documentation

### ExactTarget

- Removed references to BuddyMedia
- **Purpose of this Documentation**: Updated information
- **Restricted Uses of Information**: Updated information
- Third Party Notices: Updated information

### Heroku

• No updates

### IoT Cloud

• No updates

### Krux

- Services Covered: Updated information
- Added Restricted Uses of Information and Compliance with Self-Regulatory Programs
- Changed Third Party Applications to Third-Party Platforms and Third Party Notices
- Use of Third Party Data: Updated information

### LiveMessage

• **Restricted Uses of Information**: Updated information

### Marketing Cloud (Radian6, Social Studio, Social.com)

• Removed references to BuddyMedia.

### Pardot

• No updates

### **Predictive Intelligence**

- Services Covered: Updated information
- Purposes of this Documentation: Updated information

### Quip

• No updates

### SalesforceIQ

No updates

### **Sales Cloud Einstein**

- Services Covered: Updated information
- Account Intelligence Features: Updated information

### Work.com

• Work.com Notice and License Information documentation combined with Salesforce Notice and License Information documentation

### Security, Privacy, and Architecture

The following changes have been made in the Security, Privacy, and Architecture Documentation:

### Salesforce

- Services Covered: Clarified which services are covered by the documentation and which related services are covered by separate documentation.
- Architecture and Data Segregation: Revised the referenced Infrastructure & Sub-processors documentation to clarify the list of services covered, provide additional details on data center infrastructure, reflect the addition of a new data center in Japan, removed HCL Technologies Limited and HCL America, Inc. as sub-processors, add a description of a new Einstein Automated Contacts feature and add an explanation of SitesRuntime pods.
- Audits and Certifications: Added reference to Swiss-U.S. Privacy Shield certification, revised descriptions of ISO27001/27018 and TRUSTe certifications and added reference to TLS 1.1 requirement for PCI DSS.
- Incident Management: Added description of system status notification procedures.
- Physical Security: Added additional details on redundant systems, environmental systems and power supply systems.
- Disaster Recovery: Added additional details on data center resiliency, disaster recovery exercises and recovery objectives.
- Data Encryption: Added additional details on the type of encryption.
- Deletion of Customer Data: Clarified that deletion process is triggered by termination of all licenses associated with an environment.

### **Buddy Media**

• Removed the Buddy Media Security, Privacy, and Architecture Documentation. The Buddy Media service has been retired.

### **Commerce Cloud**

- Audits and Certifications: Added reference to Privacy Shield certification and revised description of TRUSTe certification.
- Sensitive Data: Added government-issued identification numbers to the categories of sensitive personal data that may not be submitted to the Commerce Cloud services.
- Tracking and Analytics: Clarified the circumstances under which Salesforce may use aggregated and anonymized Customer Data.

### Data.com

- Audits and Certifications: Removed references to ISO27001/27018 certification and Service Organization Control reports.
- Deletion of Customer Data: Clarified that deletion process is triggered by termination of the Data.com services.

### Desk.com

• Replaced the stand-alone Desk.com Security, Privacy and Architecture document with a combined document that also includes Einstein Data Discovery, LiveMessage, Quip, Salesforce Inbox and SalesforceIQ CRM. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Intrusion Detection," "User Authentication," and "Deletion of Customer Data."

### **Einstein Data Discovery**

• Replaced the stand-alone Einstein Data Discovery Security, Privacy and Architecture document with a combined document that also includes Desk.com, LiveMessage, Quip, Salesforce Inbox and SalesforceIQ CRM. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Intrusion Detection," "User Authentication," and "Deletion of Customer Data."

### **Einstein Vision**

• Created new Security, Privacy and Architecture document for product branded as Einstein Vision.

### ExactTarget

Replaced the stand-alone ExactTarget Security, Privacy and Architecture document with a Marketing Cloud document that also
includes Predictive Intelligence, Social Studio, and Advertising Studio (including Social.com). For uniformity and to enable consolidation,
titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include:
"Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Reliability and Backup," "Disaster Recovery,"
"Deletion of Customer Data," and "Tracking and Analytics."

### Heroku

- Audits and Certifications: Added reference to Swiss-U.S. Privacy Shield certification and added description of TRUSTe certification.
- Security Procedures, Policies and Logging: Renamed section Security Controls.
- Disaster Recovery: Added target recovery objectives for certain of Heroku's services.

### IoT Cloud

- Services Covered: Added reference to privacy-related certifications.
- Audits and Certifications: Added description of TRUSTe certification.
- Deletion of Customer Data: Clarified process to request deletion of data after termination.

### Krux

- Services Covered: Updated to reflect description of the documentation and rebranding to "Salesforce DMP."
- Architecture and Data Segregation: Moved information regarding infrastructure to Infrastructure and Sub-processors documentation and added link.
- Audits and Certifications: Clarified that SOC 2 report is SOC 2, Type II. Added reference and link to Infrastructure and Sub-processors documentation.
- Incident Management: Clarified incident management system in place by Salesforce instead of Krux.
- Physical Security: Added links to AWS Security Web site and AWS security processes.
- Return of Customer Data: Updated support contact email address.
- Deletion of Customer Data: Changed "Lookback Window" to "Term" and clarified process following the Term.
- Personal Data: Clarified that onboarding is done through the Krux Secure Onboarding API or other agreed upon onboarding method.
- Tracking and Analytics: Clarified that users means customers' licensed users.

### LiveMessage

• Replaced the stand-alone Live Message Security, Privacy and Architecture document with a combined document that also includes Desk.com, Einstein Data Discovery, Quip, Salesforce Inbox and SalesforceIQ CRM. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Intrusion Detection," "User Authentication," and "Deletion of Customer Data."

### Marketing Cloud

• This is a new Security, Privacy and Architecture document consolidating information about the services branded ExactTarget, Predictive Intelligence, Social Studio, and Advertising Studio (including Social.com).

### Pardot

- Services Covered: Added reference to privacy-related certifications.
- Audits and Certifications: Added reference to Swiss-U.S. Privacy Shield certification and added description of TRUSTe certification.

### **Predictive Intelligence**

• Replaced the stand-alone Predictive Intelligence Security, Privacy and Architecture document with a Marketing Cloud document that also includes ExactTarget, Social Studio, and Advertising Studio (including Social.com). For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include:

"Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Reliability and Backup," "Disaster Recovery," "Deletion of Customer Data," and "Tracking and Analytics."

### Radian6

• Audits and Certifications: Added reference to Privacy Shield certification, revised description of TRUSTe certification and removed references to ISO27001/27018 certification and Service Organization Control reports.

### SalesforcelQ

 Replaced the stand-alone SalesforcelQ Security, Privacy and Architecture document with a combined document that also includes Desk.com, Einstein Data Discovery, LiveMessage and Quip. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Intrusion Detection," "User Authentication," and "Deletion of Customer Data."

### **Sales Cloud Einstein**

- Services Covered: Added Einstein Automated Contacts as a feature to the Service and updated names for two other features of the Service.
- Audits and Certifications: Revised section so that it only describes audits and certifications pertaining to the Service, and does not describe other security controls.

### Social.com

• Replaced the stand-alone Social.com Security, Privacy and Architecture document with a Marketing Cloud document that also includes ExactTarget, Predictive Intelligence, and Social Studio. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Reliability and Backup," "Disaster Recovery," "Deletion of Customer Data," and "Tracking and Analytics."

### Social Studio

Replaced the stand-alone Social Studio Security, Privacy and Architecture document with a Marketing Cloud document that also
includes ExactTarget, Predictive Intelligence, and Advertising Studio (including Social.com). For uniformity and to enable consolidation,
titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include:
"Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Reliability and Backup," "Disaster Recovery,"
"Deletion of Customer Data," and "Tracking and Analytics."

### Quip

 Replaced the stand-alone Quip Security, Privacy and Architecture document with a combined document that also includes Desk.com, Einstein Data Discovery, LiveMessage, Salesforce Inbox and SalesforceIQ CRM. For uniformity and to enable consolidation, titles as well as descriptions in certain sections may vary from the original language. Key sections where such changes exist include: "Audits and Certifications," "Security Controls," "Security Policies and Procedures," "Intrusion Detection," "User Authentication," and "Deletion of Customer Data."

# Other Salesforce Products

# desk.com

Desk.com is an all-in-one customer support app for small businesses and growing teams.

For information on new features, go to the Desk.com Product Updates Blog.

# Heroku

Heroku is a cloud-based application platform for building and deploying web apps.

For information on new features, go to the Heroku Changelog.

# 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.