

# Salesforce Spring '19 Release Notes

Salesforce, Spring '19

Blaze new trails to connected customer experiences





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# SALESFORCE SPRING '19 RELEASE NOTES

The Spring '19 release delivers more personalized and integrated customer journeys while enabling your team to work smarter with new levels of data insight across your org.

#### IN THIS SECTION:

#### How to Use the Release Notes

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

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

Some features in Spring '19 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 changed our support for Apple® Safari® to version 12.x+. Supported browsers for Salesforce vary depending on whether you use Salesforce Classic or Lightning Experience.

#### Salesforce Overall: More Tools to Adopt Lightning Experience and Boost Productivity

Introducing new tools to guide you through a successful transition to Lightning Experience. You can also make a favorite list view your default list. Simplify appointment scheduling with the new Lightning Scheduler. Gain more insight from surveys with translations, new question types, and invitations. Master multiple windows with pop-out utilities and customized subtabs in console apps. Print a record page, appreciate coworkers with thanks badges, enjoy more data storage, and (of course) more!

#### Lightning Experience: A Modern and Intelligent User Experience

Lightning Experience is a completely reimagined interface. Even better, it's built on the Lightning Platform, so the experience can grow and evolve with your needs.

#### Salesforce Essentials: Combined Sales and Service, In-App Help, Updates to User Management and Setup Flows

Sales Essentials and Service Essentials are combined under one product—Salesforce Essentials. Use in-app help to find resources without leaving Salesforce. Add and reduce user licenses to make sure that you have the right number for your team, and manage your users in the redesigned Users page in Setup. Use the new Voice Support setup flow to integrate a third-party voice support system with Salesforce, and learn more about leads and opportunities in the Sales Stages setup flow.

#### Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

Einstein brings you reports on insights and contact suggestions, while elevating what you get from reports with Einstein Data Insights. Improved syncing, sharing, and metrics with Einstein Activity Capture, as well as Case Classification and smarter bots make agents and admins more efficient. Prediction Builder gives you the impact of each predictor in your model and notifies you when it's ready.

#### Sales: High Velocity Sales Tools, Better Google Integration, Flexible Pricing from CPQ, and Einstein in Pardot

Give your inside sales reps the tools they need to succeed with High Velocity Sales. Work faster, the way you want to, by integrating Salesforce with Gmail and Google Calendar. Get more flexibility on your pricing practices with Usage-Based Pricing in Salesforce CPQ. And align your sales and marketing team on prospect targeting with Einstein Behavior Scoring and Campaign Insights in Pardot.

#### Service: Einstein Case Classification, Lightning Knowledge Migration Tool, and Preventive Maintenance Improvements

Help your agents work faster and smarter with Einstein Case Classification, which recommends field values on new cases based on past data. Check out enhancements to Einstein Bots, including support for your SMS text messaging channel. Transition your Salesforce Classic knowledge base with the help of the Lightning Knowledge Migration Tool. Simplify preventive maintenance tracking for field service by grouping all of a maintenance plan's assets into one work order, with each asset linked to a work order line item. And enjoy new Lightning Experience support for case management tools.

#### Analytics: Al-Driven Insights in Reports, Joined Reports in Lightning Experience, Action Menus in Communities

Learn new things about your business as Einstein Data Insights intelligently calls your attention to interesting patterns in reports; no need to group, filter, or summarize. Gain insights from up to five report types with Lightning joined reports, then share them on a 12-column dashboard. In Communities, update records directly from embedded Analytics dashboards with action menus. Benefit from these and many more features and enhancements across Reports and Dashboards and Einstein Analytics.

#### Communities: Partner Account Relationships, Feed Translations, Einstein Next Best Action, and Much More

Spring '19 is jam-packed with features and improvements for your communities. Easily create sharing relationships between partner types, such as distributors and resellers. Integrate with the Google Cloud Translation API to have community members instantaneously translate questions, posts, comments, answers, and replies into 50 languages. Use Einstein Next Best Action to deliver the right offer at the right time.

#### Chatter: Sticky Sort, Hyperlinks in Posts, Better Redirect URLs, Reports on Topics and Posts

Users' feed sort options remain even when they navigate away. Include hyperlinks in posts and comments. Redirect URLs in feeds are shorter and include the feed item ID. Run a report on posts and comments with a particular topic, and see the post and comment content and other details

#### Files: Asset Files Updates in Managed Packages and Folders in Org Asset Libraries

Make updates to asset files in managed packages and organize your org asset library with folders.

#### Mobile: Do More on the Go

Check out the latest features for getting more done no matter where you are.

#### Financial Services Cloud: Lightning Scheduler and Financial Services Analytics

Lightning Scheduler gives you the tools you need to simplify appointment scheduling for your customers and prospects. Financial Services Analytics, a suite of applications with datasets, data flows, and dashboards, helps you convert data to insights faster.

#### Health Cloud: Social Determinants of Care, Referral Management, and More

Help patients holistically, streamline patient referrals, and provide industry-standard codes for preauthorization requests. Build patient relationships and personalized journeys, offer more flexible assessments, and create a custom smart phone app.

#### Customization: Einstein Next Best Action, Lightning Flow Builder, and Enhancements to Salesforce Connect

Make your org smarter with Einstein Next Best Action, now generally available. Build simpler and more streamlined flows with the new Flow Builder. Build and interact with connections to external data systems more easily with new tools, improvements to existing tools, and increased limits.

#### Security and Identity: New Login Options, Device Management, and Cache-Only Keys for All

Users can log in with email addresses, phone numbers, and more. Use Device Management to track and revoke device access. And the Cache-Only Key Service is now generally available.

#### Deployment: Change Set Operations with Fewer Clicks

Take action on a change set without loading its detail page.

# Salesforce IoT: IoT Insights available in Field Service Lightning for Android, IoT in Service Cloud, and an Improved Context Setup Process

Mobile workers can now see Salesforce IoT data in Field Service Lightning for Android, using IoT Insights. Salesforce IoT is now offered as part of Service Cloud on Unlimited Edition. We've also improved the context setup flow, adding a wizard to simplify the process and other features to make navigating the process more efficient.

#### Development: Creating Your Own Salesforce App

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

#### Marketing: Google Analytics 360 Audience Activation and Social Studio Instagram Engagement and Stories

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. Plan and optimize unique customer journeys based on your business objectives. Deliver personalized content across every channel and device at precisely the right time. 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 Experience users, utilities, communities and portals, processes and flows, enterprise territory management, the Guided Action List component, and your org schema. And we postponed critical updates for instance names in URLs and email notifications from automated field updates.

#### Help and Training

We introduced a CLI Plug-In developer guide, added content about features in the Outlook and Gmail integrations, and added omitted documentation about supported languages. We added Trailhead modules, trails, and projects, and we created and updated instructional videos.

Other Salesforce Products and Services

### How to Use the Release Notes

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

- 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 material from the previous release.

Some of our documentation has preview versions available several weeks before the release. To access a preview version 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 Lightning Experience and What's in Salesforce Classic

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

#### You Asked for It!

We delivered the features you asked for on IdeaExchange.

#### Get Ready for the Release

Reading the release notes is a great step in preparing for the release. These other resources are designed to help get you, your org, and your users ready for what's coming your way. We add resources throughout the release when they become available, so check back often.

#### Release Note 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 the enhancements that are available in your edition.

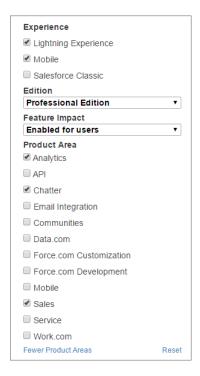
#### **Feature Impact**

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.



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 Lightning Experience and What's in Salesforce Classic

Everybody's excited about Lightning Experience and everything it offers. But we also understand that lots of orgs continue to use Salesforce Classic—either exclusively 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 added experience information to the applicable release notes at the highest level: for entire clouds or for individual features within clouds. Let's look at a couple of examples.

- A new Service Cloud feature is available in *both desktop experiences*, so the **Where** section of the release note says, "This change applies to both Lightning Experience and Salesforce Classic."
- A new Sales Cloud feature is available in Lightning Experience *only*, so the **Where** section of the release note says, "This change applies to Lightning Experience only."

If a key feature is also available in the Salesforce app, we mention that in the **Where** section of the release note. But you can also check the Mobile section for a complete list of what's new.

### You Asked for It!

We delivered the features you asked for on IdeaExchange.

IdeaExchange	Idea delivered
Salesforce Overall	
Configurable Default List View in Lightning Experience	Jump Right into Your Most Important List View with Pinned Lists
Thanks and Links in Lightning Experience	Use Thanks Badges in Lightning Experience (Pilot)
Lightning Experience	
Suppress "Help & Training" link	Add Custom Resources to the Refreshed Lightning Experience Help Menu
Customize Help & Training Link on Homepage in Lightning	Add Custom Resources to the Refreshed Lightning Experience Help Menu
Sales	
Territory Sharing for Custom Objects in Enterprise Territory Management	Share Individual Records by Territory
Lightning Email Templates not accessible in Salesforce Inbox (Mobile)	Write Emails Faster with Lightning Templates in Salesforce Inbox
Create Folders for Email Templates in Salesforce Engage	Find Email Templates for Engage Campaigns Faster
Connect Multiple Pardot Accounts to One Salesforce Org	Concentrate Your Marketing Efforts with Pardot Business Units
Support Multiple CNames	Use Custom Tracker Domains in Email Links and Vanity URLs
Required Fields for Tasks in Salesforce Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension

IdeaExchange	Idea delivered
Ability to Create Custom Objects from Salesforce Inbox in Outlook and Chrome	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Auto-Populating Profile Records When Creating New Leads and Contacts	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Edit Contact and Lead Information in Salesforce Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Change Log Email Icon When I've Already Added an Email to Salesforce	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Ability to Edit New Contact Record Details When Adding to Salesforce from Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
E-Mail Opt Out Doesn't Disable E-mailing	Respect Opt Out and Don't Track Preferences with a New Setting
	Account For Your Customers' Email Opt Out Preferences
Email Opt Out Functionality in Lightning	Respect Opt Out and Don't Track Preferences with a New Setting
	Account For Your Customers' Email Opt Out Preferences
Email Templates in Lightning - Need to Control Visibility / Folders	Organize Email Templates with Folders and Nesting
	Control Which Email Templates Are Shared
List View: Checklist	Check Tasks Off Your List with a Click
Need to Log Even Using Salesforce Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Log Emails to Campaigns	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Allow Us to Change the Visible Fields in Salesforce Inbox for Custom Objects	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Use Lightning Email Templates As Well As Classic Templates in Salesforce Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Add Salesforce Inbox Email Attachments Under Files not Attachments	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Create Accounts from Salesforce Inbox	Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension
Communities	
"Sort By" choice saved for user or session in Customer Service (Napili) template	Define a Default Feed Sort Order in Community Builder
Change Default sort order discussions overview community	Define a Default Feed Sort Order in Community Builder
Chatter answers default sorting in communities (Compact Feed)	Define a Default Feed Sort Order in Community Builder
Hyperlink button in Lightning for Chatter posts	Add Hyperlinks to Your Community Posts and Comments

IdeaExchange	Idea delivered
Chatter	
Hyperlink button in Lightning for Chatter posts	Add Hyperlinks to Your Posts and Comments
Customization	
Assign Lightning Home Pages by App	Assign Default Home Pages Based on the Lightning App

# Get Ready for the Release

Reading the release notes is a great step in preparing for the release. These other resources are designed to help get you, your org, and your users ready for what's coming your way. We add resources throughout the release when they become available, so check back often.

### **Release Readiness Essentials**

- Release Readiness Trailblazers. Access resources and experts for all things release readiness.
- Release Milestones. See key dates for the release.
- Trust Status Maintenances. See Sandbox and other release dates and times. Click Instances and your instance to see your maintenance dates
- Sandbox Refresh Calculator. Plan if and when you need to refresh your existing Sandbox orgs.
- Sandbox Preview Video. Learn how to navigate the Sandbox preview process.
- Sandbox Preview Instructions. Get early access to new features in your sandbox.
- Customer Success Event Calendar. Register for release overview webinars and access recordings.
- Certification Release Maintenance Schedule. Keep your certification updated in Trailhead.
- Prepare for Salesforce Releases. Use Trailhead to create your release strategy.
- Releases Email Journey. Prepare for releases by subscribing to emails.

### What's New This Release

- Release Overview Deck (ROD). Create internal training for your users, review setup screens, and learn how to use features.
- Release Matrix. Quickly see which features immediately affect your users.
- Spring '19 Pre-release Signup. Sign up for a pre-release org to get early access to the new features.
- Release Readiness Live. Register and make the most of the new features.
- Release Demos. Get quick video overviews of what's coming this release.
- Spring '19 Release Website. Check out the new features.
- Spring '19 Release Highlights Module. Get the Spring '19 Trailhead badge.
- Release in a Box. Use this kit to prepare and present the new release to your org and users.

### Release Note Changes

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

### January 30, 2019

#### **Help and Training**

Added omitted documentation about supported languages, and added new Trailhead trails, modules, and instructional videos.

#### Metadata API

Updated release note for BotVersion metadata type: sourceType has a subtype of BotVariableOperand, not BotStepCondition. Also, sourceType is no longer a required field.

Added changes for the ProfileActionOverride metadata type. This metadata type can no longer be defined on Profile. Instead, define the metadata type from the related CustomApplication.

#### **Changed Objects**

Added the IsArchived field to the PricebookEntry object.

#### **Enable Improved Caching of Org Schema (Critical Update, Postponed)**

Updated release note to indicate that the critical update is postponed to Summer '19.

#### **Script Tags Blocked in Dynamically Created Components**

Added release note for new restriction in Aura components.

#### **Get Faster Page Loads in Your Community**

Updated release note with guidance to include https://static.lightning.force.com in corporate whitelists to ensure functionality. In addition, added context for clarity.

#### **Find Your Email Templates Quickly**

Updated topic to clarify that the Email Templates page displays Lightning email templates only.

#### Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)

Added release note about postponing a critical update.

#### **OAuth 2.0 Connected App Client Secrets Require More Characters**

Updated topic to clarify that the change in size of the client secret does not impact existing OAuth connected apps.

#### Einstein Prediction Builder: Enhanced Scorecard, Notifications, and New Setup Flow (Generally Available)

Added release note about Einstein Prediction Builder's general availability.

#### Connect to Your Data in Oracle Eloqua and NetSuite (Beta)

Added release note about Oracle Eloqua and NetSuite connectors.

#### Removed: Assess Audience Effectiveness with Google Analytics

This feature isn't quite ready, so we're removing it while we make improvements.

#### **Removed: Filter Reports by Inactive Picklist Values**

This feature isn't quite ready, so we're removing it while we make improvements. We'll let you know once it's back up.

#### Turn On Lightning Experience (Critical Update)

Updated when the update appears under Critical Updates and when the update auto-activates.

#### **Lightning Data Service Returns New Error Values**

Added release note about for new error values returned by Lightning Data Service.

### January 23, 2019

#### Prepare Visualforce Pages for Lightning Experience with the Lightning Experience Configuration Converter (Beta)

Clarified that the Visualforce tab in the Lightning Experience Configuration Converter replaces the Visualforce check in the Readiness Check.

#### **Build Flows More Intuitively with Flow Builder**

Clarified note about updating flow error messages to reflect terminology used in Flow Builder.

#### Field Service Mobile App: Welcome to Version 5.0

Field Service Mobile App Version 5.0 is releasing in January.

#### You Asked for It!

Added Ideas that we delivered.

#### **Changed Objects**

Fixed the name of the new field, EmailTemplateId, for the EmailMessage object.

Added the new field, ActionCadenceStepTrackerId, to the EmailMessage object.

#### **Account For Your Customers' Email Opt Out Preferences**

Clarified previous functionality for email opt out.

#### Removed: Email Relay Activation Settings Have Moved to a Different Page

This feature isn't quite ready, so we're removing it while we make improvements.

#### Some Features in the Lightning Experience Migration Assistant are Renamed

We've modified the names of two options in the Lightning Experience Migration Assistant: Encourage users to stay in Lightning Experience and Keep Lightning Experience users in Lightning Experience only.

#### **Use Edit Inline in Record Detail**

New topic announcing extension of inline editing in record detail components in Lightning Communities.

#### Add Custom Resources to the Refreshed Lightning Experience Help Menu

Revised to clarify that the Learn More with Trailhead section was replaced with links to Trailhead modules in other sections of the Help Menu. Also clarified that the link to search for content in Salesforce Help was replaced with the ability to search documentation from within the Help Menu.

#### **New Status Codes for Event Publishing Failures**

Added information about a status code returned when platform event publishing limits are exceeded.

#### **DOM Inspection Tests Are Subject to Change**

Clarified messaging for end-to-end UI tests.

#### Upgrade to the Spring '19 Versions of Analytics for iOS and Android

Added release notes about Einstein Analytics Mobile new releases, which include the new color scheme, images in tables, suggested charts, and long-press on charts.

#### **Dev Hub: New Limited Access License**

Use the free Limited Access License to add users to your Dev Hub org to provide them the ability to create scratch orgs.

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

Added release note about postponing a critical update.

# January 16, 2019

#### **Organize Email Templates with Folders and Nesting**

Clarified when the Create Folders for Lightning Email Templates permission is needed.

#### Add Quip Documents Directly to Salesforce Records (Beta)

Added a release note about the new Quip Document component.

#### Force.com IDE Is Being Retired in October 2019

Added release note about the October 2019 retirement of the Force.com IDE plug-in for Eclipse.

#### Tooling API

Added the PackageInstallRequest object's new UpgradeType field.

#### **Enjoy Improved Field Service Help Content**

Added a release note about new Field Service Lightning help content.

#### Removed: See Which Objects Were Searched at a Glance

This feature isn't quite ready for showtime, so we're removing it for now while we make improvements. We'll let you know when it's back up.

#### **Removed: Create Objects From Spreadsheets**

Removed the release note. Creating objects from spreadsheets isn't available in Spring '19.

#### **Scratch Orgs: Configurable Salesforce Environments**

Added information on new and deprecated scratch org features. Announced that org preferences won't be deprecated in Winter '19.

#### Track Data Changes to External Objects More Easily (Beta)

Added release note for External Change Data Capture (Beta)

### January 9, 2019

#### **Concentrate Your Marketing Efforts with Pardot Business Units**

Added release note about feature availability.

#### **Send the Session ID Securely in Outbound Messages**

Added release note about a security enhancement for outbound messages.

#### **Changed Objects**

Added release note about new PermissionSetGroupId field in PermissionSetAssignment object.

#### Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning

Added release note about feature availability.

#### **Get More Security with a Refreshed Password Blacklist**

Removed the instructions to contact Salesforce Customer Support to extend the password blacklist. The password blacklist is extended by default.

#### Salesforce Billing Spring '19 Pre-Installation Instructions

Added pre-installation instructions for Salesforce Billing.

#### **Enable Consumption Schedules for Salesforce CPQ and Billing**

Added enablement instructions for consumption schedules.

#### **Use Consumption Schedules and Consumption Rates in Custom Scripts**

Moved release note from the Other Changes in Salesforce CPQ section to the Price Usage with Consumption Schedules section.

# January 8, 2019

#### Improve Dataset Security with Broader Sharing Inheritance

Removed release note.

### December 26, 2018

#### **Changed Objects**

Added a change to ForecastingShare.

Added a change to ForecastingType.

#### **Test Process Scheduled Actions and Flow Resume Events with Apex**

Added details about how to test scheduled actions in event processes.

#### **Changed Apex Classes**

Updated to reflect that stopTest also works for processes that start when a platform event message is received.

#### **Build Flows More Intuitively with Flow Builder**

Added note about updating flow error messages to reflect terminology used in Flow Builder.

#### Convert and Move Faster in the Lightning Experience Configuration Converter

Updated the Where statement to update the availability date of the changes to starting in early 2019.

#### **GoodData Is Being Retired**

Added release note about GoodData retirement.

# December 20, 2018

#### Salesforce Billing: New Invoicing Options for Usage Summaries and Evergreen Subscriptions

Warned users with Avalara for Salesforce Billing to wait before upgrading to Salesforce Billing Spring '19.

#### **Create Revenue Schedules Based on Order Product Bookings Amount**

Clarified that the Order Product Bookings field shows an order product's bookings amount.

#### Salesforce CPQ and Billing: Expanded Invoicing, Amendment Options, and Consumption Schedules for Usage Summaries

Added a link to a knowledge article showing all new Salesforce CPQ & Billing objects, fields, and picklist values for Spring '19.

### December 17, 2018

#### Salesforce Spring '19 Release Notes

Published preview release notes.

### Your Feedback Matters

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

- **Feedback forms**—As you're working with our documentation in Salesforce Help, release notes, or developer guides, look for the feedback form and vote up or down. Add comments if you have them.
- **Twitter**—When you follow @salesforcedocs on Twitter, you receive notices whenever we publish new documentation or make significant updates to existing documentation. Tweet us at @salesforcedocs.

# How and When Do Features Become Available?

Some features in Spring '19 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 changed our support for Apple Safari to version 12.x+. 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	~			
Supported Browsers for Salesforce Classic	~			
Supported Browsers for Einstein Analytics	~			

# **Salesforce Overall**

Introducing new tools to guide you through a successful transition to Lightning Experience. You can also make a favorite list view your default list. Simplify appointment scheduling with the new Lightning Scheduler. Gain more insight from surveys with translations, new question types, and invitations. Master multiple windows with pop-out utilities and customized subtabs in console apps. Print a record page, appreciate coworkers with thanks badges, enjoy more data storage, and (of course) more!

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Experience	Adoption: More Ways	to Discover and Ado	opt the New Salesfo	rce
Drive Your Lightning Experience Transition from One Place			<b>✓</b>	
Some Features in the Lightning Experience Migration Assistant are Renamed			<u>~</u>	
Turn On Lightning Experience (Critical Update) (not immediately available)		~		
Display Adoption Assistance Features in Sandbox Environments			~	
Onboarding & Assistance Is Now Adoption Assistance in Setup		~		
Add Custom Resources to the Refreshed Lightning Experience Help Menu	~			
Lightning Experience Configuration Co	onverter: Scan and Pre	pare Visualforce Pag	ges, Scan All Objects	At Once
Prepare Visualforce Pages for Lightning Experience with the Lightning Experience Configuration Converter (Beta)	✓			
Convert and Move Faster in the Lightning Experience Configuration Converter			<b>~</b>	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Give Us Feedback (not immediately available)	~			
Jump Right into Your Most Important List View with Pinned Lists	<b>~</b>			
Print a Record Page	~			
Lightnin	g Scheduler: Simplify	ing Appointment Sc	heduling	
Create Personalized Appointments with Lightning Scheduler			~	
Salesforce Survey	rs: Going Global and N	More Insight with Ne	w Question Types	
Translate Your Surveys	~			
Gain Insight from Your Customers with New Question Types	<b>✓</b>			
Create Custom Reports for Net Promoter Score®, Ranking, Rating, Scoring, and Slider Question Types			~	
Generate Survey Invitations for Contacts and Person Accounts	<b>~</b>			
Set an Expiration Date for a Survey Invitation	~			
	Cons	sole		
Open a Window into Productivity with Pop-Out Utilities (Critical Update)	<b>~</b>			
Manage Your Workspace with New Subtab Options	<b>~</b>			
Use Two-Region Page Templates for Your Console Apps			~	
Use Lightning Web Components in the Utility Bar		~		
Set Tab Colors, Disable Utility Pop-Out, and Edit Browser Tab Titles with Lightning Console JavaScript APIs		<u>~</u>		
Use Thanks Badges in Lightning Experience (Pilot)			<u>~</u>	
	Sea	rch		
Get Search Results for More Objects	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Enjoy Increased Data Storage		~		
Open Hyperlinks in Formula Fields Correctly			~	
Update to Retention Limit for Field History Data		~		

# **Lightning Experience**

Lightning Experience is a completely reimagined interface. Even better, it's built on the Lightning Platform, so the experience can grow and evolve with your needs.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Experience Features in This Release			~	
What's Different or Not Available in Spring '19 Lightning Experience Features			~	

## **Essentials**

Sales Essentials and Service Essentials are combined under one product—Salesforce Essentials. Use in-app help to find resources without leaving Salesforce. Add and reduce user licenses to make sure that you have the right number for your team, and manage your users in the redesigned Users page in Setup. Use the new Voice Support setup flow to integrate a third-party voice support system with Salesforce, and learn more about leads and opportunities in the Sales Stages setup flow.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Sales and Service—Two Become One	~			
Find Helpful Resources and Recommended Content with In-App Help	✓			
Add or Reduce Users to Reflect Your Changing Team		~		
Manage Your Team's Information and Permissions on the Users Page		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Create a Call Center with the Voice Support Setup Flow		~		
Get to Know Leads and Opportunities in the Sales Stages Setup Flow		~		

# Sales

Give your inside sales reps the tools they need to succeed with High Velocity Sales. Work faster, the way you want to, by integrating Salesforce with Gmail and Google Calendar. Get more flexibility on your pricing practices with Usage-Based Pricing in Salesforce CPQ. And align your sales and marketing team on prospect targeting with Einstein Behavior Scoring and Campaign Insights in Pardot.

Feature	Enabled for users	Enabled for administrators/	Requires administrator	Contact Salesforce to enable
		developers	setup	enable
	city Sales (available w	itnin 24 nours after t	ine release)	
Streamline Outreach to Help Reps Sell Faster with Sales Cadences			<u>~</u>	
Empower Sales Reps with the High Velocity Sales Workspace and Work Queue			<u>~</u>	
	Sales Clou	d Einstein		
<b>Einstein Opportunity Scoring</b>				
Give Opportunity Scores to More Users	~			
See Opportunity Scores in More Places	~			
<b>Einstein Activity Capture</b>			<b>✓</b>	
Einstein Insights			<b>✓</b>	
<b>Einstein Automated Contacts</b>			<b>✓</b>	
	Core Sales	s Features		
Collaborative Forecasts				
Get Product Family Forecasts by Territory			~	
Share the Power of Territory Forecasts	~			
See Forecasts for More Time Periods	~			
Enterprise Territory Management				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Grant Access to Records, Report and Dashboard Folders, and List Views by Territory		<u>~</u>		
Add Sales Reps to Groups and Queues Based on Territory Assignment		~		
Share Individual Records by Territory	~			
Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)			✓	
Get Product Family Revenue Forecasts for Territories			~	
Share Your Territory Forecasts	~			
Accounts				
Remove an Account Team in Lightning Experience	<u>~</u>			
Keep More Related Records When Transferring Accounts in Lightning Experience	~			
Opportunities	~			
Other Changes in Core Sales Features				
Customizable Forecasting Is Being Retired		~		
Original Territory Management Is Being Retired		~		
Product Selector Enhancements	~			
	Productivit	y Features		
Einstein Activity Capture				
Sync Events and Contacts with Einstein Activity Capture			~	
Share Activities with Users Who Don't Use Einstein Activity Capture			~	
Get the Complete Picture About Your Activity Data with Activity Metrics (Beta)			~	
Get More Out of the Activities Dashboard	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Track Emails That Come from Einstein Activity Capture	<b>~</b>			
Boost Your People Skills with More Recommended Connections	<b>~</b>			
Einstein Email Insights: New Insights, Better Control Over Custom Insights, and More Visibility	✓			
Test Einstein Activity Capture in Sandbox			~	
Email Experience				
Respect Opt Out and Don't Track Preferences with a New Setting			~	
Account For Your Customers' Email Opt Out Preferences			~	
Honor Customer Privacy with Updates to List Email Statuses			~	
Expanded Enforcement of Daily External Email Limit for New Orgs		~		
Create Secure DKIM Keys with Longer RSA Key Sizes		~		
Return Bounced Emails to Senders as Attached Files			~	
Email Templates				
Organize Email Templates with Folders and Nesting			~	
Control Which Email Templates Are Shared			~	
Find Your Email Templates Quickly			~	
Do More with the Manage Public Lightning Templates Permission			~	
Activities				
Check Tasks Off Your List with a Click	~			
Create a Follow-Up Event with One Click	~			
Lightning Dialer			~	
Inbox App				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Write Emails Faster with Lightning Templates in Salesforce Inbox				
Refine Inbox Notifications on Android Devices	<b>~</b>			
Get Access to New and Standard Email Insights			~	
Use Combined Custom Email Insights for Smarter Email	<b>✓</b>			
Notes	~			
Calendar				
Schedule an Event Series (Generally Available)			~	
Keep Your Team Organized with Public Calendars in Lightning Experience			~	
Book Resources for Events			~	
Add Attendees Without Setting Up Lightning Sync			~	
See More Details from the Event Preview			~	
See More Details When You Print Calendars	~			
See Files Related to Your Events			~	
Data Quality			~	
	Integration	with Google		
<b>Gmail Integration</b>				
Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension			~	
Accelerate Sales with the High Velocity Sales Work Queue in Gmail <sup>™</sup>			~	
Require Login Credentials When Sessions Expire		~		
Access Salesforce Information Directly from Google Calendar	<b>~</b>			
Log Emails to People Who Aren't Email Recipients from Gmail <sup>™</sup>	<b>~</b>			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Lightning Sync for Google	~			
	Integration wi	th Microsoft <sup>®</sup>		
Outlook <sup>®</sup> Integration				
Accelerate Sales with the High Velocity Sales Work Queue in Microsoft® Outlook®			<b>✓</b>	
Log Emails to People Who Aren't Email Recipients from Outlook®	~			
Run Outlook Integration in Outlook® 2019			<b>✓</b>	
Use Salesforce Two-Factor Authentication with Microsoft® Outlook®			~	
Lightning Sync for Microsoft® Exchange	<b>©</b>			
Sync Event Series (Generally Available)			<b>✓</b>	
See Attendee Changes Made Through the API on Microsoft® Calendars	~			
Salesforce for Outlook				
Explore the Latest Cloud-Based Product Alternatives			<b>~</b>	
Upgrade to Salesforce for Outlook v3.4.5			<b>✓</b>	
Connect for Office	~			
Salesforce CPQ and Billing: Expanded In	voicing, Amendment	Options, and Consu	mption Schedules fo	or Usage Summaries
Salesforce CPQ				
Price Usage with Consumption Schedules (Generally Available)	~			
Amend Subscriptions in the Quote Line Editor	~			
Other Changes in Salesforce CPQ				
Salesforce Billing				
Salesforce Billing Spring '19 Pre-Installation Instructions	~			
Complete Your Upgrade to Salesforce Billing Spring '19			~	
Rate and Invoice Usage Summaries with Consumption Schedules	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Invoice and Cancel Subscriptions Without End Dates	~			
Create Revenue Schedules Based on Order Product Bookings Amount	<b>~</b>			
	Pare	dot		
Salesforce-Pardot Integration: Easier Se	etup and Smarter Syn	cing		
Concentrate Your Marketing Efforts with Pardot Business Units				
Configure the Salesforce-Pardot Connector with Improved Navigation and Design	<u>~</u>			
Breeze Through Pardot Provisioning with the Pardot Setup Assistant			~	
Choose Which Records Sync Between Salesforce and Pardot				
See Marketing Asset Performance on Campaigns (Generally Available)			~	
Use Pardot in French, German, and Spanish (Generally Available)	<b>~</b>			
Use Custom Tracker Domains in Email Links and Vanity URLs	<b>~</b>			
Find Email Templates for Engage Campaigns Faster	<b>~</b>			
Get Pardot Actions and Reports Without the Bot Clicks	<b>~</b>			
Set Up B2B Marketing Analytics with Ease			~	
Score Prospects on Engagement Activity			~	
Get Insights on Campaign Performance (Beta)			~	
GoodData Is Being Retired	~			

### **Service**

Help your agents work faster and smarter with Einstein Case Classification, which recommends field values on new cases based on past data. Check out enhancements to Einstein Bots, including support for your SMS text messaging channel. Transition your Salesforce Classic knowledge base with the help of the Lightning Knowledge Migration Tool. Simplify preventive maintenance tracking for field service

by grouping all of a maintenance plan's assets into one work order, with each asset linked to a work order line item. And enjoy new Lightning Experience support for case management tools.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Eins	tein		
Save Agents Time and Improve Accuracy and Completion with Einstein Case Classification			<b>✓</b>	
Evaluate How Well Your Bots Understand Your Customers			~	
Make Your Bots Smarter with Customer Input Classification and Feedback			~	
Put Your Bots to Work on Your SMS Text Messaging Channel			~	
Set Up Einstein Bots More Easily with Channel Settings in the Bot Builder		~		
<b>Build Channel-Independent Bots</b>			~	
Check Out the Improved Bots Performance Dashboard			~	
Get to Know Our New Bots Terminology		~		
Suggest the Right Recommendations with Einstein Next Best Action (Generally Available)		<u>~</u>		
	Field S	ervice		
Manage Service Crews Faster (Beta)			~	
Customize Service Appointment Feed Preferences			~	
Filter Faster in the Gantt	~			
Color-Code the Dispatcher Console	~			
Create Work Order Line Items for Each Asset in a Maintenance Plan	~			
Create Service Appointments for Leads	~			
Create Your Own Icons for the Gantt			~	
Sort Time Slots by Date When Booking Appointments	~			
Control Access to Bulk Unscheduling			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
View Absences in the Multiday View	<b>✓</b>			
Enjoy Improved Field Service Help Content	<b>~</b>			
Field Service Mobile App				
More Control on Layouts			~	
Offline Support for Formula Functions and Operators			~	
Improved Connected App for Push Notifications			~	
Improvements to Service Reports			~	
Save Time Ordering Products with Contextual Product Requests (Android)			~	
IoT Insights Card: Show Your Salesforce IoT Data in Field Service Lightning (Android)			~	
Communicate Clearly with Offline Chatter Enhancements (Android)			~	
Link to the Salesforce App with Related Lists (Android)			~	
Currency Defaults to Work Order or Work Order Line Items (Android)			~	
Other Field Service Lightning Mobile Enhancements			~	
	Know	ledge		
Embrace the Future with the Lightning Knowledge Migration Tool (Generally Available)				✓
Manage Your Articles with Lightning Experience Actions			~	
Attach Files to Emails with Lightning Knowledge			~	
View Related Files on Articles in Communities			~	
Embed Ooyala Videos in Knowledge Articles			~	
	Chan	inels		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Messaging				
View Transcripts Without a LiveMessage License	<b>~</b>			
Deploy Einstein Bots on Your Text Messaging Channel			~	
Route Text Messages to Qualified Agents with Omni-Channel Skills-Based Routing			~	
Autolinking No Longer Creates Contact Records	<b>~</b>			
Communities			~	
Chat				
View Transcripts Without a Live Agent License	~			
Take Advantage of Chat Conferencing for Snap-Ins			~	
Route Chats to Qualified Agents with Omni-Channel Skills-Based Routing (Generally Available)			~	
Support Your Agents with Enhancements to Omni-Channel Supervisor for Lightning Experience			~	
Phone				
Open Softphones in a New Window	~			
Set Up Open CTI with Guided Experience		~		
Social Customer Service				
Prevent Duplicate Facebook Messages		~		
Carry Over Social Personas and Social Posts When Merging Contacts, Accounts, or Leads				
Snap-Ins for Mobile Apps			~	
Snap-Ins for Web				
Show Customers Their Place in Line During Transfers			~	
Help Customers as a Team			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Increase Your Response Rate with Post-Chat Updates			~	
Allow Guest Users to Run Flows			~	
	Case Man	agement		
Service Console				
Lightning Flow for Service				
Convert Guided Action List Settings into Deployments in Setup (Critical Update)			~	
Reuse Your Guided Action List Settings in a Deployment			~	
Help Agents Find and Resume Paused Flows in the Guided Action List			~	
Hide the Remove Option on Guided Actions			~	
View the Latest and Greatest Guided Action List, Always			~	
Cases				
Verify Your Customer Communications with Email Draft Approval			~	
See Related Work at a Glance with Case Hierarchy			~	
Know Who's Who with Case Contact Roles			~	
Take on Work with the Accept Case Button	~			
Omni-Channel				
Route Text Messages and Chats to Qualified Agents with Skills-Based Routing (Generally Available)			<b>~</b>	
Route Customer Contact Requests with Omni-Channel				
Lend a Helping Hand with Enhancements to Omni Supervisor			~	
Assign Work Based on Field Data Using Attribute-Based Routing (Beta)			~	
Productivity				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Stay on Time with Relative Dates for Macros	~			
Tidy Up and Close the Tab After a Macro Finishes	<b>~</b>			
View All Your Salesforce Classic Macros and Quick Text in Lightning Experience	<b>~</b>			
Lightning Scheduler			~	
	Other C	hanges		
Create a Call Center in Lightning Experience with the Voice Support Setup Flow		✓		
Set Up Offline Support and Related Records in the Live Agent Setup Flow		~		
Get IoT in Service Cloud Unlimited Edition for Better Customer Service		~		

# **Analytics**

Learn new things about your business as Einstein Data Insights intelligently calls your attention to interesting patterns in reports; no need to group, filter, or summarize. Gain insights from up to five report types with Lightning joined reports, then share them on a 12-column dashboard. In Communities, update records directly from embedded Analytics dashboards with action menus. Benefit from these and many more features and enhancements across Reports and Dashboards and Einstein Analytics.

Enabled for

Pequires

Contact

Feature	Enabled for users	administrators/ developers	administrator setup	Salesforce to enable
	Reports and	Dashboards		
Reports				
Joined Reports Arrive in Lightning Experience (Generally Available)	<b>✓</b>			
Review Data More Easily from the Run Page (Generally Available)	<b>~</b>			
Resize Columns to Fit Your Content	~			
Quickly Focus on Relevant Data with Conditional Formatting (Beta)	<b>~</b>			
Gather Insights Faster with Stacked Summaries	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
View Historical Tracking Reports in Lightning Experience	~			
Dashboards				
Show More Data with 12-Column Dashboards	~			
Add Summary Formulas as Formula Columns to Lightning Tables	~			
Put More Data in Less Space with Compact Components	~			
Other Enhancements to Dashboards in Lightning Experience	~			
Subscriptions				
Subscribe to Reports and Dashboards by Group or Role	~			
	Einstein A	Analytics		
Setup and Data Integration				
Step Confidently Through First-Time Analytics Setup			~	
Bring Your Website Statistics into Analytics with the Google Analytics Connector		~		
Connect to Your Data in Oracle Eloqua and NetSuite (Beta)		~		
Test Your Connections When You Create Them		~		
Create More Complex Dataflow Filters with SAQL		~		
Orchestrate Data Sync and Dataflow Runs with Event-Based Scheduling		~		
Set Up Notifications Without Scheduling		~		
See Which Dataflows Are Taking Longer Than Expected		~		
Run More Data Jobs (not immediately available)		~		
Get a Better Metadata View on the Dataset Edit Page		<u>~</u>		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
App Building				
Create Apps from Templates to Jump-Start Your Analytics Journey		~		
Build Visualizations Quickly with Smart Dashboard Templates	~			
Search App and Dashboard Template Pickers to Find the One You Want		~		
Link to Pages in Different Dashboards	<b>✓</b>			
Customize Combo Charts with Bars, Lines, and Stacks	~			
Customize Derived Dimension Values	<b>✓</b>			
Forecast the Future from the Explorer	<b>✓</b>			
Plan for Einstein Analytics Classic Designer's Retirement	~			
Other Enhancements in App Building	~			
Analytics Intelligence				
Learn More from Your Reports with Einstein Data Insights (Generally Available)	<b>~</b>			
Crunch More Data with Double the Row Limit	<b>✓</b>			
Export Your Story for Additional Analysis	~			
Easily Deploy Models to Salesforce Objects	~			
Encrypt Einstein Discovery Data (Pilot)				~
Extending Analytics				
Take Action in Salesforce from Analytics for Communities		~		
Experience Smoother Analytics in the Salesforce Mobile App	~			
Analytics for End Users				
Walk Through the Analytics Studio Home	<b>✓</b>			
Select the Videos You Want to Watch from Playlists	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Watch Onboarding Videos Within the Welcome Mat	<u>~</u>			
Other Onboarding Enhancements	~			
Upgrade to the Spring '19 Versions of Analytics for iOS and Android	~			

### **Communities**

Spring '19 is jam-packed with features and improvements for your communities. Easily create sharing relationships between partner types, such as distributors and resellers. Integrate with the Google Cloud Translation API to have community members instantaneously translate questions, posts, comments, answers, and replies into 50 languages. Use Einstein Next Best Action to deliver the right offer at the right time.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Lightning Co	ommunities	· ·	
Update Your Lightning Community to the Latest Template			<b>~</b>	
Update Selectors in the Navigation Menu, Related Articles, and Trending Articles by Topic			<u>~</u>	
Translate Feed Items on the Spot			<b>✓</b>	
Level-Up Member Engagement with Missions		~		
Move Feed Items for Best Placement		~		
Help Your Members Stay on Topic			<b>✓</b>	
Get More with of CMS for Community Cloud (Beta)		~		
Use the Files Related List for Knowledge Articles in Communities		~		
Upvotes Impact Influence Cards and Likes Received	<b>~</b>			
Template and Theme Export Enhancements		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Future-Proof Your Linking with Navigation API Calls		~		
Get Faster Page Loads in Your Community		~		
Add Hyperlinks to Your Community Posts and Comments	<b>~</b>			
Provide Search Engines with the Freshest Content Snapshots		~		
Add Dynamic SEO Properties to More Object Detail Pages		~		
Be in the Know About Your SEO		~		
Li	ghtning Components	in Community Build	er	
Use Custom Lightning Web Components in Communities			~	
Get More Use Out of Your Code with Lightning Container Components in Communities		✓		
Recommend Actions and Offers to Your Users (Generally Available)		~		
Capture Feedback on the Helpfulness of Community Content		~		
Help Customers Get Answers Fast, and Lighten Your Support Load			~	
Add a Button to Let Community Members Request a Call from Support			~	
Polish Your Buttons with More Style Properties		~		
Add Styles to Your Featured Topics		~		
Define a Default Feed Sort Order in Community Builder		~		
Use Edit Inline in Record Detail		~		
Take Control over Options in Record Lists		~		
Get More Components in Your Customer Account Portal Template		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Audie	•		3.143.15
Do More, More Easily with the Updated Audiences Editor		~		
Create Custom Audience Formulas		~		
Increase the Power of Audiences with New Criteria and Data Types		✓		
	Partner Cor	mmunities		
Create Partner Account Relationships and Data Sharing Rules (Generally Available)			~	
Update Partner Account Fields on Opportunities and Leads			~	
Let Partner Users Manage Their Own Budgets with Budget Hierarchies			~	
Internal Users and Admins Can View and Manage Community Members from Accounts			~	
Merge Account Brand Information for Duplicate Accounts			~	
	Sharing an	d Security		
Use Sharing Sets with Campaigns, Opportunities, and Orders (Generally Available) (available within 24 hours after the release)		✓		
Use Sharing Sets with Contacts with Multiple Accounts (Generally Available)		~		
Enable External Org-Wide Defaults in Orgs with Communities or Portals (Critical Update)			~	
Assign a Content Security Policy Level to Your Community		~		
Avoid CSP Errors When Using CMS Connect		~		
Discover and Resolve CSP Resource Issues		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Enable Clickjack Protection More Easily in Community Builder		~		
Restrict Community User Access to Cases (Generally Available)			~	
See What Your Guest Users See		~		
Set the iframeDomain Cookie in Sites and Communities in Internet Explorer		~		
Localize Login Prompts and Error Messages for Login Discovery		~		
Give New Users a Taste of Your Community Before They Sign Up		~		
Create Your Own Verify Page for Community Sign-Ups		~		
Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update			✓	
	Files in Lightnin	g Communities		
Track Stats on the Community File Detail Page		~		
Let Community Guest Users Upload Files			~	
	Other Changes i	in Communities		
Control Community User Visibility (Generally Available)			~	
Create Reports on a Community's Topic Usage			~	
Take Action in Salesforce from Analytics Dashboards		~		

# Chatter

Users' feed sort options remain even when they navigate away. Include hyperlinks in posts and comments. Redirect URLs in feeds are shorter and include the feed item ID. Run a report on posts and comments with a particular topic, and see the post and comment and other details.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Sort Selections Are Sticky	~			
Add Hyperlinks to Your Posts and Comments	<b>~</b>			
Redirect URLs Are Shorter and More Informative	<b>✓</b>			
Create Reports on Topics and the Posts That Use Them	;		~	

# **Files**

Make updates to asset files in managed packages and organize your org asset library with folders.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Update Asset Files in Managed Packages		~		
Organize Your Asset Library with Folders		~		
Query All Files (available within 24 hours after the release)			~	
Embed Fully Functional Quip Documents Directly in Salesforce (Beta)			~	

# Mobile

Check out the latest features for getting more done no matter where you are.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Salesfor	rce App		
Everything That's New in the Salesford	e App			
Sort Order Is Sticky on Mobile			~	
Translate Community Feed Items on Your Mobile Device			~	
Block Topic Selection on Questions	~			
Get Answers Fast			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Updated Salesforce App Requirements	~			
Remove an Account or Opportunity Team Using the Salesforce App	<u>~</u>			
Keep More Related Records When Transferring Accounts Using the Salesforce App	~			
Delete Push Registrations for Mobile Devices				
Salesforce Mobile App Documentation Updates				
Spring '19 Features That Are Different or Not Available in the Salesforce App			~	

## **Financial Services Cloud**

Lightning Scheduler gives you the tools you need to simplify appointment scheduling for your customers and prospects. Financial Services Analytics, a suite of applications with datasets, data flows, and dashboards, helps you convert data to insights faster.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Personalize Customer Appointments with Lightning Scheduler			~	
Get Customer Insights Fast with Financial Services Analytics			~	

## **Health Cloud**

Help patients holistically, streamline patient referrals, and provide industry-standard codes for preauthorization requests. Build patient relationships and personalized journeys, offer more flexible assessments, and create a custom smart phone app.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Deliver Holistic Care and Support with Social Determinants of Health Insights			~	
Streamline Patient Referrals with Referral Management			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Step Up Patient Care with Campaigns and Personalized Journeys				~
Complete a Health Assessment on Someone's Behalf	<u>~</u>			
Add Code Sets to Pre-Authorization Requests and Approval Processes			~	
Engage Patients and Members With the Health Cloud App Template			~	
Personalize Patient and Member Appointments with Lightning Scheduler			~	
Health Cloud Has New Objects		~		
Changed Health Cloud Objects		~		
New and Changed Health Cloud Lightning Components			<u>~</u>	

## Customization

Make your org smarter with Einstein Next Best Action, now generally available. Build simpler and more streamlined flows with the new Flow Builder. Build and interact with connections to external data systems more easily with new tools, improvements to existing tools, and increased limits.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Einstein: Next Best Action	n and Prediction Bui	lder	
Einstein Prediction Builder: Enha	nced Scorecard, Notification	ns, and New Setup Fl	ow (Generally Availa	able)
Understand the Impact of Each Pred Your Model	ictor in		~	
Get Notified About Prediction Status	5		~	
Work Faster with a Streamlined Prec Flow	liction		~	
Einstein Next Best Action: Use Strato Recommend Actions and Offe (Generally Available)	_	<u>~</u>		
Build an Action Strategy to Produce Recommended Actions and Offe		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Lightnir	ng Flow		
Build Flows More Intuitively with Flow Builder		~		
Process and Flow Design				
Create or Install Pre-Built Business Processes That You Can Customize		~		
Respond to Salesforce Errors with Processes or Flows		~		
Create a Flow to Let Community Users Request Help		~		
Display an Image and Capture Address Information More Easily in Your Flows		~		
Access Data Outside Salesforce with Processes and Flows via External Objects		~		
Execute Scheduled Actions in Event Processes		~		
Schedule Actions in Processes to Happen Immediately		~		
Return Null Values in Process and Flow Formulas (Critical Update)			~	
"Stop Automated Field Updates from Suppressing Email Notifications" Critical Update Postponed			<u>~</u>	
Flow Distribution				
Use Action Strategies and Einstein Next Best Action to Recommend Flows to Users and Community Members (Generally Available)		✓		
Reuse Guided Action List Settings and View Paused Flows		~		
Use Snap-Ins to Let Guest Users Run Flows		~		
Test Process Scheduled Actions and Flow Resume Events with Apex		~		
	Salesforce	Connect		
Track Data Changes to External Objects More Easily (Beta)		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Connect Your Users to More External Data with Increased Hourly Limits		~		
Validate Your Connections to External Object Data		~		
Improved OData 2.0 Adapter for Salesforce Connect		~		
Use External Objects in Processes and Flows		₹		
Related Updates for Developers		~		
Permission Set Groups: Group Permission Sets Based on User Tasks for Easier Assignment (Pilot)				<b>~</b>
	Lightning A	pp Builder		
Switch Your Lightning Page to a Different Template		~		
Suggest Recommendations and Offers to Your Lightning Experience Users (General Availability)		✓		
Add Quip Documents Directly to Salesforce Records (Beta)			~	
Add the Work Queue Component to Email Application Panes			~	
Rich Text Component Uses the Quill Text Editor		~		
Standard Lightning Page Template Labels Have Changed		~		
Better Labels for Form Factors in Component Visibility Rules		~		
	Data Protectio	n and Privacy		
Fine-Tune Your Data Privacy Tracking with New Objects			~	
Combine Consent API Requests into One Call with the Multiaction Endpoint		~		
Merge Data Privacy Records in Lightning Experience	~			

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Add Demographic Information to Your Data Privacy Records	~			
Report On Field History for Data Privacy Records	~			
Classify Your Sensitive Data to Support Your Data Management Policies (Beta)			~	
	Globali	zation		
Connect with More Customers with New Platform Languages	~			
Get Things Right with Right-to-Left Languages (Beta)			~	
Translation Workbench Supports Survey Translation			~	
	Shar	ring		
Get New Sharing Options with Enterprise Territory Management			~	
Improved Sharing Rules Documentation	~			
	Genera	l Setup		
Create Custom Big Objects from Setup		~		
Assign Default Home Pages Based on the Lightning App		~		
Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning		✓		
Check a Field's References Before You Edit It (Beta)		▼		
Include Reserved Apex Names in External Services Schema		~		
Add a Namespace Prefix to pageReference.state Properties and Query Parameters			<b>~</b>	
Send the Session ID Securely in Outbound Messages		~		
"Make Sure Records That Are Submitted Behind the Scenes Are Routed to the			~	

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Right Approval Process" Critical Update Postponed				

# Security and Identity

Users can log in with email addresses, phone numbers, and more. Use Device Management to track and revoke device access. And the Cache-Only Key Service is now generally available.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Authenticatio	n and Identity		
My Domain Login Discovery		~		
Certificate-Based Authentication			~	
Localized Login Prompts and Error Messages		~		
Integrations with Auth 2.0 Endpoints			~	
Client Secret New Size Requirement		~		
Custom Verify Page		~		
Asynchronous Email Verifications		~		
Contactless External Identity Users		~		
Device Management				~
Custom URL on Logout		~		
Redirect to Website After Self-Registration		~		
Special Characters in Passwords		~		
Refreshed Password Blacklist				~
Credential Security During Session Access				
Secure Access to Editing Roles			~	
Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)				
	Salesford	ce Shield		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Field Audit Trail Supports More Objects				~
Shield Platform Encryption				
Cache-Only Key Service (Generally Available)			~	
Synchronize Your Data with Self-Service Background Encryption			~	
Self-Service Encryption for Managed Packages			~	
Custom Rich Text Area (Generally Available)			~	
Encryption Compatibility with Event Series			~	
Case-Insensitive Deterministic Encryption (Beta)			~	
Encrypt Einstein Discovery (Pilot)				~
Event Monitoring				
Get More Information When Long-Running Concurrent Apex Requests Are Terminated		~		
Apex Unexpected Exception Event Type		~		
Transaction Policy Management		~		

# **Deployment**

Take action on a change set without loading its detail page.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Clone, Deploy, Upload, and Validate Change Sets with Fewer Clicks		~		
New and Changed Components for Change Sets		~		

## Salesforce IoT

Mobile workers can now see Salesforce IoT data in Field Service Lightning for Android, using IoT Insights. Salesforce IoT is now offered as part of Service Cloud on Unlimited Edition. We've also improved the context setup flow, adding a wizard to simplify the process and other features to make navigating the process more efficient.

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Improve Customer Experience with IoT in Service Cloud Unlimited Edition			~	
Enjoy an Easier Setup Process for Creating Contexts			~	
Show Your Salesforce IoT Data in Field Service Lightning Mobile for Android			~	

# **Development**

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

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
	Lightning C	omponents		
Lightning Web Components (Generally Available)		~		
Locker Service is Now Lightning Locker		~		
Changes in Lightning Locker		~		
Deprecated Default Values Without Square Brackets for Array, Set, and List Attributes		<b>~</b>		
Get Notified About Unsaved Changes		~		
Reference Asset Files with the \$ContentAsset Global Value Provider		~		
New Date-Time \$Locale Attributes		~		
Performance Enhancements for Communities			<b>~</b>	
Add Region Labels to Your Aura Page Template Components		~		
DOM Inspection Tests Are Subject to Change		~		
Script Tags Blocked in Dynamically Created Components		~		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Navigate to a URL with the standard_webPage Page Reference Type		✓		
Lightning Data Service Returns New Error Values		~		
	Visual	force		
Show a Toast with a New JavaScript Function		~		
Allow External iframes of Visualforce Pages with Clickjack Protection		~		
The <apex:detail> and <apex:enhancedlist> Components Sorted Out Their Differences</apex:enhancedlist></apex:detail>		✓		
Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update			~	
Fix to Blank Page Issue Requires Test Updates		~		
	Ар	ex		
Enforce Field-Level Security Permissions for SOQL Queries (Beta)		~		
Enable Improved Caching of Org Schema (Critical Update, Postponed)		~		
	AF	ગ		
Invocable Actions		~		
Fewer Round-Trips for the FlexiPage Object by Using SObject Collections		₹		
Custom Metadata Types		~		
	Salesforce CLI (not im	mediately available		
Leverage Extended Functionality for Lightning Web Components with Salesforce CLI		✓		
Build Your Own Salesforce CLI Plug-In with Open-Source Tools		<b>✓</b>		

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable		
AppExchange Partners						
Package Pre-Built Business Processes That Subscribers Can Open and Build Upon		<u>~</u>				
Package Inactive Processes and Flows		~				
Support for Trialforce Web Forms Is Ending		~				
	Enterprise	Messaging				
Keep Your External Data Up to Date wit	h Change Data Captu	re (Generally Availal	ble)			
Capture Change Events in Apex Triggers (Developer Preview)		~				
Migrate Change Data Capture Entity Selections with Metadata API		~				
Capture Data Changes for Field Type Conversions		~				
Capture Data Changes for Picklist Values Across Records		~				
Scale Your Event-Based Apps with High-Volume Platform Events (Generally Available)		~				
Monitor Your Standard-Volume Platform Event Usage		~				
New Status Codes for Event Publishing Failures		~				
Subscribe to Standard Platform Events in Processes and Flows		~				
	Sand	ooxes				
Save Time by Cloning Sandboxes (Generally Available)		~				
Simpler Format for User Email Addresses in Sandboxes		~				
	Salesforce Extens	sions for VS Code				
Simplify Lightning Web Component Development with the VS Code Extension Pack		<b>✓</b>				

Feature	Enabled for users	Enabled for administrators/ developers	Requires administrator setup	Contact Salesforce to enable
Force.com IDE Is Being Retired in October 2019		~		

# **Supported Browsers**

We changed our support for Apple Safari to version 12.x+. 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.

## Supported Browsers for Salesforce Classic

Salesforce Classic supports Microsoft® Internet Explorer® versions 9 and 10 (support for 9 and 10 ends on April 5, 2019) and 11, and Apple® Safari® version 12.x on macOS. The most recent stable versions of Microsoft Edge, Mozilla® Firefox®, and Google Chrome™ are also supported.

## Supported Browsers for Einstein Analytics

The supported browsers for Einstein Analytics are Microsoft® Edge, Microsoft Internet Explorer® 11, and the most recent stable versions of Mozilla® Firefox® and Google Chrome™. Analytics isn't supported on Apple® Safari®.

# Supported Browsers for Lightning Experience

See the supported browsers and limitations for Lightning Experience.

**Where:** Lightning Experience is available in the Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.



#### Note:

- Salesforce doesn't support non-browser applications that embed WebView or similar controls to render content for Salesforce Classic, Lightning Experience, or Salesforce mobile web. Examples of approaches that embed this type of control include Salesforce Mobile SDK, Microsoft's WebBrowser Control, Electron's embedded Chromium browser, iOS's UIWebView and WKWebView, and Android's WebView.
- You can't access Lightning Experience in a mobile browser. Instead, we recommend using the Salesforce app when you're working on a mobile device. For a list of supported mobile browsers on Salesforce, see Salesforce App Requirements.
- (1) Important: Support for Internet Explorer 11 to access Lightning Experience is retiring beginning in Summer '16.
  - You can continue to use IE11 to access Lightning Experience until December 16, 2017.
  - If you opt in to Extended Support for IE11, you can continue to use IE11 to access Lightning Experience and Communities until December 31, 2020.
  - IE11 has significant performance issues in Lightning Experience.
  - It is strongly recommended that you do not use Internet Explorer 11 with Community Builder.
  - This change doesn't impact Salesforce Classic.

	Microsoft® Internet Explorer®	Microsoft® Edge	Google Chrome <sup>™</sup>	Mozilla® Firefox®	Apple® Safari®
Lightning Experience	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	12.x+
Lightning Communities	IE 11 (EOL December 31, 2020)	Latest	Latest	Latest	12.x+
Special setup considerations?	No	No	No	No	No
Limitations?	Yes	Yes	No	Yes	Yes



**Note**: The term "latest" is defined by the browser vendors. Check with your browser vendor to determine the latest version available.

# Supported Browsers for Salesforce Classic

Salesforce Classic supports Microsoft® Internet Explorer® versions 9 and 10 (support for 9 and 10 ends on April 5, 2019) and 11, and Apple® Safari® version 12.x on macOS. The most recent stable versions of Microsoft Edge, Mozilla® Firefox®, and Google Chrome™ are also supported.

Where: Salesforce Classic is available in all editions.



#### Note:

- We will no longer support Internet Explorer 9 and 10 as of April 5, 2019. We recommend moving to a supported browser, such as Chrome, Firefox, Safari, Edge, or Internet Explorer version 11. After April 5, 2019, you can continue to access Salesforce Classic using IE9 and IE10. However, Salesforce will not provide support for issues that you encounter using these browsers.
- Using Salesforce Classic in a mobile browser isn't supported. Instead, we recommend using the Salesforce app when you're working on a mobile device. To see the mobile browsers that are supported for Salesforce, check out Salesforce App Requirements.

	Microsoft Internet Explorer	Microsoft Edge	Google Chrome	Mozilla Firefox	Apple Safari
Salesforce Classic	IE 11 (support for IE 9 and 10 ends on April 5, 2019)	Latest	Latest	Latest	12.x+
Salesforce Console	IE 11 (support for IE 9 and 10 ends on April 5, 2019)	Latest	Latest	Latest	No
Special setup considerations?	Yes	No	No	Yes	No
Limitations?	Yes	Yes	No	No	Yes

## Mote:

- The term "latest" is defined by the browser vendors. Check with your browser vendor to determine the latest version available.
- Salesforce Classic support for Microsoft Internet Explorer versions 7 and 8 is discontinued as of Summer '15.

## Supported Browsers for Einstein Analytics

The supported browsers for Einstein Analytics are Microsoft® Edge, Microsoft Internet Explorer® 11, and the most recent stable versions of Mozilla® Firefox® and Google Chrome™. Analytics isn't supported on Apple® Safari®.

# Salesforce Overall: More Tools to Adopt Lightning Experience and Boost Productivity

Introducing new tools to guide you through a successful transition to Lightning Experience. You can also make a favorite list view your default list. Simplify appointment scheduling with the new Lightning Scheduler. Gain more insight from surveys with translations, new question types, and invitations. Master multiple windows with pop-out utilities and customized subtabs in console apps. Print a record page, appreciate coworkers with thanks badges, enjoy more data storage, and (of course) more!

#### IN THIS SECTION:

## Lightning Experience Adoption: More Ways to Discover and Adopt the New Salesforce

To make it easier to transition to Lightning Experience, we created a central hub for all of the recommended steps. Show Salesforce prompts that recommend Lightning Experience in sandbox environments, instead of only seeing these prompts in production orgs. Guide your users with custom help in the redesigned help menu.

## Jump Right into Your Most Important List View with Pinned Lists

Do you have a go-to list view that you want to load as your default list? Now you can. With pinned lists, all users can make any list their new default.

## Print a Record Page

Print key details and related lists from a record page in Lightning Experience, just as in Salesforce Classic. Specify record details visibility on the printable page and print the page from the browser. This feature is available for all users, for Account, Campaign, Case, Contact, Contract, Lead, Opportunity, Order, and custom objects.

## Lightning Scheduler: Simplifying Appointment Scheduling

Lightning Scheduler gives you the tools you need to simplify appointment scheduling.

## Salesforce Surveys: Going Global and More Insight with New Question Types

You can now translate your surveys, include different question types, generate targeted survey invitations, create custom reports, and set expiration dates for invitations.

## Lightning Console Apps: Pop-Out Utilities, Subtab Options, and API Parity

Spread your workflow across multiple windows with pop-out utilities. Customize your subtabs, and promote them to workspace tabs. Change tab colors, and edit browser tab titles with new API methods.

## Use Thanks Badges in Lightning Experience (Pilot)

Sing your praises from the mountaintops, or at least from your Chatter feed. Thanks badges are now available in Lightning Experience. Let your coworkers know how much you value them with our suite of thanks badges.

## Search: More Searchable Objects

Find results for more objects in Salesforce Classic and Lightning Experience.

## Enjoy Increased Data Storage

The calculation for data storage is changing. We are increasing the minimum storage from 1 GB to 10 GB. Pretty sweet!

## Open Hyperlinks in Formula Fields Correctly

As mentioned in the Spring '19 release notes, this critical update addresses an issue when opening hyperlinks in formula fields. If you have formula fields that contain a HYPERLINK function, Lightning Experience ignores the target value when attempting to open the link. This critical update ensures that the target value for hyperlinks is honored, whether it's explicitly configured or set by default. This critical update is enabled in Summer '19 on May 17, 2019.

## Update to Retention Limit for Field History Data

Salesforce guarantees to retain your field history data for up to 18 months through your org, and up to 24 months via the API. As announced in Winter '19, starting in Spring '19, we begin the process of removing field history data older than 24 months. Because of the rolling nature of mass deletes, the data might still be available for some time after Spring '19.

# Lightning Experience Adoption: More Ways to Discover and Adopt the New Salesforce

To make it easier to transition to Lightning Experience, we created a central hub for all of the recommended steps. Show Salesforce prompts that recommend Lightning Experience in sandbox environments, instead of only seeing these prompts in production orgs. Guide your users with custom help in the redesigned help menu.

## IN THIS SECTION:

## Drive Your Lightning Experience Transition from One Place

We're making it easier for you to move your company to Lightning Experience. Starting in early 2019, the Lightning Experience Transition Assistant is your central hub for *all* of the recommended steps for a successful transition. It guides you through the entire process—from building a business case, evaluating your org's readiness, and preparing your implementation to launching Lightning Experience, tracking user adoption, and, ultimately, to turning off Salesforce Classic. The Transition Assistant replaces the current Lightning Experience Migration Assistant.

## Some Features in the Lightning Experience Migration Assistant are Renamed

We've modified the names of two features in the Lightning Experience Migration Assistant: Encourage users to stay in Lightning Experience and Keep Lightning Experience users in Lightning Experience only.

## Turn On Lightning Experience (Critical Update)

Salesforce will turn on Lightning Experience on a rolling basis starting in Winter '20 to empower users to move faster, do more, and be more productive. We encourage everyone to start preparing to transition to Lightning Experience soon so that your users can benefit from everything the new interface has to offer. The future of the Salesforce user experience and platform is Salesforce Lightning. Moving forward, all innovations will be in Lightning Experience. Take advantage of the lead time before Lightning Experience is turned on to understand how your org's features and customizations perform in the new interface and to prepare your users via change management. Start now to ensure a better experience for everyone when Lightning Experience is turned on later. Better yet, take control and turn on Lightning Experience for your users before this update is auto-activated, on your terms.

## Display Adoption Assistance Features in Sandbox Environments

During the past few releases, Salesforce has introduced in-app prompts to encourage users to try Lightning Experience. These prompts appeared only in production. Now you can control whether the prompts appear in sandbox. Test out your welcome mat before rolling it out to production. Or see how other types of in-app prompts appear to users.

## Onboarding & Assistance Is Now Adoption Assistance in Setup

The setup home for the Switch to Salesforce Classic, Try Lightning Experience, It's Better in Lightning, and Lightning Experience welcome mat in-app prompts has a new name: Adoption Assistance.

## Add Custom Resources to the Refreshed Lightning Experience Help Menu

We redesigned the Help Menu to make room for your own resources. Guide users as they work in your org with links to your own URLs to websites, PDF files, videos, or Trailhead mixes. A getting-started section helps both users and admins to get on-boarded to the new user experience. Everyone can now search for and see documentation results from within the Help Menu.

## Lightning Experience Configuration Converter: Scan and Prepare Visualforce Pages, Scan All Objects At Once

Use the Lightning Experience Configuration Converter to scan your org's Visualforce pages for issues that impact your transition to Lightning Experience, The tool gives you a prioritized report with recommendations, and automatically apply Lightning Experience stylesheets. For the JavaScript Buttons tab and Actions and Buttons tab, it's one click to scan and see all the actions and buttons for all objects. We're also introducing a way to move actions and buttons for all objects at once.

#### Give Us Feedback

Salesforce wants to hear from you! We're continually innovating based on feedback from our customers. A feedback form now appears in Lightning Experience to hear from more users. You can disable the form.

## Drive Your Lightning Experience Transition from One Place

We're making it easier for you to move your company to Lightning Experience. Starting in early 2019, the Lightning Experience Transition Assistant is your central hub for *all* of the recommended steps for a successful transition. It guides you through the entire process—from building a business case, evaluating your org's readiness, and preparing your implementation to launching Lightning Experience, tracking user adoption, and, ultimately, to turning off Salesforce Classic. The Transition Assistant replaces the current Lightning Experience Migration Assistant.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

When: The Transition Assistant is available the first quarter of 2019, sometime after the Spring '19 release is completed.

**Who:** To use the Transition Assistant, you must have the View Setup and Configuration and Customize Application user permissions. My Domain must be deployed in your org to use some of the tools available from the Transition Assistant.

**Why:** With the Transition Assistant as your guide, you can keep organized, monitor your progress, and be confident that you aren't missing anything. It breaks things up into Discover, Roll Out, and Optimize phases for better manageability. In each phase, you get step-by-step directions and tools that speed up many transition tasks. Stay tuned for more details!

# Some Features in the Lightning Experience Migration Assistant are Renamed

We've modified the names of two features in the Lightning Experience Migration Assistant: Encourage users to stay in Lightning Experience and Keep Lightning Experience users in Lightning Experience only.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

How: The Encourage users to stay in Lightning Experience feature is now called Switch users to Lightning Experience on a regular schedule.

The **Keep Lightning Experience users in Lightning Experience only** feature is now called **Make Lightning Experience your org's only experience**.

The buttons for controlling these features are now labeled **Off** and **On** instead of **Disabled** and **Enabled**.

## Turn On Lightning Experience (Critical Update)

Salesforce will turn on Lightning Experience on a rolling basis starting in Winter '20 to empower users to move faster, do more, and be more productive. We encourage everyone to start preparing to transition to Lightning Experience soon so that your users can benefit from everything the new interface has to offer. The future of the Salesforce user experience and platform is Salesforce Lightning. Moving forward, all innovations will be in Lightning Experience. Take advantage of the lead time before Lightning Experience is turned on to understand how your org's features and customizations perform in the new interface and to prepare your users via change management. Start now to ensure a better experience for everyone when Lightning Experience is turned on later. Better yet, take control and turn on Lightning Experience for your users before this update is auto-activated, on your terms.

**Where:** This change applies to Group, Developer, Professional, Enterprise, Performance, and Unlimited editions for orgs that don't yet have Lightning Experience turned on yet.

When: This update starts appearing under Critical Updates on January 28, 2019. The update begins auto-activating on October 12, 2019.

**Who:** All users with the Lightning Experience User permission enabled are affected by this critical update. This includes all users with standard profiles and users with custom profiles or permission sets that have the Lightning Experience User permission enabled by an admin. In Salesforce Classic, users see two options to switch to Lightning Experience: a link to switch to Lightning Experience appears in the header and in the user profile menu.

To encourage everyone to work in Lightning Experience, users working in Salesforce Classic are switched to Lightning Experience on a weekly basis. Users can switch between Salesforce Classic and Lightning Experience from the user profile menu.

**How:** From Setup, enter *Critical Updates* in the Quick Find box and then select **Critical Updates**. For Turn on Lightning Experience, click **Review**. When you're ready to turn on Lightning Experience, you can **Activate** the update either in Critical Updates or Lightning Experience in setup.

Salesforce is here to help.

- Learn more about this critical update in the Turn on Lightning Experience (Critical Update) FAQ Knowledge article.
- Read through the recommended transition tools that automate and speed up the process in the Journey to Lightning Experience Learning Map.
- Check out the Lightning Now Trailblazer Community to get answers from Lightning Experience experts and to collaborate with the Salesforce Ohana.

## Display Adoption Assistance Features in Sandbox Environments

During the past few releases, Salesforce has introduced in-app prompts to encourage users to try Lightning Experience. These prompts appeared only in production. Now you can control whether the prompts appear in sandbox. Test out your welcome mat before rolling it out to production. Or see how other types of in-app prompts appear to users.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** From setup in Lightning Experience, enter *Adoption Assistance* in the Quick Find box, then select **Adoption Assistance**. Select **Display Adoption Assistance in Sandbox**.

If you have automation running in sandbox, turning on the adoption assistance feature might impact your automated tests.

SEE ALSO:

Salesforce Help: Encourage Users to Work in Lightning Experience (can be outdated or unavailable during release preview)

## Onboarding & Assistance Is Now Adoption Assistance in Setup

The setup home for the Switch to Salesforce Classic, Try Lightning Experience, It's Better in Lightning, and Lightning Experience welcome mat in-app prompts has a new name: Adoption Assistance.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** From setup in Lightning Experience, enter *Adoption Assistance* in the Quick Find box, then select **Adoption Assistance**. You can also search for *Onboarding & Assistance* to see the sub pages **Adoption Assistance** and **Help Menu**.

SEE ALSO:

Salesforce Help: Encourage Users to Work in Lightning Experience (can be outdated or unavailable during release preview)

## Add Custom Resources to the Refreshed Lightning Experience Help Menu

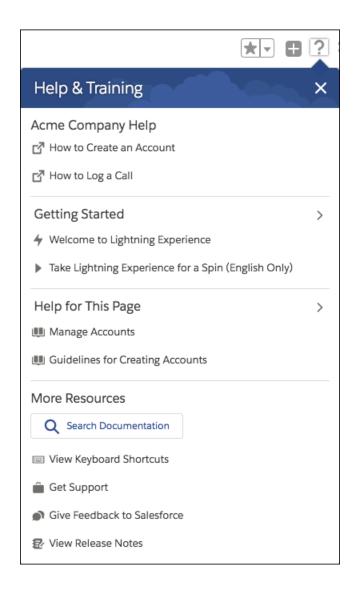
We redesigned the Help Menu to make room for your own resources. Guide users as they work in your org with links to your own URLs to websites, PDF files, videos, or Trailhead mixes. A getting-started section helps both users and admins to get on-boarded to the new user experience. Everyone can now search for and see documentation results from within the Help Menu.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The Help Menu is a one-stop shop for learning journeys, getting-started tips, contextual help topics—and now resources you've created for your org's users.

The Help Menu has four main sections. You can add links only to the Custom Help section.

- **Custom Help**—If you choose to add this section, it appears at the top of the Help Menu on every page in Lightning Experience. You can name the section and decide which resources to display.
- **Getting Started**—Resources to help users and admins get up and running in Lightning Experience. Different resources are shown to users and admins. As you read the suggested resources, more topics are rotated to the top of the list, so you're continually learning something new.
- **Help for This Page**—Page-relevant assistance for when users have a question while working. If there's no suggested resources for the page, the section is hidden.
  - Note: Trailhead modules recommended by Salesforce appear in both Getting Started and Help for This Page. The Learn More with Trailhead section available in previous releases was removed to avoid duplication.
- **More Resources**—Links to keyboard shortcuts and feedback are shown to everyone. Admins also see links to support and release notes. Everyone can search for Salesforce documentation in the Help Menu, see top results, and read topics without leaving the app.
  - Note: Search Salesforce Help, available in previous releases, was removed to add the ability to search documentation inside the Help Menu.



**How:** From Setup in Lightning Experience, enter Help Menu in the Quick Find box, then select **Help Menu**. Name your custom help section, and then add up to 15 resources. Turn on **Customize the Help Menu** so that users see the resources.

If you want, you can hide Salesforce resources. Turn off **Show Salesforce Help Content to Users**. The Getting Started section, the Help for This Page section, and the ability to search Salesforce documentation are hidden. The links to keyboard shortcuts and feedback to Salesforce are always displayed. As an admin, you always see all resources.

#### SEE ALSO:

Salesforce Help: Define Custom Help for the Lightning Experience Help Menu (can be outdated or unavailable during release preview)
Salesforce Help: Find Help in Lightning Experience (can be outdated or unavailable during release preview)

# Lightning Experience Configuration Converter: Scan and Prepare Visualforce Pages, Scan All Objects At Once

Use the Lightning Experience Configuration Converter to scan your org's Visualforce pages for issues that impact your transition to Lightning Experience, The tool gives you a prioritized report with recommendations, and automatically apply Lightning Experience stylesheets. For the JavaScript Buttons tab and Actions and Buttons tab, it's one click to scan and see all the actions and buttons for all objects. We're also introducing a way to move actions and buttons for all objects at once.

## IN THIS SECTION:

## Prepare Visualforce Pages for Lightning Experience with the Lightning Experience Configuration Converter (Beta)

The new Visualforce tab in the Lightning Experience Configuration Converter scans your org's Visualforce pages for issues that may affect your transition to Lightning Experience. It groups pages by profiles and prioritizes necessary fixes by highest user impact and lowest level of effort. If the tool can't resolve detected issues, you get instructions on how to fix things yourself. You can also use the tool to restyle most pages for the new interface by automatically applying the Lightning Experience stylesheets. The Visualforce tab in the Configuration Converter replaces the Visualforce Check in the Lightning Experience Readiness Check.

## Convert and Move Faster in the Lightning Experience Configuration Converter

Tired of selecting which objects to scan for the latest information on JavaScript buttons and actions? Instead, get the full picture by scanning each tab for relevant metadata from all objects. Moving actions and buttons one object at a time getting you down? Move them all, for all objects, all at once!

## SEE ALSO:

Salesforce Help: Lightning Experience Configuration Converter

# Prepare Visualforce Pages for Lightning Experience with the Lightning Experience Configuration Converter (Beta)

The new Visualforce tab in the Lightning Experience Configuration Converter scans your org's Visualforce pages for issues that may affect your transition to Lightning Experience. It groups pages by profiles and prioritizes necessary fixes by highest user impact and lowest level of effort. If the tool can't resolve detected issues, you get instructions on how to fix things yourself. You can also use the tool to restyle most pages for the new interface by automatically applying the Lightning Experience stylesheets. The Visualforce tab in the Configuration Converter replaces the Visualforce Check in the Lightning Experience Readiness Check.

Important: As a beta feature, the Visualforce Pages feature in the Lightning Experience Configuration Converter is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Visualforce Pages in the Lightning Exp Configuration Converter Trailblazer Community.

**Where:** This tool is available in Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

When: This feature is available in January 2019.

**Who:** The Visualforce Pages feature requires the Customize Application and Modify All Data permissions.

**How:** The Lightning Experience Configuration Converter is a standalone tool that lives outside of Salesforce. We recommend that you run it in a sandbox or Developer org first, and then migrate your changes to your production org. To get started, visit <a href="https://lightning-configuration.salesforce.com/">https://lightning-configuration.salesforce.com/</a> and log in with your org credentials.

## Convert and Move Faster in the Lightning Experience Configuration Converter

Tired of selecting which objects to scan for the latest information on JavaScript buttons and actions? Instead, get the full picture by scanning each tab for relevant metadata from all objects. Moving actions and buttons one object at a time getting you down? Move them all, for all objects, all at once!

Where: This change applies to Lightning Experience in Professional, Enterprise, Unlimited, and Developer editions.

When: These changes will be made available on a rolling basis starting in early 2019.

**Why:** We've been listening to your feedback about the Lightning Experience Configuration Converter. The next iteration of the tool gives you a full view of your org and saves you time when making the necessary changes.

- We replaced the settings, user impact, and refresh buttons with **Scan for JavaScript Buttons** and **Scan for Actions and Buttons**. When you scan, the tool analyzes all relevant metadata for the tab for all objects. The user impact information is also calculated. While the scan takes place, you can't work in the other tabs. Salesforce sends you an email when the scan is finished. When you're back in the tool, you're greeted with an updated list of all the tab's items.
- Instead of moving buttons for one object at time, you can move actions and buttons for all supported objects at once. As part of this shortcut, we still remove the Mobile Smart Actions bundle and create the missing record types. To review what we're going to update, select one or more objects, then click **Move Selected**. While the move takes place, you can't work in the other tabs. You get an email when the move is finished.
- Important: As a beta feature, the Actions and Buttons feature in the Lightning Experience Configuration Converter is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Actions and Buttons in the Lightning Exp Configuration Converter Trailblazer Community.

**How:** The Lightning Experience Configuration Converter is a standalone tool that lives outside of Salesforce. We recommend that you run it in a sandbox or Developer org first, then migrate your changes to your production org. To get started, visit <a href="https://lightning-configuration.salesforce.com/">https://lightning-configuration.salesforce.com/</a> and log in with your org credentials.

SEE ALSO:

Salesforce Help: Lightning Experience Configuration Converter (can be outdated or unavailable during release preview)

## Give Us Feedback

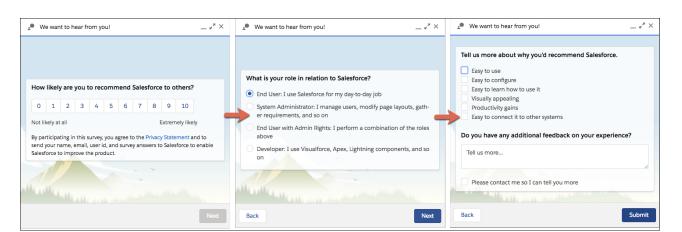
Salesforce wants to hear from you! We're continually innovating based on feedback from our customers. A feedback form now appears in Lightning Experience to hear from more users. You can disable the form.

**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

When: This change takes effect in March 2019.

**Who:** We display the form to a random subset of users in each org to get a broad range of responses.

**Why:** The form appears at the bottom of the app. Users can complete or close the form.



**How:** To disable the form, go to setup in Lightning Experience, enter *Adoption Assistance* in the Quick Find box then select **Adoption Assistance**. Deselect **Salesforce Product Feedback Form**.

SEE ALSO:

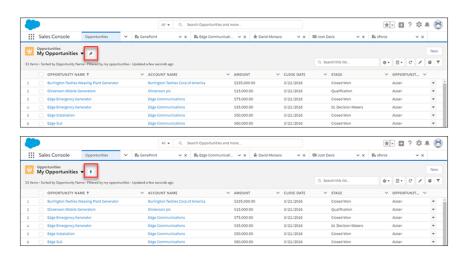
Salesforce Help: Salesforce Product Feedback Form (can be outdated or unavailable during release preview)

## Jump Right into Your Most Important List View with Pinned Lists

Do you have a go-to list view that you want to load as your default list? Now you can. With pinned lists, all users can make any list their new default.

**Where:** This change applies to Lightning Experience for Essential, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions

**How:** To pin an unpinned list, click its pin icon. To pin a different list, select the list view and pin it instead. The default pinned list for all objects is Recently Viewed.



SEE ALSO:

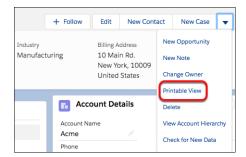
Salesforce Help: Pin List Views in Lightning Experience (can be outdated or unavailable during release preview)

# Print a Record Page

Print key details and related lists from a record page in Lightning Experience, just as in Salesforce Classic. Specify record details visibility on the printable page and print the page from the browser. This feature is available for all users, for Account, Campaign, Case, Contact, Contract, Lead, Opportunity, Order, and custom objects.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, and Unlimited editions.

**How:** On a record home page, click **Printable View**. The sections and fields on the printable view reflect the current user's page layout. The related lists reflect the current user's related list preferences.



The printable view opens with the record details expanded or collapsed, based on visibility on the record home page. You can change visibility for all record details or for individual detail sections. Related lists are visible in printable view, and you can't modify their visibility for printing.



Admins can remove the **Printable View** button from the record page layout in the Page Layout Editor to disable the feature.

## Lightning Scheduler: Simplifying Appointment Scheduling

Lightning Scheduler gives you the tools you need to simplify appointment scheduling.

## IN THIS SECTION:

## Create Personalized Appointments with Lightning Scheduler

Delight your customers and prospects by scheduling appointments with the right person at the right time and place. Use Lightning Scheduler to quickly set up appointments within standard Salesforce workflows, such as leads and referrals, opportunities, and accounts. And with greater visibility into appointments, you can assign resources more efficiently and better address customer needs.

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Where: This feature is available for an extra cost in Enterprise and Unlimited editions.

Why: Here are some of the things you can do with Lightning Scheduler.

- Create records that represent your employees, and add details about their skills, locations, and availability.
- Define office locations and operating hours.
- Create appointment topics, such as account opening or mortgage application.
- Search for employees with the right skills for an appointment, including certifications and areas of expertise.
- Schedule customer appointments, and add details about required attendees.

**How:** Assign the relevant permissions and set up service resources and territories.

#### SEE ALSO:

**New Objects** 

Salesforce Help: Manage Appointments with Lightning Scheduler (can be outdated or unavailable during release preview)

Personalize Customer Appointments with Lightning Scheduler

Personalize Patient and Member Appointments with Lightning Scheduler

# Salesforce Surveys: Going Global and More Insight with New Question Types

You can now translate your surveys, include different question types, generate targeted survey invitations, create custom reports, and set expiration dates for invitations.

## IN THIS SECTION:

#### Translate Your Surveys

Speak your customers' language. Connect with your global audience by translating your surveys in more than 10 languages. Your org participants automatically view a survey in their default language. Participants outside of your org can choose from a list of languages in which the survey has been translated.

## Gain Insight from Your Customers with New Question Types

Take advantage of two new question types to gather more refined data from your customers. The Net Promoter Score® (NPS®) question type assesses your customers' loyalty for your products and services. Use the Ranking question type to gauge your participants' preferences from a list of choices.

Create Custom Reports for Net Promoter Score®, Ranking, Rating, Scoring, and Slider Question Types

Create custom reports about participant responses for Net Promoter Score®, ranking, rating, scoring, and slider question types.

Generate Survey Invitations for Contacts and Person Accounts

Broaden your survey scope. You can now generate a customized survey invitation for a contact or a person account directly from the record.

Set an Expiration Date for a Survey Invitation

Decide the exact date when you want a survey invitation to expire. You can revise the expiration date at any point of the invitation's life cycle.

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Speak your customers' language. Connect with your global audience by translating your surveys in more than 10 languages. Your org participants automatically view a survey in their default language. Participants outside of your org can choose from a list of languages in which the survey has been translated.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

**Who:** Translators in your org who have Translation Workbench permissions can translate surveys in the languages they have permissions for

**How:** Survey records now have a Language tab where translators can view and translate surveys in the languages they have permissions for.

SEE ALSO:

Translate Your Surveys

# Gain Insight from Your Customers with New Question Types

Take advantage of two new question types to gather more refined data from your customers. The Net Promoter Score® (NPS®) question type assesses your customers' loyalty for your products and services. Use the Ranking question type to gauge your participants' preferences from a list of choices.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

**How:** In the Survey Builder, click the **Add Question** dropdown to add the new question types to your survey.

SEE ALSO:

Survey Question Types

# Create Custom Reports for Net Promoter Score®, Ranking, Rating, Scoring, and Slider Question Types

Create custom reports about participant responses for Net Promoter Score®, ranking, rating, scoring, and slider question types.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

**Who:** Admins can create and view custom reports about survey responses. Survey owners and survey invitation owners can create custom reports for surveys or invitations that they own. Admins, survey owners, and survey invitation owners can share their custom reports with others.

SEE ALSO:

Create a Custom Report Type to View Specific Responses

## Generate Survey Invitations for Contacts and Person Accounts

Broaden your survey scope. You can now generate a customized survey invitation for a contact or a person account directly from the record.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

**How:** On a contact or person account record, click **Get Survey Invitation**.

SEE ALSO:

Generate Individual Survey Invitations for Contacts and Person Accounts

## Set an Expiration Date for a Survey Invitation

Decide the exact date when you want a survey invitation to expire. You can revise the expiration date at any point of the invitation's life cycle.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

**How:** You can set an expiration date on the survey invitation record or when generating a survey invite in the Survey Builder or for a contact or person account.

SEE ALSO:

Set Expiration Dates for Your Survey Invitations

## Lightning Console Apps: Pop-Out Utilities, Subtab Options, and API Parity

Spread your workflow across multiple windows with pop-out utilities. Customize your subtabs, and promote them to workspace tabs. Change tab colors, and edit browser tab titles with new API methods.



**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, aren't available in Lightning console apps. Learn more.

## IN THIS SECTION:

## Open a Window into Productivity with Pop-Out Utilities (Critical Update)

Pop utilities out of the utility bar and into their own separate windows. You can arrange popped-out utilities, even move them onto different monitors. You can interact with a popped-out utility alongside your main window, making multitasking a breeze. When you're done using the utility, pop it back into your utility bar or close the window.

## Manage Your Workspace with New Subtab Options

The subtab has received a long-deserved promotion! If you're working on a subtab and need more space, you can promote a subtab to a workspace tab. You can also refresh an individual subtab, and customize its titles and icons.

## Use Two-Region Page Templates for Your Console Apps

Are three regions more space than you actually need? We added two two-region page templates for console apps: Console: Pinned Left Sidebar (2 regions), and Console: Pinned header and Left Sidebar (2 regions).

## Use Lightning Web Components in the Utility Bar

Bring modern, blazing-fast Lightning web components (LWC) into the utility bar by adding the lightning\_\_UtilityBar target to your LWC's meta configuration. LWC utilities don't yet support APIs or being used as background utility items.

## Set Tab Colors, Disable Utility Pop-Out, and Edit Browser Tab Titles with Lightning Console JavaScript APIs

Set tab colors, disable utility pop-out, and edit browser tab titles. With these new methods, the Lightning Console JavaScript API is now at parity with the most used methods and events of the classic Salesforce Console Integration Toolkit API.

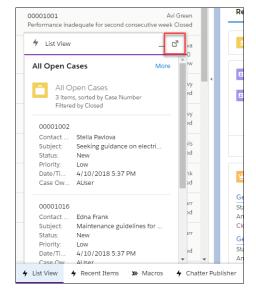
## Open a Window into Productivity with Pop-Out Utilities (Critical Update)

Pop utilities out of the utility bar and into their own separate windows. You can arrange popped-out utilities, even move them onto different monitors. You can interact with a popped-out utility alongside your main window, making multitasking a breeze. When you're done using the utility, pop it back into your utility bar or close the window.

**Where:** This change applies to Lightning Experience for Essentials, 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.

**When:** Pop-out is automatically available for most standard utilities in Spring '19. The critical update enables pop-out for custom utilities. This critical update will be activated for custom utilities on June 17, 2019. If a custom utility isn't ready to pop just yet, or if you never want users to be able to pop it out, you can disable pop-out per utility.

How: In the utility bar, open a utility and then click the pop-out icon to open the utility in its own window.



You can pop out these standard utilities.

- Open CTI Softphone
- History
- Rich Text

- Report Chart
- Visualforce
- Flow
- List View
- Recent Items
- Chatter Feed
- Chatter Publisher

## SEE ALSO:

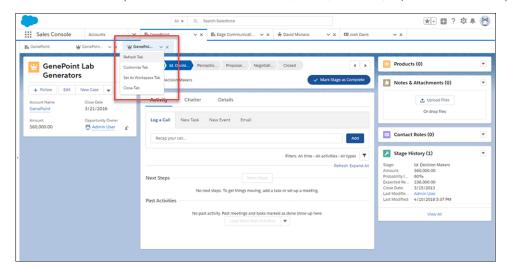
Salesforce Console Developer Guide: Using Pop-Out Utilities (can be outdated or unavailable during release preview)

## Manage Your Workspace with New Subtab Options

The subtab has received a long-deserved promotion! If you're working on a subtab and need more space, you can promote a subtab to a workspace tab. You can also refresh an individual subtab, and customize its titles and icons.

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**How:** Use the new dropdown menu on a subtab to close, refresh, customize, or promote it to a workspace tab.



# Use Two-Region Page Templates for Your Console Apps

Are three regions more space than you actually need? We added two two-region page templates for console apps: Console: Pinned Left Sidebar (2 regions), and Console: Pinned header and Left Sidebar (2 regions).

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SEE ALSO:

Lightning Web Components (Generally Available)

# Set Tab Colors, Disable Utility Pop-Out, and Edit Browser Tab Titles with Lightning Console JavaScript APIs

Set tab colors, disable utility pop-out, and edit browser tab titles. With these new methods, the Lightning Console JavaScript API is now at parity with the most used methods and events of the classic Salesforce Console Integration Toolkit API.

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SEE ALSO:

Lightning Console JavaScript API

Get Notified About Unsaved Changes

*Salesforce Console Developer Guide*: Classic Console API Methods Supported in the Lightning Console API (can be outdated or unavailable during release preview)

# Use Thanks Badges in Lightning Experience (Pilot)

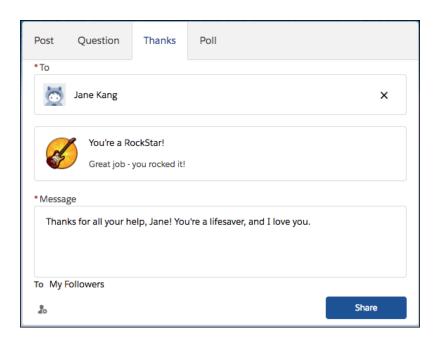
Sing your praises from the mountaintops, or at least from your Chatter feed. Thanks badges are now available in Lightning Experience. Let your coworkers know how much you value them with our suite of thanks badges.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.



**Note:** As a pilot feature, Thanks Badges in Lightning is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time without liability to you. This feature is for evaluation purposes only. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. To use the Thanks Badges in Lightning feature, contact Salesforce Customer Support.

**Why:** Chatter users can now give thanks from a user's profile, a record, or a group in Lightning Experience. Giving thanks is as easy as it is in Salesforce Classic. Click the **Thanks** tab from a Chatter feed, and then enter the badge details.



Create and manage badges in Salesforce Classic. Lightning Experience doesn't support reward badges.

**How:** Contact Salesforce Customer Support to enable the Thanks pilot. After you're enrolled, you can access Thanks settings in Salesforce Classic. From Setup, enter *Work.com* in the Quick Find box, and then select **Work.com Settings**.

SEE ALSO:

IdeaExchange: Thanks and Links in Lightning Experience (can be outdated or unavailable during release preview)

# Search: More Searchable Objects

Find results for more objects in Salesforce Classic and Lightning Experience.

IN THIS SECTION:

## Get Search Results for More Objects

The Account Brand, Account Relationship, Contact Point Type Consent, Data Use Legal Basis, Data Use Purpose, and Work Type Group objects are now searchable. The Calendar object is searchable via lookup search in Lightning Experience.

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The Account Brand, Account Relationship, Contact Point Type Consent, Data Use Legal Basis, Data Use Purpose, and Work Type Group objects are now searchable. The Calendar object is searchable via lookup search in Lightning Experience.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

SEE ALSO:

Salesforce Help: Searchable Fields by Object in Salesforce Classic (can be outdated or unavailable during release preview)
Salesforce Help: Searchable Fields by Object in Lightning Experience (can be outdated or unavailable during release preview)

# **Enjoy Increased Data Storage**

The calculation for data storage is changing. We are increasing the minimum storage from 1 GB to 10 GB. Pretty sweet!

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, and Unlimited editions.

When: Orgs will begin to see the increase starting in late March 2019.

**How:** For example, if you have Professional or Unlimited Editions with 10 users, the following shows how your storage is calculated. For other editions, see the user license allotments that you receive, including add-on licenses.

Edition	Before Spring '19	After Spring '19
Professional	10 users * 20 MB per user, for 200 MB. Round up to 1 GB total data storage.	10 users * 20 MB per user, for 200 MB + 10 GB. 10.2 GB total data storage.
Unlimited	10 users * 120 MB, for 1.2 GB total data storage.	10 users * 120 MB, for 1.2 GB + 10 GB. 11.2 GB total data storage.

# Open Hyperlinks in Formula Fields Correctly

As mentioned in the Spring '19 release notes, this critical update addresses an issue when opening hyperlinks in formula fields. If you have formula fields that contain a HYPERLINK function, Lightning Experience ignores the target value when attempting to open the link. This critical update ensures that the target value for hyperlinks is honored, whether it's explicitly configured or set by default. This critical update is enabled in Summer '19 on May 17, 2019.

Where: This change applies to Lightning Experience and the Salesforce app in all editions.



**Note:** If your org displays an auto-activation date of January 10, 2019, ignore it. This date was the original activation date for the critical update before it was postponed. When your org updates to the Spring '19 release, the displayed auto-activation date will be correct.

**How:** From Setup, enter *Critical Updates* in the Quick Find box. Then select **Critical Updates**. For Lightning Experience Honors Target Values for Hyperlinks in Formula Fields, click **Acknowledge**.

## Update to Retention Limit for Field History Data

Salesforce guarantees to retain your field history data for up to 18 months through your org, and up to 24 months via the API. As announced in Winter '19, starting in Spring '19, we begin the process of removing field history data older than 24 months. Because of the rolling nature of mass deletes, the data might still be available for some time after Spring '19.

Where: This policy applies to all orgs created after June 1, 2011 who have not purchased the Field Audit Trail (FAT) add-on.



Note: If your org was created before June 1, 2011, Salesforce commits to retain your field history beyond the 18-month limit.

**How:** When field history data reaches the 18-month limit, Salesforce retains it for 6 more months, but the data is accessible only via Data Loader using Export All or the queryAll() API. After Salesforce deletes data, you can't use the getDeleted() API to retrieve it.

To guarantee that you can access your field history data, purchase the FAT add-on. FAT lets you define a policy to retain archived field history data up to 10 years from the time the data was archived. To purchase FAT, contact your Salesforce Account Executive. For help retrieving your field history before it's deleted, contact Salesforce Customer Support.

#### SEE ALSO:

Winter '19 Release Notes: Retention Limit for Field History Data Is Now Enforced

Salesforce Help: Field History Tracking Salesforce Help: Field Audit Trail

Salesforce Help: Export Data with Data Loader

Developer Guide: queryAll() API

# Lightning Experience: A Modern and Intelligent User Experience

Lightning Experience is a completely reimagined interface. Even better, it's built on the Lightning Platform, so the experience can grow and evolve with your needs.

#### IN THIS SECTION:

## Lightning Experience Features in This Release

Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Check out the new features and considerations in this release.

What's Different or Not Available in Spring '19 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.

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Lightning Experience is a completely reimagined interface. Even better, it's built on our UI platform, so the experience can grow and evolve with your needs. Check out the new features and considerations in this release.

Lightning Experience: A Modern and Intelligent User Experience

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Jump Right into Your Most Important List View with Pinned Lists

Print a Record Page

Lightning Console Apps: Pop-Out Utilities, Subtab Options, and API Parity

Use Thanks Badges in Lightning Experience (Pilot)

Enjoy Increased Data Storage

Open Hyperlinks in Formula Fields Correctly

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Some Features in the Lightning Experience Migration Assistant are Renamed

Turn On Lightning Experience (Critical Update)

Display Adoption Assistance Features in Sandbox Environments

Onboarding & Assistance Is Now Adoption Assistance in Setup

Add Custom Resources to the Refreshed Lightning Experience Help Menu

Lightning Experience Configuration Converter: Scan and Prepare Visualforce Pages, Scan All Objects At Once

Give Us Feedback

## Lightning Scheduler: Simplifying Appointment Scheduling

Create Personalized Appointments with Lightning Scheduler

## Salesforce Surveys: Going Global and More Insight with New Question Types

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Create Custom Reports for Net Promoter Score®, Ranking, Rating, Scoring, and Slider Question Types

Generate Survey Invitations for Contacts and Person Accounts

Set an Expiration Date for a Survey Invitation

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Get Search Results for More Objects

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Add or Reduce Users to Reflect Your Changing Team

Manage Your Team's Information and Permissions on the Users Page

Create a Call Center with the Voice Support Setup Flow

Get to Know Leads and Opportunities in the Sales Stages Setup Flow

## Sales

High Velocity Sales: Accelerating Your Sales Team with Sales Cadences and Work Queues

Sales Cloud Einstein: Opportunity Scoring for All Users, Big Improvements to Einstein Activity Capture, and More Reporting

Lightning Data: Refresh Data Automatically

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Enterprise Territory Management: Territory-Based Sharing Options and Enhancements to Territory Forecasts

Accounts: Account Team Removal, Related Records Transfer to New Owner

Opportunities: Remove a Team in Lightning Experience

Other Changes in Core Sales Features

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Activities and Tasks: Streamlined Event Creation and Closure

Lightning Dialer: Track the Result of Each Call

Salesforce Inbox App: Lightning Experience Templates, Android Notifications, Compound Email Insights

Notes: Say Goodbye to Unsafe Characters in Notes

Calendar: More Ways to Stay Organized in Lightning Experience

## Integration with Google

Gmail Integration: Combined Chrome Extension, High Velocity Sales Work Queue, and More Email Logging Options

Lightning Sync: See Attendee Changes Made Through the API on Google Calendars

## Integration with Microsoft®

 $Outlook\ Integration: High\ Velocity\ Sales\ Work\ Queue, More\ Logging\ Options, and\ Two-Factor\ Authentication\ and\ Outlook\ 2019\ Support\ Noveloop Control of Control of$ 

Lightning Sync for Microsoft® Exchange: Event Series Sync (Generally Available) and Attendee Sync Improvements

Salesforce for Outlook: More Cloud-Based Alternatives and the Latest Installable Version

## Salesforce CPQ and Billing: Expanded Invoicing, Amendment Options, and Consumption Schedules for Usage Summaries

Salesforce CPQ: Consumption Schedules for Usage Summaries and More Amendment Options

Salesforce Billing: New Invoicing Options for Usage Summaries and Evergreen Subscriptions

#### **Pardot**

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Set Up B2B Marketing Analytics with Ease

Score Prospects on Engagement Activity

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Save Agents Time and Improve Accuracy and Completion with Einstein Case Classification

Evaluate How Well Your Bots Understand Your Customers

Make Your Bots Smarter with Customer Input Classification and Feedback

Put Your Bots to Work on Your SMS Text Messaging Channel

Set Up Einstein Bots More Easily with Channel Settings in the Bot Builder

**Build Channel-Independent Bots** 

Check Out the Improved Bots Performance Dashboard

Get to Know Our New Bots Terminology

Suggest the Right Recommendations with Einstein Next Best Action (Generally Available)

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Manage Service Crews Faster (Beta)

**Customize Service Appointment Feed Preferences** 

Filter Faster in the Gantt

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Create Work Order Line Items for Each Asset in a Maintenance Plan

Create Service Appointments for Leads

Create Your Own Icons for the Gantt

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View Absences in the Multiday View

Enjoy Improved Field Service Help Content

Field Service Mobile App: Welcome to Version 5.0

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Embrace the Future with the Lightning Knowledge Migration Tool (Generally Available)

Manage Your Articles with Lightning Experience Actions

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View Related Files on Articles in Communities

Embed Ooyala Videos in Knowledge Articles

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Communities: Let Your Customers Request a Call from Support

Chat: Expanded Transcript Access and Skills-Based Routing

Phone: Softphone Pop-Out and a Guided Setup Flow for Open CTI

Social Customer Service: Duplicate Facebook Message Prevention and Merged Records with Social Personas and Social Posts

Snap-Ins for Mobile Apps: Give Customers a Richer Chat Experience

Snap-Ins for Web: Queue Positions for Transfers, Chat Conferences, and Updated Post-Chat

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Service Console: More Convenience for Admins, Agents, and Customers

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Omni-Channel: Skills-Based Routing for Chats and Texts, Routing for Contact Requests, Enhancements to Omni Supervisor, and

Attribute-Based Routing (Beta)

Agent Productivity: Relative Dates and Close Tab for Macros

Lightning Scheduler: Simplify Appointment Scheduling

## **Other Changes**

Set Up Offline Support and Related Records in the Live Agent Setup Flow

Get IoT in Service Cloud Unlimited Edition for Better Customer Service

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Dashboards: 12-Column Layouts, Formula Columns in Lightning Tables, Compact Metric Components

Subscriptions: Report and Dashboard Subscriptions for Users, Groups, and Roles

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Analytics Intelligence: Einstein Data Insights (Generally Available), Einstein Discovery Enhancements

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Analytics for End Users: Studio Walkthrough, Video Playlists, Mobile Apps

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Move Feed Items for Best Placement

Help Your Members Stay on Topic

Get More with of CMS for Community Cloud (Beta)

Use the Files Related List for Knowledge Articles in Communities

Upvotes Impact Influence Cards and Likes Received

Template and Theme Export Enhancements

Future-Proof Your Linking with Navigation API Calls

Get Faster Page Loads in Your Community

Add Hyperlinks to Your Community Posts and Comments

Provide Search Engines with the Freshest Content Snapshots

Add Dynamic SEO Properties to More Object Detail Pages

Be in the Know About Your SEO

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Assign a Content Security Policy Level to Your Community

Avoid CSP Errors When Using CMS Connect

Discover and Resolve CSP Resource Issues

Enable Clickjack Protection More Easily in Community Builder

Restrict Community User Access to Cases (Generally Available)

See What Your Guest Users See

Set the iframeDomain Cookie in Sites and Communities in Internet Explorer

Localize Login Prompts and Error Messages for Login Discovery

Give New Users a Taste of Your Community Before They Sign Up

Create Your Own Verify Page for Community Sign-Ups

Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

## **Files in Lightning Communities**

Track Stats on the Community File Detail Page

Let Community Guest Users Upload Files

## **Other Changes in Communities**

Control Community User Visibility (Generally Available)

Create Reports on a Community's Topic Usage

Take Action in Salesforce from Analytics Dashboards

#### Chatter

Sort Selections Are Sticky

Add Hyperlinks to Your Posts and Comments

Redirect URLs Are Shorter and More Informative

Create Reports on Topics and the Posts That Use Them

#### **Files**

Update Asset Files in Managed Packages

Organize Your Asset Library with Folders

Query All Files

Embed Fully Functional Quip Documents Directly in Salesforce (Beta)

#### Financial Services Cloud

Personalize Customer Appointments with Lightning Scheduler

Get Customer Insights Fast with Financial Services Analytics

#### Customization

Permission Set Groups: Group Permission Sets Based on User Tasks for Easier Assignment (Pilot)

#### **Einstein: Next Best Action and Prediction Builder**

Einstein Prediction Builder: Enhanced Scorecard, Notifications, and New Setup Flow (Generally Available)

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

Build an Action Strategy to Produce Recommended Actions and Offers

#### **Lightning Flow**

Build Flows More Intuitively with Flow Builder

Process and Flow Design: External Data Access, Process and Flow Templates, Help-Request Flows for Communities

Flow Distribution: Recommended Flows with Next Best Action, Guided Action Deployments, and Snap-Ins that Let Guest Users Run Flows

Test Process Scheduled Actions and Flow Resume Events with Apex

#### **Salesforce Connect**

Track Data Changes to External Objects More Easily (Beta)

Connect Your Users to More External Data with Increased Hourly Limits

Validate Your Connections to External Object Data

Improved OData 2.0 Adapter for Salesforce Connect

Use External Objects in Processes and Flows

#### Related Updates for Developers

#### **Lightning App Builder**

Switch Your Lightning Page to a Different Template

Suggest Recommendations and Offers to Your Lightning Experience Users (General Availability)

Add Quip Documents Directly to Salesforce Records (Beta)

Add the Work Queue Component to Email Application Panes

Rich Text Component Uses the Quill Text Editor

Standard Lightning Page Template Labels Have Changed

Better Labels for Form Factors in Component Visibility Rules

#### **Data Protection and Privacy**

Fine-Tune Your Data Privacy Tracking with New Objects

Combine Consent API Requests into One Call with the Multiaction Endpoint

Merge Data Privacy Records in Lightning Experience

Add Demographic Information to Your Data Privacy Records

Report On Field History for Data Privacy Records

Classify Your Sensitive Data to Support Your Data Management Policies (Beta)

#### Globalization

Connect with More Customers with New Platform Languages

Get Things Right with Right-to-Left Languages (Beta)

Translation Workbench Supports Survey Translation

#### Sharing

Get New Sharing Options with Enterprise Territory Management

Improved Sharing Rules Documentation

#### **General Setup**

Create Custom Big Objects from Setup

Assign Default Home Pages Based on the Lightning App

Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning

Check a Field's References Before You Edit It (Beta)

Include Reserved Apex Names in External Services Schema

Add a Namespace Prefix to pageReference.state Properties and Query Parameters

Send the Session ID Securely in Outbound Messages

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

## Security and Identity

#### **Authentication and Identity**

Create an Identity-First Login Page with My Domain Login Discovery

Authenticate Your Users with Certificates

Localize Login Prompts and Custom Error Messages for Login Discovery

Streamline Connected App Integrations with OAuth 2.0 Endpoints (Generally Available)

OAuth 2.0 Connected App Client Secrets Require More Characters

Create Your Own Verify Page for Community Sign-Ups

Send Asynchronous Email Verifications

Create Lightweight Contactless External Identity Users (Generally Available)

View and Revoke Devices with Device Management (Beta)

Send Users to a Custom URL When They Log Out

Redirect Users to Your Website After Self-Registration

Include Even More Special Characters in Passwords

Get More Security with a Refreshed Password Blacklist

Set Session Security Policy to Secure Access to Editing Roles

Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)

#### Salesforce Shield

Shield Platform Encryption: Cache-Only Keys Generally Available, Self-Service Background Encryption, and More Compatibility Across Clouds

Event Monitoring: New Event Types for Apex Troubleshooting and Improved Transaction Policy Wizard

## Deployment

Clone, Deploy, Upload, and Validate Change Sets with Fewer Clicks

New and Changed Components for Change Sets

#### Salesforce IoT

Improve Customer Experience with IoT in Service Cloud Unlimited Edition

Enjoy an Easier Setup Process for Creating Contexts

Show Your Salesforce IoT Data in Field Service Lightning Mobile for Android

## Development

Lightning Components: Introducing Lightning Web Components

Visualforce: Show a Toast in JavaScript, Improved Component Compatibility, and Postponed Critical Update

Apex

API

Custom Metadata: Configure Default Field Values with Custom Metadata Types

Salesforce CLI: Pre-Release Version, Salesforce Plug-In Generator

Salesforce Extensions for VS Code: Lightning Web Component Support, Upcoming Force.com IDE Retirement

#### **AppExchange Partners**

Package Pre-Built Business Processes That Subscribers Can Open and Build Upon

Package Inactive Processes and Flows

Support for Trialforce Web Forms Is Ending

#### **Enterprise Messaging**

Keep Your External Data Up to Date with Change Data Capture (Generally Available)

Scale Your Event-Based Apps with High-Volume Platform Events (Generally Available)

Monitor Your Standard-Volume Platform Event Usage

New Status Codes for Event Publishing Failures

Subscribe to Standard Platform Events in Processes and Flows

#### Sandboxes

Save Time by Cloning Sandboxes (Generally Available)

Simpler Format for User Email Addresses in Sandboxes

#### **New and Changed Items for Developers**

Lightning Components: New and Changed Items

Apex: New and Changed Items

API: New and Changed Items

Salesforce CLI: New and Changed Commands

Dev Hub: New Limited Access License

Scratch Orgs: Configurable Salesforce Environments

#### **Doc Content**

Build Your Own Salesforce CLI Plug-Ins with a New Developer Guide

Outlook and Gmail Integration Content Added

Watch Videos (English Only)

## What's Different or Not Available in Spring '19 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.



**Note**: To see the full list of feature gaps and limitations in Lightning Experience for the previous release, check out "What are the Gaps Between Lightning Experience and Salesforce Classic" in the Salesforce Help.

## **Productivity**

#### **Calendar Views**

In the event preview, type, time, duration, attendees, and email aren't visible.

For public, resource, and other user's calendar events, you can see the subject, start time, and end time in the event preview detail but not other fields added to the compact layout.

#### **Event Series**

- If you enabled platform encryption for Event Description, event series created during Winter '19 aren't automatically encrypted. To encrypt series created during Winter '19, edit the event series. Events that are updated to fall outside the series pattern aren't encrypted with the series. To encrypt these exceptions to the series, edit the individual occurrence.
- You can add related files and notes to individual events in a series but not the series as a whole.
- If you create a series in Lightning Experience, you can't update or delete the series from Salesforce Classic.
- You can't edit the start date of a series. Instead, delete the series and recreate it with a new start date.
- You can't edit the series from events that fall outside of the series pattern.
- If you edit the following fields for an event series, events that fall outside of the series pattern are updated along with the series. Previous changes to those events aren't kept.
  - All-day event checkbox
  - Start or end time
  - Recurrence pattern
  - Recurrence start or end date
  - Location
- Editing the Assigned To field for an event series doesn't update events that fall outside of the series pattern. Reassign these events to the new owner individually.
- If you schedule a series with events occurring more than 180 days in the past, all of the events in the series aren't displayed on your calendar. You can see the first event in the series and events that occur within 180 days of the current date.

## Salesforce Essentials: Combined Sales and Service, In-App Help, Updates to User Management and Setup Flows

Sales Essentials and Service Essentials are combined under one product—Salesforce Essentials. Use in-app help to find resources without leaving Salesforce. Add and reduce user licenses to make sure that you have the right number for your team, and manage your users in the redesigned Users page in Setup. Use the new Voice Support setup flow to integrate a third-party voice support system with Salesforce, and learn more about leads and opportunities in the Sales Stages setup flow.

#### IN THIS SECTION:

#### Sales and Service—Two Become One

Sales Essentials and Service Essentials are unified as one product: Salesforce Essentials. We want your sales and customer support tools to mesh seamlessly, whether you're managing deals or customer support requests. All Essentials customers have access to both Sales and Service features.

#### Find Helpful Resources and Recommended Content with In-App Help

Search help and see recommended resources without losing your place in Salesforce. With in-app help, get the help you need when you need it so that you can stay on track and be more productive. If you need additional support, you can log a case and connect with one of our Essentials coaches.

#### Add or Reduce Users to Reflect Your Changing Team

Make adjustments to the number of your users on the fly. No more phone calls or email exchanges to get just the right number of licenses for your business whether you're purchasing Essentials for the first time or adjusting the number of people using Salesforce.

#### Manage Your Team's Information and Permissions on the Users Page

As your team grows and changes, you need to invite, update, and deactivate users. View and update user information, reset passwords, and assign profiles and permission sets in the redesigned Users page in Setup.

#### Create a Call Center with the Voice Support Setup Flow

Integrate your third-party voice support system with Salesforce so that your team can take calls from the service console. Our new guided setup flow walks you through connecting with your voice provider, installing the AppExchange package you need, and selecting the users who can take calls.

#### Get to Know Leads and Opportunities in the Sales Stages Setup Flow

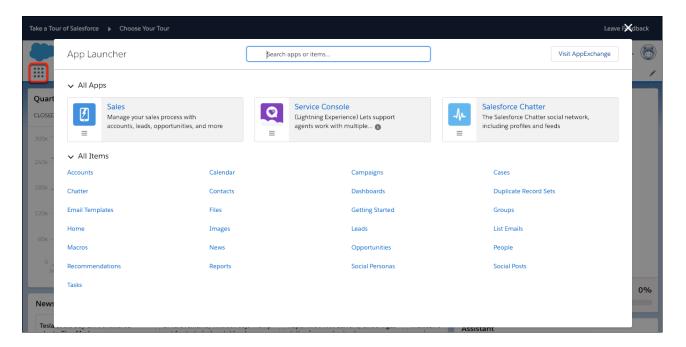
Customize every stage of your sales process, from the top of your funnel with leads through deal closure with opportunities. Previously, this flow created opportunity stages only. Plus, get the context you need to create the best path for your team with a new start screen that explains leads and opportunities.

### Sales and Service—Two Become One

Sales Essentials and Service Essentials are unified as one product: Salesforce Essentials. We want your sales and customer support tools to mesh seamlessly, whether you're managing deals or customer support requests. All Essentials customers have access to both Sales and Service features.

**Where:** This change applies to the Essentials edition.

**How:** Switch between Sales and Service using the App Launcher.



## Find Helpful Resources and Recommended Content with In-App Help

Search help and see recommended resources without losing your place in Salesforce. With in-app help, get the help you need when you need it so that you can stay on track and be more productive. If you need additional support, you can log a case and connect with one of our Essentials coaches.

#### Where:

**How:** On the home page, select .



## Add or Reduce Users to Reflect Your Changing Team

Make adjustments to the number of your users on the fly. No more phone calls or email exchanges to get just the right number of licenses for your business whether you're purchasing Essentials for the first time or adjusting the number of people using Salesforce.

Where: This change applies to the Essentials Edition.

How: Select and select Users. To adjust the number of licenses, select Manage Licenses and tell us how many instances you

need.

## Manage Your Team's Information and Permissions on the Users Page

As your team grows and changes, you need to invite, update, and deactivate users. View and update user information, reset passwords, and assign profiles and permission sets in the redesigned Users page in Setup.

**Where:** This change applies to the Essentials edition.

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Integrate your third-party voice support system with Salesforce so that your team can take calls from the service console. Our new guided setup flow walks you through connecting with your voice provider, installing the AppExchange package you need, and selecting the users who can take calls.

SEE ALSO:

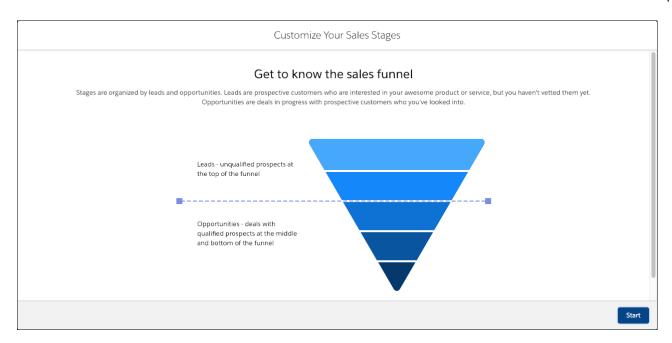
Set Up Open CTI with Guided Experience

## Get to Know Leads and Opportunities in the Sales Stages Setup Flow

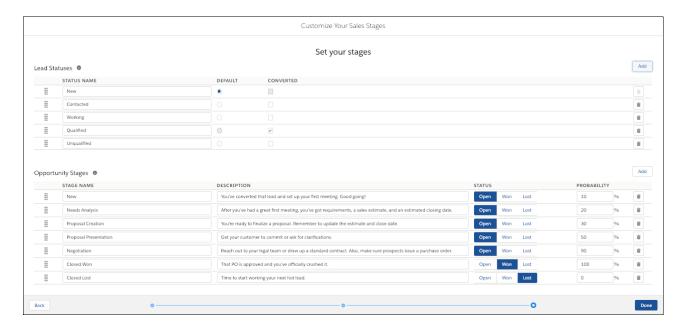
Customize every stage of your sales process, from the top of your funnel with leads through deal closure with opportunities. Previously, this flow created opportunity stages only. Plus, get the context you need to create the best path for your team with a new start screen that explains leads and opportunities.

Where: This change applies to the Essentials edition.

Why: The new start screen helps you better understand how leads and opportunities work together to power your team throughout the sales process.



The stages step in the flow lets you customize both lead statuses and opportunity stages so that you can more easily track where and how your leads convert to opportunities. We recommend stages to use based on customers like you, then you can tailor them for your unique business.



# Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

Einstein brings you reports on insights and contact suggestions, while elevating what you get from reports with Einstein Data Insights. Improved syncing, sharing, and metrics with Einstein Activity Capture, as well as Case Classification and smarter bots make agents and admins more efficient. Prediction Builder gives you the impact of each predictor in your model and notifies you when it's ready.

Here's how Einstein helps you work smarter.

### Sales

#### Einstein Activity Capture: Go to the Next Level with Syncing Capabilities, Increased Sharing, and Better Metrics

Sync contacts and events. Share activities with colleagues who don't use Einstein Activity Capture. Get a better understanding of activities with activity metrics and an improved Activities dashboard. Plus, do more with Einstein Email Insights and Recommended Connections.

#### **Einstein Insights: Create Reports Based on Insights**

You can now create reports and dashboards related to account and opportunity insights. Get a better understanding of your customers by, for example, running reports that show all insights for specific accounts or opportunities.

#### **Einstein Automated Contacts: Create Reports Based on Suggestions**

You can create reports and dashboards related to contact suggestions and opportunity contact role suggestions. For example, use reports to get a quick view of which suggestions Einstein added to Salesforce and for which accounts.

#### **Give Opportunity Scores to More Users**

Now everyone can prioritize opportunities and close more deals. If you have at least one Sales Cloud Einstein license, we'll turn on Einstein Opportunity Scoring for all Salesforce users at your company. Users who are assigned a Sales Cloud Einstein license see scores on all opportunities, while all other users see scores on a limited number of opportunities.

#### **See Opportunity Scores in More Places**

Opportunity scores are now in the opportunity Recently Viewed list view when it's displayed as a table. So sales reps can work from a prioritized list of opportunities with fewer clicks.

#### **Score Prospects on Engagement Activity**

Your prospects generate a lot of data, but it's hard to know what to do with it. Einstein analyzes your Pardot prospects' activities to aggregate and grade their engagement, so you can focus on the people who mean the most to your business. Place the Einstein Scoring component on your prospect records to see granular, meaningful insights.

#### **Get Insights on Campaign Performance (Beta)**

Guessing what makes prospects engage with your campaigns isn't effective. Campaign Insights uses artificial intelligence uncover similarities among prospects who engage with your campaigns. Use the Einstein Campaign Insights component to optimize your marketing assets and find new audiences.

#### Service

#### Save Agents Time and Improve Accuracy and Completion with Einstein Case Classification

Use Einstein Case Classification to recommend or populate picklist and checkbox field values for new cases based on past data. Display those recommendations to your agents in the Service Console in Lightning Experience and Saleseforce Classic. In Lightning Experience your agents view recommendations in the related record component.

#### **Evaluate How Well Your Bots Understand Your Customers**

The Model Management page provides metrics on the quality of your bot's intent model and a detailed look at individual intents. Use the information to fine-tune intents and improve how well your bot understands your customers.

#### Make Your Bots Smarter with Customer Input Classification and Feedback

Review how a bot classifies what your customers type in chat and then approve, ignore, or reclassify each input to the proper intent. This feedback process helps your bot learn and become smarter over time.

#### Put Your Bots to Work on Your SMS Text Messaging Channel

Build your bot once, and deploy it to the LiveMessage SMS text messaging channel in addition to the Live Agent chat channel.

#### Set Up Einstein Bots More Easily with Channel Settings in the Bot Builder

Are you confused when setting up your bot to work with LiveAgent? You're not alone! We streamlined channel setup by moving it into the Bot Builder.

#### **Build Channel-Independent Bots**

Do you plan to put your bot to work on both Live Agent and SMS Text Messaging channels? If so, check out the new context variables and system variable that let your bot gather customer information regardless of channel. No need for pre-chat form rule actions or custom code.

#### **Check Out the Improved Bots Performance Dashboard**

You can now filter by date and channel (chat, messaging) on the Performance Dashboard. And you have more ways to understand your bot's performance: Top Last Dialogs, Escalation Success, Einstein Intent Usage, and Interactions.

#### **Get to Know Our New Bots Terminology**

To support natural-language processing, we're introducing the term utterance and distinguishing it from customer input.

## **Analytics**

#### Learn More from Your Reports with Einstein Data Insights (Generally Available)

Einstein Data Insights extends your reports with AI to help you discover new and useful insights about your data.

#### **Crunch More Data with Double the Row Limit**

Einstein Discovery can create stories from Einstein Analytics datasets with up to 20 million rows.

#### **Export Your Story for Additional Analysis**

Export your story to R so your data scientists can analyze and customize the model in their own language. Export your story to Quip to share with business users on your team.

#### **Easily Deploy Models to Salesforce Objects**

Map fields between a model and a Salesforce object, so you can get the recommendations and predictions you want without writing code.

#### **Encrypt Einstein Discovery Data (Pilot)**

Einstein Discovery users who have the Shield Platform encryption license can now opt-in to encrypt Einstein Discovery data.

## Customization

#### Einstein Prediction Builder: Enhanced Scorecard, Notifications, and New Setup Flow (Generally Available)

After a successful beta program, Einstein Prediction Builder is now generally available. Find details about the impact of each predictor in the scorecard. Get notifications when your prediction is ready. Build your predictions more efficiently in a streamlined setup flow.

#### Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

Display the right recommendations, at the right moment, to the right people with Einstein Next Best Action. Integrate business rules, predictive models, and data—both inside and outside of Salesforce—to create unique strategies for all your use cases. Maybe you have offers, like discounts and upgrades, that are only relevant under specific conditions. Perhaps service agents have multiple ways to assist customers, and you want to guide the agent to the best action. Consider using Einstein Next Best Action.

#### **Build an Action Strategy to Produce Recommended Actions and Offers**

Use Strategy Builder to create a stream of actions and offers that you can display on Lightning record pages and Community pages. Strategy Builder is a point-and-click automation tool for creating strategies for Einstein Next Best Action. With Strategy Builder, you can sort, filter, and prioritize your recommendations.

# Sales: High Velocity Sales Tools, Better Google Integration, Flexible Pricing from CPQ, and Einstein in Pardot

Give your inside sales reps the tools they need to succeed with High Velocity Sales. Work faster, the way you want to, by integrating Salesforce with Gmail and Google Calendar. Get more flexibility on your pricing practices with Usage-Based Pricing in Salesforce CPQ. And align your sales and marketing team on prospect targeting with Einstein Behavior Scoring and Campaign Insights in Pardot.

#### IN THIS SECTION:

#### High Velocity Sales: Accelerating Your Sales Team with Sales Cadences and Work Queues

Accelerate your inside sales process with a high-productivity workspace. With sales cadences, managers can create custom sales processes that guide reps through handling different types of prospects. Sales cadences appear for sales reps in the work queue, a prioritized list that appears inside the High Velocity Sales workspace. And with other productivity-boosting features like Lightning Dialer, Einstein Lead Scoring, and included reports, your sales teams have everything they need to handle prospects in a fraction of the time it took before.

#### Sales Cloud Einstein: Opportunity Scoring for All Users, Big Improvements to Einstein Activity Capture, and More Reporting

Einstein Opportunity Scoring is turned on for you and available to more users. Einstein Activity Capture adds syncing capabilities, expanded sharing, and better metrics. Account Insights, Opportunity Insights, and Automated Contacts are available in reports and dashboards.

#### Core Sales Features: Enhanced Forecasting, Sharing by Territory, and Easier Management of Account and Opportunity Teams

Get more options from Collaborative Forecasts, including product family forecasts by territory. Grant access to records, folders, and list views by territory. And maintain account and opportunity teams with fewer clicks.

## Productivity Features: Improvements to Einstein Activity Capture, Better Email Privacy and Template Management, and Enhancements to Salesforce Inbox

Einstein Activity Capture adds syncing capabilities, expanded sharing, and better metrics. Respect customers' preferences for receiving email. Organize and share email templates better than before. And the Salesforce Inbox app supports Lightning Experience email templates and compound email insights.

#### Lightning Data: Refresh Data Automatically

In Lightning Data rules that update fields on your records via a lookup to a custom object, you can replace old data with new information automatically: In Setup, select a new field mapping option for existing values. Previously, when sales reps updated accounts, contacts, or leads, Lightning Data could only fill empty fields. It couldn't update fields that already contained data—even if the data was out-of-date. Now, sales reps no longer have to click a link to see the latest data, such as head count, revenue, or contact information. And with this automation, your sales team enjoys better segmentation, more comprehensive reporting, and easier task assignment.

#### Integration with Google: Combined Chrome Extension, High Velocity Sales Work Queue, and Attendee Sync Improvements

Lightning for Gmail and Salesforce Inbox are now available in a combined Chrome extension. The High Velocity Sales Work Queue is available in Gmail<sup>™</sup>. Plus, Lightning Sync users can now see event attendee changes made through the API on Google calendars.

#### Integration with Microsoft®: High Velocity Sales Work Queue, More Email Logging Options, and Event Series Sync

Work in the High Velocity Sales Work Queue from within Outlook®. Log an email to any person in Salesforce. Keep event series up to date with less effort.

#### Salesforce CPQ and Billing: Expanded Invoicing, Amendment Options, and Consumption Schedules for Usage Summaries

Bring usage-based pricing into Salesforce CPQ and define custom billable unit prices for your evergreen subscriptions. Amend subscriptions from any of your account's contracts within the quote line editor. Use consumption schedules to rate your usage summaries. Expand your invoicing capabilities by invoicing usage summaries with consumption schedules and subscriptions without end dates.

#### Pardot: Easier Setup and Syncing, Engagement History, Einstein Prospect Scoring, and More Goodies

Breeze through configuration tasks and provisioning with Pardot's Setup Assistant, and sync records to Salesforce without complex sharing rules. Engagement History is now generally available—track prospect engagement on connected campaigns without leaving Salesforce. Plus, Einstein artificial intelligence comes to Pardot with Behavior Score, which learns to identify and rate prospects who are ready to buy.

## High Velocity Sales: Accelerating Your Sales Team with Sales Cadences and Work Queues

Accelerate your inside sales process with a high-productivity workspace. With sales cadences, managers can create custom sales processes that guide reps through handling different types of prospects. Sales cadences appear for sales reps in the work queue, a prioritized list that appears inside the High Velocity Sales workspace. And with other productivity-boosting features like Lightning Dialer, Einstein Lead Scoring, and included reports, your sales teams have everything they need to handle prospects in a fraction of the time it took before.

High Velocity Sales and its features are available for an extra cost. For pricing details, contact your Salesforce account executive.

#### IN THIS SECTION:

#### Streamline Outreach to Help Reps Sell Faster with Sales Cadences

With sales cadences, your inside sales reps can work through their prospects at top speed. Inside sales managers use Sales Cadence Builder to create consistent, scheduled cadences of outreach activities to help reps nurture their prospects with maximum efficiency. A sales cadence can include activities like sending emails, making calls, arranging meetings, and sending text messages. Sales managers and reps can add leads and contacts to each sales cadence. Sales reps act on the sales cadence activities from a prioritized work queue that shows them at a glance which prospects are ready for each outreach.

#### Empower Sales Reps with the High Velocity Sales Workspace and Work Queue

Sales reps can see all the information they need with the High Velocity Sales app. The app includes the work queue, which prioritizes the next steps reps need to take with their prospects. Lightning Dialer puts click-to-call right in Salesforce. Plus, with email templates and call scripts, reps can communicate confidently with prospects.

## Streamline Outreach to Help Reps Sell Faster with Sales Cadences

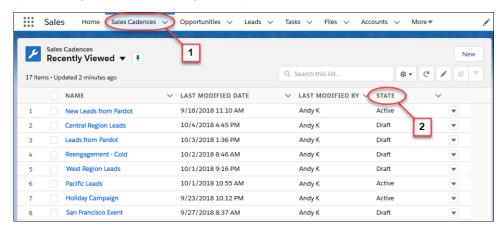
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**Where:** The High Velocity Sales app and sales cadences are available for an extra cost in Lightning Experience in Enterprise, Performance, and Unlimited editions.

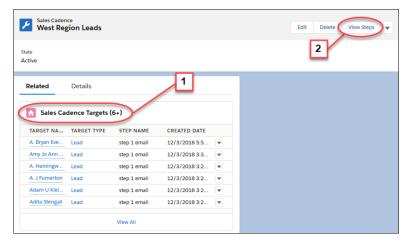
**Who:** To create sales cadences, users need the High Velocity Sales Cadence Creator permission. To create email templates, users need the Manage Public Lightning Email Templates permission.

**Why:** Managers can build best practices right into Salesforce, optimizing prospecting outcomes. Sales cadences guide new and veteran reps alike through the prospecting process—including when to email a prospect, when to call, or when to wait. Managers can even specify call scripts and email templates for each step.

For reps, sales cadences bring together all of their pending activities in one view and log their activities as they complete them. After reps start using sales cadences, managers can report on which of them result in the best sales outcomes.



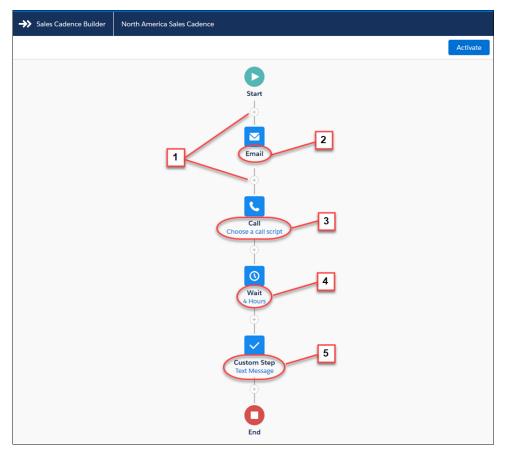
The Sales Cadences tab (1) shows details for each sales cadence, including whether it is in draft, activating, or active (2). When in draft, sales managers can edit the sales cadence. When the sales cadence is activated, the sales manager can assign leads and contacts to the sales cadence, but the steps can't be changed.



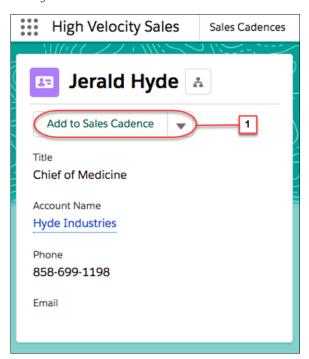
Managers can check the details on the sales cadence record detail page, including the leads and contacts targeted by the sales cadence (1) and its outreach steps (2).

For example, a sales manager can create a sales cadence that guides sales reps to make two back-to-back phone calls to the prospect, wait half a day, and then call again or send an email. This sequence is a best practice for optimizing the prospecting results.

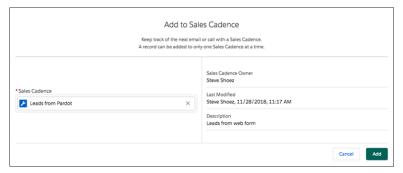
**How:** Sales managers use the Sales Cadence Builder to create each scheduled outreach plan.



Click the + icons (1) to add an email (2), call (3), wait period (4), or a custom step (5), such as setting up a meeting or sending a text message.



After a sales cadence is activated, sales managers or reps can add prospects right from a lead or contact detail page by clicking the **Add to Sales Cadence** action (1). Then choose a sales cadence to get prospects started on the scheduled outreach.



You can assign a lead and contact to only one sales cadence at a time, and the lead or contact appears in the Work Queue of the record owner. If your business wants to address new prospects with a specific sales process immediately when they come in, you can add them to sales cadences automatically. Use Process Builder and Flow Designer without code, or use Process Builder and Apex.

SEE ALSO:

Salesforce Help: Add Prospects to a High Velocity Sales Cadence Automatically (can be outdated or unavailable during release preview)

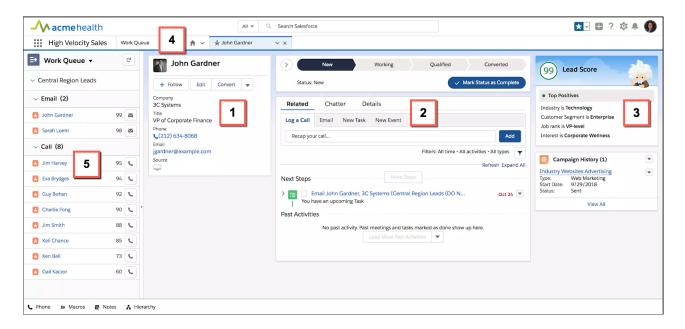
### Empower Sales Reps with the High Velocity Sales Workspace and Work Queue

Sales reps can see all the information they need with the High Velocity Sales app. The app includes the work queue, which prioritizes the next steps reps need to take with their prospects. Lightning Dialer puts click-to-call right in Salesforce. Plus, with email templates and call scripts, reps can communicate confidently with prospects.

**Where:** The High Velocity Sales app and Work Queue are available for an extra cost in Lightning Experience in Enterprise, Performance, and Unlimited editions.

**Who:** To use High Velocity Sales features, users need the High Velocity Sales User permission set. Lightning Dialer is available for an extra cost as an add-on license.

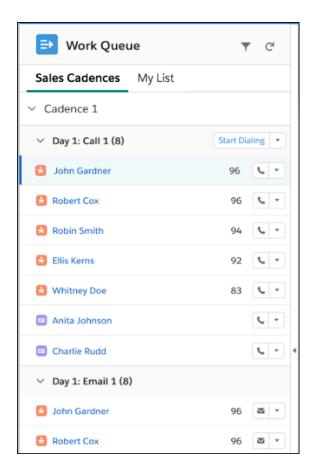
**Why:** High Velocity Sales is built on the Lightning Sales Console, which provides your reps with everything they need in a tab-based workspace.



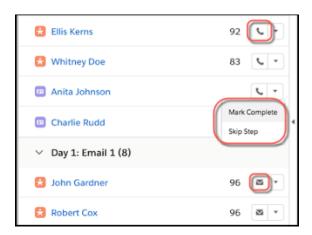
The console features a navigation-friendly, three-column layout that includes a highlights panel (1), the familiar workspace (2), and useful related lists (3). With the split view, your reps can see a list view while they view workspace tabs and subtabs, so they get everything they need in one workspace. You can customize the default layout for your company's business processes.

Reps can pin tabs such as Home (4) for easy access to useful content. Home provides reps an overview of what's waiting for them in the Work Queue. It can also be customized for users to show relevant reports and dashboards.

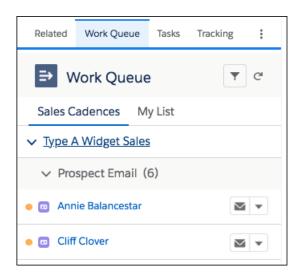
Your reps can get the most out of High Velocity Sales with the Work Queue (5) in the split view. With the Work Queue, reps that own the lead or contact records see a prioritized list of emails, calls, and tasks. These activities are defined by the sales cadences created by sales managers. And reps can also tackle their own list of one-off activities from My List.



If your company uses Einstein Lead Scoring, leads in the Work Queue are prioritized by lead score. Your reps can immediately tackle the leads that are most likely to convert based on artificial intelligence about your business's patterns of lead conversion. If Einstein Lead Scoring isn't active, records are sorted alphabetically.



Reps can take action directly from the Work Queue. They can click the phone icon to launch Lightning Dialer from the console. Reps can send emails with the email action. And call scripts and email templates assigned to the sales cadence steps help reps power through each action even more efficiently. If reps perform the task without using the Work Queue, they can also manually complete a step. And they can skip a step if it isn't relevant.



You can also expose the Work Queue in the Outlook and Gmail integrations by adding the component to an email integration pane.

High Velocity Sales includes Einstein Activity Capture, so relevant events and emails are automatically associated with related records in Salesforce. Reps don't have to worry about manually logging different activities.

**How:** Set up and customize features from the High Velocity Sales page in Setup. For more information, see the High Velocity Sales Implementation Guide.

## Sales Cloud Einstein: Opportunity Scoring for All Users, Big Improvements to Einstein Activity Capture, and More Reporting

Einstein Opportunity Scoring is turned on for you and available to more users. Einstein Activity Capture adds syncing capabilities, expanded sharing, and better metrics. Account Insights, Opportunity Insights, and Automated Contacts are available in reports and dashboards.



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

#### IN THIS SECTION:

#### Einstein Opportunity Scoring: Scores for More Users and in More Places

We're turning on Einstein Opportunity Scoring and giving it to more users. Plus, opportunity scores are on the Recently Viewed opportunity list view.

#### Einstein Activity Capture: Go to the Next Level with Syncing Capabilities, Increased Sharing, and Better Metrics

Sync contacts and events. Share activities with colleagues who don't use Einstein Activity Capture. Get a better understanding of activities with activity metrics and an improved Activities dashboard. Plus, do more with Einstein Email Insights and Recommended Connections.

#### Einstein Insights: Create Reports Based on Insights

You can now create reports and dashboards related to account and opportunity insights. Get a better understanding of your customers by, for example, running reports that show all insights for specific accounts or opportunities.

#### Einstein Automated Contacts: Create Reports Based on Suggestions

You can create reports and dashboards related to contact suggestions and opportunity contact role suggestions. For example, use reports to get a quick view of which suggestions Einstein added to Salesforce and for which accounts.

#### SEE ALSO:

Get Insights on Campaign Performance (Beta) Score Prospects on Engagement Activity

### Einstein Opportunity Scoring: Scores for More Users and in More Places

We're turning on Einstein Opportunity Scoring and giving it to more users. Plus, opportunity scores are on the Recently Viewed opportunity list view.

#### IN THIS SECTION:

#### Give Opportunity Scores to More Users

Now everyone can prioritize opportunities and close more deals. If you have at least one Sales Cloud Einstein license, we'll turn on Einstein Opportunity Scoring for all Salesforce users at your company. Users who are assigned a Sales Cloud Einstein license see scores on all opportunities, while all other users see scores on a limited number of opportunities.

#### See Opportunity Scores in More Places

Opportunity scores are now in the opportunity Recently Viewed list view when it's displayed as a table. So sales reps can work from a prioritized list of opportunities with fewer clicks.

### Give Opportunity Scores to More Users

Now everyone can prioritize opportunities and close more deals. If you have at least one Sales Cloud Einstein license, we'll turn on Einstein Opportunity Scoring for all Salesforce users at your company. Users who are assigned a Sales Cloud Einstein license see scores on all opportunities, while all other users see scores on a limited number of opportunities.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, and Unlimited editions.

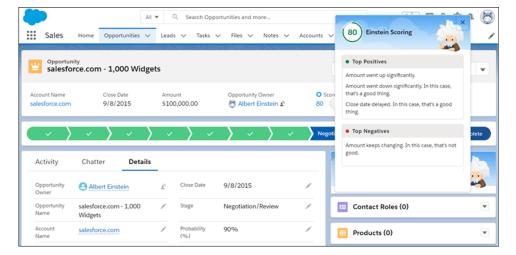
**When:** We won't make changes until at least 30 days after the release. Keep an eye out for more communications from Salesforce about exact timing and opting out.

**Who:** If you already use Einstein Opportunity Scoring, nothing changes for reps who have a Sales Cloud Einstein license, regardless of whether you give non-licensed users access to opportunity scores.

To make sure that this change has a positive impact, we won't turn on Einstein Opportunity Scoring for all users when one of the following is true about your company.

- You don't meet the minimum data requirements for Einstein Opportunity Scoring.
- You elected to not have features auto-enabled.
- You elected to not have data in your Salesforce org copied.

**Why:** By giving scores to all sales reps, your entire sales teams can prioritize opportunities and close more deals.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

Salesforce Help: Manage Whether All Users See Einstein Opportunity Scores (can be outdated or unavailable during release preview)

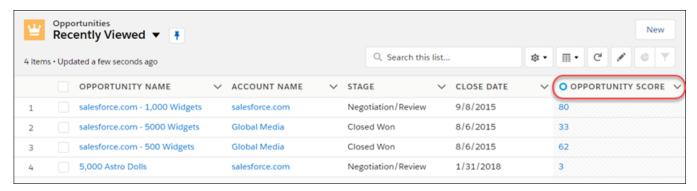
Salesforce Help: Einstein Opportunity Scoring (can be outdated or unavailable during release preview)

#### See Opportunity Scores in More Places

Opportunity scores are now in the opportunity Recently Viewed list view when it's displayed as a table. So sales reps can work from a prioritized list of opportunities with fewer clicks.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, and Unlimited editions.

**How:** The Opportunity Score field is on the Recently Viewed list view by default.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

Salesforce Help: Einstein Opportunity Scoring (can be outdated or unavailable during release preview)

## Einstein Activity Capture: Go to the Next Level with Syncing Capabilities, Increased Sharing, and Better Metrics

Sync contacts and events. Share activities with colleagues who don't use Einstein Activity Capture. Get a better understanding of activities with activity metrics and an improved Activities dashboard. Plus, do more with Einstein Email Insights and Recommended Connections.

Where: This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions.

SEE ALSO:

Einstein Activity Capture: New Syncing Capabilities, Expanded Sharing, Better Metrics, and Enhancements to Email Insights Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

## Einstein Insights: Create Reports Based on Insights

You can now create reports and dashboards related to account and opportunity insights. Get a better understanding of your customers by, for example, running reports that show all insights for specific accounts or opportunities.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, and Unlimited editions.

**How:** To get started, create a custom report type. To report on opportunity insights, use Opportunities as the primary object and Einstein Opportunity Insights as the secondary object. To report on account insights, use Accounts as the primary object and Einstein Account Insights as the secondary object. Then add extra criteria to focus on the data you need.

Be aware of the following limitations.

- When insights are no longer relevant, we remove them from the Einstein component, so they're not available in reports. For example, an insight about no communication with a prospect is removed after communication is reestablished.
- You can run reports only for the objects that insights are associated with. You can't run reports for insights based on what appears on the Home page.

SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

## Einstein Automated Contacts: Create Reports Based on Suggestions

You can create reports and dashboards related to contact suggestions and opportunity contact role suggestions. For example, use reports to get a quick view of which suggestions Einstein added to Salesforce and for which accounts.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, and Unlimited editions.

**How:** To get started, create a custom report type. To report on contact suggestions, use Accounts as the primary object and Einstein Contact Suggestions as the secondary object. To report on opportunity contact role suggestions, use Opportunities as the primary object and Einstein Opportunity Contact Role Suggestions as the secondary object. Then add more criteria to focus on the data you need.

SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

## Core Sales Features: Enhanced Forecasting, Sharing by Territory, and Easier Management of Account and Opportunity Teams

Get more options from Collaborative Forecasts, including product family forecasts by territory. Grant access to records, folders, and list views by territory. And maintain account and opportunity teams with fewer clicks.

#### IN THIS SECTION:

#### Collaborative Forecasts: Product Family Forecasting by Territory, Territory Forecast Sharing, and Expanded Forecast Range

Forecast product family revenue by territory. Share your territory forecasts. And see forecasts for up to 15 months or fiscal periods.

#### Enterprise Territory Management: Territory-Based Sharing Options and Enhancements to Territory Forecasts

Sharing is the key word for territory management in Spring '19. Use territories to define access level to records, report and dashboard folders, and list views. Create public groups and queues based on territories. Forecast product family revenue by territory. And share your territory forecasts.

#### Accounts: Account Team Removal, Related Records Transfer to New Owner

In Lightning Experience, account reps can remove an entire account team with a click. And when a rep transfers an account to another rep, more related records go along for the ride.

#### Opportunities: Remove a Team in Lightning Experience

If your sales reps aren't using a team-selling approach, the opportunity owner can remove an entire opportunity team with a click. Previously, you had to remove a team one member at a time.

#### Other Changes in Core Sales Features

Customizable Forecasting and the original territory management feature are scheduled for retirement. And the product selector on opportunities is enhanced.

## Collaborative Forecasts: Product Family Forecasting by Territory, Territory Forecast Sharing, and Expanded Forecast Range

Forecast product family revenue by territory. Share your territory forecasts. And see forecasts for up to 15 months or fiscal periods.

#### IN THIS SECTION:

#### Get Product Family Forecasts by Territory

Now that sales teams can forecast product family revenue by sales territory, they have a clearer understanding of their forecasts. For example, they can see how well software is selling in Canada and which product family is lagging in Arizona. Previously, territory forecasts were available only for opportunity revenue forecasts.

#### Share the Power of Territory Forecasts

Forecast managers can now share their territory forecasts with any Salesforce user at their company. Sharing ensures that everyone who needs to can view, adjust, and report on forecasts. Previously, sharing was available for all forecast types except territory forecasts. If territory forecasts are set up, no steps are required to get this enhancement.

#### See Forecasts for More Time Periods

Does your team need to see sales forecasts for 15 months or custom fiscal periods at a glance? Now they can! Previously the limit was 12. For quarterly forecasts, the limit is still 8.

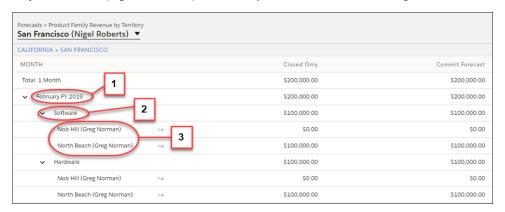
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Now that sales teams can forecast product family revenue by sales territory, they have a clearer understanding of their forecasts. For example, they can see how well software is selling in Canada and which product family is lagging in Arizona. Previously, territory forecasts were available only for opportunity revenue forecasts.

**Where:** This change applies to Lightning Experience in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

Who: If Enterprise Territory Management is enabled, forecast users can forecast product family revenue by territory.

**Why:** The forecasts page shows how product family forecasts for territories are organized.



Users see amounts for a period (1) broken down by product family (2). Product families are further broken down by territory (3).

**How:** Make sure that your active territory model and product families are set up to reflect your company's business needs. Then on the Forecasts Settings page in Setup, add the Product Family Revenue by Territory forecast type.



If no other product family forecast type is enabled, choose the product families to show on the forecasts page and the order in which they appear.

#### SEE ALSO:

Salesforce Help: Territory Forecasts (can be outdated or unavailable during release preview)

Salesforce Help: Enable and Set Up Territory Forecasts (can be outdated or unavailable during release preview)

Salesforce Help: Enable Forecast Types for Collaborative Forecasts (can be outdated or unavailable during release preview)

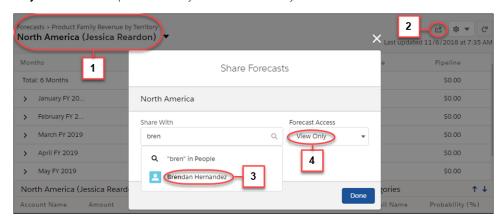
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Forecast managers can now share their territory forecasts with any Salesforce user at their company. Sharing ensures that everyone who needs to can view, adjust, and report on forecasts. Previously, sharing was available for all forecast types except territory forecasts. If territory forecasts are set up, no steps are required to get this enhancement.

**Where:** This change applies to Lightning Experience in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

Who: Forecast managers assigned to territories can share their territory forecasts.

Why: Here's an example of how easy it is to share territory forecasts.



Jessica, a forecast manager, views her territory forecasts (1) on the forecasts page. She clicks the Share button (2) and selects Brendan to share with (3). Now Brendan can see (4), but not adjust, Jessica's territory forecasts.



To view the forecasts that Jessica shared, Brendan selects them from the My Shared Forecasts list (5) on the forecasts page.

SEE ALSO:

Salesforce Help: Share Forecasts and Manage Shared Forecasts (can be outdated or unavailable during release preview)

#### See Forecasts for More Time Periods

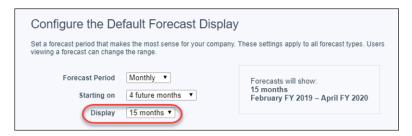
Does your team need to see sales forecasts for 15 months or custom fiscal periods at a glance? Now they can! Previously the limit was 12. For quarterly forecasts, the limit is still 8.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Performance, and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

**Why:** In Display Settings on the forecasts page, forecast users can set a wider forecast range.



**How:** No steps are required to give your team this enhancement. To widen the default forecast period, select the number of months or periods on the Forecasts Settings page in Setup.



#### SEE ALSO:

Salesforce Help: Change Your Forecast Date Range Display in Collaborative Forecasts (can be outdated or unavailable during release preview)

Salesforce Help: Define Your Company's Forecast Date Range (can be outdated or unavailable during release preview)

## Enterprise Territory Management: Territory-Based Sharing Options and Enhancements to Territory Forecasts

Sharing is the key word for territory management in Spring '19. Use territories to define access level to records, report and dashboard folders, and list views. Create public groups and queues based on territories. Forecast product family revenue by territory. And share your territory forecasts.

#### IN THIS SECTION:

#### Grant Access to Records, Report and Dashboard Folders, and List Views by Territory

Sharing rules give groups of users wider access to records than what organization-wide defaults allow. Now you can define sharing rules based on the users assigned to territories. For example, keep opportunities private, except for California reps, who need to view and edit opportunities assigned to Oregon reps. You can also share report folders, dashboard folders, and list views by territory.

#### Add Sales Reps to Groups and Queues Based on Territory Assignment

Now it takes only a few clicks to add all the reps assigned to specific territories to groups or queues. For example, you can add all your Florida reps to your East Coast public group. It's faster than adding reps one by one and helps you avoid redundant groupings of users.

#### Share Individual Records by Territory

In Salesforce Classic, reps can share the records they own with the users assigned to territories. Sharing this way lets users grant wider access to records than what organization-wide defaults allow. For example, your team's opportunities are private, but reps assigned to California work deals together, so they share their opportunities with coworkers.

#### Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)

This update changes the TerritoryManual reason code in AccountShare records to Territory2AssociationManual and is required to let users share accounts manually with territory groups. After you activate the update in production, it can take up to two weeks before you see the changes.

#### Get Product Family Revenue Forecasts for Territories

If your team uses Collaborative Forecasts, they can now see product family revenue forecasts for territories. For example, they can see which territory is bringing in the most revenue from software deals or which product family is selling best in Canada.

#### **Share Your Territory Forecasts**

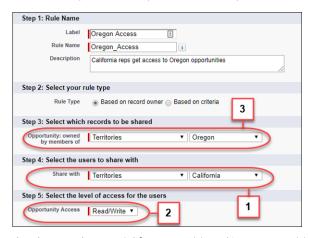
If your team uses Collaborative Forecasts, forecast managers can now share their territory forecasts with any Salesforce user at their company. Forecast sharing ensures that everyone who needs to can view, adjust, and report on the forecasts that a manager shares.

### Grant Access to Records, Report and Dashboard Folders, and List Views by Territory

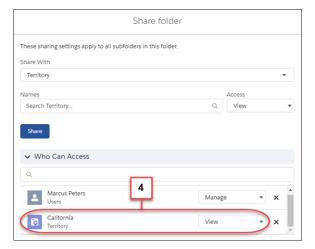
Sharing rules give groups of users wider access to records than what organization-wide defaults allow. Now you can define sharing rules based on the users assigned to territories. For example, keep opportunities private, except for California reps, who need to view and edit opportunities assigned to Oregon reps. You can also share report folders, dashboard folders, and list views by territory.

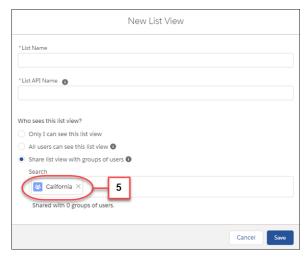
**Where:** This change applies to Lightning Experience and Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

**How:** In Setup, select **Territories** or **Territories and Subordinates** when you create a sharing rule in Sharing Settings. Then specify territories. Only territories in your active territory model are available.



This sharing rule gives California reps (1) read/write access (2) to opportunities owned by Oregon reps (3).





Follow a similar process to share report folders (4), dashboard folders, and list views (5).

#### SEE ALSO:

Demo: Who Sees What: Record Access via Sharing Rules (English only) (can be outdated or unavailable during release preview)

Salesforce Help: Sharing Rules (can be outdated or unavailable during release preview)

Salesforce Help: Share a Report or Dashboard Folder in Lightning Experience (can be outdated or unavailable during release preview)

Salesforce Help: Share a Report or Dashboard Folder in Salesforce Classic (can be outdated or unavailable during release preview)

Salesforce Help: Create or Clone a List View in Lightning Experience (can be outdated or unavailable during release preview)

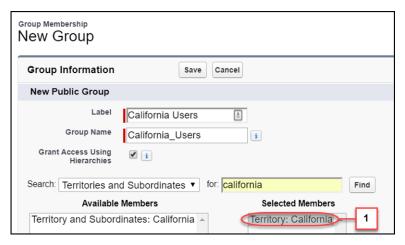
Salesforce Help: Create a Custom List View in Salesforce Classic (can be outdated or unavailable during release preview)

### Add Sales Reps to Groups and Queues Based on Territory Assignment

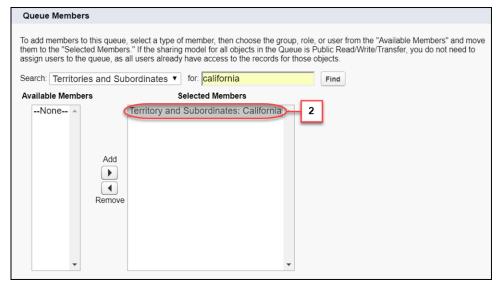
Now it takes only a few clicks to add all the reps assigned to specific territories to groups or queues. For example, you can add all your Florida reps to your East Coast public group. It's faster than adding reps one by one and helps you avoid redundant groupings of users.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

How: In Setup, select Territories or Territories and Subordinates when you create or edit a group or queue.



Then select territories to add to the group (1) or gueue (2). Only territories in your active territory model are available.



#### SEE ALSO:

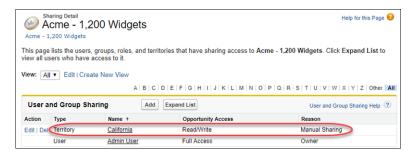
Salesforce Help: What Is a Group? (can be outdated or unavailable during release preview)
Salesforce Help: Create Queues (can be outdated or unavailable during release preview)

#### Share Individual Records by Territory

In Salesforce Classic, reps can share the records they own with the users assigned to territories. Sharing this way lets users grant wider access to records than what organization-wide defaults allow. For example, your team's opportunities are private, but reps assigned to California work deals together, so they share their opportunities with coworkers.

**Where:** This feature is available in Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

**Why:** When sharing a record, reps can now select **Territories** or **Territories and Subordinates**. Only territories in the active territory model are available.



**How:** To let your reps share account records by territory, activate the critical update for enabling manual account sharing in Enterprise Territory Management. No setup is required to let your reps share other types of records by territory.

#### SEE ALSO:

Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)

Salesforce Help: Granting Access to Records (can be outdated or unavailable during release preview)

Salesforce Help: Share Accounts (can be outdated or unavailable during release preview)

You Asked for It!

#### Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)

This update changes the TerritoryManual reason code in AccountShare records to Territory2AssociationManual and is required to let users share accounts manually with territory groups. After you activate the update in production, it can take up to two weeks before you see the changes.

**Where:** This update applies to Lightning Experience and Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

When: You can activate this update in Spring '19. We'll auto-activate this update on October 30, 2019.

Why: In Winter '19 and earlier:

- The TerritoryManual reason code was written to AccountShare records when you manually assigned an account to a territory.
- Manually sharing an account with territory groups wasn't available.

With this update activated:

- The Territory2AssociationManual reason code replaces all instances of TerritoryManual.
- The Territory2AssociationManual reason code is written to AccountShare records when you manually assign an account to a territory.
- Manually sharing an account with territory groups is available.

**How:** We recommend that you test this update in a sandbox or Developer Edition org before activating the update in production. To activate the update, go to Critical Updates in Setup, and then click **Activate** next to Enable Manual Account Sharing in Enterprise Territory Management. You can't deactivate the update after it's activated.

If you have Apex code or integrations that work directly with the AccountShare object, make sure that you update all instances of the TerritoryManual reason code to Territory2AssociationManual.

SEE ALSO:

Share Individual Records by Territory

### Get Product Family Revenue Forecasts for Territories

If your team uses Collaborative Forecasts, they can now see product family revenue forecasts for territories. For example, they can see which territory is bringing in the most revenue from software deals or which product family is selling best in Canada.

**Where:** This change applies to Lightning Experience in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

SEE ALSO:

Get Product Family Forecasts by Territory

#### **Share Your Territory Forecasts**

If your team uses Collaborative Forecasts, forecast managers can now share their territory forecasts with any Salesforce user at their company. Forecast sharing ensures that everyone who needs to can view, adjust, and report on the forecasts that a manager shares.

**Where:** This change applies to Lightning Experience in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

SEE ALSO:

Share the Power of Territory Forecasts

### Accounts: Account Team Removal, Related Records Transfer to New Owner

In Lightning Experience, account reps can remove an entire account team with a click. And when a rep transfers an account to another rep, more related records go along for the ride.

#### IN THIS SECTION:

#### Remove an Account Team in Lightning Experience

When an account team isn't needed, the account owner can remove the entire team with a click. Previously, you had to remove a team one member at a time.

#### Keep More Related Records When Transferring Accounts in Lightning Experience

When an account rep transfers an account to a different owner, more of the historical information that the new owner needs is also transferred.

### Remove an Account Team in Lightning Experience

When an account team isn't needed, the account owner can remove the entire team with a click. Previously, you had to remove a team one member at a time.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

How: To remove a team, on the Account Team related list, select Remove All Members.



#### SEE ALSO:

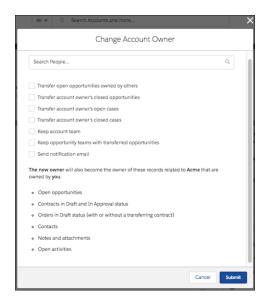
Remove an Account or Opportunity Team Using the Salesforce App

#### Keep More Related Records When Transferring Accounts in Lightning Experience

When an account rep transfers an account to a different owner, more of the historical information that the new owner needs is also transferred.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Account owners can transfer opportunities that they own, open cases, and closed cases. They can keep the account team and opportunity teams related to opportunities being transferred or delete them.



SEE ALSO:

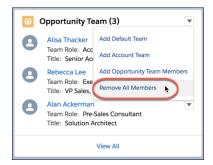
Keep More Related Records When Transferring Accounts Using the Salesforce App

## Opportunities: Remove a Team in Lightning Experience

If your sales reps aren't using a team-selling approach, the opportunity owner can remove an entire opportunity team with a click. Previously, you had to remove a team one member at a time.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**How:** To remove a team, on the Opportunity Team related list, select **Remove All Members**.



SEE ALSO:

Remove an Account or Opportunity Team Using the Salesforce App

## Other Changes in Core Sales Features

Customizable Forecasting and the original territory management feature are scheduled for retirement. And the product selector on opportunities is enhanced.

#### IN THIS SECTION:

#### Customizable Forecasting Is Being Retired

Customizable Forecasting is scheduled for retirement as of Summer '20. After the feature is retired, users can't access Customizable Forecasting and its underlying data. We encourage you to migrate to Collaborative Forecasts.

#### Original Territory Management Is Being Retired

The original territory management feature is scheduled for retirement as of Summer '20. After the feature is retired, users can't access original territory management and its underlying data. We encourage you to migrate to Enterprise Territory Management.

#### **Product Selector Enhancements**

We reworked the product selector on opportunities to help sales reps work better on smaller screens. When adding products to opportunities, reps can see more products on the screen, and they can review selected products on one screen.

#### Customizable Forecasting Is Being Retired

Customizable Forecasting is scheduled for retirement as of Summer '20. After the feature is retired, users can't access Customizable Forecasting and its underlying data. We encourage you to migrate to Collaborative Forecasts.

Where: This change applies to Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Review our documentation, and follow the instructions for setting up Collaborative Forecasts. If you use the original territory management feature, we also encourage you to migrate to Enterprise Territory Management.

#### SEE ALSO:

Knowledge article: Customizable Forecasting Will Be Retired in the Summer '20 Release Original Territory Management Is Being Retired

#### Original Territory Management Is Being Retired

The original territory management feature is scheduled for retirement as of Summer '20. After the feature is retired, users can't access original territory management and its underlying data. We encourage you to migrate to Enterprise Territory Management.

**Where:** This change applies to Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud.

**How:** Review our documentation, and follow the instructions for setting up Enterprise Territory Management. If you use Customizable Forecasting, we also encourage you to migrate to Collaborative Forecasts.

#### SEE ALSO:

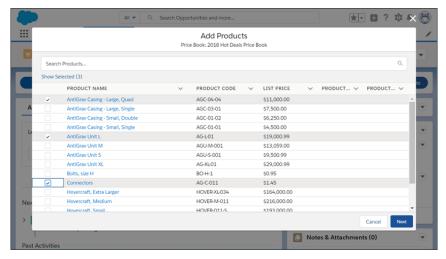
Knowledge article: The Original Territory Management Module Will Be Retired in the Summer '20 Release Customizable Forecasting Is Being Retired

#### **Product Selector Enhancements**

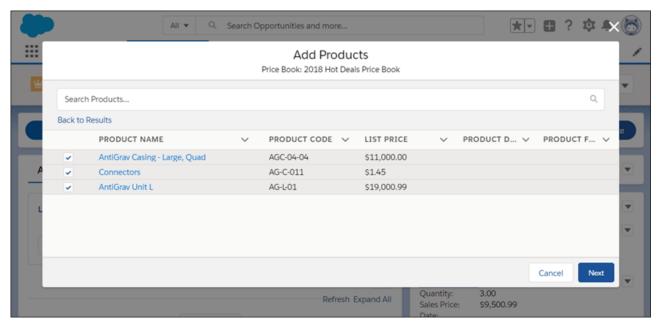
We reworked the product selector on opportunities to help sales reps work better on smaller screens. When adding products to opportunities, reps can see more products on the screen, and they can review selected products on one screen.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The new product selector uses screen space more efficiently so that reps can work more productively. Select products from the condensed list, or search for products to select.



Click **Show Selected** to see a detailed list of products selected. Search selected products to quickly verify products you wanted to add are on the list. Deselect products to remove them before continuing to the next page to configure selections.



# Productivity Features: Improvements to Einstein Activity Capture, Better Email Privacy and Template Management, and Enhancements to Salesforce Inbox

Einstein Activity Capture adds syncing capabilities, expanded sharing, and better metrics. Respect customers' preferences for receiving email. Organize and share email templates better than before. And the Salesforce Inbox app supports Lightning Experience email templates and compound email insights.

#### IN THIS SECTION:

#### Einstein Activity Capture: New Syncing Capabilities, Expanded Sharing, Better Metrics, and Enhancements to Email Insights

Sync contacts and events. Share activities with colleagues who don't use Einstein Activity Capture. Get a better understanding of activities with activity metrics and an improved Activities dashboard. Plus, do more with Einstein Email Insights and Recommended Connections.

## Email Experience: Better Email Privacy Enforcement, Ability to Send Non-Commercial Emails, More List Email Status Details, and Expanded Limits

Respect customers' preferences to not receive emails or have the emails they receive from you tracked. Alert sales reps before they send emails to individuals who opted out of receiving commercial emails. Give reps permissions to send non-commercial emails to customers. And get more detail about the status of your list email recipients. In new orgs, more types of emails count toward the daily external email limit.

#### Email Templates: Folders, Sharing, and Template Reporting

With subfolders and nested folders, it's easy to keep email templates organized. Sharing email templates with the right people is easier too, because it's done by folder.

#### Activities and Tasks: Streamlined Event Creation and Closure

Closing a task is just a matter of clicking a button. And creating a follow-up event based on a task is also just one click away.

#### Lightning Dialer: Track the Result of Each Call

With one click, sales reps can track whether a call was connected and how it went. Also known as call disposition, this important information is captured in Salesforce on call logs and the activity timeline of related records.

#### Salesforce Inbox App: Lightning Experience Templates, Android Notifications, Compound Email Insights

Use Lightning Experience templates in the Salesforce Inbox app for iOS and Android. Salesforce Inbox notifications are now connected to Android's notification categories, so users can choose which ones to receive. Compound email insights are available in the Salesforce Inbox app.

#### Notes: Say Goodbye to Unsafe Characters in Notes

Previously, you couldn't save a note that contained certain HTML characters, such as a single quote ('), because they can lead to cross-site scripting (XSS) attacks. Salesforce now does the dirty work for you and strips out the unsafe characters and saves the note.

#### Calendar: More Ways to Stay Organized in Lightning Experience

Sales reps can manage all the logistics of their event needs better in Lightning Experience and the Salesforce app. Event series are generally available and now you have more flexibility when deleting events from a series. Take advantage of more event options, including creating events for group calendars, booking resources, and easily adding attendees. Plus, prepare for events by viewing related files on meetings and printing calendars.

## Einstein Activity Capture: New Syncing Capabilities, Expanded Sharing, Better Metrics, and Enhancements to Email Insights

Sync contacts and events. Share activities with colleagues who don't use Einstein Activity Capture. Get a better understanding of activities with activity metrics and an improved Activities dashboard. Plus, do more with Einstein Email Insights and Recommended Connections.

#### IN THIS SECTION:

#### Sync Events and Contacts with Einstein Activity Capture

This productivity-boosting feature does more than just associate email and events to related Salesforce records. Einstein Activity Capture now syncs events and contacts between sales reps' Google or Microsoft® accounts and Salesforce. With everything captured and in sync, reps can get back to more important things, like selling.

#### Share Activities with Users Who Don't Use Einstein Activity Capture

When the sharing setting for Einstein Activity Capture users is set to Share with Everyone, we really mean everyone. Previously, the setting meant that email and events captured by Einstein Activity Capture were shared with other Einstein Activity Capture users. This expanded visibility means reps can collaborate more easily.

#### Get the Complete Picture About Your Activity Data with Activity Metrics (Beta)

When you include Activity Metrics fields on reports, triggers, list views, page layouts, and so forth, the data reflects activities that were added to Salesforce manually and by Einstein Activity Capture.

#### Get More Out of the Activities Dashboard

Not only has the Activities dashboard gotten a much-needed makeover, it also has better organization and filters. These improvements make it easier to get to the data you need.

#### Track Emails That Come from Einstein Activity Capture

Emails that Einstein Activity Capture adds to related Salesforce records now include tracking information, so sales reps can see if and when a recipient opens an email. Get tracking information in the activity timeline.

#### Boost Your People Skills with More Recommended Connections

The more recommend connections sales reps can see, the easier it is for them to find business connections within their networks. We increased the number of connections shown to reps from 3 to 50, so it's easier to get advice or an introduction from a colleague.

#### Einstein Email Insights: New Insights, Better Control Over Custom Insights, and More Visibility

Take Einstein Email Insights to new levels with new standard insights. If you use custom email insights, you can edit insights and combine them. Plus, sales reps who don't use Einstein Activity Capture see standard email insights for shared emails.

#### Test Einstein Activity Capture in Sandbox

Einstein Activity Capture is available in sandbox environments. See how easy it is to set up and get a preview of how sales reps use the feature.

#### Sync Events and Contacts with Einstein Activity Capture

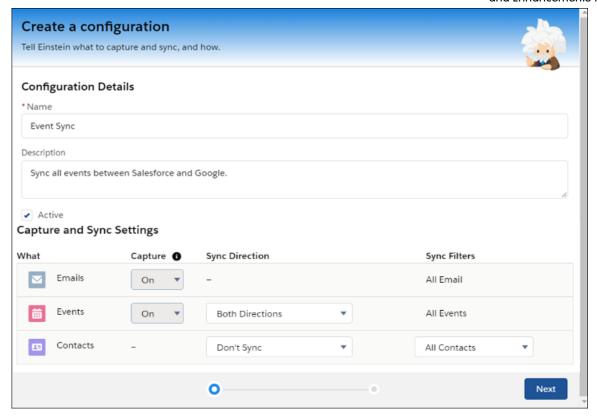
This productivity-boosting feature does more than just associate email and events to related Salesforce records. Einstein Activity Capture now syncs events and contacts between sales reps' Google or Microsoft® accounts and Salesforce. With everything captured and in sync, reps can get back to more important things, like selling.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, and Unlimited editions.

Who: Syncing occurs for Einstein Activity Capture users who meet the following criteria.

- The email account on their user record is connected to Salesforce.
- You add them to an Einstein Activity Capture configuration that includes syncing.

**How:** From Setup, go to the Einstein Activity Capture settings page. Create a configuration that syncs contacts or events.



SEE ALSO:

Salesforce Help: Create a Configuration for Einstein Activity Capture (can be outdated or unavailable during release preview)

#### Share Activities with Users Who Don't Use Einstein Activity Capture

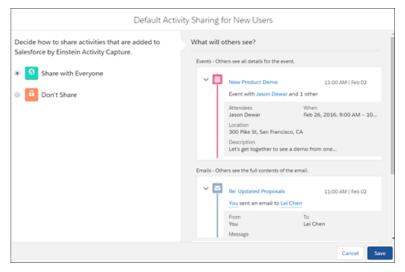
When the sharing setting for Einstein Activity Capture users is set to Share with Everyone, we really mean everyone. Previously, the setting meant that email and events captured by Einstein Activity Capture were shared with other Einstein Activity Capture users. This expanded visibility means reps can collaborate more easily.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

Why: Reps who don't use Einstein Activity Capture see activities similar to how Einstein Activity Capture users see them.

- For shared activities, they see the full event details and email contents in the activity timeline. They also see email insights, when available, but can't take action from the insights or leave feedback about them.
- For private activities, they see only the event's date, time, and attendees, and only an email's sender, recipients, and date in the activity timeline. They can request full access directly from the email or event.
- When Einstein Activity Capture users share activities within Chatter groups, the sharing now applies to all members of the group.

**How:** This change is automatic. You can set the default sharing for new Einstein Activity Capture users from the Einstein Activity Capture settings. And Einstein Activity Capture users can change their activity sharing at any time from their personal settings and from individual emails or events.



Salesforce Help: Set Default Activity Sharing for Einstein Activity Capture Users (can be outdated or unavailable during release preview)

# Get the Complete Picture About Your Activity Data with Activity Metrics (Beta)

When you include Activity Metrics fields on reports, triggers, list views, page layouts, and so forth, the data reflects activities that were added to Salesforce manually and by Einstein Activity Capture.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, and Unlimited editions. Users can also see Activity Metrics if they switch back to Salesforce Classic.



**Note:** As a beta feature, Activity Metrics is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Activity Metrics in the Trailblazer Community.

Who: If you have at least one licensed Einstein Activity Capture user, you can use Activity Metrics.

**Why:** Because Einstein Activity Capture data is stored outside of Salesforce, it isn't available in many Salesforce platform capabilities, such as reports and triggers. With Activity Metrics, you can trust that activity data is complete without manually maintaining it.

**How:** From the Einstein Activity Capture settings, turn on Activity Metrics. Depending on how much data you have, it can take a few hours before the Activity Metrics fields are ready to use. We send a notification when they're available.

For example, the Last 7 Days Activities field indicates how many activities were completed in the last seven days. Use a trigger to send an email to opportunity owners if there hasn't been any completed activities over the last seven days.

SEE ALSO:

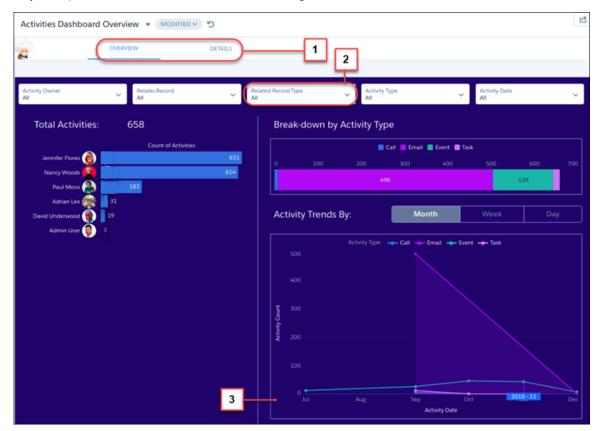
Salesforce Help: Activity Metrics (can be outdated or unavailable during release preview)

## Get More Out of the Activities Dashboard

Not only has the Activities dashboard gotten a much-needed makeover, it also has better organization and filters. These improvements make it easier to get to the data you need.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

Why: The updated Activities dashboard boasts the following enhancements.



- Charts are organized by tabs (1). The Overview tab includes the original charts. The Details tab includes two new charts, Activities by Accounts and Activities by Opportunities, letting sales reps compare activities across their accounts and opportunities.
- The Related Record Type filter (2) includes all objects that Einstein Activity Capture supports. Previously, the filter included only opportunities and quotes.
- The amount of activity data that appears in the dashboard (3) is increased from 90 to 180 days. This increase helps companies with longer sales cycles to analyze activity data for the entire cycle. This change applies to licensed Einstein Activity Capture users, not Einstein Activity Capture Standard users.

# SEE ALSO:

Salesforce Help: Give Users Access to the Activities Dashboard(can be outdated or unavailable during release preview)

# Track Emails That Come from Einstein Activity Capture

Emails that Einstein Activity Capture adds to related Salesforce records now include tracking information, so sales reps can see if and when a recipient opens an email. Get tracking information in the activity timeline.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

**How:** To collect and display email tracking information for your company, enable Email Tracking.

In Lightning Experience only, to collect and display email tracking while respecting individual privacy preferences, also enable Data Protection and Privacy and Enforce email privacy settings.

### SEE ALSO:

Respect Opt Out and Don't Track Preferences with a New Setting

Salesforce Help: Data Protection and Privacy (can be outdated or unavailable during release preview)

Salesforce Help: Enable Email Tracking for All Customers Opening Email from Your Company (can be outdated or unavailable during release preview)

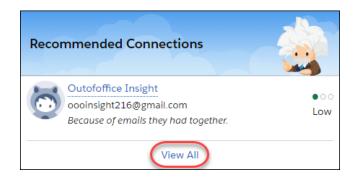
Salesforce Help: Enable the Enforce Email Privacy Settings Preference (can be outdated or unavailable during release preview)

# Boost Your People Skills with More Recommended Connections

The more recommend connections sales reps can see, the easier it is for them to find business connections within their networks. We increased the number of connections shown to reps from 3 to 50, so it's easier to get advice or an introduction from a colleague.

Where: This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions.

**How:** If the Recommended Connection component is already on a page, the View All button appears. Click **View All** to see up to 50 recommended connections.



#### SEE ALSO:

Salesforce Help: Add Recommended Connections to Lightning Pages (can be outdated or unavailable during release preview)

# Einstein Email Insights: New Insights, Better Control Over Custom Insights, and More Visibility

Take Einstein Email Insights to new levels with new standard insights. If you use custom email insights, you can edit insights and combine them. Plus, sales reps who don't use Einstein Activity Capture see standard email insights for shared emails.

### IN THIS SECTION:

Get a Heads-Up from Einstein with New Standard Email Insights

Einstein Email Insights has new insights to help sales reps stay on top of important emails that mention competition and executives.

### Edit Custom Einstein Email Insights Until They're Right

Creating custom email insights that yield useful results takes practice. Save your insight as a draft and keep the previous version. Now you can edit the keywords used in your insights. Previously, you could add but not edit keywords. By seeing what works and what doesn't, you can get those email insights perfect.

## Make Your Email Even Smarter When You Combine Email Insights

Now you can turn two or more insights into a super insight that brings even more intelligence to your email. For example, if a custom email insight for golfing appears with the Executive Involved insight, you might have found the perfect candidate for the CEO Golf Extravaganza your company sponsors every year.

### Standard Einstein Email Insights Visible to All Users

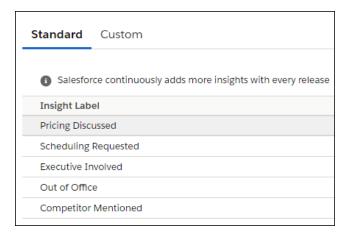
Spread the wealth of insight! If your org has at least one paid Einstein Activity Capture license, all users can see standard and custom email insights on shared emails.

# Get a Heads-Up from Einstein with New Standard Email Insights

Einstein Email Insights has new insights to help sales reps stay on top of important emails that mention competition and executives.

**Where:** This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions. This feature is also new in the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

Who: Custom Einstein Email Insights aren't available for Einstein Activity Capture Standard users.



#### SEE ALSO:

Standard Einstein Email Insights Visible to All Users

Salesforce Help: Turn On Einstein Email Insights (can be outdated or unavailable during release preview)

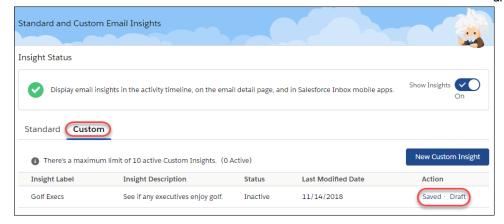
## Edit Custom Einstein Email Insights Until They're Right

Creating custom email insights that yield useful results takes practice. Save your insight as a draft and keep the previous version. Now you can edit the keywords used in your insights. Previously, you could add but not edit keywords. By seeing what works and what doesn't, you can get those email insights perfect.

Where: This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions.

**Who:** Reps with the Customize Application user permission can create and edit custom email insights. Custom Einstein Email Insights aren't available for Einstein Activity Capture Standard users.

**Why:** With access to the current version of a custom email insight and a saved draft, reps can easily fine-tune insights to ensure they're getting the most relevant and useful results without losing existing work.



Make Your Email Even Smarter When You Combine Email Insights

Salesforce Help: Create Custom Einstein Email Insights (can be outdated or unavailable during release preview)

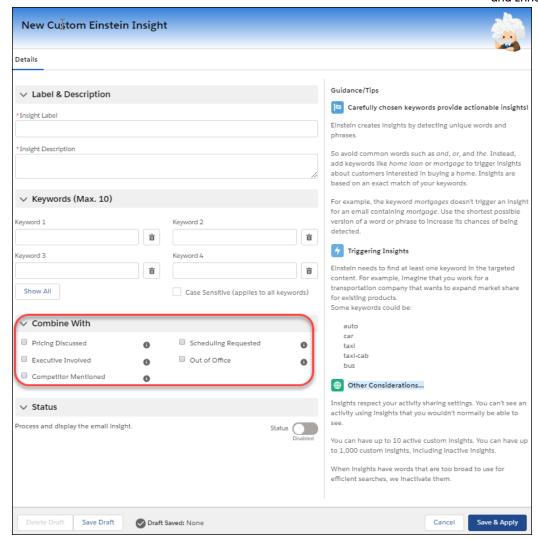
# Make Your Email Even Smarter When You Combine Email Insights

Now you can turn two or more insights into a super insight that brings even more intelligence to your email. For example, if a custom email insight for golfing appears with the Executive Involved insight, you might have found the perfect candidate for the CEO Golf Extravaganza your company sponsors every year.

**Where:** This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions. This change also applies to the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

**Who:** Reps need the Customize Application user permission to create and edit custom email insights. Custom Einstein Email Insights aren't available for Einstein Activity Capture Standard users.

**Why:** Your reps love the standard email insights, and they'll love them even more now that they can combine them with each other and with keywords.



On the Custom tab, reps can choose one or more standard insights along with 10 keywords. There's almost no limit to the number of combinations reps can create. Targeting the perfect customer is even easier.

Custom email insights appear in the activity timeline and email detail page, just like standard email insights. For users of the Inbox mobile app, custom email insights appear in their inbox.

### SEE ALSO:

Edit Custom Einstein Email Insights Until They're Right

Salesforce Help: Create Custom Einstein Email Insights (can be outdated or unavailable during release preview)

# Standard Einstein Email Insights Visible to All Users

Spread the wealth of insight! If your org has at least one paid Einstein Activity Capture license, all users can see standard and custom email insights on shared emails.

**Where:** This feature is new in Lightning Experience in Enterprise, Performance, and Unlimited editions. This feature is also new in the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited Editions.

Why: Users without Einstein Activity Capture can view email insights only. They can't take action or provide feedback on those insights.

#### SEE ALSO:

Get a Heads-Up from Einstein with New Standard Email Insights

Salesforce Help: Turn On Einstein Email Insights (can be outdated or unavailable during release preview)

# Test Einstein Activity Capture in Sandbox

Einstein Activity Capture is available in sandbox environments. See how easy it is to set up and get a preview of how sales reps use the feature.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, and Unlimited editions.

**How:** To see the full functionality of Einstein Activity Capture, connect the sandbox to a production Microsoft® or Google server, and connect some user email and calendar accounts. Be sure that sync functionality is turned off in sandbox before you turn on syncing for users in production. After you set up Einstein Activity Capture in sandbox, you can't copy a production org to that sandbox

# Email Experience: Better Email Privacy Enforcement, Ability to Send Non-Commercial Emails, More List Email Status Details, and Expanded Limits

Respect customers' preferences to not receive emails or have the emails they receive from you tracked. Alert sales reps before they send emails to individuals who opted out of receiving commercial emails. Give reps permissions to send non-commercial emails to customers. And get more detail about the status of your list email recipients. In new orgs, more types of emails count toward the daily external email limit.

# IN THIS SECTION:

### Respect Opt Out and Don't Track Preferences with a New Setting

Customers want privacy, and you can give it to them with a new setting. This setting enforces the user's email privacy settings, whether it's Don't Market, Don't Track, Forget this Individual, or Don't Process.

### Account For Your Customers' Email Opt Out Preferences

If your customers choose Email Opt Out or the Don't Market email privacy setting, your company should send them non-commercial emails only, such as product shipping updates and service plan changes. Previously, Salesforce didn't account for these settings, and would allow emails to these customers without any warning. You can now prevent reps from sending email to customers with these privacy settings by removing their Send Non-Commercial Email permission.

### Honor Customer Privacy with Updates to List Email Statuses

If a list email delivery has errors, you're sent a delivery summary with an attached CSV file. The file lists the status for each person the email was sent to, including email privacy settings. Whether you're complying with data protection and privacy regulations, such as General Data Protection Regulation (GDPR), or other requirements, this information helps you honor your customers' requests for privacy.

### Expanded Enforcement of Daily External Email Limit for New Orgs

Each org can send 5,000 single emails per day to external email addresses. For orgs created in Spring '19 and later, this daily limit is also enforced for email alerts, simple email actions, Send Email actions, and REST API. If one of the newly counted emails can't be sent because your org has reached the limit, we notify you by email and add an entry to the debug logs. For orgs created before Spring '19, the daily limit is enforced only for emails sent via Apex and Salesforce APIs except the REST API.

## Create Secure DKIM Keys with Longer RSA Key Sizes

You can now choose between 1024-bit and 2048-bit RSA key sizes when creating DKIM (DomainKeys Identified Mail) keys. Before choosing a key size, research possible limitations and security requirements, such as complying with industry-specific security regulations like FIPS (Federal Information Processing Standards). Existing DKIM keys are set to the 1024-bit size. You can specify the RSA key size only for new DKIM keys.

## Return Bounced Emails to Senders as Attached Files

Help reps keep track of emails that aren't delivered by returning bounced messages to them. When an email bounces, it is now sent as an email attachment to the sender's email address. Returning bounced emails as attachments complies with security measures that help to protect against fraudulent emails.

# Respect Opt Out and Don't Track Preferences with a New Setting

Customers want privacy, and you can give it to them with a new setting. This setting enforces the user's email privacy settings, whether it's Don't Market, Don't Track, Forget this Individual, or Don't Process.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Confirm that Data Protection and Privacy is enabled. Then from Setup, enter <code>Deliverability</code> in the Quick Find box, and select **Deliverability**. In the Data Protection and Privacy section, select **Enforce email privacy settings**.



Note: In previous releases, you had to enable Data Protection and Privacy only. Now you must also enable **Enforce email privacy settings**.

### SEE ALSO:

Account For Your Customers' Email Opt Out Preferences

Salesforce Help: Email Open Tracking and Email Opt Out (can be outdated or unavailable during release preview)

IdeaExchange: E-Mail Opt Out Doesn't Disable E-mailing

IdeaExchange: Email Opt Out Functionality in Lightning

# Account For Your Customers' Email Opt Out Preferences

If your customers choose Email Opt Out or the Don't Market email privacy setting, your company should send them non-commercial emails only, such as product shipping updates and service plan changes. Previously, Salesforce didn't account for these settings, and would allow emails to these customers without any warning. You can now prevent reps from sending email to customers with these privacy settings by removing their Send Non-Commercial Email permission.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Reps with the Send Non-Commercial Email permission can send non-commercial email. This permission is on by default for all standard profiles that send email and for already-created custom profiles.

**How:** Reps with the permission confirm that the email is non-commercial before it's sent.



Note: In Lightning Experience, reps need read visibility to the field Email Opt Out on leads and contacts. Check field level security on this field to confirm visibility. Without access to the field, reps don't see any warning messages until they click send.

To prevent a rep from sending email to customers who've opted out, disable Send Non-Commercial Email in their permission set.



### SEE ALSO:

Respect Opt Out and Don't Track Preferences with a New Setting

Salesforce Help: Choose Which Sales Reps Can Send Non-Commercial Email (can be outdated or unavailable during release preview)

Salesforce Help: What's the Difference Between Commercial and Non-Commercial Email? (can be outdated or unavailable during release preview)

*IdeaExchange*: E-Mail Opt Out Doesn't Disable E-mailing *IdeaExchange*: Email Opt Out Functionality in Lightning

# Honor Customer Privacy with Updates to List Email Statuses

If a list email delivery has errors, you're sent a delivery summary with an attached CSV file. The file lists the status for each person the email was sent to, including email privacy settings. Whether you're complying with data protection and privacy regulations, such as General Data Protection Regulation (GDPR), or other requirements, this information helps you honor your customers' requests for privacy.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Expanded Enforcement of Daily External Email Limit for New Orgs

Each org can send 5,000 single emails per day to external email addresses. For orgs created in Spring '19 and later, this daily limit is also enforced for email alerts, simple email actions, Send Email actions, and REST API. If one of the newly counted emails can't be sent because your org has reached the limit, we notify you by email and add an entry to the debug logs. For orgs created before Spring '19, the daily limit is enforced only for emails sent via Apex and Salesforce APIs except the REST API.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Who:** This change applies only to orgs that are created in Spring '19 and later.

# Create Secure DKIM Keys with Longer RSA Key Sizes

You can now choose between 1024-bit and 2048-bit RSA key sizes when creating DKIM (DomainKeys Identified Mail) keys. Before choosing a key size, research possible limitations and security requirements, such as complying with industry-specific security regulations like FIPS (Federal Information Processing Standards). Existing DKIM keys are set to the 1024-bit size. You can specify the RSA key size only for new DKIM keys.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

**How:** From Setup, enter *DKIM Keys* in the Quick Find box, and then select **DKIM Keys**. Click **Create New Key**, and select the key size.

### SEE ALSO:

Salesforce Help: Create a DKIM Key with Increased Security (can be outdated or unavailable during release preview)
Salesforce Help: Create a DKIM Key (can be outdated or unavailable during release preview)

### Return Bounced Emails to Senders as Attached Files

Help reps keep track of emails that aren't delivered by returning bounced messages to them. When an email bounces, it is now sent as an email attachment to the sender's email address. Returning bounced emails as attachments complies with security measures that help to protect against fraudulent emails.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** To return bounced emails as attachments, from Setup, enter <code>Deliverability</code> in the Quick Find box, and then select **Deliverability**. Under Bounce Management, activate bounce management, and select **Return bounced emails to sender**.

SEE ALSO:

Salesforce Help: Enable Email Bounce Handling (can be outdated or unavailable during release preview)

# Email Templates: Folders, Sharing, and Template Reporting

With subfolders and nested folders, it's easy to keep email templates organized. Sharing email templates with the right people is easier too, because it's done by folder.

### IN THIS SECTION:

### Organize Email Templates with Folders and Nesting

You and your sales reps can now organize email templates into more folders than just Private and Public. And nesting folders makes it easier to organize and find email templates.

### Control Which Email Templates Are Shared

Admins and sales reps can set different levels of access to email templates based on which folder a template is in.

### Find Your Email Templates Quickly

We added some bells and whistles to the Email Templates page to help you find your Lightning email templates easily.

### Do More with the Manage Public Lightning Templates Permission

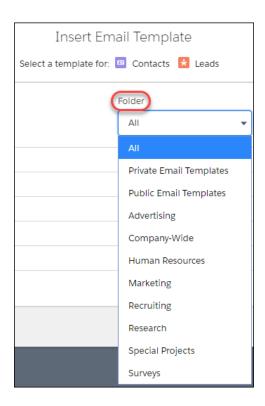
In previous releases, standard users with this permission could create new public templates, but only edit and delete templates they owned. Now users with this permission can edit and delete all public templates.

# Organize Email Templates with Folders and Nesting

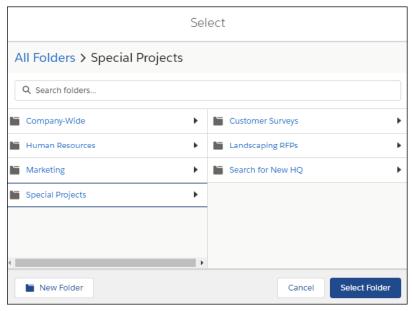
You and your sales reps can now organize email templates into more folders than just Private and Public. And nesting folders makes it easier to organize and find email templates.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Organizing email templates makes them easier to find. Sales reps can use existing folders, while users with the Create Folders for Lightning Email Templates permission can also create folders.



Create a hierarchy for email templates with up to four levels of nesting. Reps can put templates for your entire company in the first level of folders, and then add folders on the next level for different departments in your company. In this example, the Special Projects folder has three subfolders: Customer Surveys, Landscaping RFPs, and Search for New HQ.



Or, a rep might want to make an email template for an event invitation available to her colleagues in a folder they can access. She also keeps a customized event follow-up email template under lock and key in a folder only she can access.

**How:** Enable the org permission **Folders and Enhanced Sharing for Lightning Email Templates**. Then give the **Create Folders for Lightning Email Templates** permission to users who you want to create folders.

Users who are admins or have the **Modify All Data** permission don't need the **Create Folders for Lightning Email Templates** permission. They can already create folders.



**Note:** If you disable **Folders and Enhanced Sharing for Lightning Email Templates**, you lose access to the email template folders you created and the email templates inside those folders. To regain access, enable **Folders and Enhanced Sharing for Lightning Email Templates**.

### SEE ALSO:

Control Which Email Templates Are Shared

Salesforce Help: Enable Folders and Enhanced Sharing for Email Templates (can be outdated or unavailable during release preview)

Salesforce Help: Select Which Users Can Create and Share Email Template Folders (can be outdated or unavailable during release preview)

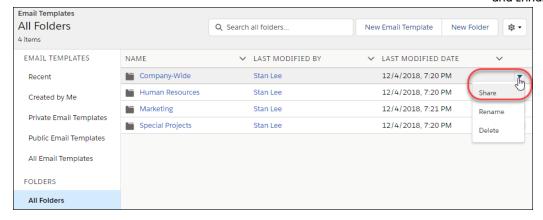
*Salesforce Help*: Considerations for Email Template Folders and Sharing (can be outdated or unavailable during release preview) *IdeaExchange*: Email Templates in Lightning - Need to Control Visibility / Folders

# Control Which Email Templates Are Shared

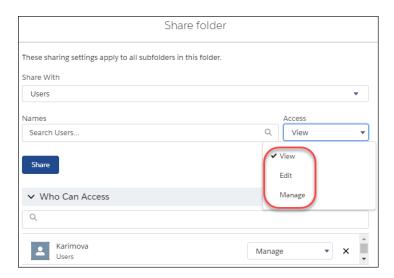
Admins and sales reps can set different levels of access to email templates based on which folder a template is in.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: Reps can control who can access which email templates and how, based on the settings of the email template folder.



To change the sharing settings, click **Share** on the Email Templates page or while editing a folder.



Select who to share the folder with, and what access to give them.



**How:** Enable the org permission **Folders and Enhanced Sharing for Lightning Email Templates**. By default, the user who creates the folder has Manage access.



**Note:** If you disable **Folders and Enhanced Sharing for Lightning Email Templates**, you lose access to the email template folders you created and the email templates inside those folders. To regain access, enable **Folders and Enhanced Sharing for Lightning Email Templates**.

### SEE ALSO:

Organize Email Templates with Folders and Nesting

Salesforce Help: Enable Folders and Enhanced Sharing for Email Templates (can be outdated or unavailable during release preview)
Salesforce Help: Select Which Users Can Create and Share Email Template Folders (can be outdated or unavailable during release preview)

Salesforce Help: Select Which Users Can Create and Share Email Template Folders (can be outdated or unavailable during release preview)

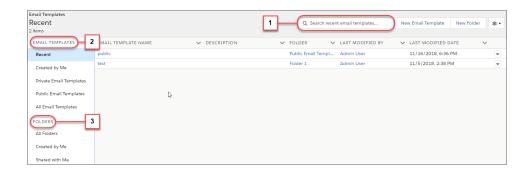
*IdeaExchange*: Email Templates in Lightning - Need to Control Visibility / Folders

# Find Your Email Templates Quickly

We added some bells and whistles to the Email Templates page to help you find your Lightning email templates easily.

Where: These changes apply to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Searching for templates or folders is easy with the search bar (1). The new navigation for Lightning email templates (2) and folders (3) helps you organize your Lightning templates and locate them easily.





Note: To see your Classic email templates, use Classic Email Templates in Setup.

# Do More with the Manage Public Lightning Templates Permission

In previous releases, standard users with this permission could create new public templates, but only edit and delete templates they owned. Now users with this permission can edit and delete all public templates.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Activities and Tasks: Streamlined Event Creation and Closure

Closing a task is just a matter of clicking a button. And creating a follow-up event based on a task is also just one click away.

### IN THIS SECTION:

#### Check Tasks Off Your List with a Click

Closing tasks isn't a burdensome task anymore. Instead of scrolling through the Status dropdown list, sales reps can mark tasks complete with one click.

### Create a Follow-Up Event with One Click

Quickly reserve time on your calendar to complete a task, or create an event to follow up on an existing task, with a click of a button. Now reps don't have to enter data twice because the key information is copied from the original task.

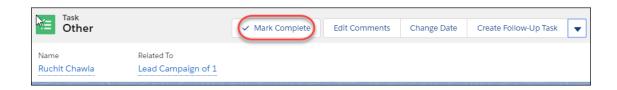
# Check Tasks Off Your List with a Click

Closing tasks isn't a burdensome task anymore. Instead of scrolling through the Status dropdown list, sales reps can mark tasks complete with one click.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Unlimited, and Developer editions.

Why: Click to mark a task complete in the activity timeline or the task detail view.





And you can easily reopen a task in the task detail view.



### SEE ALSO:

Create a Follow-Up Event with One Click IdeaExchange: List View: Checklist

# Create a Follow-Up Event with One Click

Quickly reserve time on your calendar to complete a task, or create an event to follow up on an existing task, with a click of a button. Now reps don't have to enter data twice because the key information is copied from the original task.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions, except Personal Edition.

**Why:** Click **Create Follow-Up Event** to create a follow-up event.



SEE ALSO:

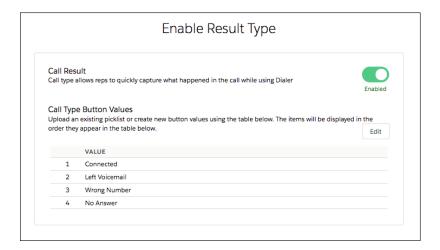
Check Tasks Off Your List with a Click

# Lightning Dialer: Track the Result of Each Call

With one click, sales reps can track whether a call was connected and how it went. Also known as call disposition, this important information is captured in Salesforce on call logs and the activity timeline of related records.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

**Why:** Track the call results of different calls. Sales reps can select from four options in the call panel. The call result options that are enabled by default include Connected, Left Voicemail, Wrong Number, and No Answer. You can customize the options that are right for your company.



Sales reps are required to select a value to log a call when this feature is enabled. The value is saved to the **Call Result** of the related task.

**How:** Set up this feature by selecting **Log a Call** under the Dialer settings in Setup.

# Salesforce Inbox App: Lightning Experience Templates, Android Notifications, Compound Email Insights

Use Lightning Experience templates in the Salesforce Inbox app for iOS and Android. Salesforce Inbox notifications are now connected to Android's notification categories, so users can choose which ones to receive. Compound email insights are available in the Salesforce Inbox app.

### IN THIS SECTION:

## Write Emails Faster with Lightning Templates in Salesforce Inbox

The templates you create in Lightning Experience are now available in the Salesforce Inbox app for iOS and Android devices. Templates increase your reps' productivity and ensure consistent messaging across your business. Sales reps can use the same templates in Inbox on their mobile device that they use in Lightning Experience.

### Refine Inbox Notifications on Android Devices

Salesforce Inbox notifications are now connected to Android's notification categories to give your reps more control over which notifications they receive. Notifications are important to keep busy sales reps on top of their tasks and events for their day. But too many notifications—or the wrong ones—can be distracting, so reps can choose which ones to receive from Inbox. Reps can tap a notification to set how they want future notifications to display.

### Get Access to New and Standard Email Insights

Do more with Einstein email insights. If you have a paid Einstein Activity Capture license and Einstein Email Insights is on, all standard email insights are available to Salesforce Inbox mobile users. Standard email insights include the new Executive Mentioned and Competition Mentioned insights available in Spring '19.

## Use Combined Custom Email Insights for Smarter Email

You can now combine two or more custom insights to create a super insight that brings even more intelligence to your Salesforce Inbox on iOS and Android.

# Write Emails Faster with Lightning Templates in Salesforce Inbox

The templates you create in Lightning Experience are now available in the Salesforce Inbox app for iOS and Android devices. Templates increase your reps' productivity and ensure consistent messaging across your business. Sales reps can use the same templates in Inbox on their mobile device that they use in Lightning Experience.

**Where:** This change applies to the Salesforce Inbox app on iOS and Android devices. Salesforce Inbox is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

### SEE ALSO:

Salesforce Help: Email Templates in Lightning Experience (can be outdated or unavailable during release preview)

IdeaExchange: Lightning Email Templates Not Accessible in Salesforce Inbox

# Refine Inbox Notifications on Android Devices

Salesforce Inbox notifications are now connected to Android's notification categories to give your reps more control over which notifications they receive. Notifications are important to keep busy sales reps on top of their tasks and events for their day. But too many notifications—or the wrong ones—can be distracting, so reps can choose which ones to receive from Inbox. Reps can tap a notification to set how they want future notifications to display.

**Where:** This change applies to the Salesforce Inbox app on Android devices. Salesforce Inbox is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

# Get Access to New and Standard Email Insights

Do more with Einstein email insights. If you have a paid Einstein Activity Capture license and Einstein Email Insights is on, all standard email insights are available to Salesforce Inbox mobile users. Standard email insights include the new Executive Mentioned and Competition Mentioned insights available in Spring '19.

**Where:** This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions. This change also applies to the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

### SEE ALSO:

Get a Heads-Up from Einstein with New Standard Email Insights Standard Einstein Email Insights Visible to All Users

# Use Combined Custom Email Insights for Smarter Email

You can now combine two or more custom insights to create a super insight that brings even more intelligence to your Salesforce Inbox on iOS and Android.

**Where:** This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions. This change also applies to the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

## SEE ALSO:

Make Your Email Even Smarter When You Combine Email Insights

Salesforce Help: Create Custom Einstein Email Insights (can be outdated or unavailable during release preview)

# Notes: Say Goodbye to Unsafe Characters in Notes

Previously, you couldn't save a note that contained certain HTML characters, such as a single quote ('), because they can lead to cross-site scripting (XSS) attacks. Salesforce now does the dirty work for you and strips out the unsafe characters and saves the note.

Where: This change applies to Lightning Experience in Group, Essentials, Enterprise, Performance, and Unlimited editions.

# Calendar: More Ways to Stay Organized in Lightning Experience

Sales reps can manage all the logistics of their event needs better in Lightning Experience and the Salesforce app. Event series are generally available and now you have more flexibility when deleting events from a series. Take advantage of more event options, including creating events for group calendars, booking resources, and easily adding attendees. Plus, prepare for events by viewing related files on meetings and printing calendars.

### IN THIS SECTION:

# Schedule an Event Series (Generally Available)

Schedule daily, weekly, monthly, or other repeating events that last until the end of time, or just through next month. Plus, when shift happens, you can update a single event or remove any events after a specific occurrence.

# Keep Your Team Organized with Public Calendars in Lightning Experience

Use public calendars to keep team members in the loop and everyone's projects on track more easily. Everyone who shares a public calendar can view, schedule, and update events without switching to Salesforce Classic. Previously, you could enable public calendars, but reps couldn't access them from Lightning Experience.

Productivity Features: Improvements to Einstein Activity Capture, Better Email Privacy and Template Management, and Enhancements to Salesforce Inbox

### **Book Resources for Events**

Reserve meeting resources, such as projectors, to avoid double-booking the tools you need.

# Add Attendees Without Setting Up Lightning Sync

Set up sales reps to add Salesforce users, contacts, person accounts, and leads to their events faster: You don't have to bother with Lightning Sync anymore.

## See More Details from the Event Preview

From your calendar, click an event to see a preview of up to 10 fields. Previously, you could see up to four fields.

### See More Details When You Print Calendars

Printed calendars show outlined time and date blocks, so you can see more event details without the side panel fogging up your view.

### See Files Related to Your Events

When an event owner relates files to an event, anyone with access to the event can view the files. Previously, only the event owner could see related files.

# Schedule an Event Series (Generally Available)

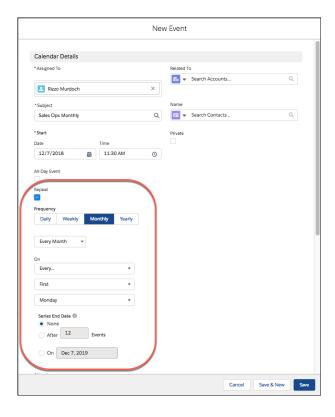
Schedule daily, weekly, monthly, or other repeating events that last until the end of time, or just through next month. Plus, when shift happens, you can update a single event or remove any events after a specific occurrence.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** We made some improvements since the beta version of this feature.

- If you have platform encryption enabled for the Event Description field, event series created or updated in Spring '19 are encrypted.
- Sales reps can update custom fields.
- When changes are needed, sales reps can remove a single event, all events from a specific occurrence onward, and an entire series.

**How:** To let your reps schedule event series, on the page layout for events, add the Repeat checkbox. Then, to schedule a series, reps can select Repeat.



Salesforce Help: Considerations for Using Events and Calendars in Lightning Experience (can be outdated or unavailable during release preview)

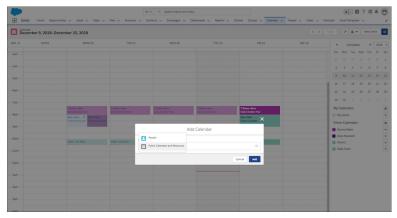
**Encryption Compatibility with Event Series** 

# Keep Your Team Organized with Public Calendars in Lightning Experience

Use public calendars to keep team members in the loop and everyone's projects on track more easily. Everyone who shares a public calendar can view, schedule, and update events without switching to Salesforce Classic. Previously, you could enable public calendars, but reps couldn't access them from Lightning Experience.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

Why: Under Other Calendars in the side panel, sales reps can add and hide public calendars from their calendar view.



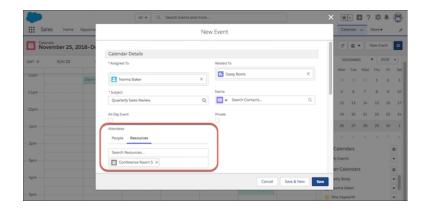
**How:** In Setup, enter *Public Calendars and Resources* in the Quick Find box and then click **Public Calendars and Resources**. Under Public Calendars, select **New**.

## **Book Resources for Events**

Reserve meeting resources, such as projectors, to avoid double-booking the tools you need.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** When creating events, you can add resources as attendees to reserve them. If you need to compare the availability of multiple resources, add the resource calendars to your calendar view.



How: Add Resources in Setup. Then from the page layout for events, add the Attendees field.

SEE ALSO:

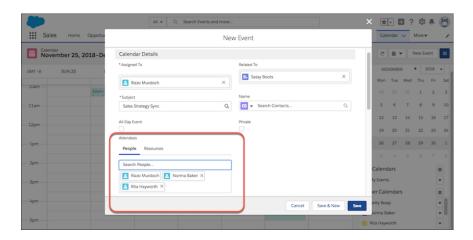
Salesforce Help: Create and Manage a Public Calendar or a Resource Calendar (can be outdated or unavailable during release preview)

# Add Attendees Without Setting Up Lightning Sync

Set up sales reps to add Salesforce users, contacts, person accounts, and leads to their events faster: You don't have to bother with Lightning Sync anymore.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** To allow reps to add or remove attendees in Lightning Experience and the Salesforce app, add the Attendees field to the page layout for events.



To send invitations to attendees and get their responses in Salesforce, the event organizer still has to use Lightning Sync.

## SEE ALSO:

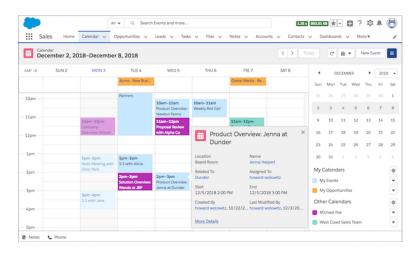
Salesforce Help: Set Up Attendees to Receive Invitations When They're Invited to Events from Lightning Experience and the Salesforce App (can be outdated or unavailable during release preview)

# See More Details from the Event Preview

From your calendar, click an event to see a preview of up to 10 fields. Previously, you could see up to four fields.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Reps can view more event information directly from the calendar home page without having to open events to see important details.



Salesforce Help: Create Compact Layouts (can be outdated or unavailable during release preview)

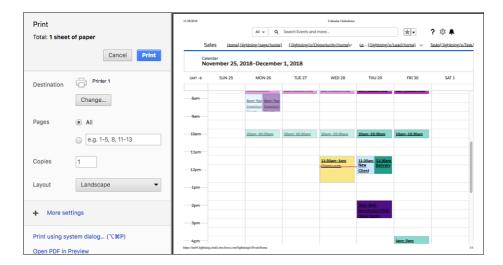
## See More Details When You Print Calendars

Printed calendars show outlined time and date blocks, so you can see more event details without the side panel fogging up your view.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Who: Sales reps using Google Chrome, Microsoft Internet Explorer, and Mozilla Firefox can benefit from this enhancement.

Why: From your calendar view, print up to 12 hours of events in a week view or an entire month.

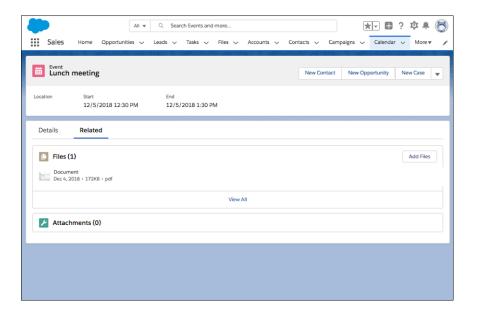


# See Files Related to Your Events

When an event owner relates files to an event, anyone with access to the event can view the files. Previously, only the event owner could see related files.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Keep everyone at the table on the same page. From the event detail page, sales reps can select **Related** to see files added by the event owner.



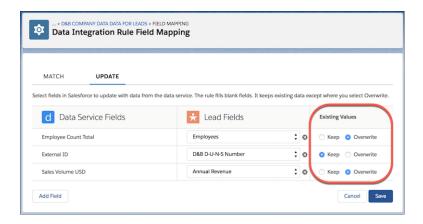
Salesforce Help: Add the Files Related List to Page Layouts (can be outdated or unavailable during release preview)

# Lightning Data: Refresh Data Automatically

In Lightning Data rules that update fields on your records via a lookup to a custom object, you can replace old data with new information automatically: In Setup, select a new field mapping option for existing values. Previously, when sales reps updated accounts, contacts, or leads, Lightning Data could only fill empty fields. It couldn't update fields that already contained data—even if the data was out-of-date. Now, sales reps no longer have to click a link to see the latest data, such as head count, revenue, or contact information. And with this automation, your sales team enjoys better segmentation, more comprehensive reporting, and easier task assignment.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** In Setup, use the Quick Find box to find **Data Integration Rules** and open a rule that updates records. In the rule's field mapping settings, select **Update**. On each field, select **Overwrite** or **Keep**. Before selecting Overwrite, enable history tracking for the field.



Salesforce Help: Edit the Field Mapping for a Data Integration Rule (can be outdated or unavailable during release preview)
Salesforce Help: Track Field History for Standard Objects (can be outdated or unavailable during release preview)

# Integration with Google: Combined Chrome Extension, High Velocity Sales Work Queue, and Attendee Sync Improvements

Lightning for Gmail and Salesforce Inbox are now available in a combined Chrome extension. The High Velocity Sales Work Queue is available in Gmail™. Plus, Lightning Sync users can now see event attendee changes made through the API on Google calendars.

### IN THIS SECTION:

### Gmail Integration: Combined Chrome Extension, High Velocity Sales Work Queue, and More Email Logging Options

Lightning for Gmail and Salesforce Inbox are now available in a combined Chrome extension. The High Velocity Sales Work Queue is available in Gmail and Sales reps can now log emails to anyone in Salesforce, even people not included in the email.

### Lightning Sync: See Attendee Changes Made Through the API on Google Calendars

Now when changes are made to the Attendees field through the API, it's easier for sales reps to see those changes on their Google calendars. That's because changes sync from Salesforce automatically. Previously, changes made through the API didn't sync unless triggered by a change to an additional field on the event. Considerations for attendee status sync (Accepted, Declined, or No response) still apply.

# Gmail Integration: Combined Chrome Extension, High Velocity Sales Work Queue, and More Email Logging Options

Lightning for Gmail and Salesforce Inbox are now available in a combined Chrome extension. The High Velocity Sales Work Queue is available in Gmail and Sales reps can now log emails to anyone in Salesforce, even people not included in the email.

### IN THIS SECTION:

### Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension

The Chrome Web Store listing for Lightning for Gmail is now called Salesforce. The Chrome extension brings sales reps the Salesforce experience within G Suite Gmail, regardless of whether they're set up to use standard features or premium Inbox features. The single extension provides the base Gmail integration features at no cost, and the option to add Inbox features with the purchase of an Inbox license.

# Accelerate Sales with the High Velocity Sales Work Queue in Gmail™

Sales reps working in Gmail have access to the Work Queue functionality from High Velocity Sales. With access in Gmail, sales reps can work through their queue from where they prefer to work: Lightning Experience or their email application.

### Require Login Credentials When Sessions Expire

To support different security policies, you can now configure the Gmail integration to require sales reps to enter their Salesforce login credentials each time their Salesforce session expires. By default, the integration with Gmail $^{\text{M}}$  uses single sign-on (SSO) to preserve and restore the Salesforce session after the first login.

## Access Salesforce Information Directly from Google Calendar

Sales reps can now easily access the matching Salesforce data while viewing or creating an event in Calendar view. No more double-clicking the event to drill into the details to see Salesforce data.

# Log Emails to People Who Aren't Email Recipients from Gmail™

Previously, sales reps could log emails from Gmail to contacts, leads, and person accounts in Salesforce that matched an address in the To or CC fields in the email. Because an email can include important information, reps can now log messages to any people record, ensuring that pertinent information is recorded in Salesforce. Sales reps can search for other people using global search in the Gmail integration pane. Emails logged to other people records are included in the record's activity timeline.

# Get Lightning for Gmail and Salesforce Inbox in One Chrome Extension

The Chrome Web Store listing for Lightning for Gmail is now called Salesforce. The Chrome extension brings sales reps the Salesforce experience within G Suite Gmail, regardless of whether they're set up to use standard features or premium Inbox features. The single extension provides the base Gmail integration features at no cost, and the option to add Inbox features with the purchase of an Inbox license.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** If you're already using Lightning for Gmail, you're all set. No need to replace the Lightning for Gmail extension you have installed. If you want to add Inbox features to your Gmail integration and don't have an Inbox license, contact Salesforce.

Find all the Gmail integration settings on the Gmail integration and Sync page in Salesforce Setup.

#### SEE ALSO:

External Link: Salesforce Extension in the Chrome Web Store (can be outdated or unavailable during release preview)

IdeaExchange: Required Fields for Tasks in Salesforce Inbox

*IdeaExchange*: Ability to Create Custom Objects from Salesforce Inbox in Outlook and Chrome

IdeaExchange: Auto-Populating Profile Records When Creating New Leads and Contacts

IdeaExchange: Edit Contact and Lead Information in Salesforce Inbox

IdeaExchange: Change Log Email Icon When I've Already Added an Email to Salesforce

IdeaExchange: Ability to Edit New Contact Record Details When Adding to Salesforce from Inbox

IdeaExchange: Log Emails to Campaigns

IdeaExchange: Allow Us to Change the Visible Fields in Salesforce Inbox for Custom Objects

IdeaExchange: Use Lightning Email Templates As Well As Classic Templates in Salesforce Inbox

*IdeaExchange*: Add Salesforce Inbox Email Attachments Under Files not Attachments

*IdeaExchange*: Create Accounts from Salesforce Inbox

# Accelerate Sales with the High Velocity Sales Work Queue in Gmail™

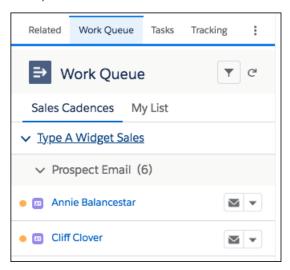
Sales reps working in Gmail have access to the Work Queue functionality from High Velocity Sales. With access in Gmail, sales reps can work through their queue from where they prefer to work: Lightning Experience or their email application.

Where: This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions.

**Who:** Users with the High Velocity Sales permission set and Inbox permission set can see the Work Queue after it's added to the email application pane.

**How:** After High Velocity Sales and Inbox are enabled, use the Lightning App Builder to update the email application panes to include the Work Queue component. For the best experience, we recommend adding a tab to the Gmail integration Tab component and placing

the Work Queue component in the new tab. Include the component in each pane assigned to your inside sales reps who use the High Velocity Sales features.



#### SEE ALSO:

High Velocity Sales: Accelerating Your Sales Team with Sales Cadences and Work Queues Salesforce Help: Customize the Gmail Integration Pane

# Require Login Credentials When Sessions Expire

To support different security policies, you can now configure the Gmail integration to require sales reps to enter their Salesforce login credentials each time their Salesforce session expires. By default, the integration with Gmail<sup>™</sup> uses single sign-on (SSO) to preserve and restore the Salesforce session after the first login.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** In the Gmail Integration & Sync setup page, turn off **Keep Gmail and Salesforce Connected**. Mappings between Salesforce and Gmail users are deleted, and each user is prompted in the integration to log in to Salesforce when their current session expires.

# Access Salesforce Information Directly from Google Calendar

Sales reps can now easily access the matching Salesforce data while viewing or creating an event in Calendar view. No more double-clicking the event to drill into the details to see Salesforce data.

**Where:** This feature is available in Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Log Emails to People Who Aren't Email Recipients from Gmail™

Previously, sales reps could log emails from Gmail to contacts, leads, and person accounts in Salesforce that matched an address in the To or CC fields in the email. Because an email can include important information, reps can now log messages to any people record, ensuring that pertinent information is recorded in Salesforce. Sales reps can search for other people using global search in the Gmail integration pane. Emails logged to other people records are included in the record's activity timeline.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Lightning Sync: See Attendee Changes Made Through the API on Google Calendars

Now when changes are made to the Attendees field through the API, it's easier for sales reps to see those changes on their Google calendars. That's because changes sync from Salesforce automatically. Previously, changes made through the API didn't sync unless triggered by a change to an additional field on the event. Considerations for attendee status sync (Accepted, Declined, or No response) still apply.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the mobile app in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Attendee statuses sync from Google to Salesforce, but not from Salesforce to Google. Be wary of creating API flows that update attendee status in Salesforce for users set up to sync both ways. Eventually the original Google status overrides the update made in Salesforce.

# Integration with Microsoft®: High Velocity Sales Work Queue, More Email Logging Options, and Event Series Sync

Work in the High Velocity Sales Work Queue from within Outlook®. Log an email to any person in Salesforce. Keep event series up to date with less effort.

### IN THIS SECTION:

# Outlook Integration: High Velocity Sales Work Queue, More Logging Options, and Two-Factor Authentication and Outlook 2019 Support

The High Velocity Sales Work Queue is available in Mircrosoft<sup>®</sup> Outlook<sup>®</sup>. Sales reps can now log emails to any Salesforce people record, even people not included in the email. Plus, the Outlook integration now supports your Salesforce two-factor authentication setup and is available in Outlook 2019.

# Lightning Sync for Microsoft® Exchange: Event Series Sync (Generally Available) and Attendee Sync Improvements

Event series sync is now generally available. Lightning Sync users can now see event attendee changes made through the API on Microsoft calendars.

### Salesforce for Outlook: More Cloud-Based Alternatives and the Latest Installable Version

Tired of manual upgrades? We are too! Check out the improvements to our latest product alternatives: the Outlook Integration, Lightning Sync, and Einstein Activity Capture. Today could be the day that you move to something better. Or, if you want to stick to familiar ground, get security improvements and bug fixes when you upgrade to Salesforce for Outlook v3.4.5.

### Connect for Office and Standard Mail Merge Have Been Retired

The Microsoft® Excel and Microsoft® Word add-ons and standard Mail Merge are no longer available. If your sales reps still use these features, check out our product retirement articles for alternatives.

# Outlook Integration: High Velocity Sales Work Queue, More Logging Options, and Two-Factor Authentication and Outlook 2019 Support

The High Velocity Sales Work Queue is available in Mircrosoft® Outlook®. Sales reps can now log emails to any Salesforce people record, even people not included in the email. Plus, the Outlook integration now supports your Salesforce two-factor authentication setup and is available in Outlook 2019.

### IN THIS SECTION:

## Accelerate Sales with the High Velocity Sales Work Queue in Microsoft® Outlook®

Sales reps working in Outlook have access to the Work Queue functionality from High Velocity Sales. With access in Outlook, sales reps can work through their queue from where they prefer to work: Lightning Experience or their email application.

### Log Emails to People Who Aren't Email Recipients from Outlook®

Previously, sales reps could log emails from Microsoft<sup>®</sup> Outlook to contacts, leads, and person accounts in Salesforce that matched an address in the To or CC fields in the email. Because an email can include important information, reps can now log messages to any people record, ensuring that pertinent information is recorded in Salesforce. Sales reps can search for other people using global search in the Gmail integration pane. Emails logged to other people records are included in the record's activity timeline.

### Run Outlook Integration in Outlook® 2019

The Outlook integration is now supported in Outlook 2019. As with other Outlook versions, we recommend that you run the latest build of Outlook 2019 to ensure that the integration works as expected.

### Use Salesforce Two-Factor Authentication with Microsoft® Outlook®

Provide an extra layer of security when sales reps connect Outlook to Salesforce by requiring a username, password, and a third security component, such as a code. Two-factor authentication isn't new to Salesforce. However, the Outlook integration now respects the two-factor authentication that you configure for Salesforce.

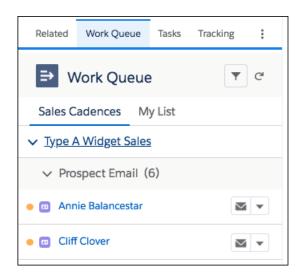
# Accelerate Sales with the High Velocity Sales Work Queue in Microsoft® Outlook®

Sales reps working in Outlook have access to the Work Queue functionality from High Velocity Sales. With access in Outlook, sales reps can work through their queue from where they prefer to work: Lightning Experience or their email application.

Where: This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions.

**Who:** Users with the High Velocity Sales permission set and the Inbox permission set can see the Work Queue after it's added to the email application pane.

**How:** After High Velocity Sales and Inbox are enabled, use the Lightning App Builder to update the email application panes to include the Work Queue component. For the best experience, we recommend adding a tab to the Outlook integration Tab component and placing the Work Queue component in the new tab. Include the component in each pane assigned to your inside sales reps who use the High Velocity Sales features.



High Velocity Sales: Accelerating Your Sales Team with Sales Cadences and Work Queues

Salesforce Help: Customize the Outlook Integration Pane (can be outdated or unavailable during release preview)

# Log Emails to People Who Aren't Email Recipients from Outlook®

Previously, sales reps could log emails from Microsoft<sup>®</sup> Outlook to contacts, leads, and person accounts in Salesforce that matched an address in the To or CC fields in the email. Because an email can include important information, reps can now log messages to any people record, ensuring that pertinent information is recorded in Salesforce. Sales reps can search for other people using global search in the Gmail integration pane. Emails logged to other people records are included in the record's activity timeline.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Run Outlook Integration in Outlook® 2019

The Outlook integration is now supported in Outlook 2019. As with other Outlook versions, we recommend that you run the latest build of Outlook 2019 to ensure that the integration works as expected.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Use Salesforce Two-Factor Authentication with Microsoft® Outlook®

Provide an extra layer of security when sales reps connect Outlook to Salesforce by requiring a username, password, and a third security component, such as a code. Two-factor authentication isn't new to Salesforce. However, the Outlook integration now respects the two-factor authentication that you configure for Salesforce.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

When: This feature is available after all Salesforce instances are upgraded to Spring '19. Go to trust.salesforce.com for exact dates.

**Who**: Two-factor authentication is available for any Salesforce users who use the integration with Outlook. However, due to limitations in Outlook for Mac, we don't support two-factor authentication for Outlook for Mac users.

SEE ALSO:

Salesforce Security Guide: Set Up Two-Factor Authentication (can be outdated or unavailable during release preview)

# Lightning Sync for Microsoft® Exchange: Event Series Sync (Generally Available) and Attendee Sync Improvements

Event series sync is now generally available. Lightning Sync users can now see event attendee changes made through the API on Microsoft calendars.

### IN THIS SECTION:

### Sync Event Series (Generally Available)

Event series sync is generally available and ready to sync your sales reps' new and updated event series between Salesforce and Microsoft® calendars.

### See Attendee Changes Made Through the API on Microsoft® Calendars

Now when changes are made to the Attendees field through the API, it's easier for sales reps to see those changes on their Microsoft calendars. That's because changes sync from Salesforce automatically. Previously, changes made through the API didn't sync unless triggered by a change to an additional field on the event. Considerations for attendee status sync (Accepted, Declined, or No response) still apply.

# Sync Event Series (Generally Available)

Event series sync is generally available and ready to sync your sales reps' new and updated event series between Salesforce and Microsoft® calendars

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Select **Sync event series** in your reps' sync configurations. New and updated event series created in Lightning Experience, the Salesforce app, or Microsoft calendars sync according to reps' event sync directions.

To keep calendars aligned, when reps delete individual events from a series, Lightning Sync seamlessly removes those events from the other application, according to sync direction. Unlike standalone events or event series, individual events from a series are removed regardless of whether you've selected the **Delete synced events** setting in reps' sync configurations. If you haven't selected **Delete synced events** for reps, let them know that deleting individual events from a series removes it from both systems.

# SEE ALSO:

Schedule an Event Series (Generally Available)

Salesforce Help: Define Lightning Sync for Microsoft® Exchange Settings for Reps (can be outdated or unavailable during release preview)

# See Attendee Changes Made Through the API on Microsoft® Calendars

Now when changes are made to the Attendees field through the API, it's easier for sales reps to see those changes on their Microsoft calendars. That's because changes sync from Salesforce automatically. Previously, changes made through the API didn't sync unless triggered by a change to an additional field on the event. Considerations for attendee status sync (Accepted, Declined, or No response) still apply.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the mobile app in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Attendee statuses sync from Exchange to Salesforce, but not from Salesforce to Exchange. Be wary of creating API flows that update attendee status in Salesforce for users set up to sync both ways. Eventually the original Exchange status overrides the update made in Salesforce.

# Salesforce for Outlook: More Cloud-Based Alternatives and the Latest Installable Version

Tired of manual upgrades? We are too! Check out the improvements to our latest product alternatives: the Outlook Integration, Lightning Sync, and Einstein Activity Capture. Today could be the day that you move to something better. Or, if you want to stick to familiar ground, get security improvements and bug fixes when you upgrade to Salesforce for Outlook v3.4.5.

### IN THIS SECTION:

# Explore the Latest Cloud-Based Product Alternatives

If you're ready to give up manual product installations, compare the latest benefits of our cloud-based Microsoft integration products. In addition to Outlook integration and Lightning Sync, now Einstein Activity Capture is an option too! These products are better because they're automatically updated every release with the latest features and improvements. No more manual upgrades required.

### Upgrade to Salesforce for Outlook v3.4.5

Salesforce for Outlook v3.4.5 is the next available version after Salesforce for Outlook v3.4.3 was released in Summer '18. Get security improvements and prevent Microsoft® Outlook® crashes. For more details, check the Salesforce for Outlook Trailblazer Community in early January 2019 for version-specific release notes.

# Explore the Latest Cloud-Based Product Alternatives

If you're ready to give up manual product installations, compare the latest benefits of our cloud-based Microsoft integration products. In addition to Outlook integration and Lightning Sync, now Einstein Activity Capture is an option too! These products are better because they're automatically updated every release with the latest features and improvements. No more manual upgrades required.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all version of the mobile app in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Whether you're waiting for a favorite feature, specific system support, or a simplified setup, see if these improvements meet your company's needs.

- Einstein Activity Capture syncs contacts and events, plus offers productivity-boosting email and event capture. With its less-complicated setup and connection requirements, Einstein Activity Capture could provide the sync capabilities that suit you.
- Lightning Sync syncs event series for users working in Lightning Experience and the Salesforce app.
- Outlook integration offers productivity features that aren't available on the Salesforce for Outlook side panel. New features include the High Velocity Sales Work Queue and email logging to anyone in Salesforce.

**How:** Check out our release notes and comparison documentation for more details. And when you settle on the right product, get started with the setup documentation.

### SEE ALSO:

Einstein Activity Capture: New Syncing Capabilities, Expanded Sharing, Better Metrics, and Enhancements to Email Insights
Lightning Sync for Microsoft® Exchange: Event Series Sync (Generally Available) and Attendee Sync Improvements
Outlook Integration: High Velocity Sales Work Queue, More Logging Options, and Two-Factor Authentication and Outlook 2019
Support

Salesforce Help: Which Email Integration Product Is Right for My Company? (can be outdated or unavailable during release preview)

Salesforce Help: Set Up Einstein Activity Capture (can be outdated or unavailable during release preview)

Trailhead: Outlook Integration (can be outdated or unavailable during release preview)

# Upgrade to Salesforce for Outlook v3.4.5

Salesforce for Outlook v3.4.5 is the next available version after Salesforce for Outlook v3.4.3 was released in Summer '18. Get security improvements and prevent Microsoft® Outlook® crashes. For more details, check the Salesforce for Outlook Trailblazer Community in early January 2019 for version-specific release notes.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

### SEE ALSO:

Salesforce Trailblazer Community: Salesforce for Outlook Release Notes v3.4.5 (can be outdated or unavailable during release preview)

# Connect for Office and Standard Mail Merge Have Been Retired

The Microsoft® Excel and Microsoft® Word add-ons and standard Mail Merge are no longer available. If your sales reps still use these features, check out our product retirement articles for alternatives.

Where: This change applies to Salesforce Classic in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

## SEE ALSO:

Knowledge Article: Connect for Office Excel Add-on Will Be Retired

Knowledge Article: Connect for Office Word Add-on and Standard Mail Merge Will Be Retired

# Salesforce CPQ and Billing: Expanded Invoicing, Amendment Options, and Consumption Schedules for Usage Summaries

Bring usage-based pricing into Salesforce CPQ and define custom billable unit prices for your evergreen subscriptions. Amend subscriptions from any of your account's contracts within the quote line editor. Use consumption schedules to rate your usage summaries. Expand your invoicing capabilities by invoicing usage summaries with consumption schedules and subscriptions without end dates.

# IN THIS SECTION:

### Salesforce CPQ: Consumption Schedules for Usage Summaries and More Amendment Options

Bring usage-based pricing into Salesforce CPQ and define consumption rates for pricing usage. Improve your quoting process with support for larger bundles and better performance when deleting many quote lines at once.

## Salesforce Billing: New Invoicing Options for Usage Summaries and Evergreen Subscriptions

Expand your invoicing capabilities by invoicing evergreen subscriptions. Use consumption schedules to rate usage summaries and customize how you invoice them. Override the billable unit price for your evergreen subscriptions and create revenue schedules based on order product bookings.

#### SEE ALSO:

Knowledge Article: New Objects and Fields for Salesforce CPQ and Billing Spring '19 (can be outdated or unavailable during release preview)

# Salesforce CPQ: Consumption Schedules for Usage Summaries and More Amendment Options

Bring usage-based pricing into Salesforce CPQ and define consumption rates for pricing usage. Improve your quoting process with support for larger bundles and better performance when deleting many quote lines at once.



Note: Salesforce CPQ is offered for an extra cost. For pricing, contact your Salesforce account executive.

### IN THIS SECTION:

### Price Usage with Consumption Schedules (Generally Available)

Price usage based on predefined consumption rates. Previously, price schedules allowed reps to define pricing for only one set of usage rates per order product. Consumption schedules offer enhanced flexibility in pricing. Apply consumption schedules across multiple products, or attach multiple consumption schedules to one product.

## Amend Subscriptions in the Quote Line Editor

We added an Amend Subscriptions button for amendment quotes in the quote line editor. When a sales rep clicks Amend Subscriptions in the quote line editor, Salesforce CPQ shows the Amend Subscriptions page. This page lets the sales rep choose any amendable subscription on their quote's account and add it to the amendment quote. This feature is useful if they want to bring a subscription from a different contract onto their amendment quote.

### Other Changes in Salesforce CPQ

Create larger bundles and delete more lines in the quote line editor.

### SEE ALSO:

Knowledge Article: New Objects and Fields for Salesforce CPQ and Billing Spring '19 (can be outdated or unavailable during release preview)

# Price Usage with Consumption Schedules (Generally Available)

Price usage based on predefined consumption rates. Previously, price schedules allowed reps to define pricing for only one set of usage rates per order product. Consumption schedules offer enhanced flexibility in pricing. Apply consumption schedules across multiple products, or attach multiple consumption schedules to one product.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

### IN THIS SECTION:

### **Define Consumption Schedule Prices**

You can configure your units of usage and set up different rates based on volume of usage. For example, give customers a lower rate if they use more than 2 GB of data on a cellular plan, and an even lower rate if they use more than 10.

### Use Consumption Schedules with Salesforce CPQ and Billing

Previously, consumption schedules were available only in Salesforce. With CPQ and Billing managed package support, you can bring consumption schedules throughout the Salesforce CPQ and Billing life cycle. You can now quote, contract, order, and invoice usage products that have consumption schedules.

### Customize Usage Billing with Consumption Schedule Billing Rules

We added billing rules, tax rules, and revenue recognition rules to consumption schedules. You can now invoice a usage summary using different rules from its parent subscription order product.

### Use Consumption Schedules and Consumption Rates in Custom Scripts

Add extra functionality to your consumption schedules and rates to better meet your company's needs. Include up to 10 fields from the Consumption Rate and Consumption Schedule objects in custom JavaScript code.

### Enable Consumption Schedules for Salesforce CPQ and Billing

To use consumption schedules in Salesforce CPQ and Billing, enable them in Salesforce CPQ package settings and provide users with the appropriate permissions.

# **Define Consumption Schedule Prices**

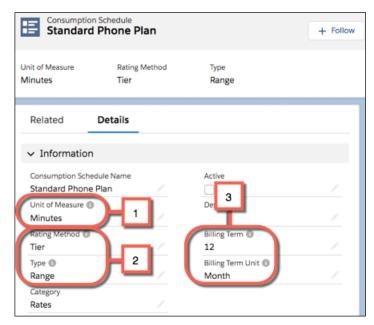
You can configure your units of usage and set up different rates based on volume of usage. For example, give customers a lower rate if they use more than 2 GB of data on a cellular plan, and an even lower rate if they use more than 10.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

**Why:** Previously, price schedules allowed reps to define pricing for only one set of usage rates per order product. Consumption schedules offer enhanced flexibility in pricing. Apply consumption schedules across multiple products, or attach multiple consumption schedules to one product.

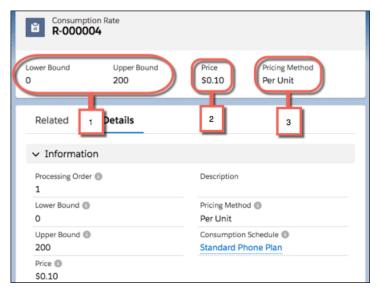
**How:** To enable usage based pricing, install the CPQ managed package or update it to the latest version. Then, turn on usage based pricing in the CPQ package settings. From Setup, enter <code>Installed Packages</code> in the <code>Quick Find</code> box and select <code>Installed Packages</code>. Find the CPQ Package and click <code>Configure</code>. Navigate to the Pricing and Calculation tab. Select <code>Enable Usage Based Pricing</code>.

After sales reps agree on a rating plan, they use the Consumption Schedule object to group the rates in Salesforce.



A consumption schedule defines the unit of measurement (1) and rating method (2) for all of your rates. You can associate one consumption schedule with several products, or several consumption schedules to one product that has multiple types of usage. The consumption schedule also defines the billing frequency (3) that Salesforce Billing uses to invoice the product.

A consumption schedule requires at least one consumption rate.



The consumption rate sets unit-based boundaries for usage (1) and defines the pricing rate (2) for products that fall within the boundaries. The pricing method (3) specifies whether to price usage in that boundary at a flat rate or per unit of usage. For example, a consumption schedule for a phone data plan could have two consumption rates: \$0.10 per minute for the first 200 minutes, and \$0.20 per minute for 201 minutes or more.

When you invoice your customer for a usage product, Salesforce Billing calculates the usage summary's price based on two factors.

The customer's usage amount during a usage period

• Where each usage amount falls in your consumption rates

#### SEE ALSO:

Salesforce Help: Usage-Based Products (can be outdated or unavailable during release preview)

Salesforce Help: Defining Consumption Schedule Price Rates (can be outdated or unavailable during release preview)

Salesforce Help: Consumption Rate Relationships (can be outdated or unavailable during release preview)

Salesforce Help: Use Cases for Usage-Based Pricing (can be outdated or unavailable during release preview)

Salesforce Help: Create a Basic Usage Pricing Setup (can be outdated or unavailable during release preview)

#### Use Consumption Schedules with Salesforce CPQ and Billing

Previously, consumption schedules were available only in Salesforce. With CPQ and Billing managed package support, you can bring consumption schedules throughout the Salesforce CPQ and Billing life cycle. You can now quote, contract, order, and invoice usage products that have consumption schedules.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ and Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**How:** To enable usage based pricing, install the CPQ managed package or update it to the latest version. Then, turn on usage based pricing in the CPQ package settings. From Setup, enter <code>Installed Packages</code> in the <code>Quick Find</code> box and select <code>Installed Packages</code>. Find the CPQ Package and click <code>Configure</code>. Navigate to the Pricing and Calculation tab. Select <code>Enable Usage Based Pricing</code>.

Salesforce uses a linking object, called a product consumption schedule, to define a relationship between the product and the consumption schedule. The product consumption schedule has a one-to-many relationship with products, which lets you associate multiple schedules with the same product. You can also associate one consumption schedule with several products.

Usage pricing begins when you associate a consumption schedule with a product. This association allows sales reps to review and edit usage pricing in the quote line editor during quote development. As sales reps move through the CPQ workflow, Salesforce CPQ creates unique consumption schedules for the quote line, subscription, and order product made from that product. When you upload usage to a usage summary, Salesforce CPQ prices from the order product consumption schedule. You can then invoice your usage summaries.

#### SEE ALSO:

Salesforce Help: Consumption Schedule Data Flow (can be outdated or unavailable during release preview)

Salesforce Help: Viewing Consumption Schedules in the Quote Line Editor (can be outdated or unavailable during release preview)

Salesforce Help: Rating Usage Summaries with a Consumption Schedule (can be outdated or unavailable during release preview)

Salesforce Help: Contracting Products with Consumption Schedules (can be outdated or unavailable during release preview)

Salesforce Help: Amending Products with Consumption Schedules (can be outdated or unavailable during release preview)

Salesforce Help: Renewing Products with Consumption Schedules (can be outdated or unavailable during release preview)

#### Customize Usage Billing with Consumption Schedule Billing Rules

We added billing rules, tax rules, and revenue recognition rules to consumption schedules. You can now invoice a usage summary using different rules from its parent subscription order product.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ and Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**Why:** If you previously used price schedules with your usage products, Salesforce Billing invoiced the order product and its usage summaries based on the order product's rules. With independent sets of billing rules on consumption schedules, you have more flexibility with invoicing, tax calculations, and recognizing revenue for your usage summaries. For example, you could tax the usage order product while keeping its usage summaries tax-free. You could also record usage summary transactions into a separate GL account from usage order product transactions.

**How:** To enable usage based pricing, install the CPQ managed package or update it to the latest version. Then, turn on usage based pricing in the CPQ package settings. From Setup, enter <code>Installed Packages</code> in the <code>Quick Find</code> box and select <code>Installed Packages</code>. Find the CPQ Package and click <code>Configure</code>. Navigate to the Pricing and Calculation tab. Select <code>Enable Usage Based Pricing</code>.

When you create a consumption schedule, provide Billing Rule, Tax Rule, and Revenue Recognition Rule fields. When a sales rep orders a usage-based product related to a consumption schedule, Salesforce Billing creates an order product consumption schedule that inherits all the rule field values from the original consumption schedule. Each order product usage summary looks up to an order product consumption schedule. When Salesforce Billing invoices a usage-based order product, it bills the usage summaries based on the order product consumption schedule rules and treatments. Meanwhile, it bills the order product based on the order product rules and treatments.

#### Use Consumption Schedules and Consumption Rates in Custom Scripts

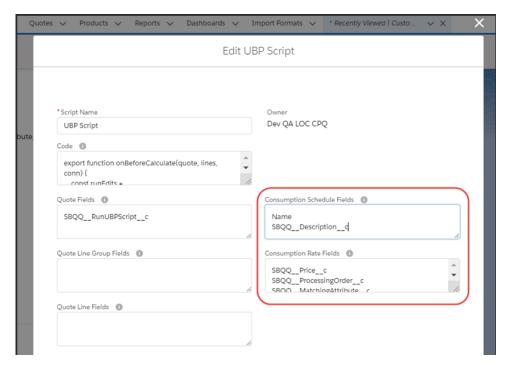
Add extra functionality to your consumption schedules and rates to better meet your company's needs. Include up to 10 fields from the Consumption Rate and Consumption Schedule objects in custom JavaScript code.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

**Why:** Consumption schedules provide flexible pricing for usage-based products, but your company's business process is unique. Use custom scripts to provide more functionality to better meet your company's needs.

**How:** Enter the API names of up to 10 fields from the consumption schedules object, and the API names of up to 10 fields from the consumption rates object. Use custom scripts by calling them from the CPQ Quote Calculator Plugin.

1 Tip: Don't enter fields that your script doesn't need. The more fields you enter, the longer it takes to run your script.



### Enable Consumption Schedules for Salesforce CPQ and Billing

To use consumption schedules in Salesforce CPQ and Billing, enable them in Salesforce CPQ package settings and provide users with the appropriate permissions.

- 1. Enable usage based pricing in Salesforce CPQ package settings.
  - a. From Setup, enter Installed Packages in the Quick Find box, and then select Installed Packages.
  - **b.** Find the Salesforce CPQ package and click **Configure**.
  - **c.** Select the Pricing and Calculation tab.
  - d. Select Enable Usage Based Pricing.
- 2. Make sure that users who need consumption schedules have Create, Read, Edit, and Delete permissions for the following objects.
  - Consumption Schedule
  - Contract Line Item Consumption Schedule (Service Cloud for Salesforce CPQ only)
  - Contract Line Item Consumption Rate (Service Cloud for Salesforce CPQ only)
  - Localizations (if your org uses CPQ translations)
  - Order Product Consumption Schedule
  - Order Product Consumption Rate
  - Quote Line Consumption Schedule
  - Quote Line Consumption Rate
  - Subscription Consumption Schedule (Not needed for Service Cloud for Salesforce CPQ)
  - Subscription Consumption Rate (Not needed for Service Cloud for Salesforce CPQ)

### Amend Subscriptions in the Quote Line Editor

We added an Amend Subscriptions button for amendment quotes in the quote line editor. When a sales rep clicks Amend Subscriptions in the quote line editor, Salesforce CPQ shows the Amend Subscriptions page. This page lets the sales rep choose any amendable subscription on their quote's account and add it to the amendment quote. This feature is useful if they want to bring a subscription from a different contract onto their amendment quote.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

Why: Previously, on amendment quotes, sales reps could amend only assets and subscriptions from the original quote.

**How:** On an amendment quote, select the Add Products dropdown button and then select **Amend Subscriptions**.

## Other Changes in Salesforce CPQ

Create larger bundles and delete more lines in the quote line editor.

#### IN THIS SECTION:

#### Delete Quote Lines Faster

We've enhanced the quote line editor so that large deletes, such as deletes of 150 or more quote lines, are completed more quickly.

#### Download Quote Document PDFs from the Quote Preview Page

You can now download a PDF copy of your CPQ quote document from the Quote Preview page.

#### Delete Quote Lines Faster

We've enhanced the guote line editor so that large deletes, such as deletes of 150 or more guote lines, are completed more guickly.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

Who: Orgs that have enabled multi-line delete.

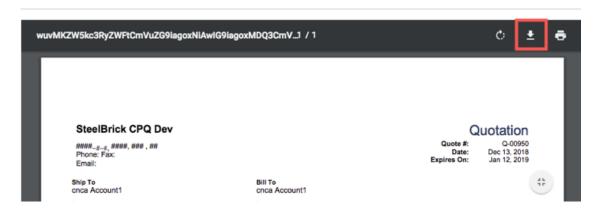
#### Download Quote Document PDFs from the Quote Preview Page

You can now download a PDF copy of your CPQ quote document from the Quote Preview page.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce CPQ editions.

**Why:** Now it's easy to download a PDF of your CPQ quote document when you're done previewing it. On the Quote Preview page, click the Download icon.

#### **Quote Preview**



# Salesforce Billing: New Invoicing Options for Usage Summaries and Evergreen Subscriptions

Expand your invoicing capabilities by invoicing evergreen subscriptions. Use consumption schedules to rate usage summaries and customize how you invoice them. Override the billable unit price for your evergreen subscriptions and create revenue schedules based on order product bookings.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

**Where:** You need to have Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

#### IN THIS SECTION:

#### Salesforce Billing Spring '19 Pre-Installation Instructions

Before you upgrade to Salesforce Billing Spring '19, make sure that your org follows key compatibility requirements.

#### Complete Your Upgrade to Salesforce Billing Spring '19

After you upgrade to Salesforce Billing Spring '19, make sure that you make key permission and record changes so that your sales team can get complete functionality out of the package.

#### Rate and Invoice Usage Summaries with Consumption Schedules

Expand your invoicing capabilities by invoicing based on usage consumed in a billing period. When you order a subscription product with a consumption schedule, Salesforce Billing evaluates its usage records and calculates a price based on usage and the order product's consumption schedule. You can then invoice the usage as a separate invoice line.

#### Invoice and Cancel Subscriptions Without End Dates

Get more control over your evergreen subscriptions. You can now invoice and cancel evergreen subscriptions in Salesforce Billing.

#### Create Revenue Schedules Based on Order Product Bookings Amount

We expanded the billing fields that you use to create revenue schedules for your order products. You can now use an order product's bookings amount as the source of your revenue schedule's total amount.

#### SEE ALSO:

Knowledge Article: New Objects and Fields for Salesforce CPQ and Billing Spring '19 (can be outdated or unavailable during release preview)

## Salesforce Billing Spring '19 Pre-Installation Instructions

Before you upgrade to Salesforce Billing Spring '19, make sure that your org follows key compatibility requirements.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need to have Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

#### How:

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

## Complete Your Upgrade to Salesforce Billing Spring '19

After you upgrade to Salesforce Billing Spring '19, make sure that you make key permission and record changes so that your sales team can get complete functionality out of the package.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need to have Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**How:** Follow these steps.

- 1. On the order product object, provide Create, Write, Update, and Delete permissions to the SBQQ\_OrderItemConsumptionSchedule\_c field
- 2. By default, activated evergreen subscription order products created in Salesforce Billing Winter '19 don't have a next billing date. To invoice them in Salesforce Billing Spring '19, deactivate and then reactivate them to calculate a next billing date. If the order products were contracted and can't be deactivated, manually add a next billing date based on your invoicing needs.
  - (1) Important: In most cases, we don't recommend manually changing an order product's next billing date. We advise only changing it for this upgrade scenario.

### Rate and Invoice Usage Summaries with Consumption Schedules

Expand your invoicing capabilities by invoicing based on usage consumed in a billing period. When you order a subscription product with a consumption schedule, Salesforce Billing evaluates its usage records and calculates a price based on usage and the order product's consumption schedule. You can then invoice the usage as a separate invoice line.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**Why:** Previously, Salesforce Billing didn't create usage summaries for order products related to consumption schedules. Users could invoice usage summaries only related to price schedules, which had fewer options for usage pricing.

**How:** When you order a usage product, Salesforce Billing creates an order product consumption schedule based off the usage product's original consumption schedule. Salesforce Billing then creates usage summaries for your order product based off the order product's date range and the order product consumption schedule's billing term. The schedule's billing term represents the length of one usage summary, which Salesforce Billing repeats through the order product's start and end dates. For example, your order product bills monthly from 01/01/2019 through 12/31/2019. If your order product consumption schedule has a one-month term, you get a one-month usage summary each month during your order product's term. This setup leads to a total of 12 usage summaries.

As you upload usage to your usage summary, Salesforce billing prices its unbilled subtotal based on where the usage summary's quantity falls within the order product consumption rates. For example, your usage summary has a quantity of 50, and one of your order product consumption rates lists a price of \$0.50 per unit for 1 through 100 units. The usage summary would then have an unbilled subtotal of \$25.

A usage summary has an independent Next Billing Date from its parent order product. When Salesforce Billing creates the usage summary, it sets the next billing date equal to the summary end date. This setup gives you the freedom to invoice a usage summary on the same invoice as its parent subscription or on separate invoices. For example, you could set your order product's billing frequency to monthly. You could then give its usage summaries a quarterly billing frequency by setting the order product consumption schedule's term to three months. If an order product and its usage summaries have the same Next Billing Dates, they'll invoice as separate invoice lines on one invoice.

#### SEE ALSO:

Salesforce Help: Invoicing Usage Summaries with Consumption Schedules (can be outdated or unavailable during release preview)
Salesforce Help: Rating Usage Summaries with a Consumption Schedule (can be outdated or unavailable during release preview)

#### Invoice and Cancel Subscriptions Without End Dates

Get more control over your evergreen subscriptions. You can now invoice and cancel evergreen subscriptions in Salesforce Billing.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

#### IN THIS SECTION:

#### Invoice Subscriptions Without End Dates

You can now invoice evergreen subscriptions. When your order product has an Evergreen subscription type, Salesforce Billing invoices it each billing period indefinitely. This way, you can charge customers for subscriptions until they decide to cancel. Since you're not renewing the subscription at the end of a contract, you don't have to worry about the extra records that the renewal process requires.

#### Invoice Canceled Evergreen Subscriptions

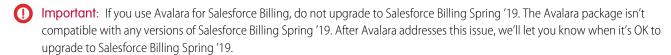
Customers sometimes need to cancel their evergreen subscription before or after they've paid for a range of billing periods. Sales reps can now cancel evergreen subscriptions and invoice their customers for paid balances or charge them for pending balances.

#### Override Billable Unit Prices for Evergreen Subscriptions

Customize your evergreen subscription's billing price by defining a custom billable unit price before activation. You can now use the Override Billable Unit Price field to overrule the default billable unit price on order products for your evergreen subscriptions. This field is useful for correcting rounding errors or overriding the billable unit price on evergreen subscription records that were migrated to Salesforce Billing.

#### Invoice Subscriptions Without End Dates

You can now invoice evergreen subscriptions. When your order product has an Evergreen subscription type, Salesforce Billing invoices it each billing period indefinitely. This way, you can charge customers for subscriptions until they decide to cancel. Since you're not renewing the subscription at the end of a contract, you don't have to worry about the extra records that the renewal process requires.



Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**How:** Salesforce Billing invoices an evergreen subscription based off the order product's billable unit price.

SEE ALSO:

Salesforce Help: Invoicing Evergreen Subscriptions (can be outdated or unavailable during release preview)

#### Invoice Canceled Evergreen Subscriptions

Customers sometimes need to cancel their evergreen subscription before or after they've paid for a range of billing periods. Sales reps can now cancel evergreen subscriptions and invoice their customers for paid balances or charge them for pending balances.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**Why:** When you activate your cancel order product, Salesforce Billing handles evergreen cancellations differently based on whether your order product's charge date falls before or after its terminated date.

• Next Charge Date Before Terminated Date: On the original order product, Salesforce Billing multiplies the billable unit price by the number of billing periods between the next charge date and the terminated date. The order product's pending balance shows the

results of the calculation. The next invoice run or Bill Now process starts invoicing based on the pending balance and billing frequency until the order product's terminated date.

Next Charge Date After Terminated Date: On the cancel order product, Salesforce Billing multiplies the billable unit price by the
number of billing periods between the terminated date and the next charge date. To represent a refund, it takes the result and
inverts it. A positive number becomes negative, and vice versa. The cancel order product's pending balance shows the results of the
calculation. The next invoice run or Bill Now invoices the cancel order product's pending balance into one invoice line.

#### SEE ALSO:

Salesforce Help: Canceling Evergreen Subscriptions (can be outdated or unavailable during release preview)

#### Override Billable Unit Prices for Evergreen Subscriptions

Customize your evergreen subscription's billing price by defining a custom billable unit price before activation. You can now use the Override Billable Unit Price field to overrule the default billable unit price on order products for your evergreen subscriptions. This field is useful for correcting rounding errors or overriding the billable unit price on evergreen subscription records that were migrated to Salesforce Billing.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

How: Edit the Override Billable Unit Price field only on unactivated order products for evergreen subscriptions that haven't been invoiced.

After you start invoicing the evergreen order product, Salesforce Billing will use its Override Billable Unit Price instead of its billable unit price when creating invoice lines.

#### SEE ALSO:

Salesforce Help: Overriding Billable Unit Price (can be outdated or unavailable during release preview)

## Create Revenue Schedules Based on Order Product Bookings Amount

We expanded the billing fields that you use to create revenue schedules for your order products. You can now use an order product's bookings amount as the source of your revenue schedule's total amount.

(1) Important: If you use Avalara for Salesforce Billing, do not upgrade to Salesforce Billing Spring '19. The Avalara package isn't compatible with any versions of Salesforce Billing Spring '19. After Avalara addresses this issue, we'll let you know when it's OK to upgrade to Salesforce Billing Spring '19.

Where: This change applies to Salesforce Classic and Lightning Experience in all Salesforce Billing editions.

**Who:** You need Salesforce CPQ to install Salesforce Billing. Some subscriptions offer this package for an extra cost. For pricing, contact your Salesforce account executive.

**Why:** An order product's Order Product Bookings field shows the amount of revenue that you intend to recognize before you invoice your order product, also known as the bookings amount. Companies that recognize revenue on the order product often want to create revenue schedules based an order product's bookings amount. Previously, Salesforce Billing could create revenue schedules based only on revenue amounts and transaction amounts.

**How:** On your revenue recognition treatment, set the Revenue Schedule Amount field to Bookings Amount. You can use Bookings Amount only if the treatment's Revenue Schedule Creation Action field has a value of Order Activation.

For standard subscription order products and one-time order products, the bookings amount equals the order product's total amount. Because evergreen subscription order products don't have end dates, their bookings amount is zero. When your revenue recognition treatment creates revenue schedules based on bookings amount, you can create accurate revenue schedules for your standard subscription order products and evergreen subscription order products.

# Pardot: Easier Setup and Syncing, Engagement History, Einstein Prospect Scoring, and More Goodies

Breeze through configuration tasks and provisioning with Pardot's Setup Assistant, and sync records to Salesforce without complex sharing rules. Engagement History is now generally available—track prospect engagement on connected campaigns without leaving Salesforce. Plus, Einstein artificial intelligence comes to Pardot with Behavior Score, which learns to identify and rate prospects who are ready to buy.

#### IN THIS SECTION:

#### Salesforce-Pardot Integration: Easier Setup and Smarter Syncing

We improved the Salesforce-Pardot integration in several big ways, including easier-to-navigate settings, a brand-new setup assistant, and more control over which assets and prospects your users have access to.

#### See Marketing Asset Performance on Campaigns (Generally Available)

When you connect Pardot and Salesforce campaigns, you can see exactly how much engagement your marketing campaigns generate, right in Salesforce. Search for campaigns and marketing assets in Salesforce, and view engagement performance from records and reports. No more exporting Pardot asset data to share reports—your users can do everything from Salesforce.

#### Use Pardot in French, German, and Spanish (Generally Available)

The Pardot user interface is now translated into more languages: French, German, and Spanish (EU). It's easy for users to change their locale and language settings by editing their profile. Pardot admins change the default language and locale from the account settings page in Pardot. In accounts with Salesforce User Sync, matching language settings for users are inherited from Salesforce.

#### Use Custom Tracker Domains in Email Links and Vanity URLs

Tailor your email links and vanity URLs for your message. You no longer have to use your primary domain for link rewriting or vanity URLs. Assign any of your tracker domains to email templates for link rewriting, and create vanity URLs using any of your tracker domains.

#### Find Email Templates for Engage Campaigns Faster

While composing an email, users can browse the Pardot folder hierarchy or search for a template by folder. Users can view all templates marked for 1:1 emails that are in any folder they have permission to view. If your Pardot edition doesn't include folder permissions, users can browse all folders that contain email templates marked for 1:1 use.

#### Get Pardot Actions and Reports Without the Bot Clicks

To improve reports and automated actions, Pardot now ignores clicks from certain IP ranges that are associated with email security scanners. Although we collect all clicks and click-through data, a new setting removes scanner activity from reports. Activity from these IP ranges also is no longer used to fire completion actions, triggers, or scores. The setting is turned on by default, but can be changed.

#### Set Up B2B Marketing Analytics with Ease

B2B Marketing Analytics offers the same powerful dashboards and insights as before, but it's now easier to set up. The new flow guides you through the steps, including choosing a Pardot account, optional dashboards, and locale settings.

#### Score Prospects on Engagement Activity

Your prospects generate a lot of data, but it's hard to know what to do with it. Einstein analyzes your Pardot prospects' activities to aggregate and grade their engagement, so you can focus on the people who mean the most to your business. Place the Einstein Scoring component on your prospect records to see granular, meaningful insights.

#### Get Insights on Campaign Performance (Beta)

Guessing what makes prospects engage with your campaigns isn't effective. Campaign Insights uses artificial intelligence uncover similarities among prospects who engage with your campaigns. Use the Einstein Campaign Insights component to optimize your marketing assets and find new audiences.

#### GoodData Is Being Retired

GoodData is scheduled for retirement February 1, 2019. Consider Salesforce reporting or B2B Marketing Analytics to meet your needs. For further customization, you can also use Pardot's API.

## Salesforce-Pardot Integration: Easier Setup and Smarter Syncing

We improved the Salesforce-Pardot integration in several big ways, including easier-to-navigate settings, a brand-new setup assistant, and more control over which assets and prospects your users have access to.

#### IN THIS SECTION:

#### Concentrate Your Marketing Efforts with Pardot Business Units

If your enterprise has marketing goals based on geography or product lines, use Pardot Business Units to help each division focus on their own unique marketing objectives. Business units give you control over which prospects and assets your users have access to, so your divisions can market independently and still get a global view with B2B Marketing Analytics.

#### Configure the Salesforce-Pardot Connector with Improved Navigation and Design

Connect your sales and marketing teams faster with the redesigned Salesforce-Pardot connector edit page. You can now configure Connected Campaigns, Salesforce User Sync, and Marketing Data Sharing right from the connector page. While editing your connector, select a tab to see your options.

#### Breeze Through Pardot Provisioning with the Pardot Setup Assistant

The Pardot Setup Assistant makes integration easy and error-free by automatically creating the Salesforce-Pardot connector. Provision and complete the initial configuration tasks for Pardot accounts right from Salesforce. If you have Pardot Advanced edition, you can create multiple Pardot business units for a Salesforce account without contacting support.

#### Choose Which Records Sync Between Salesforce and Pardot

Gone are the days of adjusting sharing rules and organization-wide defaults. Now you can use Marketing Data Sharing to decide what syncs between Salesforce and Pardot. And because selective sync rules are managed in Pardot, you don't need to be a Salesforce admin or even have a Sales Cloud license.

### Concentrate Your Marketing Efforts with Pardot Business Units

If your enterprise has marketing goals based on geography or product lines, use Pardot Business Units to help each division focus on their own unique marketing objectives. Business units give you control over which prospects and assets your users have access to, so your divisions can market independently and still get a global view with B2B Marketing Analytics.

Where: These changes are available in the Pardot Lightning app in Pardot Advanced edition.

Why: Pardot Business Units help you tailor your marking efforts and report on their effectiveness. Specifically, you can:

- Control which records sync between Pardot and Salesforce with Marketing Data Sharing.
- Use Custom tracker domains in vanity URLs and email templates.

- Create business units from Salesforce using the Pardot Setup Assistant.
- Get a unified view of your business units with B2B Marketing Analytics.

#### SEE ALSO:

Use Custom Tracker Domains in Email Links and Vanity URLs
Choose Which Records Sync Between Salesforce and Pardot
Breeze Through Pardot Provisioning with the Pardot Setup Assistant
Set Up B2B Marketing Analytics with Ease

### Configure the Salesforce-Pardot Connector with Improved Navigation and Design

Connect your sales and marketing teams faster with the redesigned Salesforce-Pardot connector edit page. You can now configure Connected Campaigns, Salesforce User Sync, and Marketing Data Sharing right from the connector page. While editing your connector, select a tab to see your options.

Where: This change applies to all Pardot editions. Marketing Data Sharing is available only in the Pardot Lightning app.

Who: Pardot admins have access to the connector edit page.

## Breeze Through Pardot Provisioning with the Pardot Setup Assistant

The Pardot Setup Assistant makes integration easy and error-free by automatically creating the Salesforce-Pardot connector. Provision and complete the initial configuration tasks for Pardot accounts right from Salesforce. If you have Pardot Advanced edition, you can create multiple Pardot business units for a Salesforce account without contacting support.

Where: This change applies to Lightning Experience and Salesforce Classic for all new Pardot accounts.



**Note:** For the best setup experience, we recommend using the Pardot Setup Assistant in Lightning Experience. The functionality in Salesforce Classic is limited.

## Choose Which Records Sync Between Salesforce and Pardot

Gone are the days of adjusting sharing rules and organization-wide defaults. Now you can use Marketing Data Sharing to decide what syncs between Salesforce and Pardot. And because selective sync rules are managed in Pardot, you don't need to be a Salesforce admin or even have a Sales Cloud license.

Where: This change applies to the Pardot Lightning app with any Pardot edition.

**How:** Change your Marketing Data Sharing settings by editing the Salesforce-Pardot connector.

SEE ALSO:

Salesforce Help: Configure Marketing Data Sharing Rules (can be outdated or unavailable during release preview)

# See Marketing Asset Performance on Campaigns (Generally Available)

When you connect Pardot and Salesforce campaigns, you can see exactly how much engagement your marketing campaigns generate, right in Salesforce. Search for campaigns and marketing assets in Salesforce, and view engagement performance from records and reports. No more exporting Pardot asset data to share reports—your users can do everything from Salesforce.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, and Unlimited editions that have purchased Pardot and are using Connected Campaigns.

**How:** To get started, use the Engagement History Setup Assistant. From Setup, in the Quick Find box, enter *Engagement History*, then select **Engagement History**.

SEE ALSO:

Salesforce Help: Track Prospect Engagement in Salesforce (can be outdated or unavailable during release preview)

## Use Pardot in French, German, and Spanish (Generally Available)

The Pardot user interface is now translated into more languages: French, German, and Spanish (EU). It's easy for users to change their locale and language settings by editing their profile. Pardot admins change the default language and locale from the account settings page in Pardot. In accounts with Salesforce User Sync, matching language settings for users are inherited from Salesforce.

Where: This change applies to all Pardot editions.

SEE ALSO:

Salesforce Help: Change Your Language and Locale (can be outdated or unavailable during release preview)

# Use Custom Tracker Domains in Email Links and Vanity URLs

Tailor your email links and vanity URLs for your message. You no longer have to use your primary domain for link rewriting or vanity URLs. Assign any of your tracker domains to email templates for link rewriting, and create vanity URLs using any of your tracker domains.

**Where:** This change applies to all Pardot editions.

SEE ALSO:

Salesforce Help: Add a Tracker Domain (can be outdated or unavailable during release preview)
Salesforce Help: Email Link Tracking (can be outdated or unavailable during release preview)

# Find Email Templates for Engage Campaigns Faster

While composing an email, users can browse the Pardot folder hierarchy or search for a template by folder. Users can view all templates marked for 1:1 emails that are in any folder they have permission to view. If your Pardot edition doesn't include folder permissions, users can browse all folders that contain email templates marked for 1:1 use.

Where: This change applies to all editions of Pardot with Salesforce Engage.

SEE ALSO:

Salesforce Help: Limit Access with Folder Permissions (can be outdated or unavailable during release preview)

# Get Pardot Actions and Reports Without the Bot Clicks

To improve reports and automated actions, Pardot now ignores clicks from certain IP ranges that are associated with email security scanners. Although we collect all clicks and click-through data, a new setting removes scanner activity from reports. Activity from these IP ranges also is no longer used to fire completion actions, triggers, or scores. The setting is turned on by default, but can be changed.

Where: This change applies to all Pardot editions.

**How:** To change the default behavior and allow bot clicks to trigger activity and appear in reports, make changes on the Visitor Filters table. In Pardot, click **Admin** (**Pardot Settings** in Pardot Lightning), then click **Automation Settings** > **Visitor Filters**. Remove entries that begin with the prefix [PD-SYS].

## Set Up B2B Marketing Analytics with Ease

B2B Marketing Analytics offers the same powerful dashboards and insights as before, but it's now easier to set up. The new flow guides you through the steps, including choosing a Pardot account, optional dashboards, and locale settings.

Where: This change applies to Lightning Experience and Salesforce Classic and is included with Pardot Plus and Advanced.

**Who:** Users with the ManageTemplatedApp or WaveEmbeddedApp permission set can create and edit the B2B Marketing Analytics app, dashboards, and dataflow. The WaveEmbeddedApp permission set allows creation of custom apps and datasets from external sources.

# Score Prospects on Engagement Activity

Your prospects generate a lot of data, but it's hard to know what to do with it. Einstein analyzes your Pardot prospects' activities to aggregate and grade their engagement, so you can focus on the people who mean the most to your business. Place the Einstein Scoring component on your prospect records to see granular, meaningful insights.

Where: This change applies to Lightning Experience and is included with Pardot Advanced.

**How:** To show Einstein Behavior Scoring, a lead must be synced to a Pardot prospect. To enable Einstein Behavior Scoring, turn it on in Setup and use the Lightning App Builder to place components. From Setup, enter *Einstein* in the Quick Find box and select **Einstein Behavior Score**.

SEE ALSO:

Salesforce Help: Syncing Prospects Between Pardot and Salesforce (can be outdated or unavailable during release preview)
Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

# Get Insights on Campaign Performance (Beta)

Guessing what makes prospects engage with your campaigns isn't effective. Campaign Insights uses artificial intelligence uncover similarities among prospects who engage with your campaigns. Use the Einstein Campaign Insights component to optimize your marketing assets and find new audiences.



**Note:** As a beta feature, Einstein Campaign Insights is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Einstein Campaign Insights in the Pardot Einstein Beta group in the Trailblazer Community.

Where: This change applies to Lightning Experience and is included with Pardot Advanced.

**How:** Before you start, make sure Connected Campaigns is turned on in your Pardot Settings. Next, from Setup, enter *Einstein* in the Quick Find box and select **Einstein Campaign Insights**. Turn on Campaign Insights and then use the Lightning App Builder to place components.

#### SEE ALSO:

Salesforce Help: Connect Pardot Campaigns to Salesforce Campaigns (can be outdated or unavailable during release preview)
Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

# GoodData Is Being Retired

GoodData is scheduled for retirement February 1, 2019. Consider Salesforce reporting or B2B Marketing Analytics to meet your needs. For further customization, you can also use Pardot's API.

SEE ALSO:

Salesforce Help: GoodData Is Being Retired (can be outdated or unavailable during release preview)

# Service: Einstein Case Classification, Lightning Knowledge Migration Tool, and Preventive Maintenance Improvements

Help your agents work faster and smarter with Einstein Case Classification, which recommends field values on new cases based on past data. Check out enhancements to Einstein Bots, including support for your SMS text messaging channel. Transition your Salesforce Classic knowledge base with the help of the Lightning Knowledge Migration Tool. Simplify preventive maintenance tracking for field service by grouping all of a maintenance plan's assets into one work order, with each asset linked to a work order line item. And enjoy new Lightning Experience support for case management tools.

#### IN THIS SECTION:

#### Einstein for Service: Case Classification, Bots Enhancements, and Next Best Action

Improve the experience for your customers and the efficiency of your agents with exciting additions to Service Cloud Einstein. Einstein Case Classification saves agents time by recommending field values for new cases. Enhancements to Einstein Bots include support for your SMS text messaging channel, streamlined channel setup, and improved model management. Einstein Next Best Action refines your recommendations so that you can present the best options to your customers and agents.

#### Field Service: Crew Management, Gantt Customization, and Maintenance Plan Improvements

Create, update, and view service crews with an all-in-one crew management tool. Help dispatchers work more efficiently in the dispatcher console with custom Gantt icons, improved filtering, and new color-coding options. Simplify your preventive maintenance tracking by grouping a maintenance plan's assets into a single work order, with each asset linked to a work order line item.

#### Knowledge: Enhanced Lightning Knowledge Usability and Introducing the Lightning Knowledge Migration Tool

We're excited to bring you the Lightning Knowledge Migration Tool—now generally available—to transition your Salesforce Classic knowledge base to Lightning Knowledge. We've also been adding features and actions to Lightning Knowledge to help streamline article management and share article files more easily. Start taking advantage of all the new and exciting features in Lightning Experience.

#### Channels: Einstein Bots for SMS, Skills-Based Routing, and Contact Requests for Communities

We've enhanced your customers' favorite channels so that they can get the support they need, when they need it. Deploy Einstein Bots on your SMS text messaging channel to deflect cases and lower your customers' wait times. Direct cases to the most skilled agent for the job using Omni-Channel Skills-Based Routing. Let your customers say goodbye to long waits on hold with Contact Requests for Communities.

#### Case Management: More Reasons to Make the Move to Lightning Experience

We've been busy moving the features you know and love to Lightning Experience. Require your agents to get their emails approved before sending them to customers. View and manage case contacts and case hierarchies. For folks using Omni-Channel Supervisor, use the whisper and raise flag features in Lightning Experience. To top it off, deployments make it easier to set up the Guided Action List.

#### Other Changes in Service Cloud

Learn about other changes we've made in the Service Cloud.

# Einstein for Service: Case Classification, Bots Enhancements, and Next Best Action

Improve the experience for your customers and the efficiency of your agents with exciting additions to Service Cloud Einstein. Einstein Case Classification saves agents time by recommending field values for new cases. Enhancements to Einstein Bots include support for your SMS text messaging channel, streamlined channel setup, and improved model management. Einstein Next Best Action refines your recommendations so that you can present the best options to your customers and agents.

#### IN THIS SECTION:

#### Save Agents Time and Improve Accuracy and Completion with Einstein Case Classification

Use Einstein Case Classification to recommend or populate picklist and checkbox field values for new cases based on past data. Display those recommendations to your agents in the Service Console in Lightning Experience and Saleseforce Classic. In Lightning Experience your agents view recommendations in the related record component.

#### Evaluate How Well Your Bots Understand Your Customers

The Model Management page provides metrics on the quality of your bot's intent model and a detailed look at individual intents. Use the information to fine-tune intents and improve how well your bot understands your customers.

#### Make Your Bots Smarter with Customer Input Classification and Feedback

Review how a bot classifies what your customers type in chat and then approve, ignore, or reclassify each input to the proper intent. This feedback process helps your bot learn and become smarter over time.

#### Put Your Bots to Work on Your SMS Text Messaging Channel

Build your bot once, and deploy it to the LiveMessage SMS text messaging channel in addition to the Live Agent chat channel.

#### Set Up Einstein Bots More Easily with Channel Settings in the Bot Builder

Are you confused when setting up your bot to work with LiveAgent? You're not alone! We streamlined channel setup by moving it into the Bot Builder.

#### **Build Channel-Independent Bots**

Do you plan to put your bot to work on both Live Agent and SMS Text Messaging channels? If so, check out the new context variables and system variable that let your bot gather customer information regardless of channel. No need for pre-chat form rule actions or custom code.

#### Check Out the Improved Bots Performance Dashboard

You can now filter by date and channel (chat, messaging) on the Performance Dashboard. And you have more ways to understand your bot's performance: Top Last Dialogs, Escalation Success, Einstein Intent Usage, and Interactions.

#### Get to Know Our New Bots Terminology

To support natural-language processing, we're introducing the term utterance and distinguishing it from customer input.

#### Suggest the Right Recommendations with Einstein Next Best Action (Generally Available)

Present the best options to your agents and customers, such as a discount, a repair, or a suggested next step. Apply your company's business rules, predictive models, and data to refine and personalize offers and actions. Einstein Next Best Action refines many possibilities into a few spot-on recommendations, making it easy to deliver a customized service experience.

# Save Agents Time and Improve Accuracy and Completion with Einstein Case Classification

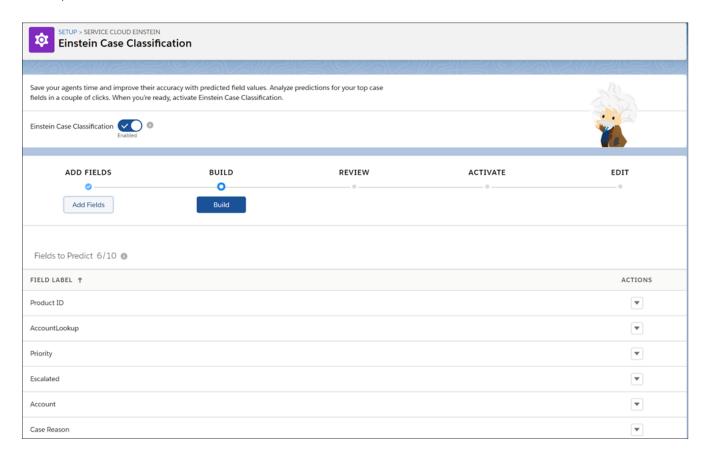
Use Einstein Case Classification to recommend or populate picklist and checkbox field values for new cases based on past data. Display those recommendations to your agents in the Service Console in Lightning Experience and Saleseforce Classic. In Lightning Experience your agents view recommendations in the related record component.

**Where:** This change applies to Lightning Experience and Salesforce Classic. Einstein for Agents is available for an extra fee in Lightning Experience in Enterprise and Unlimited editions. Setup for Einstein Case Classification is available only in Lightning Experience.



Note: Einstein Case Classification is not available in the Salesforce Government Cloud.

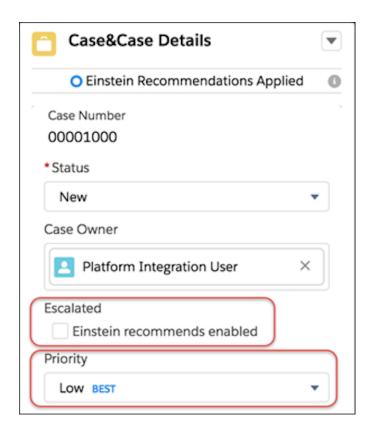
**How:** Add the fields that you want to predict for your agents. Then build the predictive model. Einstein Case Classification analyzes the fields in your closed-case data to determine recommendations for these fields in new cases.



After you build the model, review the recommendations. For each field, you can choose to turn on Select Best Recommendation. This setting controls whether your agents must select the correct recommended value for the field or whether the best recommendation (if available) is selected for them.

Activate Einstein Case Classification to display recommendations to your agents.

In the Service Console, your agents see an alert that Einstein recommendations are available. To view the recommendations, agents click the alert.



Successful case classification relies on sufficient closed case volume. We recommend the following volume for cases created and closed in the past six months.

- A minimum of 1000 cases but 10,000 or more is ideal for best performance.
- A minimum of 100 closed cases that used each field and value that you want to predict for your agents.
- Fewer than 100 values per field. If you have more than 100 possible values per field, model accuracy is reduced.

SEE ALSO:

Salesforce Help: Einstein Case Classification (can be outdated or unavailable during release preview)

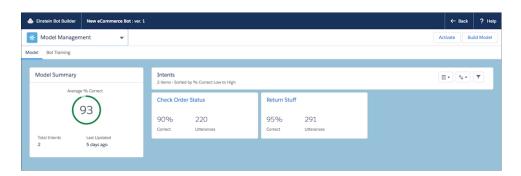
#### Evaluate How Well Your Bots Understand Your Customers

The Model Management page provides metrics on the quality of your bot's intent model and a detailed look at individual intents. Use the information to fine-tune intents and improve how well your bot understands your customers.

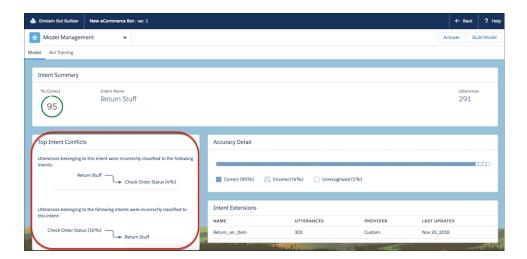
**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription.

**How:** We moved model management from the Overview page to a page of its own. View intent model metrics on your bot's Model Management page.



Click an intent to view more information. The Top Intent Conflicts section shows you where utterances are incorrectly classified when testing the model. Data scientists call this "intent confusion" because the utterances don't clearly belong to one intent or another. Use intent conflicts to refine your intents. If you have a high percentage of misclassified utterances, try merging two similar intents into one. Similarly, try splitting a general intent into multiple, more-specific intents. Then adjust your set of utterances accordingly.



SEE ALSO:

Make Your Bots Smarter with Customer Input Classification and Feedback

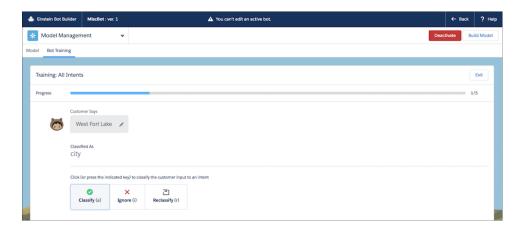
# Make Your Bots Smarter with Customer Input Classification and Feedback

Review how a bot classifies what your customers type in chat and then approve, ignore, or reclassify each input to the proper intent. This feedback process helps your bot learn and become smarter over time.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent User with an active subscription.

**How:** To train your bot, navigate to the Bot Training tab on the Model Management page. Review how the intent model classifies your customer inputs, and then approve, ignore, or reclassify them as needed.



SEE ALSO:

Evaluate How Well Your Bots Understand Your Customers

## Put Your Bots to Work on Your SMS Text Messaging Channel

Build your bot once, and deploy it to the LiveMessage SMS text messaging channel in addition to the Live Agent chat channel.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription.

To exchange messages with customers, users need the Service Cloud license, LiveMessage User permission set license, and View Setup and Configuration permission. To set up LiveMessage, users need the Configure LiveMessage permission and the View Setup and Configuration permission.

SEE ALSO:

Deploy Einstein Bots on Your Text Messaging Channel

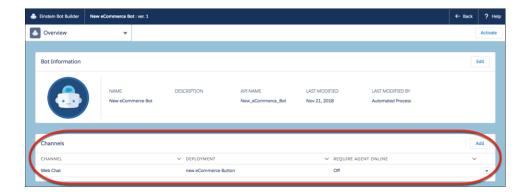
# Set Up Einstein Bots More Easily with Channel Settings in the Bot Builder

Are you confused when setting up your bot to work with LiveAgent? You're not alone! We streamlined channel setup by moving it into the Bot Builder.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription.

How: View available channels, add new channels, and deploy your bot quickly and easily in your bot's Overview page.



# **Build Channel-Independent Bots**

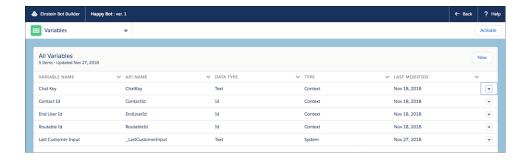
Do you plan to put your bot to work on both Live Agent and SMS Text Messaging channels? If so, check out the new context variables and system variable that let your bot gather customer information regardless of channel. No need for pre-chat form rule actions or custom code.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

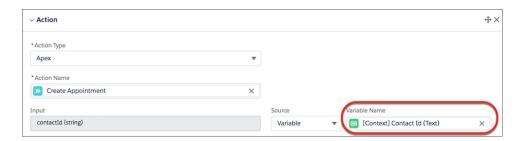
**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription.

**How:** If you use pre-chat form rule actions, don't worry—you don't have to update your existing bots. We handle the change for you. We replace your pre-chat form rule action with the appropriate context variable.

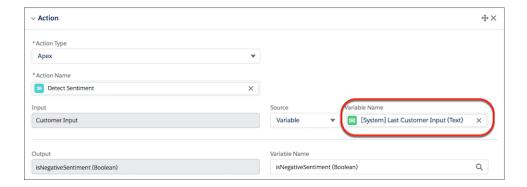
We provide the following context variables and one new system variable.



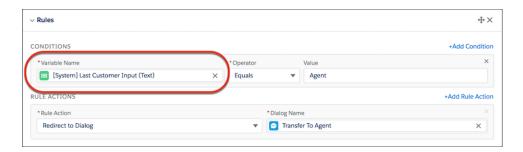
Use context variables as inputs for dialog actions.



You can use the Last Customer Input system variable in a dialog action to capture the last customer input and pass it to Apex for additional processing.



You can even use the Last Customer Input system variable in dialog rule conditions.



Like other Einstein Bot variables, you can merge context and system variables into bot messages with merge syntax.

```
{!$System.LastCustomerInput}
{!$Context.ContactId}
{!VariableName}
```

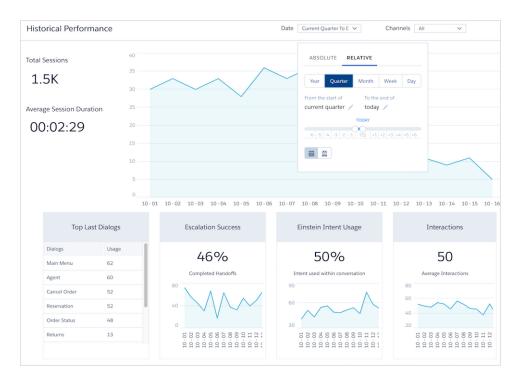
# Check Out the Improved Bots Performance Dashboard

You can now filter by date and channel (chat, messaging) on the Performance Dashboard. And you have more ways to understand your bot's performance: Top Last Dialogs, Escalation Success, Einstein Intent Usage, and Interactions.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription. To make full use of the Einstein Bots Performance Dashboard, you also need Service Cloud Analytics.

**How:** View the updated Dashboard on your bot's Performance page.



Can't see the new dashboard? No problem! Toggle Einstein Bots off and then on again.

# Get to Know Our New Bots Terminology

To support natural-language processing, we're introducing the term utterance and distinguishing it from customer input.

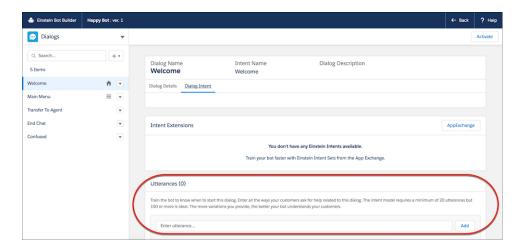
**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Setup for Einstein Bots is available only in Lightning Experience.

**Who:** Einstein Bots is available to orgs with both Service Cloud and Live Agent user licenses. Each org is provided with 25 Einstein Bot conversations per month for each Live Agent user with an active subscription.

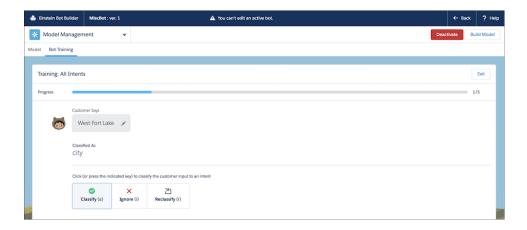
**Why:** Although an utterance and customer input represent the same thing—how a customer asks or has asked for something—we distinguish between them in Einstein Bots. Utterances are reviewed by your team and added to the set of inputs that represent an intent. Utterances help the bot learn. Customer inputs are the words that your customers type in chat. They don't necessarily represent an intent that you want the bot to learn.

You use the Bot Training tab to review your customer inputs. If you see a customer input that represents an intent, you classify it to the intent. It becomes an utterance in the intent. When you build the model, the new utterance is incorporated and helps your bot learn.

You add utterances when you build a dialog intent.



You classify, ignore, or reclassify customer inputs when you train your bot to understand what your customers type in chat.



SEE ALSO:

Make Your Bots Smarter with Customer Input Classification and Feedback

# Suggest the Right Recommendations with Einstein Next Best Action (Generally Available)

Present the best options to your agents and customers, such as a discount, a repair, or a suggested next step. Apply your company's business rules, predictive models, and data to refine and personalize offers and actions. Einstein Next Best Action refines many possibilities into a few spot-on recommendations, making it easy to deliver a customized service experience.

Where: This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, and Unlimited editions.

SEE ALSO:

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

# Field Service: Crew Management, Gantt Customization, and Maintenance Plan Improvements

Create, update, and view service crews with an all-in-one crew management tool. Help dispatchers work more efficiently in the dispatcher console with custom Gantt icons, improved filtering, and new color-coding options. Simplify your preventive maintenance tracking by grouping a maintenance plan's assets into a single work order, with each asset linked to a work order line item.

#### IN THIS SECTION:

#### Manage Service Crews Faster (Beta)

Click less, see more! The new drag-and-drop crew management tool lets you easily build and update service crews to accommodate a fast-changing appointment schedule. Quickly find and add members with the right skills, adjust crew membership dates to match appointment times, and view all crews' schedules and members in one place.

#### Customize Service Appointment Feed Preferences

Boost the visibility of Gantt Chatter messages, emergency appointment notifications, and dispatch notifications for Field Service Lightning mobile app users. Currently, these messages are posted to the relevant service appointment's feed and aren't shown on the mobile app's Feed tab. Now you can opt to post them to the parent record's feed instead.

#### Filter Faster in the Gantt

Filter aficionados, prepare to be delighted! Gantt territory filtering now lets you search for territories, select favorite territories, and quickly switch selected territories. In the Gantt skills filter, you can search for skills, define filter logic, and select all skills.

#### Color-Code the Dispatcher Console

Use color to help dispatchers work more efficiently in the Gantt. You can already color-code appointments in the dispatcher console by creating Gantt palettes or setting an appointment's Gantt color. Now, assign service crews colors, apply background shading in the appointment list, and highlight the list's appointments on the Gantt.

#### Create Work Order Line Items for Each Asset in a Maintenance Plan

Reduce the number of work orders generated for a maintenance plan by creating a single parent work order with a work order line item for each asset covered by the plan.

#### Create Service Appointments for Leads

There's a new service appointment parent (record) in town. When your team needs to schedule a site visit to pursue a promising lead, track the visit in Salesforce by creating a child service appointment for the lead.

#### Create Your Own Icons for the Gantt

Use customized icons on the Gantt to help dispatchers quickly identify particular service appointment characteristics. For example, create an icon to indicate that an appointment is for a VIP or first-time customer.

#### Sort Time Slots by Date When Booking Appointments

Book appointments faster by viewing open appointment slots by date. When a customer requests an appointment for next Tuesday, click the date in the appointment booking window to view its slots. No more scrolling!

#### Control Access to Bulk Unscheduling

Unscheduling multiple appointments at once can significantly impact a field service team's schedule. To prohibit users from taking this action, you can remove the new Bulk Unschedule custom permission from their profiles. The permission is assigned by default to users with the FSL Admin Permissions or FSL Dispatcher Permissions permission set.

#### View Absences in the Multiday View

Dispatchers using the Gantt Multiday view can see resource absences in their schedule. Previously, only service appointments were visible in this view.

#### Enjoy Improved Field Service Help Content

The documentation elves have been burning the midnight oil to make sure that you have the information you need to be a field service rock star. We've given all the field service help content a thorough spring cleaning to make sure that it answers your most common questions.

#### Field Service Mobile App: Welcome to Version 5.0

This version brings your workforce closer to a unified experience, no matter their device. You can decide the layout of each card to have as much or as little information as your mobile workers need. An improved connected app for push notifications works for both Android and iOS. The mobile experience now includes Quick Actions, @ mentions in feeds, work with the Chatter feed offline, required product confirmation, maintenance plan improvements, and access IoT data on your Android devices.

# Manage Service Crews Faster (Beta)

Click less, see more! The new drag-and-drop crew management tool lets you easily build and update service crews to accommodate a fast-changing appointment schedule. Quickly find and add members with the right skills, adjust crew membership dates to match appointment times, and view all crews' schedules and members in one place.

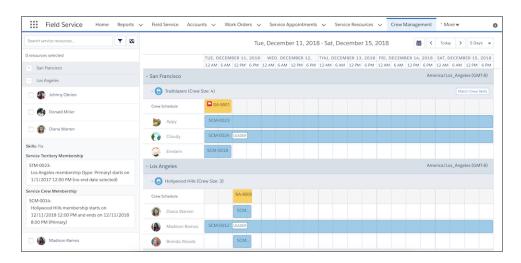
**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.



**Note:** As a beta feature, crew management is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only from generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for crew management in the IdeaExchange and through the Trailblazer Community. For information about enabling this feature in your organization, contact Salesforce.

**Who:** To access crew management, users need the FSL Admin Permissions *or* FSL Dispatcher Permissions permission set. They also need access to crew management Visualforce pages and Apex classes. For details, see Set Up Crew Management (Beta) (can be outdated or unavailable during release preview).

**Why:** Manually managing crew membership from the Service Crew Members related list on service crew records can take time away from other field service tasks. If your service crews change frequently, work faster by viewing and updating membership for all your crews with the crew management tool.



In the crew management tool, you can:

- Filter crews by service territory, and filter service resources by skills
- View each crew's schedule and members
- Find and add crew members based on skill requirements
- View each service resource's skills, service crew memberships, and service territory memberships
- View details for each service appointment and its parent record, including crew size and skill requirements
- Drag resources onto a crew to add them to the crew for the dates shown, or drag them onto an appointment to add them to the crew for the span of the appointment



**How:** To let users access crew management, either embed the Crew Management custom Lightning component in a Lightning page or create a Crew Management Visualforce tab.

#### SEE ALSO:

Salesforce Help: Set Up Crew Management (Beta) (can be outdated or unavailable during release preview)

Salesforce Help: Manage Service Crews (Beta) (can be outdated or unavailable during release preview)

Salesforce Help: Create Visualforce Tabs (can be outdated or unavailable during release preview)

Salesforce Help: Custom Lightning Page Components (can be outdated or unavailable during release preview)

# **Customize Service Appointment Feed Preferences**

Boost the visibility of Gantt Chatter messages, emergency appointment notifications, and dispatch notifications for Field Service Lightning mobile app users. Currently, these messages are posted to the relevant service appointment's feed and aren't shown on the mobile app's Feed tab. Now you can opt to post them to the parent record's feed instead.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** A dispatcher can write a Chatter message for a service appointment from the Gantt by selecting **Chatter > Custom message** in the appointment's action menu. To control where custom messages are posted, open the Field Service Admin app and select **Field Service Settings > Dispatcher Console UI > Gantt Configurations**. Then, select a value in the Gantt Chatter Post Destination field.



When an appointment is dispatched, the assigned resource is notified in a Chatter post. To control where dispatch messages are posted, open the Field Service Admin app and select **Field Service Settings** > **Dispatch** > **Automation**. Then, select a value in the Dispatch Chatter Post Destination field.



When an emergency appointment is assigned, the assigned resource is notified in a Chatter post. To control where emergency messages are posted, open the Field Service Admin app and select **Field Service Settings** > **Global Actions** > **Emergency Wizard**. Then, select a value In the Emergency Chatter Post Destination field.



SEE ALSO:

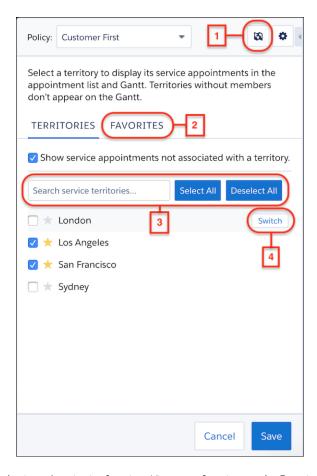
Salesforce Help: Customize Service Appointment Chatter Settings (can be outdated or unavailable during release preview)

#### Filter Faster in the Gantt

Filter aficionados, prepare to be delighted! Gantt territory filtering now lets you search for territories, select favorite territories, and quickly switch selected territories. In the Gantt skills filter, you can search for skills, define filter logic, and select all skills.

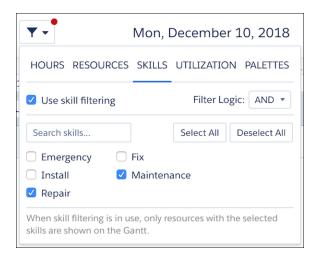
**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** To filter the appointment list and Gantt by service territory, click the territory filtering icon (1) in the appointment list.



- Click the stars to make frequently viewed territories favorites. View your favorites on the Favorites tab (2).
- Use the search field and selection buttons (3) to find territories faster.
- Hover over a territory and click Switch (4) to deselect all territories and select only that territory.
- Click **Save** to apply the filter and return to the appointment list.

Filter the Gantt resource list by skill from the Gantt filter's Skills tab. Change the Filter Logic to OR to display resources with one or more of the selected skills.



#### SEE ALSO:

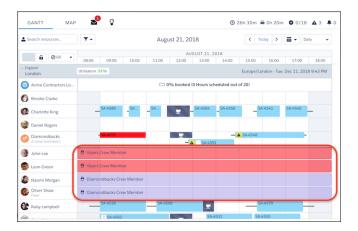
Salesforce Help: Filter the Gantt (can be outdated or unavailable during release preview)
Salesforce Help: Filter the Gantt by Service Territory (can be outdated or unavailable during release preview)

## Color-Code the Dispatcher Console

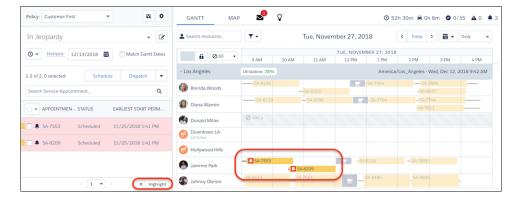
Use color to help dispatchers work more efficiently in the Gantt. You can already color-code appointments in the dispatcher console by creating Gantt palettes or setting an appointment's Gantt color. Now, assign service crews colors, apply background shading in the appointment list, and highlight the list's appointments on the Gantt.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

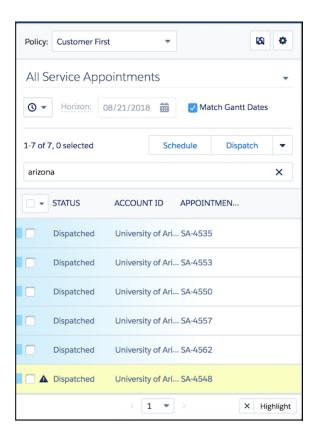
**How:** To set a service crew's Gantt background color, add the Gantt Color field to service crew layouts. Then, enter a hex code in the field on any service crew record. For example, display service crew members in red if a company vehicle is assigned to the crew. Crew members without a defined Gantt color appear in purple.



To highlight appointments shown in the appointment list on the Gantt, select an appointment list filter or enter a search term. For example, filter the appointment list to show only appointments that include the word "Repair." Then, click **Highlight** at the bottom of the list. All appointments and absences not shown in the list appear faded.



To apply background shading to the appointment list, click the gear icon and select **Dispatch Console Settings**. In the Appointment List Color-Coding field, select **Default** (white background color), **Full Shading** (flat background color), or **Horizontal Gradient** (shown here).



# Note:

• An appointment's color on the Gantt and appointment list is based on its status. However, Gantt palettes and the Gantt Color field on service appointments override the status-based color scheme.

• Regardless of the appointment list color-coding setting, appointments with rule violations are highlighted in yellow and in-jeopardy appointments are highlighted in red.

#### SEE ALSO:

Salesforce Help: Color-Code the Gantt (can be outdated or unavailable during release preview)

Salesforce Help: Work in the Dispatcher Console Appointment List (can be outdated or unavailable during release preview)

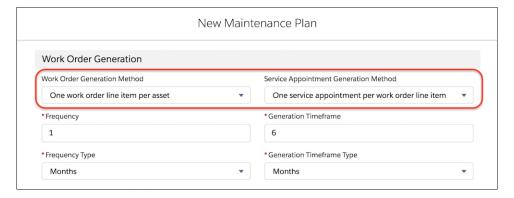
### Create Work Order Line Items for Each Asset in a Maintenance Plan

Reduce the number of work orders generated for a maintenance plan by creating a single parent work order with a work order line item for each asset covered by the plan.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** On a maintenance plan, select your generation method preferences.

- Choose whether to create one work order or one work order line item for each maintenance asset.
- If you select **One work order line item per asset**, choose whether to create a service appointment for each work order or each work order line item.



To ensure that all assets are maintained under one work order, select **One work order line item per asset**. If each asset needs a separate service appointment, select **One service appointment per work order line item**.

If all maintenance assets have the same **Next Suggested Maintenance Date** on the maintenance plan, they're grouped in one work order. However, if maintenance assets have different **Next Suggested Maintenance Dates**, a work order is created for each date.

1 Tip: To provide guidance on which order to service the assets in, create guided actions, or flows, on the parent work order.

If Work Order Generation Method is left as None, it defaults to one work order per asset.

(1) Important: If your existing maintenance plans have work orders or work order line items associated with them, you can't change their generation methods. To change preexisting maintenance plan generation methods, either delete the work orders and regenerate them or delete the maintenance plan and recreate it with the needed generation methods.

#### SEE ALSO:

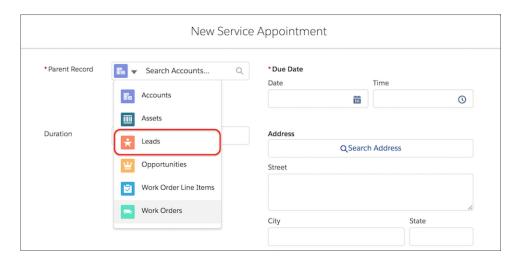
Salesforce Help: Guidelines for Generating Work Orders from a Maintenance Plan (can be outdated or unavailable during release preview)

## Create Service Appointments for Leads

There's a new service appointment parent (record) in town. When your team needs to schedule a site visit to pursue a promising lead, track the visit in Salesforce by creating a child service appointment for the lead.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** The Parent Record field on service appointments now includes the option to select a lead—no admin setup required. Manage a lead's appointments in the Service Appointments related list.





Note: Only service appointments whose parents are work orders or work order line items are included in schedule optimization.

#### Create Your Own Icons for the Gantt

Use customized icons on the Gantt to help dispatchers quickly identify particular service appointment characteristics. For example, create an icon to indicate that an appointment is for a VIP or first-time customer.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** After you add the Gantt Icon field to service appointment page layouts, you can enter an icon URL in the field for any service appointment. The URL must end in an image suffix, such as .png or .gif. Images with a transparent background appear with a white background on the Gantt.

For example, add an ice cream icon to an appointment that's next to your favorite ice cream shop. Find a URL that leads to an ice cream icon, and paste the link in the appointment's Gantt icon field. (Of course, we recommend scheduling a snack break after the appointment.)

Gantt Icon

http://icons.iconarchive.com/icons/ridessnow/u-r-what- u-eat/96/ice-cream-icon.png



SEE ALSO:

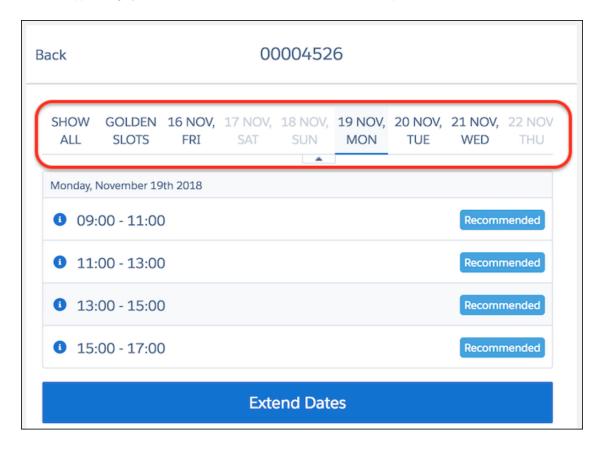
Salesforce Help: Create Custom Gantt Icons (can be outdated or unavailable during release preview)

# Sort Time Slots by Date When Booking Appointments

Book appointments faster by viewing open appointment slots by date. When a customer requests an appointment for next Tuesday, click the date in the appointment booking window to view its slots. No more scrolling!

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** When you use the Book Appointment action to view a list of available time slots, click a date in the new horizontal panel. Days without time slots appear in gray and aren't clickable. Click the arrow icon to hide the panel.

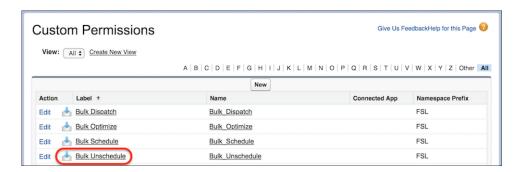


# Control Access to Bulk Unscheduling

Unscheduling multiple appointments at once can significantly impact a field service team's schedule. To prohibit users from taking this action, you can remove the new Bulk Unschedule custom permission from their profiles. The permission is assigned by default to users with the FSL Admin Permissions or FSL Dispatcher Permissions permission set.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** Add or remove the permission in the Custom Permissions section of any permission set. Users without the Bulk Unschedule permission don't see the Unschedule action in the appointment list action menu.



#### SEE ALSO:

Salesforce Help: Enable Custom Permissions in Profiles (can be outdated or unavailable during release preview)

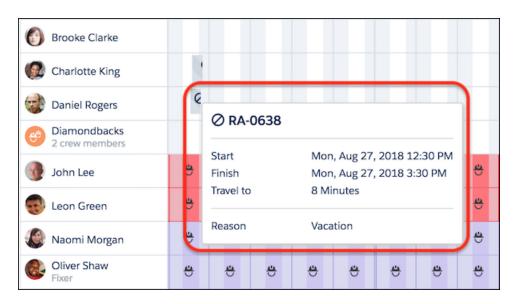
Salesforce Help: Work in the Dispatcher Console Appointment List (can be outdated or unavailable during release preview)

# View Absences in the Multiday View

Dispatchers using the Gantt Multiday view can see resource absences in their schedule. Previously, only service appointments were visible in this view.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions with the Field Service Lightning managed package installed.

**How:** Hover over an absence to view its details, or right-click it to view available actions.



## **Enjoy Improved Field Service Help Content**

The documentation elves have been burning the midnight oil to make sure that you have the information you need to be a field service rock star. We've given all the field service help content a thorough spring cleaning to make sure that it answers your most common questions.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

Why: These new articles can help you navigate schedule optimization, work in the Gantt, and more.

- Gantt Keyboard Shortcuts (can be outdated or unavailable during release preview)—Use keyboard shortcuts to work faster in the dispatcher console.
- Optimize Your Field Service Schedule (can be outdated or unavailable during release preview)—Use schedule optimization to formulate the optimal schedule for your team and customers. Schedule optimization helps you comply with service-level agreements and minimize travel time, overtime, costs, and no-shows.
- Set Up Optimization Jobs (can be outdated or unavailable during release preview)—Optimize your team's schedule for one or more service territories across a specified range of days.
- Create Relevance Groups (can be outdated or unavailable during release preview)—A relevance group is a group of service appointments or service territory members that require their own work rules or service objectives. For example, use relevance groups to enforce your company policy on breaks and travel time for full-time versus part-time employees.
- Customize Appointment Booking Settings (can be outdated or unavailable during release preview)—Users can schedule service appointments for a work order, work order line item, or other record by using the Book Appointment Chatter action.
- Time Zones and Appointment Booking (can be outdated or unavailable during release preview)—In large field service operations, the service appointment's support agent, assigned resource, and customer could all be in different time zones. Field Service Lightning's appointment booking process shows each user's appointment details in the user's time zone.
- Create Service Resource Absences (can be outdated or unavailable during release preview)—Indicate when a service resource is unavailable to work. During schedule optimization, service resources aren't assigned to appointments that conflict with their absences.

In addition, the Field Service Lightning Developer Guide now includes reference content related to the Field Service Lightning managed package. Developers, dig in!

# Field Service Mobile App: Welcome to Version 5.0

This version brings your workforce closer to a unified experience, no matter their device. You can decide the layout of each card to have as much or as little information as your mobile workers need. An improved connected app for push notifications works for both Android and iOS. The mobile experience now includes Quick Actions, @ mentions in feeds, work with the Chatter feed offline, required product confirmation, maintenance plan improvements, and access IoT data on your Android devices.

#### IN THIS SECTION:

#### More Control on Layouts

This version brings your workforce closer to a unified experience, no matter if they use an Android or iOS device. In doing so, there are significant changes to the look of the mobile app and how it is administered.

#### Offline Support for Formula Functions and Operators

To enable users to take more advantage of flows we are supporting formula functions and operators offline. A formula is an algorithm that derives its value from other fields, expressions, or values. Formulas can help you automatically calculate the value of a field based on other fields.

#### Improved Connected App for Push Notifications

The connected app, which is different from the actual Field Service Lightning mobile app, provides push notifications and other app settings related to service report generation and app customization.

#### Improvements to Service Reports

To improve performance, the actions (send sms, email, view details, etc.) and necessary data under the mobile worker's avatar aren't primed until needed.

#### Save Time Ordering Products with Contextual Product Requests (Android)

Creating product requests on an Android device is simpler and faster. Android devices now have product required.

#### IoT Insights Card: Show Your Salesforce IoT Data in Field Service Lightning (Android)

Give your field service users new data about your connected product wherever they are with Salesforce IoT Insights in Field Service Lightning for Android.

#### Communicate Clearly with Offline Chatter Enhancements (Android)

Get access to more of your favorite Chatter features in Field Service Lightning for Android even when working without internet access. Users working offline can view the Chatter feed, create, edit, and delete posts, comment on posts, and upload images to the Chatter feed on primed records.

#### Link to the Salesforce App with Related Lists (Android)

To enhance performance, offline priming rules now download fewer related list records.

#### Currency Defaults to Work Order or Work Order Line Items (Android)

Before version 5.0, the currency field was based on the Android mobile device locale. Now the currency field is based on the work order's or work order line item's currency field.

#### Other Field Service Lightning Mobile Enhancements

Look out for these improvements to your mobile experience.

### More Control on Layouts

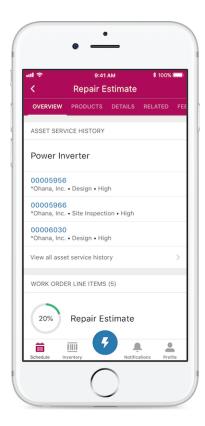
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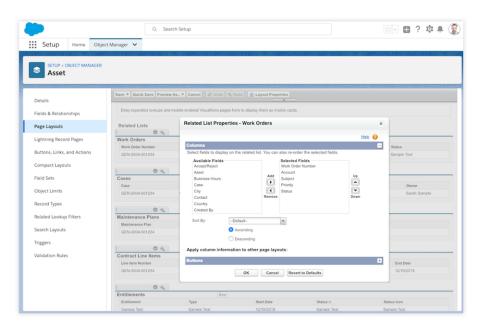
**Where:** These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on App Store and Google Play in January, 2019.

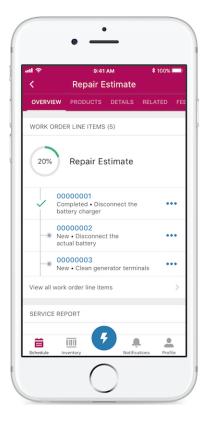
**How:** Much of the user interface is driven by related list layouts. If the first field in the related list layout is empty, then by default we show the last modified date. If the reference field name is empty, there's no tab to view.

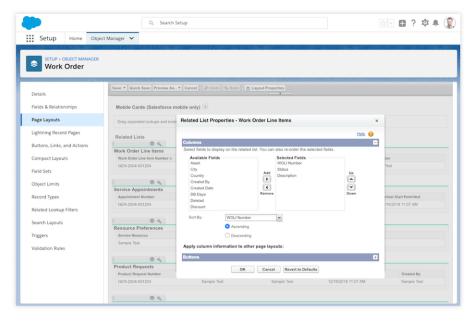
On Service Appointment, the Asset Service History shows three fields and pulls from the Work Order related list on the Asset object page layout.



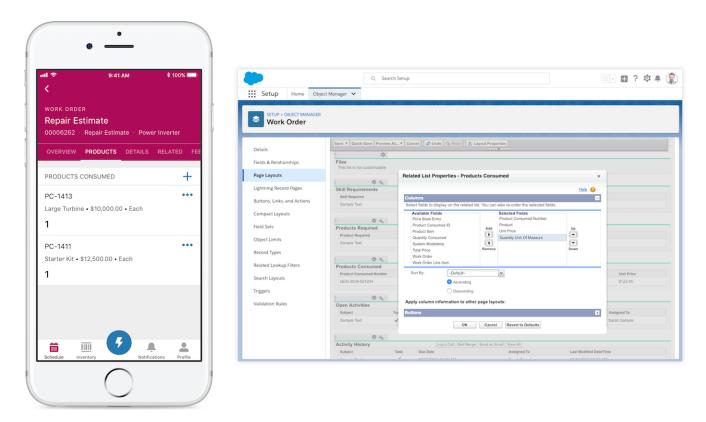


Also on Service Appointment, the Work Order Line Item has two sub fields, which are pulled from the Work Order Line Item's related list layout on the Work Order.

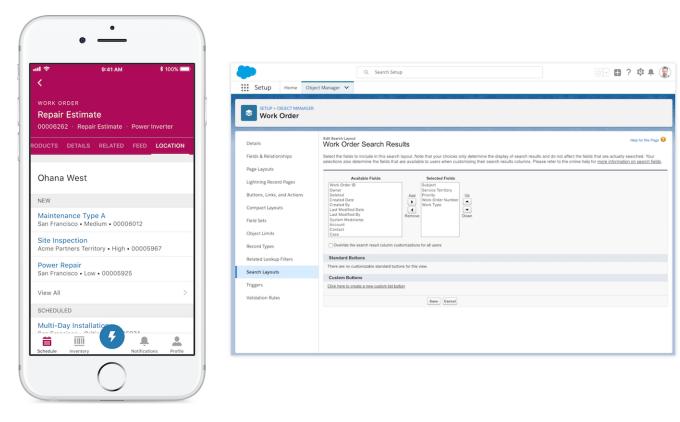




On a Work Order, the Products Consumed is pulled from the Product Consumed related list layout on the Work Order, where the Product Number must be the first field.

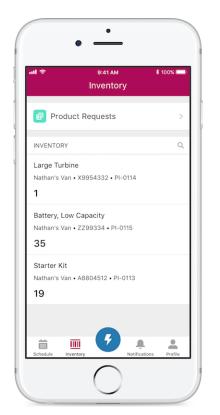


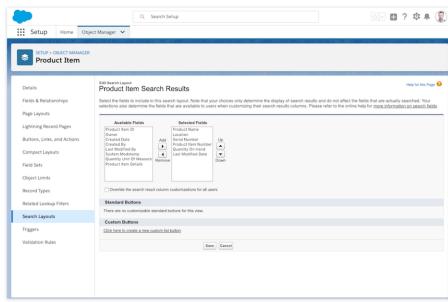
Also, the Location tab in a technician's schedule is pulled from the search results layout on the Work Order.



On the Inventory tab, the layout comes from the search result layout on the Product Item object.

Note: The amount, or quantity, can't be changed.





#### Offline Support for Formula Functions and Operators

To enable users to take more advantage of flows we are supporting formula functions and operators offline. A formula is an algorithm that derives its value from other fields, expressions, or values. Formulas can help you automatically calculate the value of a field based on other fields.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on App Store and Google Play in January, 2019.

**How:** Field Service Lightning Mobile Apps support formula functions and operators offline as described in Calculate Field Values With Formulas (can be outdated or unavailable during release preview). However, there are some execptions as described in Considerations for Using Flows in the Field Service Lightning Mobile App (can be outdated or unavailable during release preview).

#### Improved Connected App for Push Notifications

The connected app, which is different from the actual Field Service Lightning mobile app, provides push notifications and other app settings related to service report generation and app customization.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on App Store and Google Play in January, 2019.

**How:** If your team uses push notifications, download the connected app for Field Service Lightning.

#### Improvements to Service Reports

To improve performance, the actions (send sms, email, view details, etc.) and necessary data under the mobile worker's avatar aren't primed until needed.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on App Store and Google Play in January, 2019.

**How:** When you click **View all Service Reports**, you see all service reports for the current service appointment and its parent (either work order or work order line item). No more slowing down with the Service Appointment picker.

Service report notes are easier to use with this release.

#### Save Time Ordering Products with Contextual Product Requests (Android)

Creating product requests on an Android device is simpler and faster. Android devices now have product required.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

**When:** Version 5.0 is available for download on Google Play in January, 2019.

**How:** After the work order number is copied into the product request, the field is read only on the app.

Mobile workers on Androids can click on **View all Products Required** from the product consumed screen on a work order, and navigate to the **Required Products**.

When you use a quick action to create a product request from the detail view of a work order or work order line item, the product request now inherits the work order's or work order line item's number. Previously, you had to manually enter the number on product requests. On product requests that are created from the app via a quick action from a work order line item detail page, the work order and work order line item are auto-populated.

If you update the work order or work order line item number on a product request after it is inherited, a sync error occurs when the app tries to upload the data to Salesforce. Users aren't able to upload those changes until they correct the problem.

Required products, only shows a list of required products if multiple location is enabled and doesn't show how many products are in stock and there will be no option to add.

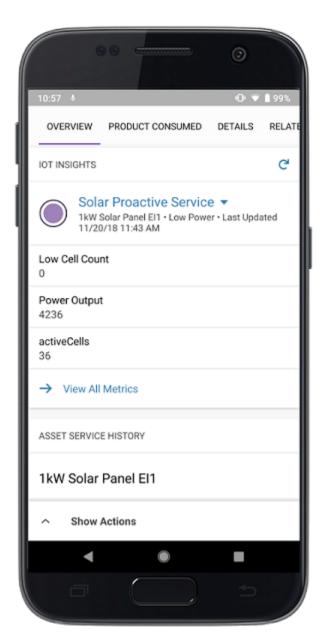
#### IoT Insights Card: Show Your Salesforce IoT Data in Field Service Lightning (Android)

Give your field service users new data about your connected product wherever they are with Salesforce IoT Insights in Field Service Lightning for Android.

Where: This change applies to Field Service Lightning for Android in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on Google Play in January, 2019.

**Why:** With IoT Insights in Field Service Lightning, mobile workers can now access valuable IoT data for customers' connected devices from anywhere. By having access to valuable diagnostic data, a field service technician can more quickly analyze and solve customer issues while on-site.



**How:** To enable IoT Insights in Field Service Lightning for mobile:

- 1. From Setup, enter Connected Apps in the Quick Find box, then select Manage Connected Apps.
- 2. Click **Edit** next to Salesforce Field Service for Android.
- 3. Confirm that ENABLED\_IOT is set to TRUE, or click Edit and change the attribute to TRUE.
- 4. Click Save.

#### Communicate Clearly with Offline Chatter Enhancements (Android)

Get access to more of your favorite Chatter features in Field Service Lightning for Android even when working without internet access. Users working offline can view the Chatter feed, create, edit, and delete posts, comment on posts, and upload images to the Chatter feed on primed records.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on Google Play in January, 2019.

**How:** Field Service Lightning Android users can view the Chatter feed offline on records that have been primed (downloaded to their mobile device). Records are automatically downloaded according to the default list view in Field Service Mobile Settings and the user's calendar of assigned service appointments. Records that aren't part of the default list view are downloaded when they are opened by the user manually in the app while connected to the internet.

Users working offline can also create posts, comment on posts, and upload images on the Chatter feed for primed records. Any post, comment, or file posted to the Chatter feed is added to the pending upload queue until internet connectivity is restored.

Required products, only shows a list of required products if multiple location is enabled and doesn't show how many products are in stock and there will be no option to add.

#### Link to the Salesforce App with Related Lists (Android)

To enhance performance, offline priming rules now download fewer related list records.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on Google Play in January, 2019.

**How:** Instead of downloading all records on a related list, users are linked to the Salesforce app when they view a particular related list. The related lists on service appointments, work orders, work order line items, and assets are still primed by Field Service Lightning for Android. Easily access online (non primed) data available in Salesforce1.

You don't need to do anything to enable this feature. Users that don't have the Salesforce app installed are prompted to download and install it when attempting to open a related record that hasn't already been downloaded by Field Service Lightning.

#### Currency Defaults to Work Order or Work Order Line Items (Android)

Before version 5.0, the currency field was based on the Android mobile device locale. Now the currency field is based on the work order's or work order line item's currency field.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on Google Play in January, 2019.

#### Other Field Service Lightning Mobile Enhancements

Look out for these improvements to your mobile experience.

Where: These changes apply to Field Service Lightning for Android and iOS in Enterprise, Performance, Unlimited, and Developer editions.

When: Version 5.0 is available for download on Google Play in January, 2019.

#### **Empty Fields are No Longer Skipped**

Mobile users can see fields without values in their Field Service Lightning Mobile app.

#### Backdate to the Future

If a mobile device ahead of the server, the mobile time and date stamp doesn't affect the recorde update validation.

#### **Resource Absences Have Start and End Dates**

Keep your resources in check. All resource absences must have start and end dates.

#### **Simple Markup for Extensions**

The param substitution for {! works instead of {!\$ for app extensions.

#### **View Videos From Device Player**

For improved performance, iOS devices must download videos from a Chatter feed and view them with their device player.

#### No Support for iOS 10 or Eariler

Upgrade your iOS devices to iOS 11 or later.

# Knowledge: Enhanced Lightning Knowledge Usability and Introducing the Lightning Knowledge Migration Tool

We're excited to bring you the Lightning Knowledge Migration Tool—now generally available—to transition your Salesforce Classic knowledge base to Lightning Knowledge. We've also been adding features and actions to Lightning Knowledge to help streamline article management and share article files more easily. Start taking advantage of all the new and exciting features in Lightning Experience.

#### IN THIS SECTION:

#### Embrace the Future with the Lightning Knowledge Migration Tool (Generally Available)

Get on board with Lightning Experience, and let the Lightning Knowledge Migration Tool do most of the heavy lifting to transition your Salesforce Classic knowledge base. Lightning Knowledge takes advantage of standard Salesforce components, helping you build faster and better. The Migration Tool consolidates article types into a standard Knowledge object, creates record types from previous article types, moves articles and files, and updates Feeds and Smart Links. And now you can also migrate articles owned by inactive users.

#### Manage Your Articles with Lightning Experience Actions

Get more done in Lightning Experience with three new and expanded actions, Restore, Edit as Draft, and Archive. Restore archived articles or past versions in Lightning Knowledge. Previously, restoring a past version required switching to Salesforce Classic. Make last-minute changes to translations that are published or in the publication queue to keep articles in sync. Quickly declutter your knowledge base by archiving multiple articles at once from list views. And customize your knowledge base however you like—these Lightning Experience actions are available in the Salesforce APIs and with Flow.

#### Attach Files to Emails with Lightning Knowledge

Use the Insert Article to Email Action in Lightning Experience to attach Knowledge article files from the related list. Choose which attachments to include by removing those you don't need from the email. You can send files larger than your org's email attachment limits as a link.

#### View Related Files on Articles in Communities

Share attachments and resources with your customers in Communities. Add the Files related list to knowledge articles in Communities.

#### Embed Ooyala Videos in Knowledge Articles

Lightning Knowledge authors love to create a rich article experience for their customers by embedding videos. We added ooyala.com to the list of supported domains for embedding videos in both Salesforce Classic and Lightning Experience.

## Embrace the Future with the Lightning Knowledge Migration Tool (Generally Available)

Get on board with Lightning Experience, and let the Lightning Knowledge Migration Tool do most of the heavy lifting to transition your Salesforce Classic knowledge base. Lightning Knowledge takes advantage of standard Salesforce components, helping you build faster and better. The Migration Tool consolidates article types into a standard Knowledge object, creates record types from previous article types, moves articles and files, and updates Feeds and Smart Links. And now you can also migrate articles owned by inactive users.

**Where:** This change applies to Lightning Experience in Essentials, Developer, and Unlimited editions. Salesforce Knowledge is available for an additional cost in Professional, Performance, and Enterprise editions.

Who: Admins must have the Knowledge User license to access the Lightning Knowledge Migration Tool.

**How:** To enable the Lightning Knowledge Migration Tool in your sandbox, contact Salesforce Support. You must test and verify the migration in a full-copy sandbox before you can enable the tool in a production org.

After it's enabled, find the Lightning Knowledge Migration Tool in Lightning Experience Setup. Be sure to complete the planning steps so that you know what's involved in migrating. To use Lightning Knowledge effectively, you also need to revise your permissions, page layouts, and customizations.

Previously, you couldn't migrate articles with record owners who were inactive users, and the beta version didn't handle this special case. Now the Migration Tool checks the **Enable Set Audit Fields upon Record Creation** and **Update Records with Inactive Owners** org preferences and temporarily enables them during the migration.

SEE ALSO:

Salesforce Help: Lightning Knowledge Migration Tool (can be outdated or unavailable during release preview)

## Manage Your Articles with Lightning Experience Actions

Get more done in Lightning Experience with three new and expanded actions, Restore, Edit as Draft, and Archive. Restore archived articles or past versions in Lightning Knowledge. Previously, restoring a past version required switching to Salesforce Classic. Make last-minute changes to translations that are published or in the publication queue to keep articles in sync. Quickly declutter your knowledge base by archiving multiple articles at once from list views. And customize your knowledge base however you like—these Lightning Experience actions are available in the Salesforce APIs and with Flow.

**Where:** This change applies to Lightning Experience in Essentials, Developer, and Unlimited editions. Salesforce Knowledge is available for an additional cost in Professional, Performance, and Enterprise editions.

Who: To interact with Lightning Knowledge actions, users need the following permissions.

- Restore—Available in record home. Requires Create, Edit, Update permission on Knowledge, and Manage Articles and Archive Articles permission on the user profile.
- Archive from list views—Available in record home and list views. Requires Read, Update, Delete permission on Knowledge and Archive Articles on the user profile.
- Edit as Draft—Available in record home. Requires Update on Knowledge and Manage Articles permissions on the user profile. Editing translations also requires the Edit Translations permission.

**How:** Add the Restore, Edit as Draft, and Archive buttons to your record home page layouts and set user profile permissions. The Archive button appears on list views for users with the appropriate access.

SEE ALSO:

Salesforce Help: Lightning Knowledge User Access (can be outdated or unavailable during release preview)

Salesforce Help: Authoring Actions in Lightning Knowledge (can be outdated or unavailable during release preview)

## Attach Files to Emails with Lightning Knowledge

Use the Insert Article to Email Action in Lightning Experience to attach Knowledge article files from the related list. Choose which attachments to include by removing those you don't need from the email. You can send files larger than your org's email attachment limits as a link.

**Where:** This change applies to Lightning Experience in Essentials, Developer, and Unlimited editions. Salesforce Knowledge is available for an additional cost in Professional, Performance, and Enterprise editions.

SEE ALSO:

Insert Article Content into Emails
Email Customers in Lightning Experience

#### View Related Files on Articles in Communities

Share attachments and resources with your customers in Communities. Add the Files related list to knowledge articles in Communities.

**Where:** This change applies to Lightning Experience in Essentials, Developer, and Unlimited editions. Salesforce Knowledge is available for an additional cost in Professional, Performance, and Enterprise editions.

## Embed Ooyala Videos in Knowledge Articles

Lightning Knowledge authors love to create a rich article experience for their customers by embedding videos. We added ooyala.com to the list of supported domains for embedding videos in both Salesforce Classic and Lightning Experience.

**Where:** This change applies to Essentials, Developer, and Unlimited editions. Salesforce Knowledge is available for an additional cost in Professional, Performance, and Enterprise editions.

# Channels: Einstein Bots for SMS, Skills-Based Routing, and Contact Requests for Communities

We've enhanced your customers' favorite channels so that they can get the support they need, when they need it. Deploy Einstein Bots on your SMS text messaging channel to deflect cases and lower your customers' wait times. Direct cases to the most skilled agent for the job using Omni-Channel Skills-Based Routing. Let your customers say goodbye to long waits on hold with Contact Requests for Communities.

#### IN THIS SECTION:

#### Messaging: Transcript Access, Einstein Bots for SMS, and Skills-Based Routing

Every support agent can view LiveMessage transcripts. Deploy Einstein Bots on your text messaging channel to save your agents time. Omni-Channel Skills-Based Routing directs text messages to the most qualified agent for the job.

#### Communities: Let Your Customers Request a Call from Support

Your customers can say goodbye to smooth jazz and long waits on 1-800 numbers for help. With the click of a button, community users can request that customer support call them back. A popup form lets users detail the problem. Then the right agent can call them back. Show your customers that you value their time as much as their continued business. Contact Request lets customers get back to the things they were doing—no smooth jazz required.

#### Chat: Expanded Transcript Access and Skills-Based Routing

Every support agent can now view Live Agent transcripts. Let multiple support agents resolve a customer's issue together with Snap-ins chat conferences. Use Omni-Channel Skills-Based Routing to route cases to the most skilled agent for the job.

#### Phone: Softphone Pop-Out and a Guided Setup Flow for Open CTI

Agents can pop-out the softphone utility in a new window. And a guided setup flow in Lightning Experience walks you through configuring your phone channel and CTI partner—using clicks not code.

Social Customer Service: Duplicate Facebook Message Prevention and Merged Records with Social Personas and Social Posts Avoid getting duplicate Facebook messages, and maintain social personas and social posts when you merge records.

#### Snap-Ins for Mobile Apps: Give Customers a Richer Chat Experience

The iOS and Android SDKs have several enhancements to chat, including hyperlink previews and a low-level core API for customers who want to build their own user interface. We also made some general enhancements to the SDK so that your mobile app can give customers the best experience.

#### Snap-Ins for Web: Queue Positions for Transfers, Chat Conferences, and Updated Post-Chat

Display a customer's queue position during transfers. Let multiple support agents resolve a customer's issue together with chat conferences in Salesforce Classic. Get more responses by sending customers directly to the post-chat form when their chat ends.

## Messaging: Transcript Access, Einstein Bots for SMS, and Skills-Based Routing

Every support agent can view LiveMessage transcripts. Deploy Einstein Bots on your text messaging channel to save your agents time. Omni-Channel Skills-Based Routing directs text messages to the most qualified agent for the job.

#### IN THIS SECTION:

#### View Transcripts Without a LiveMessage License

To provide more consistent support, every user with a Service Cloud license now has a 360-degree view of a customer's support history and can see past chat transcripts. Previously, a support agent needed a LiveMessage license to view chat transcripts. So when a customer chatted with an agent and then followed up on another channel, like email, the new agent couldn't always see the full history. A LiveMessage license is still required to deliver service using LiveMessage in the Lightning Service Console.

#### Deploy Einstein Bots on Your Text Messaging Channel

Create an Einstein Bots deployment for SMS to help your customers with simple questions and tasks, even when an agent isn't available.

#### Route Text Messages to Qualified Agents with Omni-Channel Skills-Based Routing

Route chats to agents based on the skills needed to resolve them. Use skills, agent availability, and skill levels to assign text messages to an agent who is right for the job

#### Autolinking No Longer Creates Contact Records

If you have autolinking enabled, the behavior has changed. When a matching contact record isn't found for a messaging user, LiveMessage doesn't automatically create one. LiveMessage autolinking behavior hasn't changed for cases where a matching record is found.

### View Transcripts Without a LiveMessage License

To provide more consistent support, every user with a Service Cloud license now has a 360-degree view of a customer's support history and can see past chat transcripts. Previously, a support agent needed a LiveMessage license to view chat transcripts. So when a customer chatted with an agent and then followed up on another channel, like email, the new agent couldn't always see the full history. A LiveMessage license is still required to deliver service using LiveMessage in the Lightning Service Console.

**Where:** This change applies to orgs with access to LiveMessage through a Digital Engagement add-on. LiveMessage in Lightning Experience is available in Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.

## Deploy Einstein Bots on Your Text Messaging Channel

Create an Einstein Bots deployment for SMS to help your customers with simple questions and tasks, even when an agent isn't available.

**Where:** This change applies to orgs with access to LiveMessage through a Digital Engagement add-on. LiveMessage in Lightning Experience is available in Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.

#### SEE ALSO:

Put Your Bots to Work on Your SMS Text Messaging Channel

#### Route Text Messages to Qualified Agents with Omni-Channel Skills-Based Routing

Route chats to agents based on the skills needed to resolve them. Use skills, agent availability, and skill levels to assign text messages to an agent who is right for the job

**Where:** This change applies to orgs with access to LiveMessage through a Digital Engagement add-on. LiveMessage in Lightning Experience is available in Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.



Note: Einstein Bots don't support omni skills-based routing.

SEE ALSO:

Route Text Messages and Chats to Qualified Agents with Skills-Based Routing (Generally Available)

### Autolinking No Longer Creates Contact Records

If you have autolinking enabled, the behavior has changed. When a matching contact record isn't found for a messaging user, LiveMessage doesn't automatically create one. LiveMessage autolinking behavior hasn't changed for cases where a matching record is found.

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## Communities: Let Your Customers Request a Call from Support

Your customers can say goodbye to smooth jazz and long waits on 1-800 numbers for help. With the click of a button, community users can request that customer support call them back. A popup form lets users detail the problem. Then the right agent can call them back. Show your customers that you value their time as much as their continued business. Contact Request lets customers get back to the things they were doing—no smooth jazz required.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

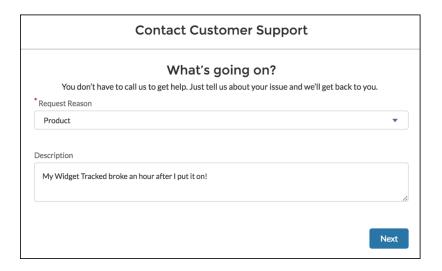
**Who:** Contact Request works in public communities and communities that require authentication. Make sure that your community users have the Run Flows permission, including your Guest User profile that's used in public communities. Without this permission, members don't see the button or the form to submit contact requests.

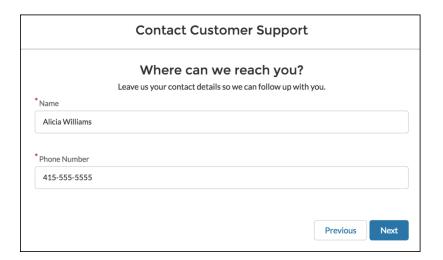
To work with contact requests in the console, make sure that your agents' profiles include at least read access on the contact request object. By default, all Standard User and System Administrator profiles have access to the object.

**Why:** When you add the Contact Request Button & Flow component to your community, users can request a call from support. You can change the button label.

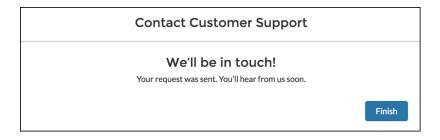


In a popup, the customer enters their issue and contact details.





When the user clicks **Next**, the request is sent.



**How:** To set up the contact request form, create a flow using a guided setup experience. In Setup, go to the Customer Contact Requests page. Then add the flow to your community using a component. In Community Builder, add one of the following components.

- Contact Request Button & Flow—Users can click a button, and detail their issue in a popup form.
- Flow—Your flow is embedded in the page, and users see the flow's first screen when the page loads.

These components are supported in the following templates: Customer Account Portal, Customer Service, Partner Central, and Build Your Own. The Flow component is also supported in the Help Center template.

Contact requests work alongside your other Service-related records. Agents can use the Requested By field to relate the contact request to people, like contacts and leads. And the Related To field connects the contact request to accounts, cases, opportunities, work orders, and custom objects.

To set up your agents for success, add the Contact Request object to the Service Console, and make sure that they have at least read access to the contact request object. Optionally, set up routing with Omni-Channel.

In addition to Communities, Contact Request also works with interactive voice response (IVR) systems. Work with your Open CTI providers for integration.

#### SEE ALSO:

Route Customer Contact Requests with Omni-Channel

Salesforce Help: Set Up and Manage Contact Requests (can be outdated or unavailable during release preview)

## Chat: Expanded Transcript Access and Skills-Based Routing

Every support agent can now view Live Agent transcripts. Let multiple support agents resolve a customer's issue together with Snap-ins chat conferences. Use Omni-Channel Skills-Based Routing to route cases to the most skilled agent for the job.

#### IN THIS SECTION:

#### View Transcripts Without a Live Agent License

To provide more consistent support, every user with a Service Cloud license now has a 360-degree view of a customer's support history and can see past chat transcripts. Previously, a support agent needed a Live Agent license to view chat transcripts. So when a customer chatted with an agent and then followed up on another channel, like email, the new agent couldn't always see the full history. A Live Agent license is still required to deliver service using Live Agent in the Lightning Service Console.

#### Take Advantage of Chat Conferencing for Snap-Ins

Use Snap-ins for your Live Agent chat conferences in Salesforce Classic. With chat conferencing, support agents can work together to solve your customers' trickiest problems.

#### Route Chats to Qualified Agents with Omni-Channel Skills-Based Routing (Generally Available)

Route chats to agents based on the skills needed to resolve them. Use skills, agent availability, and skill levels to assign Live Agent chats to an agent who is right for the job. Previously, this feature was in Beta.

#### Support Your Agents with Enhancements to Omni-Channel Supervisor for Lightning Experience

Let agents raise flags during a chat, signaling to supervisors that they need help. Supervisors can also discretely provide suggestions during a Live Message session between an agent and a customer. Only agents can see the supervisor messages, not the customer.

### View Transcripts Without a Live Agent License

To provide more consistent support, every user with a Service Cloud license now has a 360-degree view of a customer's support history and can see past chat transcripts. Previously, a support agent needed a Live Agent license to view chat transcripts. So when a customer chatted with an agent and then followed up on another channel, like email, the new agent couldn't always see the full history. A Live Agent license is still required to deliver service using Live Agent in the Lightning Service Console.

**Where:** This change applies to Lightning Experience and Salesforce Classic. Live Agent is available in Performance and Developer edition orgs that were created after June 14, 2012, and in Unlimited and Enterprise edition orgs with the Service Cloud.

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Use Snap-ins for your Live Agent chat conferences in Salesforce Classic. With chat conferencing, support agents can work together to solve your customers' trickiest problems.

**Where:** This change applies to Lightning Experience and Salesforce Classic. Live Agent is available in Performance and Developer edition orgs that were created after June 14, 2012, and in Unlimited and Enterprise edition orgs with the Service Cloud.

SEE ALSO:

Help Customers as a Team

#### Route Chats to Qualified Agents with Omni-Channel Skills-Based Routing (Generally Available)

Route chats to agents based on the skills needed to resolve them. Use skills, agent availability, and skill levels to assign Live Agent chats to an agent who is right for the job. Previously, this feature was in Beta.

**Where:** This change applies to Lightning Experience. Live Agent is available in Performance and Developer edition orgs that were created after June 14, 2012, and in Unlimited and Enterprise edition orgs with the Service Cloud.

SEE ALSO:

Route Text Messages and Chats to Qualified Agents with Skills-Based Routing (Generally Available)

#### Support Your Agents with Enhancements to Omni-Channel Supervisor for Lightning Experience

Let agents raise flags during a chat, signaling to supervisors that they need help. Supervisors can also discretely provide suggestions during a Live Message session between an agent and a customer. Only agents can see the supervisor messages, not the customer.

SEE ALSO:

Lend a Helping Hand with Enhancements to Omni Supervisor

## Phone: Softphone Pop-Out and a Guided Setup Flow for Open CTI

Agents can pop-out the softphone utility in a new window. And a guided setup flow in Lightning Experience walks you through configuring your phone channel and CTI partner—using clicks not code.

IN THIS SECTION:

#### Open Softphones in a New Window

Let your agents make the most of their screen space. Agents that use multiple monitors can pop-out their softphone utility into its own window. Agents can move the utility anywhere on the screen to make the most of the space. No setup is required. Just tell your agents to click the pop-out icon in the top-right corner of utility. Previously, this feature was only available in Salesforce Classic.

#### Set Up Open CTI with Guided Experience

Use a guided flow to set up Open CTI. Select from a list of CTI partners and install the managed package from that partner with just a few clicks.

#### Open Softphones in a New Window

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**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

#### SEE ALSO:

Open a Window into Productivity with Pop-Out Utilities (Critical Update)

#### Set Up Open CTI with Guided Experience

Use a guided flow to set up Open CTI. Select from a list of CTI partners and install the managed package from that partner with just a few clicks.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.

**How:** On the Service Setup home page, select **Voice Support Setup**. If you don't see it on the Service Setup home page, click **View All**, and then select **Voice Support Setup**.

## Social Customer Service: Duplicate Facebook Message Prevention and Merged Records with Social Personas and Social Posts

Avoid getting duplicate Facebook messages, and maintain social personas and social posts when you merge records.

#### IN THIS SECTION:

#### Prevent Duplicate Facebook Messages

Getting the same Facebook private message twice? If you're using both Social Customer Service and LiveMessage, you could be seeing double. Stop the extra messages from clogging up your system and see clearly again in no time.

#### Carry Over Social Personas and Social Posts When Merging Contacts, Accounts, or Leads

When you merge contacts, accounts, or leads, the child Social Personas and related Social Posts carry over during the merge process, allowing you to retain the social history on your records.

### Prevent Duplicate Facebook Messages

Getting the same Facebook private message twice? If you're using both Social Customer Service and LiveMessage, you could be seeing double. Stop the extra messages from clogging up your system and see clearly again in no time.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, and Unlimited editions.

**How:** In Setup, turn off Facebook messaging on the Inbound Settings tab of the Social Business Rules section.

#### Carry Over Social Personas and Social Posts When Merging Contacts, Accounts, or Leads

When you merge contacts, accounts, or leads, the child Social Personas and related Social Posts carry over during the merge process, allowing you to retain the social history on your records.

**Where:** This change applies to Lightning Experience and contacts in Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

## Snap-Ins for Mobile Apps: Give Customers a Richer Chat Experience

The iOS and Android SDKs have several enhancements to chat, including hyperlink previews and a low-level core API for customers who want to build their own user interface. We also made some general enhancements to the SDK so that your mobile app can give customers the best experience.

Where: This update applies to the Snap-ins for Mobile Apps SDK for iOS (version 216.0.0) and Android (version 216.0.2).

For details about new features, see the release notes for iOS and Android. Visit the Snap-ins for Mobile Apps developer center for other resources.

## Snap-Ins for Web: Queue Positions for Transfers, Chat Conferences, and Updated Post-Chat

Display a customer's queue position during transfers. Let multiple support agents resolve a customer's issue together with chat conferences in Salesforce Classic. Get more responses by sending customers directly to the post-chat form when their chat ends.

#### IN THIS SECTION:

#### Show Customers Their Place in Line During Transfers

Sometimes your customers need extra help for trickier tasks. While they wait to be transferred from their first support agent or bot to a new agent, customers can see their position in the queue.

#### Help Customers as a Team

Use Snap-ins for your Live Agent chat conferences in Salesforce Classic. With chat conferencing, support agents can work together to solve your customers' trickiest problems. Add custom avatars to help customers keep track of who's who in a group chat, or add flair to a one-on-one chat. If you don't set an avatar, the agent's initials are displayed in your color scheme instead.

#### Increase Your Response Rate with Post-Chat Updates

We know that customer feedback is important to you. We also know that your customers are less likely to visit your post-chat URL if they can choose to close the chat. Remove the post-chat button, and update your Snap-in code to take customers directly to the post-chat URL when they're done chatting.

#### Allow Guest Users to Run Flows

Embedded flows help your users complete simple, automated tasks from within your website. The best part? Users can now run a flow without logging in.

## Show Customers Their Place in Line During Transfers

Sometimes your customers need extra help for trickier tasks. While they wait to be transferred from their first support agent or bot to a new agent, customers can see their position in the queue.

**Where:** This change applies to Salesforce Classic and Lightning Experience in Professional, Enterprise, Unlimited, and Developer editions that use the Snap-in code snippet version 5.0 or later.

**How:** Make sure that the chat button that's assigned to your Snap-in deployment has the **Enable Queue** setting enabled in your Live Agent settings. In Snap-ins setup, select **Show queue position**.

#### Help Customers as a Team

Use Snap-ins for your Live Agent chat conferences in Salesforce Classic. With chat conferencing, support agents can work together to solve your customers' trickiest problems. Add custom avatars to help customers keep track of who's who in a group chat, or add flair to a one-on-one chat. If you don't set an avatar, the agent's initials are displayed in your color scheme instead.

**Where:** This change applies to Salesforce Classic. Live Agent is available in Performance and Developer edition orgs that were created after June 14, 2012, and in Unlimited and Enterprise edition orgs with the Service Cloud. Chat conferencing is available using the Snap-in code snippet version 5.0 or later.

**How:** To turn on chat conferencing, identify the Live Agent configuration that you're using with your Snap-in. Go to the Live Agent Configurations setup page in Salesforce Classic, and enable chat conferencing. To set a custom avatar, edit Custom Branding in the Live Agent settings for your Snap-in deployment.



**Important**: Omni-Channel routing is not supported for chat conferencing. Make sure that your Live Agent configuration uses Live Agent routing. Your support agents can use chat conferencing only in Salesforce Classic.

#### Increase Your Response Rate with Post-Chat Updates

We know that customer feedback is important to you. We also know that your customers are less likely to visit your post-chat URL if they can choose to close the chat. Remove the post-chat button, and update your Snap-in code to take customers directly to the post-chat URL when they're done chatting.

**Where:** This change applies to Salesforce Classic and Lightning Experience in Professional, Enterprise, Unlimited, and Developer editions that use the Snap-in code snippet version 5.0 or later.

**How:** Make sure that you add a post-chat URL for your Live Agent chat button. Add the following setting to your JavaScript snippet anywhere before the embedded svc.init call.

embedded svc.settings.autoOpenPostChat = true;

#### Allow Guest Users to Run Flows

Embedded flows help your users complete simple, automated tasks from within your website. The best part? Users can now run a flow without logging in.

**Where:** This change applies to Salesforce Classic and Lightning Experience in Professional, Enterprise, Unlimited, and Developer editions that use the Snap-in code snippet version 5.0 or later.

**Why:** Maybe you're an insurance company, and you want to let policyholders search for in-network medical providers without logging in. Or you're an online retailer, and you want to streamline how new customers create accounts. No matter what type of business you run, embedded flows are easily configured to support your customers' most important tasks.

**How:** Decide which flow you want to use in your Snap-in. Don't have one? Go to the Flows page in Setup and select **New Flow**. Then head to the Snap-ins page in Setup. Create a Snap-in deployment, and select **Start** under Flow Settings.

SEE ALSO:

Salesforce Help: Add a Flow to Your Website (can be outdated or unavailable during release preview)

# Case Management: More Reasons to Make the Move to Lightning Experience

We've been busy moving the features you know and love to Lightning Experience. Require your agents to get their emails approved before sending them to customers. View and manage case contacts and case hierarchies. For folks using Omni-Channel Supervisor, use the whisper and raise flag features in Lightning Experience. To top it off, deployments make it easier to set up the Guided Action List.

#### IN THIS SECTION:

#### Service Console: More Convenience for Admins, Agents, and Customers

A new component called Contact Request Button & Flow lets customers request that support call them back, saving them from waiting on hold. Agents can pop out console utilities to let them see more of the records they need. And it's easier for you to set up and configure the Guided Action List component using deployments.

#### Lightning Flow for Service: Reusable Deployments and Easy-to-Find Paused Flows

We made it easier to set up and use the Guided Action List component. Deployments let you capture and reuse list settings across different record pages and orgs. To help your agents find and complete paused flows fast, the Guided Action List shows all paused flows for the current record page.

#### Cases: Email Approval, Case Hierarchy, Contact Roles, and the Accept Case Button

Provide consistent communication and approve case emails sent by your agents. Let agents see the big picture with case hierarchy. Agents can contact the right person on the first try with case contact roles. And agents can also accept cases with a single click. These features were available in Salesforce Classic and are new in Lightning Experience.

## Omni-Channel: Skills-Based Routing for Chats and Texts, Routing for Contact Requests, Enhancements to Omni Supervisor, and Attribute-Based Routing (Beta)

Route contact request records to make sure that your customers are contacted by available agents. Skills-based routing comes to Live Agent and LiveMessage. Enhancements to Omni Supervisor let agents signal that they need help and gives supervisors the power to whisper to their agents in their Live Message session. Attribute-based routing goes beta, letting you use fields and field values as routing criteria.

#### Agent Productivity: Relative Dates and Close Tab for Macros

Use relative dates to create macros that set dates and times in the future. You can add a step to your macro to close a console tab when the macro completes. And as a bonus, now there's one less reason to switch back to Salesforce Classic. Macros and quick text shared in Salesforce Classic are visible in Lightning Experience.

#### Lightning Scheduler: Simplify Appointment Scheduling

Swiftly schedule appointments for customers within standard Salesforce workflows like leads, opportunities, and accounts. Personalize appointments by topic, assign them to employees with the right skills, and ensure that they're scheduled within your operating hours.

## Service Console: More Convenience for Admins, Agents, and Customers

A new component called Contact Request Button & Flow lets customers request that support call them back, saving them from waiting on hold. Agents can pop out console utilities to let them see more of the records they need. And it's easier for you to set up and configure the Guided Action List component using deployments.

**Where**: This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions with the 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 custom keyboard shortcuts, aren't available in Lightning console apps. Learn more.

**How:** Check out the new features available in the Service Console.

#### **Communities: Let Your Customers Request a Call from Support**

Your customers can say goodbye to smooth jazz and long waits on 1-800 numbers for help. With the click of a button, community users can request that customer support call them back. A popup form lets users detail the problem. Then the right agent can call them back. Show your customers that you value their time as much as their continued business. Contact Request lets customers get back to the things they were doing—no smooth jazz required.

#### **Agent Productivity: Relative Dates and Close Tab for Macros**

Use relative dates to create macros that set dates and times in the future. You can add a step to your macro to close a console tab when the macro completes. And as a bonus, now there's one less reason to switch back to Salesforce Classic. Macros and quick text shared in Salesforce Classic are visible in Lightning Experience.

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#### Lightning Console Apps: Pop-Out Utilities, Subtab Options, and API Parity

Spread your workflow across multiple windows with pop-out utilities. Customize your subtabs, and promote them to workspace tabs. Change tab colors, and edit browser tab titles with new API methods.

SEE ALSO:

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

## Lightning Flow for Service: Reusable Deployments and Easy-to-Find Paused Flows

We made it easier to set up and use the Guided Action List component. Deployments let you capture and reuse list settings across different record pages and orgs. To help your agents find and complete paused flows fast, the Guided Action List shows all paused flows for the current record page.

#### IN THIS SECTION:

#### Convert Guided Action List Settings into Deployments in Setup (Critical Update)

Migrate your existing Guided Action List settings into deployments that you manage in Setup. You can then reuse a Guided Action List configuration on different record pages and orgs. As of Spring '19, you can no longer configure these settings in component properties. Instead, use deployments that you manage in Setup. To simplify the transition, perform a one-time migration of your existing settings into deployments.

#### Reuse Your Guided Action List Settings in a Deployment

Practice sustainable deployments by recycling the settings in your Guided Action List component. When you capture Guided Action List settings in a Setup deployment, you can reuse it on multiple record pages. To save more time and effort, package your deployment and reuse it in other orgs.

#### Help Agents Find and Resume Paused Flows in the Guided Action List

When there's an agent handoff or a customer calls back, agents often search for flows that they paused midstream. Show agents all paused flows for a record page in the Guided Action List. This single go-to location makes it easy for agents to find and complete flows that automate your procedures.

#### Hide the Remove Option on Guided Actions

Keep actions in your Guided Action List by deciding which actions users can remove. Hide the remove option so essential steps stay on the list until they're completed. Previously, if you pinned actions to the top or bottom regions, users couldn't remove them.

#### View the Latest and Greatest Guided Action List, Always

Give agents a clear picture of what steps to take. When a record updates, the Guided Action List dynamically refreshes. For example, when a case status changes from new to escalated, the Guided Action List refreshes and shows agents an up-to-date list of steps. The refresh also removes completed actions.

SEE ALSO:

Lightning Flow for Service Developer Guide (English only)

#### Convert Guided Action List Settings into Deployments in Setup (Critical Update)

Migrate your existing Guided Action List settings into deployments that you manage in Setup. You can then reuse a Guided Action List configuration on different record pages and orgs. As of Spring '19, you can no longer configure these settings in component properties. Instead, use deployments that you manage in Setup. To simplify the transition, perform a one-time migration of your existing settings into deployments.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** From Setup, in the Quick Find box, enter *Critical Updates*. Click **Review** to learn more about the update. Click **Activate** to migrate the settings for your Guided Action List components.



The update converts your settings to a corresponding deployment on each component. After activation, review the record pages that display Guided Action Lists, verify the results, and confirm that the component behavior is the same.

You can create a Guided Action deployment and specify it on a component before activating the update. If you do so, the component takes settings from your deployment, and not from the conversion created in the migration.

Activating the update does not migrate settings for components that are already packaged. After updating the org, update your package.

SEE ALSO:

Reuse Your Guided Action List Settings in a Deployment Lightning Flow for Service Developer Guide (English only)

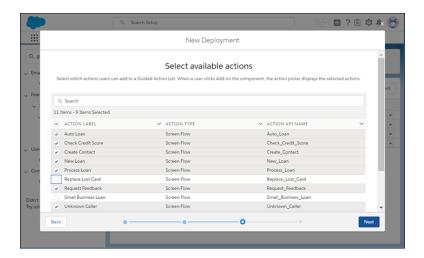
## Reuse Your Guided Action List Settings in a Deployment

Practice sustainable deployments by recycling the settings in your Guided Action List component. When you capture Guided Action List settings in a Setup deployment, you can reuse it on multiple record pages. To save more time and effort, package your deployment and reuse it in other orgs.

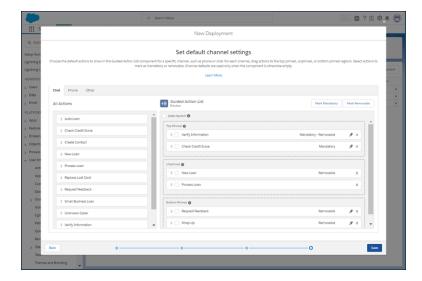
**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** If you already display the Guided Action List component on record pages, you can use a one-time update to transition existing component settings to a Guided Action deployment. Then use Setup to create a deployment or to modify an existing one. You can point and click to set up deployments, or we implemented keyboard controls for accessibility.

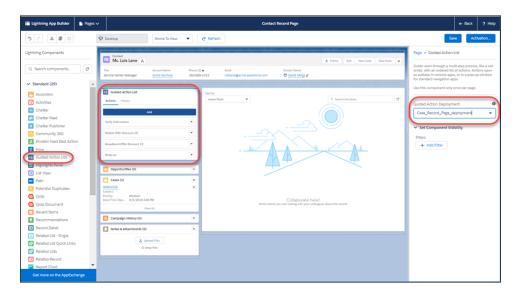
From Setup, in the Quick Find box, enter *Guided Actions*. Click **New Deployment**, and name your deployment. Select which actions are available for users to add when needed.



For each channel, select actions to show as defaults. Mark which actions are removable and which are mandatory. Previously, you could only define mandatory actions in Process Builder. Users see a reminder when they try to close a mandatory action without completing it.



In Lightning App Builder, drag the Guided Action List component to the record page, and select the deployment in the component properties. Reuse the deployment and its settings on multiple record pages.



You can use packaging to capture Guided Action Lists and deployments. When you package a record page with a Guided Action List, the package captures the components, the deployment settings, and all processes and flows associated with the record in RecordActions. Before you create a package with a Guided Action deployment, make sure that it references active flows.



**Note:** If you created a package in a previous release that includes Guided Action Lists, activate the update to convert settings in your org. Then update your package so that it includes your Guided Action deployments.

#### SEE ALSO:

Convert Guided Action List Settings into Deployments in Setup (Critical Update)

*Lightning Flow for Service Developer Guide* (English only)

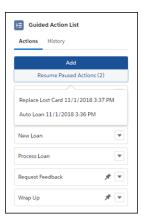
Salesforce Help: Lightning Flow for Service and the Guided Action List Component (can be outdated or unavailable during release preview)

## Help Agents Find and Resume Paused Flows in the Guided Action List

When there's an agent handoff or a customer calls back, agents often search for flows that they paused midstream. Show agents all paused flows for a record page in the Guided Action List. This single go-to location makes it easy for agents to find and complete flows that automate your procedures.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The Guided Action List shows all paused flows for the current record page, regardless of whether the flow was started from the list.



**How:** Click **Resume Paused Actions**, and select a paused flow to resume. Resumed flows are added to the Guided Action List. If the flow was started from the top or bottom pinned region of the list, it's added at the end of the region. Otherwise, it's added to the bottom of the unpinned region. If a flow was marked as mandatory or removable, those attributes are preserved on the resumed flow.



**Note:** Flows can use the variable *Flow.CurrentRecord* to track the current record associated with the flow. Sometimes API or flow logic updates this variable. For example, if a flow is associated with a lead record and the lead is converted to a contact, the record association is updated. When a user pauses a flow, the Guided Action List checks the currently associated record. If the record context changed, the paused flow doesn't appear on the record page's Guided Action List. Instead, to resume the flow, a message directs the user to the new record that's associated with the flow.

#### SEE ALSO:

Lightning Flow for Service Developer Guide (English only)

Salesforce Help: Let Users Pause Flow Interviews (can be outdated or unavailable during release preview)

Salesforce Help: Add Record Context to Your Flows (can be outdated or unavailable during release preview)

#### Hide the Remove Option on Guided Actions

Keep actions in your Guided Action List by deciding which actions users can remove. Hide the remove option so essential steps stay on the list until they're completed. Previously, if you pinned actions to the top or bottom regions, users couldn't remove them.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Decide which actions, whether pinned or unpinned, users are able to remove.





Note: Even if you hide the remove option on an action, it can still be deleted from a Guided Action List using the API.

**How:** By default, actions are removable. To hide the remove option, modify channel defaults in your Guided Action deployment, or configure the RecordAction attribute in Process Builder or API.

SEE ALSO:

Reuse Your Guided Action List Settings in a Deployment Lightning Flow for Service Developer Guide (English only)

#### View the Latest and Greatest Guided Action List, Always

Give agents a clear picture of what steps to take. When a record updates, the Guided Action List dynamically refreshes. For example, when a case status changes from new to escalated, the Guided Action List refreshes and shows agents an up-to-date list of steps. The refresh also removes completed actions.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Lightning Flow for Service Developer Guide (English only)

## Cases: Email Approval, Case Hierarchy, Contact Roles, and the Accept Case Button

Provide consistent communication and approve case emails sent by your agents. Let agents see the big picture with case hierarchy. Agents can contact the right person on the first try with case contact roles. And agents can also accept cases with a single click. These features were available in Salesforce Classic and are new in Lightning Experience.

#### IN THIS SECTION:

#### Verify Your Customer Communications with Email Draft Approval

Control the messaging between your agents using Lightning Experience and your customers to ensure that the content is as amazing as your company. Require that agents send email drafts to designated approvers when they're communicating with customers. Previously, email draft approval for case emails was available only in Salesforce Classic.

#### See Related Work at a Glance with Case Hierarchy

Let your support agents clearly see child-parent relationships on cases to understand related work. View any case in the hierarchy by clicking on the case number. Adjust the columns to show other case field details, like subject or location. Previously, this feature was available only in Salesforce Classic.

#### Know Who's Who with Case Contact Roles

Contact roles let agents in Lightning Experience know exactly who to contact based on the person's role or speciality. Previously, this feature was available only in Salesforce Classic.

#### Take on Work with the Accept Case Button

Accept one or more cases at a time with the Accept Case button, now in Lightning Experience. Previously, this button was available only in Salesforce Classic on list views for cases that are assigned to a queue. Just like in Salesforce Classic, users in Lightning Experience see the button on the list view but they also see it on the record detail view for a case.

#### Verify Your Customer Communications with Email Draft Approval

Control the messaging between your agents using Lightning Experience and your customers to ensure that the content is as amazing as your company. Require that agents send email drafts to designated approvers when they're communicating with customers. Previously, email draft approval for case emails was available only in Salesforce Classic.

Where: This change applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Enable email drafts in Setup on the Support Settings page. Then configure a workflow process on email message to define approval and rejection actions.

#### SEE ALSO:

Salesforce Help: Review and Approve Email Drafts in the Case Feed (can be outdated or unavailable during release preview)
Salesforce Help: Work with Draft Emails in the Case Feed (can be outdated or unavailable during release preview)

#### See Related Work at a Glance with Case Hierarchy

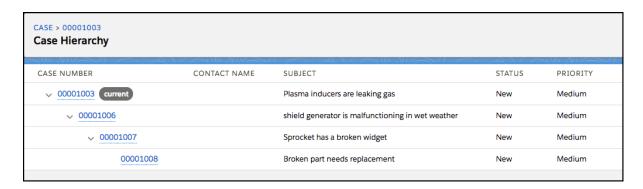
Let your support agents clearly see child-parent relationships on cases to understand related work. View any case in the hierarchy by clicking on the case number. Adjust the columns to show other case field details, like subject or location. Previously, this feature was available only in Salesforce Classic.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions. Case hierarchy is not available in Communities.

Who: Give your users read permission on cases and set the field-level security for the Case Parent field to read.

**How:** Edit the case page layout and add the Parent Case field and the View Case Hierarchy action to Salesforce Mobile and Lightning Experience Actions.

You can choose which case fields to show as Hierarchy Columns. By default, the hierarchy view uses the same columns as the recently viewed cases list view.



Users can expand and collapse parts of the list and click a case number to view any case in the hierarchy.

#### SEE ALSO:

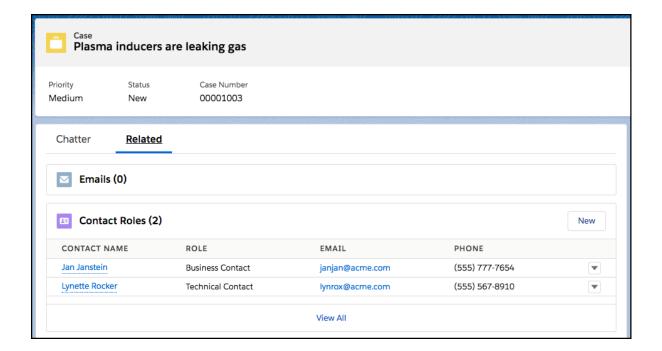
Salesforce Help: Case Hierarchies (can be outdated or unavailable during release preview)

#### Know Who's Who with Case Contact Roles

Contact roles let agents in Lightning Experience know exactly who to contact based on the person's role or speciality. Previously, this feature was available only in Salesforce Classic.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** To set up case contact roles, from Setup, enter *Case Contact Roles* into the Quick Find box and select **Case Contact Roles**. Click **New**, and start defining the contact roles that are most useful to your org. Then open the Object Manager for Case in Setup, then edit the case page layout and add the Contact Roles related list.



#### Take on Work with the Accept Case Button

Accept one or more cases at a time with the Accept Case button, now in Lightning Experience. Previously, this button was available only in Salesforce Classic on list views for cases that are assigned to a queue. Just like in Salesforce Classic, users in Lightning Experience see the button on the list view but they also see it on the record detail view for a case.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

## Omni-Channel: Skills-Based Routing for Chats and Texts, Routing for Contact Requests, Enhancements to Omni Supervisor, and Attribute-Based Routing (Beta)

Route contact request records to make sure that your customers are contacted by available agents. Skills-based routing comes to Live Agent and LiveMessage. Enhancements to Omni Supervisor let agents signal that they need help and gives supervisors the power to whisper to their agents in their Live Message session. Attribute-based routing goes beta, letting you use fields and field values as routing criteria.

#### IN THIS SECTION:

#### Route Text Messages and Chats to Qualified Agents with Skills-Based Routing (Generally Available)

Route customers from both Live Agent and LiveMessage channels to qualified agents based on the skills needed to assist them. Use skills, agent availability, and skill levels to assign the customer an agent who is right for the job. Previously, this feature was in Beta for Live Agent and was unavailable for LiveMessage.

#### Route Customer Contact Requests with Omni-Channel

Customers don't have to call a help line and wait on hold anymore. With Contact Requests, a community user can request that customer support call them back using an online form. When a request is submitted, a contact request record is created to track the issue. Using Omni-Channel, you can route the contact requests to available agents.

#### Lend a Helping Hand with Enhancements to Omni Supervisor

Let agents raise flags during a chat, signaling to supervisors that they need help. Supervisors can also discretely provide suggestions during a Live Message session between an agent and a customer. Only agents can see the supervisor messages, not the customer.

#### Assign Work Based on Field Data Using Attribute-Based Routing (Beta)

Direct work to the right agents with attribute-based routing. Use the fields of incoming records to assign work to the most capable, available agents. Fine-tune your routing solution so that incoming service requests are grouped according to your business needs. Attribute-based routing works with cases, leads, orders, and custom objects. To participate in this closed beta, contact Salesforce support.

#### Route Text Messages and Chats to Qualified Agents with Skills-Based Routing (Generally Available)

Route customers from both Live Agent and LiveMessage channels to qualified agents based on the skills needed to assist them. Use skills, agent availability, and skill levels to assign the customer an agent who is right for the job. Previously, this feature was in Beta for Live Agent and was unavailable for LiveMessage.

**Where:** This feature is available to org with Live Agent or LiveMessage. Live Agent is available in Performance and Developer edition orgs that were created after June 14, 2012, and in Unlimited and Enterprise edition orgs with the Service Cloud. LiveMessage is available through a Digital Engagement add-on. LiveMessage in Lightning Experience is available in Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.

Why: Skills-based routing allows work items to be routed using more sophisticated and dynamic criteria than queue-based routing.

**How:** To utilize skills-based routing, enable the feature, enable and create skills, create service resources for agents, and assign skills to service resources. Then you set up routing.

#### SEE ALSO:

Salesforce Help: How Does Skills-Based Routing Work? (can be outdated or unavailable during release preview)

Salesforce Help: How Does Skills-Based Routing Differ from Queue-Based Routing? (can be outdated or unavailable during release preview)

Salesforce Help: Set Up Skills-Based Routing (can be outdated or unavailable during release preview)

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Customers don't have to call a help line and wait on hold anymore. With Contact Requests, a community user can request that customer support call them back using an online form. When a request is submitted, a contact request record is created to track the issue. Using Omni-Channel, you can route the contact requests to available agents.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How**: To route the requests to Omni-Channel, create or edit a queue that's used by Omni-Channel to include the contact request object. Then specify this queue as the owner when you set up the contact request flow. This flow is what creates the online form that community members use. To create the contact request flow, go to the Customer Contact Requests page in Setup.

#### SEE ALSO:

Communities: Let Your Customers Request a Call from Support

Salesforce Help: Associate Routing Configurations and Agents with Queues (can be outdated or unavailable during release preview)

#### Lend a Helping Hand with Enhancements to Omni Supervisor

Let agents raise flags during a chat, signaling to supervisors that they need help. Supervisors can also discretely provide suggestions during a Live Message session between an agent and a customer. Only agents can see the supervisor messages, not the customer.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions with the Service Cloud.

**How:** Agents can click the flag button to raise the flag for a chat session. Supervisors see a new column in the Omni Supervisor that shows flagged chat sessions. You can even sort by the flagged column to bring these sessions to the top of the list so you can give assistance quickly.

Supervisors can monitor chats like before, but now they can also send private messages while monitoring a session. Only the agent sees these messages. One or more supervisors can advise the agent with how to help resolve the reason for raising a flag, while the customer continues to see only the messages that the agent types.

#### Assign Work Based on Field Data Using Attribute-Based Routing (Beta)

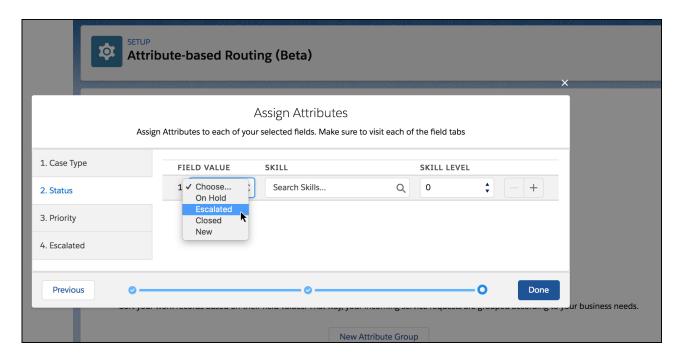
Direct work to the right agents with attribute-based routing. Use the fields of incoming records to assign work to the most capable, available agents. Fine-tune your routing solution so that incoming service requests are grouped according to your business needs. Attribute-based routing works with cases, leads, orders, and custom objects. To participate in this closed beta, contact Salesforce support.



**Note:** As a beta feature, attribute-based routing is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature.

**Where:** This feature applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: You can specify which fields and field values to use as routing criteria.



## Agent Productivity: Relative Dates and Close Tab for Macros

Use relative dates to create macros that set dates and times in the future. You can add a step to your macro to close a console tab when the macro completes. And as a bonus, now there's one less reason to switch back to Salesforce Classic. Macros and quick text shared in Salesforce Classic are visible in Lightning Experience.

#### IN THIS SECTION:

#### Stay on Time with Relative Dates for Macros

It's a fact of life: schedules and dates change. Rather than using precise dates and times in your macros, use relative dates and times that always remain applicable, even when the schedule slips. For instance, you want a macro to create a follow-up task. With relative dates, you can set the due date to be a certain number of days after the date the macro runs.

#### Tidy Up and Close the Tab After a Macro Finishes

Let agents know that a macro has completed the work on a record by closing the tab. When a tab lingers open, agents might wonder if more work is needed. In the Macro Builder, you can now easily add a final close tab instruction to your macros.

#### View All Your Salesforce Classic Macros and Quick Text in Lightning Experience

Work with all your macros and quick text in Lightning Experience, even items that were created and shared in Salesforce Classic. Previously, items shared in Salesforce Classic weren't visible in Lightning Experience when folders were enabled.

#### Stay on Time with Relative Dates for Macros

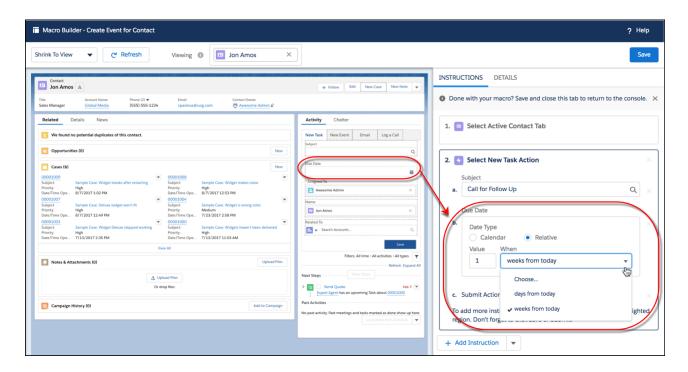
It's a fact of life: schedules and dates change. Rather than using precise dates and times in your macros, use relative dates and times that always remain applicable, even when the schedule slips. For instance, you want a macro to create a follow-up task. With relative dates, you can set the due date to be a certain number of days after the date the macro runs.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions

**Why:** When working with dates and times, relative dates let you specify:

- Minutes from now
- Hours from now
- Days from today
- Weeks from today

**How:** In Macro Builder, select **Relative** when working with date and time fields. Enter a value, and choose a duration. Here's an example of the Due Date field on a task.



The Relative option is available on Time, Date, and DateTime fields. For example, you can create an event that's one week from today at 8:00 AM.

#### SEE ALSO:

Salesforce Help: Create Macros in Lightning Experience (can be outdated or unavailable during release preview)

#### Tidy Up and Close the Tab After a Macro Finishes

Let agents know that a macro has completed the work on a record by closing the tab. When a tab lingers open, agents might wonder if more work is needed. In the Macro Builder, you can now easily add a final close tab instruction to your macros.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** In the Macro Builder, select **Add Close Tab Instruction** from the Add Instruction dropdown. Make sure to add it last. Otherwise, the rest of your macro doesn't run.





Note: This instruction works only in Lightning console apps, because tabs don't exist in apps with standard navigation.

SEE ALSO:

Salesforce Help: Create Macros in Lightning Experience (can be outdated or unavailable during release preview)

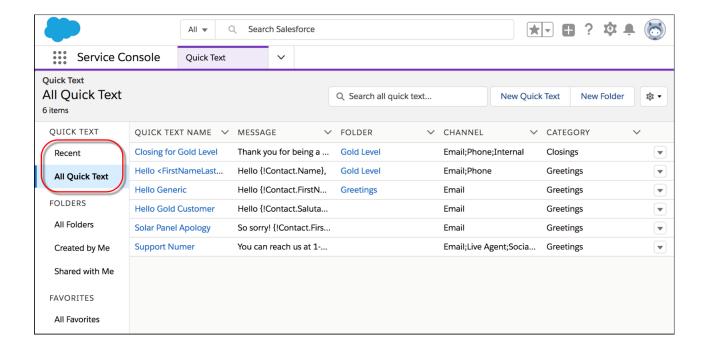
#### View All Your Salesforce Classic Macros and Quick Text in Lightning Experience

Work with all your macros and quick text in Lightning Experience, even items that were created and shared in Salesforce Classic. Previously, items shared in Salesforce Classic weren't visible in Lightning Experience when folders were enabled.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions. Folders for macros and guick text aren't supported in Essentials.

**How:** To work with macros and quick text in Lightning Experience, enable folders on the Macro Settings and Quick Text Settings pages in Setup. After you enable folders, the macro utility and quick text browser are updated.

By default, items shared in Salesforce Classic display in the All view on the Quick Text or Macros list view. After you access an item, it also displays under Recent.



To keep things easy for your users, when an item is assigned to a folder in Lightning Experience, the Share button in Salesforce Classic on the record detail page is disabled.

SEE ALSO:

Salesforce Help: Share Quick Text Using a Folder in Lightning Experience (can be outdated or unavailable during release preview)
Salesforce Help: Share Macros Using a Folder in Lightning Experience (can be outdated or unavailable during release preview)

## Lightning Scheduler: Simplify Appointment Scheduling

Swiftly schedule appointments for customers within standard Salesforce workflows like leads, opportunities, and accounts. Personalize appointments by topic, assign them to employees with the right skills, and ensure that they're scheduled within your operating hours.

Where: This feature is available for an extra cost in Enterprise and Unlimited editions.

SEE ALSO:

Create Personalized Appointments with Lightning Scheduler

## Other Changes in Service Cloud

Learn about other changes we've made in the Service Cloud.

#### IN THIS SECTION:

#### Create a Call Center in Lightning Experience with the Voice Support Setup Flow

Integrate your third-party voice support system with Salesforce so that your team can take calls from the service console. Our new guided setup flow walks you through connecting with your voice provider, installing the AppExchange package you need, and selecting the users who can take calls.

#### Set Up Offline Support and Related Records in the Live Agent Setup Flow

Using pre-chat and offline support in your Snap-ins chat window is more seamless than ever before. Add offline support right in the setup flow to let your customers log a case when there aren't any support agents available to chat. Plus, select which records you want to create and link to your chats using the fields in your pre-chat form.

#### Get IoT in Service Cloud Unlimited Edition for Better Customer Service

A limited version of Salesforce IoT is now available at no extra cost in Service Cloud. With Salesforce IoT, your agents have diagnostic information about the condition of your customer's connected device to help analyze and solve issues faster.

## Create a Call Center in Lightning Experience with the Voice Support Setup Flow

Integrate your third-party voice support system with Salesforce so that your team can take calls from the service console. Our new guided setup flow walks you through connecting with your voice provider, installing the AppExchange package you need, and selecting the users who can take calls.

SEE ALSO:

Set Up Open CTI with Guided Experience

## Set Up Offline Support and Related Records in the Live Agent Setup Flow

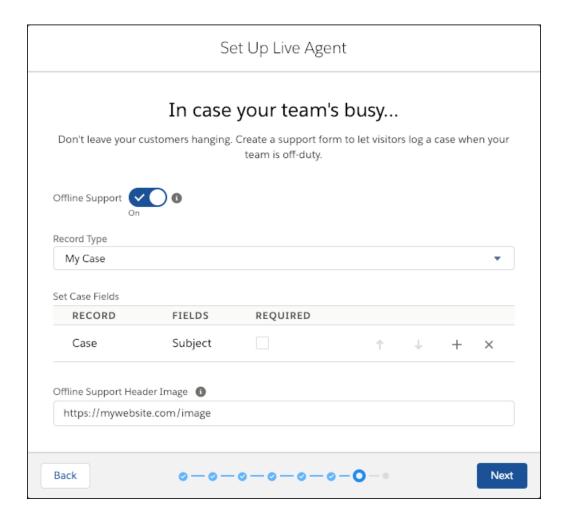
Using pre-chat and offline support in your Snap-ins chat window is more seamless than ever before. Add offline support right in the setup flow to let your customers log a case when there aren't any support agents available to chat. Plus, select which records you want to create and link to your chats using the fields in your pre-chat form.

Where: This change applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

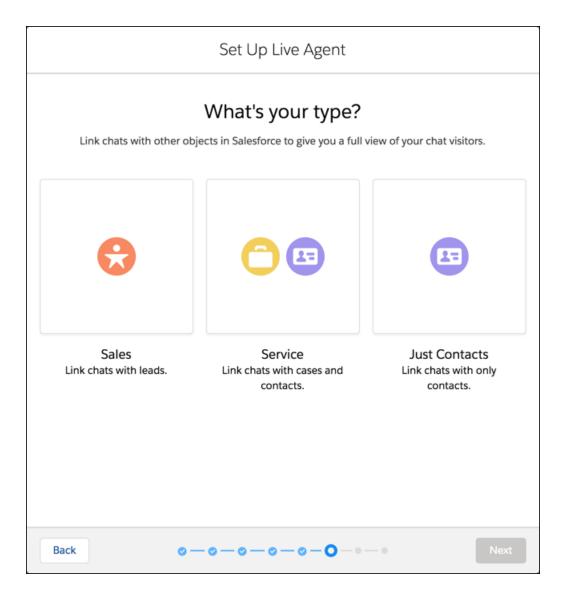
**Why:** Create an offline support form in the setup flow. When you turn it on, you can create the case form that your customers can fill out when your chat agents are offline. You can also add a header image to appear at the top of the case form.



**Note:** When you turn on offline support, we turn on guess access in the Support API for the site you selected earlier in the flow. This is necessary for allowing customers to log a case.



Link your chats with other Salesforce records with a simple selection in the flow. Select one of the options, and Salesforce will find or create records with your chat, so you get a full view of your customers. You can select a sales focus (Leads), a service focus (Cases and Contacts), or just Contacts.



How: From Service Setup, select Live Agent Setup. If it's not in your recommendations, click View All, then select Live Agent Setup.

## Get IoT in Service Cloud Unlimited Edition for Better Customer Service

A limited version of Salesforce IoT is now available at no extra cost in Service Cloud. With Salesforce IoT, your agents have diagnostic information about the condition of your customer's connected device to help analyze and solve issues faster.

Where: This change applies to Lightning Experience in Unlimited Edition with the Service Cloud.

SEE ALSO:

Improve Customer Experience with IoT in Service Cloud Unlimited Edition

# Analytics: Al-Driven Insights in Reports, Joined Reports in Lightning Experience, Action Menus in Communities

Learn new things about your business as Einstein Data Insights intelligently calls your attention to interesting patterns in reports; no need to group, filter, or summarize. Gain insights from up to five report types with Lightning joined reports, then share them on a 12-column dashboard. In Communities, update records directly from embedded Analytics dashboards with action menus. Benefit from these and many more features and enhancements across Reports and Dashboards and Einstein Analytics.

#### IN THIS SECTION:

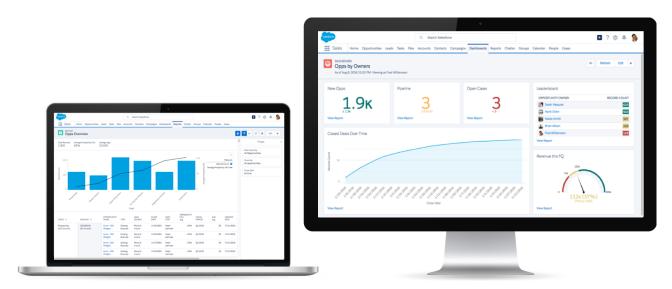
Reports and Dashboards: Lightning Joined Reports (Generally Available), Conditional Formatting (Beta), 12-Column Dashboards Get insights from more than one report type with joined reports in Lightning Experience. Then share the insights on 12-column dashboards.

Einstein Analytics: Einstein Data Insights, Financial Services Templated App, Action Menus in Communities

Provide Al for every user. Go from data to insights faster with prebuilt analytics specific to financial services. Update Salesforce records without leaving your community.

# Reports and Dashboards: Lightning Joined Reports (Generally Available), Conditional Formatting (Beta), 12-Column Dashboards

Get insights from more than one report type with joined reports in Lightning Experience. Then share the insights on 12-column dashboards.



#### IN THIS SECTION:

Reports: Lightning Joined Reports (Generally Available), Enhanced Run Page (Generally Available), Conditional Formatting (Beta), View Historical Tracking Reports

Create joined reports and then view them on the enhanced run page, which is now the standard run page for all reports. Call out insights with conditional formatting (beta), and see how data changes over time by viewing historical tracking reports in Lightning Experience.

#### Dashboards: 12-Column Layouts, Formula Columns in Lightning Tables, Compact Metric Components

Dashboards excel at detailing your business data, and now you can present even more data by upping the column count from 9 to 12. Display summary formulas from source reports in Lightning tables. And fit more data into less space with compact metric components.

#### Subscriptions: Report and Dashboard Subscriptions for Users, Groups, and Roles

The people in your local sales group love the Sales Pipeline dashboard that they receive in their inboxes every Monday morning. The dashboard subscription you set up a few months ago has been working just fine. But your team is now expanding and a few people have moved on to other assignments, so your recipient list isn't current anymore. No problem! By setting up report and dashboards subscriptions by group or role, you can keep your recipient lists current even when people come and go.

## Reports: Lightning Joined Reports (Generally Available), Enhanced Run Page (Generally Available), Conditional Formatting (Beta), View Historical Tracking Reports

Create joined reports and then view them on the enhanced run page, which is now the standard run page for all reports. Call out insights with conditional formatting (beta), and see how data changes over time by viewing historical tracking reports in Lightning Experience.

#### IN THIS SECTION:

#### Joined Reports Arrive in Lightning Experience (Generally Available)

With up to five *blocks*, joined reports let you view different types of information in a single report. Each block shows data from one standard or custom report type.

#### Review Data More Easily from the Run Page (Generally Available)

Updated headers in the run page (formerly called the Enhanced run page) make gaining insights from your report data faster.

#### Resize Columns to Fit Your Content

If truncated data and unused white space in columns aren't your favorite things, wave goodbye to them. You can now adjust report column widths in Lightning Experience report builder and the run page.

#### Quickly Focus on Relevant Data with Conditional Formatting (Beta)

Looking for a way to help sales reps easily identify the hottest deals that need immediate attention? Want to know at a glance which accounts have opportunities valued between \$100,000 and \$500,000? Apply conditional formatting to summary or matrix reports in Lightning Experience to lend color to your reports and gather insights at the same time.

#### Gather Insights Faster with Stacked Summaries

You created those complex—but awesome— matrix reports so you could summarize large volumes of data and compare values in different fields. But the summarized metrics that you wish to compare are not always conveniently located next to each other. For a more viewer-friendly version of the report involves less scrolling, view the report with Stacked Summaries option enabled.

#### View Historical Tracking Reports in Lightning Experience

You don't have to pop back to Salesforce Classic anymore just to view historical tracking reports. All your historical tracking reports are now viewable from the Lightning Experience Reports page.

#### Joined Reports Arrive in Lightning Experience (Generally Available)

With up to five *blocks*, joined reports let you view different types of information in a single report. Each block shows data from one standard or custom report type.

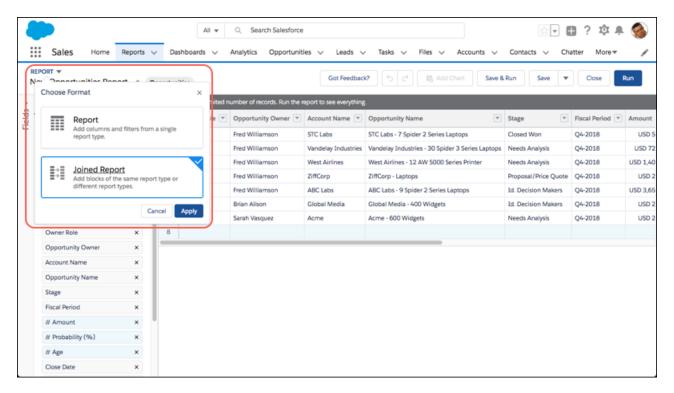
Where: This feature is generally available in Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Joined reports are perfect for analyzing Salesforce data across multiple report types, like Opportunities with Products joined to Cases with Assets. Or, get multiple, simultaneous views of an object, like Closed Won Opportunities alongside Closed Lost Opportunities.

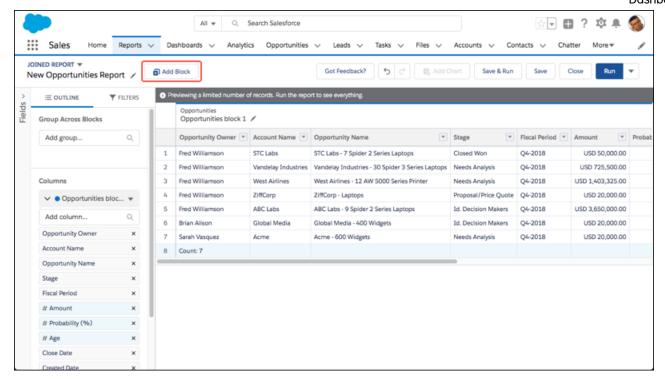
For example, create the ultimate sales report by building a joined report. Add three blocks to the joined report that give you a complete view of your accounts, opportunities, and cases.

Or, build a joined report to get a birds-eye-view of your customer service operation. Add three blocks and assign each of them the Cases report type. Filter one block by open status, one by in progress, and the third by closed status.

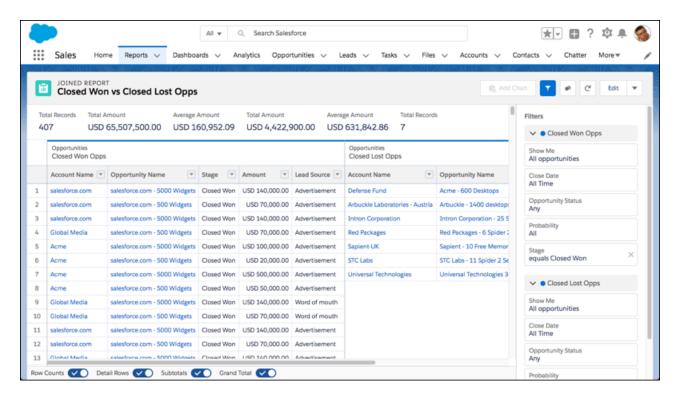
**How:** You can turn any report into a joined report by clicking **Report** ▼ > **Joined Report** > **Apply**.



To add a block, click **a** Add Block, and choose a report type.



Group, filter, summarize, and chart report data just like in other reports. Before you know it, your joined report provides useful business insights. This one compares closed won opportunities with closed lost opportunities.



Now that Lightning joined reports are generally available, these actions are supported.

Create joined reports

- Convert existing unjoined reports into joined reports
- Rename blocks
- Reorder blocks
- Change principal report type (the report type of the first block in a Lightning joined report is always the principal report type)
- Adding and editing summary formulas and cross-block summary formulas
- Chatter feeds

Lightning joined reports don't support these features.

- Subscriptions
- Export
- Open in Quip
- Conditional formatting
- Currency picklist selector
- Trend report data in Einstein Analytics
- Einstein Data Insights
- N N

Note: We removed **Enable Lightning Joined Reports (Beta)** from Reports and Dashboards Settings in Setup.

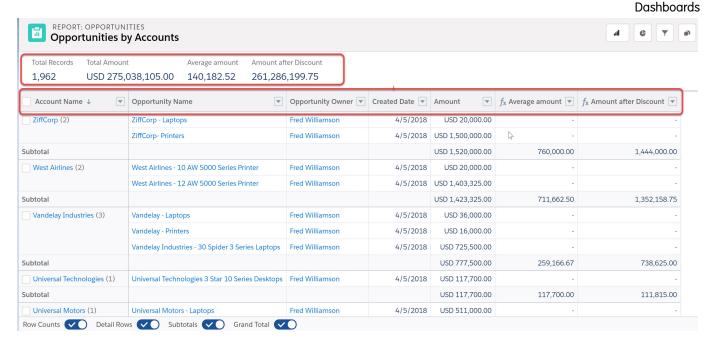
## Review Data More Easily from the Run Page (Generally Available)

Updated headers in the run page (formerly called the Enhanced run page) make gaining insights from your report data faster.

**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** For a quick view of key metrics in a report, look no further than the Lightning Experience report header. It now displays up to 8 metrics, in the order that they appear in the report, from left to right. These metrics include grand totals, subtotals, record counts, and formula column results.

Also, scrolling through jumbo-sized reports is more manageable. Column headers are now sticky. So, they don't go out of sight as you page through report records.





**Note**: Now that the run page (formerly called the Enhanced run page) is generally available, we removed the option to switch to the legacy run page.

## Resize Columns to Fit Your Content

If truncated data and unused white space in columns aren't your favorite things, wave goodbye to them. You can now adjust report column widths in Lightning Experience report builder and the run page.

**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions

**How:** To resize a column width, hover over the column header's right edge. When the resize cursor appears, drag the edge until the data fits right for you. When you're done, click the cursor to set the new width.



# Quickly Focus on Relevant Data with Conditional Formatting (Beta)

Looking for a way to help sales reps easily identify the hottest deals that need immediate attention? Want to know at a glance which accounts have opportunities valued between \$100,000 and \$500,000? Apply conditional formatting to summary or matrix reports in Lightning Experience to lend color to your reports and gather insights at the same time.

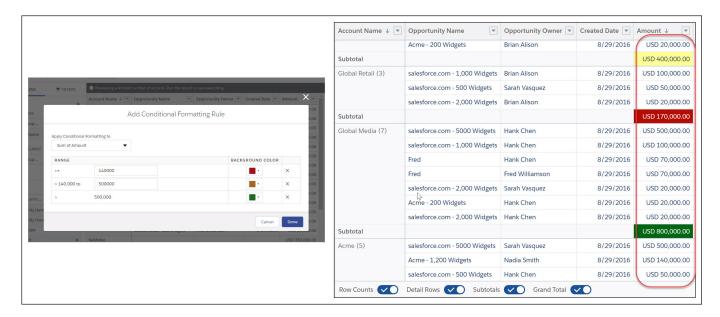
**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.



**Note:** As a beta feature, Conditional formatting in Lightning Experience is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or about it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Conditional formatting in Lightning Experience in the Trailblazer Community

**Why:** If you loved applying conditional formatting to reports in Salesforce Classic, you'll love it more in Lightning Experience. For more precision, you can now apply up to five formatting rules to a report in a Lightning Experience. And, you can define up to three bins for each rule you apply. Setting the color for each bin is faster, and you also get to customize colors.

**How:** Conditional formatting is enabled for your org by default. Open a summary or matrix report that has at least one measure or summary in edit mode. Click **Conditional Formatting**. In Add Conditional Formatting Rule, select a summary or custom summary formula field to apply the conditional formatting rule on. Set the breakpoint values and the range colors for each bin. When you're ready to apply the conditional formatting rule, click **Done**.

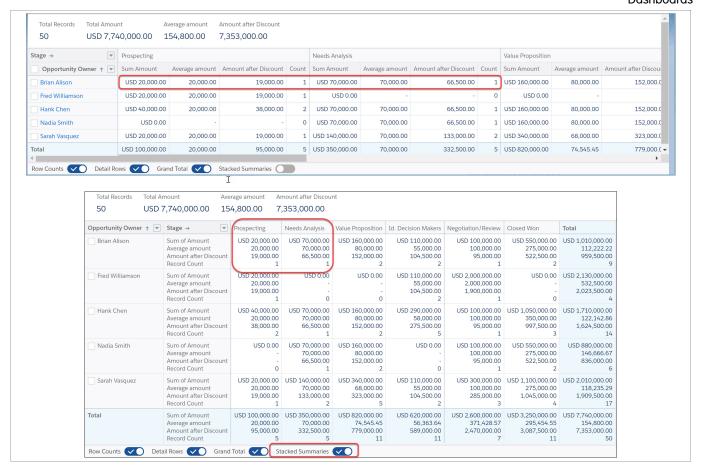


# Gather Insights Faster with Stacked Summaries

You created those complex—but awesome— matrix reports so you could summarize large volumes of data and compare values in different fields. But the summarized metrics that you wish to compare are not always conveniently located next to each other. For a more viewer-friendly version of the report involves less scrolling, view the report with Stacked Summaries option enabled.

**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** The **Stacked Summaries** option is available for all matrix reports in the report footer. By default, stacked summaries are enabled in Lightning report builder and the run page. Take a look at how enabling stacked summaries makes it effortless to review and compare the same data.



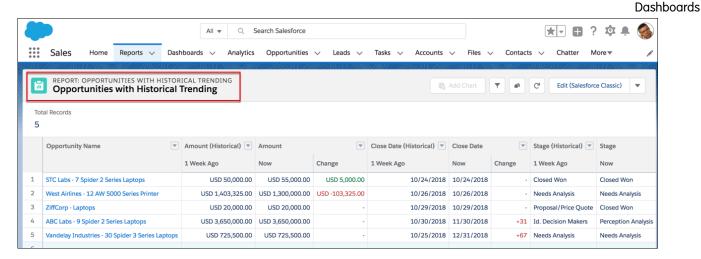
## View Historical Tracking Reports in Lightning Experience

You don't have to pop back to Salesforce Classic anymore just to view historical tracking reports. All your historical tracking reports are now viewable from the Lightning Experience Reports page.

Where: This change applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Prior to this release, you could view historical tracking reports that were in matrix format in Lightning Experience. Now you can view all supported formats (tabular and matrix).

**How:** Now, when you click on a tabular historical tracking report from the Lightning Experience Reports page, the report runs and is displayed. For tracked fields, the **Show Changes** and **Format Changes** options are available for viewing the changes between the historical value(s) and the current value..



# Dashboards: 12-Column Layouts, Formula Columns in Lightning Tables, Compact Metric Components

Dashboards excel at detailing your business data, and now you can present even more data by upping the column count from 9 to 12. Display summary formulas from source reports in Lightning tables. And fit more data into less space with compact metric components.

#### IN THIS SECTION:

## Show More Data with 12-Column Dashboards

12-column dashboards give you even more control over data layout, but you can still make 9-column dashboards if you want. 12-columns or 9, dashboards created this release have rows that are half as tall as dashboards created previously. Previously created dashboards retain their original row height.

## Add Summary Formulas as Formula Columns to Lightning Tables

If a Lightning table's source report has a summary formula column, you can add it to the Lightning table.

## Put More Data in Less Space with Compact Components

Compact components usher in a new era of data-dense dashboards. Any component can be a compact component, but metrics make the most sense. Dashboard editors can now add one row by one column (1x1) components to dashboards. Previously, the smallest possible component was 1 row by 2 columns.

## Other Enhancements to Dashboards in Lightning Experience

In addition to this release's major features, we made some small-but-notable improvements to dashboards.

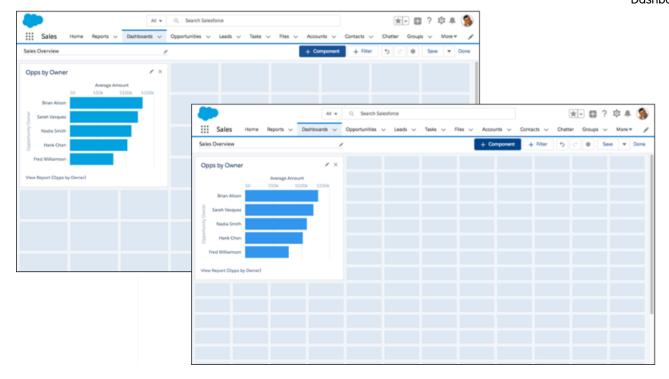
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12-column dashboards give you even more control over data layout, but you can still make 9-column dashboards if you want. 12-columns or 9, dashboards created this release have rows that are half as tall as dashboards created previously. Previously created dashboards retain their original row height.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: More columns and shorter rows means more components and more layout options in the same space.

**How:** To switch between 12 and 9 columns, create or edit a dashboard. Open the dashboard properties by clicking the properties icon (\*). From the Dashboard Grid Size section of the properties window, choose **12 columns** or **9 columns**.



# Add Summary Formulas as Formula Columns to Lightning Tables

If a Lightning table's source report has a summary formula column, you can add it to the Lightning table.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

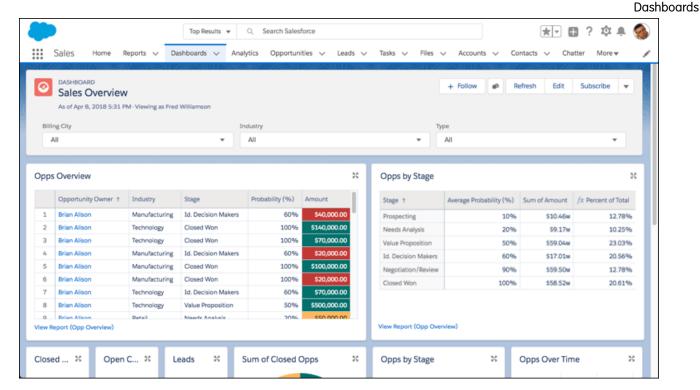
Why: Summary formula columns let you logically and mathematically evaluate report data.

Say your company's sales are taxed at a progressive rate (15% on sales below \$1,000,000, and 20% above \$1,000,000). You can calculate after-tax returns with a summary formula column named Amount After Tax.

```
IF(AMOUNT:SUM < 1000000, AMOUNT:SUM * (1 - 0.15), AMOUNT:SUM * (1 - 0.20))
```

**How:** To add a formula column, edit the Lightning table. If necessary, group data in the Lightning table by clicking **Add group** and selecting a field to group by. Finally, choose a formula column (identifiable by the formula icon before their name fx.

For example, this Sales Overview dashboard uses a Lightning table on the left to list details about individual opportunity records. The right-hand Lightning table, grouped by stage, provides a handy reference of key metrics, like average probability and sum of amount. The right-most column is a formula column, Amount After Tax.

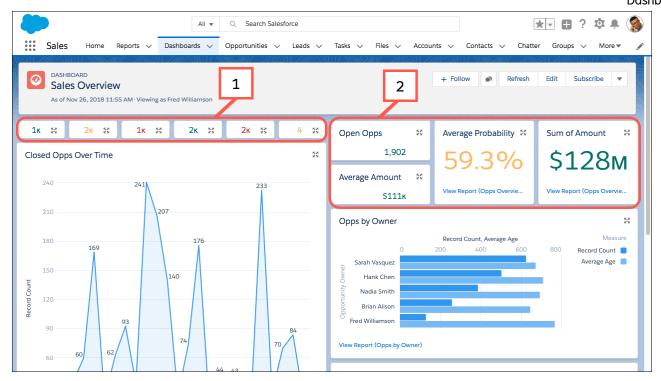


Note: If a source report's summary formula column is evaluated at **All Summary Levels**, it is compatible with all Lightning tables. If a summary formula column is evaluated at **Specific Groups**, group data in the Lightning table the same way as the source report to show the formula column. Lightning tables don't support summary formula columns evaluated at **Grand Total Only**. Reports support up to four groups, but Lightning tables support two groups, so you can't add a formula column based on the third or fourth report grouping. Lightning tables with source reports grouped by both rows and columns support formula columns based on the report's first-level row and column groupings.

## Put More Data in Less Space with Compact Components

Compact components usher in a new era of data-dense dashboards. Any component can be a compact component, but metrics make the most sense. Dashboard editors can now add one row by one column (1x1) components to dashboards. Previously, the smallest possible component was 1 row by 2 columns.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions. **Why:** Compact components let you group even more related metrics together.



This dashboard features a row of 1x1 metric components showing important details opportunity pipeline (1). The dashboard also features 1x2 and 2x2 metric components detailing the opportunity pipeline (2). The 1x1 metric components don't show a title or a source report link.

**How:** To compact a component, first edit a dashboard. Then select the component you want to compact, grab the corner, and shrink it

To see a compact component's title and source report link and a larger view of the component, expand it by clicking the expand icon (3.6).

# Other Enhancements to Dashboards in Lightning Experience

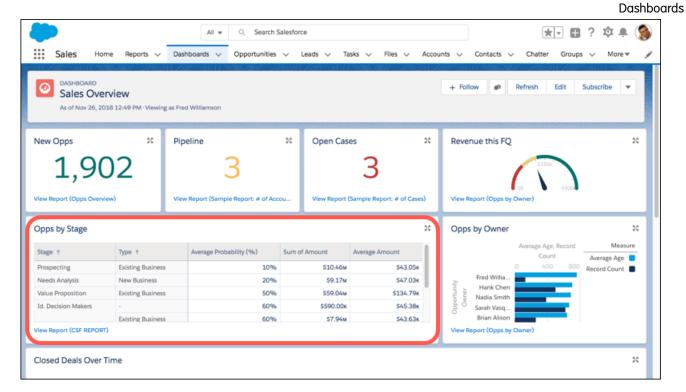
In addition to this release's major features, we made some small-but-notable improvements to dashboards.

**Where:** These changes apply to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: A lot of little enhancements is a big deal.

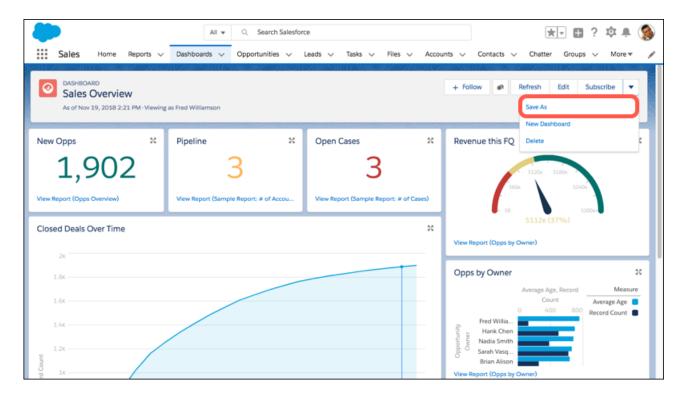
## **Add Two Groups to Lightning Tables**

Lightning tables now support two groups. Previously, you could have only one. For example, this dashboard shows opportunities grouped by stage and type.



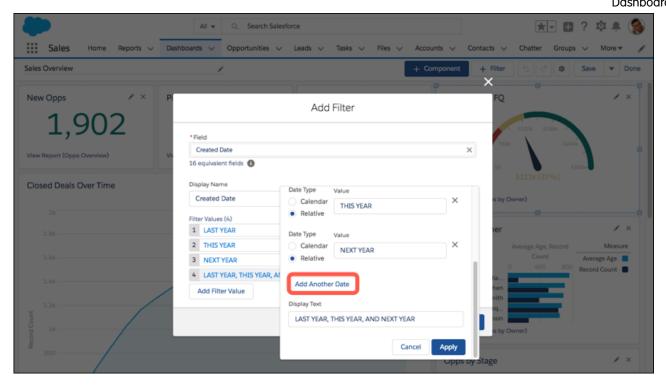
## Clone a Dashboard with Save As

To match reports, the **Clone** option dashboards is now labeled **Save As**. The functionality remains the same.



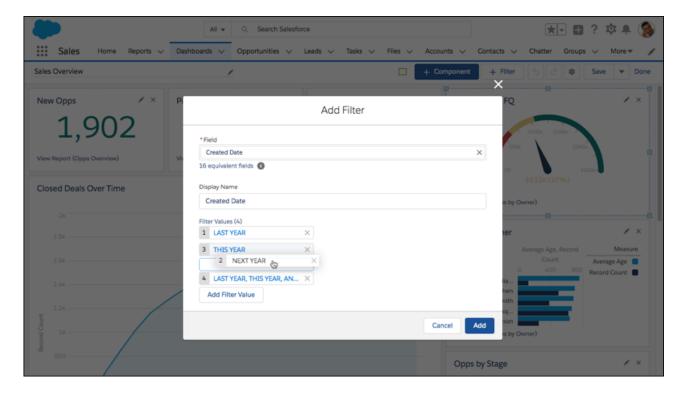
#### **Add Another Date**

We renamed the filter option **Add More Date** to **Add Another Date**. The previous label snuck past our grammar checkers. The functionality remains the same.



## Reorder Dashboard Filter Values with Drag-and-Drop

You can drag dashboard filter values in the order you want them. Previously, you had to delete the filter values and then add them again in the desired order.



#### "Whole Number" Relabeled "Full Number"

We've changed the **Display Units** option to display a complete number from "Whole Number" to "Full Number." Now that you can set decimal precision, "whole number" could be confused for "round to the nearest integer," which is not what the option does. (To round decimals to the nearest integer, set **Decimal Places** to "0."

# Subscriptions: Report and Dashboard Subscriptions for Users, Groups, and Roles

The people in your local sales group love the Sales Pipeline dashboard that they receive in their inboxes every Monday morning. The dashboard subscription you set up a few months ago has been working just fine. But your team is now expanding and a few people have moved on to other assignments, so your recipient list isn't current anymore. No problem! By setting up report and dashboards subscriptions by group or role, you can keep your recipient lists current even when people come and go.

#### IN THIS SECTION:

## Subscribe to Reports and Dashboards by Group or Role

Identify report and dashboard subscribers by group or role. That way, your recipient list stays current even when group membership or roles change.

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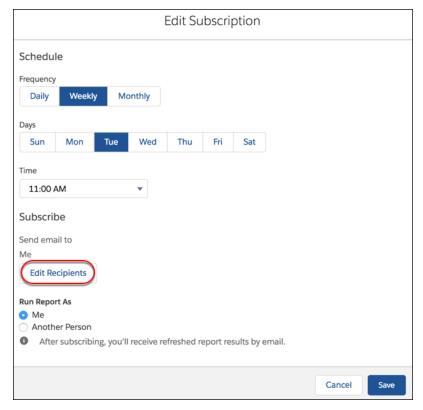
**Where:** This change applies to Lightning Experience in Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Who: To subscribe others to a dashboard, you need the Subscribe to Dashboards: Send to Groups and Roles permission.

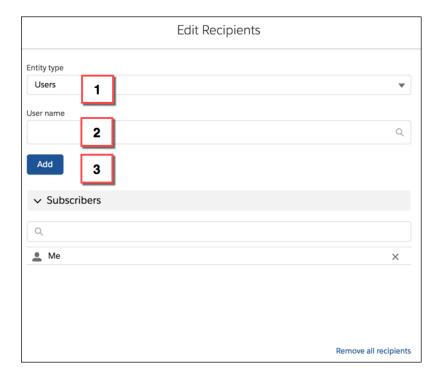
To subscribe others to a report, you need the Subscribe to Reports: Send to Groups and Roles user permission. To specify who runs the report in a report subscription, you need the Subscribe to Reports: Set Running User user permission.

**Why:** A group subscription keeps your subscriber list current even when people join or leave the group. A role-based subscription keeps your subscriber list current even when people change roles.

**How:** When you're setting up a report or dashboard subscription, click **Edit Recipients**.



- 1. For the **Entity Type**, select the recipient type.
- 2. Start typing to see matching entries of the selected entity type and make a selection.
- **3.** Click **Add** to add your selection to the list of subscribers.



# Einstein Analytics: Einstein Data Insights, Financial Services Templated App, Action Menus in Communities

Provide Al for every user. Go from data to insights faster with prebuilt analytics specific to financial services. Update Salesforce records without leaving your community.

## IN THIS SECTION:

## Setup and Data Integration: New Google Analytics Connector, SAQL in Dataflow Filters, Event-Based Dataflow Scheduling

Load your website statistics with the Google Analytics connector. Create more targeted dataflow filters with SAQL. Schedule dataflows to run after data sync with event-based scheduling.

## App Building: Analytics App and Smart Dashboard Templates, Dashboard Page Links, Combo Chart Customizations

Quickly build apps and dashboards using new Analytics templates. Improve the navigation through your app with links to pages in other dashboards. Customize combo charts to show measures as bars or lines.

## Analytics Intelligence: Einstein Data Insights (Generally Available), Einstein Discovery Enhancements

Understand what happened and why with Al-driven insights from Einstein Data Insights directly within operational reports. Within Einstein Analytics, intelligence is more accessible with new features and enhancements in Einstein Discovery, including a new story toolbar, expanded row capacity for story creation, writeback improvements, and several other enhancements.

## Extending Analytics: Action Menus in Communities, Enhanced Support for the Salesforce Mobile App

Act on insights from Analytics dashboards while staying within Community Cloud. Experience smoother Analytics dashboard access in the Salesforce mobile app.

## Analytics for End Users: Studio Walkthrough, Video Playlists, Mobile Apps

With more learning resources integrated in the app, including the new walkthrough, video playlists, and more in-app videos, users can discover what they need to know for themselves. Mobile users get new versions of Analytics for iOS and Android to coincide with the Spring '19 release.

# Setup and Data Integration: New Google Analytics Connector, SAQL in Dataflow Filters, Event-Based Dataflow Scheduling

Load your website statistics with the Google Analytics connector. Create more targeted dataflow filters with SAQL. Schedule dataflows to run after data sync with event-based scheduling.

#### IN THIS SECTION:

## Step Confidently Through First-Time Analytics Setup

With the refreshed Getting Started page in Setup, enabling and setting up Analytics is now more intuitive. The page includes help with each step and recommended actions to complete your setup.

## Bring Your Website Statistics into Analytics with the Google Analytics Connector

Use the Google Analytics connector to bring in data about your websites, and analyze the data using the power of Einstein Analytics.

## Connect to Your Data in Oracle Eloqua and NetSuite (Beta)

Connect to even more enterprise application data with the new Oracle Eloqua and NetSuite connectors.

#### Test Your Connections When You Create Them

You can now test connection settings when you create or update a connection. Previously, you only discovered a connection didn't work when you tried using it and had to return to the connection setup to fix it.

## Create More Complex Dataflow Filters with SAQL

Filter nodes in your dataflows now support Salesforce Analytics Query Language (SAQL), so you can create more complex filters to get just the data that you need in your datasets. SAQL gives you a wider range of operators. For example, you can filter on an array of values, on part matches, and on relative dates.

## Orchestrate Data Sync and Dataflow Runs with Event-Based Scheduling

Scheduling a dataflow for Salesforce objects used to require some planning and could be tricky if you didn't know how long the data sync would take. But now, by setting an event-based schedule to run the dataflow when the data sync finishes, you can run them back to back, without the guesswork. Use event-based scheduling to schedule your dataflow to run whenever your Salesforce Local connection finishes syncing.

## Set Up Notifications Without Scheduling

Notification options for dataflows and connectors now have their own home. Previously, these options were hidden away with the schedule options. We made them easier to find by creating a separate item for them on dataflow and connection menus.

## See Which Dataflows Are Taking Longer Than Expected

Find out when a dataflow is running after a specified length of time. When a dataflow takes longer than expected, it could impact dependent dataflows and recipes scheduled to run after. Now you can set an elapsed time notification to notify you when a dataflow is still running and take action.

## Run More Data Jobs

Your dataflows and recipes run as data jobs in Analytics. As you work with more data, we want to make sure that you can run all these jobs, so we increased the number of data job runs that you can make in a rolling 24-hour period from 50 to 60.

## Get a Better Metadata View on the Dataset Edit Page

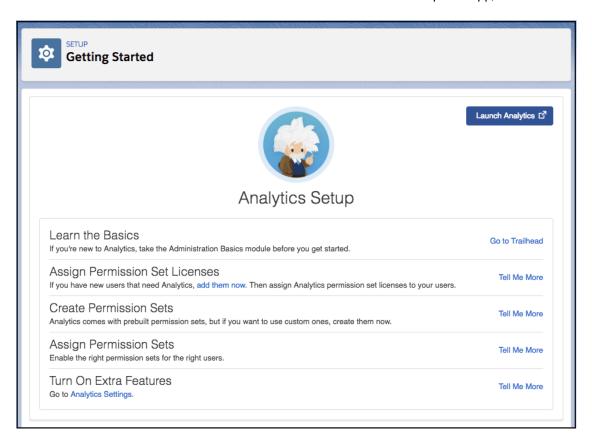
We added last queried and size information to the top of the dataset edit page to give you a complete at-a-glance metadata view whenever you're working with a dataset. We also moved the extended metadata file information to the top to complete the picture.

## Step Confidently Through First-Time Analytics Setup

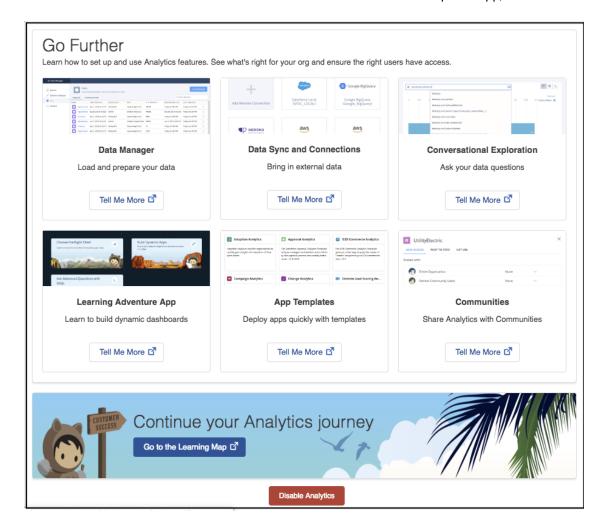
With the refreshed Getting Started page in Setup, enabling and setting up Analytics is now more intuitive. The page includes help with each step and recommended actions to complete your setup.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

Why: With a high-level overview of the setup steps and easy access to more details for each step, the page provides a clear setup path.



The page includes a Usage Statistics section and a section that points you to extra setup options to consider, depending on your installation.



## Bring Your Website Statistics into Analytics with the Google Analytics Connector

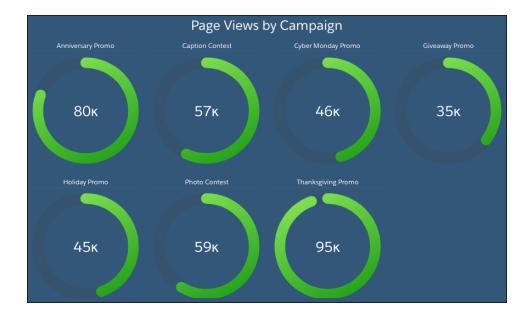
Use the Google Analytics connector to bring in data about your websites, and analyze the data using the power of Einstein Analytics.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Why:** If you use Google Analytics to track how visitors use your website, you can now bring this data into Analytics to combine and analyze it with all your other data. Let's look at an example. Imagine your marketing team launches a series of social media promotions and wants to track your website's page views for each promotion. Here's the page view report in Google Analytics.



Using the Google Analytics connector, you can connect to and sync this page view data and then combine it with your marketing data in Einstein Analytics.



**How:** Create connections with the Google Analytics connector on the Connect tab of the data manager. Google Analytics stores your website data as a binary large object (blob). It uses SQL views to query the blob to create 32 virtual objects that you can connect to.

# Connect to Your Data in Oracle Eloqua and NetSuite (Beta)

Connect to even more enterprise application data with the new Oracle Eloqua and NetSuite connectors.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

As beta features, the Oracle Eloqua and Netsuite connectors are previews and aren't part of the "Services" under your master subscription agreement with Salesforce. Use these features at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of these features within any particular time frame or at all, and we can discontinue them at any time. These features are for evaluation purposes only, not for production use. They are offered

as is and aren't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with them. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of these features.

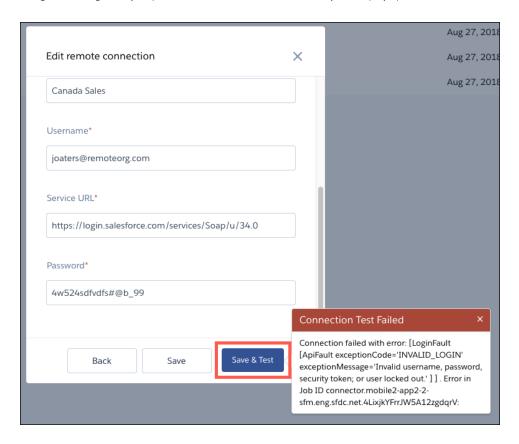
**How:** Create connections with the Oracle Eloqua and NetSuite connectors on the Connect tab of the data manager.

#### Test Your Connections When You Create Them.

You can now test connection settings when you create or update a connection. Previously, you only discovered a connection didn't work when you tried using it and had to return to the connection setup to fix it.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** When you create or update a connection, click **Save & Test**. Analytics saves the connection and attempts to connect to the source using the settings that you provided. If the connection fails, Analytics displays possible reasons.



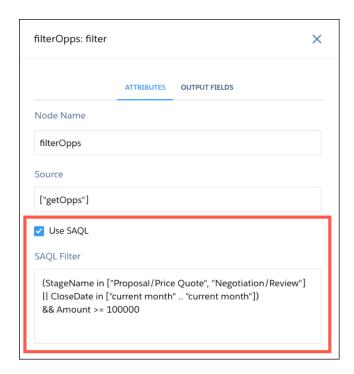
# Create More Complex Dataflow Filters with SAQL

Filter nodes in your dataflows now support Salesforce Analytics Query Language (SAQL), so you can create more complex filters to get just the data that you need in your datasets. SAQL gives you a wider range of operators. For example, you can filter on an array of values, on part matches, and on relative dates.

**Where:** This feature applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited Editions.

**Who:** To create or edit a dataflow, you must have the Edit Analytics Dataflows permission.

**How:** When you add a filter node in the dataflow editor, SAQL is selected by default. Imagine that you want to create a dataset of large opportunities closing soon to identify where you might need executive sponsorship. You add this filter using the in operator to include opportunities at the last two stages of your sales cycle. You also use current month as a relative date to include opportunities closing this month.



If you're adding the filter node in the dataflow JSON, use the saqlFilter parameter. Escape the double quotes inside the filter with \.

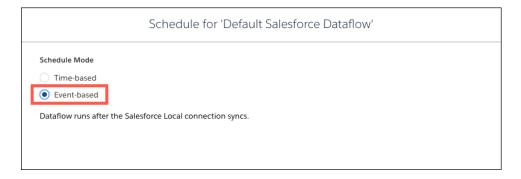
```
"filterOpps": {
    "action": "filter",
    "parameters": {
        "source": "getOpps",
        "saqlFilter": "(StageName in [\"Proposal/Price Quote\", \"Negotiation/Review\"]
        || CloseDate in [\"current month\" .. \"current month\"])
        && Amount >= 100000"
    }
},
```

# Orchestrate Data Sync and Dataflow Runs with Event-Based Scheduling

Scheduling a dataflow for Salesforce objects used to require some planning and could be tricky if you didn't know how long the data sync would take. But now, by setting an event-based schedule to run the dataflow when the data sync finishes, you can run them back to back, without the guesswork. Use event-based scheduling to schedule your dataflow to run whenever your Salesforce Local connection finishes syncing.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited Editions.

**How:** To schedule a dataflow to run after the Salesforce Local connection syncs, select **Event-based** when you schedule the dataflow.

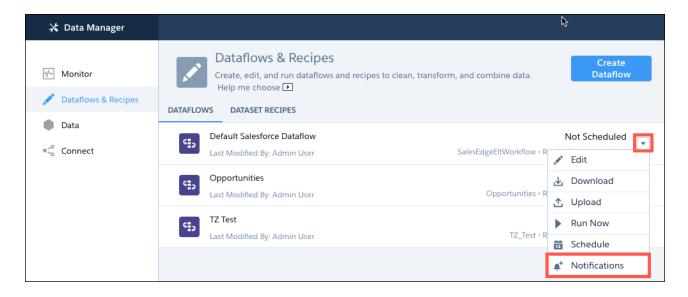


# Set Up Notifications Without Scheduling

Notification options for dataflows and connectors now have their own home. Previously, these options were hidden away with the schedule options. We made them easier to find by creating a separate item for them on dataflow and connection menus.

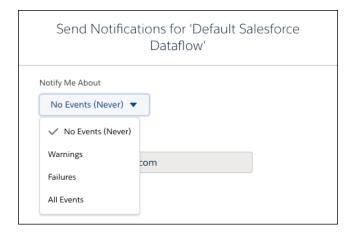
**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** To set up a notification, select **Notifications** from the dataflow or connection menu.





Then select what you want to be notified about.

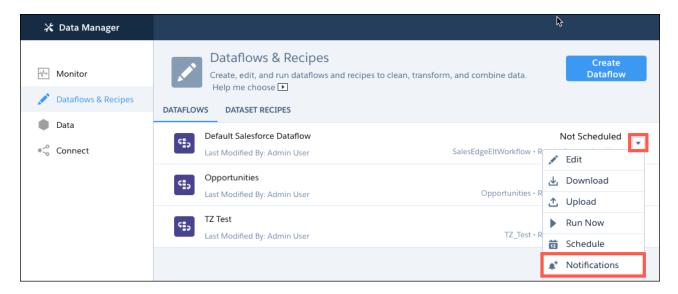


## See Which Dataflows Are Taking Longer Than Expected

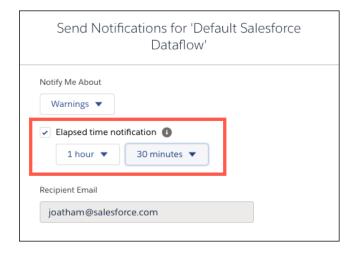
Find out when a dataflow is running after a specified length of time. When a dataflow takes longer than expected, it could impact dependent dataflows and recipes scheduled to run after. Now you can set an elapsed time notification to notify you when a dataflow is still running and take action.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

How: To set up an elapsed time notification for a dataflow, select **Notifications** from the dataflow's menu.



Select **Elapsed time notification** and specify a duration.



## Run More Data Jobs

Your dataflows and recipes run as data jobs in Analytics. As you work with more data, we want to make sure that you can run all these jobs, so we increased the number of data job runs that you can make in a rolling 24-hour period from 50 to 60.

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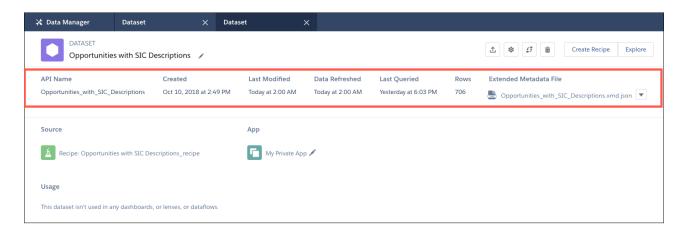
When: The increase to the 24-hour data job limit is available on a rolling basis during the Spring '19 release.

# Get a Better Metadata View on the Dataset Edit Page

We added last queried and size information to the top of the dataset edit page to give you a complete at-a-glance metadata view whenever you're working with a dataset. We also moved the extended metadata file information to the top to complete the picture.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** You see the updated metadata section when you edit a dataset.



# App Building: Analytics App and Smart Dashboard Templates, Dashboard Page Links, Combo Chart Customizations

Quickly build apps and dashboards using new Analytics templates. Improve the navigation through your app with links to pages in other dashboards. Customize combo charts to show measures as bars or lines.

#### IN THIS SECTION:

## Create Apps from Templates to Jump-Start Your Analytics Journey

With Analytics Templates, you're just a few clicks away from an Analytics app that's right for your business. Templates for customers with public sector case management, environmental sustainability, and financial services lead the way, with many more right behind them.

## Build Visualizations Quickly with Smart Dashboard Templates

The latest smart templates create ready-made dashboards that visualize how metrics change over time and predict future metrics trends based on historical data.

## Search App and Dashboard Template Pickers to Find the One You Want

Rather than scrolling through an ever-increasing number of templates, use the template picker Search feature.

#### Link to Pages in Different Dashboards

Take dashboard viewers straight to where they need to go with links to specific pages in other dashboards. Previously, you could only link to the dashboard itself, leaving viewers to find their own way to the page they wanted. Now you can link to a specific page in the dashboard.

## Customize Combo Charts with Bars, Lines, and Stacks

For combo and time combo charts, previously, the first measure appeared as a bar, and the subsequent measures appeared as lines. Now you can choose which measures to display as lines or bars. You can also stack all bars to show and compare parts of a whole.

## Customize Derived Dimension Values

You can customize display labels and colors of derived dimension values without using JSON. Assign new labels to the values and apply colors to them directly from the explorer. To match the user experience when working with dimensions, we updated the interface for customizing dimensions as well. You now get the same easier-to-use interface in a lens when customizing dimension values.

## Forecast the Future from the Explorer

To maximize your bottom line and minimize losses, you need to plan your business expenses and forecast sales projections. We made the timeseries functions available in the compare-table formula editor so that you can predict those numbers faster.

## Plan for Einstein Analytics Classic Designer's Retirement

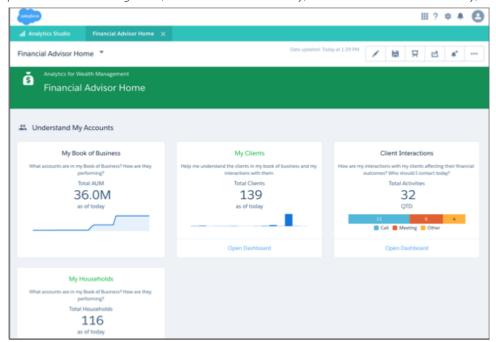
Classic designer is scheduled for retirement in all Salesforce orgs on July 2019. Starting with Winter '19, you can't create dashboards in classic designer, but you can edit them.

## Other Enhancements in App Building

Show stacked bar totals. Style the selected tab in a toggle widget. Learn about other minor changes in explorer and dashboard designer.

## Create Apps from Templates to Jump-Start Your Analytics Journey

With Analytics Templates, you're just a few clicks away from an Analytics app that's right for your business. Templates for customers with public sector case management, environmental sustainability, and financial services lead the way, with many more right behind them.



**Where:** This feature is available in Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Who:** To create Einstein Analytics apps from templates, you must have an Analytics Platform license. Some templates require an extra Salesforce license, as specified on the Help page for each template.

**Why:** Analytics Templates let you start building Analytics solutions fast by creating prebuilt apps based on your Salesforce data. The apps include dashboards you can use as-is to get instant, actionable insights, or customize to meet your business's unique needs. You also get Analytics datasets that you can use to start building your own visualizations with intuitive Analytics platform features.

Templates provide ready-made solutions for Analytics needs across industries and lines of business.

• Case Management Analytics helps public sector organizations stay on top of social service delivery programs. Case workers can track cases and clients to get insight into their priorities and performance. Managers can instantly view team workflow, backlog, and organizational and program effectiveness.

- Financial Services Analytics, a suite of Analytics apps, helps financial advisors manage their book of business with insights across client goals and satisfaction, leads, and referrals. Managers can review and evaluate individual and regional performance with the app's ready-made dashboards and datasets.
- Sustainability Analytics brings your environmental accounting in line with your financial accounting by helping you manage your environmental footprint. It includes dashboards to measure, report on, and disclose investor-level environmental impact data, including energy consumption and carbon emissions.

Category	Template
Industry templates	B2B Commerce Analytics
	B2B Marketing Analytics
	Financial Client Segmentation Analytics
	Einstein Analytics for Veeva
	Health Cloud Analytics
	Financial Services Analytics
	Fundraising Analytics
	Public Sector Analytics
	Retail Banking Analytics
Line-of-business templates	Campaign Analytics
	Field Service Analytics
	Lead Trending Analytics
	Multi-Org Sales Analytics
	Pricing Analytics
	Quoting Analytics
	Sales Analytics
	Service Analytics
	Social Case Analytics
	Subscription Analytics
	Sustainability Analytics
Analyst productivity templates	Adoption Analytics
	Approval Analytics
	Change Analytics
	Event Monitoring Analytics
	Pipeline Analytics
	<ul> <li>Snapshot Analytics</li> </ul>



How: Go to Analytics Studio, click Create, and choose App

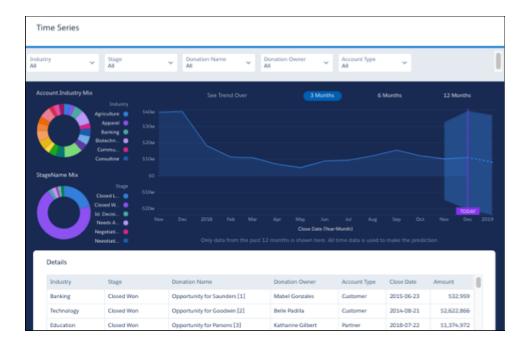
. Then click **Start from Template**.



Scroll through the template picker, or use the Search field, and select the template that you want to use. The configuration wizard then guides you through the rest of the process.

## Build Visualizations Quickly with Smart Dashboard Templates

The latest smart templates create ready-made dashboards that visualize how metrics change over time and predict future metrics trends based on historical data.



**Where:** This feature is available in Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

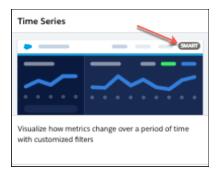
Who: To use smart Analytics dashboard templates or the SAQL timeseries feature, you must have an Analytics Platform license.

**Why:** Smart templates automatically build Analytics dashboards using existing datasets according to preferences you set in a configuration wizard. You don't have to select and position widgets, create steps, add filters, write any JSON, or perform any of the usual manual dashboard-building tasks. Analytics takes care of all that for you.

We're building a wide variety of smart templates to address common analytics needs. Here are the latest:

- **Time Series.** Look at future metrics trends based on historical data. Select a dataset, dimensions, and measures to include in the dashboard, and Analytics does the rest. You have the option of using the SAQL timeseries feature without having to write a line of SAQL. Or create the dashboard without SAQL.
- **Table Expansion.** Visualize how metrics change over time with customized filters based on wizard selections. The dashboard details table expands into a full page so you can quickly view complete data.

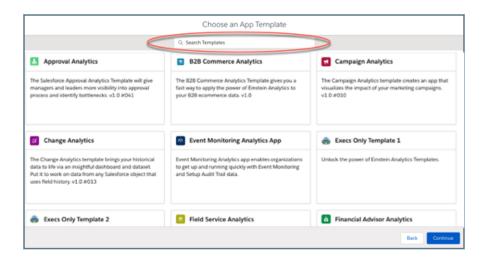
**How:** In Analytics Studio, select **Create | Dashboard**. Then click **Dashboard from Template**, look for templates marked **SMART** or use Search, and select the one you want.



The configuration wizard then guides you through the rest of the process.

# Search App and Dashboard Template Pickers to Find the One You Want

Rather than scrolling through an ever-increasing number of templates, use the template picker Search feature.



**Where:** This feature is available in Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Who:** To create Einstein Analytics apps and dashboards from templates, you must have an Analytics Platform license. Some app templates require an extra Salesforce license, as specified in Help.

# Link to Pages in Different Dashboards

Take dashboard viewers straight to where they need to go with links to specific pages in other dashboards. Previously, you could only link to the dashboard itself, leaving viewers to find their own way to the page they wanted. Now you can link to a specific page in the dashboard.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** To link to a page in another dashboard, select the destination dashboard, select **Specify Page**, and then select the page. The Specify Page option appears only for dashboards that contain multiple pages.

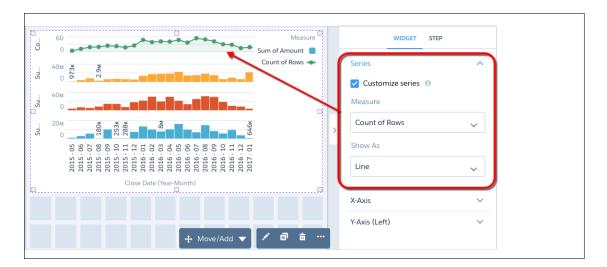


## Customize Combo Charts with Bars, Lines, and Stacks

For combo and time combo charts, previously, the first measure appeared as a bar, and the subsequent measures appeared as lines. Now you can choose which measures to display as lines or bars. You can also stack all bars to show and compare parts of a whole.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** In the Series section of the widget properties, select each measure, and show it as a bar or line.



To stack all bars, select **Stack bars** in the Combo Chart section for combo charts or Time Combo Chart section for time combo charts.



Note: The Stack bars option is available when Axis Mode is set to Single Axis or Dual Axis, not Small Multiples.

## **Customize Derived Dimension Values**

You can customize display labels and colors of derived dimension values without using JSON. Assign new labels to the values and apply colors to them directly from the explorer. To match the user experience when working with dimensions, we updated the interface for customizing dimensions as well. You now get the same easier-to-use interface in a lens when customizing dimension values.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** To customize a derived dimension's label or color, in the **Fields** panel, click the menu control (v) next to the derived dimension. Click **Edit Values**. To change the label of a derived dimension value, click it, and enter the new name. To assign a color to the value, select one from the palette or create a customized color.

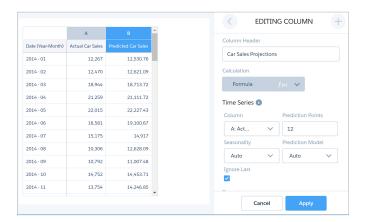
# Forecast the Future from the Explorer

To maximize your bottom line and minimize losses, you need to plan your business expenses and forecast sales projections. We made the timeseries functions available in the compare-table formula editor so that you can predict those numbers faster.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

Who: To work with the timeseries functions in the explorer, you need an Analytics Growth or Analytics Plus license.

**Why:** The timeseries functions let you apply the best algorithms on your existing data to make predictions for the future. We automatically choose the most suitable seasonality and predictions models for your data. You can specify the number of prediction points to plot, and choose to include or ignore seasonal data and current data.





**How:** You can apply timeseries functions to a lens that includes at least two measures and one time-based dimension. In the compare table, select the column you want to use for forecasting. Set the number of prediction points and specify the prediction model you want to apply. Choose whether to include seasonal data and data from the most current time period. When done, click **Apply**.

# Plan for Einstein Analytics Classic Designer's Retirement

Classic designer is scheduled for retirement in all Salesforce orgs on July 2019. Starting with Winter '19, you can't create dashboards in classic designer, but you can edit them.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** We encourage you to start converting classic designer dashboards to the newer dashboard designer now. For more information, see Convert Your Classic Designer Dashboard to Dashboard Designer.

SEE ALSO:

Knowledge Article: Einstein Analytics Classic Dashboard Retirement

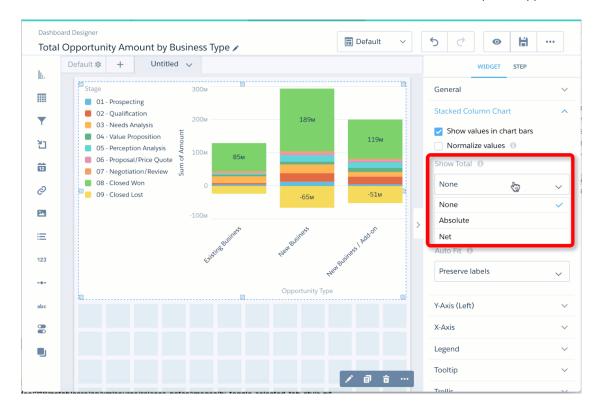
# Other Enhancements in App Building

Show stacked bar totals. Style the selected tab in a toggle widget. Learn about other minor changes in explorer and dashboard designer.

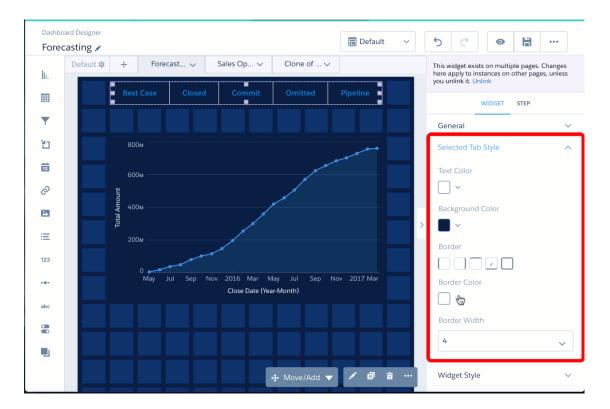
**Where:** These changes apply to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition for an extra cost in Enterprise, Performance, and Unlimited editions.

Why: These enhancements make it easier to build Analytics apps.

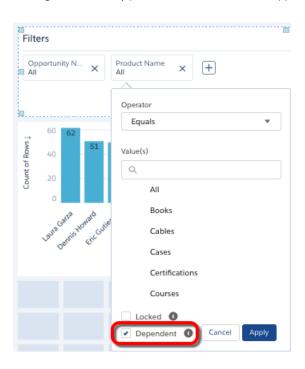
**Totals in stacked bars.** Show the total for each bar in stacked bar and stacked column charts. To subtract negative values from the total, select **Net**. To ignore the negative signs and add the absolute values, select **Absolute**.



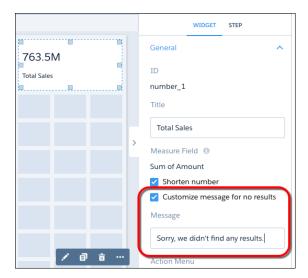
**Styling for the selected tab in a toggle.** Make it easier to see which tab is selected in a toggle widget by applying a unique style to it.



**Dependent global filters.** Ever applied multiple global filters and received no results? Solve this problem by using dependent global filters. When adding a global filter, select **Dependent** to limit its picklist values based on selections in other global filters. This option applies to global filters that use the same dataset or a connected data source. For example, you select an opportunity in the Opportunity Name global filter. Only products sold in the selected opportunity appear in the Product Name global filter picklist.

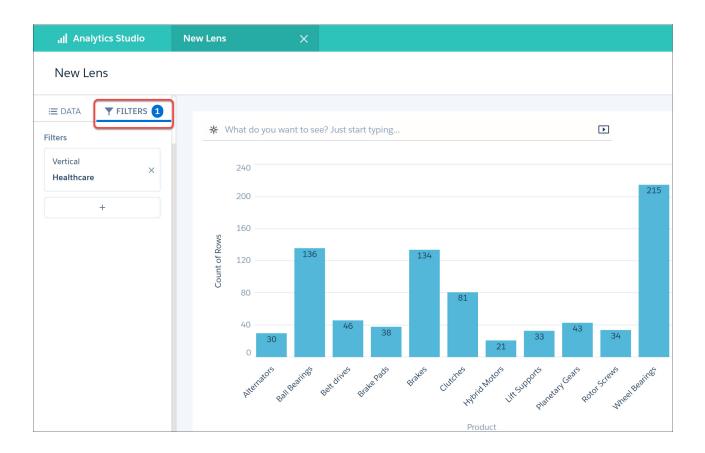


**Custom message when no results found in a number widget.** Customize the message that appears when no results are found. The default message is "No Results Found."



**Easier selection of thin bars in charts.** We added extra padding around thin bars to make them easier to hover over and select. This change applies to bar, column, combo, pyramid, time combo, and waterfall chart types.

**New Filters Pane.** You no longer have to scroll past all the data fields to access the filters pane. Because data explorations often involve working with filters, we gave them their own screen real estate. So, now you get to all the same great functionality, but faster.



# Analytics Intelligence: Einstein Data Insights (Generally Available), Einstein Discovery Enhancements

Understand what happened and why with Al-driven insights from Einstein Data Insights directly within operational reports. Within Einstein Analytics, intelligence is more accessible with new features and enhancements in Einstein Discovery, including a new story toolbar, expanded row capacity for story creation, writeback improvements, and several other enhancements.

#### IN THIS SECTION:

## Learn More from Your Reports with Einstein Data Insights (Generally Available)

Einstein Data Insights extends your reports with AI to help you discover new and useful insights about your data.

## Crunch More Data with Double the Row Limit

Einstein Discovery can create stories from Einstein Analytics datasets with up to 20 million rows.

## **Export Your Story for Additional Analysis**

Export your story to R so your data scientists can analyze and customize the model in their own language. Export your story to Quip to share with business users on your team.

## Easily Deploy Models to Salesforce Objects

Map fields between a model and a Salesforce object, so you can get the recommendations and predictions you want without writing code.

## Encrypt Einstein Discovery Data (Pilot)

Einstein Discovery users who have the Shield Platform encryption license can now opt-in to encrypt Einstein Discovery data.

## Learn More from Your Reports with Einstein Data Insights (Generally Available)

Einstein Data Insights extends your reports with AI to help you discover new and useful insights about your data.

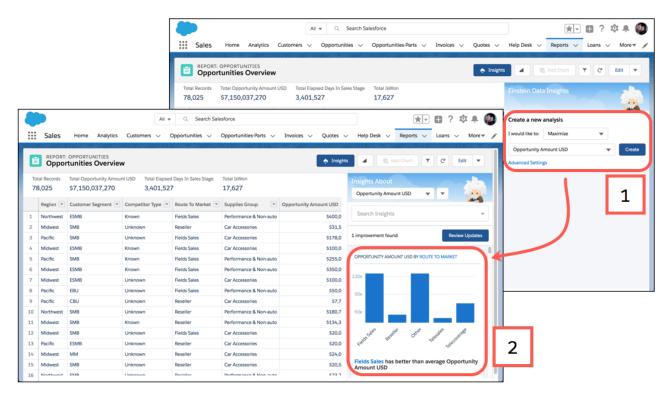
**Where:** This change applies to Einstein Analytics in Lightning Experience. Einstein Analytics and Einstein Data Insights are available for an extra cost in Enterprise, Performance, and Unlimited Editions. Also available in Developer Edition.

**Who:** To view an insight, you need the Can Run Einstein Data Insights user permission that is included in the Einstein Analytics Plus license

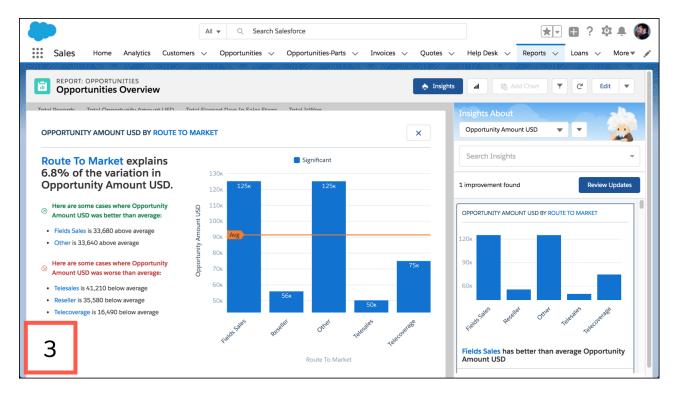
**Why:** Reports show you data, but what does the data mean? Wonder no more! Introducing Einstein Data Insights: a smarter report. Einstein analyzes report data and summarizes key takeaways, comparisons, and trends with insightful charts and metrics. It's one-click data science!

For example, if you're interested in maximizing opportunity amount, an analysis from Einstein Data Insights can help.

**How:** Analyze report data with Einstein Data Insights on an opportunities report by clicking **Insights** after running the report. Einstein Data Insights asks about your goals.



Let's tell Einstein that we're interested in maximizing opportunity amount (1). After clicking **Create**, Einstein Data Insights shows us when opportunity amount is maximized. For example, when Route to Market is Field Sales, Opportunity Amount is higher than average (2).



To learn more about why Opportunity Amount variance, click the insight card (3).

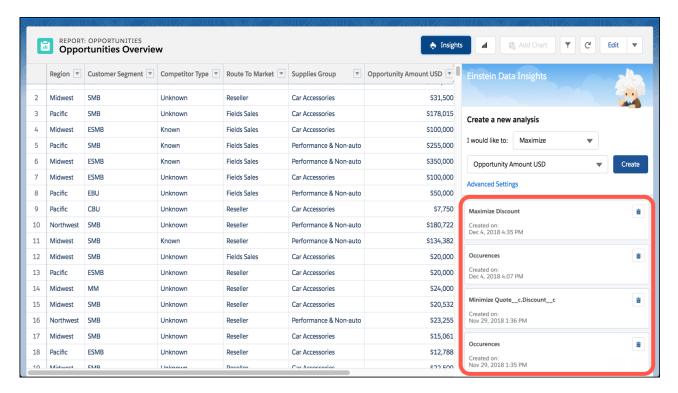
Here are some other things you can do with Einstein Data Insights to explore your data.

- Change the insight (outcome variable) of a story.
- Filter data to focus on certain insights.
- Improve your data to make the insights more relevant.
- Scroll the insights list to look for insights that interest you.
- Click an insight to expand it.
- Learn more about an insight that interests you by hovering over chart segments and hyperlinks to reveal underlying details.

Now that Einstein Data Insights is generally available, these features and enhancements are available.

#### **Save and Retrieve Einstein Data Insight Analyses**

After running an analysis with Einstein Data Insights, it's automatically saved. When you next run Einstein Data Insights on the report, you see a list of saved analyses. To quickly view insights from an analysis, click it.



#### **Analyze How Often Things Occur**

Choose **Occurrences** when Einstein asks what you want to focus on. Occurrences-based analyses are useful when you want to know, for example, how many cases are filed each day of the week.

#### Run Einstein Data Insights by Clicking • Insights

We renamed the button you click to run Einstein Data Insights. Previously it was labeled **Einstein Data Insights**. Now it is labeled **Insights**.

SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

#### Crunch More Data with Double the Row Limit

Einstein Discovery can create stories from Einstein Analytics datasets with up to 20 million rows.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics and Einstein Discovery are available for an extra cost in Enterprise, Performance, and Unlimited editions, and they're also available in Developer Edition.

**Who:** To create a story, you need the **Can Create Story on a dataset with predicate** user permission that is included in the Einstein Analytics Plus license.

**Why:** The capacity to handle larger datasets gives you more flexibility on the data you choose. Stories created with bigger datasets can give you deeper insights into the factors affecting your business, and better predictions for future business outcomes.

**How:** To create a story, select **Create Story** from the dataset's dropdown menu.

#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

#### **Export Your Story for Additional Analysis**

Export your story to R so your data scientists can analyze and customize the model in their own language. Export your story to Quip to share with business users on your team.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics and Einstein Discovery are available for an extra cost in Enterprise, Performance, and Unlimited editions, and they're also available in Developer Edition.

**Who:** To export a story, you need the **Share Einstein Discovery Stories** user permission that is included in the Einstein Analytics Plus license.

**Why:** You want to share stories with different people on your team. Export the story to R to share it with data scientists in their own language. Export the story to Quip to help your business users collaborate.

**How:** To export a story, select **Export Story** from the story's drop-down menu.

SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

#### Easily Deploy Models to Salesforce Objects

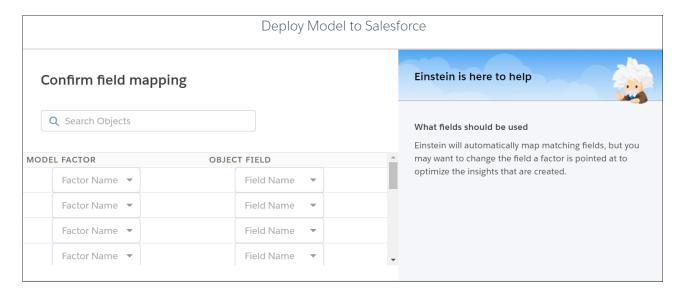
Map fields between a model and a Salesforce object, so you can get the recommendations and predictions you want without writing code.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics and Einstein Discovery are available for an extra cost in Enterprise, Performance, and Unlimited editions, and they're also available in Developer Edition.

**Who:** To deploy a model to a Salesforce object, you need the **Connect Einstein Discovery Model** user permission that is included in the Einstein Analytics Plus license.

**Why:** Deploying Einstein Discovery predictions to a Salesforce object gives you the power of data science where you need it. But sometimes, the field names in your model don't exactly match the field names on your Salesforce object. Use the mapping screen to tell Einstein Discovery how the model's fields map to the Salesforce object's fields.

**How:** On the Story toolbar, click **Deploy Model** and follow the instructions to select your model and object. On the **Confirm field mapping** screen, map the fields in your model to the corresponding fields in your Salesforce object. Fields with the same name are mapped automatically but you can easily change mappings as needed.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

#### **Encrypt Einstein Discovery Data (Pilot)**

Einstein Discovery users who have the Shield Platform encryption license can now opt-in to encrypt Einstein Discovery data.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics and Einstein Discovery are available for an extra cost in Enterprise, Performance, and Unlimited editions, and they're also available in Developer Edition.

**Who:** Encryption for Einstein Discovery is available to customers who have both the Einstein Analytics Plus license and Shield Platform Encryption.

**How:** For more information, see "Encrypt Your Einstein Discovery Data" in the Shield Platform Encryption release notes. To join the Einstein Discovery Encryption pilot, contact your Salesforce account executive.

#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available) Encrypt Your Einstein Discovery Data (Pilot)

# Extending Analytics: Action Menus in Communities, Enhanced Support for the Salesforce Mobile App

Act on insights from Analytics dashboards while staying within Community Cloud. Experience smoother Analytics dashboard access in the Salesforce mobile app.

#### IN THIS SECTION:

#### Take Action in Salesforce from Analytics for Communities

Analytics for Communities now supports opening Salesforce records and performing record-level actions and bulk actions. You set up an action menu on a dataset or a bulk action on a table widget. Then your community users can open records and take action in Salesforce directly from the Analytics dashboard, without leaving your community.

#### Experience Smoother Analytics in the Salesforce Mobile App

Performance improvements in Analytics dashboards viewed in the Salesforce app make it easier to gain data insights on the go. The improvements are in dashboard components embedded in App pages in Lightning Experience through the Lightning App Builder.

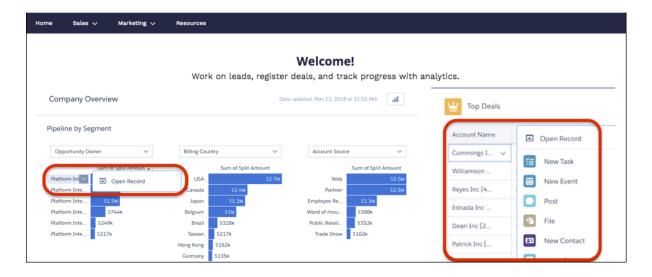
#### Take Action in Salesforce from Analytics for Communities

Analytics for Communities now supports opening Salesforce records and performing record-level actions and bulk actions. You set up an action menu on a dataset or a bulk action on a table widget. Then your community users can open records and take action in Salesforce directly from the Analytics dashboard, without leaving your community.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic. Communities are available in Enterprise, Performance, Unlimited, and Developer editions. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Who:** Users with a Customer Community Plus, Partner Community, or Lightning External Apps Plus license can use Analytics for Communities.

**Why:** Let users create, update, and interact with Salesforce records that underlie the Analytics dashboards they see in their community. Action menus can include object-specific and global actions defined in Salesforce, such as creating cases, updating accounts, and posting to Chatter.



You can also configure bulk action menu options to let users perform actions on multiple Salesforce records with only one click. For example, using the dashboard to filter a set of leads in a table, a user could create a campaign for those leads by selecting the bulk action in the table's menu.



**How:** Add an action menu to any dataset field, except a measure. You can set up the menu to include any actions available for the field. When an action menu is set up, a dropdown arrow appears in charts, chart legends, and table cells. Records that users access then open in new tabs within the community.

With Analytics bulk actions, you can perform an action on all records shown in a table. You define the bulk action in a Visualforce page that is enabled for Lightning communities. You can also configure the Visualforce page to display the results of the action or show an interactive form. When the bulk action is set up, users can access it in the table's menu.

Be aware of the following considerations.

- Action menus are accessible in dashboards embedded via either Community Builder
   – based templates or Salesforce Tabs + Visualforce templates.
- Analytics for Communities isn't supported on mobile.
- To access a record from a dashboard's action menu, the user must have access to its objects and fields.
- Users see only actions available to their profile.
- Bulk actions are available only in values tables.
- Visualforce pages and components used in bulk actions must be made available for use in Lightning communities.

#### SEE ALSO:

Salesforce Help: Perform Actions on a Salesforce Record from Analytics
Salesforce Help: Perform Bulk Actions on Multiple Salesforce Records from Analytics

#### Experience Smoother Analytics in the Salesforce Mobile App

Performance improvements in Analytics dashboards viewed in the Salesforce app make it easier to gain data insights on the go. The improvements are in dashboard components embedded in App pages in Lightning Experience through the Lightning App Builder.

**Where:** This change applies to Einstein Analytics in Lightning Experience. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**How:** Understanding the following considerations can help you when planning for Analytics dashboard use in the Salesforce app.

- Users can view saved dashboard views on mobile, but the menu for managing saved views isn't accessible due to space constraints.
- When adding list selectors to dashboards, make them wide enough to render on mobile.
- Dashboard links that are set to open in a new window open the native Analytics mobile app.
- Widget dropdown menus aren't supported, which means Explore, Share, Details, Annotate, Set Notification, and (if configured) bulk actions aren't available.
- Sharing actions aren't available.
- Record-level actions and bulk actions on tables aren't supported.
- Global filters can't be adjusted.
- Charts don't include hover-over information (tooltips).
- Some filters, such as range selectors, aren't optimized for mobile touch behavior.

# Analytics for End Users: Studio Walkthrough, Video Playlists, Mobile Apps

With more learning resources integrated in the app, including the new walkthrough, video playlists, and more in-app videos, users can discover what they need to know for themselves. Mobile users get new versions of Analytics for iOS and Android to coincide with the Spring '19 release.

#### IN THIS SECTION:

#### Walk Through the Analytics Studio Home

New users get a friendly introduction to Analytics assets the first time they open the Analytics Studio. And returning users can start the walkthrough from the Help Menu any time they want to refer to it.

#### Select the Videos You Want to Watch from Playlists

Playlists group related videos, providing learning continuity and making it easier to find relevant information. Check for playlists in Help Menus and video player icons throughout the interface.

#### Watch Onboarding Videos Within the Welcome Mat

It's a welcome mat; it's a video player; it's integrated content delivery! No need to open another window to watch the videos you find in the welcome mat. The welcome mat converts to a video player and back on demand.

#### Other Onboarding Enhancements

The Einstein Analytics Learning Map is reorganized and integrates Einstein Data Insights and Prediction Builder. New pages cover best practices and release-focused new content. The Einstein Analytics Learning Adventure App is refreshed with new SAQL use cases, design best practices, and more chart types.

#### Upgrade to the Spring '19 Versions of Analytics for iOS and Android

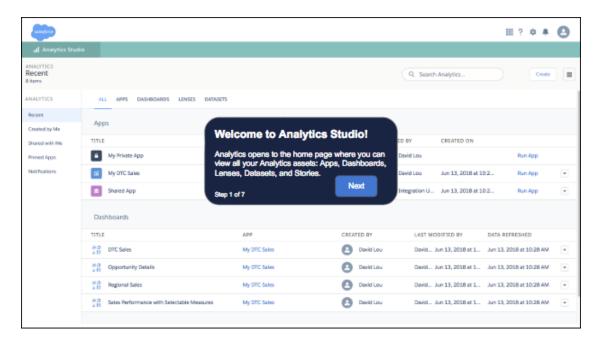
Support for dependent global filters, toggle widget styling options, and new widgets, makes getting data insights on mobile more straightforward.

#### Walk Through the Analytics Studio Home

New users get a friendly introduction to Analytics assets the first time they open the Analytics Studio. And returning users can start the walkthrough from the Help Menu any time they want to refer to it.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Why:** The walkthrough orients new users by teaching key terms, pointing out where to find assets, and demonstrating how to use the home page. If they have an Einstein Discovery user permission, the walkthrough includes information about stories.

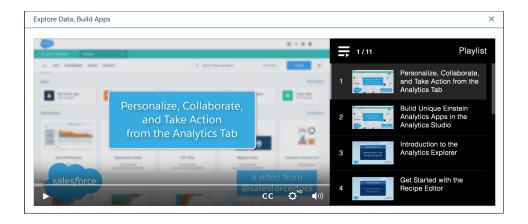


#### Select the Videos You Want to Watch from Playlists

Playlists group related videos, providing learning continuity and making it easier to find relevant information. Check for playlists in Help Menus and video player icons throughout the interface.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

**Why:** The playlist is scrollable and gives you an overview of the available videos for a feature or page. Users can start with the first video, or select any in the list.

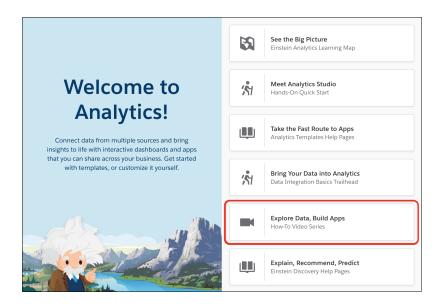


#### Watch Onboarding Videos Within the Welcome Mat

It's a welcome mat; it's a video player; it's integrated content delivery! No need to open another window to watch the videos you find in the welcome mat. The welcome mat converts to a video player and back on demand.

**Where:** This change applies to Einstein Analytics in Lightning Experience and Salesforce Classic. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

How: Click a tile with a video icon to convert the welcome mat to a video player. Then click the X in the upper right to go back.



#### Other Onboarding Enhancements

The Einstein Analytics Learning Map is reorganized and integrates Einstein Data Insights and Prediction Builder. New pages cover best practices and release-focused new content. The Einstein Analytics Learning Adventure App is refreshed with new SAQL use cases, design best practices, and more chart types.

**Where:** These changes apply to Einstein Analytics in Lightning Experience. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

#### Upgrade to the Spring '19 Versions of Analytics for iOS and Android

Support for dependent global filters, toggle widget styling options, and new widgets, makes getting data insights on mobile more straightforward.

#### IN THIS SECTION:

#### Additional Enhancements in Einstein Analytics for iOS

Get the new and improved user experience, including suggested charts with richer visualizations, enhanced usability with charts, and more.

#### Additional Enhancements in Einstein Analytics for Android

Explore dashboards that load faster, access new widgets, and visualize your data in new ways.

#### Additional Enhancements in Einstein Analytics for iOS

Get the new and improved user experience, including suggested charts with richer visualizations, enhanced usability with charts, and more

**Where:** These changes apply to Einstein Analytics for iOS. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited editions.

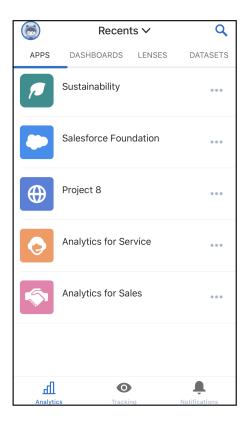
Why: Enhancements in the latest releases include the following features.

- Performance Improvements: Dashboards load faster!
- Images in Tables: Experience richer visualizations of your data with images in tables.

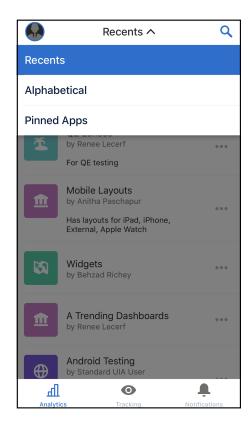
•



New and Improved User Interface: Enjoy an updated UI for an enhanced user experience.



Now, you can change the view for assets using this dropdown menu.



- Chart Usability Enhancement: Long-press and move your finger to view chart values quickly without triggering a selection.
- Suggested Charts: Mobile Explorer now suggests the most appropriate visualization for your data.
- Support for Spring '19 features, such as dependent global filters and toggle widget styling options.
- Link Widget: Specify the landing page when linking to another dashboard.
- Number Widget: When there are no results found, your custom text appears.
- Bug fixes.

**How:** Analytics is available for devices running iOS 10 and later. For the latest enhancements, download Einstein Analytics from the App Store.

#### Additional Enhancements in Einstein Analytics for Android

Explore dashboards that load faster, access new widgets, and visualize your data in new ways.

**Where:** These changes apply to Einstein Analytics for Android. Einstein Analytics is available in Developer Edition and for an extra cost in Enterprise, Performance, and Unlimited Editions.

Why: Enhancements in the latest releases include the following features.

- Performance Improvements: Dashboards load faster!
- Support for Spring '19 features, such as dependent global filters and toggle widget styling options.
- Link Widget: Specify the landing page when linking to another dashboard.
- Number Widget: When there are no results found, your custom text appears.
- Bug fixes.

**How:** Analytics is available for devices running Android 5 or later. For the latest enhancements, download Einstein Analytics from Google Play<sup>™</sup>.

# Communities: Partner Account Relationships, Feed Translations, Einstein Next Best Action, and Much More

Spring '19 is jam-packed with features and improvements for your communities. Easily create sharing relationships between partner types, such as distributors and resellers. Integrate with the Google Cloud Translation API to have community members instantaneously translate questions, posts, comments, answers, and replies into 50 languages. Use Einstein Next Best Action to deliver the right offer at the right time.



Tip: There's lots of Lightning Salesforce these days—Lightning Experience, Lightning Bolts, Lightning components—and it can be tricky to know how it all applies to Communities. Here's the rundown.

Lightning communities 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.

#### IN THIS SECTION:

#### Lightning Communities: Google Translation, Mission Badges, and Improved SEO

Give your community users the ability to translate questions, posts, comments, answers, and replies with the Google Cloud Translate API. Increase member engagement with mission badges. Improve your community's search engine optimization (SEO) with content snapshots and dynamic SEO properties for more object detail pages.

#### Lightning Components in Communities: Lightning Container Components, Einstein Next Best Action, and Case Deflection Tracking

Create and reuse components built with third-party UI frameworks such as React, Vue, Angular 2.0, and embed them into a community. Deliver the right offer at the right time with Einstein Next Best Action, artificial intelligence built for Community Cloud. Capture feedback on how helpful your community content is with the Deflection Tracking component.

#### Audiences: Custom Formulas, More Criteria, and an Updated Editor

The Audience feature in Community Builder is more robust. For even more focused audiences, create custom criteria formulas and use additional criteria types. Last, but not least, we updated the editor, making it cleaner and easier to read.

#### Partner Central: Partner Account Relationships and Data Sharing Rules, Budget Hierarchies, and Enhancements to Account Management

Partner relationships and data sharing rules enable partners to securely share targeted records with one another using clicks, not code. Channel account managers can split budgets between multiple partners and partners can manage and allocate their own budgets with budget hierarchies. Enhancements to account management let internal users and admins create and edit new community members. And users can seamlessly merge to one account brand when merging accounts.

# Security and Sharing: Sharing Sets on More Objects and with Contacts on Multiple Accounts, Avoid CSP Warnings, and Easily Enable Clickjack

Use sharing sets with campaigns, opportunities, and orders, and on contacts on multiple accounts. Avoid CSP warnings on CMS Connect, and discover and resolve CSL resource issues. And enable clickjack protection more easily from Community Builder.

#### Files in Lightning Communities: Permissions, User Role, and Security

New features and updates to Files in Lightning communities include the ability to let guest users upload files and new ways to manage users, roles, and permissions.

#### Other Changes in Communities

Learn about smaller changes that improve your experience with communities.

# Lightning Communities: Google Translation, Mission Badges, and Improved SEO

Give your community users the ability to translate questions, posts, comments, answers, and replies with the Google Cloud Translate API. Increase member engagement with mission badges. Improve your community's search engine optimization (SEO) with content snapshots and dynamic SEO properties for more object detail pages.

#### IN THIS SECTION:

#### Update Your Lightning Community to the Latest Template

We're always adding improvements to Lightning communities, but you can't take advantage of them without the latest template. If you haven't updated yet, don't get left behind.

#### Update Selectors in the Navigation Menu, Related Articles, and Trending Articles by Topic

If you're updating your community template to Spring '19 using a manual update via an update flag in Community Builder, and you use custom CSS overrides, you might need to update some CSS selectors. Update the CSS selectors in your Navigation Menu, Reputation Leaderboard, Related Articles, and Trending Articles by Topics components so that your CSS works just as planned.

#### Translate Feed Items on the Spot

When your users have a common interest but not a common language, you can help. Use Community Builder's new translation setting to put a Translate with Google menu on every feed item. Translate posts, questions, comments, answers, and replies. Over 50 languages are available to get people talking. Translations are offered through a Google Cloud Translation API key that you provide.

#### Level-Up Member Engagement with Missions

Game mechanics, such as using badges, are a great way to get your users involved in your community. However, assigning badges manually can be time consuming. Instead, use the Missions feature to assign badges automatically. Community managers have their say in what action earns a badge and when it can be awarded, and then Missions takes care of the rest. And members can see which badges they haven't yet earned, inspiring action.

#### Move Feed Items for Best Placement

Did someone ask a great question or run a poll in the wrong discussion? Has someone posted useful information for marketing but in the sales group? In your community, you can move a feed item—like a post, question, or poll—from one public group feed to another. The feed item's comments, answers, and replies move with it.

#### Help Your Members Stay on Topic

You can configure the Ask button to block users from choosing a new topic when they ask questions under a selected topic. For example, a user selects the topic New Products and clicks the Ask button. But then in the Posting to field, the user selects another topic. To avoid potential confusion about the location of their question, use the new property to help your users keep focus and easily find their way back.

#### Get More with of CMS for Community Cloud (Beta)

Experience easier ways to sift and select CMS Content (formerly Native Content). Work with improved operators to select content dynamically for collections, and better manage your connections.

#### Use the Files Related List for Knowledge Articles in Communities

You can now see the Files related list for knowledge articles on your community's Article Detail pages.

#### Upvotes Impact Influence Cards and Likes Received

Why shouldn't upvotes have the same impact on influence as likes? As a vote of confidence, upvotes are now counted as likes and exposed on a user's influence card.

#### Template and Theme Export Enhancements

When you export a Lightning template or theme that has locked regions, the locked regions are maintained in the exported version. Previously, the regions were unlocked when users created a community or theme from the exported item. We also added a Publisher Name field for template and theme export, which appears in the Community Creation wizard and on AppExchange. Previously, we used your org name.

#### Future-Proof Your Linking with Navigation API Calls

Communities now support lightning-navigation, which helps you avoid broken navigation if Salesforce changes URL formats in the future.

#### Get Faster Page Loads in Your Community

Akamai's content delivery network (CDN) for static Lightning components is now enabled in all new and existing communities. A CDN speeds up page load time by storing cached versions in multiple geographic locations.

#### Add Hyperlinks to Your Community Posts and Comments

In community feeds, members can now add links to posts and comments.

#### Provide Search Engines with the Freshest Content Snapshots

Salesforce takes a weekly snapshot of your community's published public content, which works well for most updates. But let's say you update a page's content with important, time-sensitive information, such as price changes for a flash sale. Now, instead of waiting for the weekly update, you can take a snapshot every 24 hours to refresh the page content served to search engines.

#### Add Dynamic SEO Properties to More Object Detail Pages

Improve search engine results and help customers find the article, question, and topic information they're looking for by adding dynamic SEO values.

#### Be in the Know About Your SEO

See at a glance which objects in your Lightning community are indexed and available to search engines.

# Update Your Lightning Community to the Latest Template

We're always adding improvements to Lightning communities, but you can't take advantage of them without the latest template. If you haven't updated yet, don't get left behind.

**Where:** This change applies to Lightning communities, accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** If it's time to update your community, you see an update flag in Community Builder. Follow the prompts to update your community.



Important: Before updating your community, make sure to review Update Your Community to understand how the update can affect your community. Also see Migrate CSS Overrides to check selector changes that could affect your custom CSS. Then do a test run in a sandbox before updating it in your production org. If you haven't updated your community since Winter '18, check out this release note with important information. This help topic can be outdated or unavailable during release preview, so check back to ensure that you understand the full impact of the update.

#### SEE ALSO:

Update Selectors in the Navigation Menu, Related Articles, and Trending Articles by Topic

# Update Selectors in the Navigation Menu, Related Articles, and Trending Articles by Topic

If you're updating your community template to Spring '19 using a manual update via an update flag in Community Builder, and you use custom CSS overrides, you might need to update some CSS selectors. Update the CSS selectors in your Navigation Menu, Reputation Leaderboard, Related Articles, and Trending Articles by Topics components so that your CSS works just as planned.

**Where:** This change applies to Lightning communities, accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Update the following CSS selectors.

#### Navigation Menu

#### Table 1: Home Menu Item Link

New Selector
<pre>.comm-navigation .comm-navigationitem a[data-type="home"]</pre>

#### **Table 2: Top-Level Menu Item**

# Previous Selectors .forceCommunityNavigationMenu .menuItem .forceCommunityGlobalNavigation .navigationMenuNode .comm-navigation .comm-navigation\_\_list > .slds-list\_\_item .comm-navigation .comm-navigation\_\_item .comm-navigation .comm-navigation\_\_item

Includes submenu triggers.

#### Table 3: Current Top-Level Menu Item Link

#### 

#### Table 4: Top-Level Menu Item Links

#### **Previous Selectors**

#### **New Selector**

- .forceCommunityNavigationMenu .menuItemLink
- .forceCommunityNavigationMenu
- a.menuItemLink
- .forceCommunityNavigationMenu .menuItem
- .menuItemLink
- .forceCommunityNavigationMenu .menuItem a
- .forceCommunityNavigationMenu .menuItem
- a.menuItemLink
- .comm-navigation .comm-navigation\_ list >
- .slds-list item > a
- .comm-navigation .comm-navigation list >
- .slds-list\_\_item > button

#### vew Selector

- .comm-navigation .comm-navigation\_\_list >
- .slds-list\_\_item> .comm-navigation\_\_item
- a > a
  - .comm-navigation .comm-navigation\_\_list >
  - .slds-list item> .comm-navigation item
  - > button

#### **Table 5: Submenu Items**

#### **Previous Selectors**

#### **New Selector**

- $. force {\tt Community Navigation Menu .sub Menu Item}\\$
- .comm-navigation
- .slds-list vertical.slds-is-nested
- .slds-list item

- .comm-navigation
- .slds-list vertical.slds-is-nested
- $. \verb|comm-navigation__item| \\$

#### Table 6: Active Submenu Item

#### **Previous Selectors**

#### **New Selector**

- .forceCommunityNavigationMenu
- .subMenuItem.current
- .comm-navigation
- .slds-list vertical.slds-is-nested
- .slds-list item .slds-is-active
- .comm-navigation
- .slds-list vertical.slds-is-nested
- .comm-navigation\_\_item .slds-is-active

#### Table 7: Submenu Trigger Link

#### **Previous Selectors**

#### **New Selector**

- .forceCommunityNavigationMenu .triggerLink
- ..forceCommunityNavigationMenu
- .triggerLabel

- .comm-navigation .comm-navigation item
- button:enabled

#### **Previous Selectors**

#### **New Selector**

.comm-navigation .slds-list\_\_item
button:enabled

#### Table 8: Submenu Trigger Link Icon

#### **Previous Selectors**

#### **New Selector**

- $. force {\tt Community Navigation Menu~.} trigger {\tt Link}$
- .forceIcon

.comm-navigation .comm-navigation\_\_item
button:enabled .slds-icon\_container

.comm-navigation .slds-list\_\_item
button:enabled .slds-icon container

#### Table 9: Menu Items

#### **Previous Selectors**

#### **New Selector**

- .forceCommunityNavigationMenu
- .navigationMenu li

.comm-navigation .comm-navigation item

.comm-navigation .comm-navigation item

a.comm-navigation .comm-navigation item

.comm-navigation .slds-list\_\_item

Includes top-level and submenu items.

#### **Table 10: Menu Item Links**

#### **Previous Selectors**

#### **New Selector**

button

- .forceCommunityNavigationMenu a
- .forceCommunityNavigationMenu
- a.menuItemLink

- .comm-navigation .slds-list\_\_item a
- .comm-navigation .slds-list item button

Includes top-level and submenu items.

#### Table 11: Submenu Items

#### **Previous Selectors**

#### **New Selector**

.forceCommunityNavigationMenu	
.subMenuItem.comm-navigation	<pre>.comm-navigation .slds-list vertical.slds-is-nested</pre>
.slds-list_vertical.slds-is-nested	.comm-navigationitem
.slds-list item	

#### Table 12: Submenu Item Links

Previous Selectors	New Selector
.comm-navigation	.comm-navigation
.slds-list_vertical.slds-is-nested	.slds-list_vertical.slds-is-nested
.comm-navigationitem	.comm-navigationitem a

## Reputation Leaderboard

#### **Table 13: Reputation Leaderboard Row**

Previous Selectors	New Selector
.forceCommunityReputationLeaderboardRow.comm-leaderboard li	.comm-leaderboard .comm-leaderboarditem

#### **Related Articles**

#### **Table 14: Article List Items**

Previous Selectors	New Selector
<pre>.selfServiceSimilarArticles .base-simple-item .comm-related-articles li</pre>	<pre>.comm-related-articles .comm-related-articlesitem</pre>

#### **Table 15: Article Links**

Previous Selectors	New Selector
.selfServiceSimilarArticles .item-title	
<pre>.selfServiceSimilarArticles .item-title-link</pre>	<pre>.comm-related-articles .comm-related-articlesitem a</pre>
.comm-related-articles li a	

# **Trending Articles by Topics**

#### **Table 16: Article List Items**

Previous Selectors	New Selector
<pre>.selfServiceTopicTrendingArticles .base-simple-item .comm-topic-trending-articles li</pre>	<pre>.comm-topic-trending-articles .comm-topic-trending-articlesitem</pre>

#### **Table 17: Article Links**

# Previous Selectors New Selector .selfServiceTopicTrendingArticles .comm-topic-trending-articles .selfServiceTopicTrendingArticles a .comm-topic-trending-articles\_\_item a .comm-topic-trending-articles li a .comm-topic-trending-articles\_\_item a

## Translate Feed Items on the Spot

When your users have a common interest but not a common language, you can help. Use Community Builder's new translation setting to put a Translate with Google menu on every feed item. Translate posts, questions, comments, answers, and replies. Over 50 languages are available to get people talking. Translations are offered through a Google Cloud Translation API key that you provide.

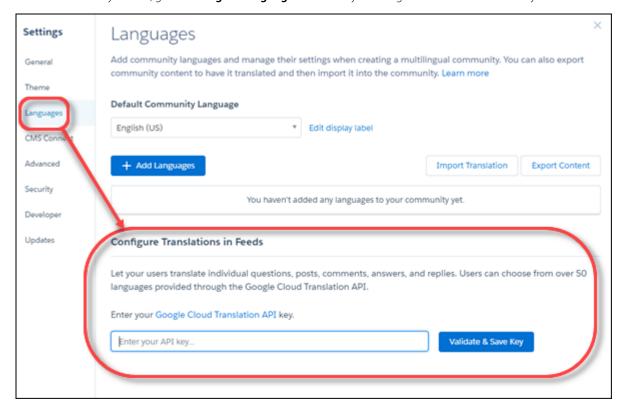
**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

Why: A user can translate a feed item into the default language or select a different language.

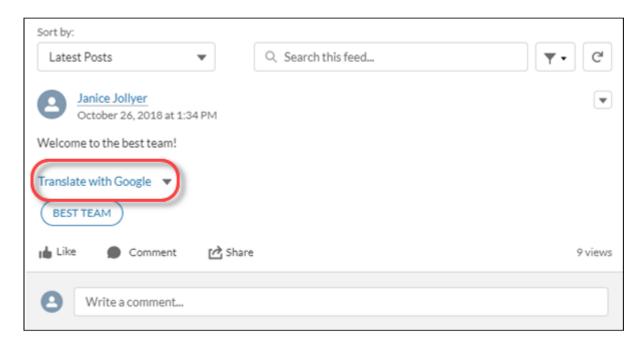
- To translate the feed item into the default language, click **Translate with Google**.
   For community members, the default language comes from the locale that's set on the user's profile. For guest users, it comes from the locale set in the user's browser.
- To select a language, click the menu icon.

After translation, Translate with Google switches to View Original, so it's easy to switch back to the original language.

How: In Community Builder, go to Settings > Languages and enter your Google Cloud Translation API key.



After you verify and save your key, a **Translate with Google** menu appears on all feed items in your community.



SEE ALSO:

Salesforce Help: Add a Translate Button to Feed Items in Communities (can be outdated or unavailable during release preview)

# Level-Up Member Engagement with Missions

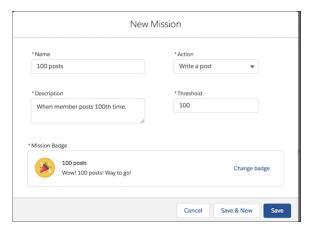
Game mechanics, such as using badges, are a great way to get your users involved in your community. However, assigning badges manually can be time consuming. Instead, use the Missions feature to assign badges automatically. Community managers have their say in what action earns a badge and when it can be awarded, and then Missions takes care of the rest. And members can see which badges they haven't yet earned, inspiring action.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** You can create missions based on the following actions:

- Update a profile picture
- Create posts or ask questions
- Comment on posts or answer questions
- Give and receive likes
- Receive a best answer, or mark an answer as being a best answer

For example, you could create a mission that gives users a badge when they post for the 100th time.



Members are notified when they receive a badge and can see it on their profile page. Choosing **See All** on the badges card opens a page that displays all the user's badges, both earned and unearned.

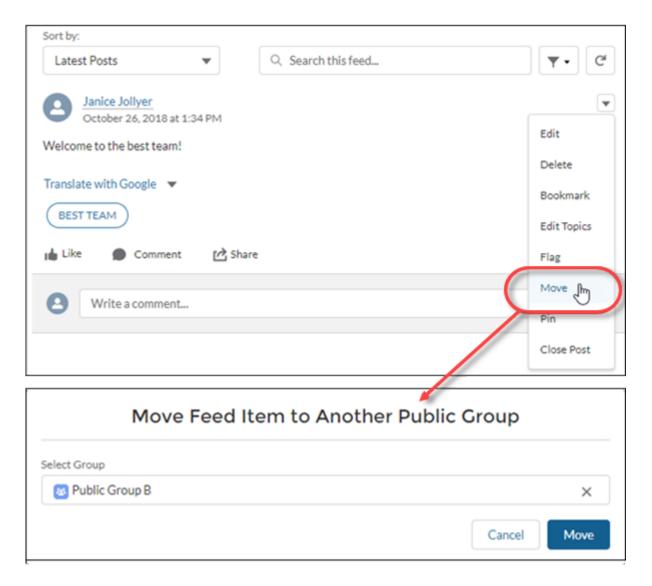
### Move Feed Items for Best Placement

Did someone ask a great question or run a poll in the wrong discussion? Has someone posted useful information for marketing but in the sales group? In your community, you can move a feed item—like a post, question, or poll—from one public group feed to another. The feed item's comments, answers, and replies move with it.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Who:** System administrators, community administrators, and Chatter moderators can move feed items from one public group feed to another.

Why: Put posts, questions, and polls in the best spot, keep related information together, and help your users find their best audience.



**How:** In a public group feed, go to a post, question, or poll overflow menu and select **Move**. In the Move popup, select the public group feed you want to move the item to and click **Move**.

Note: You can't move feed items into or out of public, broadcast-only groups.

When you move an item:

- Mentions are preserved.
- Announcements become announcements in the target group.
- Things that are included in or attached to the feed item stay included or attached.

For example, moved items bring their answers, comments, replies, topics, bookmarks, attachments, and other related entities with them. If an answer is marked as best, that status is preserved.

Note: To move a pinned post, unpin it first.

Users receive notifications about the moved feed item according to their preferences. So, assuming users have opted in to the related notification setting:

- People who follow the target group are notified.
- When the person who moved the feed item is also a follower of the target group, that person is notified.
- People who are mentioned in the moved feed item are notified about the mention.
- The moved item's author isn't notified because authors aren't notified about their post actions.

Chatter REST API and Chatter in Apex support moving posts from one public group to another.

SEE ALSO:

Salesforce Help: Move Feed Items from One Public Group Feed to Another (can be outdated or unavailable during release preview)

# Help Your Members Stay on Topic

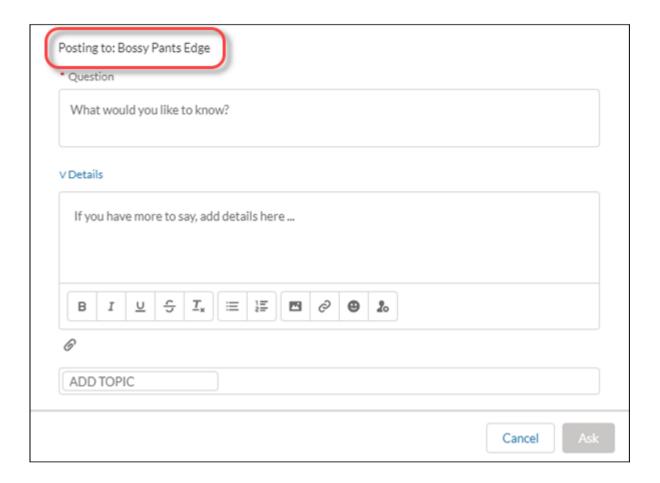
You can configure the Ask button to block users from choosing a new topic when they ask questions under a selected topic. For example, a user selects the topic New Products and clicks the Ask button. But then in the Posting to field, the user selects another topic. To avoid potential confusion about the location of their question, use the new property to help your users keep focus and easily find their way back.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Members with the Create and Set Up Communities and View Setup and Configuration permissions can configure component properties.

**How:** In Community Builder, open the property manager for the Ask or Contact Support & Ask button and select **Block topic selection on questions in topics**.

When users ask questions in a topic feed, they're prevented from selecting a new topic in the **Posting to** field. Instead, that topic is read-only.



# Get More with of CMS for Community Cloud (Beta)

Experience easier ways to sift and select CMS Content (formerly Native Content). Work with improved operators to select content dynamically for collections, and better manage your connections.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. This open beta is available to all communities automatically, but you need to enable Content Management in Community Workspaces.



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

**Who:** Content Management is available to anyone with permissions to use Community Workspaces to create content and to anyone with access to Community Builder to add content to a page.

**What:** Here are some of the new features and improvements.

- Native Content is now called CMS Content.
- Insert hyperlinks and inline videos and format text in the rich text editor when creating content.
- Dynamic collections support AND and OR operators to get just the right content to display.
- Remove access to a previously approved Salesforce CRM object.

- Create and control CMS Content collections manually by adding and removing specific content.
- Delete outdated or unwanted collections.
- Find things faster even as your content collection grows with new filters to get more targeted results.
- Choose from new layout options. For instance, titles can be links to content detail and you don't have to use a button in your layout to provide navigation.
- Identify external URLs that need to be whitelisted.

#### SEE ALSO:

Salesforce Help: CMS for Communities (can be outdated or unavailable during release preview)
Salesforce Help: Content Security Policy (can be outdated or unavailable during release preview)
Salesforce Help: CMS Connect (can be outdated or unavailable during release preview)

# Use the Files Related List for Knowledge Articles in Communities

You can now see the Files related list for knowledge articles on your community's Article Detail pages.

**Where:** This change applies to Lightning Communities with Lightning Knowledge enabled. Lightning Knowledge is available in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions with Service Cloud. Salesforce Knowledge is available in Professional, Enterprise, and Performance editions as an add-on.

**Who:** Internal community users can see files uploaded to a Files related list for a Knowledge article that they can view. External community users see files uploaded to a Files related list when the visibility is set to **AllUsers**, and they can view the associated Knowledge article.

How: In Community Builder, add the Record Related List component to an Article Detail page.

#### SEE ALSO:

Salesforce Help: Record Related List

Knowledge Article: Default visibility for files shared on records (can be outdated or unavailable during release preview)

# Upvotes Impact Influence Cards and Likes Received

Why shouldn't upvotes have the same impact on influence as likes? As a vote of confidence, upvotes are now counted as likes and exposed on a user's influence card.

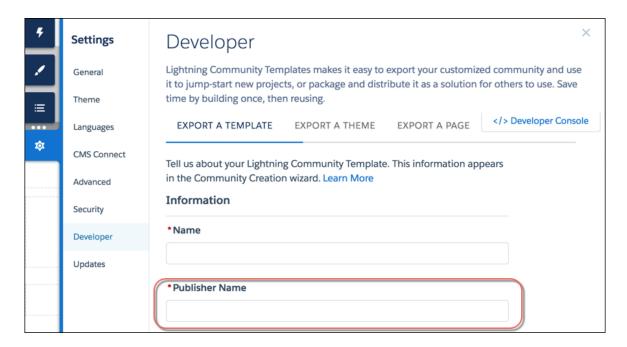
**Where:** This change applies to Lightning communities accessed through Lightning Experience, and is available in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**How:** If you enabled upvotes in your community, new upvotes count toward influence and likes received.

# Template and Theme Export Enhancements

When you export a Lightning template or theme that has locked regions, the locked regions are maintained in the exported version. Previously, the regions were unlocked when users created a community or theme from the exported item. We also added a Publisher Name field for template and theme export, which appears in the Community Creation wizard and on AppExchange. Previously, we used your org name.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.



# Future-Proof Your Linking with Navigation API Calls

Communities now support lightning-navigation, which helps you avoid broken navigation if Salesforce changes URL formats in the future.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

#### SEE ALSO:

Lightning Components Developer Guide: Navigation in Lightning Experience and the Salesforce Mobile App Using Page References (can be outdated or unavailable during release preview)

Lightning Components Developer Guide: pageReference Types (can be outdated or unavailable during release preview)

# Get Faster Page Loads in Your Community

Akamai's content delivery network (CDN) for static Lightning components is now enabled in all new and existing communities. A CDN speeds up page load time by storing cached versions in multiple geographic locations.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions. This setting doesn't affect any version of the Salesforce app.

**How:** This setting turns on Lightning CDN delivery for the static JavaScript in the Lightning Component framework. It doesn't distribute your org's data or metadata in a CDN. Lightning CDN is different than Communities CDN. See Set Up the Community Cloud Content Delivery Network for more information.



**Note**: If you experience issues, ensure that https://static.lightning.force.com is added to any whitelist or firewall that your company operates, and ask your IT department if your company's firewall blocks Akamai CDN content.

#### SEE ALSO:

https://help.salesforce.com/articleView?id=community\_builder\_cdn.htm&type=5

## Add Hyperlinks to Your Community Posts and Comments

In community feeds, members can now add links to posts and comments.

SEE ALSO:

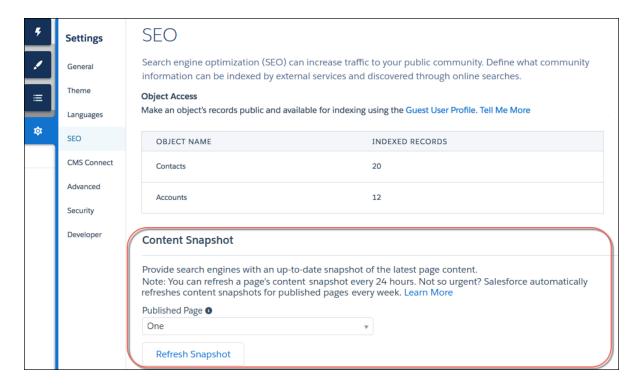
Add Hyperlinks to Your Posts and Comments *IdeaExchange*: Hyperlink button in Lightning for Chatter posts

# Provide Search Engines with the Freshest Content Snapshots

Salesforce takes a weekly snapshot of your community's published public content, which works well for most updates. But let's say you update a page's content with important, time-sensitive information, such as price changes for a flash sale. Now, instead of waiting for the weekly update, you can take a snapshot every 24 hours to refresh the page content served to search engines.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, and Unlimited editions.

**How:** To access the Content Snapshot settings in Community Builder, you must first set up a preferred domain for your community. Then, after you update a page's content and publish your changes, on the SEO settings tab, select the page in the Published Page dropdown and click **Refresh Snapshot**.

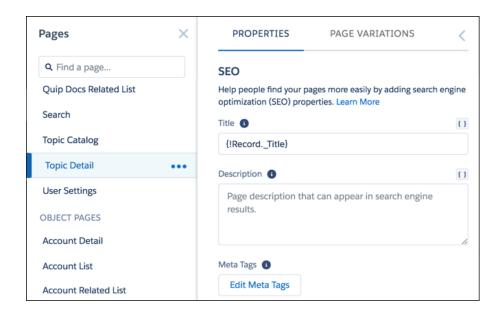


# Add Dynamic SEO Properties to More Object Detail Pages

Improve search engine results and help customers find the article, question, and topic information they're looking for by adding dynamic SEO values

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Several releases ago, we added editable, dynamic SEO properties to object detail pages in Community Builder, but the Article, Question, and Topic detail pages missed all the fun. Well, their party time starts now! In the pages' properties, you can use expressions to add dynamic page title and description values from the associated record, along with dynamic metadata tags.

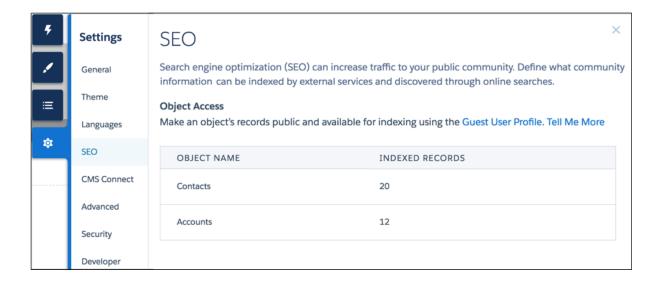


#### Be in the Know About Your SEO

See at a glance which objects in your Lightning community are indexed and available to search engines.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** We added the ability to make objects and fields available for indexing in Summer '18, but it was difficult to know which objects were public without opening the Guest User Profile. Now we show which objects are accessible in the SEO settings tab in Community Builder, along with the number of indexed records.



**How:** In the SEO settings tab, configure which objects are public using the Guest User Profile, and create appropriate object pages. After you publish your community, allow several minutes for the table to appear.



Tip: To see the SEO page in the Settings area, enable public access in the General settings page. Private pages can't be indexed.

# Lightning Components in Communities: Lightning Container Components, Einstein Next Best Action, and Case Deflection Tracking

Create and reuse components built with third-party UI frameworks such as React, Vue, Angular 2.0, and embed them into a community. Deliver the right offer at the right time with Einstein Next Best Action, artificial intelligence built for Community Cloud. Capture feedback on how helpful your community content is with the Deflection Tracking component.

#### IN THIS SECTION:

#### Use Custom Lightning Web Components in Communities

Spring '19 introduces a new type of Lightning component, called a Lightning web component. As a developer, you can build custom Lightning web components that admins can drag onto community pages. Lightning web components are custom HTML elements built using HTML and modern JavaScript. Lightning web components and Aura components (which we previously called Lightning components) can work together on a page. To admins and end users, they both appear as Lightning components.

#### Get More Use Out of Your Code with Lightning Container Components in Communities

Have a site experience or existing code that you can't easily replicate in your Salesforce community using standard Lightning components? Now that we support lightning:container in Communities, you can reuse your existing code. Easily integrate your existing or new applications built in React, Angular, Vue, or other third-party JavaScript frameworks or open-source software with lightning:container in Lightning applications.

#### Recommend Actions and Offers to Your Users (Generally Available)

Recommend actions and suggest ideas with the Einstein Next Best Action component. Available on Lightning record pages, this component uses action strategies that apply your org's business rules and predictive models to display context-sensitive offers and actions, like an upgrade, a discount, or a task. Using Next Best Action Strategy Builder, you define the conditions and rules that determine which recommendations to display to your users. This component is available as part of Einstein Next Best Action.

#### Capture Feedback on the Helpfulness of Community Content

You make knowledge articles available to your community to help users help themselves in finding answers to their most burning questions. But how can you tell if an article was helpful? Use the Deflection Tracking component in Community Builder to ask users about the effectiveness of your content. Present them with a customized set of answers, and capture their feedback in your Salesforce org.

#### Help Customers Get Answers Fast, and Lighten Your Support Load

When members have questions, put your best information forward, and let them help themselves. Configure the Ask and Contact Support & Ask buttons to respond with pertinent articles and previous answers when users ask questions. Members can cancel a question when the response hits the mark, or they can continue to post their question.

#### Add a Button to Let Community Members Request a Call from Support

Don't keep members waiting. Add the Contact Request Button & Flow component to your community or portal to let members request that customer support call them back. When a user clicks the Request Help button, a popup displays for the user to enter their issue and contact details.

#### Polish Your Buttons with More Style Properties

We added sparkle to button components in Community Builder. New style properties give you more control over a button's look and feel and let you more fully bring buttons into your community theme. Set the size, shape, text position, and colors right from the button's properties.

#### Add Styles to Your Featured Topics

Add style to featured-topic text, set the width of text background, and shape the tile border. A new link in the property manager lets you move easily from setting properties on a Featured Topics component to configuring featured topics for your community.

#### Define a Default Feed Sort Order in Community Builder

Set a default sort order on feeds to present community members and guests with the initial experience that you intend. If users choose to change the sort order in their view, their selection sticks. Everyone's happy!

#### Use Edit Inline in Record Detail

Record detail now supports inline editing in communities, just as it does elsewhere in Lightning Experience.

#### Take Control over Options in Record Lists

Not only can you do so much more from a record list these days, but you can also control which options are available. New controls let you allow folks to edit the record list without sending them to the record detail, show or hide the actions buttons, and show or hide the search bar.

#### Get More Components in Your Customer Account Portal Template

Three more components are now available in the Customer Account Portal community template: Featured Topics, Topic Description, and Headline. Featured Topics and Headline are available on all page types. Topic Description is available for topic pages.

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Spring '19 introduces a new type of Lightning component, called a Lightning web component. As a developer, you can build custom Lightning web components that admins can drag onto community pages. Lightning web components are custom HTML elements built using HTML and modern JavaScript. Lightning web components and Aura components (which we previously called Lightning components) can work together on a page. To admins and end users, they both appear as Lightning components.

**Where:** This change applies to Lightning communities accessed through Lightning Experience in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

#### SEE ALSO:

Lightning Web Components (Generally Available)

Lightning Web Components Developer Guide: Configure a Component for Lightning Communities (can be outdated or unavailable during release preview)

# Get More Use Out of Your Code with Lightning Container Components in Communities

Have a site experience or existing code that you can't easily replicate in your Salesforce community using standard Lightning components? Now that we support lightning:container in Communities, you can reuse your existing code. Easily integrate your existing or new applications built in React, Angular, Vue, or other third-party JavaScript frameworks or open-source software with lightning:container in Lightning applications.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

#### SEE ALSO:

Lightning Components Developer Guide: Lightning Container (can be outdated or unavailable during release preview)

Salesforce Developers Blog: Lightning Container Component (can be outdated or unavailable during release preview)

Salesforce Developers Blog: Introducing New Content Security Policy Options (can be outdated or unavailable during release preview)

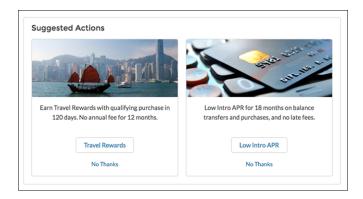
## Recommend Actions and Offers to Your Users (Generally Available)

Recommend actions and suggest ideas with the Einstein Next Best Action component. Available on Lightning record pages, this component uses action strategies that apply your org's business rules and predictive models to display context-sensitive offers and actions, like an upgrade, a discount, or a task. Using Next Best Action Strategy Builder, you define the conditions and rules that determine which recommendations to display to your users. This component is available as part of Einstein Next Best Action.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Professional, Enterprise, and Unlimited editions.

**Who:** When a user accepts a suggestion, a screen flow launches. To run a flow, your community members must have either the Run Flows permission or the Flow User field enabled on the user detail page.

**Why:** Let's say you've created an action strategy that displays two recommended flows when a case description includes "credit card benefits." One flow offers a new card with travel rewards, and the other offers a new card with lower interest rates and fees. If your customer creates a case that includes the key phrase, they see the two suggested actions.



Chatter REST API and Chatter in Apex support Einstein Next Best Action.

SEE ALSO:

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available) Salesforce Help: Suggested Actions (can be outdated or unavailable during release preview)

# Capture Feedback on the Helpfulness of Community Content

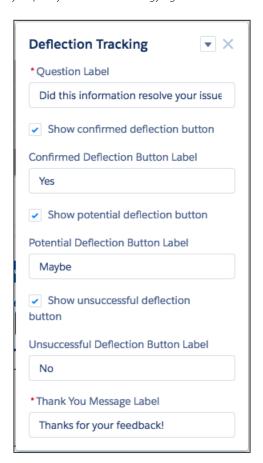
You make knowledge articles available to your community to help users help themselves in finding answers to their most burning questions. But how can you tell if an article was helpful? Use the Deflection Tracking component in Community Builder to ask users about the effectiveness of your content. Present them with a customized set of answers, and capture their feedback in your Salesforce org.

**Where:** This change applies to Lightning communities, accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

Why: Find out how well suggested content helps your users.



**How:** In Community Builder, drag the Deflection Tracking component on any Feed Detail, Question Detail, or Article Detail page. Gauge article effectiveness by building reports with the Salesforce Case Deflection Reporting Package for Lightning Communities. Reports help you plan your content strategy against real data.

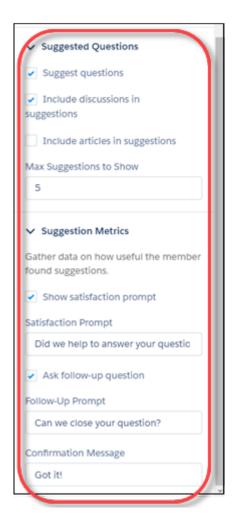


# Help Customers Get Answers Fast, and Lighten Your Support Load

When members have questions, put your best information forward, and let them help themselves. Configure the Ask and Contact Support & Ask buttons to respond with pertinent articles and previous answers when users ask questions. Members can cancel a question when the response hits the mark, or they can continue to post their question.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** You can also configure the Suggestion Metrics properties on the button to collect data on the effectiveness of your suggestions. Use this information to identify gaps and fine-tune your knowledge base.



How: In Community Builder, place an Ask or Contact Support & Ask button on a page, and set its properties.

# Add a Button to Let Community Members Request a Call from Support

Don't keep members waiting. Add the Contact Request Button & Flow component to your community or portal to let members request that customer support call them back. When a user clicks the Request Help button, a popup displays for the user to enter their issue and contact details.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Communities: Let Your Customers Request a Call from Support

# Polish Your Buttons with More Style Properties

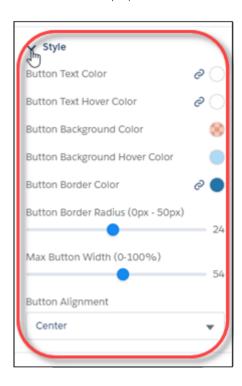
We added sparkle to button components in Community Builder. New style properties give you more control over a button's look and feel and let you more fully bring buttons into your community theme. Set the size, shape, text position, and colors right from the button's properties.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The new style properties are available on these buttons.

- Contact Support
- Contact Support & Ask
- Ask
- Follow

Here's how the new properties look for the Ask Button.

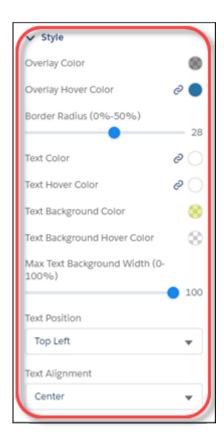


# Add Styles to Your Featured Topics

Add style to featured-topic text, set the width of text background, and shape the tile border. A new link in the property manager lets you move easily from setting properties on a Featured Topics component to configuring featured topics for your community.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**How:** In Community Builder, select a Featured Topics or a Featured Topics & Feeds component and configure its properties. When you're ready to configure featured topics for your community, click the Add or Edit Featured Topics link in the property manager. You land in the Content Management Workspace right where you can work on featured topic configuration for the community.



SEE ALSO:

Polish Your Buttons with More Style Properties

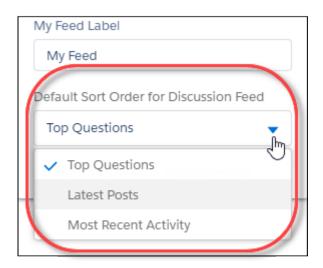
# Define a Default Feed Sort Order in Community Builder

Set a default sort order on feeds to present community members and guests with the initial experience that you intend. If users choose to change the sort order in their view, their selection sticks. Everyone's happy!

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

Why: Check out the new default sort options on these components.

- Feed
- Feed Compact
- Featured Topics & Feeds
- Search Results



**How:** To set a default sort order, in Community Builder, select a Feed, Feed Compact, or Featured Topics & Feeds component, and change its properties.

#### SEE ALSO:

IdeaExchange: "Sort By" choice saved for user or session in Customer Service (Napili) template

IdeaExchange: Change Default sort order discussions overview community

IdeaExchange: Chatter Answers Default Sorting in Communities (Compact Feed)

#### Use Edit Inline in Record Detail

Record detail now supports inline editing in communities, just as it does elsewhere in Lightning Experience.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.



Note: This ability is not available for mobile or tablet use.

#### SEE ALSO:

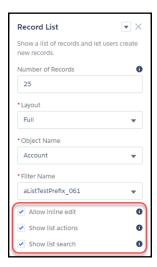
Take Control over Options in Record Lists Salesforce Help: Record Detail

# Take Control over Options in Record Lists

Not only can you do so much more from a record list these days, but you can also control which options are available. New controls let you allow folks to edit the record list without sending them to the record detail, show or hide the actions buttons, and show or hide the search bar.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

How: Select which component options you want to include for your customers.





Note: These options are not available for mobile or tablet use.

SEE ALSO:

Salesforce Help: Record List Component (can be outdated or unavailable during release preview)

# Get More Components in Your Customer Account Portal Template

Three more components are now available in the Customer Account Portal community template: Featured Topics, Topic Description, and Headline. Featured Topics and Headline are available on all page types. Topic Description is available for topic pages.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

# Audiences: Custom Formulas, More Criteria, and an Updated Editor

The Audience feature in Community Builder is more robust. For even more focused audiences, create custom criteria formulas and use additional criteria types. Last, but not least, we updated the editor, making it cleaner and easier to read.

#### IN THIS SECTION:

#### Do More, More Easily with the Updated Audiences Editor

Create unlimited rows and link them any way you want, using custom logic, in the updated editor.

#### Create Custom Audience Formulas

Create highly targeted audiences by linking criteria using custom logic. For example, target all customers who are high-value AND live in either San Francisco OR Los Angeles.

#### Increase the Power of Audiences with New Criteria and Data Types

Now you can target audiences based on the standard and custom permissions assigned to your users. For example, create an audience of moderators by selecting all users with the "Moderate Communities Feeds" permissions. You can also use extra field data types when creating audiences based on fields on the user object. We added currency, multipicklist, and date.

# Do More, More Easily with the Updated Audiences Editor

Create unlimited rows and link them any way you want, using custom logic, in the updated editor.

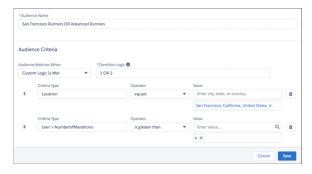
**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

### Create Custom Audience Formulas

Create highly targeted audiences by linking criteria using custom logic. For example, target all customers who are high-value AND live in either San Francisco OR Los Angeles.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

How: Start creating your custom logic by selecting **Custom Condition Is Met** in the **Audience Matches When** dropdown list.



# Increase the Power of Audiences with New Criteria and Data Types

Now you can target audiences based on the standard and custom permissions assigned to your users. For example, create an audience of moderators by selecting all users with the "Moderate Communities Feeds" permissions. You can also use extra field data types when creating audiences based on fields on the user object. We added currency, multipicklist, and date.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** You can choose any standard or custom permissions assigned to the user through the user profile or permission sets. Permission criteria is especially useful if you control back-end functionality using permissions as you can now create a corresponding front-end experience.

# Partner Central: Partner Account Relationships and Data Sharing Rules, Budget Hierarchies, and Enhancements to Account Management

Partner relationships and data sharing rules enable partners to securely share targeted records with one another using clicks, not code. Channel account managers can split budgets between multiple partners and partners can manage and allocate their own budgets with budget hierarchies. Enhancements to account management let internal users and admins create and edit new community members. And users can seamlessly merge to one account brand when merging accounts.

#### IN THIS SECTION:

#### Create Partner Account Relationships and Data Sharing Rules (Generally Available)

If you have multiple distributors and they need different levels of access to your object records, sharing rules can get complicated. Easily create sharing relationships between partner accounts and protect confidential data by sharing only select information. Channel account managers can use account relationship data sharing rules and account relationships to target how information is shared and who it's shared with.

#### Update Partner Account Fields on Opportunities and Leads

Let's say that you are the channel manager of a partner account with regional divisions. You've created an opportunity from the partner account, but now one of your divisions is taking the lead in driving the opportunity. Now you can update the partner account field on opportunity or leads to more accurately track who is driving them forward.

#### Let Partner Users Manage Their Own Budgets with Budget Hierarchies

Allow greater flexibility for market development funds that are applied to campaigns and automations, while maintaining control of the budget amount. Free your channel account manager from managing everyone's budgets by letting partner users manage their own. Budget hierarchies let your channel account manager create child budgets that partner users can administer. The information still rolls up to the channel account manager, but partner users have the autonomy to allocate and approve within their own organization.

#### Internal Users and Admins Can View and Manage Community Members from Accounts

Now internal users and admins can view and manage community members from an account. Using Account Management, users can view, add members to communities, deactivate and activate members, and reset member passwords.

### Merge Account Brand Information for Duplicate Accounts

Now when you merge duplicate accounts, account brand information for the master record is retained. If the master record doesn't have an account brand, the most recently created account brand information associated with the duplicate accounts is attached.

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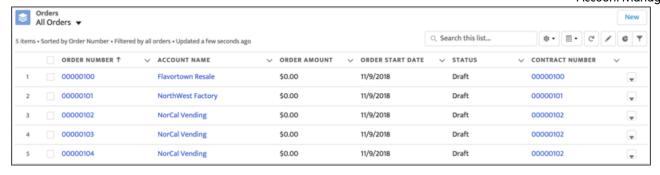
**Where:** This change applies to Lightning and Salesforce Tabs + Visualforce communities accessed through Lightning Experience and Salesforce in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** External users with Partner Community and Customer Community Plus licenses have access to account relationships. The Create and Set Up Communities permission is required for users who want to create and manage account relationship data sharing rules.

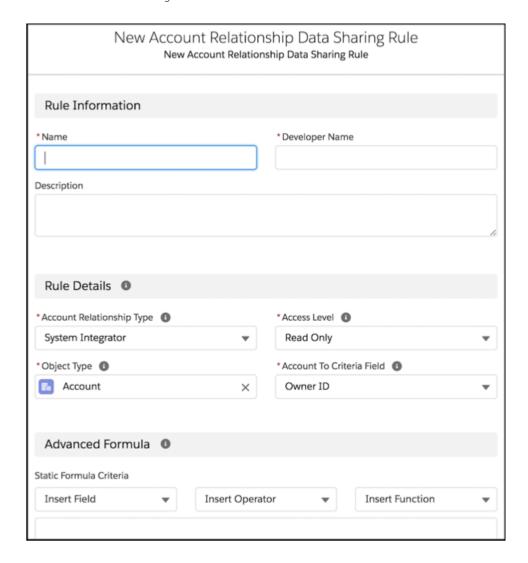
**Why:** This All Orders list view is a list of orders that a partner had access to before setting up an account relationship and account relationship data sharing rules.



This All Orders list view is after an account relationship data sharing rule is created and associated with an account relationship.



**How:** Create the account relationship data sharing rule, which determines the account relationship type, how information is shared (by owner or by account id), the access granted (read or read/write), and the object records shared. Account relationship data sharing rules can be applied to accounts, contacts, campaigns, cases, leads, opportunities, orders, and custom objects. Use Advanced Formula to further refine the data sharing rule.



An account relationship with the same account relationship type can then use the rule to share data.

# Update Partner Account Fields on Opportunities and Leads

Let's say that you are the channel manager of a partner account with regional divisions. You've created an opportunity from the partner account, but now one of your divisions is taking the lead in driving the opportunity. Now you can update the partner account field on opportunity or leads to more accurately track who is driving them forward.

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**Where:** This change applies to Lightning and Salesforce Tabs + Visualforce communities accessed through Lightning Experience and Salesforce in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Create child budgets five levels in the hierarchy. You can create any combination of child budgets and allocations from a budget, as long as they don't exceed the total budget amount and maximum number of hierarchy levels.

# Internal Users and Admins Can View and Manage Community Members from Accounts

Now internal users and admins can view and manage community members from an account. Using Account Management, users can view, add members to communities, deactivate and activate members, and reset member passwords.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce n Enterprise, Performance, Unlimited, and Developer editions.

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Now when you merge duplicate accounts, account brand information for the master record is retained. If the master record doesn't have an account brand, the most recently created account brand information associated with the duplicate accounts is attached.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce in Enterprise, Performance, Unlimited, and Developer editions.

# Security and Sharing: Sharing Sets on More Objects and with Contacts on Multiple Accounts, Avoid CSP Warnings, and Easily Enable Clickjack

Use sharing sets with campaigns, opportunities, and orders, and on contacts on multiple accounts. Avoid CSP warnings on CMS Connect, and discover and resolve CSL resource issues. And enable clickjack protection more easily from Community Builder.

#### IN THIS SECTION:

Use Sharing Sets with Campaigns, Opportunities, and Orders (Generally Available)

You can now grant portal or community users access to campaigns, opportunities, and orders using sharing sets.

### Use Sharing Sets with Contacts with Multiple Accounts (Generally Available)

Simplify record access by using existing account contact relationships. Let's say you create a community or portal user from a contact that is associated with multiple accounts. You can then create a sharing set that grants access to all records with a lookup to any accounts related to that contact.

### Enable External Org-Wide Defaults in Orgs with Communities or Portals (Critical Update)

This update enables the External Sharing Model and provides admins with a list of objects whose default external access settings must be reviewed. This update helps you secure your data by letting you set more restrictive levels of access for external users. Before Spring '19, org-wide defaults gave internal and external users the same default access to objects. After activating this update, external org-wide defaults are enabled in all orgs with communities or portals.

### Assign a Content Security Policy Level to Your Community

The default script security level is now *strict*, which provides optimum security. A strict Content Security Policy (CSP) blocks inline scripts from running in your site. It allows non-script resources, such as images from approved, third-party hosts to display. We recommend using the strict level.

### Avoid CSP Errors When Using CMS Connect

New integrations with your community's Content Security Policy (CSP) settings helps CMS Connect avoid issues before you publish. CMS Connect attempts to whitelist external URLs for you and warn you when it recognizes issues.

#### Discover and Resolve CSP Resource Issues

It wasn't always easy to know when certain resources conflicted with your Lightning community's Content Security Policy (CSP) settings. But with the CSP Errors section in the Security tab of Community Builder, you can now see where the issues lie and quickly resolve them.

### Enable Clickjack Protection More Easily in Community Builder

You can now enable clickjack protection levels for Lightning communities right from Community Builder. Clickjack protection helps prevent attacks that trick users into clicking something they shouldn't.

#### Restrict Community User Access to Cases (Generally Available)

Manage whether users with Customer Community Plus licenses can view and edit cases for which they are listed as the contact. You can disable the standard sharing behavior that grants the assigned contact and everyone in the contact's role hierarchy access to a case. After disabling the sharing behavior, you can control access to cases by creating a manual share or by using Apex managed sharing.

#### See What Your Guest Users See

To take the guesswork out of your community's security design, you can see what your Lightning community looks like to visitors who haven't logged in. Previously, when you previewed a community, you were viewing it as an authenticated user, so it was difficult to know exactly what guest users could see.

#### Set the iframeDomain Cookie in Sites and Communities in Internet Explorer

URL variables, such as \_iframeDomain, aren't always saved when navigating between pages in Internet Explorer. This behavior prevented users from embedding some pages in iframes. Now, if the \_iframeDomain variable isn't present, iframes are allowed on the whitelisted URL domain set in the iframeDomain cookie.

### Localize Login Prompts and Error Messages for Login Discovery

When you use the Login Discovery page type in Communities, you can localize the login prompt with a custom label. You can also localize custom login error messages in Apex.

## Give New Users a Taste of Your Community Before They Sign Up

We've added async email verification for community self-registration. Async email lets users verify their email address at any time. You send users a verification link in an email message. Users can verify their email address by clicking the link when it's convenient. Welcome new members by giving them access to your community without delay. You can also customize the email message so that users can recognize your brand.

### Create Your Own Verify Page for Community Sign-Ups

When users sign up for your community with an email address or phone number, Salesforce sends them a verification code and generates the Verify page for users to confirm their identity. You've been able to brand the Verify page with your logo, colors, and background, but the form comes from Salesforce. Now you can customize your Verify page's layout and text with Visualforce and a couple of Apex methods.

Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

This critical update, released in Spring '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

# Use Sharing Sets with Campaigns, Opportunities, and Orders (Generally Available)

You can now grant portal or community users access to campaigns, opportunities, and orders using sharing sets.

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Salesforce Help: Use Sharing Sets in Communities (can be outdated or unavailable during release preview)

# Use Sharing Sets with Contacts with Multiple Accounts (Generally Available)

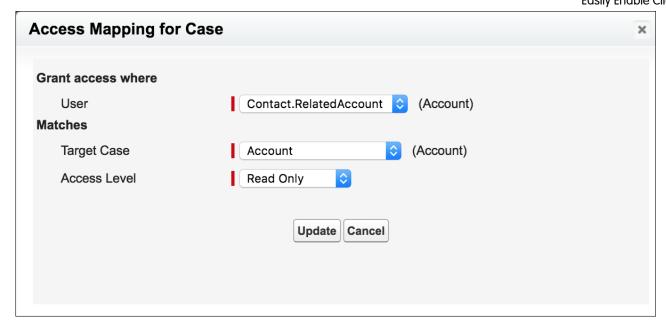
Simplify record access by using existing account contact relationships. Let's say you create a community or portal user from a contact that is associated with multiple accounts. You can then create a sharing set that grants access to all records with a lookup to any accounts related to that contact.

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Users with the following licenses or their login equivalents can use sharing sets.

- Customer Community
- Customer Community Plus
- Partner Community
- Lightning External Apps
- Lightning External Apps Plus

**How:** In Setup, enter *Communities Settings* in the Quick Find box, then select **Communities Settings**. In the Sharing Sets related list, click **New**. Under Configure Access, set up the access mapping. For the user, select **Contact.RelatedAccount**, and for the target object, select **Account**.



#### SEE ALSO:

Salesforce Help: Use Sharing Sets in Communities (can be outdated or unavailable during release preview)
Salesforce Help: Set Up Contacts to Multiple Accounts (can be outdated or unavailable during release preview)

# Enable External Org-Wide Defaults in Orgs with Communities or Portals (Critical Update)

This update enables the External Sharing Model and provides admins with a list of objects whose default external access settings must be reviewed. This update helps you secure your data by letting you set more restrictive levels of access for external users. Before Spring '19, org-wide defaults gave internal and external users the same default access to objects. After activating this update, external org-wide defaults are enabled in all orgs with communities or portals.

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

When: This critical update is enforced on June 17, 2019. Orgs that turn on communities after this date have these defaults enabled.

**Why:** When external org-wide defaults are first enabled, the external access levels are set to match the internal access levels. The default settings might give more data access to external users than you want. In the Critical Update Console, we provide a list of objects that don't meet Salesforce's security recommendations for external users.

**How:** From Setup, enter *Critical Updates* in the Quick Find box, then select **Critical Updates**. For Enable External Org-Wide Defaults in Orgs with Communities or Portals, click **Activate**.

After enabling external org-wide defaults, review your access levels for external users. From Setup, enter *Sharing Settings* in the Quick Find box, then select **Sharing Settings**. Under Organization-Wide Defaults, edit the default external access.

### SEE ALSO:

Salesforce Help: Setting the External Organization-Wide Defaults (can be outdated or unavailable during release preview)

# Assign a Content Security Policy Level to Your Community

The default script security level is now *strict*, which provides optimum security. A strict Content Security Policy (CSP) blocks inline scripts from running in your site. It allows non-script resources, such as images from approved, third-party hosts to display. We recommend using the strict level.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

When: This change takes effect in February 2019.

**How:** You can change the security levels in **Settings** > **Security in Community Builder**.



**Note:** We removed the Allow Inline Scripts and Script Access to Any Third-party Host option for new communities. This option was the default option, and is still an option for existing communities.

# Avoid CSP Errors When Using CMS Connect

New integrations with your community's Content Security Policy (CSP) settings helps CMS Connect avoid issues before you publish. CMS Connect attempts to whitelist external URLs for you and warn you when it recognizes issues.

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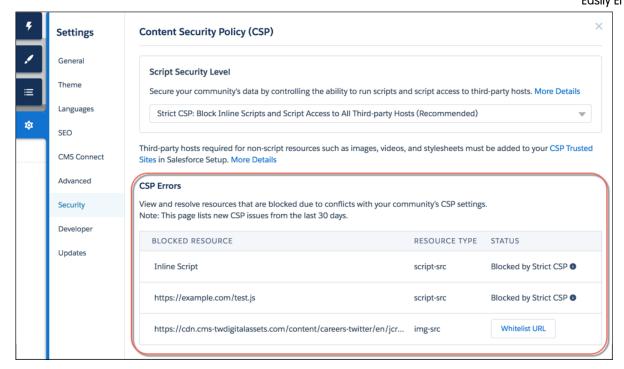
#### SEE ALSO:

Salesforce Help: Content Security Policy (can be outdated or unavailable during release preview)
Salesforce Help: CMS Connect (can be outdated or unavailable during release preview)

### Discover and Resolve CSP Resource Issues

It wasn't always easy to know when certain resources conflicted with your Lightning community's Content Security Policy (CSP) settings. But with the CSP Errors section in the Security tab of Community Builder, you can now see where the issues lie and guickly resolve them.

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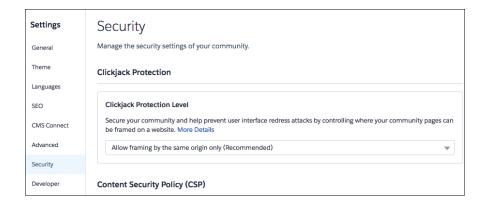


# Enable Clickjack Protection More Easily in Community Builder

You can now enable clickjack protection levels for Lightning communities right from Community Builder. Clickjack protection helps prevent attacks that trick users into clicking something they shouldn't.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**How:** In **Settings**, go to **Security**, and select a protection level from the dropdown.



# Restrict Community User Access to Cases (Generally Available)

Manage whether users with Customer Community Plus licenses can view and edit cases for which they are listed as the contact. You can disable the standard sharing behavior that grants the assigned contact and everyone in the contact's role hierarchy access to a case. After disabling the sharing behavior, you can control access to cases by creating a manual share or by using Apex managed sharing.

Easily Enable Clickjack

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** For instance, your company has multiple offices but wants to keep its cases private within each office location. By disabling the standard sharing behavior, community users who transfer from one location to another don't automatically retain access to their cases.

**How:** From Setup, enter *Sharing Settings* in the Quick Find box, and then select **Sharing Settings**. In the Other Settings section, deselect **Grant community users access to related cases**.

SEE ALSO:

Salesforce Help: Restrict Community Users' Access to Cases (can be outdated or unavailable during release preview)

### See What Your Guest Users See

To take the guesswork out of your community's security design, you can see what your Lightning community looks like to visitors who haven't logged in. Previously, when you previewed a community, you were viewing it as an authenticated user, so it was difficult to know exactly what guest users could see.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

**How:** After you click the **Preview** button in Community Builder, click > **Guest User** to open the community in a new browser tab and view it as a guest user. Now, as long your community includes one public page (such as the Home page), you can use the **Guest User** option to preview your community.



# Set the iframeDomain Cookie in Sites and Communities in Internet Explorer

URL variables, such as \_iframeDomain, aren't always saved when navigating between pages in Internet Explorer. This behavior prevented users from embedding some pages in iframes. Now, if the \_iframeDomain variable isn't present, iframes are allowed on the whitelisted URL domain set in the iframeDomain cookie.

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

How: Create a Cookie class using the iframeDomain value. This cookie allows framing by www.example.com.

```
Cookie iframeDomainCookie = ApexPages.currentPage().getCookies().get('iframeDomain');

if (iframeDomainCookie == null) {
   iframeDomainCookie = new Cookie('iframeDomain','www.example.com');

   // Set the new cookie for the page
```

```
ApexPages.currentPage().setCookies(new Cookie[]{iframeDomainCookie});
}
```

SEE ALSO:

Visualforce Developer Guide: Cookie Class (can be outdated or unavailable during release preview)

# Localize Login Prompts and Error Messages for Login Discovery

When you use the Login Discovery page type in Communities, you can localize the login prompt with a custom label. You can also localize custom login error messages in Apex.

**Where:** This change is available in all communities accessed through Lightning Experience and Salesforce Classic, and is available in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Salesforce Help: Set Up the Community Cloud Content Delivery Network

# Give New Users a Taste of Your Community Before They Sign Up

We've added async email verification for community self-registration. Async email lets users verify their email address at any time. You send users a verification link in an email message. Users can verify their email address by clicking the link when it's convenient. Welcome new members by giving them access to your community without delay. You can also customize the email message so that users can recognize your brand.

**Where:** This change is available in all communities accessed through Lightning Experience and Salesforce Classic, and is available in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Send Asynchronous Email Verifications

# Create Your Own Verify Page for Community Sign-Ups

When users sign up for your community with an email address or phone number, Salesforce sends them a verification code and generates the Verify page for users to confirm their identity. You've been able to brand the Verify page with your logo, colors, and background, but the form comes from Salesforce. Now you can customize your Verify page's layout and text with Visualforce and a couple of Apex methods.

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SEE ALSO:

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# Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

This critical update, released in Spring '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Files in Lightning Communities: Permissions, User Role, and Security

New features and updates to Files in Lightning communities include the ability to let guest users upload files and new ways to manage users, roles, and permissions.

#### IN THIS SECTION:

### Track Stats on the Community File Detail Page

It's useful to know how many times people view and download your files. Now you can see these statistics at a glance in the File Engagement card on the file detail page in your community. The file's lifetime views and downloads are counted from all user interfaces, including API and mobile.

### Let Community Guest Users Upload Files

Promote file sharing in your communities. Let guest users upload files using the lightning:fileUpload component.

# Track Stats on the Community File Detail Page

It's useful to know how many times people view and download your files. Now you can see these statistics at a glance in the File Engagement card on the file detail page in your community. The file's lifetime views and downloads are counted from all user interfaces, including API and mobile.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, and Developer editions.

**How:** Add the File Engagement card to the file detail page by to show stats.





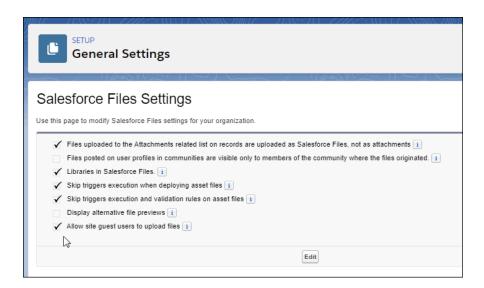
**Note:** Only file types that display a preview are counted. Views and downloads through public links or content deliveries aren't counted in the file engagement stats for files in the org.

# Let Community Guest Users Upload Files

Promote file sharing in your communities. Let guest users upload files using the lightning:fileUpload component.

**Where:** This change applies to Lightning Experience in Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** By default, guest user files are blocked from being uploaded. Once developer customizations (Lightning pages, for instance) have been created, admins can change the settings to let guest users upload files. To enable, go to Setup > General Settings, and select **Allow site guest users to upload files**.





**Note:** By default, unassigned files are public. As a best practice, set up a trigger to assign an owner to files uploaded by guest users. You may also wish to restrict file upload size or type using community file moderation.

# Other Changes in Communities

Learn about smaller changes that improve your experience with communities.

#### IN THIS SECTION:

### Control Community User Visibility (Generally Available)

Some things should just be private. Now you can control whether members can see members of other communities or just their own. Enable Community User Visibility to let members view members of other communities. Turn the option off to keep your community members hidden.

### Create Reports on a Community's Topic Usage

Set up a report to see all your community's topics and the posts and questions that they apply to. Create a custom report type with networks as the primary object, topic assignments as the second object, and feed posts as the third object. You can also include feed comments as a fourth object. You can use this information to check your knowledge base for relevant articles and content.

#### Take Action in Salesforce from Analytics Dashboards

The Wave Dashboard component now supports opening Salesforce records and performing record-level actions and bulk actions. Set up a menu of actions on a chart or table, or configure a bulk action on a table widget. Then your community users can open records and take action in Salesforce directly from the Analytics dashboard, without leaving your community. An action menu can include object-specific and global actions defined in Salesforce, such as creating cases, updating accounts, and posting to Chatter. Bulk action menu options let users perform actions on multiple Salesforce records with only one click.

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# Take Action in Salesforce from Analytics Dashboards

The Wave Dashboard component now supports opening Salesforce records and performing record-level actions and bulk actions. Set up a menu of actions on a chart or table, or configure a bulk action on a table widget. Then your community users can open records and take action in Salesforce directly from the Analytics dashboard, without leaving your community. An action menu can include object-specific and global actions defined in Salesforce, such as creating cases, updating accounts, and posting to Chatter. Bulk action menu options let users perform actions on multiple Salesforce records with only one click.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic. Communities are available in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Users with a Customer Community Plus, Partner Community, or Lightning External Apps Plus license can use Analytics for Communities.

SEE ALSO:

Take Action in Salesforce from Analytics for Communities

# Chatter: Sticky Sort, Hyperlinks in Posts, Better Redirect URLs, Reports on Topics and Posts

Users' feed sort options remain even when they navigate away. Include hyperlinks in posts and comments. Redirect URLs in feeds are shorter and include the feed item ID. Run a report on posts and comments with a particular topic, and see the post and comment and other details.

#### IN THIS SECTION:

#### Sort Selections Are Sticky

In Lightning Experience, the feed sort option that a user selects stays in place when the user navigates away from a feed and then returns. Users have a better experience with greater control over how they view their feeds.

### Add Hyperlinks to Your Posts and Comments

In Chatter, you can now add links to posts and comments.

### Redirect URLs Are Shorter and More Informative

In Lightning Experience, the redirect URLs that appear in your browser address field are now more succinct and clear. We fixed URL redirection in feeds to follow platform standards. The standard syntax is shorter, easier on the eyes, and includes the informative feed item ID.

### Create Reports on Topics and the Posts That Use Them

You can now report on posts and comments with a particular topic and see the post and comment content and other details. Create a custom report type with topic assignments as the primary object, and feed posts as the secondary object. You can also include feed comments as a third object. Previously, you could create reports that gathered the records, including posts, that included a particular topic. However, you couldn't view the content of the posts.

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In Lightning Experience, the feed sort option that a user selects stays in place when the user navigates away from a feed and then returns. Users have a better experience with greater control over how they view their feeds.

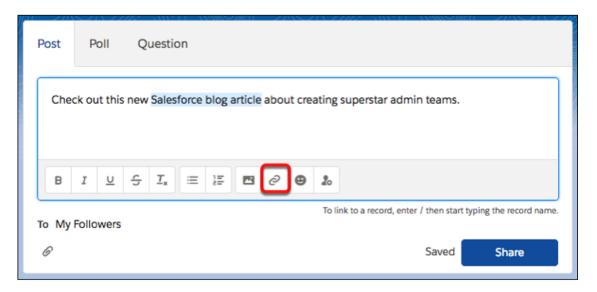
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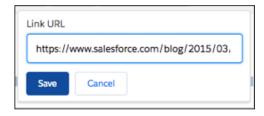
# Add Hyperlinks to Your Posts and Comments

In Chatter, you can now add links to posts and comments.

**Where:** This change applies to Lightning Experience in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** With the rich text editor enabled, highlight the link text in your post or comment. Click the phyperlink icon, enter a URL, and click **Save**.





Chatter REST API and Chatter in Apex support hyperlinks in posts and comments.

SEE ALSO:

IdeaExchange: Hyperlink button in Lightning for Chatter posts

# Redirect URLs Are Shorter and More Informative

In Lightning Experience, the redirect URLs that appear in your browser address field are now more succinct and clear. We fixed URL redirection in feeds to follow platform standards. The standard syntax is shorter, easier on the eyes, and includes the informative feed item ID.

**Where:** This change applies to Lightning Experience in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The old syntax redirect URL that you got with links in Chatter notification emails was long and provided no useful information about the feed item.

https://domain.com/one/one.app#eyJjb21wb25lbnREZWYiOiXczmb3 JjZUNoYXROZXI6ZLOGVza3RvcENoYXROZXIiLCJhdHRyaWJ1dGVzI jp7ImZ1ZWRFbGVtZW50SWQiOiIwRDVCMDAwMDAwbFQ5d0ci

The new syntax is /lightning/<feedItemId>/view. It's shorter, and it includes the ever-useful feed item ID.

https://domain.com/lightning/r/OD5BZ23000000yN9wGKAS/view

# Create Reports on Topics and the Posts That Use Them

You can now report on posts and comments with a particular topic and see the post and comment content and other details. Create a custom report type with topic assignments as the primary object, and feed posts as the secondary object. You can also include feed comments as a third object. Previously, you could create reports that gathered the records, including posts, that included a particular topic. However, you couldn't view the content of the posts.

**Where:** This change applies to Lightning Experience and Salesforce Classic (not available in all orgs) in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Files: Asset Files Updates in Managed Packages and Folders in Org Asset Libraries

Make updates to asset files in managed packages and organize your org asset library with folders.

IN THIS SECTION:

### Update Asset Files in Managed Packages

You can update and publish existing asset files in managed packages. For instance, when you improve the image quality of a logo or update product images, your subscribers get the updated asset files automatically. Managed packages offer you more control over asset files. Although you can update an asset file and its associated documents in the developer org, they can't be modified or deleted from a subscriber org.

### Organize Your Asset Library with Folders

Is your org asset library one long list of files? Now you can organize those asset files into folders by type or use, and keep special asset files for promotional events or holidays in their own folders. Create, rename, and delete folders in the org asset library from the desktop. Library folders are visible from your mobile device.

#### **Query All Files**

With the new Query All Files permission, View All Data users can query ContentDocument and ContentVersion and retrieve all files in the org, including files in non-member libraries and files in unlisted groups. On its own, the View All Data permission only allows you to query files you own or have access to.

#### Embed Fully Functional Quip Documents Directly in Salesforce (Beta)

Bring Quip documents, spreadsheets, slides, and chat rooms directly into your Lightning apps with the new Quip Document component. Your users get familiar Quip features like real-time updates, comments, and @mentions without leaving Salesforce. You can also create templates to streamline your team's workflow.

# Update Asset Files in Managed Packages

You can update and publish existing asset files in managed packages. For instance, when you improve the image quality of a logo or update product images, your subscribers get the updated asset files automatically. Managed packages offer you more control over asset files. Although you can update an asset file and its associated documents in the developer org, they can't be modified or deleted from a subscriber org.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Professional, Enterprise, Performance, and Unlimited editions.

**How:** You can update or add asset files to a managed package from Setup.

In a release-managed or a beta-managed package, users can delete content assets in the developer org, but not in subscriber orgs. In a release-managed package, you can upload a new version of a document or asset to the developer org, but not to a subscriber org.

Managed packages do not support updates to existing shares of asset files using ContentDocumentLink. Both developers and subscribers can add new shares or update existing shares in their orgs.

When an asset file is part of a managed package, the underlying file associated with the asset file can't be updated or deleted. This behavior is true regardless of whether the asset file is referenced anywhere.

# Organize Your Asset Library with Folders

Is your org asset library one long list of files? Now you can organize those asset files into folders by type or use, and keep special asset files for promotional events or holidays in their own folders. Create, rename, and delete folders in the org asset library from the desktop. Library folders are visible from your mobile device.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Professional, Enterprise, Performance, and Unlimited editions.

**How:** Folders are enabled by default in the org asset library. Click **New Folder**, and start getting organized!

# **Query All Files**

With the new Query All Files permission, View All Data users can query ContentDocument and ContentVersion and retrieve all files in the org, including files in non-member libraries and files in unlisted groups. On its own, the View All Data permission only allows you to query files you own or have access to.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, and Unlimited editions.

**How:** Enable the profile permission under **System Permissions** and **App Permissions** in Setup.

# Embed Fully Functional Quip Documents Directly in Salesforce (Beta)

Bring Quip documents, spreadsheets, slides, and chat rooms directly into your Lightning apps with the new Quip Document component. Your users get familiar Quip features like real-time updates, comments, and @mentions without leaving Salesforce. You can also create templates to streamline your team's workflow.

**Where:** This change applies to Lightning Experience in Professional, Performance, Unlimited, and Developer editions. This change applies only to Lightning apps.



**Note:** As a beta feature, the Quip Document component is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related non-Salesforce applications and content apply equally to your use of this feature.

Who: Available in orgs with a Quip Enterprise plan or free trial.

**Why:** Users can collaborate on documents right where they work without switching apps. All documents created from a Quip Document component are automatically attached as files to the Salesforce record. For more information, see Add Quip Documents Directly to Salesforce Records (Beta) on page 344.

# Mobile: Do More on the Go

Check out the latest features for getting more done no matter where you are.

### IN THIS SECTION:

### Salesforce App: Parity for Chatter and Sales Features

The latest version of the Salesforce app has Chatter parity with desktop for sort order in community feeds. Sales features for removing account or opportunity teams help users do the same tasks they regularly complete on desktop. Feature parity helps users do more on the go and work seamlessly across devices no matter where their day takes them.

# Salesforce App: Parity for Chatter and Sales Features

The latest version of the Salesforce app has Chatter parity with desktop for sort order in community feeds. Sales features for removing account or opportunity teams help users do the same tasks they regularly complete on desktop. Feature parity helps users do more on the go and work seamlessly across devices no matter where their day takes them.

#### IN THIS SECTION:

### Access the Salesforce Mobile App

Your users have several options for accessing Salesforce on mobile devices that meet minimum platform requirements. Install Salesforce for Android or iOS. Users can download the app from Google Play or the App Store. Access Salesforce mobile web from a supported mobile browser on select Android, Apple, or Windows mobile devices. This option doesn't require anything to be installed.

#### Everything That's New in the Salesforce App

Our latest round of new and improved Salesforce app features makes it easier to access Salesforce on the go.

#### Spring '19 Features That Are Different or Not Available in the Salesforce App

The Salesforce mobile app doesn't include all the functionality that's available in the full Salesforce site, whether your org is using Lightning Experience or Salesforce Classic. Learn about the Spring '19 Salesforce enhancements that either aren't available, have functional gaps from the full site, or work differently in the mobile app.

# Access the Salesforce Mobile App

Your users have several options for accessing Salesforce on mobile devices that meet minimum platform requirements. Install Salesforce for Android or iOS. Users can download the app from Google Play or the App Store. Access Salesforce mobile web from a supported mobile browser on select Android, Apple, or Windows mobile devices. This option doesn't require anything to be installed.

Where: For the current minimum platform requirements, see Requirements for the Salesforce App in Salesforce Help.

# Everything That's New in the Salesforce App

Our latest round of new and improved Salesforce app features makes it easier to access Salesforce on the go.

The Salesforce 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 user.

Salesforce App Enhancements and Changes	Salesforce for Android	Salesforce for iOS	Salesforce Mobile Web	Set Up in the Full Site
Device and Browser Support				
Updated Salesforce App Requirements	✓	✓	✓	
Sales Features				
Keep More Related Records When Transferring Accounts Using the Salesforce App	<b>~</b>	<b>~</b>	<b>~</b>	
Remove an Account or Opportunity Team Using the Salesforce App	✓	✓	✓	
${\sf Keep Your Team  Organized  with  Public  Calendars  in  Lightning  Experience}$	✓	✓	✓	<b>✓</b>
Book Resources for Events	✓	✓	✓	<b>✓</b>
Add Attendees Without Setting Up Lightning Sync	✓	✓	✓	<b>✓</b>
See More Details from the Event Preview	✓	✓	✓	✓
See Files Related to Your Events	✓	✓	✓	<b>~</b>

Salesforce App Enhancements and Changes	Salesforce for Android	Salesforce for iOS	Salesforce Mobile Web	Set Up in the Full Site
Sort Order Is Sticky on Mobile, Too			✓	
Salesforce Communities				
Translate Community Feed Items			✓	✓
Get Answers Fast			✓	<b>~</b>
Access and Security				
Delete Push Registrations for Mobile Devices	✓	✓		<b>✓</b>
Other Enhancements				
Salesforce Mobile App Documentation Updates				

## Sort Order Is Sticky on Mobile

You can set a default sort order for a community feed. Users can select some other sort order that stays in place when they navigate away from a feed and then return. You get a great way to design your users' initial experience, and users get greater control over how they view their feeds.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Sort Selections Are Sticky

Define a Default Feed Sort Order in Community Builder

### Translate Community Feed Items on Your Mobile Device

Add a Translate with Google button to every post, question, comment, answer, and reply to let users translate content, even on mobile. Translations are offered through a Google Cloud Translation API key that you provide. Over 50 languages are available to get people talking.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Translate Feed Items on the Spot

### **Block Topic Selection on Questions**

You can block topic selection when a user asks a question in a community topic from a mobile device. For example, with blocking in place, a user who selects a topic and then asks a question cannot select a new topic in the ask dialog. Instead, the dialog shows the read-only current topic in the Posting to field.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Help Your Members Stay on Topic

#### Get Answers Fast

Set up Ask buttons to respond to a user's question with similar questions and relevant discussions and articles. If an article has the answer the user needs, the user can close their question. If it doesn't, the user can continue with their question.

**Where:** This change applies to Lightning communities accessed through Lightning Experience and Salesforce Classic in Essentials, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Help Customers Get Answers Fast, and Lighten Your Support Load

# Updated Salesforce App Requirements

Salesforce is available on many popular mobile platforms. Salesforce is revising the requirements for using Salesforce for Android, Salesforce for iOS, and Salesforce mobile web. Learn about the mobile platform requirements and the devices that we use for feature and performance testing as we continue improving the Salesforce experience.

### Mobile Platform Requirements

Users can run Salesforce on mobile devices that meet these mobile platform requirements.

Operating System and Version Requirements	Mobile Browser Requirements*
Android 6.0 or later	Google Chrome on Android
iOS 11.3 or later	Apple Safari on iOS

<sup>\*</sup>The latest mobile browser version is required. Mobile browser requirements apply to Salesforce mobile web only.

To allow for innovation and to keep Salesforce current in the rapidly evolving mobile market, minimum platform requirements are subject to change at the sole discretion of Salesforce, with or without advance notice.

### Mobile Devices Used for Salesforce Testing

Salesforce performs automated and manual testing of the Salesforce for iOS and Android and Salesforce mobile web on a select set of mobile devices. For the Summer '18 release, this is the list of devices used for testing.

Platform	Phones	Tablets
Android	<ul> <li>Google Pixel 3 / Pixel 3 XL</li> <li>Google Pixel 2 / Pixel 2 XL</li> <li>Google Pixel / Pixel XL</li> </ul>	<ul><li>Samsung Tab A 9.7</li><li>Samsung Tab A 8.0</li></ul>

Platform	Phones	Tablets
	<ul> <li>Google Nexus 6P</li> <li>Samsung Galaxy S9</li> <li>Samsung Galaxy S8</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>	
iOS	<ul> <li>iPhone XS / XS Max</li> <li>iPhone XR</li> <li>iPhone X</li> <li>iPhone 8 / 8 Plus</li> <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" (2nd Generation)</li> <li>iPad Pro 12.9"</li> <li>iPad Pro 9.7"</li> <li>iPad 2017 (5th Generation)</li> <li>iPad Air 2</li> <li>iPad Mini 4</li> </ul>

Customers aren't blocked from using Salesforce on untested devices that meet current platform requirements. Salesforce may not be able to replicate some issues for customers using Salesforce on untested devices on due to manufacturer-specific customizations.

To allow for innovation and to keep Salesforce current in the rapidly evolving mobile market, the list of Salesforce-tested devices is subject to change at the sole discretion of Salesforce, with or without advance notice.

### Salesforce Updates

Customers whose devices meet current minimum platform requirements are eligible to receive Salesforce feature updates and fixes.

Our goal is to release Salesforce mobile feature and functionality updates to coincide with each Salesforce major release. This information is provided to help with your release planning, but is subject to change at Salesforce's discretion.

#### Salesforce Mobile Web

Enhanced features and functionality are automatically available with each Salesforce major release.

#### Salesforce for Android and iOS

Enhanced features and functionality are provided in major version updates. We aim to release a new major version of Salesforce for Android and Salesforce for iOS after the completion of each Salesforce major release to all production instances. The timeframe in which a new major version is released varies and can be impacted by factors outside of 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 from the App Store and Google Play as long as their mobile devices meet Salesforce's current minimum mobile operating system requirements. If a device is running an older operating system, updated versions of Salesforce don't appear in the app stores.

### **Customer Support Services for Salesforce**

Salesforce Customer Support uses commercially reasonable efforts to troubleshoot issues with Salesforce, provided:

- A user's device meets current minimum platform requirements
- Salesforce for Android and iOS users have the most recent version installed

When customers run Salesforce on Salesforce-tested devices, it's more efficient for us to troubleshoot issues. For customers using untested devices, even those meeting minimum platform requirements, we might not be able to replicate some issues due to device manufacturer–specific customizations.

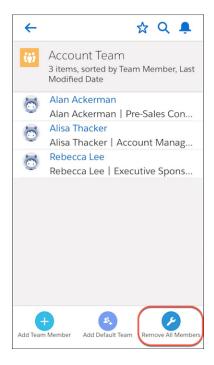
Running Salesforce on older devices or devices with low computation and memory capabilities can adversely impact performance, as compared to performance on Salesforce-tested devices.

## Remove an Account or Opportunity Team Using the Salesforce App

When an account or opportunity team isn't needed, account or opportunity owners can remove the entire team with a tap. Previously, you had to remove a team one member at a time.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**How:** To remove a team, on the team's related list, tap **Remove All Members**.



#### SEE ALSO:

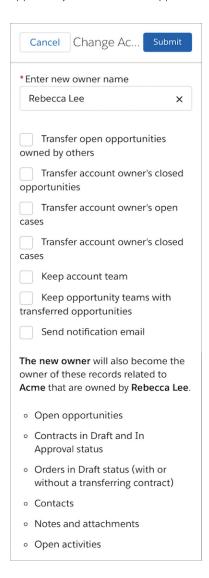
Remove an Account Team in Lightning Experience
Opportunities: Remove a Team in Lightning Experience

## Keep More Related Records When Transferring Accounts Using the Salesforce App

When an account rep transfers an account to a different owner, more of the historical information that the new owner needs is transferred too.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Contact Manager, Group, Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Account owners can transfer opportunities that they own, open cases, and closed cases. They can keep the account team and opportunity teams related to opportunities being transferred or delete them.



### SEE ALSO:

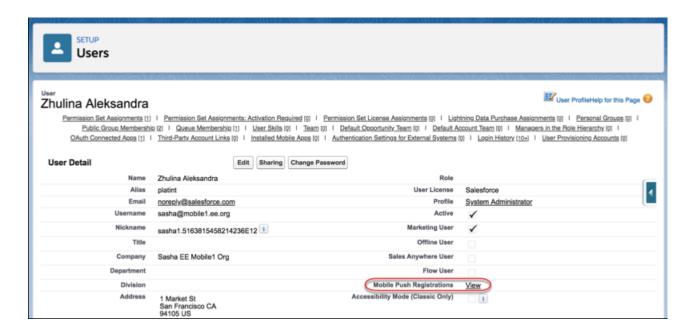
Keep More Related Records When Transferring Accounts in Lightning Experience

## Delete Push Registrations for Mobile Devices

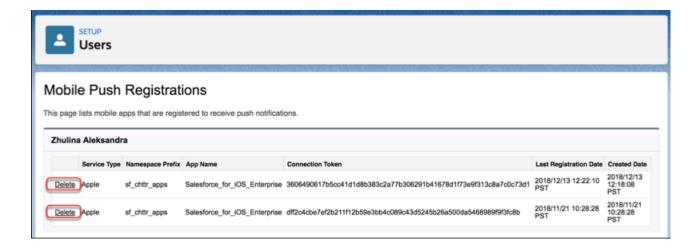
Admins can now ensure that push notifications aren't being sent to users whose refresh tokens have been revoked. Deleting push registrations for mobile devices gives you more control over who receives Salesforce data from your org.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the mobile app in all Editions.

**How:** After revoking a refresh token for a user, delete push registrations for each user as well. In the record detail page for the user, go to **Mobile Push Registrations** and **View** all devices.



Delete each registered device for the application the token was revoked for to ensure that push notifications are no longer sent to the user.



Note: Make sure the Application name under **OAuth Connected Apps** and App Name under **Mobile Push Registrations** are the same, so you revoke access to the same application. The names may look slightly different because of formatting.

## Salesforce Mobile App Documentation Updates

With significant changes coming to the Salesforce mobile app over the next few releases, we made the content for admins in Salesforce Help easier to navigate. All Salesforce app content is now in one place in Salesforce Help with links to our guides, Trailhead modules, and other content to help your mobile users succeed. Check out our new Salesforce Mobile App page to see everything.

# Spring '19 Features That Are Different or Not Available in the Salesforce App

The Salesforce mobile app doesn't include all the functionality that's available in the full Salesforce site, whether your org is using Lightning Experience or Salesforce Classic. Learn about the Spring '19 Salesforce enhancements that either aren't available, have functional gaps from the full site, or work differently in the mobile app.



**Note:** For the complete list of differences between the Salesforce app and the full site, see What's Different or Not Available in the Salesforce App in Salesforce Help.

# Financial Services Cloud: Lightning Scheduler and Financial Services Analytics

Lightning Scheduler gives you the tools you need to simplify appointment scheduling for your customers and prospects. Financial Services Analytics, a suite of applications with datasets, data flows, and dashboards, helps you convert data to insights faster.

#### IN THIS SECTION:

### Personalize Customer Appointments with Lightning Scheduler

Lightning Scheduler is a powerful set of features that make it easy to schedule customer appointments with the right banker or advisor at the right place and time.

#### Get Customer Insights Fast with Financial Services Analytics

Financial Services Analytics, a suite of applications, helps financial advisors and personal bankers manage their books of business with insights about client goals and satisfaction, leads, and referrals. Plus, app dashboards make it easier for managers to review and evaluate individual and regional performance.

# Personalize Customer Appointments with Lightning Scheduler

Lightning Scheduler is a powerful set of features that make it easy to schedule customer appointments with the right banker or advisor at the right place and time.

Where: This feature is available for an extra cost in Enterprise and Unlimited editions.

### SEE ALSO:

Create Personalized Appointments with Lightning Scheduler

Salesforce Help: Manage Appointments with Lightning Scheduler (can be outdated or unavailable during release preview)

# Get Customer Insights Fast with Financial Services Analytics

Financial Services Analytics, a suite of applications, helps financial advisors and personal bankers manage their books of business with insights about client goals and satisfaction, leads, and referrals. Plus, app dashboards make it easier for managers to review and evaluate individual and regional performance.

Where: This feature is available for an extra cost in Enterprise, Unlimited, and Developer editions.

**Why:** Financial Services managers can review and evaluate individual and regional performance with the app's ready-made dashboards and datasets. Here's the app's Client Attrition dashboard, which identifies clients at risk of leaving so you can pay closer attention to them



**How:** In Analytics Studio, select **Create**, choose **App**, and select **Start from Template**. Select the **Financial Services Analytics** template, and follow the instructions in the wizard.

# Health Cloud: Social Determinants of Care, Referral Management, and More

Help patients holistically, streamline patient referrals, and provide industry-standard codes for preauthorization requests. Build patient relationships and personalized journeys, offer more flexible assessments, and create a custom smart phone app.

#### IN THIS SECTION:

#### Deliver Holistic Care and Support with Social Determinants of Health Insights

Understand the social and environmental factors that adversely affect your patients or members, and address them with interventions that make the difference between struggling and thriving. Capture critical social and environmental factors like homelessness, food insecurity, and low income by identifying determinants, barriers, and interventions to help mitigate avoidable adverse health events.

#### Streamline Patient Referrals with Referral Management

Streamline patient referrals with new tools that enhance management and collaboration throughout the entire referral process, from submission, to onboarding, to care. Use referral scoring to prioritize and process referrals more quickly with access to relevant details, all on one connected platform.

#### Step Up Patient Care with Campaigns and Personalized Journeys

Care Coordinators now have an easy way to enroll cohorts of patients into campaigns while leveraging the multi-dimensional filtering of the Patient List. Enrolling patients in campaigns can also help unlock the power of Marketing Cloud's Journey Builder and distributed marketing for richly personalized, dynamic engagement at scale.

### Complete a Health Assessment on Someone's Behalf

An assessment survey is a valuable way to efficiently gather information about the health of the people whose care you manage. But what if you're performing a phone screening or managing someone who doesn't have access to a community? Now you can open the assessment and complete the guestions on behalf of the patient or member you're managing.

#### Add Code Sets to Pre-Authorization Requests and Approval Processes

When a provider submits an authorization request, it must include codes for what is being requested and why. Similarly, payers must respond with what is being approved by using industry-standard code sets. Give service agents, provider staff, and others involved in prior-authorization requests access to industry-standard procedure or diagnosis codes.

### Engage Patients and Members With the Health Cloud App Template

Easily build custom branded mobile apps for patients and members to drive digital engagement and empower health consumers to stay on top of health goals, get faster access to information, adhere to treatment plans and take control over their own health journey. Use the new Mobile Publisher for Community Cloud to package and distribute these native apps on the Apple and Google App Stores.

### Personalize Patient and Member Appointments with Lightning Scheduler

Lightning Scheduler is a powerful set of features that makes it easy to schedule appointments with a care coordinator or case manager.

Health Cloud Has New Objects

These objects are new.

Changed Health Cloud Objects

We added custom fields to the following objects.

New and Changed Health Cloud Lightning Components

We added a component to Health Cloud.

# Deliver Holistic Care and Support with Social Determinants of Health Insights

Understand the social and environmental factors that adversely affect your patients or members, and address them with interventions that make the difference between struggling and thriving. Capture critical social and environmental factors like homelessness, food insecurity, and low income by identifying determinants, barriers, and interventions to help mitigate avoidable adverse health events.

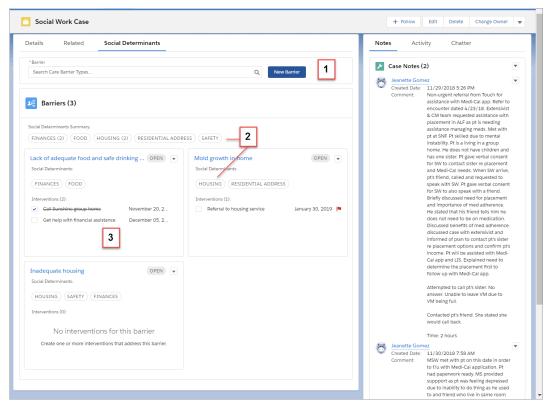
**Where:** This feature is available through the Health Cloud Platform permission set license in Lightning Experience in Enterprise, Performance, and Unlimited editions where Health Cloud is enabled.

Who: Users must have the Health Cloud Permission Set License and the Health Cloud Platform permission set assigned to them.

**Why:** To effectively serve all members or patients—especially high-need, high-cost individuals—you need tools to efficiently capture, track, and follow up on social determinants of health. Health Cloud gives you a complete data model and a robust Lightning Experience component that helps you identify issues and create solutions.

**How:** Add the Care Determinants Lightning component to a case or account Lightning record page. Then use the new standard objects to support a customizable internal library of barriers, social determinants, and interventions.

From a case or an account, the Care Determinants Lightning component captures important information about issues and lets you create an intervention plan to address them.



Using the Care Determinants component you can:

- Create barriers that describe the social or environmental issues that affect someone (1).
- Select the social determinants that are relevant to each barrier, and view an aggregated list of determinants at the top of the card list (2).
- Create and view tasks and other interventions that address the barrier (3).

The social determinants data model includes these standard objects.

- Care Barrier Type—the standard, defined list of barriers used within your company, including the related codes and code types.
- Care Determinant Type—the list of determinants of health maintained in your organization, including the domain and type.
- Care Intervention Type—the standard, defined list of available referrals, programs, or other interventions maintained in your organization.
- Care Barrier—the circumstances or obstacles affecting a member or patient.
- Care Barrier Determinant, which relates a barrier to a determinant for a member or patient.
- Care Determinant—the determinants of health that are relevant to a member or patient.

# Streamline Patient Referrals with Referral Management

Streamline patient referrals with new tools that enhance management and collaboration throughout the entire referral process, from submission, to onboarding, to care. Use referral scoring to prioritize and process referrals more quickly with access to relevant details, all on one connected platform.

**Where:** This feature is available through the Health Cloud Platform permission set license in Lightning Experience in Enterprise, Performance, and Unlimited editions where Health Cloud is enabled. The reports for the referral management feature are available through an unmanaged package.

Who: Users must have the Health Cloud Permission Set License and the Health Cloud Platform permission set assigned to them.

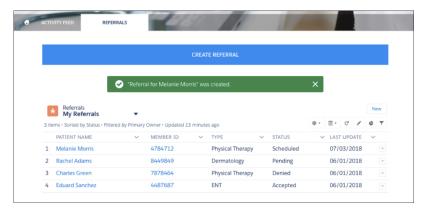
**Why:** Referral management closes the loop on the referral process—no more dropped referrals. Prioritize the best referrals, ensure timely referral processing, and track the referral to the final confirmation back to the referring physician.

- Support multiple channels for how referrals come in to your company—whether it's through faxes, through a provider community, or from a call center.
- Get intelligent insights into referral patterns, including scores for top referrers, referral priority based on insurance or patient condition, closure tracking, and referral priority.
- Track referrals from submission to closure, including closure tracking, escalations, and reminders to ensure that no referral is dropped.

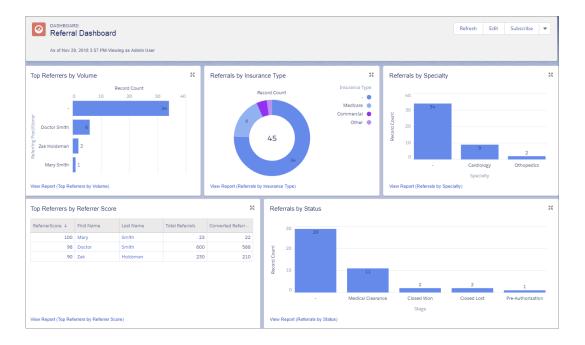
**How:** Health Cloud offers the following support for referral management.

- Two referral records: one based on the Lead object and the other on the Opportunity object
- Record types for patient referrals on Lead and Opportunity objects
- Standard and compact page layouts for referrals on Lead and Opportunity objects
- A lead queue for open referrals
- New fields added to Lead, Opportunity, and Contact objects that support referral management

Add the Referrals list view to a partner community, and let physicians and others create referrals in your organization.



We packaged up a set of reports that you can put on your home page dashboard. Install the unmanaged package, and let your users drill in to types of referrals, open referrals, and network leakage, all from one convenient dashboard.



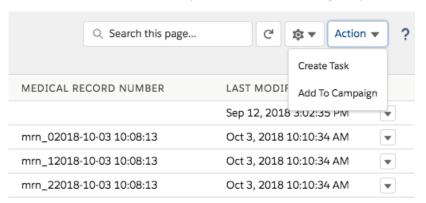
# Step Up Patient Care with Campaigns and Personalized Journeys

Care Coordinators now have an easy way to enroll cohorts of patients into campaigns while leveraging the multi-dimensional filtering of the Patient List. Enrolling patients in campaigns can also help unlock the power of Marketing Cloud's Journey Builder and distributed marketing for richly personalized, dynamic engagement at scale.

Where: This feature is available in Lightning Experience in Enterprise, Performance, and Unlimited editions where Health Cloud is enabled.

**How:** Campaigns leverage the power of Salesforce Marketing Cloud. Marketing Cloud makes it easy for care coordinators or other health care providers to set up, execute, and monitor the effectiveness of campaigns.

Who: Health Cloud users automatically have access to the Campaigns object, which enables them to create and edit campaigns.



#### SEE ALSO:

Salesforce Help: Drive Patient Engagement with Campaigns
Health Cloud Admin Guide: Drive Patient Engagement with Campaigns
Salesforce Help: Campaigns in Marketing Cloud

# Complete a Health Assessment on Someone's Behalf

An assessment survey is a valuable way to efficiently gather information about the health of the people whose care you manage. But what if you're performing a phone screening or managing someone who doesn't have access to a community? Now you can open the assessment and complete the questions on behalf of the patient or member you're managing.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Enterprise, Performance, and Unlimited edition where Health Cloud is enabled.

**How:** On the Available tab, select **Complete Assessment**, open the assessment survey, and take the assessment on behalf of the person you're speaking with. Your name is saved as the submitter of the assessment.



# Add Code Sets to Pre-Authorization Requests and Approval Processes

When a provider submits an authorization request, it must include codes for what is being requested and why. Similarly, payers must respond with what is being approved by using industry-standard code sets. Give service agents, provider staff, and others involved in prior-authorization requests access to industry-standard procedure or diagnosis codes.

**Where:** This feature is available through the Health Cloud Platform permission set license in Lightning Experience and Salesforce Classic in Enterprise, Performance, and Unlimited editions where Health Cloud is enabled.

**Who:** Users must have Health Cloud and the Health Cloud Platform permission set license assigned to them. Users also need at least one of the following permission sets: Health Cloud Permission Set License, Health Cloud Utilization Management, or Health Cloud Member Services.

**Why:** With the new code sets data model, you can make industry-standard procedure and diagnosis codes available to use in Health Cloud. These codes can be used to store discrete procedures and diagnoses as part of a patient's clinical record, or be used in pre-authorization requests in utilization management.

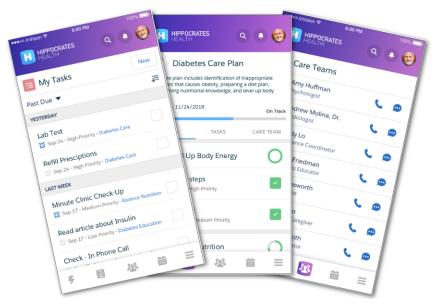
**How:** Acquire codes, such as the Current Procedural Terminology (CPT) or the International Statistical Classification of Diseases and Related Health Problems (ICD), from the American Medical Association or similar organizations. Use Data Loader to import the codes, and then map diagnosis code fields to the HealthCareDiagnosis object, and map the procedure codes to the HealthCareProcedure object. You can modify the data that's displayed so that only the information your company uses is visible. Use sharing rules to grant access to the individuals who work with code sets

# Engage Patients and Members With the Health Cloud App Template

Easily build custom branded mobile apps for patients and members to drive digital engagement and empower health consumers to stay on top of health goals, get faster access to information, adhere to treatment plans and take control over their own health journey. Use the new Mobile Publisher for Community Cloud to package and distribute these native apps on the Apple and Google App Stores.

**Where:** This feature is available in Lightning Communities accessed through Lightning Experience and Salesforce Classic and is available in Essentials, Enterprise, Performance, Unlimited, and Developer editions. Your org must have the Health Cloud managed package installed and the Health Cloud permission set license assigned.

**Why:** Knowledge is power. Put that power in your patients' hands with your own dedicated, branded smart phone app. Your app can help patients conveniently interact with Health Cloud components such as Goals, Care Plans, Tasks, and Care Team, so they can efficiently follow up on tasks, stick with their care plans, and contact their providers.



**How:** Health Cloud provides an optional, unmanaged package containing a Bolt template. Customize this template to create a Community app, then publish it to the Apple App Store or Google Play Store using the new Mobile Publisher for Communities feature, purchased separately. The template is purpose-built to work with Mobile Publisher.

SEE ALSO:

Health Cloud Admin Guide: Drive Patient Engagement with Campaigns

# Personalize Patient and Member Appointments with Lightning Scheduler

Lightning Scheduler is a powerful set of features that makes it easy to schedule appointments with a care coordinator or case manager.

Where: This feature is available for an extra cost in Enterprise and Unlimited editions.

SEE ALSO:

Create Personalized Appointments with Lightning Scheduler

Salesforce Help: Manage Appointments with Lightning Scheduler (can be outdated or unavailable during release preview)

# Health Cloud Has New Objects

These objects are new.

Where: This change applies to Enterprise, Performance, and Unlimited editions.

**Who:** To access the objects, admins must install the Health Cloud managed package and assign the Health Cloud Permission Set License and the Health Cloud Platform permission set licenses to users.

#### CareBarrier

Represents limitations or obstacles preventing a person from receiving adequate healthcare.

#### CareBarrierDeterminant

Represents the relationship of a barrier to a determinant for a patient.

#### CareBarrierType

Represents the standard, defined list of barriers maintained by an organization.

#### CareDeterminant

Represents the determinants of health for a patient such as availability of safe housing, adequate employment, or local food markets.

### CareDeterminantType

Represents the standard, defined list of determinants of health maintained by an organization, including the domain and type.

#### CareInterventionType

Represents the standard, defined list of interventions maintained by an organization.

### HealthCareDiagnosis

Represents information related to industry-standard healthcare diagnosis codes.

#### HealthCareProcedure

Represents information related to industry-standard healthcare procedure codes.

# **Changed Health Cloud Objects**

We added custom fields to the following objects.

Where: This change applies to Enterprise, Performance, and Unlimited editions.

**Who:** To access the objects, admins must install the Health Cloud managed package. Then, they must assign the Health Cloud Permission Set License and the Health Cloud Platform permission set licenses to users.

How: The following objects have new custom fields.

#### Lead

These fields are new.

- Diagnosis\_\_c
- InsuranceGroupId c
- InsuranceMemberId c
- InsuranceType c
- IsOutOfNetwork\_\_c
- PrimaryInsurance c
- Priority c
- ReasonForOutOfNetworkReferral c
- ReasonForReferral c
- ReferralStatus c
- ReferredToOrganization c
- ReferredToPractitioner c
- ReferredToUser c

- ReferringOrganization c
- ReferringPractitioner c
- ReferringUser c
- RelatedAccount c
- Specialty\_\_c
- TypeOfService c

### Opportunity

These fields are new.

- Diagnosis\_\_c
- InsuranceGroupId c
- InsuranceMemberId c
- InsuranceType\_\_c
- IsOutOfNetwork c
- PrimaryInsurance\_\_c
- Priority\_\_c
- ReasonForOutOfNetworkReferral\_\_c
- ReferralReceivedDate\_\_c
- ReferredToOrganization\_\_c
- ReferredToPractitioner c
- ReferredToUser c
- ReferringOrganization c
- ReferringPractitioner c
- ReferringUser\_c
- Specialty c
- TypeOfService c

#### Contact

These fields are new.

- ConvertedReferrals\_\_c
- ReferrerScore c
- TotalReferrals c

# New and Changed Health Cloud Lightning Components

We added a component to Health Cloud.

Where: This change applies to Enterprise, Performance, and Unlimited editions.

**Who:** To access the component, admins must install the Health Cloud managed package and assign the Health Cloud Permission Set License and the Health Cloud Platform permission set licenses to users.

**How:** The following component is new.

#### **Care Determinants**

The Care Determinants Lightning component lets you associate barriers with an object and configure how barriers appear in the app.

# Customization: Einstein Next Best Action, Lightning Flow Builder, and Enhancements to Salesforce Connect

Make your org smarter with Einstein Next Best Action, now generally available. Build simpler and more streamlined flows with the new Flow Builder. Build and interact with connections to external data systems more easily with new tools, improvements to existing tools, and increased limits.

#### IN THIS SECTION:

#### Einstein: Next Best Action and Prediction Builder

Leverage the power of Salesforce Einstein to recommend offers and actions to your customers and predict what happens next in your business.

#### Lightning Flow: Flow Builder, Process and Flow Templates, and External Object Support

We're super excited to introduce Flow Builder! It replaces Cloud Flow Designer with an all-new interface that simplifies and streamlines the way you build flows in both Salesforce Classic and Lightning Experience. We also deliver pre-built business processes via templates that you can clone and customize! Want more? Well, now you can create a single process or flow that can look up, create, or update data that's stored outside Salesforce!

#### Salesforce Connect: Increased Limits, Connection Validator, and More

We added some tools for building and interacting with connections to external data systems. We increased the Salesforce Connect default hourly limits per org for Odata callouts and new rows retrieved or created. Test and troubleshoot your external object connections using validator, a built-in diagnostic tool. To top it off, you're getting an improved Odata 2.0 adapter.

#### Permission Set Groups: Group Permission Sets Based on User Tasks for Easier Assignment (Pilot)

Instead of assigning users multiple permission sets, you can combine them into a single permission set group based on the tasks that a user regularly performs. You can include the permission sets in other permission set groups, too. Updates in a permission set propagate to all permission set groups that include the permission set, giving users in the groups the aggregated permissions. ISV partners can package permission sets in groups and allow subscribers to extend the groups with their own local permission sets.

#### Lightning App Builder: Template Switching and New Components

Give any Lightning page a new template without creating a new page. Take advantage of new components to enhance your record pages and email application panes.

#### Data Protection and Privacy: More Granularity for Consent Preferences

Track data privacy preferences at a granular level using new objects and fields. New metadata fields help you classify customers' sensitive data.

#### Globalization: New Languages and an Improved Right-to-Left Layout

We added 10 new platform languages, helping you connect with customers in India and South Africa. We also added enhanced support for right-to-left languages in Lightning Experience.

#### Sharing: Territory-Based Sharing and Improved Documentation

Enterprise Territory Management supports new sharing options. We also updated the Sharing Rules documentation in Salesforce Help, making it more concise and informative.

#### General Setup: Big Objects in Setup and App Default Home Pages

No longer restricted to the Metadata API, now you can create a big object right from Setup. Show users the home page that's most relevant to them by assigning default home pages by app.

## Einstein: Next Best Action and Prediction Builder

Leverage the power of Salesforce Einstein to recommend offers and actions to your customers and predict what happens next in your business.

#### IN THIS SECTION:

#### Einstein Prediction Builder: Enhanced Scorecard, Notifications, and New Setup Flow (Generally Available)

After a successful beta program, Einstein Prediction Builder is now generally available. Find details about the impact of each predictor in the scorecard. Get notifications when your prediction is ready. Build your predictions more efficiently in a streamlined setup flow.

#### Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

Display the right recommendations, at the right moment, to the right people with Einstein Next Best Action. Integrate business rules, predictive models, and data—both inside and outside of Salesforce—to create unique strategies for all your use cases. Maybe you have offers, like discounts and upgrades, that are only relevant under specific conditions. Perhaps service agents have multiple ways to assist customers, and you want to guide the agent to the best action. Consider using Einstein Next Best Action.

#### Build an Action Strategy to Produce Recommended Actions and Offers

Use Strategy Builder to create a stream of actions and offers that you can display on Lightning record pages and Community pages. Strategy Builder is a point-and-click automation tool for creating strategies for Einstein Next Best Action. With Strategy Builder, you can sort, filter, and prioritize your recommendations.

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#### IN THIS SECTION:

#### Understand the Impact of Each Predictor in Your Model

Predictors are field values that might influence your prediction. Are you overwhelmed by the number of predictors in your model scorecard? Unsure which ones to pay attention to? Now Einstein gives you an impact score for each predictor.

#### Get Notified About Prediction Status

Predictions can take a little while to build. Now Einstein notifies you when your prediction is built, and if it runs into any problems. No need to keep checking the prediction status. You can go about your work, and you'll know when the prediction is ready.

#### Work Faster with a Streamlined Prediction Flow

When you build a prediction, you'll notice that some pages in the setup flow have been reordered and consolidated. For example, you select an object and set up segmentation on the same page.

#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

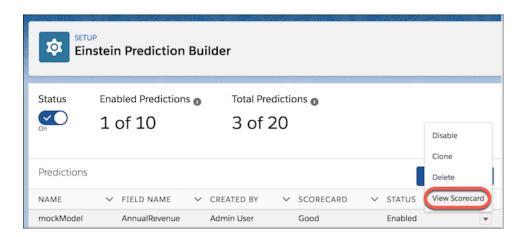
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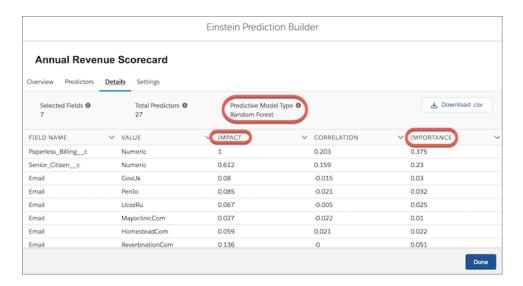
Who: This feature is available to admins with the Einstein Analytics Plus, or Einstein Predictions license.

Where: This change applies to Lightning Experience in Enterprise and Developer editions.

**How:** After a prediction is finished building, find it in your predictions list and select View Scorecard from the action menu.



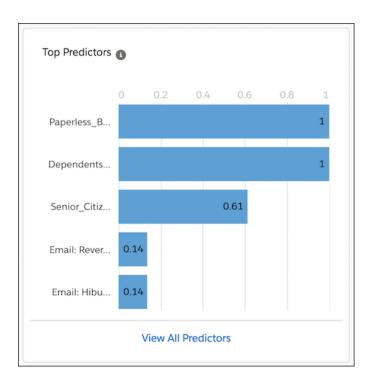
Impact is a number between 0 and 1 that represents the scaled weight or importance of a predictor.



Importance (or weight, depending on the model type) represents how significant a predictor is in the predictive model. Einstein builds predictive models using the model type that performs best for the data in the particular model. Since some models use importance and others use weight, it can be difficult to compare predictors across multiple models. That's why Einstein gives you an impact score, which you can find on the scorecard Details page.

The scorecard also shows you the predictive model type that was used to build the model. For true/false fields, Einstein tests Random Forest and Logistic Regression model types. For number fields, Einstein tests Random Forest and Linear Regression model types.

You can view predictor impact visually on the scorecard Overview page. Here you can see the impact for the top 5 predictors in your model. To view impact for all predictors, click **View All Predictors**.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

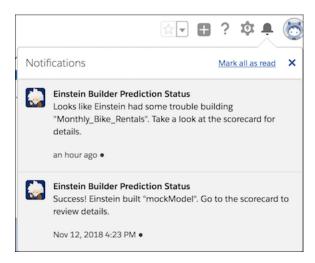
#### **Get Notified About Prediction Status**

Predictions can take a little while to build. Now Einstein notifies you when your prediction is built, and if it runs into any problems. No need to keep checking the prediction status. You can go about your work, and you'll know when the prediction is ready.

Who: This feature is available to admins with the Einstein Analytics Plus, or Einstein Predictions license.

Where: This change applies to Lightning Experience in Enterprise and Developer editions.

**How:** When you're working in Salesforce, keep an eye out for that little red number on your Notifications bell! Click it to see what's up with your predictions.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

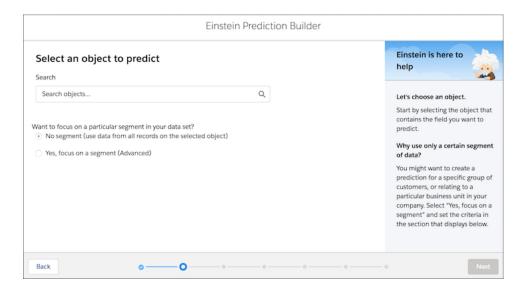
#### Work Faster with a Streamlined Prediction Flow

When you build a prediction, you'll notice that some pages in the setup flow have been reordered and consolidated. For example, you select an object and set up segmentation on the same page.

Who: This feature is available to admins with the Einstein Analytics Plus or Einstein Predictions license.

Where: This change applies to Lightning Experience in Enterprise and Developer editions.

How: This new, lighter-weight flow means fewer clicks and less busy work for you.



#### SEE ALSO:

Salesforce Einstein: Case Classification, Reports for Insights and Contacts, and Pardot Behavior Scoring (Generally Available)

## Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

Display the right recommendations, at the right moment, to the right people with Einstein Next Best Action. Integrate business rules, predictive models, and data—both inside and outside of Salesforce—to create unique strategies for all your use cases. Maybe you have offers, like discounts and upgrades, that are only relevant under specific conditions. Perhaps service agents have multiple ways to assist customers, and you want to guide the agent to the best action. Consider using Einstein Next Best Action.

Where: This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, and Unlimited editions.

**Why:** For example, when an agent opens a contact record, the Einstein Next Best Action component requests a set of recommendations from Strategy Builder and displays recommended offers for that contact. Three possible actions could surface, so the strategy runs and produces the best one.

- The first action is filtered out because the customer's credit score isn't above a certain threshold.
- The second action is filtered out because it's an upsell offer for a service that the customer already has.
- The final action is surfaced and recommended because the customer's satisfaction score is above average, and a different upsell offer is appropriate.



**How:** Create recommendations to filter through your strategy. Create and activate screen flows that include actions or offers, and connect them to your recommendations. When a user accepts a recommendation, the associated screen flow launches.

Find Strategy Builder under Next Best Action in Setup. Create strategies that load recommendations and filter or sort those recommendations based on rules, predictions, field values, and external data.

Display recommendations for a given strategy by adding the Lightning component to your record pages. For Lightning record pages, add the Einstein Next Best Action component. For Lightning community pages, add the Suggested Actions component. For Visualforce pages, use Lightning Out to add the lightning:nextBestAction component.

SEE ALSO:

Salesforce Help: Einstein Next Best Action

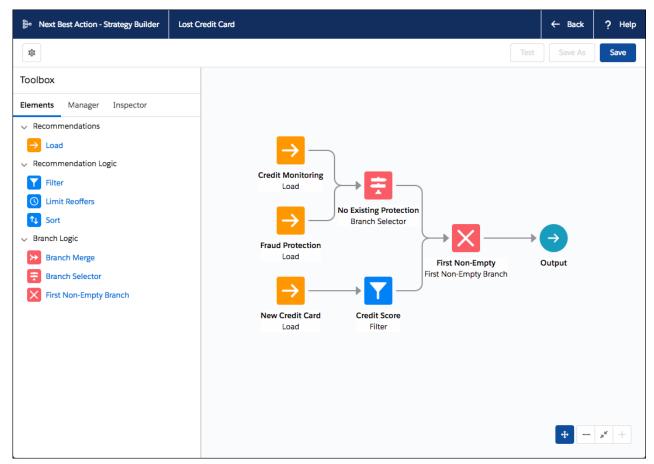
## Build an Action Strategy to Produce Recommended Actions and Offers

Use Strategy Builder to create a stream of actions and offers that you can display on Lightning record pages and Community pages. Strategy Builder is a point-and-click automation tool for creating strategies for Einstein Next Best Action. With Strategy Builder, you can sort, filter, and prioritize your recommendations.

Where: This change applies to Lightning Experience in Essentials, Professional, Enterprise, and Unlimited editions.

**Why:** Deliver the right recommendations at the right time by designing a strategy that fits your use case.

For example: Let's say you own a bank, and you want your service representatives to see the offers that best suit the customer's situation. When a customer loses a credit card and contacts support, the service rep creates a case with the type "lost credit card." You can create a strategy that recognizes the case type and recommends offers. The strategy here suggests credit monitoring, fraud protection, and maybe a new credit card offer, depending on the customer's credit score.



Using Strategy Builder, you can pull in all the possible recommendations and filter them based on existing protection and credit score. Strategy Builder only shows the offers that fit your criteria.

**How:** Create and activate screen flows that include actions or offers. Create recommendations and connect them to your existing flows. When a user accepts a recommendation, its associated screen flow launches.

Display recommendations for a given strategy by adding the Lightning component to your pages. For Lightning pages, add the Einstein Next Best Action component. For Lightning community pages, add the Suggested Actions component. For Visualforce pages, use Lightning Out to add the lightning:nextBestAction component.

SEE ALSO:

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

# Lightning Flow: Flow Builder, Process and Flow Templates, and External Object Support

We're super excited to introduce Flow Builder! It replaces Cloud Flow Designer with an all-new interface that simplifies and streamlines the way you build flows in both Salesforce Classic and Lightning Experience. We also deliver pre-built business processes via templates that you can clone and customize! Want more? Well, now you can create a single process or flow that can look up, create, or update data that's stored outside Salesforce!

#### IN THIS SECTION:

#### Build Flows More Intuitively with Flow Builder

Your flow-building experience just got a whole lot better! We're replacing Cloud Flow Designer with a much faster tool: Flow Builder. It streamlines flow building and maintenance with a simplified user interface.

#### Process and Flow Design: External Data Access, Process and Flow Templates, Help-Request Flows for Communities

Announcing process super-powers! Get pre-built business processes via templates that you can clone and customize! What's more, processes and flows can access data that's stored outside your org and respond to Salesforce error notifications. Scheduled actions are supported in all process types, and there's a new flow type in town.

Flow Distribution: Recommended Flows with Next Best Action, Guided Action Deployments, and Snap-Ins that Let Guest Users Run Flows

There's a new way to put your flows to work: recommend screen flows to the right user at the right time with Einstein Next Best Action, Smart! Plus, we've got other enhancements to how flows work in the Guided Action List component and snap-in deployments

#### Test Process Scheduled Actions and Flow Resume Events with Apex

To help you provide more test coverage for behind-the-scenes automations, the stopTest Apex method executes processes' pending scheduled actions and resumes flows that are waiting for a time-based resume event. Previously, Apex tests could start processes and autolaunched flows, but they couldn't validate scheduled actions or whether a flow resumes.

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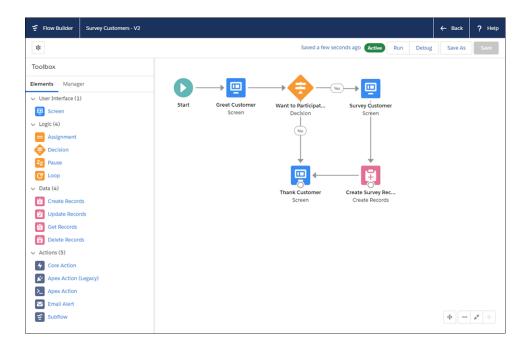
**Where:** Flow Builder is available in Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions. Flow Builder isn't supported in Internet Explorer 11 and earlier.

Who: Like Cloud Flow Designer, Flow Builder is available to admins with the Manage Flow user permission.

**Why:** If you're familiar with other builders on the Salesforce Platform, like Lightning App Builder or Community Builder, you should feel right at home.

With Flow Builder, we streamlined the toolbox, so it's easier to choose the right element or resource for your flow. For example, we consolidated the data elements and how you create variables. No more keeping track of whether to use a Fast Create or Record Create,

or which type of variable you need. We also renamed some elements and resources to be more intuitive. For example, the sObject data type is now called "Record."



**How:** Flow Builder is now the default flow-building tool in all orgs, Salesforce Classic or Lightning Experience, so no migration is needed. When you modify an existing flow or click **New Flow**, you open Flow Builder.

When you use Flow Builder, the only change is how you build or modify flows. The new Flow Builder doesn't affect how your flows behave or your users' experience when flows run.

For now, you can still access flows with both flow tools. Cloud Flow Designer is disabled by default, but you can turn it back on. From Setup, go to Process Automation Settings and deselect **Disable access to Cloud Flow Designer**. When Cloud Flow Designer is re-enabled, you see the **New Flow in Cloud Flow Designer** button on the Flows page. When both tools are enabled, a flow opens in the tool that it was built with.



- Adobe Flash is no longer required to build a flow.
- We updated flow error messages, including those that are returned via Cloud Flow Designer, Metadata API, and Tooling API, to reflect the terminology used in Flow Builder. If you've written code that checks for specific error strings, you might need to update that code. The terminology in some warnings, error messages, and debug details aren't updated for Flow Builder or Cloud Flow Designer.

## Process and Flow Design: External Data Access, Process and Flow Templates, Help-Request Flows for Communities

Announcing process super-powers! Get pre-built business processes via templates that you can clone and customize! What's more, processes and flows can access data that's stored outside your org and respond to Salesforce error notifications. Scheduled actions are supported in all process types, and there's a new flow type in town.

#### IN THIS SECTION:

#### Create or Install Pre-Built Business Processes That You Can Customize

A process or flow template is a base business process that you can clone to create customized business processes. Unlike non-template processes and flows, if you install a template from a managed package, you can open and clone it. Even if you build your own templates and don't use managed packages, marking a process or flow as a template clearly identifies it as a base business process.

#### Respond to Salesforce Errors with Processes or Flows

Processes and flows now support standard platform events that the Salesforce Platform provides for you. Both Batch Apex Platform Event (BatchApexErrorEvent) and Platform Status Alert Event (PlatformStatusAlertEvent) capture information about errors in Salesforce. Just like with custom platform events, you can start a process or resume a flow when event messages are received for these standard platform events. Previously, the only platform events that processes and flows supported were custom ones.

#### Create a Flow to Let Community Users Request Help

Use a flow to let community members request that your support team call them back. When creating flows, look for the new Contact Request Flow type and the Create Customer Contact Request action. After you create a flow, use Community Builder to add the component to your page.

#### Display an Image and Capture Address Information More Easily in Your Flows

Two new screen components improve your flows. Use the Display Image component to insert images in flow screens. Use the Address component to display a complete address form that's customized to your settings.

#### Access Data Outside Salesforce with Processes and Flows via External Objects

Automate a single process that can access both Salesforce data and data that lives outside Salesforce. With Salesforce Connect external objects, you can create a process or flow that can look up, create, or update data that's stored in an external system. Event processes, invocable processes, screen flows, and autolaunched flows all support external objects. Because record-change processes don't support external objects, start a process when a platform event message is received.

#### **Execute Scheduled Actions in Event Processes**

When you create a process that starts when a platform event is received, you can set times to execute actions. Previously, only record-change processes supported scheduled actions. But event processes can do more with scheduled actions. These scheduled actions can create or update data that's stored outside of Salesforce via external objects. Record-change processes don't support external objects.

#### Schedule Actions in Processes to Happen Immediately

You can now create a schedule in Process Builder that waits for zero hours or days, which means the pending actions are executed as soon as possible. Previously, one hour was the minimum time for a pending scheduled action that's adjusted from the current time. You can use scheduled actions to avoid governor limits, because scheduled actions are executed in a separate transaction from immediate actions.

#### Return Null Values in Process and Flow Formulas (Critical Update)

This update enables process and flow formulas to return null values when the calculations involve a null record variable or null lookup relationship field.

#### "Stop Automated Field Updates from Suppressing Email Notifications" Critical Update Postponed

This critical update, released in Summer '17, was scheduled for auto-activation in Spring '19 but has been postponed to March 1, 2020 GMT.

#### Create or Install Pre-Built Business Processes That You Can Customize

A process or flow template is a base business process that you can clone to create customized business processes. Unlike non-template processes and flows, if you install a template from a managed package, you can open and clone it. Even if you build your own templates and don't use managed packages, marking a process or flow as a template clearly identifies it as a base business process.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Suppose your company needs a process or flow that differs slightly for each country where you do business. You can create or install a template for the base business process and then clone it to create each country-specific business process.

**How:** To make a process a template, open it in Process Builder and click **Edit Properties**. For Template, select **Yes**. To make a flow a template, go to the flow list page in Setup. Find the flow, click **Edit**, and select **Template**.

Although you can activate templates and have them run just like other processes and flows, templates are typically kept inactive. After you clone a template and customize the clone, activate the clone in your org. If you install a template from a managed package and later install an upgrade, your template is overwritten with the updated version, but your clones aren't affected.



#### Note:

- If you install a process template *from* a package, make sure that the process is inactive unless you want it to actively run in your org. If you add a process template *to* a package, first deactivate the process unless you're sure that installers want the process to be active in their orgs upon installation. You can see the status of a process on the process management page. To deactivate a process, open it in Process Builder and click **Deactivate**.
- We don't recommend opening flow templates in Cloud Flow Designer. Doing so deselects the Template field for those flows. You can reselect the Template field in the flow detail page.

#### Related Updates for Developers

#### Metadata API

Added the isTemplate field to the Flow metadata type.

#### **Tooling API**

Added the IsTemplate field to the Flow object.

SEE ALSO:

Package Pre-Built Business Processes That Subscribers Can Open and Build Upon

Package Inactive Processes and Flows

Salesforce Help: Process Management (can be outdated or unavailable during release preview)

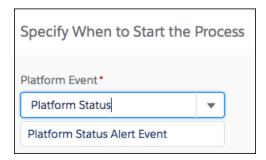
#### Respond to Salesforce Errors with Processes or Flows

Processes and flows now support standard platform events that the Salesforce Platform provides for you. Both Batch Apex Platform Event (BatchApexErrorEvent) and Platform Status Alert Event (PlatformStatusAlertEvent) capture information about errors in Salesforce. Just like with custom platform events, you can start a process or resume a flow when event messages are received for these standard platform events. Previously, the only platform events that processes and flows supported were custom ones.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** When you select a platform event to start a process or resume a flow, Batch Apex Platform Event and Platform Status Alert Event are available, along with your org's custom platform events.

For example, you want to customize who receives error notifications for Einstein Next Best Action strategies. Those errors are signaled with the Platform Status Alert Event platform event. Create a process that starts when it receives an event message from Platform Status Alert Event. Then use criteria and actions to send the error to the appropriate user.



#### **Related Updates for Developers**

#### **Tooling API**

Updated the EventSubscription object with a new value for the EventType field.

SEE ALSO:

Apex Developer Guide: Firing Platform Events from Batch Apex

#### Create a Flow to Let Community Users Request Help

Use a flow to let community members request that your support team call them back. When creating flows, look for the new Contact Request Flow type and the Create Customer Contact Request action. After you create a flow, use Community Builder to add the component to your page.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Communities: Let Your Customers Request a Call from Support

#### Display an Image and Capture Address Information More Easily in Your Flows

Two new screen components improve your flows. Use the Display Image component to insert images in flow screens. Use the Address component to display a complete address form that's customized to your settings.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions. Screen components are supported only in Lightning flow runtime.

**How:** To add Display Image or Address to your flow, open or add a Screen element in Flow Builder. Drag the component you want onto the screen canvas and then configure its properties.

Bonus! The Address screen component can take advantage of State and Country/Territory Picklists, if you have them enabled in your org.

To use the Display Image screen component, upload images into your org as static resources. Then, you can reference them while configuring the component.

SEE ALSO:

Salesforce Help: Lightning Flow Runtime vs. Classic Flow Runtime (can be outdated or unavailable during release preview)

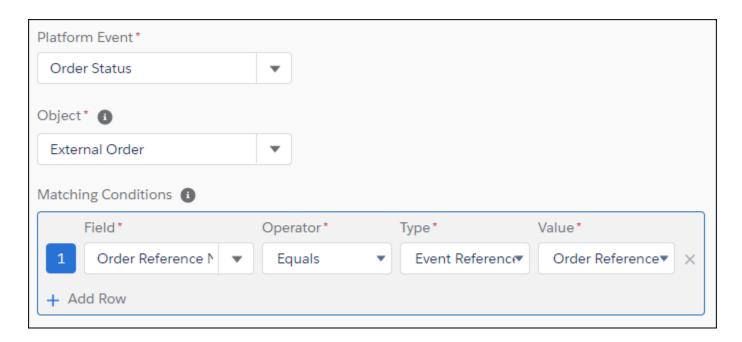
#### Access Data Outside Salesforce with Processes and Flows via External Objects

Automate a single process that can access both Salesforce data and data that lives outside Salesforce. With Salesforce Connect external objects, you can create a process or flow that can look up, create, or update data that's stored in an external system. Event processes, invocable processes, screen flows, and autolaunched flows all support external objects. Because record-change processes don't support external objects, start a process when a platform event message is received.

**Where:** This change applies to Lightning Experience and Salesforce Classic. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

**Why:** For example, when an order is updated, a third-party order management system publishes the platform event message for Order Status. When a process receives the event message, the process matches the order reference number of an external order record with the order reference number of the event message. This example assumes that the platform event and external object are defined in your org.

When Salesforce data is modified in an event process, we need to start a new transaction before we can update data outside Salesforce. Scheduled actions let us do just that. To update the external data as soon as possible, set the schedule to **0 Hours from now**.



**How:** When you select an object for a process or a flow to access, the standard, custom, and external objects are displayed as options.

SEE ALSO:

Platform Events Developer Guide

**Execute Scheduled Actions in Event Processes** 

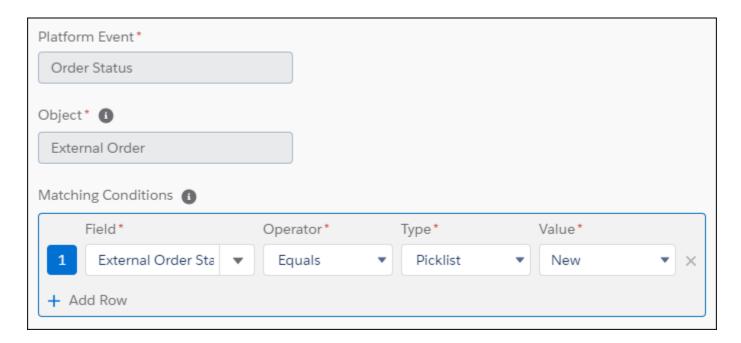
Schedule Actions in Processes to Happen Immediately

#### **Execute Scheduled Actions in Event Processes**

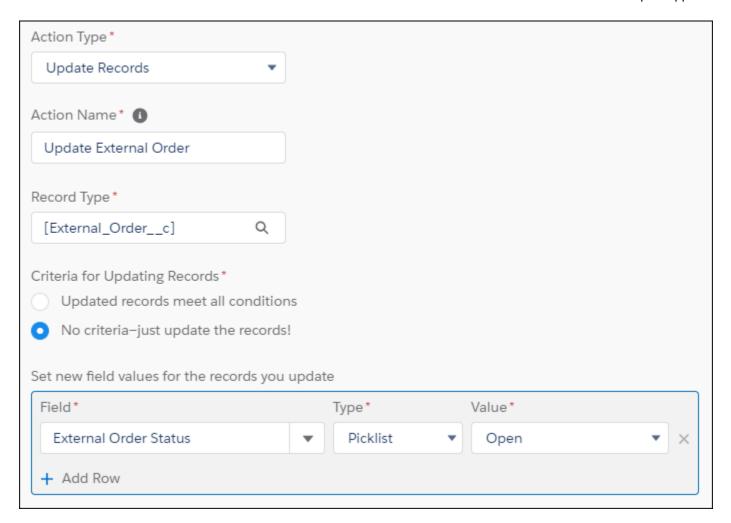
When you create a process that starts when a platform event is received, you can set times to execute actions. Previously, only record-change processes supported scheduled actions. But event processes can do more with scheduled actions. These scheduled actions can create or update data that's stored outside of Salesforce via external objects. Record-change processes don't support external objects.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** For example, when an order is created, a third-party order management system publishes the platform event message for Order Status. When a process receives the event message, the process checks that the external order status is new. External Order is an external object.



The process then creates a contact record in Salesforce and schedules an action to update the external order status.



Note: When Salesforce data is modified in an event process, we need to start a new transaction before we can update data outside Salesforce. Scheduled action let us do just that, to update the external data as soon as possible, set the schedule to **0 Hours from now**.

**How:** When you create an event process, both immediate and scheduled actions are displayed as options.

#### SEE ALSO:

Access Data Outside Salesforce with Processes and Flows via External Objects Schedule Actions in Processes to Happen Immediately

#### Schedule Actions in Processes to Happen Immediately

You can now create a schedule in Process Builder that waits for zero hours or days, which means the pending actions are executed as soon as possible. Previously, one hour was the minimum time for a pending scheduled action that's adjusted from the current time. You can use scheduled actions to avoid governor limits, because scheduled actions are executed in a separate transaction from immediate actions.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** When you add a schedule to a process, set the time for actions to execute to **0 Hours from now**.



Ø

**Note**: Actions are executed within one hour, but may be executed sooner depending on the number of actions Salesforce is currently processing.

SEE ALSO:

Access Data Outside Salesforce with Processes and Flows via External Objects

#### Return Null Values in Process and Flow Formulas (Critical Update)

This update enables process and flow formulas to return null values when the calculations involve a null record variable or null lookup relationship field.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** In processes and flows, a formula can reference a record's field via a record variable or lookup relationship field. At run-time, when the record variable or lookup relationship field is null, the formula sometimes returns null. Otherwise, it returns an unhandled exception. With this update, the formula always returns a null value when the record variable or lookup relationship field is null. This update doesn't affect merge fields.

For example, when you update an account, a process starts and checks the criteria before it performs actions. The criteria includes a formula that references the parent account's name via the account's Parent Account field. The Parent Account field is a lookup relationship field: [Account].Parent.Name.

If the value of the lookup relationship field is null, the formula returns null. Without this update, the formula sometimes returns an unhandled exception instead of null.

**How:** To test this critical update, we recommend working in a sandbox. From Setup, enter <code>Critical Updates</code> in the Quick Find box. Then select **Critical Updates**. Review the details for the Check for Null Record Variables or Null Values of Lookup Relationship Fields in Process and Flow Formulas critical update and then click **Activate**. Test all process and flow formulas that reference lookup relationship fields or record variable fields. Processes have formulas in criteria and in actions. Flows have formulas in resources and in validation of input components.

SEE ALSO:

Critical Updates

#### "Stop Automated Field Updates from Suppressing Email Notifications" Critical Update Postponed

This critical update, released in Summer '17, was scheduled for auto-activation in Spring '19 but has been postponed to March 1, 2020 GMT.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

#### SEE ALSO:

#### Critical Updates

Summer '17 Release Notes: Stop Automated Field Updates from Suppressing Email Notifications (Critical Update)

# Flow Distribution: Recommended Flows with Next Best Action, Guided Action Deployments, and Snap-Ins that Let Guest Users Run Flows

There's a new way to put your flows to work: recommend screen flows to the right user at the right time with Einstein Next Best Action, Smart! Plus, we've got other enhancements to how flows work in the Guided Action List component and snap-in deployments

#### IN THIS SECTION:

#### Use Action Strategies and Einstein Next Best Action to Recommend Flows to Users and Community Members (Generally Available)

Display your flows to the right users, at the right time, with the right information. Using Einstein Next Best Action, you can integrate business rules, predictive models, and data—inside and outside Salesforce—to make sure that the best flows are surfaced to the correct users.

#### Reuse Guided Action List Settings and View Paused Flows

Create flows that guide users through a multi-step procedure, like a call script, in the Guided Action list. To make it easier to configure the list, we added deployments that you manage in Setup. Deployments let you reuse settings, such as which flows can be added to the list at run-time, on different record pages. To help users quickly find and complete paused flows, the list displays all paused flows for the record.

#### Use Snap-Ins to Let Guest Users Run Flows

Unauthenticated users can run flows from your website. Choose or create a flow and then embed it in your website using a Snap-ins deployment.

## Use Action Strategies and Einstein Next Best Action to Recommend Flows to Users and Community Members (Generally Available)

Display your flows to the right users, at the right time, with the right information. Using Einstein Next Best Action, you can integrate business rules, predictive models, and data—inside and outside Salesforce—to make sure that the best flows are surfaced to the correct users.

Where: This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, and Unlimited editions.

#### SEE ALSO:

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

#### Reuse Guided Action List Settings and View Paused Flows

Create flows that guide users through a multi-step procedure, like a call script, in the Guided Action list. To make it easier to configure the list, we added deployments that you manage in Setup. Deployments let you reuse settings, such as which flows can be added to the list at run-time, on different record pages. To help users quickly find and complete paused flows, the list displays all paused flows for the record.

**Where:** This change applies to Lightning Experience in Essentials, Professional, Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

Lightning Flow for Service: Reusable Deployments and Easy-to-Find Paused Flows

#### Use Snap-Ins to Let Guest Users Run Flows

Unauthenticated users can run flows from your website. Choose or create a flow and then embed it in your website using a Snap-ins deployment.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Unlimited, and Developer editions using the Snap-ins code snippet version 5.0 and later.

SEE ALSO:

Allow Guest Users to Run Flows

## Test Process Scheduled Actions and Flow Resume Events with Apex

To help you provide more test coverage for behind-the-scenes automations, the stopTest Apex method executes processes' pending scheduled actions and resumes flows that are waiting for a time-based resume event. Previously, Apex tests could start processes and autolaunched flows, but they couldn't validate scheduled actions or whether a flow resumes.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** The stopTest method marks the point in your test code when your test ends. When stopTest is executed, all asynchronous processes are run synchronously.

For Apex tests that trigger record-change processes (built in Process Builder), the stopTest method executes scheduled actions for any date, even if the criteria group includes multiple schedules. For Apex tests that trigger event processes (built in Process Builder), publish the event, and use the Test.getEventBus().deliver() method to start the process. Use the stopTest method to execute associated scheduled actions.

For Apex tests that trigger autolaunched flows with Pause elements, the stopTest method resumes the flow and executes the remaining elements. For each Pause element that's waiting on a time-based resume event, the flow resumes and executes all elements along the path.

#### **Related Updates for Developers**

Apex

Changed method in System. Test: stopTest()

## Salesforce Connect: Increased Limits, Connection Validator, and More

We added some tools for building and interacting with connections to external data systems. We increased the Salesforce Connect default hourly limits per org for Odata callouts and new rows retrieved or created. Test and troubleshoot your external object connections using validator, a built-in diagnostic tool. To top it off, you're getting an improved Odata 2.0 adapter.

#### IN THIS SECTION:

#### Track Data Changes to External Objects More Easily (Beta)

Track changes made to data that's stored outside your Salesforce org with External Data Change Capture. Previously, you contacted Salesforce Customer Service, but now it's on by default after you enable it. External Change Data Capture was called External Data Change Tracking in its Winter '18 pilot release and renamed Triggers in its Spring '19 beta release.

#### Connect Your Users to More External Data with Increased Hourly Limits

We increased the Salesforce Connect default hourly limits per org for OData callouts and new rows retrieved or created. Higher limits mean more opportunities for users to view and modify data stored outside your Salesforce org.

#### Validate Your Connections to External Object Data

Test and troubleshoot your external object connections using validator, a built-in diagnostic tool. With just a few clicks, validator checks that your external object from Apex and OData data sources is connected and responding properly. If the test isn't successful, you get easy-to-understand messages to fix the connection.

#### Improved OData 2.0 Adapter for Salesforce Connect

If you're using the OData 2.0 adapter with Salesforce Connect, we're pushing improvements your way. To prepare, make sure that your external data sources that connect using the OData 2.0 adapter can decode encoded URLs. But if you're following HTTP standards, you are already compliant.

#### Use External Objects in Processes and Flows

You can now use external data in flows and processes other than record change processes. This support expands your click-not-code toolbox, letting you build call scripts for support agents with Salesforce and external data, create automated emails incorporating external data, and more.

Related Updates for Developers

## Track Data Changes to External Objects More Easily (Beta)

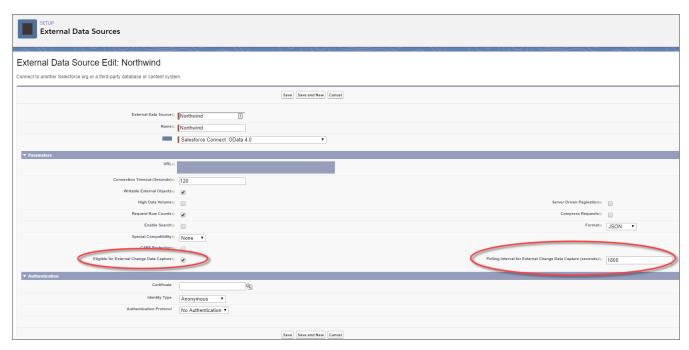
Track changes made to data that's stored outside your Salesforce org with External Data Change Capture. Previously, you contacted Salesforce Customer Service, but now it's on by default after you enable it. External Change Data Capture was called External Data Change Tracking in its Winter '18 pilot release and renamed Triggers in its Spring '19 beta release.

**Where:** This change applies to Lightning Experience and Salesforce Classic as part of Salesforce Connect using the OData 4.0 adapter. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

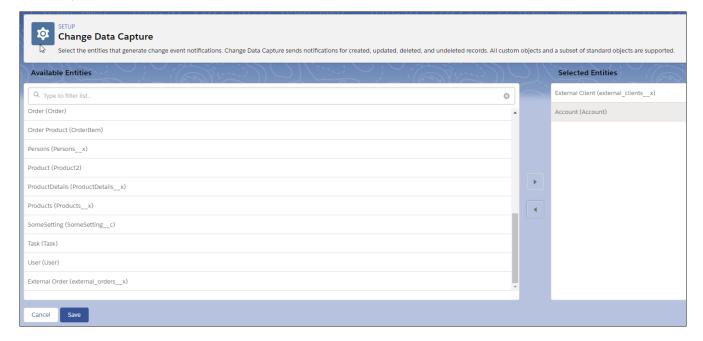


**Note:** As a beta feature, External Data Change Tracking is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. For information on enabling this feature in your org, contact Salesforce.

**How:** To enable a data source for change tracking, from Setup, in the Quick Find box, enter *External Data Source*, and then select **External Data Source**. Select your external data source, and select **Eligible for Data Change Capture**. Then enter the polling interval.



You can now also see your selected entities in the Change Data Capture screen, once you enable the Track Data Changes checkbox on external objects.



## Connect Your Users to More External Data with Increased Hourly Limits

We increased the Salesforce Connect default hourly limits per org for OData callouts and new rows retrieved or created. Higher limits mean more opportunities for users to view and modify data stored outside your Salesforce org.

**Where:** This change applies to Lightning Experience and Salesforce Classic as part of Salesforce Connect. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

Maximum OData callouts per hour.	20,000
Maximum navy rays accessed nor hour. This limit doesn't apply to	100,000

Maximum new rows accessed per hour. This limit doesn't apply to:

- 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

To avoid reaching this limit unexpectedly, track your hourly callout limit with the Lightning REST API limits resource using the HourlyLongTermIdMapping limit.

## Validate Your Connections to External Object Data

Test and troubleshoot your external object connections using validator, a built-in diagnostic tool. With just a few clicks, validator checks that your external object from Apex and OData data sources is connected and responding properly. If the test isn't successful, you get easy-to-understand messages to fix the connection.

**Where:** This change applies to Lightning Experience and Salesforce Classic as part of Salesforce Connect. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

## Improved OData 2.0 Adapter for Salesforce Connect

If you're using the OData 2.0 adapter with Salesforce Connect, we're pushing improvements your way. To prepare, make sure that your external data sources that connect using the OData 2.0 adapter can decode encoded URLs. But if you're following HTTP standards, you are already compliant.

**Where:** This change applies to Lightning Experience and Salesforce Classic as part of Salesforce Connect. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

## Use External Objects in Processes and Flows

You can now use external data in flows and processes other than record change processes. This support expands your click-not-code toolbox, letting you build call scripts for support agents with Salesforce and external data, create automated emails incorporating external data, and more.

**Where:** This change applies to Lightning Experience and Salesforce Classic as part of Salesforce Connect. Salesforce Connect is free for Developer Edition and available for an extra cost in Enterprise, Performance, and Unlimited editions.

## Related Updates for Developers

#### **Limits Resource**

The limits resource has these new limits: HourlyLongTermIdMapping and HourlyShortTermIdMapping.

#### **Updated Access Levels**

Access levels have changed for users without defined unique credentials for the ExternalDataSource, BackgroundOperation, NamedCredential, and ExternalDataUserAuth objects. Resyncing an external data source now grants field-level security access to users with the same profile as the user who initiated the resync. Review field-level access to ensure your users have the right permissions.

# Permission Set Groups: Group Permission Sets Based on User Tasks for Easier Assignment (Pilot)

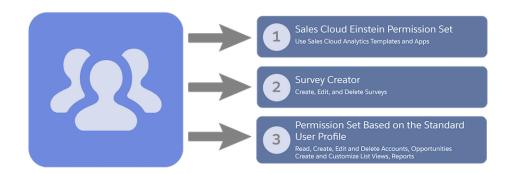
Instead of assigning users multiple permission sets, you can combine them into a single permission set group based on the tasks that a user regularly performs. You can include the permission sets in other permission set groups, too. Updates in a permission set propagate to all permission set groups that include the permission set, giving users in the groups the aggregated permissions. ISV partners can package permission sets in groups and allow subscribers to extend the groups with their own local permission sets.

Where: This applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

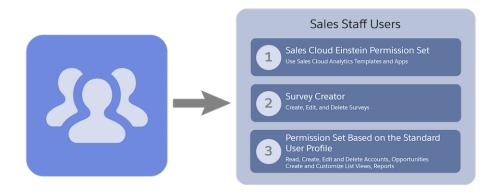


Note: We provide this feature to selected customers through a pilot program that requires agreement to specific terms and conditions. To be nominated to participate in the program, contact your Success Manager or log a case in <a href="https://help.salesforce.com/home">https://help.salesforce.com/home</a>. 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.

**Why:** Suppose that you have employees in your sales department that work with Sales Cloud Analytics templates and apps. They must also create, edit, and delete surveys and read, create, edit, and delete accounts. You have three permission sets that contain the permissions needed: Sales Cloud Einstein, Survey Creator, and a permission set based on the Standard User Profile. You assign each permission set separately to your users.



But with a permission set group, you can combine the permission sets and assign the group to the sales employees. The new Sales Staff Users permission set group contains the combined permissions of all permission sets that you include.





**Note**: If you're an ISV partner, to fully benefit from the pilot, enlist subscriber customers to participate. Using permission set groups along with a subscriber org allows you to move through a full cycle on a branched version of a managed package. If you participate in the pilot without a subscriber org, the feature is limited to Developer edition orgs and your test environment.

## Lightning App Builder: Template Switching and New Components

Give any Lightning page a new template without creating a new page. Take advantage of new components to enhance your record pages and email application panes.

#### IN THIS SECTION:

#### Switch Your Lightning Page to a Different Template

Don't like the layout of a Lightning page? Did your business needs change? Now with a few clicks, you can swap a Lightning page's template.

#### Suggest Recommendations and Offers to Your Lightning Experience Users (General Availability)

Direct your users to the best next step with the Einstein Next Best Action component. Available on Lightning record pages, this component uses strategies that apply your org's business rules to display context-sensitive offers and actions, like an upgrade, a discount, or a service. You define the conditions and rules that determine which recommendations to display to your users. This component is available as part of Einstein Next Best Action.

#### Add Quip Documents Directly to Salesforce Records (Beta)

Bring Quip documents, spreadsheets, slides, and chat rooms directly into your Lightning apps with the new Quip Document component. Your users get familiar Quip features like rich editing, real-time updates, comments, and @mentions without leaving Salesforce. You can also create templates to streamline your team's workflow.

#### Add the Work Queue Component to Email Application Panes

Provide your reps the same High Velocity Sales Work Queue they use in Salesforce directly in Microsoft® Outlook® and Gmail™.

#### Rich Text Component Uses the Quill Text Editor

To ensure that the Rich Text component works smoothly with Lightning Locker, we changed its text editor from CKEditor to Quill.

#### Standard Lightning Page Template Labels Have Changed

As part of the Lightning page template switching feature, we revised the titles, descriptions, and region names of some of our page templates. We replaced "Column" with "Region" and improved the template description text. This change is cosmetic. The structure and features of the templates remain the same.

#### Better Labels for Form Factors in Component Visibility Rules

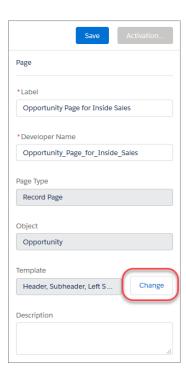
We've been working on making form factor values more intuitive when creating visibility rules for components. In Winter '19, we started by changing the form factor values in the Value field from Small, Medium, and Large to Phone, Tablet, and Desktop. In Spring '19, we finished up by updating the filter text to reflect the Phone, Tablet, and Desktop values.

## Switch Your Lightning Page to a Different Template

Don't like the layout of a Lightning page? Did your business needs change? Now with a few clicks, you can swap a Lightning page's template.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** When you view a Lightning page's properties in the Lightning App Builder, click **Change** next to the Template field to start the template-switching process.



# Suggest Recommendations and Offers to Your Lightning Experience Users (General Availability)

Direct your users to the best next step with the Einstein Next Best Action component. Available on Lightning record pages, this component uses strategies that apply your org's business rules to display context-sensitive offers and actions, like an upgrade, a discount, or a service. You define the conditions and rules that determine which recommendations to display to your users. This component is available as part of Einstein Next Best Action.

Where: This change applies to Lightning Experience and Salesforce Classic in Essentials, Professional, Enterprise, and Unlimited editions.

**How:** When a user accepts a suggestion, a screen flow launches. To run a flow, your users must have either the Run Flow permission or the Flow User field enabled on the user detail page.

#### SEE ALSO:

Einstein Next Best Action: Use Strategies to Recommend Actions and Offers (Generally Available)

Salesforce Help: Einstein Next Best Action Component (can be outdated or unavailable during release preview)

## Add Quip Documents Directly to Salesforce Records (Beta)

Bring Quip documents, spreadsheets, slides, and chat rooms directly into your Lightning apps with the new Quip Document component. Your users get familiar Quip features like rich editing, real-time updates, comments, and @mentions without leaving Salesforce. You can also create templates to streamline your team's workflow.

**Where:** This change applies to Lightning Experience in Professional, Performance, Unlimited, and Developer editions. This change applies only to Lightning apps.

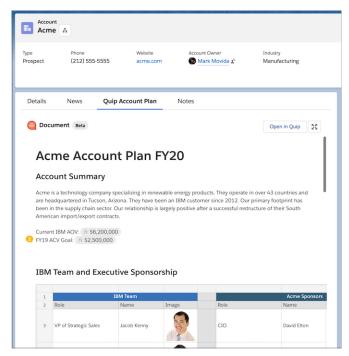


Note: As a beta feature, the Quip Document component is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally

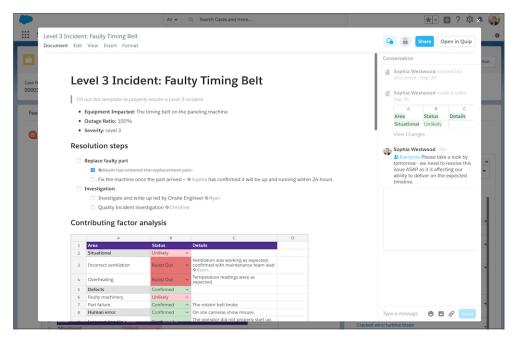
available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related non-Salesforce applications and content apply equally to your use of this feature.

Who: Available in orgs with a Quip Enterprise plan or free trial.

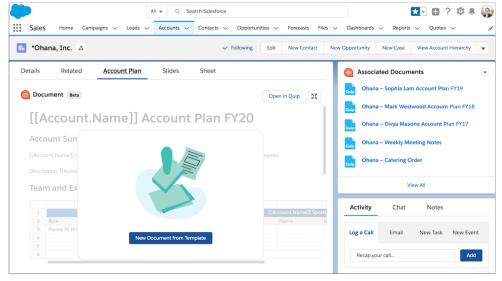
**Why:** Users can collaborate on documents right where they work without switching apps. All documents created from a Quip Document component are automatically attached as files to the Salesforce record.



Update documents right on the record, or expand them into a modal view for a richer editing experience. See a document's edit history, contribute to the conversation, and share the document with new collaborators without leaving your browser tab. Comments, @mentions, Live Apps, and other interactive features of Quip work exactly as they do in the Quip web and desktop apps.



To really accelerate and streamline your workflow, create templates. You can set up any Quip document as a template, which your team can use to quickly create documents on Salesforce records. You can even automatically fill new documents with standard and custom fields from the record using mail merge syntax. Imagine the possibilities: standardize information-gathering, track sales activities, or create team checklists.



**How:** Connect your Salesforce org to your Quip site by going through the guided Quip setup. In Setup, use the Quick Find box to find Quip, and then follow the steps. Open Lightning App Builder, and drag the Quip Document component onto a record page. Then complete the component setup in Lightning App Builder.

## Add the Work Queue Component to Email Application Panes

Provide your reps the same High Velocity Sales Work Queue they use in Salesforce directly in Microsoft® Outlook® and Gmail™.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Who: Companies with High Velocity Sales and Inbox enabled can add the Work Queue component to their email application panes.

**How:** For the best experience, we recommend adding a tab to the Outlook integration Tab component, and placing the Work Queue component in that new tab. Include the component in each pane assigned to your inside sales reps who use the High Velocity Sales features.

### Rich Text Component Uses the Quill Text Editor

To ensure that the Rich Text component works smoothly with Lightning Locker, we changed its text editor from CKEditor to Quill.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Here are some differences you'll see with the Quill text editor.

- The Quill editor supports a different set of fonts than CKEditor. The text in your component remains in the old font until you edit it. Quill's supported fonts are Arial, Courier, Garamond, Salesforce Sans, Tahoma, Times New Roman, and Verdana.
- The Quill API wraps each line of text with tags. The tags can increase the number of characters in the rich text API value when you save the text. If you get a max length warning, break up the text into two Rich Text components.
- The link editor panel in Quill has fewer options than CKEditor. For example, the Quill panel doesn't include the Link Type or Target menu options, but you can specify these options manually.
- In Quill, the default color for text is gray in the editor, but the text renders black in the output.
- Selecting text using keyboard shortcuts, such as with Cmd+A, and then typing something new resets the formatting of the existing text.

## Standard Lightning Page Template Labels Have Changed

As part of the Lightning page template switching feature, we revised the titles, descriptions, and region names of some of our page templates. We replaced "Column" with "Region" and improved the template description text. This change is cosmetic. The structure and features of the templates remain the same.

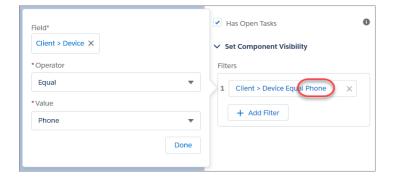
Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

## Better Labels for Form Factors in Component Visibility Rules

We've been working on making form factor values more intuitive when creating visibility rules for components. In Winter '19, we started by changing the form factor values in the Value field from Small, Medium, and Large to Phone, Tablet, and Desktop. In Spring '19, we finished up by updating the filter text to reflect the Phone, Tablet, and Desktop values.

Where: This change applies to Lightning Experience in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

How: For example, when you select Phone as the value in the rule criteria, that value is now reflected in the filter text.



## Data Protection and Privacy: More Granularity for Consent Preferences

Track data privacy preferences at a granular level using new objects and fields. New metadata fields help you classify customers' sensitive data.

#### IN THIS SECTION:

#### Fine-Tune Your Data Privacy Tracking with New Objects

Track data privacy preferences in more a granular way using new objects: Contact Point Type Consent, Data Use Purpose, and Data Use Legal Basis. For example, you can indicate that a customer allows contact via email but not through phone calls and mail. You can also set up categories to specify the purpose for which contact is legitimate, such as billing. And you can specify the legal basis for contacting someone against their wishes.

#### Combine Consent API Requests into One Call with the Multiaction Endpoint

Now you can combine multiple requests in a single call using the Consent API multiaction endpoint. Discover whether you can email, profile, or track a customer using one call.

#### Merge Data Privacy Records in Lightning Experience

Now you can merge data privacy records based on the Individual object the same way that you merge other records, like leads and accounts.

#### Add Demographic Information to Your Data Privacy Records

Data privacy records based on the Individual object now include fields that store demographic information, such as occupation, home ownership, and military service. You can access these fields when you configure the page layout for your data privacy records.

#### Report On Field History for Data Privacy Records

Now you can collect field history for data privacy records based on the Individual object with the new individual history report. This standard report type is available in organizations with Data Protection and Privacy enabled.

#### Classify Your Sensitive Data to Support Your Data Management Policies (Beta)

Classify your data to help meet your data management policies. Record the data owner, field usage, and sensitivity of the data in any field. You can then apply a default data-sensitivity level value to all contacts, leads, person accounts, and users.

## Fine-Tune Your Data Privacy Tracking with New Objects

Track data privacy preferences in more a granular way using new objects: Contact Point Type Consent, Data Use Purpose, and Data Use Legal Basis. For example, you can indicate that a customer allows contact via email but not through phone calls and mail. You can also set up categories to specify the purpose for which contact is legitimate, such as billing. And you can specify the legal basis for contacting someone against their wishes.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

**How:** From Setup, enter *Data Protection and Privacy* in the Quick Find box, and then select **Data Protection and Privacy**. Click **Edit**, select **Make data protection details available in records**, and click **Save**.

SEE ALSO:

Salesforce Help: Consent Management Objects

## Combine Consent API Requests into One Call with the Multiaction Endpoint

Now you can combine multiple requests in a single call using the Consent API multiaction endpoint. Discover whether you can email, profile, or track a customer using one call.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

Who: The Consent API requires either the View All Data or the Allow User Access to Privacy Data user permission.

### Merge Data Privacy Records in Lightning Experience

Now you can merge data privacy records based on the Individual object the same way that you merge other records, like leads and accounts.

Where: This change applies to Lightning Experience in all editions.

**How:** To access data privacy records based on the Individual object, enable Data Protection and Privacy. From Setup, enter *Data*\*Protection and Privacy in the Quick Find box, and then select **Data Protection and Privacy**. Click **Edit**, select **Make data**\*protection details available in records, and click **Save**.

## Add Demographic Information to Your Data Privacy Records

Data privacy records based on the Individual object now include fields that store demographic information, such as occupation, home ownership, and military service. You can access these fields when you configure the page layout for your data privacy records.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

**How:** To access data privacy records based on the Individual object, enable Data Protection and Privacy. From Setup, enter <code>DataProtection</code> and <code>Privacy</code> in the Quick Find box, and then select **Data Protection and Privacy**. Click **Edit**, select **Make data protection details available in records**, and click **Save**.

## Report On Field History for Data Privacy Records

Now you can collect field history for data privacy records based on the Individual object with the new individual history report. This standard report type is available in organizations with Data Protection and Privacy enabled.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

**How:** To access data privacy records based on the Individual object, enable Data Protection and Privacy. From Setup, enter <code>DataProtection</code> and <code>Privacy</code> in the Quick Find box, and then select **Data Protection and Privacy**. Click **Edit**, select **Make data protection details available in records**, and click **Save**.

SEE ALSO:

Salesforce Help: Standard Report Types

## Classify Your Sensitive Data to Support Your Data Management Policies (Beta)

Classify your data to help meet your data management policies. Record the data owner, field usage, and sensitivity of the data in any field. You can then apply a default data-sensitivity level value to all contacts, leads, person accounts, and users.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.



**Note:** As a beta feature, Data Classification is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply

equally to your use of this feature. You can provide feedback and suggestions for Data Classification in the Data Classification group in the Trailblazer Community.

Who: To edit or view data classification fields, you need either the Customize Application or Modify Data Classification permission.

How: From Setup, enter Data Classification in the Quick Find box. Then select Enable data classification metadata fields.

SEE ALSO:

Salesforce Help: Classify Sensitive Data to Support Data Management Policies

## Globalization: New Languages and an Improved Right-to-Left Layout

We added 10 new platform languages, helping you connect with customers in India and South Africa. We also added enhanced support for right-to-left languages in Lightning Experience.

#### IN THIS SECTION:

#### Connect with More Customers with New Platform Languages

We added 10 languages and locales for our South African and Indian customers. These languages are available as platform languages.

#### Get Things Right with Right-to-Left Languages (Beta)

To make right-to-left (RTL) language users feel more at home, columns and sidebars flow from right to left, and text is aligned appropriately. This right-to-left layout is available for Arabic, Hebrew, and Urdu. Arabic and Hebrew are now available as end-user languages in Lightning Experience, while Urdu is supported as a platform language.

#### Translation Workbench Supports Survey Translation

Speak your customers' language. Connect with your global audience by translating your surveys in more than 10 languages. Your org participants automatically view a survey in their default language. Participants outside of your org can choose from a list of languages in which the survey has been translated.

## Connect with More Customers with New Platform Languages

We added 10 languages and locales for our South African and Indian customers. These languages are available as platform languages.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

**Why:** We added support for the following languages and locales:

- Afrikaans (South Africa)
- Gujarati (India)
- Kannada (India)
- Malayalam (India)
- Marathi (India)
- Russian (Kazakhstan)
- Swahili (Kenya)
- Telugu (India)
- Xhosa (South Africa)

Zulu (South Africa)

SEE ALSO:

Salesforce Help: Supported Languages
Salesforce Help: Supported Locales

Salesforce Help: Supported Date and Time Formats

## Get Things Right with Right-to-Left Languages (Beta)

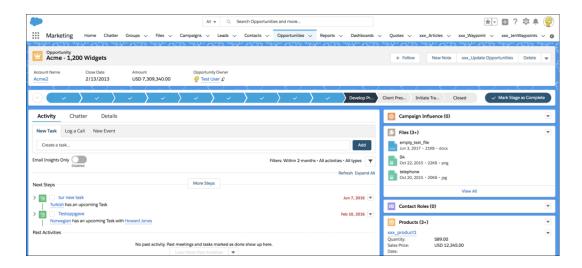
To make right-to-left (RTL) language users feel more at home, columns and sidebars flow from right to left, and text is aligned appropriately. This right-to-left layout is available for Arabic, Hebrew, and Urdu. Arabic and Hebrew are now available as end-user languages in Lightning Experience, while Urdu is supported as a platform language.

Where: This change applies to Lightning Experience in all editions except **Database.com**.

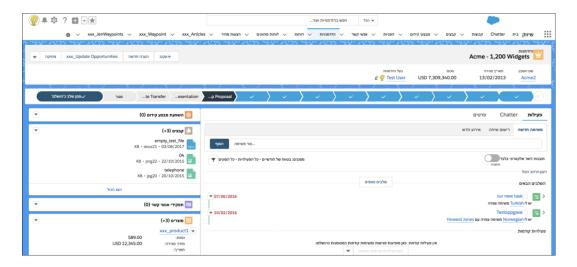
As a beta feature, right-to-left support is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for right-to-left language support by clicking ? and selecting Give Feedback about Salesforce.

Why: We've improved the layout for RTL languages, giving them a more natural look and feel.

For example, here's a left-to-right layout in English in Lightning Experience.



And here's the same view in Hebrew, right to left.



**How:** To enable RTL language support in Lightning Experience, in Setup, enter *User Interface* in the Quick Search box, then select **User Interface**. Then select **Enable Lightning Right-to-Left Support (Beta)**.

After you enable RTL language support, a user can decide whether to use the RTL layout. In personal settings, enter Language & Timezone in the Quick Search box, then select Language & Timezone. Select Enable Lightning Right-to-Left (RTL) Support (Beta).

SEE ALSO:

Salesforce Help: Edit Your Language and Locale Settings

## Translation Workbench Supports Survey Translation

Speak your customers' language. Connect with your global audience by translating your surveys in more than 10 languages. Your org participants automatically view a survey in their default language. Participants outside of your org can choose from a list of languages in which the survey has been translated.

**Where:** This change applies to Lightning Experience in Professional, Enterprise, Developer, and Unlimited editions where Salesforce Surveys is enabled.

SEE ALSO:

Translate Your Surveys

## Sharing: Territory-Based Sharing and Improved Documentation

Enterprise Territory Management supports new sharing options. We also updated the Sharing Rules documentation in Salesforce Help, making it more concise and informative.

#### IN THIS SECTION:

#### Get New Sharing Options with Enterprise Territory Management

If you use Enterprise Territory Management, you can now define sharing rules based on the users assigned to specific territories. You can add reps to groups and queues based on territory assignment. And you can share report folders, dashboard folders, and list views by territory.

#### Improved Sharing Rules Documentation

We updated the Sharing Rules documentation in Salesforce Help to make it easier to find the information you need.

## Get New Sharing Options with Enterprise Territory Management

If you use Enterprise Territory Management, you can now define sharing rules based on the users assigned to specific territories. You can add reps to groups and queues based on territory assignment. And you can share report folders, dashboard folders, and list views by territory.

**Where:** These changes apply to Lightning Experience and Salesforce Classic in Performance and Developer editions and in Enterprise and Unlimited editions with the Sales Cloud. In Salesforce Classic in these editions, reps can also manually share records by territory.

#### SEE ALSO:

Grant Access to Records, Report and Dashboard Folders, and List Views by Territory

Add Sales Reps to Groups and Queues Based on Territory Assignment

Share Individual Records by Territory

Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)

## Improved Sharing Rules Documentation

We updated the Sharing Rules documentation in Salesforce Help to make it easier to find the information you need.

**Where:** Sharing rules are available in Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: We improved the following documentation.

- Replaced the repetitive instruction pages for individual objects with more concise descriptions about creating and editing sharing rules.
- Added information about owner-based and criteria-based sharing rules.
- Consolidated availability information for sharing rules.

#### SEE ALSO:

Salesforce Help: Sharing Rules (can be outdated or unavailable during release preview)

Salesforce Help: Create Sharing Rules (can be outdated or unavailable during release preview)

Salesforce Help: Edit Sharing Rules (can be outdated or unavailable during release preview)

Salesforce Help: Sharing Rule Types (can be outdated or unavailable during release preview)

Salesforce Help: Sharing Rule Considerations (can be outdated or unavailable during release preview)

## General Setup: Big Objects in Setup and App Default Home Pages

No longer restricted to the Metadata API, now you can create a big object right from Setup. Show users the home page that's most relevant to them by assigning default home pages by app.

#### IN THIS SECTION:

#### Create Custom Big Objects from Setup

A big object stores and manages a massive amount of data natively on the Salesforce platform. You can archive data from other objects or bring massive datasets from outside systems into a big object to get a full view of your customers. Big objects provide consistent performance, whether you have 1 million records, 100 million, or even 1 billion. Previously, creating a big object required using Metadata API. But now, if you aren't comfortable using the API, you can create a big object in Setup, define its fields, and build the index that defines how the big object is gueried.

#### Assign Default Home Pages Based on the Lightning App

Make sure that users see the Home page that's most relevant to them by assigning default Home pages by app. The app default Home page overrides the org default Home page for users in the app. And if you create app-and-profile assignments, those Home pages assignments override all others.

#### Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning

As part of delivering the feature to assign default Home pages by app, we changed the configurability of custom Lightning Home page assignments for users working in Classic apps that are visible in Lightning Experience. If you had custom Lightning Home page profile assignments prior to Spring '19, your users continue to see the profile-based Home pages that they expect when working in Classic apps that are visible in Lightning Experience. However, the Home page profile assignments for those Classic apps are now read-only, so you can no longer modify them.

#### Check a Field's References Before You Edit It (Beta)

In a sandbox org, you can view the references to a custom field, such as in a formula, layout, or Apex class, with the click of a button. The new **Where is this used?** button lists where a field is used and where changes to the field appear. You can communicate changes to others who use the field in a formula or other context.

#### Include Reserved Apex Names in External Services Schema

You can put that list of avoided words away. Your external services schema variable names can now use any words you like, including "end," number," object," and "transaction."

#### Add a Namespace Prefix to pageReference.state Properties and Query Parameters

As mentioned in the Spring '19 release notes, this critical update addresses an issue with naming conflicts between package components. A namespace prefix distinguishes your package and its contents from other developers' packages. The namespace prefix prevents conflicts between components on the state or query parameter name. Query parameters and pageReference.state properties must have a namespace prefix. If they don't, this critical update removes them from the org's URLs. This critical update is enabled for Summer '19 on May 17, 2019.

#### Send the Session ID Securely in Outbound Messages

To protect sensitive session data, the HTTPS protocol is now enforced for outbound message notifications that include the session ID. If you configure the outbound message with the **Send Session ID** option enabled, ensure that the endpoint URL starts with https://.

"Make Sure Records That Are Submitted Behind the Scenes Are Routed to the Right Approval Process" Critical Update Postponed This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Spring '19.

## Create Custom Big Objects from Setup

A big object stores and manages a massive amount of data natively on the Salesforce platform. You can archive data from other objects or bring massive datasets from outside systems into a big object to get a full view of your customers. Big objects provide consistent performance, whether you have 1 million records, 100 million, or even 1 billion. Previously, creating a big object required using Metadata API. But now, if you aren't comfortable using the API, you can create a big object in Setup, define its fields, and build the index that defines how the big object is queried.

Where: This change applies to Lightning Experience and Salesforce Classic.

How: From Setup, enter Big Objects in the Quick Find box, then select Big Objects. Click New, and the wizard guides you through the steps.

## Assign Default Home Pages Based on the Lightning App

Make sure that users see the Home page that's most relevant to them by assigning default Home pages by app. The app default Home page overrides the org default Home page for users in the app. And if you create app-and-profile assignments, those Home pages assignments override all others.

Where: This change applies to Lightning Experience in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.



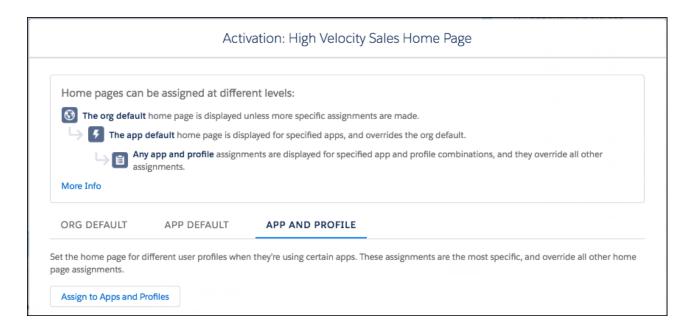
Note: This change applies only to Lightning apps. Classic apps can be viewed in Lightning Experience, but you can't display different Home pages assigned for specific apps and profiles. Upgrade Classic apps to Lightning apps in the App Manager to take advantage of Lightning Experience features.

Why: Assign a custom Home page for different apps, so that users that live in different apps don't use the same layout. This additional layer of assignment makes designing a Home page simpler, so you can specify different customizations for different app users.

For example, the Home page for your org's inside sales app can have a different layout and different components than the Home page for your field sales app, each focused on connecting reps in those areas with the tools and info they need.

Setting an app default Home page doesn't impact existing profile assignments. Existing profile assignments are nested beneath the layer of app assignments. As a result, users with different profiles can see different Home pages within the same app.

How: To assign a Home page as an app default, from Setup, enter Home in the Quick Find box, and then select Home. You can also assign specific Home pages from the Lightning App Builder.



#### SEE ALSO:

Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning IdeaExchange: Assign Lightning Home Pages by App (can be outdated or unavailable during release preview)

# Home Page Profile Assignments No Longer Editable for Classic Apps That Are Visible in Lightning

As part of delivering the feature to assign default Home pages by app, we changed the configurability of custom Lightning Home page assignments for users working in Classic apps that are visible in Lightning Experience. If you had custom Lightning Home page profile assignments prior to Spring '19, your users continue to see the profile-based Home pages that they expect when working in Classic apps that are visible in Lightning Experience. However, the Home page profile assignments for those Classic apps are now read-only, so you can no longer modify them.

**Where:** This change applies to Lightning Experience in Essentials, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions. This change applies only to Classic apps marked as visible in Lightning.

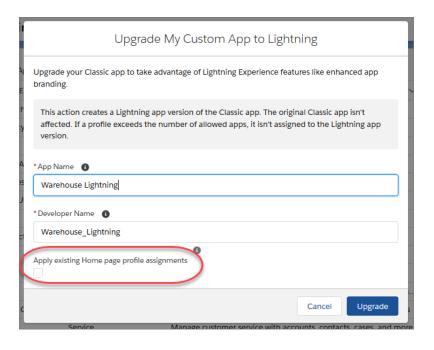
**Why:** If you want to modify the custom Lightning Home page profile assignments for your Lightning-enabled Classic apps, you must upgrade them to Lightning apps.

If you upgrade your Classic apps <u>before</u> Spring '19 is deployed to your org, we will automatically update your existing custom Lightning Home page assignments to work with your Classic apps.

If you upgrade your Classic apps <u>after</u> Spring '19 is deployed to your org, you must apply the existing Home page profile assignments to the upgraded app yourself. We added a checkbox to the app upgrade dialog that lets you do this.

If you choose not to upgrade a Classic app visible in Lightning Experience, your users see the Home pages that were assigned to their profiles in Winter '19 when working in that app. The profile assignments for the non-upgraded apps remain read-only. If you create a new Lightning-enabled Classic app during or after Spring '19, users in those apps will continue to see the Winter '19 custom Lightning Home page assigned to their profile.

**How:** To upgrade a Classic app and migrate its Home page profile assignments, navigate to the App Manager in Setup, click **r** for a Classic app, and select **Upgrade**. In the upgrade dialog, select **Apply existing Home page profile assignments**.



This checkbox is available until the Summer '19 release. After Summer '19 rolls out, any Classic app that is upgraded to Lightning must have its Home page assignments set manually.

SEE ALSO:

Assign Default Home Pages Based on the Lightning App Salesforce Help: Upgrade Classic Apps to Lightning Apps

# Check a Field's References Before You Edit It (Beta)

In a sandbox org, you can view the references to a custom field, such as in a formula, layout, or Apex class, with the click of a button. The new **Where is this used?** button lists where a field is used and where changes to the field appear. You can communicate changes to others who use the field in a formula or other context.

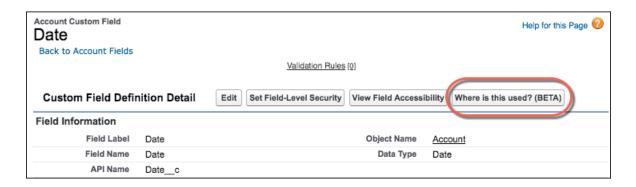
**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, and Unlimited editions, sandboxes only.



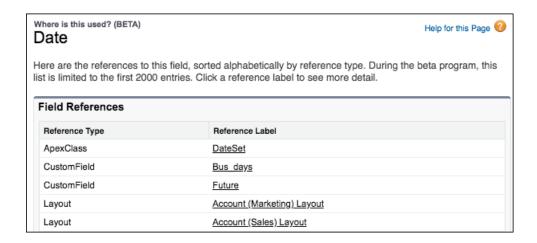
Note: As a beta feature, the **Where is this used?** button is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for the **Where is this used?** button in the Dependency API / Field Usage Trailblazer Community.

Who: Admins with the Customize Application permission can use the Where is this used? button for custom fields.

**How:** The **Where is this Used?** button is on the custom field detail page.



Click the button to see the field reference details.



The list can include these references. Click a reference label to view the settings for the layout, formula, or other reference.

- Validation rule
- Layout
- Formula field
- Visualforce page
- Apex class
- Apex trigger
- Email template (Salesforce Classic, text based)
- Field set
- Flow (query)
- Lightning component markup (attr)
- Process Builder (criteria)
- URL button (formula)
- Lightning page (related list single)
- Lookup filter (lookup and master detail)

Click a reference label to go to the settings for that layout, formula, or other reference.

References within a managed package are not included in the list within the subscriber org. For example, you have a number field referenced in a formula. If you add the field to a package and install the package in a subscriber org, the subscriber org's field reference detail page does not show that this number field is referenced in a formula field.

However, new references created after installing the managed package in the subscriber org do appear. For example, after you install the managed package and you add the number field to another formula in the subscriber org, the new reference appears.

# Include Reserved Apex Names in External Services Schema

You can put that list of avoided words away. Your external services schema variable names can now use any words you like, including "end," number," object," and "transaction."

Where: This change applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

# Add a Namespace Prefix to pageReference.state Properties and Query Parameters

As mentioned in the Spring '19 release notes, this critical update addresses an issue with naming conflicts between package components. A namespace prefix distinguishes your package and its contents from other developers' packages. The namespace prefix prevents conflicts between components on the state or query parameter name. Query parameters and pageReference.state properties must have a namespace prefix. If they don't, this critical update removes them from the org's URLs. This critical update is enabled for Summer '19 on May 17, 2019.

**Where:** This change applies to Lightning Experience and the Salesforce app in all editions. This change does not affect Visualforce or Salesforce Classic URLs, Communities, or report URL that contain non-custom guery parameters.



**Note:** If your org displays an auto-activation date of January 10, 2019, ignore it. This date was the original activation date for the critical update before it was postponed. When your org updates to the Spring '19 release, the displayed auto-activation date will be correct.

**How:** To add a namespace prefix for a managed package, see Register a Namespace Prefix. If you don't have a registered namespace, add the default namespace of c\_\_\_. To test and ensure that your namespace prefixes work, enable this critical update. Test any pages that have custom query parameters and that navigate to a URL containing /lightning/. If you have managed packages, test pages from within and outside of managed packages. If you run into issues, ensure that you've prefixed the values with a namespace. If you continue to have issues, contact Salesforce Customer Support.

After you add namespace prefixes, enable the critical update. From Setup, enter Critical Updates in the Quick Find box. Then select Critical Updates. For Add a Namespace Prefix to Query Parameters and pageReference.state Properties, click Acknowledge.

# Send the Session ID Securely in Outbound Messages

To protect sensitive session data, the HTTPS protocol is now enforced for outbound message notifications that include the session ID. If you configure the outbound message with the **Send Session ID** option enabled, ensure that the endpoint URL starts with https://.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** To create or edit an outbound message configuration in Setup, enter *Outbound Messages* in the Quick Find box, and select **Outbound Messages**.

SEE ALSO:

Salesforce Help: Session Security

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

This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Spring '19.

SEE ALSO:

Winter '17 Release Notes: "Make Sure Records that Are Submitted Behind the Scenes Are Routed to the Right Approval Process" Critical Update Postponed

Critical Updates

# Security and Identity: New Login Options, Device Management, and Cache-Only Keys for All

Users can log in with email addresses, phone numbers, and more. Use Device Management to track and revoke device access. And the Cache-Only Key Service is now generally available.

#### IN THIS SECTION:

## Authentication and Identity: More Login Options, Ironclad Security Enhancements, and Easier Setup and Maintenance

New Salesforce Authentication and Identity features give your users more login options, like letting users log in with their email addresses, phone numbers, or digital certificates. We also increased password security, and you can further safeguard your org by viewing and managing the devices that are accessing it. You can now dynamically create and manage connected apps and contactless external users.

# Salesforce Shield: Field Audit Trail Object Support, Cache-Only Keys Generally Available, and New Apex Events

In Shield Platform Encryption, the Cache-Only Key Service is now generally available. You also get the freedom of self-service background encryption and compatibility with more clouds. In Event Monitoring, two new EventLogFile event types capture Apex exception and long-running Apex request information. And Field Audit Trail supports automated archival for more objects.

# Authentication and Identity: More Login Options, Ironclad Security Enhancements, and Easier Setup and Maintenance

New Salesforce Authentication and Identity features give your users more login options, like letting users log in with their email addresses, phone numbers, or digital certificates. We also increased password security, and you can further safeguard your org by viewing and managing the devices that are accessing it. You can now dynamically create and manage connected apps and contactless external users.

## IN THIS SECTION:

# Create an Identity-First Login Page with My Domain Login Discovery

Configure My Domain with Login Discovery to simplify the login process for users. This login process is sometimes called interview-based or identity-first login. Instead of requiring users to login with a username and password, My Domain Login Discovery page prompts them to enter a unique identifier such as an email address or phone number. Then users are prompted to authenticate based on the identifier they supply. If they're configured for SSO, they don't even have to choose. My Domain Login Discovery sends them directly to the identity provider (IdP) login page to authenticate.

#### Authenticate Your Users with Certificates

Salesforce now provides certificate-based authentication. Using either Salesforce Setup or API, you can upload unique PEM-encoded X.509 digital certificates to authenticate individual users to your org.

## Localize Login Prompts and Custom Error Messages for Login Discovery

When you use the Login Discovery page type in My Domain and Communities, you can localize the login prompt with a custom label. You can also localize custom login error messages in Apex. For example, you can alert users when they try to log in with a personal email address instead of their corporate email address.

# Streamline Connected App Integrations with OAuth 2.0 Endpoints (Generally Available)

An OAuth client, such as MuleSoft, can now send a request to the dynamic client registration endpoint to automatically register a new child OAuth 2.0 connected client app with Salesforce. With a successful registration, Salesforce returns a new client identifier and metadata about the newly registered child app. The OAuth 2.0 connected app can check the current state of its access and refresh tokens. The OAuth client can check the current state of access and refresh tokens for itself and its child apps. In addition, admins can authorize a single connected app to introspect all access and refresh tokens within the entire org.

## OAuth 2.0 Connected App Client Secrets Require More Characters

When you create a connected app, Salesforce generates the value for the consumer secret (referred to as the client secret in OAuth 2.0). For security reasons, we increased the minimum size requirement from at least 8 characters to 32. We also changed the format of the generated secret. As of Spring '19, if you replace the Salesforce-generated secret with your own using Metadata API, make sure that the size is at least 32 characters. This change does not affect existing OAuth 2.0 connected apps.

## Create Your Own Verify Page for Community Sign-Ups

When users sign up for your community with an email address or phone number, Salesforce sends them a verification code and generates the Verify page. The Verify page is where users confirm their identity. Previously, you could brand the page with your logo, colors, and background, but you couldn't change the form, which comes from Salesforce. Now you can replace the Salesforce Verify page with your own page that you create using Visualforce and a couple of Apex methods.

# Send Asynchronous Email Verifications

The new Salesforce Identity asynchronous email feature lets users verify their email address at any time. You send users a verification link in an email message. Users can verify their email address by clicking the link when it's convenient. No need to stop what they're doing. You can also customize the email message so that users recognize your brand.

## Create Lightweight Contactless External Identity Users (Generally Available)

Reduce the overhead of managing external identity users by creating users without contact information. Without contacts, you don't have to worry about keeping user and contact records in sync. You can simply maintain a user database for identity purposes. You can add contacts later if you decide that you want them—for example, when the user becomes a qualified lead. You can also remove contacts from existing users to make the most of your community licenses.

## View and Revoke Devices with Device Management (Beta)

You can now track and monitor which devices are accessing your Salesforce org with Device Management, giving you greater control over the security of your data. Using an API or Apex call, you can revoke access and the associated refresh tokens from lost and stolen devices. You can also build processes and policies to define how devices access your org, such as requiring an approval request from the device before authorizing a login. In addition, create custom reports to see Device Management statistics, such as the types of devices accessing your org.

# Send Users to a Custom URL When They Log Out

You can now send users to a custom URL during single logout (SLO) when Salesforce is the service provider.

## Redirect Users to Your Website After Self-Registration

You can now configure Salesforce Identity Embedded Login to redirect users back to your website after they complete self-registration. Previously, when users self-registered on your website, they were redirected to your community page.

# Include Even More Special Characters in Passwords

Get more creative with your passwords. Salesforce now supports these special characters:  $! " # $ % &'() * + , - . / :; < = > ? @ [ ] ^ _ ` { | } ~.$ 

# Get More Security with a Refreshed Password Blacklist

We refreshed the password blacklist to give your org added security. For example, users can no longer use the string "1234567" to log in to your org.

# Verify That User Credentials Are Secure When Users Access Sessions

You can now view the HTTP method used for the session login: POST, GET, or Unknown. Use this information to determine if a user is inadvertently exposing user credentials through a GET request. For example, if a user entered a username and password on the login page, the HTTP method for login is a secure POST request. However, if the user logged in by providing the username and password in the URL as a GET request, the credentials are exposed.

# Set Session Security Policy to Secure Access to Editing Roles

You can now require that users have a high-assurance session level before allowing them to access role settings in the Roles Setup page, the UserRole object, and the Role object in Metadata API. Setting a high-assurance session level helps secure sensitive operations. These settings apply only to users who have user permissions to access these operations. If users have a high-assurance session after logging in, they aren't prompted to verify their identity in the same session, even if you require high assurance for sensitive operations.

# Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)

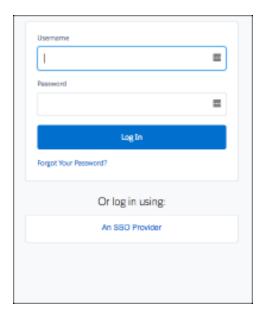
This critical update, released in Summer '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

# Create an Identity-First Login Page with My Domain Login Discovery

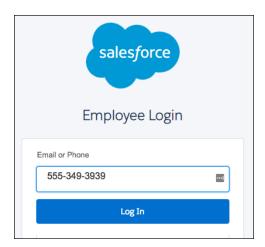
Configure My Domain with Login Discovery to simplify the login process for users. This login process is sometimes called interview-based or identity-first login. Instead of requiring users to login with a username and password, My Domain Login Discovery page prompts them to enter a unique identifier such as an email address or phone number. Then users are prompted to authenticate based on the identifier they supply. If they're configured for SSO, they don't even have to choose. My Domain Login Discovery sends them directly to the identity provider (IdP) login page to authenticate.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Login Discovery simplifies various authentication scenarios, including multiple login options and multiple ldPs. Often, customers get a login page where they can enter their credentials or click an SSO button. Some customers might not notice the SSO button or know what it's for. Here's an example of a login page with multiple login options.



Here's an example of a My Domain Login Discovery page. It has one option for users to enter an identifier. Login Discovery then either displays a Salesforce password page, or redirects them to an identity provider login page.



**How:** To implement Login Discovery for My Domain, create a handler in Apex and then reference the handler from the My Domain Setup page. The Apex class implements the MyDomainLoginDiscoveryHandler interface. Then, from Setup, enter My Domain, and select **My Domain**. Under Authentication Configuration, click **Edit**. For the login page type, select **Discovery**. For your login prompt, enter text or a custom label. Then choose the Apex handler you created.

#### SEE ALSO:

Localize Login Prompts and Custom Error Messages for Login Discovery

Apex: New and Changed Items

Salesforce Help: My Domain (can be outdated or unavailable during release preview)

# Authenticate Your Users with Certificates

Salesforce now provides certificate-based authentication. Using either Salesforce Setup or API, you can upload unique PEM-encoded X.509 digital certificates to authenticate individual users to your org.

**Where:** This change applies to Lightning Experience and Salesforce Classic in all editions and is available only in orgs configured with My Domain.

**Why:** This new authentication method complies with FedRAMP Digital Identity requirements and certification through personal identification verification cards. Your org can also use certificate authority-signed certificates with this authentication method.

**How:** Enable certificate-based authentication from Salesforce Setup or API.

If you use API to configure certificate-based authentication, you can integrate the uploaded user certificates with an external API tool, such as Data Loader. External API tools can help you manage your user certificates. To configure the new UserAuthCertificate object, you can use REST API, SOAP API, and standard API object creation.

From Salesforce Setup, enable certificate-based authentication from Session Settings.



Upload certificates in User Authentication Certificates.



And enable certificate-based authentication in My Domain.



SEE ALSO:

Salesforce Help: Configure Certificate-Based Authentication (can be outdated or unavailable during release preview)

# Localize Login Prompts and Custom Error Messages for Login Discovery

When you use the Login Discovery page type in My Domain and Communities, you can localize the login prompt with a custom label. You can also localize custom login error messages in Apex. For example, you can alert users when they try to log in with a personal email address instead of their corporate email address.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions. It's available in all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

How: To localize the login prompt, use the \$Label global variable, for example, \$Label.loginPrompt.

To localize custom error messages in Apex Auth.LoginDiscoveryHandler or Auth.MyDomainLoginDiscoveryHandler, create the error message as a custom label with the Auth.DiscoveryCustomErrorException exception. In this example, CustomError is a custom label.

throw new

Auth.DiscoveryCustomErrorException(Label.CustomError)

#### SEE ALSO:

Salesforce Help: Custom Labels (can be outdated or unavailable during release preview)

Salesforce Help: Translate Custom Labels (can be outdated or unavailable during release preview)

Create an Identity-First Login Page with My Domain Login Discovery

# Streamline Connected App Integrations with OAuth 2.0 Endpoints (Generally Available)

An OAuth client, such as MuleSoft, can now send a request to the dynamic client registration endpoint to automatically register a new child OAuth 2.0 connected client app with Salesforce. With a successful registration, Salesforce returns a new client identifier and metadata about the newly registered child app. The OAuth 2.0 connected app can check the current state of its access and refresh tokens. The OAuth client can check the current state of access and refresh tokens for itself and its child apps. In addition, admins can authorize a single connected app to introspect all access and refresh tokens within the entire org.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** This solution follows the OAuth 2.0 Dynamic Client Registration Protocol and the OAuth 2.0 Token Introspection specification. Configure connected app integrations with OAuth 2.0 endpoints with these steps.

After creating a connected app, generate an initial access token and configure your new endpoints. And be sure to register your initial access token and integrate your OAuth 2.0 endpoints with your OAuth 2.0 client, such as MuleSoft.

## SEE ALSO:

Salesforce Help: Create a Connected App (can be outdated or unavailable during release preview)

Salesforce Help: Prepare for Dynamic Client Registration (can be outdated or unavailable during release preview)

Salesforce Help: Generate an Initial Access Token (can be outdated or unavailable during release preview)

Salesforce Help: OpenID Connect Dynamic Client Registration Endpoint (can be outdated or unavailable during release preview)

Salesforce Help: OpenID Connect Token Introspection Endpoint (can be outdated or unavailable during release preview)

# OAuth 2.0 Connected App Client Secrets Require More Characters

When you create a connected app, Salesforce generates the value for the consumer secret (referred to as the client secret in OAuth 2.0). For security reasons, we increased the minimum size requirement from at least 8 characters to 32. We also changed the format of the generated secret. As of Spring '19, if you replace the Salesforce-generated secret with your own using Metadata API, make sure that the size is at least 32 characters. This change does not affect existing OAuth 2.0 connected apps.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

# SEE ALSO:

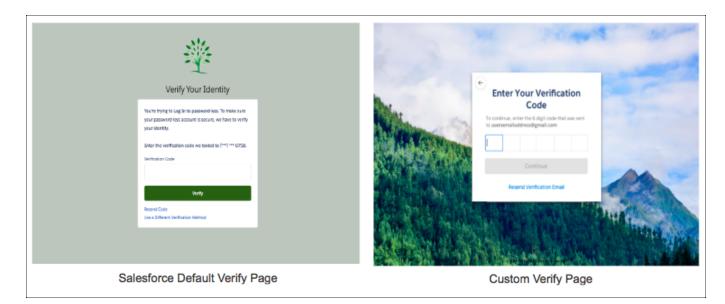
Salesforce Help: Create a Connected App (can be outdated or unavailable during release preview)

# Create Your Own Verify Page for Community Sign-Ups

When users sign up for your community with an email address or phone number, Salesforce sends them a verification code and generates the Verify page. The Verify page is where users confirm their identity. Previously, you could brand the page with your logo, colors, and background, but you couldn't change the form, which comes from Salesforce. Now you can replace the Salesforce Verify page with your own page that you create using Visualforce and a couple of Apex methods.

**Where:** This change applies to Lightning communities, accessed through Lightning Experience and Salesforce Classic. Communities are available in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Here you can compare between the default Salesforce-generated Verify page and a custom page created in Visualforce. The Visualforce page uses different fonts, colors, and layout. It also customizes how users enter the verification code.



To generate your own Verify page for self-registration, create a Visualforce page and include the Apex methods

System. UserManagement.initSelfRegistration and

System. UserManagement.verifySelfRegistration. First call initSelfRegistration, and include a user object to insert after successful registration. It returns the user identifier as a string.

```
global String initSelfRegistration(Auth.VerificationMethod method, User u)
```

Then call verifySelfRegistration, passing in the identifier returned from initSelfRegistration and the verification code that the user entered. The method returns the verification result, which contains the session ID and verification status.

global Auth. Verification Result verify Self Registration (Auth. Verification Method, String identifier, String code, String start Url)

This example verifies the identity of a user who enters a phone number.

```
User u = new user;
u.name = 'Tom'; // get input from the signup form
String id = initSelfRegistration(Auth.VerificationMethod.SMS, u);
VerificationResult res = verifySelfRegistrationAuth.VerificationMethod.SMS, id, '123456', null);
if(res.status == SUCCESS) {
//redirect
}
```

The Apex methods support verification by email and SMS. They control verification only for the self-registration process. They don't apply to the login process.

You can check whether users have verified their email addresses and phone numbers by creating a list view from the Users Setup page. For example, include these verification-related fields.

- Admin Trusted Mobile Number
- One-Time Password App
- Salesforce Authenticator
- Temporary Code
- U2F Security Key
- User Verified Email
- User Verified Mobile Number

SEE ALSO:

Apex: New and Changed Items

# Send Asynchronous Email Verifications

The new Salesforce Identity asynchronous email feature lets users verify their email address at any time. You send users a verification link in an email message. Users can verify their email address by clicking the link when it's convenient. No need to stop what they're doing. You can also customize the email message so that users recognize your brand.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions. It's available in all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** If you set up async email verification for community sign-ups, customers can access your community immediately, even before they verify their email address. You can send customers a verification link in the email message. After they click the link, their email address is verified. So customers can log in with the email address the next time they visit. Also, external users can log in without a password only after their email address is verified.

As a best practice for both internal and external users, send async email verifications on occasion. Sending email verifications ensures that users are registered with a valid email address that they own.

**How:** Set up email identity verification using the Apex method asyncEmailConfirmation, which sends the verification link in an email message. Here's an example.

```
System.UserManagement.sendAsyncEmailConfirmation('005RM000001a00x', '00XRM000000hxnG',
'0DBRM00000015i', '/s/contactsupport');
```

You can customize verification email messages by modifying the Communities: User Verification Email template or through the API using the AsyncVerificationLink field on the API Network object. To determine which users receive an email with the verification link, check that the User Verified Email bit is set. You can find the User Verified Email bit from Setup or via the API.

SEE ALSO:

Apex: New and Changed Items

Salesforce Help: Customize Email Sent from Communities (can be outdated or unavailable during release preview)
Salesforce Help: Send Async Email Verifications (can be outdated or unavailable during release preview)

# Create Lightweight Contactless External Identity Users (Generally Available)

Reduce the overhead of managing external identity users by creating users without contact information. Without contacts, you don't have to worry about keeping user and contact records in sync. You can simply maintain a user database for identity purposes. You can add contacts later if you decide that you want them—for example, when the user becomes a qualified lead. You can also remove contacts from existing users to make the most of your community licenses.

**Where:** This change applies to all communities accessed through Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** This feature applies to users with the External Identity license—users with the Identity for Customers and Partners product. It's also available to Communities users when they want to downgrade to an External Identity license. Contact Salesforce Customer Support to enable this feature.

How: To create a contactless external identity user, create a user record using Apex, SOAP, or Bulk API.

```
User u = new User();
    u.FirstName = 'Jane';
    u.LastName = 'Doe';
    u.Email = 'janedoe@test.com';
    u.Alias = 'jane';
    u.Username = 'janedoe@test.com';
    u.CommunityNickname = 'Jane';
    u.LocaleSidKey = 'en_US';
    u.TimeZoneSidKey = 'GMT';
    u.ProfileID = '00exx000000jvN4'; // Profile that's associated with the EI license u.LanguageLocaleKey = 'en_US';
    u.EmailEncodingKey = 'UTF-8';
    insert u;
```

To add a contact to the contactless external identity user, create a contact, and then associate the contact with the user.

```
Account a = [SELECT Id FROM Account WHERE Id = '001xx000003DIyf'];
  Contact c = new Contact();
  c.FirstName = 'Sonia';
  c.LastName = 'James';
  c.AccountId = a.id;
  insert c;
  User u = [SELECT Id FROM User WHERE Id = '005xx000001TLlf'];
  u.ContactId=c.id;
  update u;
```

Only users with an External Identity license can be contactless. So if you want to remove a contact from a user with a Communities license, you first downgrade the user to the External Identity license. Then you can remove the contact.

#### SEE ALSO:

Salesforce Identity for Customers and Partners: Manage Communities for External Users (can be outdated or unavailable during release preview)

# View and Revoke Devices with Device Management (Beta)

You can now track and monitor which devices are accessing your Salesforce org with Device Management, giving you greater control over the security of your data. Using an API or Apex call, you can revoke access and the associated refresh tokens from lost and stolen devices. You can also build processes and policies to define how devices access your org, such as requiring an approval request from the device before authorizing a login. In addition, create custom reports to see Device Management statistics, such as the types of devices accessing your org.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Professional, Enterprise, Performance, Unlimited, and Developer editions.



**Note:** As a beta feature, Device Management is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. For information on enabling this feature in your org, contact Salesforce.

**Who:** To view devices that access Salesforce, you must have the View Devices permission. To revoke device access, you must have the Manage Devices permission.

SEE ALSO:

Salesforce Help: Device Management (Beta) (can be outdated or unavailable during release preview)

# Send Users to a Custom URL When They Log Out

You can now send users to a custom URL during single logout (SLO) when Salesforce is the service provider.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

How: Configure both the identity provider SLO URL and custom logout URL on the SAML Single Sign-On Settings page.

When Salesforce is the service provider and initiates a logout request, the identity provider can post a logout response to redirect the user back to Salesforce. In this scenario, Salesforce sends the user to the custom URL upon logout. If the identity provider doesn't redirect the user back to Salesforce in a logout response, the identity provider determines the SLO redirect URL upon logout.

SEE ALSO:

*Salesforce Help*: Configure SAML Settings for Single Logout When Salesforce Is the Service Provider (can be outdated or unavailable during release preview)

# Redirect Users to Your Website After Self-Registration

You can now configure Salesforce Identity Embedded Login to redirect users back to your website after they complete self-registration. Previously, when users self-registered on your website, they were redirected to your community page.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** Salesforce web developers can add the new salesforce-self-register-starturl-enabled meta tag to your website's Embedded Login. The meta tag auto-generates and appends the start URL to the self-registration endpoint. When a user self-registers on your website, the auto-generated start URL initiates the OAuth user-agent flow, redirecting the user back to your website.

#### SEE ALSO:

Salesforce External Identity Implementation Guide: Embedded Login: Allow Visitors to Log In to Your Web Pages (can be outdated or unavailable during release preview)

Salesforce External Identity Implementation Guide: Embedded Login Meta Tag Reference (can be outdated or unavailable during release preview)

# Include Even More Special Characters in Passwords

Get more creative with your passwords. Salesforce now supports these special characters:  $! " # $ % & '() * + , - . / :; < = > ? @ [ ] ^ ` [ ] ~ .$ 

**Where:** This change applies to Lightning Experience and Salesforce Classic in Contact Manager, Essentials, Group, Professional, Enterprise, Performance, Unlimited, Developer, and Database.com editions.

# Get More Security with a Refreshed Password Blacklist

We refreshed the password blacklist to give your org added security. For example, users can no longer use the string "1234567" to log in to your org.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Contact Manager, Essentials, Group, Professional, Enterprise, Performance, Unlimited, Developer, and Database.com editions.

# Verify That User Credentials Are Secure When Users Access Sessions

You can now view the HTTP method used for the session login: POST, GET, or Unknown. Use this information to determine if a user is inadvertently exposing user credentials through a GET request. For example, if a user entered a username and password on the login page, the HTTP method for login is a secure POST request. However, if the user logged in by providing the username and password in the URL as a GET request, the credentials are exposed.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Contact Manager, Developer, Enterprise, Group, Performance, Professional, and Unlimited editions.

**How:** View the HTTP login method on the Login History page.

## SEE ALSO:

Salesforce Help: Monitor Login History (can be outdated or unavailable during release preview)

# Set Session Security Policy to Secure Access to Editing Roles

You can now require that users have a high-assurance session level before allowing them to access role settings in the Roles Setup page, the UserRole object, and the Role object in Metadata API. Setting a high-assurance session level helps secure sensitive operations. These settings apply only to users who have user permissions to access these operations. If users have a high-assurance session after logging in, they aren't prompted to verify their identity in the same session, even if you require high assurance for sensitive operations.

Where: This change applies to Salesforce Classic and Lightning Experience in all editions.

**How:** From Setup, enter *Identity Verification* in the Quick Find box, then select **Identity Verification.** Locate the Session Security Level Policies section, and update the Manage Roles setting.

SEE ALSO:

Salesforce Help: Require High-Assurance Session Security for Sensitive Operations (can be outdated or unavailable during release preview)

# Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)

This critical update, released in Summer '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and in Professional, Enterprise, Performance, Unlimited, and Database.com editions.

# Salesforce Shield: Field Audit Trail Object Support, Cache-Only Keys Generally Available, and New Apex Events

In Shield Platform Encryption, the Cache-Only Key Service is now generally available. You also get the freedom of self-service background encryption and compatibility with more clouds. In Event Monitoring, two new EventLogFile event types capture Apex exception and long-running Apex request information. And Field Audit Trail supports automated archival for more objects.

#### IN THIS SECTION:

## Field Audit Trail Supports More Objects

Data changes continuously, and administrators and auditors need access to historical data well beyond 18 months. To ensure that your org captures field and object changes for up to 10 years, Field Audit Trail now supports automated archival for more objects, including the new Individual object. You can now set field history retention policies on these objects: Campaigns, Individuals, Orders, and Order Products.

Shield Platform Encryption: Cache-Only Keys Generally Available, Self-Service Background Encryption, and More Compatibility Across Clouds

Once again, Shield Platform Encryption lets you use more features to access encrypted data. The Cache-Only Key Service gives you more ways to control your key material. And to help you get to work faster, we added self-service options for managed packages and the background encryption service.

Event Monitoring: New Event Types for Apex Troubleshooting and Improved Transaction Policy Wizard

Two new EventLogFile event types capture Apex exception and long-running Apex request information. Also, you can enable Transaction Security policies as you create them, and we added more informative policy error messages.

# Field Audit Trail Supports More Objects

Data changes continuously, and administrators and auditors need access to historical data well beyond 18 months. To ensure that your org captures field and object changes for up to 10 years, Field Audit Trail now supports automated archival for more objects, including the new Individual object. You can now set field history retention policies on these objects: Campaigns, Individuals, Orders, and Order Products.

Where: This change applies to Salesforce Classic in Enterprise, Performance, and Unlimited editions.

# Shield Platform Encryption: Cache-Only Keys Generally Available, Self-Service Background Encryption, and More Compatibility Across Clouds

Once again, Shield Platform Encryption lets you use more features to access encrypted data. The Cache-Only Key Service gives you more ways to control your key material. And to help you get to work faster, we added self-service options for managed packages and the background encryption service.

#### IN THIS SECTION:

## Retain Control of Your Keys with the Cache-Only Key Service (Generally Available)

Get more control over the chain of custody of your key material. With the Platform Encryption: Cache-Only Key Service, you can store your key material outside of Salesforce using a key service of your choice. The Cache-Only Key Service fetches the key material on demand. Your key service transmits your key material over a secure channel that you configure. It's then encrypted and stored in the cache for immediate encrypt and decrypt operations.

# Synchronize Your Data with Self-Service Background Encryption

Sometimes you add fields to your encryption policy, apply a different encryption scheme to a field, or rotate key material. In these cases, it's important to synchronize encrypted data with your encryption policy and active key material. Now you can sync data in most fields, as well as field history and feed tracking changes, from Setup. Self-service background encryption gives you the autonomy to maintain your encryption policy on your own schedule with fewer calls to Salesforce Customer Support.

# Self-Service Encryption for Custom Fields in Installed Managed Packages

Salesforce Customer Support is great, but self-service is even better. Now you can turn on the Encrypt Custom Fields for Managed Packages setting for your org right from Setup. No more calls to Support. If the installed managed package supports encryption, you can get right down to the important business of adding extra layers of security to your—and your customers'—data.

#### Encrypt Data in Custom Rich Text Area Fields (Generally Available)

All Shield Platform Encryption customers can now encrypt custom rich text area fields, adding an extra layer of security and compliance to a wider range of your data. You can encrypt custom rich text area fields in custom and standard objects.

## **Encryption Compatibility with Event Series**

When you encrypt the Event Description field, your event series in Lightning Experience and the Salesforce app are also encrypted.

#### Filter Encrypted Data with Exact Match Case-Insensitive Deterministic Encryption (Beta)

Want better results when filtering encrypted data? You can now use the same capabilities as deterministic encryption but with exact, case-insensitive matching. Case-insensitive means that a SOQL query against the Lead object, where Company = 'Acme', returns Acme, acme, or ACME. Similarly, when the filter-preserving scheme tests for unicity (uniqueness), each version of Acme is considered identical.

# Encrypt Your Einstein Discovery Data (Pilot)

Now you can encrypt sensitive Einstein Discovery data with Shield Platform Encryption. When you encrypt this data at rest in Salesforce, you add another layer of security to your Einstein Discovery answers, explanations, and recommendations.

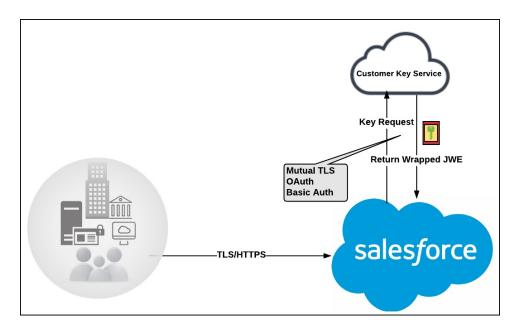
# Retain Control of Your Keys with the Cache-Only Key Service (Generally Available)

Get more control over the chain of custody of your key material. With the Platform Encryption: Cache-Only Key Service, you can store your key material outside of Salesforce using a key service of your choice. The Cache-Only Key Service fetches the key material on demand. Your key service transmits your key material over a secure channel that you configure. It's then encrypted and stored in the cache for immediate encrypt and decrypt operations.

**Where:** This change applies to Salesforce Classic, Lightning Experience, and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Available to customers who purchased the Cache-Only Key Service add-on subscription. To purchase, contact your account executive.

**Why:** The Cache-Only Key Service addresses a unique need for non-persisted key material. Cache-only keys aren't persisted in any Salesforce system of record or backups. Instead, the service fetches key material from an on-premises key service, cloud-based key service, or cloud-based key brokering vendor of your choice. After your key material is fetched, it's encrypted and stored in the cache for encrypt and decrypt operations.



You can destroy and rotate key material on demand and track cache-only key events, giving you full control of your key material.

**How:** Creating and hosting cache-compatible keys requires some setup in and outside of Salesforce. After you generate and prepare your key material, create a named credential to use as a secure channel over which the service fetches the key material. Then configure your connection on the Key Management page in Setup.

Use the Callout Check page to check that the callout connection to your key service is working. If it isn't, the page gives you the information you need to make the appropriate adjustments. You can also use the Callout Check page to monitor your connection and quickly respond to key service interruptions that could prevent the service from fetching your keys.

# New in Spring '19

- Rotate, generate, and update cache-only keys programmatically using Enterprise API.
- Opt in to replay detection for added security. Update your key service to accept nonces as a part of cache-only key callout. Then turn on **Enable Replay Detection for Cache-Only Keys** on the Advanced Settings page in Setup.
- Quickly update your cache-only keys' associated certificates and named credentials. On the Key Management page, click **Details**.
   In the Callout Connection Details section, click **Edit**. Choose your callout's up-to-date Certificate Unique Name and Named Credentials, and save. You can also update these fields through Enterprise API.

#### SEE ALSO:

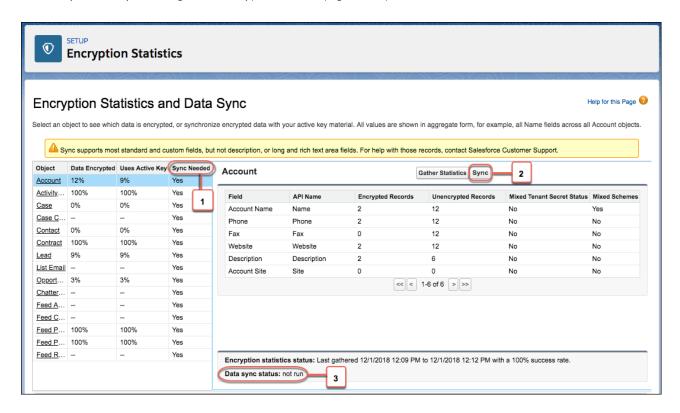
Salesforce Help: Cache-Only Key Service (can be outdated or unavailable during release preview) Changed Objects

# Synchronize Your Data with Self-Service Background Encryption

Sometimes you add fields to your encryption policy, apply a different encryption scheme to a field, or rotate key material. In these cases, it's important to synchronize encrypted data with your encryption policy and active key material. Now you can sync data in most fields, as well as field history and feed tracking changes, from Setup. Self-service background encryption gives you the autonomy to maintain your encryption policy on your own schedule with fewer calls to Salesforce Customer Support.

**Where:** This change applies to Salesforce Classic and Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions as a sandbox preview.

**How:** To synchronize your data, go to the Encryption Statistics page in Setup.



The new Sync Needed column indicates whether you need to synchronize your data (1). Click **Sync** (2), and Salesforce synchronizes the object's data in the background. Check the status of the encryption process at the bottom of the page (3), or wait for the email letting you know that the job is complete. After your data is synchronized, we gather statistics for you so that you can see the latest details about your encrypted data.

You can also encrypt field history and feed tracking changes when you synchronize your data from Setup. On the Advanced Settings page, turn on **Encrypt Field History and Feed Tracking Values**. Now whenever you sync data from Setup, field history and feed tracking values are also encrypted by your active key material.

Self-service background encryption isn't available for all data elements. You can't sync standard description fields, long and rich text area fields, and data elements, such as files and attachments, and Chatter data through Setup. For help synchronizing this data, contact Salesforce Customer Support. You can also request that Salesforce Customer Support encrypt field history and feed tracking values.

#### SEE ALSO:

Salesforce Help: Sync Data with Self-Service Background Encryption(can be outdated or unavailable during release preview)

# Self-Service Encryption for Custom Fields in Installed Managed Packages

Salesforce Customer Support is great, but self-service is even better. Now you can turn on the Encrypt Custom Fields for Managed Packages setting for your org right from Setup. No more calls to Support. If the installed managed package supports encryption, you can get right down to the important business of adding extra layers of security to your—and your customers'—data.

**Where:** This change applies to Salesforce Classic, Lightning Experience, and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**How:** On the Advanced Settings page in Setup, turn on **Encrypt Custom Fields in Managed Packages**. From now on, if an installed managed package supports encryption, you can encrypt custom fields in that package.



**Note:** Don't know if your application supports encrypted fields? Look for the Compatibility with Shield flag in its AppExchange listing. If you don't see this flag, talk to your app vendor.

If you've already had Salesforce enable this feature for you, just opt in again on the Advanced Settings page. If you don't opt in, your encrypted custom fields in installed managed packages remain encrypted. However, you can't enable or disable encryption on those fields in your installed managed packages.

## SEE ALSO:

Salesforce Help: Which Custom Fields Can I Encrypt? (can be outdated or unavailable during release preview)
Salesforce Help: Encrypt Fields on Custom Objects and Custom Fields (can be outdated or unavailable during release preview)

# Encrypt Data in Custom Rich Text Area Fields (Generally Available)

All Shield Platform Encryption customers can now encrypt custom rich text area fields, adding an extra layer of security and compliance to a wider range of your data. You can encrypt custom rich text area fields in custom and standard objects.

**Where:** This change applies to Salesforce Classic, Lightning Experience, and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Enable encryption when you create or edit a rich text area field.

In Lightning Experience, from the Object Manager, select your custom or standard object, and then select **Fields & Relationships**. When you create or edit a rich text area field, select **Encrypted** on the field detail page.

In Salesforce Classic, navigate to your object in Setup, and select **Fields**. Under the Custom Fields and Relationships section, click **New** or **Edit**, and select **Encrypted** on the field detail page.

## SEE ALSO:

Salesforce Help: Encrypt Fields on Custom Objects and Custom Fields (can be outdated or unavailable during release preview)

# **Encryption Compatibility with Event Series**

When you encrypt the Event Description field, your event series in Lightning Experience and the Salesforce app are also encrypted.

**Where:** This change applies to Lightning Experience and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**How:** On the Encryption Policy page in Setup, click **Encrypt Fields**, and encrypt the Activity (Task and Event) Description field. From now on, your event series in Lightning Experience and the Salesforce app are also encrypted.

Historical event series data remains unencrypted after you enable Shield Platform Encryption. To encrypt existing event series data in Lightning Experience, update your event series records. Updating synchronizes existing event series data with your active key material.

SEE ALSO:

Schedule an Event Series (Generally Available)

# Filter Encrypted Data with Exact Match Case-Insensitive Deterministic Encryption (Beta)

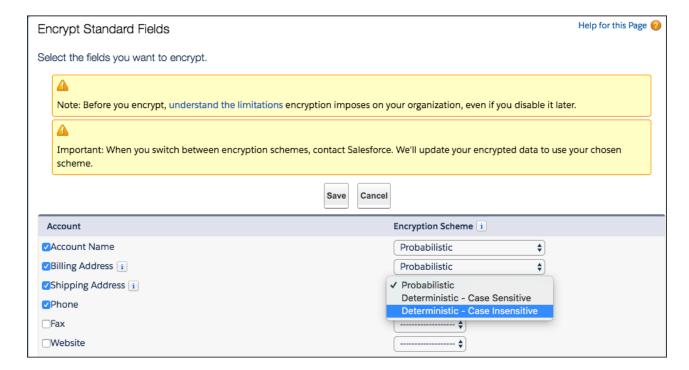
Want better results when filtering encrypted data? You can now use the same capabilities as deterministic encryption but with exact, case-insensitive matching. Case-insensitive means that a SOQL query against the Lead object, where Company = 'Acme', returns Acme, acme, or ACME. Similarly, when the filter-preserving scheme tests for unicity (uniqueness), each version of Acme is considered identical.

**Where:** This change applies to Salesforce Classic, Lightning Experience, and all versions of the Salesforce app in sandbox and Developer Edition environments. After you've tested this feature in sandbox, contact Salesforce to enable it in a production org in Enterprise, Performance, and Unlimited editions.



**Note:** As a beta feature, Case-Insensitive Deterministic Encryption is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only from generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only. It's offered as is, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions for Case-Insensitive Deterministic Encryption in the IdeaExchange and through the Trailblazer Community. For information about enabling this feature in your organization, contact Salesforce.

**How:** If you're new to using case-insensitive deterministic encryption, contact Salesforce Customer Support for access to this encryption scheme. Turn on deterministic encryption on the Advanced Settings page in Setup. On the Key Management page, select the **Data in Salesforce (Deterministic)** secret type, and click **Generate Tenant Secret**. Now you can apply case-insensitive deterministic encryption to standard fields from the Encrypt Standard Fields page or to custom fields through the Object Manager.



When you apply case-insensitive deterministic encryption to data, synchronize your data from the Encryption Statistics and Data Sync page, or contact Salesforce Customer Support to request the background encryption service. If you don't synchronize your data, case-insensitive deterministic encryption isn't fully functional.

## New in Spring '19

- Compatibility with compound fields (except fields with custom indexes).
- Ability to encrypt Text and Email external ID custom fields with case-insensitive deterministic encryption. When you create or edit these fields, use one of the following field setting combinations.

External ID Field Type	Unique Attributes	Encrypted
Text	None	Use case-insensitive deterministic encryption
Text	Unique and case sensitive	Use case-sensitive deterministic encryption
Text	Unique and case insensitive	Use case-insensitive deterministic encryption
Email	None	Use case-insensitive deterministic encryption
Email	Unique	Use case-sensitive deterministic encryption

Case-insensitive deterministic encryption doesn't support fields used in skinny table.

#### SEE ALSO:

Salesforce Help: Filter Encrypted Data with Deterministic Encryption (can be outdated or unavailable during release preview)
Salesforce Help: Considerations for Using Deterministic Encryption (can be outdated or unavailable during release preview)

# **Encrypt Your Einstein Discovery Data (Pilot)**

Now you can encrypt sensitive Einstein Discovery data with Shield Platform Encryption. When you encrypt this data at rest in Salesforce, you add another layer of security to your Einstein Discovery answers, explanations, and recommendations.

**Where:** This change applies to Salesforce Classic, Lightning Experience, and all versions of the Salesforce app in sandboxes in Enterprise, Performance, Unlimited, and Developer editions.



**Note:** We provide Einstein Discovery Encryption 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. Feature isn't generally available unless or until Salesforce announces its general availability in documentation or in press releases or public statements. We can't guarantee general availability within any particular time frame or at all. Make your purchase decisions only on the basis of generally available products and features. You can provide feedback and suggestions for Einstein Discovery Encryption in the IdeaExchange.

**Who:** Encryption for Einstein Discovery is available to customers who have both the Einstein Analytics Plus license and Shield Platform Encryption.

**How:** To join the Einstein Discovery Encryption pilot, contact your Salesforce account executive. From the Key Management page in Setup, select **Analytics** from the Choose Tenant Secret Type dropdown. Then, on the Encryption Policy page, select **Encrypt Einstein Analytics**. From now on, the following Einstein Discovery data are encrypted along with your Einstein Analytics datasets.

- Analysis Setup—Setup
- Analysis Setup File—Data File
- Analysis Insights—Properties

# Event Monitoring: New Event Types for Apex Troubleshooting and Improved Transaction Policy Wizard

Two new EventLogFile event types capture Apex exception and long-running Apex request information. Also, you can enable Transaction Security policies as you create them, and we added more informative policy error messages.

## IN THIS SECTION:

## Get More Information When Long-Running Concurrent Apex Requests Are Terminated

The Concurrent Long Running Apex Limit event type in the EventLogFile object captures information about long-running concurrent Apex requests in your org that Salesforce terminated after reaching the concurrency limit. For example, you can monitor log counts to get a benchmark or plot a count by hour. You can then use the log data to identify where a limit was exceeded. Also, you can identify the URI of the request that was terminated.

## **Get Information About Unexpected Exceptions**

The new Apex Unexpected Exception event type in the EventLogFile object captures information about unexpected exceptions in Apex code execution. The standard way to obtain exception information is from generated email. However, you now have the option of analyzing the EventLogFile object for Apex exception information, including stack traces.

## Create and Manage Transaction Policies More Easily

In the policy creation wizard, you can now enable a policy as you create it, and you don't specify an execution user for non-Apex policies. Also, more informative error messages alert you to issues when creating or updating policies. Find your policies easily by sorting them on the policy summary page.

# Get More Information When Long-Running Concurrent Apex Requests Are Terminated

The Concurrent Long Running Apex Limit event type in the EventLogFile object captures information about long-running concurrent Apex requests in your org that Salesforce terminated after reaching the concurrency limit. For example, you can monitor log counts to get a benchmark or plot a count by hour. You can then use the log data to identify where a limit was exceeded. Also, you can identify the URI of the request that was terminated.

**Where:** This change applies to Enterprise, Performance, Unlimited, and Developer editions. This event is available in the API but not in the Event Monitoring Analytics app.

Who: Available to customers who purchased Salesforce Shield or Salesforce Event Monitoring add-on subscriptions.

**Why:** Requests with an established Apex context that execute for 5 seconds are counted toward your org's limit of concurrent long-running requests. (Asynchronous requests don't count toward the limit.) When you have more than 10 long-running requests, which is the default org limit, additional long-running requests are terminated.

**How:** If you're an Event Monitoring customer, you automatically receive Concurrent Long Running Apex Limit event log data when your org exceeds the limit of concurrent Apex requests that are taking longer than the limit of overall request run time.

To identify where a limit was exceeded, see the REQUEST\_URI field. You can cross-reference this data with Apex Execution event data where the average RUN\_TIME exceeds 5 seconds.

To identify synchronous requests only, cross-reference event data with the QUIDDITY field in Apex Execution event data. For example, QUIDDITY NOT IN (A,BA,F,Q,S) and CALLOUT TIME (>5000).



Note: To change the default long-running request limit, contact Salesforce Customer Support.

#### SEE ALSO:

Object Reference for Salesforce and Lightning Platform: Concurrent Long-Running Apex Limit Event Type (can be outdated or unavailable during release preview)

Salesforce Developer Limits and Allocations Quick Reference: Apex Governor Limits (can be outdated or unavailable during release preview)

Salesforce Help: Web Request Limits

Knowledge Article: Proactive Alert Monitoring of Concurrent Apex Errors

Salesforce Developers Blog: Designing Force.com Applications That Avoid Hitting Concurrent Request Limits

# **Get Information About Unexpected Exceptions**

The new Apex Unexpected Exception event type in the EventLogFile object captures information about unexpected exceptions in Apex code execution. The standard way to obtain exception information is from generated email. However, you now have the option of analyzing the EventLogFile object for Apex exception information, including stack traces.

**Where:** This change applies to Enterprise, Performance, Unlimited, and Developer editions. This event is available in the API but not in the Event Monitoring Analytics app.

**How:** If you're an Event Monitoring customer, you receive exception data when an Apex operation terminates due to an unhandled exception.

#### SEE ALSO:

Object Reference for Salesforce and Lightning Platform: Apex Unexpected Exception Event Type (can be outdated or unavailable during release preview)

# Create and Manage Transaction Policies More Easily

In the policy creation wizard, you can now enable a policy as you create it, and you don't specify an execution user for non-Apex policies. Also, more informative error messages alert you to issues when creating or updating policies. Find your policies easily by sorting them on the policy summary page.

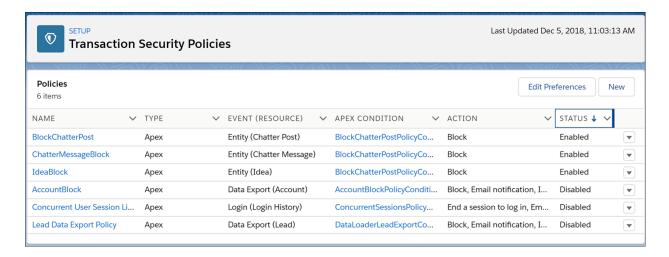
Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Who:** Available to customers who purchased Salesforce Shield or Salesforce Event Monitoring add-on subscriptions. To create and manage transaction security policies, you must have the Customize Application user permission.

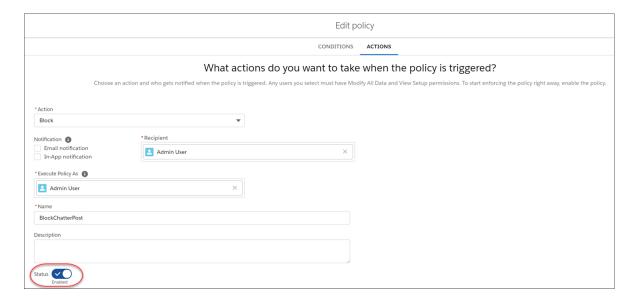


**Important**: If you're participating in the Real-Time Events pilot, you can't create Apex policies or edit disabled Apex policies for events that are supported in the pilot.

How: From Setup, enter Transaction Security in the Quick Find box, then select Transaction Security Policies.



To create a policy, click New. To update a policy, click the dropdown menu on the right, and select Edit.



## SEE ALSO:

Salesforce Help: Transaction Security (can be outdated or unavailable during release preview)

# Deployment: Change Set Operations with Fewer Clicks

Take action on a change set without loading its detail page.

## IN THIS SECTION:

# Clone, Deploy, Upload, and Validate Change Sets with Fewer Clicks

You no longer have to load the change set's detail page to initiate these operations. We added links to the Inbound Change Set page that you can use to initiate validation and deployment operations for both deployed and undeployed change sets. If the change set has been deleted from its source org, these operation links aren't available. If a deployment of the change set is in progress, these operation links aren't available until after the deployment completes. We also added links to the Outbound Change Set page that you can use to upload or clone change sets. If the change set doesn't contain any components, the Upload link isn't available.

## New and Changed Components for Change Sets

The components available for a change set vary by edition.

# Clone, Deploy, Upload, and Validate Change Sets with Fewer Clicks

You no longer have to load the change set's detail page to initiate these operations. We added links to the Inbound Change Set page that you can use to initiate validation and deployment operations for both deployed and undeployed change sets. If the change set has been deleted from its source org, these operation links aren't available. If a deployment of the change set is in progress, these operation links aren't available until after the deployment completes. We also added links to the Outbound Change Set page that you can use to upload or clone change sets. If the change set doesn't contain any components, the Upload link isn't available.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Professional, Unlimited, and Database.com editions.

# New and Changed Components for Change Sets

The components available for a change set vary by edition.

# **Aura Component Bundle**

Represents an Aura component in your org.

This change is only a label change. In previous versions, this component was called Lightning Component Bundle. You don't need to update your change sets.

## **Lightning Web Component Bundle**

Represents a Lightning web component in your org.

# Salesforce IoT: IoT Insights available in Field Service Lightning for Android, IoT in Service Cloud, and an Improved Context Setup Process

Mobile workers can now see Salesforce IoT data in Field Service Lightning for Android, using IoT Insights. Salesforce IoT is now offered as part of Service Cloud on Unlimited Edition. We've also improved the context setup flow, adding a wizard to simplify the process and other features to make navigating the process more efficient.

#### IN THIS SECTION:

# Improve Customer Experience with IoT in Service Cloud Unlimited Edition

A limited version of Salesforce IoT is now included in Service Cloud at no additional cost. By delivering IoT data to Service Cloud, Salesforce gives your users access to more diagnostic information about your customers' connected devices. Agents can analyze and solve issues faster and give your customers better service.

## Enjoy an Easier Setup Process for Creating Contexts

We've improved the IoT context setup process, and have made creating contexts simpler and more streamlined. All of the setup steps have been moved into a single wizard-based process.

# Show Your Salesforce IoT Data in Field Service Lightning Mobile for Android

With IoT Insights in Field Service Lightning for Android, mobile workers can now access valuable IoT data for customers' connected devices from anywhere.

# Improve Customer Experience with IoT in Service Cloud Unlimited Edition

A limited version of Salesforce IoT is now included in Service Cloud at no additional cost. By delivering IoT data to Service Cloud, Salesforce gives your users access to more diagnostic information about your customers' connected devices. Agents can analyze and solve issues faster and give your customers better service.

Where: This change applies to Lightning Experience in Unlimited Edition with the Service Cloud.

How: If your org has a Service Cloud license, you can find Salesforce IoT in Setup under Feature Settings.



Note: For more information, contact your Salesforce account executive.

# **Enjoy an Easier Setup Process for Creating Contexts**

We've improved the IoT context setup process, and have made creating contexts simpler and more streamlined. All of the setup steps have been moved into a single wizard-based process.

Where: This change applies to Lightning Experience in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** To make the setup flow even simpler, we made some other changes too. We combined the two steps for selecting key fields for the platform event and the Salesforce object onto one screen. You can see the key field options side by side for the platform event and the object. There's also a revert option, so you can go back to the live version of your context at any time.

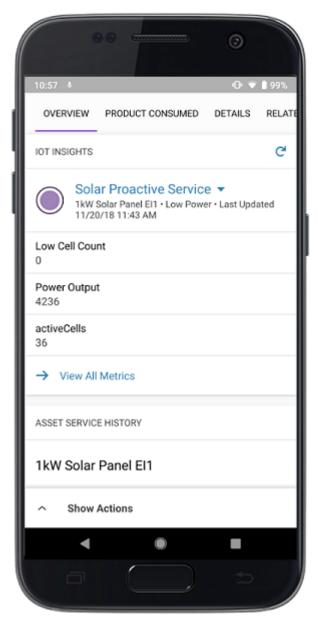
# Show Your Salesforce IoT Data in Field Service Lightning Mobile for Android

With IoT Insights in Field Service Lightning for Android, mobile workers can now access valuable IoT data for customers' connected devices from anywhere.

**Where:** You can now show your mobile workers Salesforce IoT data for your customers' connected devices using Salesforce IoT Insights in Field Service Lightning for Android.

**Who:** Users who have access to the parent record can view the data in the Salesforce IoT Insights component. Only users with a Field Service Lightning user license have access to IoT Insights in Field Service Mobile.

**Why:** For example, with access to diagnostic data about the condition of a customer's device, a field service technician can quickly analyze and solve issues while on-site.



**How:** From Setup, enter *Connected Apps* in the Quick Find box, then select **Manage Connected Apps**. Next to **Salesforce Field Service for Android**, click **Edit**. Confirm that *ENABLED\_IOT* is set to *TRUE*, or click **Edit** and change the attribute to *TRUE*. Click **Save**.

# **Development: Creating Your Own Salesforce App**

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



**Note:** Wondering where to find out about new and changed objects, classes, components, and so on in this release? We put the lists of new and changed items at the end of the Development section of the release notes. We're still covering all the changes that you want to know about. It's easier to read about new Development features when you're not interrupted by long lists of new and changed items. Let us know what you think. Use the feedback form on release note topics or tweet us at @salesforcedocs.

## IN THIS SECTION:

## Lightning Components: Introducing Lightning Web Components

Lightning Web Components is a new programming model built on the Web Components standard. Lightning web components bring modern JavaScript and web standards to the Lightning Component framework, improve developer productivity, and boost performance. Also, Locker Service is renamed Lightning Locker.

# Visualforce: Show a Toast in JavaScript, Improved Component Compatibility, and Postponed Critical Update

Use a new JavaScript function to show a toast message. The <apex:detail> and <apex:enhancedList> components have improved compatibility when working with custom objects. The critical update that removes instance names from URLs has been postponed to Winter '20.

## Apex

You can now enable checking for field- and object-level security permissions on SOQL SELECT queries by using the WITH SECURITY\_ENFORCED clause. New OrgLimit and OrgLimits Apex classes include methods to obtain a list or map of all OrgLimit instances, such as SOAP API requests, Bulk API requests, and Streaming API limits. A new System.SObject.isSet() method checks whether a field was queried or set by an Apex assignment. A new Apex Unexpected Exception event type is added to the EventLogFile object.

#### ΔP

For the FlexiPage object in Tooling API, you can take action on multiple records belonging to the same sObject type in a single request.

## Custom Metadata: Configure Default Field Values with Custom Metadata Types

Reference a custom metadata type record in a default value to simplify updating fields. If the default field value changes, you can update it in the custom metadata type instead of updating multiple field references.

## Salesforce CLI: Pre-Release Version, Salesforce Plug-In Generator

The Salesforce command-line interface (CLI) continues to evolve with more features and commands that support the Salesforce DX development models. Use it to easily create environments for development and testing, synchronize source code, run tests, and control the full application life cycle.

# AppExchange Partners (ISVforce): Templates for Business Processes, Inactive Processes and Flows in Packages, and End of Support for Trialforce Web Forms

Distribute apps, services, and other solutions on AppExchange with tools for partners. Develop processes and flows that subscribers can view and customize. Let subscribers decide whether and when to activate an installed process or flow. Trialforce web form support ends on March 1, 2019, but you can use the SignupRequest API to provision trial orgs for prospective customers.

## Enterprise Messaging: Change Data Capture and High-Volume Platform Events Generally Available

Use events to simplify communication between business systems. Change Data Capture and High-Volume Platform Events are now generally available.

## Sandboxes: Cloning Generally Available and a New User Email Address Format

We're improving application development with sandbox cloning. And, we're introducing a new format for copied user email addresses in sandboxes.

# Salesforce Extensions for VS Code: Lightning Web Component Support, Upcoming Force.com IDE Retirement

In addition to the changes we've made in weekly releases, Salesforce Extensions for VS Code v45 includes some major enhancements. Accelerate Lightning web component development with the VS Code Lightning Web Components extension, which is now included in the Salesforce Extension Pack. Start preparing now for the October 2019 retirement of Force.com IDE.

#### New and Changed Items for Developers

Here is where you can find new and changed objects, calls, classes, components, commands, and more that help you customize Salesforce features.

# Lightning Components: Introducing Lightning Web Components

Lightning Web Components is a new programming model built on the Web Components standard. Lightning web components bring modern JavaScript and web standards to the Lightning Component framework, improve developer productivity, and boost performance. Also, Locker Service is renamed Lightning Locker.

For more information, refer to the *Lightning Aura Components Developer Guide*.



**Note:** Looking for new and changed Lightning web components, Aura components, and Aura component interfaces? We received feedback that new features described in the Development section were hard to browse. In this release, we've consolidated the lists of new and changed items at the end of the Development section. We're still covering all the changes that you want to know about. Let us know what you think. Use the feedback form on release note topics or tweet us at @salesforcedocs.

#### IN THIS SECTION:

## Lightning Web Components (Generally Available)

Now you can build Lightning components using two programming models: Lightning Web Components, and the original model, Aura Components. Lightning web components are custom HTML elements built using HTML and modern JavaScript. Lightning web components and Aura components can coexist and interoperate on a page. To admins and end users, they both appear as Lightning components.

## Locker Service is Now Lightning Locker

Locker Service is renamed Lightning Locker to better reflect that it is for securing code running on the Lightning Platform.

## Changes in Lightning Locker

Lightning Locker supports the new Lightning Web Components programming model, improves Locker API Viewer, and contains many bug fixes and security improvements.

## Deprecated Default Values Without Square Brackets for Array, Set, and List Attributes

Setting a default value without square brackets is deprecated and can lead to unexpected behavior. To set a default value for these attribute types, surround comma-separated values with []; for example, default="['red', 'green', 'blue']".

## Get Notified About Unsaved Changes

Notify the UI about unsaved changes in your component with the lightning:unsavedChanges Aura component. You can use lightning:unsavedChanges in standard and console navigation apps. You can then use a controller to save or discard the changes.

## Reference Asset Files with the \$ContentAsset Global Value Provider

The \$ContentAsset global value provider lets you reference images, style sheets, and JavaScript used as asset files in your Lightning components. Reference \$ContentAsset asset files by name instead of using cumbersome file paths or URLs. \$ContentAsset provides sharing, versioning, and access control for all asset files, as well as options for mobile optimization and resizing of image files. You can use \$ContentAsset in Lightning components markup and within JavaScript controller and helper code.

## New Date-Time \$Locale Attributes

The \$Locale global value provider has new attributes for date-time formatting. \$Locale returns information about the current user's preferred locale.

#### Performance Enhancements for Communities

Akamai's content delivery network (CDN) is now enabled in all new and existing communities. A CDN speeds up page load time by storing cached versions in multiple geographic locations.

# Add Region Labels to Your Aura Page Template Components

As part of the new template switching feature in the Lightning App Builder, you can now add labels to each region in your Aura page template components. These labels appear in the template switching wizard in the Lightning App Builder when users map region content to a new template.

## DOM Inspection Tests Are Subject to Change

The content and structure of HTML, CSS, and the DOM in Lightning Experience can change at any time and can't be considered a stable API. UI tests that reach into component internals using tools, such as Selenium WebDriver, require your ongoing maintenance. This is not a change in Spring '19, as we've never guaranteed backward-compatible HTML, CSS and the DOM. We're calling out the fragility of these tests again due to changes in this release as Lightning Experience continues to evolve with modern web standards. We understand the value that our customers gain from automated UI testing, and the maintenance burden this puts on them.

# Script Tags Blocked in Dynamically Created Components

You can no longer add a <script> tag to a component dynamically created by \$A.createComponent() or \$A.createComponents(). This restriction is not new for components but we did not enforce this restriction for dynamically created components. In Spring '19, we closed that security vulnerability.

# Navigate to a URL with the standard\_\_webPage Page Reference Type

The navigation service uses a PageReference object to describe pages. A new PageReference type of standard webPage wraps a raw URL so that you can navigate to external websites

## Lightning Data Service Returns New Error Values

Lightning Data Service returns an error when a resource, such as a record or an object, is inaccessible on the server. The new error object contains the body of the response and a status code and message.

#### SEE ALSO:

Lightning Web Components Developer Guide Lightning Aura Components Developer Guide Lightning Components: New and Changed Items

# Lightning Web Components (Generally Available)

Now you can build Lightning components using two programming models: Lightning Web Components, and the original model, Aura Components. Lightning web components are custom HTML elements built using HTML and modern JavaScript. Lightning web components and Aura components can coexist and interoperate on a page. To admins and end users, they both appear as Lightning components.

**Where:** This feature is available in Lightning Experience, Lightning Communities, and all versions of the mobile app in all editions. To create a Lightning web component, use Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Lightning Web Components brings the latest advancements in JavaScript and web standards to the Lightning Component framework. Since we introduced the Lightning Component framework in 2014, the web stack has evolved into an application development platform. Many features that required frameworks are now standard. We developed the Lightning Web Components programming model to take advantage of this evolution. Salesforce engineers helped lead the way on TC39, which is the committee that defines ECMAScript (JavaScript).

Lightning Web Components uses core Web Components standards and provides only what's necessary to perform well in all browsers supported by Salesforce. Because it's built on code that runs natively in browsers, the Lightning Web Components programming model is lightweight and delivers exceptional performance. Most of the code you write is standard JavaScript and HTML.

You can also use the components, tools, and services that make it easy to develop on the Lightning Platform: Base Lightning Components, Lightning Design System, Lightning App Builder, Community Builder, Lightning Data Service, and Lightning Locker.

This Lightning web component is a fully editable form built with six lines of JavaScript.



Let's look at some code. Each Lightning web component is made up of an HTML template and a JavaScript class. This component contains a base lightning-record-form> component, which is built on Lightning Data Service. The component attributes are object-api-name, record-id, and fields.

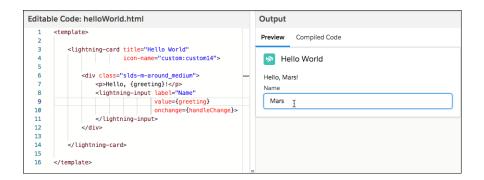
The component's JavaScript class declares the recordId, objectApiName, and fields properties, which are bound to the HTML template.

Properties decorated with <code>@api</code> are public and reactive. When their values change, the component rerenders with the new values. This component gets the values for its public properties from the Lightning record page that contains it. Cool!

```
// recordFormDynamicContact.js
import { LightningElement, api } from 'lwc';
export default class RecordFormDynamicContact extends LightningElement {
    @api recordId;
    @api objectApiName;
    fields = ['Name', 'Title', 'Phone', 'Email'];
}
```

**How:** Use the Salesforce CLI to synchronize Lightning Web Components source code between Salesforce and your favorite code editor. We recommend Visual Studio Code because the Salesforce Extension Pack includes Salesforce CLI commands, code completion, and linting, which make coding faster and more fluid.

You can also experiment in the Playground, our interactive code editor. Write JavaScript, HTML, and CSS code, and preview the output as you develop. Save playground apps and share them with other developers in your org.



#### SEE ALSO:

New Lightning Web Components
Component Library

Quick Start: Lightning Web Components

# Locker Service is Now Lightning Locker

Locker Service is renamed Lightning Locker to better reflect that it is for securing code running on the Lightning Platform.

# Changes in Lightning Locker

Lightning Locker supports the new Lightning Web Components programming model, improves Locker API Viewer, and contains many bug fixes and security improvements.

The Lightning Locker architectural layer enhances security by isolating individual Lightning components in their own containers and enforcing secure coding practices.

# Support for Lightning Web Components

The new Lightning web components are protected by Lightning Locker.

# **Locker API Viewer Changes**

- Locker API Viewer more accurately reports differences between native browser APIs and Locker APIs. You see more orange highlights, which signal that an API is present and secured by Lightning Locker.
- The original Locker API Viewer that was at documentation.auraframework.org is deprecated. That site now links to the current Locker API Viewer.

# Deprecated Default Values Without Square Brackets for Array, Set, and List Attributes

Setting a default value without square brackets is deprecated and can lead to unexpected behavior. To set a default value for these attribute types, surround comma-separated values with []; for example, default="['red', 'green', 'blue']".

**Where:** This change applies to orgs with Lightning components in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

**How:** Here's an example of attributes for an array, a list, and a set.

```
<aura:attribute name="colorArray" type="String[]" default="['red', 'green', 'blue']" />
<aura:attribute name="colorList" type="List" default="['red', 'green', 'blue']" />
<aura:attribute name="colorSet" type="Set" default="['red', 'green', 'blue']" />
```

# Get Notified About Unsaved Changes

Notify the UI about unsaved changes in your component with the lightning:unsavedChanges Aura component. You can use lightning:unsavedChanges in standard and console navigation apps. You can then use a controller to save or discard the changes.

**Where:** This change applies to orgs with Lightning components in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

# Reference Asset Files with the \$contentAsset Global Value Provider

The \$ContentAsset global value provider lets you reference images, style sheets, and JavaScript used as asset files in your Lightning components. Reference \$ContentAsset asset files by name instead of using cumbersome file paths or URLs. \$ContentAsset provides sharing, versioning, and access control for all asset files, as well as options for mobile optimization and resizing of image files. You can use \$ContentAsset in Lightning components markup and within JavaScript controller and helper code.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, and Unlimited editions.

**How:** To reference a specific asset file in component markup, use **\$ContentAsset.yourNamespace\_\_assetName**. Orgs without a namespace can use **\$ContentAsset.assetDeveloperName**. Use this syntax regardless of whether an asset is for authenticated or unauthenticated sessions. To reference a content asset within an archive, add **pathinarchive** as a parameter appended to the basic syntax: **\$ContentAsset.yourNamespace\_\_assetName** +

'pathinarchive=images/sampleImage.jpg'.

Include cascading style sheets or JavaScript libraries in a component using the <ltng:require> tag.



**Note:** The \$ContentAsset global value provider doesn't support versions or scaling parameters. Only the latest version of the asset file is served, and only the original size of the image is returned.

# New Date-Time \$Locale Attributes

The \$Locale global value provider has new attributes for date-time formatting. \$Locale returns information about the current user's preferred locale.

**Where:** This change applies to orgs with Lightning components in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

**How:** Here are the new attributes with sample output for English (United States).

Attribute	Description	Sample Output
longDateFormat	Long date format.	"MMMM d, yyyy"
shortDateFormat	Short date format.	"M/d/yyyy"
shortDatetimeFormat	Short date time format.	"M/d/yyyy h:mm a"

Attribute	Description	Sample Output
shortTimeFormat	Short time format.	"h:mm a"

SEE ALSO:

Lightning Aura Components Developer Guide

# Performance Enhancements for Communities

Akamai's content delivery network (CDN) is now enabled in all new and existing communities. A CDN speeds up page load time by storing cached versions in multiple geographic locations.

SEE ALSO:

Get Faster Page Loads in Your Community

# Add Region Labels to Your Aura Page Template Components

As part of the new template switching feature in the Lightning App Builder, you can now add labels to each region in your Aura page template components. These labels appear in the template switching wizard in the Lightning App Builder when users map region content to a new template.

Where: This change applies to orgs with Aura components in Lightning Experience and all versions of the Salesforce app.

**How:** In the design file for your component, add the label attribute to the flexipage:region tag like this:

Region labels are supported only in Aura components that implement one of these interfaces:

- lightning:appHomeTemplate
- lightning:homeTemplate
- lightning:recordHomeTemplate

SEE ALSO:

Switch Your Lightning Page to a Different Template

# DOM Inspection Tests Are Subject to Change

The content and structure of HTML, CSS, and the DOM in Lightning Experience can change at any time and can't be considered a stable API. UI tests that reach into component internals using tools, such as Selenium WebDriver, require your ongoing maintenance. This is not a change in Spring '19, as we've never guaranteed backward-compatible HTML, CSS and the DOM. We're calling out the fragility of these tests again due to changes in this release as Lightning Experience continues to evolve with modern web standards. We understand the value that our customers gain from automated UI testing, and the maintenance burden this puts on them.

Where: This release note applies to Lightning Experience and Salesforce Classic.

**Why:** Parts of Lightning Experience use Lightning web components, which are based on the Web Components standard. This standard includes Shadow DOM, which hides a component's markup, style, and behavior from other components. This encapsulation poses challenges for UI tests, especially tests that rely on globally searching the DOM or reaching into the internals of custom elements.

**How:** In Spring '19, we made significant changes to introduce a shadowRoot property that encapsulates an element's DOM subtree. This shadowRoot is represented as a DocumentFragment in the DOM and elements inside this DOM subtree are not available by traditional DOM querying methods. Elements that are rendered by Lightning web components contain this new shadowRoot property, and these elements are hidden from normal DOM queries.

We recommend using unit-testing tools to test individual Aura components and Lightning web components, and only using UI testing tools for end-to-end testing.

For Aura components, use Lightning Testing Service to write unit tests to ensure your components perform as expected. Lightning Testing Service supports testing with standard JavaScript test frameworks. It provides easy-to-use wrappers for using Jasmine and Mocha.

For Lightning web components, use lwc-jest to write unit tests.

For end-to-end UI tests, you need to adapt your existing tests for Shadow DOM use. How to do this varies by tool, and is rapidly evolving. At this moment in time, this article is a good example for Selenium WebDriver.

# Script Tags Blocked in Dynamically Created Components

You can no longer add a <script> tag to a component dynamically created by \$A.createComponent() or \$A.createComponents(). This restriction is not new for components but we did not enforce this restriction for dynamically created components. In Spring '19, we closed that security vulnerability.

**Where:** This change applies to orgs with Lightning components in Lightning Experience, Salesforce Classic, and all versions of the Salesforce app.

**How:** To reference a JavaScript library, you must upload it as a static resource, and use a <ltng:require> tag to reference it in your .cmp or .app markup.

You can still add a <script> tag to an application's template, which is a special type of component that extends aura: template.

# Navigate to a URL with the standard\_webPage Page Reference Type

The navigation service uses a PageReference object to describe pages. A new PageReference type of standard\_webPage wraps a raw URL so that you can navigate to external websites

**Where:** This change applies to orgs with Lightning components in Lightning Experience, Lightning communities, and all versions of the Salesforce app.

The standard\_webPage type replaces the force:navigateToURL event. See pageReference Types in the Spring '19 Lightning Components Developer Guide.

# Lightning Data Service Returns New Error Values

Lightning Data Service returns an error when a resource, such as a record or an object, is inaccessible on the server. The new error object contains the body of the response and a status code and message.

**Where:** This change applies to orgs with Lightning web components in Lightning Experience, Lightning Communities, and all versions of the mobile app in all editions. To create a Lightning web component, use Enterprise, Performance, Unlimited, and Developer editions.

**Why:** The new error object, which is modeled after the Fetch API's Response object, has a simpler shape to support the UI API and other Salesforce APIs.

**How:** Previously, you captured the error message using error.message and the error object looked like this.

```
//Before Spring '19
{
   type: enum<string>;
   message: string;
   details: object;
}
```

You now capture the error message using error.body.message or error.body[].message, depending on the API that returns it. The error object has been changed as follows.

```
//After Spring '19
{
   body: object|array;
   ok: boolean;
   status: number;
   statusText: string
}
```

- body (object|array)—The body of the response defined by the underlying API.
- ok (boolean)—Specifies whether the response was successful or not. ok is always set to false.
- status (number)—Contains the status code of the response, for example, 404 if a resource is not found or 500 for an internal server error.
- statusText (string)—Contains the status message corresponding to the status code, for example, Not Found for a status code of 404.

The body of the error response depends on the API that returns it.

- UI API read operations, such as the getRecord wire adapter, return error.body as an array of objects.
- UI API write operations, such as the createRecord wire adapter, return error.body as an object, often with object-level and field-level errors.
- Apex read and write operations return error.body as an object.
- Network errors, such as an offline error, return error.body as an object.

# Visualforce: Show a Toast in JavaScript, Improved Component Compatibility, and Postponed Critical Update

Use a new JavaScript function to show a toast message. The <apex:detail> and <apex:enhancedList> components have improved compatibility when working with custom objects. The critical update that removes instance names from URLs has been postponed to Winter '20.

For more information on features affected by these enhancements, refer to the Visualforce Developer's Guide.

#### IN THIS SECTION:

#### Show a Toast with a New JavaScript Function

Show a toast with the sforce.one.showToast() function. A toast displays a message below the header at the top of a view.

#### Allow External iframes of Visualforce Pages with Clickjack Protection

Use iframes to include Visualforce pages on external web pages while enabling clickjack protection. Whitelist the external domains that you trust to bring your Visualforce content outside the Salesforce domain. Previously, it was all or nothing: You could allow iframes of Visualforce pages on all external domains or none at all.

#### The <apex:detail> and <apex:enhancedList> Components Sorted Out Their Differences

The <apex:detail> and <apex:enhancedList> components now work together on a Visualforce page that uses the standard controller for custom objects. Previously, these components conflicted when they were used with custom objects.

Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

This critical update, released in Spring '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

#### Fix to Blank Page Issue Requires Test Updates

We have introduced a solution to a blank page issue for Visualforce pages in Lightning Experience. This solution may break your UI test automations that cover Lightning Experience pages with embedded Visualforce pages. The content and structure of HTML, CSS, and the DOM in Lightning Experience can change at any time and can't be considered a stable API. UI tests that reach into component internals using tools, such as Selenium WebDriver, require your ongoing maintenance. This is not a change in Spring '19, as we've never guaranteed backward-compatible HTML, CSS and the DOM. We're calling out the fragility of these tests again due to changes in this release as Lightning Experience continues to evolve with modern web standards. We understand the value that our customers gain from automated UI testing, and the maintenance burden this puts on them.

# Show a Toast with a New JavaScript Function

Show a toast with the sforce.one.showToast() function. A toast displays a message below the header at the top of a view.

**Where:** This change applies to Lightning Experience, Lightning communities, and all versions of the mobile app. The function is available for Visualforce pages set to API version 45.0.

**How:** The syntax of the function is:

```
sforce.one.showToast({toastParams})
```

The toastParams object sets the attributes for the toast, such as the toast title and message. Use any attribute available for the force: showToast Aura event.

The sforce.one.showToast function is a wrapper for the force:showToast Aura event. For details of all available attributes, see force:showToast in the Component Library.



**Example**: Show a toast on a Visualforce page using sforce.one.showToast.

```
sforce.one.showToast({
    "title": "Success!",
    "message": "The record was updated successfully."
});
```

# Allow External iframes of Visualforce Pages with Clickjack Protection

Use iframes to include Visualforce pages on external web pages while enabling clickjack protection. Whitelist the external domains that you trust to bring your Visualforce content outside the Salesforce domain. Previously, it was all or nothing: You could allow iframes of Visualforce pages on all external domains or none at all.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

**How:** In Setup, search for <code>Session Settings</code>. Under Clickjack Protection, select **Enable clickjack protection for customer Visualforce pages** either **with headers disabled** or **with standard headers**. Both these options allow framing on whitelisted external domains and provide clickjack protection.

Then under Whitelisted Domains for Visualforce Inline Frames, add the trusted external domains where you allow framing.

SEE ALSO:

Visualforce Developer Guide: Putting Visualforce Pages on External Domains (can be outdated or unavailable during release preview)

# The <apex:detail> and <apex:enhancedList> Components Sorted Out Their Differences

The <apex:detail> and <apex:enhancedList> components now work together on a Visualforce page that uses the standard controller for custom objects. Previously, these components conflicted when they were used with custom objects.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

This critical update, released in Spring '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

# Fix to Blank Page Issue Requires Test Updates

We have introduced a solution to a blank page issue for Visualforce pages in Lightning Experience. This solution may break your UI test automations that cover Lightning Experience pages with embedded Visualforce pages. The content and structure of HTML, CSS, and the DOM in Lightning Experience can change at any time and can't be considered a stable API. UI tests that reach into component internals using tools, such as Selenium WebDriver, require your ongoing maintenance. This is not a change in Spring '19, as we've never guaranteed backward-compatible HTML, CSS and the DOM. We're calling out the fragility of these tests again due to changes in this release as Lightning Experience continues to evolve with modern web standards. We understand the value that our customers gain from automated UI testing, and the maintenance burden this puts on them.

Where: This release note applies to Lightning Experience.

**How:** If an embedded Visualforce page contains an <apex:form> that triggers a page navigation, like a Cancel button or any <apex:commandButton>, customers were seeing a blank page after clicking **Cancel** or when page navigation was triggered.

For your UI automation tests to pass, do not rely on DOM structure as an API. Instead, update your test code to call a method similar to this Selenium WebDriver example. Whenever the operation triggers a POST from the Visualforce page, it switches to the active Visualforce iFrame.

```
public void switchToNewActiveVFIframe() {
    driver.switchTo().defaultContent();
    WebElement newActiveIframe = wdUtil.waitForElementVisible("Can't find the new active
VF iframe", By.cssSelector("iframe[name^=vfFrameId]"), 10000);
    driver.switchTo().frame(newActiveIframe);
}
```

For more details, see DOM Inspection Tests Are Subject to Change.

# **Apex**

You can now enable checking for field- and object-level security permissions on SOQL SELECT queries by using the WITH SECURITY\_ENFORCED clause. New OrgLimit and OrgLimits Apex classes include methods to obtain a list or map of all OrgLimit instances, such as SOAP API requests, Bulk API requests, and Streaming API limits. A new System. SObject.isSet() method checks whether a field was queried or set by an Apex assignment. A new Apex Unexpected Exception event type is added to the EventLogFile object.

For more information on these enhancements, see the Apex Developer Guide.



**Note:** Looking for new and changed classes, interfaces, and enums for Apex and ConnectAPI (Chatter in Apex)? We received feedback that new features described in the Development section were hard to browse. In this release, we've consolidated the lists of new and changed items at the end of the Development section. We're still covering all the changes that you want to know about. Let us know what you think. Use the feedback form on release note topics or tweet us at @salesforcedocs.

#### IN THIS SECTION:

#### Enforce Field-Level Security Permissions for SOQL Queries (Beta)

Use the WITH SECURITY\_ENFORCED clause to enable checking for field- and object-level security permissions on SOQL SELECT queries, including subqueries and cross-object relationships. Although performing these checks was possible in earlier releases, this clause substantially reduces the verbosity and technical complexity in query operations. This feature is tailored to Apex developers who have minimal development experience with security and to applications where graceful degradation on permissions errors isn't required.

#### Enable Improved Caching of Org Schema (Critical Update, Postponed)

This critical update was scheduled for auto-activation in Spring '19 but has been postponed to Summer '19. This critical update enables improved caching of org schema details and resolves known issues with version-specific object and field handling.

SEE ALSO:

Apex: New and Changed Items

# Enforce Field-Level Security Permissions for SOQL Queries (Beta)

Use the WITH SECURITY\_ENFORCED clause to enable checking for field- and object-level security permissions on SOQL SELECT queries, including subqueries and cross-object relationships. Although performing these checks was possible in earlier releases, this clause substantially reduces the verbosity and technical complexity in query operations. This feature is tailored to Apex developers who have minimal development experience with security and to applications where graceful degradation on permissions errors isn't required.



**Note**: As a beta feature, SELECT WITH SECURITY\_ENFORCED is a preview and isn't part of the "Services" under your master subscription agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions only on the basis of generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported, and Salesforce has no liability for any harm or damage arising out of or in connection with it. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** If fields or objects referenced in the SELECT clause using WITH SECURITY\_ENFORCED are inaccessible to the user, an exception is thrown, and no data is returned.



**Note**: The with Security\_Enforced clause is only available in Apex. Using with Security\_Enforced in Apex classes or triggers with an API version earlier than 45.0 is not recommended.



**Example**: If field-level security for either the LastName or Description field is hidden, this query throws an exception indicating insufficient permissions.

```
SELECT Id, (SELECT LastName FROM Contacts),
(SELECT Description FROM Opportunities)
FROM Account WITH SECURITY ENFORCED
```



**Example:** If field-level security for Website is hidden, this query throws an exception indicating insufficient permissions.

```
SELECT Id, Parent.Name, Parent.Website FROM Account WITH SECURITY_ENFORCED
```

# Enable Improved Caching of Org Schema (Critical Update, Postponed)

This critical update was scheduled for auto-activation in Spring '19 but has been postponed to Summer '19. This critical update enables improved caching of org schema details and resolves known issues with version-specific object and field handling.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**Why:** This critical update fixes known bugs by improving internal systems that define and cache org schema, including standard objects, custom objects, and their fields. The documented behavior of your org's schema remains unchanged. The update fixes bugs where the documentation doesn't match the known behavior. This update also resolves rare, intermittent cases where undocumented object types are visible in Apex describe result methods or where version-specific schema details are improperly reused.

**How:** From Setup, in the Quick Find box, enter *Critical Updates*. To learn more about the update, click **Review**. To activate the update, click **Activate**.

#### API

For the FlexiPage object in Tooling API, you can take action on multiple records belonging to the same sObject type in a single request.



**Note:** Looking for new and changed API objects, types, and REST resources? We received feedback that new features described in the Development section were hard to browse. In this release, we've consolidated the lists of new and changed items at the end of the Development section. We're still covering all the changes that you want to know about. Let us know what you think. Use the feedback form on release note topics or tweet us at @salesforcedocs.

#### IN THIS SECTION:

#### Invocable Actions

Invocable Actions represent the actions that can be accomplished on Salesforce with APIs.

#### Fewer Round-Trips for the FlexiPage Object by Using SObject Collections

Using Tooling API, you now can take action on multiple records belonging to the FlexiPage object with a single request. By grouping operations by object type, you reduce the number of round-trips between the client and server. SObject Collections supports XML and JSON formats. Only the FlexiPage object is supported.

#### SEE ALSO:

API: New and Changed Items

#### Invocable Actions

Invocable Actions represent the actions that can be accomplished on Salesforce with APIs.

Invocable actions are available through the REST API. The following actions have been added:

#### assign Target To Sales Cadence

Adds a lead or contact record to a sales cadence. This action requires the following fields.

- salesCadenceNameOrId—The name or ID of the sales cadence.
- targetId—The ID of the lead or contact.

#### removeTargetFromSalesCadence

Removes the specified lead or contact record from the specified sales cadence. This action requires the following fields.

- targetId—The ID of the lead or contact.
- completionReasonCode—The reason the lead or contact was removed. The only valid value for this field is ManuallyRemoved.

For more information on invocable actions, see the Actions Developer's Guide.

# Fewer Round-Trips for the FlexiPage Object by Using SObject Collections

Using Tooling API, you now can take action on multiple records belonging to the FlexiPage object with a single request. By grouping operations by object type, you reduce the number of round-trips between the client and server. SObject Collections supports XML and JSON formats. Only the FlexiPage object is supported.

Where: This change applies to Lightning Experience and Salesforce Classic in Developer, Enterprise, Performance, and Unlimited editions.

How: Use a POST request to add up to 200 records or a PATCH request to update up to 200 records, returning a list of SaveResult objects.

/vXX.X/tooling/composite/sobjects

Use a GET request to retrieve one or more records of the same object type, specified by ID.

 $/ \texttt{vXX}. \texttt{X/tooling/composite/sobjects/} \textbf{\textit{sobjectType}} ? ids = \textbf{\textit{recordId1}}, \textbf{\textit{recordId2}} \& fields = \textbf{\textit{fieldname1}}, \textbf{\textit{fieldname2}} \\ end{to the last of the$ 

Use a DELETE request to delete to up 200 records, specified by ID, returning a list of DeleteResult objects.

/vXX.X/tooling/composite/sobjects/?ids=recordId1, recordId2

For more information, see the Tooling API Reference and Developer Guide.

# **EDITIONS**

Available in: Salesforce Classic

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



Note: Let us know in IdeaExchange which Tooling API objects you'd like to see supported by SObject Collections.

SEE ALSO:

IdeaExchange on the Success Community

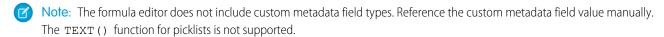
# Custom Metadata: Configure Default Field Values with Custom Metadata Types

Reference a custom metadata type record in a default value to simplify updating fields. If the default field value changes, you can update it in the custom metadata type instead of updating multiple field references.

**Where:** This change applies to Lightning Experience and Salesforce Classic 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.

Why: Let's say that your org applies different discount rates to opportunities.

- 1. Create a custom metadata type. In this example, we name it DiscountPercent.
- 2. Create a custom field for your type named discount.
- **3.** Create a record, and name it IT.
- **4.** Create a custom field on the Opportunities object, and name it Discount Rate.



When done, you can reference the custom metadata field value as a default value to populate the Discount Rate field. The syntax is:

\$CustomMetadata.CustomMetadataTypeAPIName.RecordAPIName.FieldAPIName

Use the correct suffixes. For the custom metadata type, use \_\_mdt. For fields, use \_\_\_c. Records require no suffix. Our example looks like this:

\$CustomMetadata.DiscountPercent\_\_mdt.IT.discount\_\_c

When the maximum discount amount changes, you can make the update in one location.



Tip: Remember that users can override default values if you don't make the field settings read-only.

# Salesforce CLI: Pre-Release Version, Salesforce Plug-In Generator

The Salesforce command-line interface (CLI) continues to evolve with more features and commands that support the Salesforce DX development models. Use it to easily create environments for development and testing, synchronize source code, run tests, and control the full application life cycle.

We release changes to Salesforce CLI regularly. Read the weekly release notes to learn about recent updates for v44 of the core CLI plug-ins. For more information about the pre-release version, see v45 of the Salesforce CLI Command Reference.



**Note:** Looking for new and changed Salesforce CLI commands? We received feedback that new features described in the Development section were hard to browse. In this release, we've consolidated the lists of new and changed items at the end of the Development section. We're still covering all the changes that you want to know about. Let us know what you think. Use the feedback form on release note topics or tweet us at @salesforcedocs.

#### IN THIS SECTION:

#### Leverage Extended Functionality for Lightning Web Components with Salesforce CLI

Create Lightning web components with the pre-release version of Salesforce CLI.

#### Build Your Own Salesforce CLI Plug-In with Open-Source Tools

Plug-ins add functionality to Salesforce CLI. Salesforce includes several plug-ins when you install the CLI that provide commands and functionality to meet common needs that customers and partners have. You can also choose to install other plug-ins built by Salesforce and others. But when you have requirements that existing plug-ins don't meet, Salesforce Plug-In Generator simplifies building your own using Node.js. Salesforce Plug-In Generator and the CLI @salesforce/core and @salesforce/command libraries are open source.

SEE ALSO:

Salesforce CLI: New and Changed Commands

# Leverage Extended Functionality for Lightning Web Components with Salesforce CLI

Create Lightning web components with the pre-release version of Salesforce CLI.

Where: This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

When: v45 of the salesforcedx aggregate plug-in releases on February 9, 2019. A pre-release version of v45 is available now.

#### Install the Pre-Release Version of the CLI

Install the pre-release version to use new commands and parameters available in salesforcedx v45.



Note: If you want to start trying out Lightning web components, install the pre-release version. Otherwise, most new features are added in weekly releases of Salesforce CLI, so you already have them.

sfdx plugins:install salesforcedx@pre-release

Make sure that you have the pre-release version.

```
sfdx plugins --core
salesforcedx 45.0.1-xx
```

When we officially release v45 in February 2019, uninstall the pre-release version, then run the update command.

sfdx plugins:uninstall salesforcedx

sfdx update

SEE ALSO:

Salesforce CLI: New and Changed Commands

# Build Your Own Salesforce CLI Plug-In with Open-Source Tools

Plug-ins add functionality to Salesforce CLI. Salesforce includes several plug-ins when you install the CLI that provide commands and functionality to meet common needs that customers and partners have. You can also choose to install other plug-ins built by Salesforce and others. But when you have requirements that existing plug-ins don't meet, Salesforce Plug-In Generator simplifies building your own using Node.js. Salesforce Plug-In Generator and the CLI @salesforce/core and @salesforce/command libraries are open source.

AppExchange Partners (ISVforce): Templates for Business Processes, Inactive Processes and Flows in Packages, and End of Support for Trialforce Web Forms

Where: This feature applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in all editions.

When: Changes to Salesforce Plug-In Generator are released regularly. For information about weekly releases, see the change log.

**How:** For information about using Salesforce Plug-In Generator to create your own plug-in, check out the *Salesforce CLI Plug-In Developer Guide*. For useful resources, such as the open-source repositories for the plug-in generator and its dependencies, see the guide's Resources for Salesforce CLI Plug-In Development.

# AppExchange Partners (ISVforce): Templates for Business Processes, Inactive Processes and Flows in Packages, and End of Support for Trialforce Web Forms

Distribute apps, services, and other solutions on AppExchange with tools for partners. Develop processes and flows that subscribers can view and customize. Let subscribers decide whether and when to activate an installed process or flow. Trialforce web form support ends on March 1, 2019, but you can use the SignupRequest API to provision trial orgs for prospective customers.

#### IN THIS SECTION:

#### Package Pre-Built Business Processes That Subscribers Can Open and Build Upon

Create process and flow templates that subscribers can view and clone, and that you can maintain via package upgrades. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones. You can upgrade templates as needed without affecting subscribers' clones.

#### Package Inactive Processes and Flows

When a subscriber installs a package that contains an active process or flow, that process or flow remains active. However, sometimes subscribers want to decide whether and when to activate each process or flow. For example, subscribers probably don't want record-change process templates to be active upon installation. Now you can package inactive processes and flows so that subscribers can activate them at their convenience.

#### Support for Trialforce Web Forms Is Ending

On March 1, 2019, support for Trialforce web forms ends. Provisioning trial orgs with Trialforce web forms is a simple solution we introduced in 2009, but it's showing its age. Web forms don't provide feedback on the success or failure of provisioning requests or allow you to collect additional information from your prospects. However, the SignupRequest API allows you to programmatically provision trial orgs and collect and analyze detailed information on all sign-ups from your business org.

# Package Pre-Built Business Processes That Subscribers Can Open and Build Upon

Create process and flow templates that subscribers can view and clone, and that you can maintain via package upgrades. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones. You can upgrade templates as needed without affecting subscribers' clones.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Suppose you build and package processes and flows for insurance companies. Because insurance laws and regulations can change and vary by location, your subscribers want the ability to modify your pre-built business processes when needed.

How: To make a process a template, open it in Process Builder and click Edit Properties. For Template, select Yes.

To make a flow a template, go to the flow list page in Setup. Find the flow, click **Edit**, and select **Template**.

AppExchange Partners (ISVforce): Templates for Business Processes, Inactive Processes and Flows in Packages, and End of Support for Trialforce Web Forms

We recommend that you package only inactive process templates except when you're sure that subscribers want those processes to be active upon installation.

#### **Related Updates for Developers**

#### Metadata API

Added the isTemplate field to the Flow metadata type.

#### **Tooling API**

Added the IsTemplate field to the Flow object.

SEE ALSO:

Package Inactive Processes and Flows

# Package Inactive Processes and Flows

When a subscriber installs a package that contains an active process or flow, that process or flow remains active. However, sometimes subscribers want to decide whether and when to activate each process or flow. For example, subscribers probably don't want record-change process templates to be active upon installation. Now you can package inactive processes and flows so that subscribers can activate them at their convenience.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, Unlimited, and Developer editions.

**Why:** Suppose you create a process template that subscribers are likely to clone and customize instead of use as is. We recommend that you keep that template inactive in the package.

**How:** When you upload a package that contains a process or flow, the active version of the process or flow is distributed to subscribers. If the process or flow has no active version, the latest version is distributed to subscribers.

SEE ALSO:

Package Pre-Built Business Processes That Subscribers Can Open and Build Upon

# Support for Trialforce Web Forms Is Ending

On March 1, 2019, support for Trialforce web forms ends. Provisioning trial orgs with Trialforce web forms is a simple solution we introduced in 2009, but it's showing its age. Web forms don't provide feedback on the success or failure of provisioning requests or allow you to collect additional information from your prospects. However, the SignupRequest API allows you to programmatically provision trial orgs and collect and analyze detailed information on all sign-ups from your business org.

Where: This change applies to Salesforce Classic in Professional, Enterprise, and Developer editions.

**When:** After March 1, 2019, your customers can request trial orgs using existing web forms. However, you can't request new web forms from Salesforce or edit your existing forms.

SEE ALSO:

Object Reference for Salesforce and Lightning Platform: SignupRequest (can be outdated or unavailable during release preview)

# Enterprise Messaging: Change Data Capture and High-Volume Platform Events Generally Available

Use events to simplify communication between business systems. Change Data Capture and High-Volume Platform Events are now generally available.

#### IN THIS SECTION:

#### Keep Your External Data Up to Date with Change Data Capture (Generally Available)

Receive near-real-time changes of Salesforce records, and synchronize corresponding records in an external data store. Change Data Capture publishes change events that represent changes to Salesforce records. Changes include creating a record, updating a record, deleting a record, and undeleting a record. Change Data Capture was offered in the last release as a developer preview and a pilot, and we've made enhancements for this release.

#### Scale Your Event-Based Apps with High-Volume Platform Events (Generally Available)

Use high-volume platform events to publish and process millions of events efficiently. Receive notifications in real time, and use an event-driven programming model to automate your processes and integrate your apps with external business processes. With high-volume platform events, your apps scale better than with standard-volume events, and you can retrieve retained event messages for up to three days. High-volume platform events are now the default event type for new event definitions.

#### Monitor Your Standard-Volume Platform Event Usage

For your previously defined standard-volume events, you can now inspect event delivery usage to CometD clients and prevent hitting the limit. Monitor your 24-hour usage with the limits REST API resource, in the

DailyStandardVolumePlatformEvents response value.

#### New Status Codes for Event Publishing Failures

When publishing an event message fails, due to the publishing service being unavailable or a limit being exceeded, the returned SaveResult contains the error with a status code.

#### Subscribe to Standard Platform Events in Processes and Flows

You can now start a process or resume a flow when a standard platform event message is received. Processes and flows support these standard platform events: Batch Apex Platform Event (BatchApexErrorEvent) and Platform Status Alert Event (PlatformStatusAlertEvent).

# Keep Your External Data Up to Date with Change Data Capture (Generally Available)

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Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

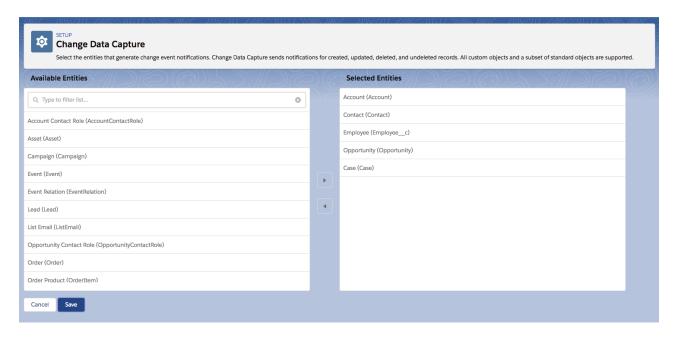
**Why:** For example, you have a human resource (HR) system with copies of employee custom object records from Salesforce. You can synchronize the employee records in the HR system by receiving change events from Salesforce. After receiving the events, you can process the corresponding insert, update, delete, or undelete operations in the HR system. Because the changes are received in near real time, the data in your HR system stays up to date.

**How:** Change events are based on platform events and share some of their characteristics. For example, you can replay a stream of past events that are stored for up to three days. Also, change events share the usage-based entitlements for CometD event delivery with high-volume platform events.

Change events are available for all custom objects defined in your Salesforce org and a subset of standard objects. Select the objects that you want to get notifications for from the new Change Data Capture page in Setup. The following standard objects support change events.

- Account (including Person Account)
- AccountContactRole
- Asset
- Campaign
- Case
- Contact
- ContractLineItem
- Entitlement
- Event
- EventRelation
- Lead
- ListEmail
- LiveChatTranscript
- Opportunity
- OpportunityContactRole
- Order
- Orderltem
- Product2
- Quote
- QuoteLineItem
- ServiceContract
- Task
- TaskRelation
- User (including partner users)

To select objects in Setup, enter Change Data Capture in the Quick Find box, and click Change Data Capture.



#### Shield Platform Encryption Support

Change Data Capture is supported when Shield Platform Encryption is enabled. If Salesforce record fields are encrypted with Shield Platform Encryption, changes in encrypted field values generate change events. Data in change event messages is delivered over a secure transport layer (HTTPS and TLS).

Change events are stored in a separate data store in Salesforce for up to three days. Before being stored, they're encrypted and require you to create an Event Bus tenant secret. To enable encryption and delivery of change events, first create an Event Bus tenant secret in the Key Management page in Setup. Then, in the Encryption Policy page, select **Encrypt and deliver Change Data Capture events**. In this release, we made the following enhancements.

#### IN THIS SECTION:

#### Capture Change Events in Apex Triggers (Developer Preview)

With Apex change event triggers, you can now capture and process change events on the Lightning Platform. Change event triggers run asynchronously after the database transaction is completed. Perform resource-intensive business logic asynchronously in the change event trigger and transaction-based logic in the Apex object trigger. By decoupling the processing of changes, change event triggers can help reduce processing times of transactions.

#### Migrate Change Data Capture Entity Selections with Metadata API

Retrieve and deploy the selected entities for change notifications with the PlatformEventChannel Metadata API type.

#### Capture Data Changes for Field Type Conversions

A change event or gap event is generated when a custom field type conversion causes a data change. Previously, those changes were not captured.

#### Capture Data Changes for Picklist Values Across Records

Updates of picklist record field values resulting from renaming or replacing a picklist value are now captured. Previously, those changes were ignored. The change events might be grouped for efficiency. When this occurs, the recordIds header field contains an array of record IDs.

SEE ALSO:

Change Data Capture Developer Guide

#### Capture Change Events in Apex Triggers (Developer Preview)

With Apex change event triggers, you can now capture and process change events on the Lightning Platform. Change event triggers run asynchronously after the database transaction is completed. Perform resource-intensive business logic asynchronously in the change event trigger and transaction-based logic in the Apex object trigger. By decoupling the processing of changes, change event triggers can help reduce processing times of transactions.



**Note:** The change event trigger feature is available as a developer preview. The change event trigger feature 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.

Where: This change applies to Lightning Experience and Salesforce Classic in Developer edition.

How: Each change event captured in the trigger contains the record fields and metadata information about the change in header fields.

Change event triggers are "after insert" triggers and are created in the Developer Console the same way you create an Apex object trigger. When you create a trigger, pick the change event object from the sObject dropdown, which is populated with the change events available in your org. For a supported standard object, the change event name is **StandardObjectName**ChangeEvent. For a custom object, the change event name is **CustomObjectName** ChangeEvent.

In this release, change event triggers don't support packaging or Apex tests.

#### **Example**

The following trigger example shows the skeletal declaration of a change event trigger on AccountChangeEvent.

```
trigger AccountChangeTrigger on AccountChangeEvent (after insert) {
}
```

### Migrate Change Data Capture Entity Selections with Metadata API

Retrieve and deploy the selected entities for change notifications with the PlatformEventChannel Metadata API type.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** This PlatformEventChannel component represents three selected objects: Account, Contact, and the Employee\_\_c custom object. It contains the event names of the corresponding objects.

#### Capture Data Changes for Field Type Conversions

A change event or gap event is generated when a custom field type conversion causes a data change. Previously, those changes were not captured.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** For example, a conversion between incompatible field types causes field data to be set to null in the corresponding records. The conversion generates a change event for all affected records. The following are a few conversions of incompatible fields.

- Changing a Date or Date/Time field to another field type and vice versa
- Changing a Checkbox field to another field type
- Changing a Picklist (Multi-Select) field to another field type

Other conversions, such as those that preserve or truncate field values, don't generate events.

#### Capture Data Changes for Picklist Values Across Records

Updates of picklist record field values resulting from renaming or replacing a picklist value are now captured. Previously, those changes were ignored. The change events might be grouped for efficiency. When this occurs, the recordIds header field contains an array of record IDs.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

# Scale Your Event-Based Apps with High-Volume Platform Events (Generally Available)

Use high-volume platform events to publish and process millions of events efficiently. Receive notifications in real time, and use an event-driven programming model to automate your processes and integrate your apps with external business processes. With high-volume platform events, your apps scale better than with standard-volume events, and you can retrieve retained event messages for up to three days. High-volume platform events are now the default event type for new event definitions.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

**How:** Standard-volume events created in API version 44.0 and earlier continue to be supported, but you can't define new standard-volume events. You can define a high-volume platform event from the user interface or through Metadata API.

From the UI, in Setup, enter *Platform Events* in the Quick Find box, then select **Platform Events**. When completing the standard fields, select **High Volume** for Event Type.

In Metadata API, the event definition is represented in the CustomObject type with eventType set to HighVolume.

Publish and subscribe to high-volume platform events in the same way that you publish and subscribe to standard-volume platform events. You can use declarative tools, such as Process Builder and flow, or write code with Apex and CometD API apps.

High-volume platform events are published asynchronously so that the system can process high loads of events efficiently. The publishing call places the publish request in a queue. The event message might not be published immediately after the call returns, but it is published when system resources are available.

#### **Usage-Based Event Entitlements**

Each Salesforce edition provides a default allocation for the number of high-volume events delivered to CometD clients. You can purchase an add-on license to increase your daily CometD event delivery allocation. With the add-on license, the CometD event delivery allocation depends on your monthly entitlement and scales with it. With the add-on, you can exceed the daily equivalent allocation of the monthly entitlement by a certain amount for a 24-hour period. Event overages are calculated for a calendar month, starting with the first day of the month or your contract start date.

Monitor your high-volume event delivery usage and entitlement with the limits REST API resource. The entitlement and usage information is returned in the MonthlyPlatformEvents response value.

The usage-based entitlements and daily allocation only apply to CometD subscribers. They don't apply to other subscribers, such as Apex triggers, processes, or flows.

SEE ALSO:

Platform Events Developer Guide

# Monitor Your Standard-Volume Platform Event Usage

For your previously defined standard-volume events, you can now inspect event delivery usage to CometD clients and prevent hitting the limit. Monitor your 24-hour usage with the limits REST API resource, in the DailyStandardVolumePlatformEvents response value.

Where: This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions.

SEE ALSO:

New, Changed, and Deprecated Calls

# New Status Codes for Event Publishing Failures

When publishing an event message fails, due to the publishing service being unavailable or a limit being exceeded, the returned SaveResult contains the error with a status code.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Enterprise, Performance, Unlimited, and Developer editions. The following status code has been added.

#### PLATFORM EVENT PUBLISHING UNAVAILABLE

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

The following status code is returned when publishing event messages exceeds a limit. Previously, an unspecified error was returned.

#### LIMIT\_EXCEEDED

The number of published platform event messages exceeded the hourly publishing limit or the test limit for event messages published from an Apex test context.

#### Subscribe to Standard Platform Events in Processes and Flows

You can now start a process or resume a flow when a standard platform event message is received. Processes and flows support these standard platform events: Batch Apex Platform Event (BatchApexErrorEvent) and Platform Status Alert Event (PlatformStatusAlertEvent).

SEE ALSO:

Respond to Salesforce Errors with Processes or Flows

# Sandboxes: Cloning Generally Available and a New User Email Address Format

We're improving application development with sandbox cloning. And, we're introducing a new format for copied user email addresses in sandboxes.

#### IN THIS SECTION:

#### Save Time by Cloning Sandboxes (Generally Available)

Sandbox cloning simplifies the management of multiple concurrent work streams in your application life cycle. Clone an existing sandbox for each type of work, such as development, testing, and staging. As you move from one development stage to the next, clone an existing sandbox rather than using your production org as the source. This pattern simplifies the customization of individual sandboxes. Your colleagues can easily clone individual sandboxes instead of sharing one sandbox to avoid stepping on each other's toes.

#### Simpler Format for User Email Addresses in Sandboxes

When you create or refresh a sandbox, Salesforce appends .invalid to all user email addresses. This email invalidation ensures that production users aren't sent automatically generated messages from the sandbox.

# Save Time by Cloning Sandboxes (Generally Available)

Sandbox cloning simplifies the management of multiple concurrent work streams in your application life cycle. Clone an existing sandbox for each type of work, such as development, testing, and staging. As you move from one development stage to the next, clone an existing sandbox rather than using your production org as the source. This pattern simplifies the customization of individual sandboxes. Your colleagues can easily clone individual sandboxes instead of sharing one sandbox to avoid stepping on each other's toes.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, and Unlimited editions.

**How:** Within each cloned sandbox, customize the data and metadata to accommodate the phase in your application life cycle, such as testing or staging.

From Setup, enter Sandboxes in the Quick Find box, then select **Sandboxes**. Next to the name of a completed sandbox, click **Clone**. Or select **New Sandbox**, and in the Create From dropdown menu, select the sandbox to clone.

When your new sandbox is ready, you can manage it from your production org like any other sandbox.

To clone a sandbox using the Tooling API, specify the ID in the SourceId field on your new SandboxInfo object.

# Simpler Format for User Email Addresses in Sandboxes

When you create or refresh a sandbox, Salesforce appends .invalid to all user email addresses. This email invalidation ensures that production users aren't sent automatically generated messages from the sandbox.

**Where:** This change applies to Lightning Experience and Salesforce Classic in Professional, Enterprise, Performance, and Unlimited editions.

**How:** Create a sandbox, and notice how user email addresses change. For example, the address name@email.com becomes name@email.com.invalid. Previously, the address changed to name=email.com@example.com.

SEE ALSO:

Salesforce Help: Sandbox Setup Considerations

# Salesforce Extensions for VS Code: Lightning Web Component Support, Upcoming Force.com IDE Retirement

In addition to the changes we've made in weekly releases, Salesforce Extensions for VS Code v45 includes some major enhancements. Accelerate Lightning web component development with the VS Code Lightning Web Components extension, which is now included in the Salesforce Extension Pack. Start preparing now for the October 2019 retirement of Force.com IDE.

For information about getting started with Salesforce Extensions for VS Code, see the Salesforce Extensions for VS Code documentation in the Visual Studio Code Marketplace. To see all the VS Code extensions that Salesforce has published, visit our publishers page in the Visual Studio Code Marketplace.

For information about enhancements made in weekly releases, see the Salesforce Extensions for VS Code change log.

#### IN THIS SECTION:

#### Simplify Lightning Web Component Development with the VS Code Extension Pack

Install the Salesforce Extensions for VS Code extension pack, and get the Lightning Web Component extension to speed your component development. You no longer need to install or manage separate extensions nor worry about the order in which you install and update your Salesforce extensions.

#### Force.com IDE Is Being Retired in October 2019

The Force.com IDE plug-in for Eclipse is in a maintenance-only state. We will still provide support through our official channels for the product until its retirement date on October 12, 2019, but the only updates will be for critical security issues that arise before the retirement date.

# Simplify Lightning Web Component Development with the VS Code Extension Pack

Install the Salesforce Extensions for VS Code extension pack, and get the Lightning Web Component extension to speed your component development. You no longer need to install or manage separate extensions nor worry about the order in which you install and update your Salesforce extensions.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**When:** This change is available when Salesforce Extensions for VS Code v45 releases on February 9, 2019. For updates, keep an eye on the Salesforce Extensions for VS Code change log.

**How:** Install the Salesforce Extension Pack from the VS Code Marketplace. To work with Lightning web components in VS Code before Salesforce Extensions for VS Code v45 is released, install the extension pack, the Lightning Web Component extension, and the pre-release version of Salesforce CLI.

SEE ALSO:

Leverage Extended Functionality for Lightning Web Components with Salesforce CLI

### Force.com IDE Is Being Retired in October 2019

The Force.com IDE plug-in for Eclipse is in a maintenance-only state. We will still provide support through our official channels for the product until its retirement date on October 12, 2019, but the only updates will be for critical security issues that arise before the retirement date.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Enterprise, Performance, Unlimited, and Developer editions.

**When:** On October 12, 2019, we will no longer provide support or updates of any kind for Force.com IDE. We will also begin archiving documentation and removing download links for the product on that date.

**How:** We recommend that you start migrating to Salesforce Extensions for Visual Studio Code or one of the great tools made by our partners. For more information, see The Future of Salesforce IDEs on the Salesforce Developers Blog.

The https://github.com/forcedotcom/idecore repository will be archived on October 12, 2019. The source code will remain available in the repository, but the repository will no longer accept pull requests. To contribute to Force.com IDE after the repository is archived, create a fork. For details about archived repositories, see About archiving repositories in GitHub Help.

# New and Changed Items for Developers

Here is where you can find new and changed objects, calls, classes, components, commands, and more that help you customize Salesforce features.

#### IN THIS SECTION:

#### Lightning Components: New and Changed Items

Build UI quicker with these new and changed resources.

#### Apex: New and Changed Items

These classes, enums, and interfaces are new or have changes.

#### API: New and Changed Items

Access metadata types, data objects, REST resources, and more in API version 45.0.

#### Salesforce CLI: New and Changed Commands

We release changes to Salesforce CLI regularly. Read the weekly release notes to learn about recent updates for v44 of the core CLI plug-ins. For more information about the pre-release version, see v45 of the Salesforce CLI Command Reference.

#### Dev Hub: New Limited Access License

Looking to use the Dev Hub in your production or business org but don't have a Salesforce user license? Look no further. The Salesforce Limited Access - Free license lets developers access the Dev Hub to create and manage scratch orgs.

#### Scratch Orgs: Configurable Salesforce Environments

Designed to be ephemeral and easily recreated, scratch orgs are dedicated and configurable Salesforce environments that you can quickly spin up for many different purposes. They can be your own personal development environment, or you can create headless scratch orgs for automated tests. You can create scratch orgs if you turned on Dev Hub in your production org or a Developer Edition org, or have a Dev Hub trial org.

# Lightning Components: New and Changed Items

Build UI quicker with these new and changed resources.

#### IN THIS SECTION:

#### New Lightning Web Components

Spring '19 introduces a new type of Lightning component called a Lightning web component. What we used to call a Lightning component we now call an Aura component. Aura components and Lightning web components work together and are both part of the Lightning Component framework.

#### New and Changed Aura Components

Spring '19 introduces a new type of Lightning component called a Lightning web component. What we used to call a Lightning component we now call an Aura component. Aura components and Lightning web components work together and are both part of the Lightning Component framework.

#### New Aura Component Interfaces

Aura component interfaces enable components to be used in different contexts or to receive extra context data.

#### SEE ALSO:

Lightning Web Components (Generally Available)

#### **New Lightning Web Components**

Spring '19 introduces a new type of Lightning component called a Lightning web component. What we used to call a Lightning component we now call an Aura component. Aura components and Lightning web components work together and are both part of the Lightning Component framework.

#### **Available Components**

These Lightning web components are generally available to all developers.

#### **Buttons**

These components provide different button flavors.

#### lightning-button

A button element that executes an action.

#### lightning-button-icon

An icon-only HTML button.

#### lightning-button-icon-stateful

An icon-only button that retains state.

#### lightning-button-group

Represents a group of buttons. This component is a container for lightning-button, which collectively create a navigation bar.

#### lightning-button-menu

A dropdown with a list of actions or functions. This component nests lightning-menu-item to create a menu item in the dropdown.

#### lightning-button-stateful

A button that switches between states.

#### **Data Entry**

Use these components for data entry.

#### lightning-checkbox-group

Enables selection of single or multiple options.

#### lightning-combobox

A widget that provides an input field that is read-only, accompanied by a dropdown of selectable options.

#### lightning-dual-listbox

A widget that provides an input listbox, accompanied with a listbox of selectable options.

#### lightning-file-upload

A file uploader for uploading and attaching files to records.

#### lightning-helptext

An icon with a text pop over that's used as a tooltip.

#### lightning-input

Interactive controls that accept user input depending on the type attribute.

#### lightning-input-address

An address compound field that contains fields such as street and city.

#### lightning-input-location

A geolocation compound field that accepts a latitude and longitude value.

#### lightning-input-name

A name compound field that contains fields such as salutation and suffix.

#### lightning-input-rich-text

A WYSIWYG editor with a customizable toolbar for entering rich text.

#### lightning-radio-group

Enables selection of a single option.

#### lightning-slider

An input range slider for specifying a value between two specified numbers.

#### lightning-textarea

A multiline text input field.

#### **Displaying Data**

Use these components to display data.

#### lightning-click-to-dial

A formatted phone number that's click-to-dial enabled or disabled for Open CTI and Voice.

#### lightning-datatable

A table that displays columns of data, formatted according to type.

#### lightning-formatted-address

A formatted address that provides a link to the given location on Google Maps.

#### lightning-formatted-date-time

A date and time that can be displayed in different formats.

#### lightning-formatted-email

An email as a hyperlink with the mailto: URL scheme.

#### lightning-formatted-location

A geolocation in decimal degrees (DD) using the format [latitude, longitude].

#### lightning-formatted-name

A formatted name that can include a salutation and suffix.

#### lightning-formatted-number

A number that can be displayed as a decimal, currency, or percentage.

#### lightning-formatted-phone

A phone number as a hyperlink with the tel: URL scheme.

#### lightning-formatted-rich-text

Rich text that's formatted with whitelisted tags and attributes. Other tags and attributes are removed and only their text content is displayed.

#### lightning-formatted-text

Text that replaces newlines with line breaks, and supports href linking.

#### lightning-formatted-time

A time that can be displayed in different formats.

#### lightning-formatted-url

Displays a URL as a hyperlink.

#### lightning-relative-date-time

Displays the relative time difference between the source date-time and the provided date-time.

#### lightning-tree

A nested tree that displays visualization of a structural hierarchy, such as a sitemap for a website or a role hierarchy in an organization.

#### lightning-tree-grid

A hierarchical view of data in a table.

#### **Forms**

Use these components to edit and view records.

#### lightning-record-edit-form

A record edit layout that displays one or more fields.

This component nests lightning-input-field to display fields.

#### lightning-record-form

An editable form or display form for a record.

#### lightning-record-view-form

A record view that displays one or more fields. This component nests lightning-output-field to display fields.

#### Layout

Use these components to organize content in various layouts.

#### lightning-accordion

A collection of vertically stacked sections with multiple content areas. This component nests lightning-accordion-section to create sections.

#### lightning-card

A container around a related group of information.

#### lightning-layout

A responsive grid system for arranging containers on a page. This component nests lightning-layout-item to group information together, which defines visual grids, spacing, and sections.

#### lightning-tabset

A list of tabs. This component nests lightning-tab to keep related content in a single container.

#### lightning-tile

Groups related information associated with a record.

#### Navigation

Use these components for navigation.

#### lightning-breadcrumbs

A hierarchy path of the page you're currently visiting within the website or app. This component nests lightning-breadcrumb to create an item in the hierarchy path.

#### lightning-navigation

Generates a URL for a given pageReference to navigate to a page in Lightning Experience and the Salesforce app.

#### lightning-vertical-navigation

A vertical list of links that takes the user to another page or parts of the page the user is on. This component nests the following components to create link items and sections.

- lightning-vertical-navigation-item
- lightning-vertical-navigation-item-badge
- lightning-vertical-navigation-item-icon
- lightning-vertical-navigation-overflow
- lightning-vertical-navigation-section

#### Utility

Use these components to simplify development.

#### platform-resource-loader

Imports a third-party JavaScript or CSS library via a static resource.

#### lightning-platform-show-toast-event

Displays messages via toasts.

#### Visual

Use these components to add visual context.

#### lightning-avatar

A visual representation of an object, such as an image of an account or user.

#### lightning-badge

A label that holds a small amount of information, such as the number of unread notifications.

#### lightning-carousel

A collection of images that are displayed one at a time. This component nests lightning-carousel-image to create carousel images.

#### lightning-dynamic-icon

Animated icons that are displayed with different states.

#### lightning-icon

A visual element that provides context and enhances usability.

#### lightning-map

Displays a map of one or more locations.

#### lightning-pill-container

A list of pills grouped in a container. This component is a container for lightning-pill to create individual pills. A pill contains a label with a link that can be removed from view.

#### lightning-progress-indicator

Provides a visual indication on the progress of a particular process. This component nests lightning-progress-step to create progress steps.

#### lightning-spinner

Displays an animated spinner.

#### SEE ALSO:

Lightning Web Components (Generally Available)
Component Library

#### New and Changed Aura Components

Spring '19 introduces a new type of Lightning component called a Lightning web component. What we used to call a Lightning component we now call an Aura component. Aura components and Lightning web components work together and are both part of the Lightning Component framework.

#### **New Aura Components**

The following component is new and requires API version 45.0 or later.

#### lightning:unsavedChanges

Notifies the UI about unsaved changes in a component.

#### **Changed Aura Components**

The following components have changes.

#### aura:unescapedHtml

You can no longer pass in the <style>, <script>, or <meta> tags to this component. This change reduces the risk of a cross-site scripting (XSS) vulnerability.

#### lightning:buttonMenu

The following attribute has changed.

menuAlignment—The auto alignment is now supported. The auto attribute aligns the dropdown with the viewport
and takes care of overflow hidden elements.

#### lightning:combobox

The following attribute is new.

spinnerActive—Displays a spinner to indicate loading activity in the dropdown list. The default is false.

#### lightning:datatable

The following attribute is new.

• suppressBottomBar—Specifies whether to hide the footer that displays the Save and Cancel buttons during inline editing. The default is false.

#### lightning:dualListbox

The following attributes are new.

- showActivityIndicator—Displays a spinner to indicate activity in the list box. The default is false.
- size—Number of items that display before a vertical scroll bar is displayed for the list box. Determines the vertical size of the dual list box.

#### lightning:formattedAddress

When you click an address that is displayed as a link, the map now opens in a new tab.

The following attribute is new.

• showStaticMap—Displays a static map of the location. The default is false.

#### lightning:inputAddress

The following attribute is new.

showLookupAddress—Specifies whether to enable address lookup using Google Maps. The default is false.

#### lightning:inputRichText

The following attribute is new.

• formats—A list of formats accepted by the text editor. By default, the list is computed based on enabled categories. The table format is always enabled to support copying and pasting of tables. If formats are specified, all desired formats must be specified. Omitting a format from the list removes the corresponding button.

#### lightning:navigation

The navigation service uses a PageReference object to describe pages. A new PageReference type of standard\_webPage wraps a raw URL so that you can navigate to external websites See Navigate to a URL with the standard\_webPage Page Reference Type.

#### lightning:nextBestActions

This component executes a strategy and displays the resulting recommendations.

#### lightning:select

The following method is new.

• checkValidity—Returns the valid property value (Boolean) on the ValidityState object to indicate whether the select has any validity errors.

#### lightning:tab

The following attributes are new.

- iconName—Specifies a utility icon to display next to a tab label.
- iconAssistiveText—Assistive text for the icon specified by iconName.
- showErrorIndicator—Specifies whether the tab content has an error. An error icon displays to the right of the tab label.

#### lightning: utility Bar API

The disableUtilityPopOut method is new. See Lightning Console JavaScript API.

#### lightning:workspaceAPI

There are new methods for workspace tabs and subtabs. See Lightning Console JavaScript API.

#### lightningsnapin:minimizedAPI

The following eventName value is new.

• chatConferenceState—Passes a list of the agents in the chat conference, whether an agent is joining or leaving the chat conference, and the name of the agent who is joining or leaving.

The following eventName value has changed:

- queueUpdate—This event now fires in the following scenarios.
  - The visitor requests a chat and is waiting for an agent.
  - After requesting a chat, the visitor navigates to another page, but is still waiting for an agent.
  - The visitor had previously lost connection (see reconnectingState) and has regained it.
  - The visitor advanced in the queue, but is still waiting for an agent to accept the chat request.
  - A bot or agent has requested a chat transfer and is waiting for another agent to accept.
  - During a chat transfer, the visitor navigates to another page, but is still waiting to be transferred.
  - The visitor has advanced in the queue, but is still waiting for an agent to accept the chat transfer.

#### SEE ALSO:

Lightning Web Components (Generally Available)
Component Library

#### **New Aura Component Interfaces**

Aura component interfaces enable components to be used in different contexts or to receive extra context data.

#### **New Interfaces**

The following interface is new.

#### lightning:utilityItem

Enables a component to be included in the utility bar.

#### SEE ALSO:

Lightning Web Components (Generally Available) Component Library

# Apex: New and Changed Items

These classes, enums, and interfaces are new or have changes.

For more information, refer to the Apex Developer Guide.

#### IN THIS SECTION:

Apex: New and Changed Classes and Interfaces

These classes and interfaces are new or have changes.

ConnectApi (Chatter in Apex): New and Changed Classes and Enums

Create custom experiences in Salesforce using Chatter in Apex. Include hyperlinks in posts, purge mission activity for users, and take advantage of generally available Next Best Actions.

#### SEE ALSO:

Create an Identity-First Login Page with My Domain Login Discovery

**Apex: New Features** 

### Apex: New and Changed Classes and Interfaces

These classes and interfaces are new or have changes.

#### IN THIS SECTION:

#### **New Apex Classes**

These classes are new in this release.

#### **Changed Apex Classes**

These existing classes have new or changed methods or constants.

#### **New Apex Enum**

This enumeration was introduced in this release.

#### New Apex Exception

This exception was introduced in this release.

#### New Apex Interface

This interface was introduced in this release.

#### **New Apex Classes**

These classes are new in this release.

#### ChangeEventHeader Class in the EventBus Namespace

The new EventBus. ChangeEventHeader class contains header fields of Change Data Capture events.

#### Class in the Auth Namespace

#### **VerificationResult Class**

Stores the result of the System.UserManagement.verifySelfRegistration method. The method returns the result of a verification challenge that you invoke when you create your own Verify page. It contains the verification status and session ID if the user is created successfully.

#### Classes in the System Namespace

#### OrgLimit Class

The System.OrgLimit class contains methods that return the name, current value, and maximum limit for an instance.

#### getName()

Returns the limit's name.

#### getValue()

Returns the limit usage value.

#### getLimit()

Returns the maximum allowed limit value.

#### OrgLimits Class

The System.OrgLimits class contains methods that return a list of all org limits or a map of all org limit names and values.

#### getAll()

Returns a list of OrgLimit instances.

#### getMap()

Returns a map of all OrgLimit instances with the limit name as key.

#### SEE ALSO:

https://developer.salesforce.com/docs/atlas.en-us.api\_rest.meta/api\_rest/resources\_limits.htm

#### **Changed Apex Classes**

These existing classes have new or changed methods or constants.

#### AppLauncher.LoginFormController Class

#### **New Method**

#### loginGetPageRefUrl(username, password, startUrl)

Logs in the user using the specified username and password. If login is successful in a Lightning environment, the user is redirected to the page specified in the startUrl. In a non-Lightning environment, use the startUrl returned by the method to program a redirect. If login fails, an error string is returned.

#### Auth.AuthConfiguration Class

#### **New Methods**

#### getCertificateLoginEnabled(domainUrl)

Returns true if certificate-based authentication is enabled for the My Domain URL.

#### getCertificateLoginUrl(domainUrl, startUrl)

Returns the certificate-based authentication endpoint for the My Domain URL if the org has certificate-based authentication enabled.

#### Auth.SessionManagement Class

#### **New Method**

#### finishLoginDiscovery(method, userId)

Finish the My Domain Login Discovery login process.

#### System. Test Class

#### **Changed Method**

#### stopTest()

Executes scheduled actions for record-change processes and event processes (built in Process Builder), and resumes flows that are waiting for time-based resume events.

#### System. SObject Class

#### **New Methods**

#### isSet(fieldName)

Returns information about the queried sObject field. Returns true if the sObject field is populated, either by direct assignment or by inclusion in a SOQL query. Returns false if the sObject field is not set. If an invalid field is specified, an SObjectException is thrown.

#### isSet(field)

Returns information about the queried sObject field. Returns true if the sObject field is populated, either by direct assignment or by inclusion in a SOQL query. Returns false if the sObject field is not set. If an invalid field is specified, an SObjectException is thrown.

#### System.String Class

#### **Changed Method**

#### format(stringToFormat, formattingArguments)

The formattingArguments parameter type now uses List<Object> instead of List<String> to allow non-string objects as parameters. Treat the first argument as a pattern and return a string using the second argument for substitution and formatting. The substitution and formatting are the same as apex:outputText and the Java MessageFormat class. Non-string types in the second argument's List are implicitly converted to strings, respecting the toString() method overrides that exist on the type.

#### System. UserManagement Class

#### **New Methods**

#### initSelfRegistration(method, user)

Use this method to invoke a verification challenge when creating your own Verify page for community self-registration.

#### sendAsyncEmailConfirmation(userId, emailTemplateId, networkId, startUrl)

Send an email message to a user's email address for verification. The message contains a verification link (URL) that the user clicks to verify the email address later on. You can send email verifications in bulk.

#### verifySelfRegistration(method, identifier, code, startUrl)

Use this method to complete a verification challenge when creating your own Verify page for community self-registration. If the person who is attempting to register enters the verification code successfully, the user is created and logged in.

#### New Apex Enum

This enumeration was introduced in this release.

#### Auth. LoginDiscoveryMethod Enum

Contains the method used to verify the user's identity.

#### **New Apex Exception**

This exception was introduced in this release.

#### Auth Namespace

#### DiscoveryCustomErrorException

Throw this exception to customize error messages that appear in MyDomainLoginDiscoveryHandler, LoginDiscoveryHandler, and ConfigurableSelfRegHandler.

#### **New Apex Interface**

This interface was introduced in this release.

#### Auth.MyDomainLoginDiscoveryHandlerInterface

The handler used to implement the My Domain Login Discovery page, which is an interview-based (two-step) login process. First the user is prompted for a unique identifier such as an email address or phone number. Then the handler determines (discovers) how to authenticate the user. Either the user enters a password or is directed to an identity provider's login page.

#### login(identifier, startUrl, requestAttributes)

Log in a Salesforce user given the specified unique identifier, such as email or phone number. If successful, redirect the user to the page specified by the start URL.

#### ConnectApi (Chatter in Apex): New and Changed Classes and Enums

Create custom experiences in Salesforce using Chatter in Apex. Include hyperlinks in posts, purge mission activity for users, and take advantage of generally available Next Best Actions.

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, you can access some Chatter data using SOQL queries and objects. However, it's simpler to expose Chatter data in ConnectApi classes, and data is localized and structured for display. For example, instead of making several calls to access and assemble a feed, you can do it with a single call.



Note: To integrate mobile apps, intranet sites, and third-party web applications with Chatter and Communities, use Chatter REST API

#### IN THIS SECTION:

New and Changed Chatter in Apex Classes

These classes are new or have changes.

New and Changed Chatter in Apex Input Classes

These input classes are new or have changes.

New and Changed Chatter in Apex Output Classes

These output classes are new or have changes.

New and Changed Chatter in Apex Enums

These enums are new or have changes.

#### New and Changed Chatter in Apex Classes

These classes are new or have changes.

Chatter Feeds

These existing methods are in the ConnectApi.ChatterFeeds class.

#### Include a hyperlink in a post

Use this existing method with the updated ConnectApi.MarkupBeginSegmentInput and ConnectApi.MarkupEndSegmentInput classes.

postFeedElement(communityId, feedElement)

#### Include a hyperlink in a comment

Use this existing method with the updated ConnectApi.MarkupBeginSegmentInput and ConnectApi.MarkupEndSegmentInput classes.

postCommentToFeedElement(communityId, feedElementId, comment, feedElementFileUpload)

#### Move a post from one public group to another

Use this existing method, and set the subjectId property of the existing ConnectApi.FeedElementInput class to the new public group ID.

updateFeedElement(communityId, feedElementId, feedElement)

#### Missions

These new methods are in the ConnectApi. Missions class.

#### Export mission activity for a user

exportUserMissionsActivities(communityId, userId)

#### Start a job to purge mission activity for a user

purgeUserMissionsActivities(communityId, userId)

#### Update the mission activity counts for a user

updateUserMissionActivityCount(activityType, activityCount, communityId, userId)

Next Best Actions (Generally Available)

All the Next Best Action methods, even methods introduced in versions 43.0 and 44.0, now have a minimum version of 45.0. All properties of the related input and output classes also have a minimum version of 45.0.

These new methods are in the ConnectApi.NextBestAction class.

#### Get a recommendation

getRecommendation(recommendationId)



Note: This method replaces the getProposition (propositionId) method.

#### Execute a recommendation strategy, and request trace information

executeStrategy(strategyName, maxResults, contextRecordId, debugTrace)

#### Get recommendation reactions

 getRecommendationReactions(onBehalfOfId, createdById, targetId, contextRecordId, pageParam, pageSize)

Users with the Manage Next Best Action Recommendations or Modify All Data permission can get recommendation reactions.

#### Get a recommendation reaction

getRecommendationReaction(reactionId)

Users with the Manage Next Best Action Recommendations or Modify All Data permission can get recommendation reactions.

#### Delete a recommendation reaction

deleteRecommendationReaction(reactionId)

Users with the Manage Next Best Action Recommendations or Modify All Data permission can delete recommendation reactions.

#### Social Engagement

These new methods are in the ConnectApi.SocialEngagement class.

#### Get available intents for a social post

getIntents(socialPostId)

#### Follow a social persona

• followSocialPersona (socialPersonaId, socialAccountId) socialPersonaId is the ID of the persona to follow, and socialAccountId is the ID of the account that follows the persona.

• followSocialPostPersona (socialPostId, socialAccountId) socialPostId is the ID of the post authored by the persona to follow, and socialAccountId is the ID of the account that follows the persona.

#### Stop following a social persona

- unfollowSocialPersona (socialPersonaId, socialAccountId)
   socialPersonaId is the ID of the persona to stop following, and socialAccountId is the ID of the account that stops following the persona.
- unfollowSocialPostPersona (socialPostId, socialAccountId) socialPostId is the ID of the post authored by the persona to stop following, and socialAccountId is the ID of the account that stops following the persona.

#### Users

These new methods are in the ConnectApi. ChatterUsers class.

#### Get more detailed information about a user's groups

- getUserGroups(communityId, userId)
- getUserGroups(communityId, userId, pageParam, pageSize)
- Note: These methods replace the getGroups (communityId, userId) and getGroups (communityId, userId, pageParam, pageSize) methods.

#### Search a user's groups and get more detailed information

- searchUserGroupDetails(communityId, userId, q)
- searchUserGroupDetails(communityId, userId, q, pageParam, pageSize)
- Note: These methods replace the searchUserGroups (communityId, userId, q) and searchUserGroups (communityId, userId, q, pageParam, pageSize) methods.

#### New and Changed Chatter in Apex Input Classes

These input classes are new or have changes.

Chatter Feeds

#### ConnectApi.MarkupBeginSegmentInput

This input class has these new and changed properties.

- altText—Alternative text for the Hyperlink segment.
- markupType—Now supports hyperlink markup.
- url—URL for the Hyperlink segment. Supported hyperlink URLs start with http:// or https://.

#### ConnectApi.MarkupEndSegmentInput

This input class has this changed property.

markupType—Now supports hyperlink markup.

Next Best Actions (Generally Available)

#### ConnectApi.NBAStrategyInput

This input class has one new property.

debugTrace—Specifies whether to return trace and debug information in the response (true) or not (false). If unspecified,
the default is false.

#### ConnectApi.RecommendationReactionInput

This input class was previously named ConnectApi.NBAReactionInput.

#### New and Changed Chatter in Apex Output Classes

These output classes are new or have changes.

#### Chatter Feeds

#### ConnectApi.MarkupBeginSegmentOutput

This output class has these new and changed properties.

- altText—Alternative text for the segment, if available.
- markupType—Now supports hyperlink markup.
- url—URL for the segment, if available.

#### ConnectApi.MarkupEndSegmentOutput

This output class has this changed property.

markupType—Now supports hyperlink markup.

#### Communities

#### ConnectApi.Community

This output class has one new property.

 memberVisibilityEnabled—Specifies whether community members can see other community members (true) or not (false).

#### Missions

#### ConnectApi.UserMissionActivitiesJob

This new output class has these properties.

- jobToken—Token that identifies the mission user activities job.
- jobType—Type of user activities job, either export or purge.
- message—Message describing the status and expected outcome of the job.

#### ConnectApi.UserMissionActivity

This new output class has these properties.

- activityCount—Number of mission activities of the specified type for the user.
- activityType—Type of mission activity for a user.

#### ConnectApi.UserMissionActivityCollection

This new output class has these properties.

• community—Community in which the user performed activities.

- userId—ID of the user.
- userMissionActivities—List of mission activities performed by the user.
- userName—Name of the user.

#### ConnectApi.UserMissionActivityStatus

This new output class has these properties.

- message—Success or error message.
- status—Status of mission activity for a user.

Next Best Actions (Generally Available)

#### ConnectApi.NBANativeRecommendation

This output class was previously named ConnectApi.NBAPropositionRecommendation.

#### ConnectApi.NBARecommendation

These properties are removed from this output class.

- actionReference
- id
- name
- url

#### ConnectApi.NBARecommendations

This output class has one new property.

• trace—Trace information for the recommendation strategy execution, if requested.

#### ConnectApi.Recommendation

This output class was previously named ConnectApi.Proposition.

#### ConnectApi.RecommendationReaction

This output class was previously named ConnectApi. NBAReaction. It has one new property.

url—URL to the recommendation reaction.

#### ConnectApi.RecommendationReactions

This new output class has these properties.

- currentPageUrl—URL to the current page of reactions in the collection.
- nextPageUrl—URL to the next page of reactions in the collection.
- reactions—Collection of recommendation reactions.

#### ConnectApi.StrategyTrace

This new output class has these properties.

- messages—Messages and errors from the strategy execution.
- nodes—Nodes of the strategy execution used for debugging.

#### ConnectApi.StrategyTraceNode

This new output class has these properties.

- inputCount—Number of items put into the node.
- messages—Messages that occurred during node execution.
- nodeName—Name of the node.
- nodeTime—Time spent processing inside the node.

- nodeType—Type of node.
- outputCount—Number of items returned from the node.
- outputs—Recommendations that are returned from the node.
- totalTime—Total time spent processing.

#### Social Engagement

#### ConnectApi.ApprovalIntent

This new output class has this property.

• isRecallable—Specifies whether the social post can be recalled (true) or not (false).

#### ConnectApi.DeleteIntent

This new output class has this property.

managedSocialAccount—Managed social account that deletes the social post.

#### ConnectApi.DeleteIntents

This new output class has this property.

• deletes—List of delete intents for the social post.

#### ConnectApi.FollowIntents

This new output class has this property.

• follows—List of follow intents for the social persona.

#### ConnectApi.FollowSocialPersonaIntent

This new output class has these properties.

- managedSocialAccount—Managed social account that follows the social persona.
- socialPersonaId—ID of the social persona to follow.

#### ConnectApi.HideSocialPostIntent

This new output class has these properties.

- isHidden—Specifies whether the managed social account hid the social post (true) or not (false).
- managedSocialAccount—Managed social account that hides the social post.

#### ConnectApi.LikeIntent

This new output class has these properties.

- isLiked—Specifies whether the managed social account liked the social post (true) or not (false).
- managedSocialAccount—Managed social account that likes the social post.

#### ConnectApi.LikeIntents

This new output class has this property.

• likes—List of like intents for the social post.

#### ConnectApi.ReplyIntent

This new output class has this property.

managedSocialAccount—Managed social account that replies to the social post.

#### ConnectApi.ReplyIntents

This new output class has this property.

replies—List of reply intents for the social post.

#### ConnectApi.SocialPostIntents

This new output class has these properties.

- approvalIntent—Approval intent for the social post.
- deleteIntent—Delete intents for the social post.
- followIntent—Follow intents for the social persona.
- hideIntent—Hide intent for the social post.
- likeIntent—Like intents for the social post.
- replyIntent—Reply intents for the social post.

Users

#### ConnectApi.UserGroupDetailPage

This new output class has these properties.

- currentPageUrl—URL to the current page.
- groups—Collection of groups that the user is a member of.
- nextPageUrl—URL to the next page, or null if there is no next page.
- previousPageUrl—URL to the previous page, or null if there is no previous page.
- total—Total number of groups that the user is a member of.

#### New and Changed Chatter in Apex Enums

These enums are new or have changes.

For information about these enums, see ConnectApi Enums in the Apex Developer Guide.

#### ConnectApi.MarkupType

This enum has one new value.

Hyperlink—Hyperlink anchor tag.

#### ConnectApi.NBATargetType

This enum has a renamed value.

Proposition is now Recommendation.

#### ${\tt ConnectApi.RecommendationReactionType}$

This enum was previously named ConnectApi.NBAReactionType.

#### ConnectApi.UserMissionActivityType

This new enum has these values.

- FeedItemAnswerAQuestion—User answered a question.
- FeedItemLikeSomething—User liked a post or comment.
- FeedItemMarkAnswerAsBest—User marked an answer as the best answer.
- FeedItemPostQuestion—User posted a question.
- FeedItemReceiveAComment—User received a comment on a post.
- FeedItemReceiveALike—User received a like on a post or comment.
- FeedItemReceiveAnAnswer—User received an answer to a question.
- FeedItemWriteAComment—User commented on a post.
- FeedItemWriteAPost—User made a post.

FeedItemYourAnswerMarkedBest—User's answer was marked as the best answer.

# API: New and Changed Items

Access metadata types, data objects, REST resources, and more in API version 45.0.

#### IN THIS SECTION:

#### New and Changed Objects

Access more data through these new and changed standard objects.

#### **REST API**

REST API includes new, changed, and deprecated calls.

#### Chatter REST API

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. Include hyperlinks in posts, purge mission activity for users, and take advantage of generally available Next Best Actions.

#### Reports and Dashboards REST API

The Reports and Dashboards REST API has been enhanced to support the beta release of historical tracking report enhancements in Lightning Experience. To support this feature, the /analytics/report-types/ resource has a new property and the /analytics/report-types/ type resource supports a new report type.

#### User Interface API

Build Salesforce UI using the same API that Salesforce uses to build Lightning Experience and Salesforce for Android, iOS, and mobile web. Build user interfaces that let users work with records, list views, actions, favorites, and more.

#### Tooling API

Tooling API includes new and changed objects.

#### Metadata API

Metadata API includes new and changed types and fields.

#### Lightning Quick Action and Salesforce Classic Publisher JavaScript APIs

Use the Lightning Quick Action JavaScript APIs and the Salesforce Classic Publisher JavaScript APIs in a utility that opens in a new window. We also changed the shape of the response for the getAvailableActionFields method in the Quick Action API.

#### Lightning Console JavaScript API

The Lightning Console JavaScript API is now at parity with the most heavily used methods and events of the classic Salesforce Console Integration Toolkit. Set tab colors, disable utility pop-out, and edit browser tab titles.

#### **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 changes.

#### **New Objects**

These objects are new.

#### AccountInsight

Represents an individual insight (a key business development or key moment) related to an account record.

#### AccountRelationship

Represents a relationship of a given type between two accounts.

#### AccountRelationshipFeed

Represents the feed activity on an account relationship record.

#### AccountRelationshipHistory

Represents the history of changes to the values in the fields of an account relationship.

#### AccountRelationshipShare

Represents a sharing entry for an account relationship, which lets the system know who has access to an account relationship.

#### AccountRelationshipShareRule

Represents the rule that determines which object records are shared, how they are shared, the account relationship type that shares the records, and the level of access granted to the records.

#### ActivityMetric

Represents activities that were added to Salesforce automatically by Einstein Activity Capture and manually by users.

#### **AppointmentSchedulingPolicy**

Represents a set of rules to enforce when a new appointment is scheduled in Lightning Scheduler.

#### Calendar

Represents a calendar. This can be a default user calendar, public calendar, resource calendar, or holiday calendar.

#### ContactPointTypeConsent

Represents consent for a contact point type, such as email or phone.

#### ContactRequest

Represents a customer's request for support to get back to them about an issue. This object is available in API version 45.0 and later.

#### ContactRequestShare

Represents a list of access levels to a ContactRequest with an explanation of the access level. This object is available in API version 45.0 and later.

#### ContactSuggestionInsight

Represents a suggestion for a new contact record.

#### CustomHelpMenuItem

Represents the items within a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources.

#### CustomHelpMenuSection

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources.

#### DataUseLegalBasis

Represents the legal basis for contacting a customer, such as billing or contract.

#### DataUseLegalBasisHistory

Represents the history of changes to values in the fields of a data use legal basis.

#### Data Use Legal Basis Share

Represents a list of access levels to a data use legal basis along with an explanation of the access level.

#### DataUsePurpose

Represents the reason for contacting a prospect or customer, such as for billing, marketing, or surveys

#### DataUsePurposeHistory

Represents the history of changes to values in the fields of a data use purpose.

#### DataUsePurposeShare

Represents a list of access levels to a data use purpose along with an explanation of the access level.

#### IframeWhiteListUrl

Represents a list of external domains that you allow to frame your Visualforce pages.

#### MyDomainDiscoverableLogin

Represents configuration settings when the My Domain login page type is Discovery. Login Discovery provides an identity-first login experience, where the login page contains the identifier field only. Based on the identifier entered, a handler determines how to authenticate the user. This object is available in API version 45.0 and later.

#### MessagingChannel

Represents a communication channel that an end user can use to send a message to an agent. A communication channel can be an SMS number, a Facebook page, or another supported messaging channel. This object is available in API version 45.0 and later.

#### MessagingChannelSkill

Junction object that represents an association between MessagingChannel and Skill. This object is available in API version 45.0 and later.

#### Opportunity Contact Role Suggestion Insight

Represents a suggestion for a new opportunity contact role.

#### OpportunityInsight

Represents an individual insights (deal prediction, follow-up reminder, or key moment) related to an opportunity record.

#### PermissionSetGroup (Pilot)

Represents a group of permission sets and the permissions within them. Use permission set groups to organize permissions based on job functions or tasks and then package them. This object is available in API version 45.0 and later.

#### PermissionSetGroupComponent (Pilot)

A junction object that relates the PermissionSetGroup and PermissionSet objects via their respective IDs; enables permission set group recalculation to determine the aggregated permissions for the group. This object is available in API version 45.0 and later.

#### PermissionSetTabSetting

Represents a permission set tab setting. Requires the View Setup permission. Use this object to query all tab settings of the permission set. This object is available in API version 45.0 and later.

#### Recommendation

Represents the recommendations surfaced as offers and actions for Einstein Next Best Action. This object was previously named Propositions in the Next Best Action pilot.

#### Service Territory Work Type

Represents the relationship between a service territory and a work type for Lightning Scheduler appointments.

#### ServiceTerritoryWorkTypeFeed

Represents the feed activity for a service territory work type record, including posts and comments.

#### ServiceTerritoryWorkTypeHistory

Represents the history of changes to the values in the fields of a service territory work type record.

#### SurveyQuestionScore

Represents the scores of the following question types: ranking, rating, scoring, slider, and Net Promoter Score® (NPS®).

#### **UserAuthCertificate**

Represents a user authentication certificate in your org. A user certificate is a unique PEM-encoded X.509 digital certificate to authenticate individual users to your org. This object is available in API version 45.0 and later.

#### WorkTypeGroup

Represents a grouping of work types used to categorize types of appointments available in Lightning Scheduler.

#### WorkTypeGroupFeed

Represents the feed activity for a work type group record, including posts and comments.

#### WorkTypeGroupHistory

Represents the history of changes to the values in the fields of a work type group record.

#### WorkTypeGroupMember

Represents the relationship between a work type and the work type group it belongs to.

#### WorkTypeGroupMemberFeed

Represents the feed activity for a work type group member record, including posts and comments.

#### WorkTypeGroupMemberHistory

Represents the history of changes to the values in the fields of a work type group member record.

#### WorkTypeGroupShare

Represents a sharing entry on a work type group record.

#### **Changed Objects**

These objects have changes.

#### **Changed Objects**

#### AccountShare

Territory2AssociationManual was added as a supported value to the RowCause field. With Enterprise Territory Management in API version 44.0 and earlier, the TerritoryManual reason code was written to AccountShare records when you manually assigned an account to a territory. In API version 45.0 and later, Territory2AssociationManual replaces all instances of TerritoryManual, and the Territory2AssociationManual reason code is written to AccountShare records when you manually assign an account to a territory.

#### AccountUserTerritory2View

A filter criterion with one AccountId is now required when you execute a SOQL query on this object.

#### **Audience**

CustomLogicMatches was added as a supported value to the FormulaFilterName field.

#### **AuthConfig**

The AuthOptionsCertificate field is new. If this field is set to true, certificate-based login displays on the My Domain login page.

#### BackgroundOperation

Access levels for users without defined unique credentials have changed.

#### ChannelProgramMember

These fields are new

• LastReferencedDate—Shows the most recent date referenced.

LastViewedDate—Shows the most recent date viewed.

#### ContentDocument and ContentVersion

The new Query All Files permission allows you to query ContentDocument and ContentVersion and retrieve all files in the org. Query All Files will return all files including files in non-member libraries and files in unlisted groups. (On its own, the View All Data permission only allows you to query files you own or have access to.)

#### ConversationEntry

Introduced in API version 43.0, this object has been added to the Object Reference for Salesforce and Lightning Platform.

#### **EmailDomainKey**

This field is new.

KeySize—Indicates the RSA key size.

#### **EmailMessage**

The field ActionCadenceStepTrackerId was added so that you can track with cadence step associated with the email.

The field EmailTemplateId was added so that you can track which template was used for the email.

#### EmailMessageRelation

OtherAddress was added as a supported value to the RelationType field. It's used for the email address of a person, such as a contact or user who wasn't the sender or a recipient on the email.

#### **EmailTemplate**

FolderName was added so that you can track which folder an email template is located in. Previously, only Public or Private was available.

#### **Event**

In the GroupEventType field, the label for the value 3has changed from "Hidden" to "IsRecurrence2 Series Pattern".

The Assigned to ID value of the OwnerId field can correspond to a user or public calendar who own events. Previously, only users could own events.

#### EventLogFile

These event types are new.

- The Concurrent Long Running Apex Limit event type in the EventLogFile object captures information about long-running concurrent Apex requests in your org that Salesforce terminated after reaching the concurrency limit. For example, you can monitor log counts to get a benchmark or plot a count by hour. You can then use the log data to identify where a limit was exceeded. Also, you can identify the URI of the request that was terminated.
- The new Apex Unexpected Exception event type in the EventLogFile object captures information about unexpected exceptions in Apex code execution. The standard way to obtain exception information is from generated email. However, you now have the option of analyzing the EventLogFile object for Apex exception information, including stack traces.

#### ExternalDataSource

Access levels for users without defined unique credentials were changed.

#### ExternalDataUserAuth

Access levels for users without defined unique credentials were changed.

#### FieldHistoryArchive

With Field Audit Trail, you can set field history retention policies on more objects. The FieldHistoryType picklist now includes these options: Campaign, Individual, Order, OrderItem.

#### For ecasting Share

This field is new.

RoleType—The type of hierarchy associated with the forecast share.

#### ForecastingType

This field has changed.

 DeveloperName—We added the value Territory\_Model\_Name\_ProductFamily, where Territory\_Model\_Name is the name of your active territory model.

#### KnowledgeArticle

This field is new.

• MigratedToFromArticle—The ID for the corresponding pre- or post-migration article. This field contains values only in orgs that migrate from Knowledge in Salesforce Classic to Lightning Knowledge.

#### **KnowledgeArticleVersion**

This field is new.

• MigratedToFromArticleVersion—The ID for the corresponding pre- or post-migration article. This field contains values only in orgs that migrate from Knowledge in Salesforce Classic to Lightning Knowledge.

#### LiveChatButton

This field is deprecated.

CustomRoutingClassId

These fields are new.

- QueueId—The record ID of the queue used for this chat button.
- RoutingConfigurationId—The record ID of the routing configuration used for this chat button.

#### LiveChatTranscript

This field is new.

IsChatBotSession—Indicates whether the visitor is chatting with a Chatbot.

#### LoginEvent

The following picklist values were added to the CipherSuite field.

- ECDHE-RSA-AES128-SHA
- ECDHE-RSA-AES256-SHA

#### LoginHistory

These fields are new.

- OptionsIsGET—The HTTP method used for the session login is a GET request.
- OptionsIsPost—The HTTP method used for the session login is a POST request.

#### MacroHistory

Represents changes to field values on a Macro object. This object was introduced in API version 32.0 and has been added to the SOAP API Developer Guide.

#### MacroInstruction

Close is now a supported value to the Operation field. Use to create a macro instruction that closes the active tab in Lightning console apps.

#### MacroShare

Represents a sharing entry on a Macro object. This object was introduced in API version 32.0 and has been added to the SOAP API Developer Guide.

#### MaintenancePlan

These fields are new.

- WorkOrderGenerationMethod—The work order generation method. You can choose to create one work order per asset or one work order item per asset.
- SvcApptGenerationMethod—The service appointment generation method. You can choose to create one service appointment per work order or one service appointment per work order line item.

#### NamedCredential

Access levels for users without defined unique credentials were changed.

#### NavigationLinkSet

This object has these new supported calls: create(), delete(), update(), and upsert().

Create and Update properties were added to these fields.

- DeveloperName
- MasterLabel
- NetworkId

Create, Defaulted on create, Nillable, and Update properties were added to the Language field.

#### Network

This field is new.

• OptionsMemberVisibility—Controls community user visibility on a per-community basis. If true, the Community User Visibility pref is enabled for the selected community

#### NetworkActivityAudit

New picklist values were added to the ParentEntityType field.

#### OwnerChangeOptions

The following options were added to the type field.

- TransferOwnedClosedOpportunities: On an account, transfers closed opportunities owned by the account owner to the new owner.
- TransferOwnedOpenCases: On an account, transfers open cases owned by the account owner to the new owner.
- TransferAllOwnedCases: On an account, transfers all cases (open and closed) owned by the account owner to the new owner.

Two options that previously were always true can now be set to true or false.

- KeepAccountTeam: If true, the account team is kept with the account when the owner is changed. If false, the account team is deleted.
- KeepSalesTeam: If true, the opportunity team is kept with the opportunity when the owner is changed. If false, the opportunity team is deleted.

The following labels were changed.

- Transfer open opportunities not owned by youwaschanged to Transfer open opportunities owned by others
- Standalone and transferred contracts' draft orders was changed to Orders in Draft status (with or without a transferring contract)

#### PackageSubscriber

This field is new.

• ParentOrg—The production org from which a sandbox was created.

#### PartnerMarketingBudget

This field is new.

• ChannelPartnerId—The ID of the channel partner.

#### PermissionSet

This field is new.

PermissionsHasUnlimitedNBAExecutions—Gives user an unlimited number of Einstein Next Best Action executions.

#### Permission Set Assignment

This field is new.

• PermissionSetGroupId—If associated with a permission set group, this is the ID of that group. This field is available in API version 45.0 and later as part of a pilot.

#### PricebookEntry

This field is new:

• isArchived— Indicates whether the PricebookEntry has been archived or not.

#### **Profile**

This field is new.

PermissionsHasUnlimitedNBAExecutions—Gives user an unlimited number of Einstein Next Best Action executions.

#### QueueRoutingConfig

This field is new.

• IsAttributeBased—Indicates whether this routing is attribute-based.

#### RecordAction

This field is new.

IsUiRemoveHidden—Specifies whether the ability to remove the guided action is hidden in the UI.

This field was updated.

 Status—This field includes a new value, Unlinked. This value indicates that the current record associated with the flow interview changed.

#### RecordActionHistory

This field was updated.

• State—This field includes a new value, Unlinked. This value indicates that the current record associated with the flow interview changed.

#### RemoteKeyCalloutEvent

This field is new.

• RequestIdentifier—A unique autogenerated marker sent with every callout when Replay Detection for Cache-Only Keys is enabled. This marker is a 128-bit random number generated using a FIPS-compliant secure random number generator.

#### ReputationPointsRule

The Type field now supports uploading a profile picture (ProfilePhotoUpload) as an action.

#### ScratchOrgInfo

This field is new.

• LoginUrl—A URL that logs you in to the scratch org. This field is read-only.

#### SiteDetail

SiteDetail fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for SiteDetail fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. SiteDetail is still exposed in Tooling API to User Profiles with the View Setup permission.

#### SurveyQuestionResponse

This field is new.

Rank

#### Task

Cadence is a new entry for the Subtype field.

#### **TenantSecret**

The following fields are new.

- RemoteKeyCertificate—The name of the certificate whose public key encrypts the SecretValue during a remote key callout.
- RemoteKeyIdentifier—A unique identifier for key material fetched from a remote key service.
- RemoteKeyServiceID—The named credential used to fetch remote key material from a remote key service.

#### Topic

The new ManagedTopicType field specifies the type of managed topic, such as Content, Featured, and Navigational, in topic list views.

#### WorkOrderLineItem

These fields are new.

- SuggestedMaintenanceDate—Date when maintenance work is planned.
- IsGeneratedFromMaintenancePlan—Identifies whether the work order line item is generated from a maintenance plan.
- SuggestedMaintenanceDate—The maintenance plan associated with the work order line item.

#### BestCommentId Field Added to Feed Objects

The BestCommentId field was added to all xFeed objects.

- AccountFeed
- ArticleType\_\_Feed
- AssetFeed
- CampaignFeed
- CaseFeed
- ChannelProgramFeed
- ChannelProgramLevelFeed
- CollaborationGroupFeed
- ContactFeed
- ContentDocumentFeed
- ContractFeed
- DashboardComponentFeed
- DashboardFeed
- EntitlementFeed
- EventFeed
- GoalFeed
- LeadFeed

- LinkedArticleFeed
- LocationFeed
- MetricFeed
- NewsFeed
- OperatingHoursFeed
- OpportunityFeed
- OrderFeed
- OrderItemFeed
- PartnerFundAllocationFeed
- PartnerFundClaimFeed
- PartnerFundRequestFeed
- PartnerMarketingBudgetFeed
- Product2Feed
- ProductRequestFeed
- ProductTransferFeed
- ProfileSkillEndorsementFeed
- ProfileSkillFeed
- ProfileSkillUserFeed
- QuoteFeed
- ReportFeed
- ResourceAbsenceFeed
- ResourcePreferenceFeed
- ReturnOrderFeed
- ReturnOrderLineItemFeed
- ServiceAppointmentFeed
- ServiceContractFeed
- ServiceCrewFeed
- ServiceCrewMemberFeed
- ServiceResourceCapacityFeed
- ServiceResourceFeed
- ServiceResourceSkillFeed
- ServiceTerritoryFeed
- ServiceTerritoryMemberFeed
- SkillRequirementFeed
- SolutionFeed
- SurveyFeed
- TaskFeed
- TimeSheetEntryFeed
- TimeSheetFeed
- TopicFeed

- UserFeed
- UserProfileFeed
- WorkCoachingFeed
- WorkFeedbackRequestFeed
- WorkGoalFeed
- WorkOrderFeed
- WorkOrderLineItemFeed
- WorkPerformanceCycleFeed
- WorkTypeFeed

#### SEE ALSO:

Retain Control of Your Keys with the Cache-Only Key Service (Generally Available)

#### **REST API**

REST API includes new, changed, and deprecated calls.

Where: This change applies to all versions of the Salesforce app in Enterprise and Unlimited editions.

## New, Changed, and Deprecated Calls

New Calls

#### vXX.X/sobjects/Event/{EventId}/fromThisEventOnwards

Deletes all remaining occurrences of IsReccurrence2 events.

#### /vXX.X/support/embeddedservice/configuration/{EmbeddedServiceConfigDeveloperName}

Embedded Service Configuration Describe retrieves the values for your Snap-ins deployment configuration, including the branding colors, font, and site URL.

#### Changed Calls

#### /vXX.X/limits/

The limits resource now returns the maximum and remaining allocation for daily standard-volume platform events delivered to CometD clients

This example shows the returned allocation for a Developer Edition org.

```
"DailyStandardVolumePlatformEvents" : {
    "Max" : 10000,
    "Remaining" : 10000
},
```

#### /vXX.X/limits/

The limits resource now returns the maximum and remaining hourly allocation for long-term external record ID mappings.

This example shows the returned allocation for a Developer Edition org.

```
"HourlyLongTermIdMapping" : {
    "Max" : 100000,
```

```
"Remaining" : 99999
},
```

#### /vXX.X/limits/

The limits resource now returns the maximum and remaining hourly allocation for short-term external record ID mappings.

This example shows the returned allocation for a Developer Edition org.

```
"HourlyShortTermIdMapping" : {
    "Max" : 100000,
    "Remaining" : 99999
},
```

#### Chatter REST API

Integrate mobile apps, intranet sites, and third-party web applications with Salesforce using Chatter REST API. Include hyperlinks in posts, purge mission activity for users, and take advantage of generally available Next Best Actions.



**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

These resources are new or have changes.

New and Changed Chatter REST API Request Bodies

These request bodies are new or have changes.

New and Changed Chatter REST API Response Bodies

These response bodies are new or have changes.

#### New and Changed Chatter REST API Resources

These resources are new or have changes.

Chatter Feeds

#### Include a hyperlink in a post

Make a POST request to the existing /chatter/feed-elements resource with the updated Message Segment Input: Markup Begin and Message Segment Input: Markup End request bodies.

#### Include a hyperlink in a comment

Make a POST request to the existing

/chatter/feed-elements/feedElementId/capabilities/comments/items resource with the updated Message Segment Input: Markup End request bodies.

#### Move a post from one public group to another

Make a PATCH request to the existing /chatter/feed-elements/**feedElementId** resource with the existing Feed Item Input request body. Set the subjectId property of the Feed Item Input request body to the new public group ID.

Missions

#### Export mission activity for a user

Make a GET request to the new

/connect/communities/communityId/missions/users/userId/activities/export-jobresource.

#### Start a job to purge mission activity for a user

Make a POST request to the new

/connect/communities/communityId/missions/users/userId/activities/purge-jobresource.



Note: POST takes no request parameters nor a request body.

#### Update the mission activity counts for a user

Make a PATCH request to the new /connect/communities/communityId/missions/users/userId resource with the new User Mission Activity Input request body.

Next Best Actions (Generally Available)

All the Next Best Action resources, including resources introduced in versions 43.0 and 44.0, now have a minimum version of 45.0. All properties of the related request and response bodies also have a minimum version of 45.0.

#### Get a recommendation

Make a GET request to the new /connect/recommendations/recommendationId resource.



Note: This resource replaces /connect/propositions/propositionId.

#### Execute a strategy, and request trace information

Make a POST request to the existing /connect/recommendation-strategies/strategyName/recommendations resource with the updated Next Best Action Strategy Input request body or with the new debugTrace parameter set to true.

#### **Get recommendation reactions**

Make a GET request to the existing /connect/recommendation-strategies/reactions resource.

Users with the Manage Next Best Action Recommendations or Modify All Data permission can get recommendation reactions.

#### Get a recommendation reaction

Make a GET request to the new /connect/recommendation-strategies/reactions/reactionId resource.

Users with the Manage Next Best Action Recommendations or Modify All Data permission can get recommendation reactions.

#### Delete a recommendation reaction

Make a DELETE request to the new /connect/recommendation-strategies/reactions/reactionId resource.

Users with the Manage Next Best Action Recommendations or Modify All Data permission can delete recommendation reactions.

Social Engagement

#### Get available intents for a social post

Make a GET request to the new /connect/social-engagement/social-posts/socialPostId/intents resource.

#### Follow a social persona

Make a PUT request to the new

/connect/social-engagement/social-persona/socialPersonaId/intents/follow/socialAccountId resource.

socialPersonaId is the ID of the persona to follow, and socialAccountId is the ID of the account that follows the persona.

Make a PUT request to the new

 $/{\tt connect/social-engagement/social-posts}/{\it socialPostId}/{\tt intents/follow}/{\it socialAccountId} \\ {\tt resource}.$ 

socialPostId is the ID of the post authored by the persona to follow, and socialAccountId is the ID of the account that follows the persona.

#### Stop following a social persona

Make a DELETE request to the new

 $/{\tt connect/social-engagement/social-persona}/ \textbf{\textit{socialPersonaId}}/{\tt intents/follow/\textbf{\textit{socialAccountId}}} resource.$ 

socialPersonaId is the ID of the persona to stop following, and socialAccountId is the ID of the account that stops
following the persona.

Make a DELETE request to the new

/connect/social-engagement/social-posts/**socialPostId**/intents/follow/**socialAccountId** resource

socialPostId is the ID of the post authored by the persona to stop following, and socialAccountId is the ID of the account that stops following the persona.

Social Engagement Setup

#### **Get the Social Customer Service configuration**

Make a GET request to the new /connect/social-engagement/setup/config resource.

#### **Update the Social Customer Service configuration**

Make a PATCH request to the new /connect/social-engagement/setup/config resource with the existing Social Customer Service Configuration request body.

Users

#### Get and search a user's groups, and get more detailed group information

Make a GET request to the existing /chatter/users/users/userId/groups resource. This resource now returns a User Group Detail Collection response body.

#### New and Changed Chatter REST API Request Bodies

These request bodies are new or have changes.

Chatter Feeds

#### Message Segment Input: Markup Begin

This request body has these new and changed properties.

- altText—Alternative text for the Hyperlink segment.
- markupType—Now supports hyperlink markup.
- url—URL for the Hyperlink segment. Supported hyperlink URLs start with http://or https://.

#### Message Segment Input: Markup End

This request body has this changed property.

markupType—Now supports hyperlink markup.

#### Missions

#### **User Mission Activity Input**

This new request body has these properties.

- activityCount—Number of mission activities of the specified type for the user.
- activityType—Type of mission activity for a user. Values are:
  - FeedItemAnswerAQuestion—User answered a question.
  - FeedItemLikeSomething—User liked a post or comment.
  - FeedItemMarkAnswerAsBest—User marked an answer as the best answer.
  - FeedItemPostQuestion—User posted a question.
  - FeedItemReceiveAComment—User received a comment on a post.
  - FeedItemReceiveALike—User received a like on a post or comment.
  - FeedItemReceiveAnAnswer—User received an answer to a question.
  - FeedItemWriteAComment—User commented on a post.
  - FeedItemWriteAPost—User made a post.
  - FeedItemYourAnswerMarkedBest—User's answer was marked as the best answer.

#### Next Best Actions (Generally Available)

#### **Next Best Action Strategy Input**

This request body has one new property.

• debugTrace—Specifies whether to return trace and debug information in the response (true) or not (false). If unspecified, the default is false.

#### **Recommendation Reaction Input**

This request body was previously named Next Best Action Reaction Input.

Social Engagement Setup

#### **Social Customer Service Configuration Input**

This request body has one new property.

• providerSettings—List of Social Customer Service settings related to the behavior of specific social networks.

#### Social Customer Service Message Type Settings Input

This new request body has these properties.

- enable—Specifies whether to send the message type to Social Customer Service (true) or not (false).
- messageType—Specifies the message type, such as PrivateMessage.

#### **Social Customer Service Provider Settings Input**

This new request body has these properties.

- messageTypeSettings—List of Social Customer Service settings related to the behavior of specific message types.
- provider—Specifies the social network provider, such as Facebook.

#### New and Changed Chatter REST API Response Bodies

These response bodies are new or have changes.

#### Chatter Feeds

#### Message Segment: Markup Begin

This response body has these new and changed properties.

- altText—Alternative text for the segment, if available.
- markupType—Now supports hyperlink markup.
- url—URL for the segment, if available.

#### Message Segment: Markup End

This response body has this changed property.

markupType—Now supports hyperlink markup.

#### Communities

#### Community

This response body has one new property.

 memberVisibilityEnabled—Specifies whether community members can see other community members (true) or not (false).

#### Missions

#### **User Mission Activities Job**

This new response body has these properties.

- jobToken—Token that identifies the mission user activities job.
- jobType—Type of user activities job, either export or purge.
- message—Message describing the status and expected outcome of the job.

#### **User Mission Activity**

This new response body has these properties.

- activityCount—Number of mission activities of the specified type for the user.
- activityType—Type of mission activity for a user.

#### **User Mission Activity Collection**

This new response body has these properties.

- community—Community in which the user performed activities.
- userId—ID of the user.
- userMissionActivities—List of mission activities performed by the user.
- userName—Name of the user.

#### **User Mission Activity Status**

This new response body has these properties.

- message—Success or error message.
- status—Status of mission activity for a user.

Next Best Actions (Generally Available)

#### **Next Best Action Native Recommendation**

This response body was previously named Next Best Action Proposition Recommendation.

#### **Next Best Action Recommendation**

These properties are removed from this response body.

- actionReference
- id
- name
- url

#### **Next Best Action Recommendations**

This response body has one new property.

• trace—Trace information for the recommendation strategy execution, if requested.

#### **Recommendation Object**

This response body was previously named Proposition.

#### **Recommendation Reaction**

This response body was previously named Next Best Action Reaction. It has one new property.

• url—URL to the recommendation reaction.

#### **Recommendation Reactions**

This new response body has these properties.

- currentPageUrl—URL to the current page of reactions in the collection.
- nextPageUrl—URL to the next page of reactions in the collection.
- reactions—Collection of recommendation reactions.

#### **Strategy Trace**

This new response body has these properties.

- messages—Messages and errors from the strategy execution.
- nodes—Nodes of the strategy execution used for debugging.

#### **Strategy Trace Node**

This new response body has these properties.

- inputCount—Number of items put into the node.
- messages—Messages that occurred during node execution.
- nodeName—Name of the node.
- nodeTime—Time spent processing inside the node.
- nodeType—Type of node.
- outputCount—Number of items returned from the node.
- outputs—Recommendations that are returned from the node.
- totalTime—Total time spent processing.

#### Social Engagement

#### **Approval Social Post Intent**

This new response body has this property.

• isRecallable—Specifies whether the social post can be recalled (true) or not (false).

#### **Delete Intent**

This new response body has this property.

managedSocialAccount—Managed social account that deletes the social post.

#### **Delete Social Post Intents**

This new response body has this property.

deletes—List of delete intents for the social post.

#### **Follow Social Persona Intent**

This new response body has these properties.

- managedSocialAccount—Managed social account that follows the social persona.
- social Persona Id—ID of the social persona to follow.

#### **Follow Social Persona Intents**

This new response body has this property.

• follows—List of follow intents for the social persona.

#### **Hide Social Post Intent**

This new response body has these properties.

- isHidden—Specifies whether the managed social account hid the social post (true) or not (false).
- managedSocialAccount—Managed social account that hides the social post.

#### Like Intent

This new response body has these properties.

- isLiked—Specifies whether the managed social account liked the social post (true) or not (false).
- managedSocialAccount—Managed social account that likes the social post.

#### **Like Social Post Intents**

This new response body has this property.

likes—List of like intents for the social post.

#### **Reply Social Post Intent**

This new response body has this property.

managedSocialAccount—Managed social account that replies to the social post.

#### **Reply Social Post Intents**

This new response body has this property.

• replies—List of reply intents for the social post.

#### **Social Post Intents**

This new response body has these properties.

- approvalIntent—Approval intent for the social post.
- deleteIntent—Delete intents for the social post.
- followIntent—Follow intents for the social persona.
- hideIntent—Hide intent for the social post.
- likeIntent—Like intents for the social post.
- replyIntent—Reply intents for the social post.

Social Engagement Setup

#### **Social Customer Service Configuration**

This request body has one new property.

providerSettings—List of Social Customer Service settings related to the behavior of specific social networks.

#### Social Customer Service Message Type Settings

This new request body has these properties.

- enable—Specifies whether the message type is sent to Social Customer Service (true) or not (false).
- messageType—Specifies the message type, such as PrivateMessage.

#### **Social Customer Service Provider Settings**

This new request body has these properties.

- messageTypeSettings—List of Social Customer Service settings related to the behavior of specific message types.
- provider—Specifies the social network provider, such as Facebook.

Users

#### **User Group Detail Collection**

This new response body has these properties.

- currentPageUrl—URL to the current page.
- groups—Collection of groups that the user is a member of.
- nextPageUrl—URL to the next page, or null if there is no next page.
- previousPageUrl—URL to the previous page, or null if there is no previous page.
- total—Total number of groups that the user is a member of.

#### Reports and Dashboards REST API

The Reports and Dashboards REST API has been enhanced to support the beta release of historical tracking report enhancements in Lightning Experience. To support this feature, the /analytics/report-types/ resource has a new property and the /analytics/report-types/ type resource supports a new report type.

For more information, see the Reports and Dashboards REST API Developer Guide.

#### **Changed Resources:**

The reports and dashboards REST API has been updated to support historical tracking report enhancements in Lightning Experience.

#### Reports (/analytics/report-types/)

The /analytics/report-types/ resource has a new property.

Property	Туре	Description
isHistorical	Boolean	Optional. If this property is missing, the value should be assumed to be false. The value is true for historical tracking report types.  Available in API version 45.0 and later.

#### Reports (/analytics/report-types/type)

The /analytics/report-types/type resource supports a new report type.

Туре	Description
Opportunities with Historical Theoding c	Provides GET output for the Opportunities with Historical Trending report type and loads and compiles the report metadata for a default view of the report.  Available in API version 45.0 and later.
	Available III All I version 13.0 and later.

#### User Interface API

Build Salesforce UI using the same API that Salesforce uses to build Lightning Experience and Salesforce for Android, iOS, and mobile web. Build user interfaces that let users work with records, list views, actions, favorites, and more.

#### **Display All Navigation Items**

To retrieve all navigation items that the user has access to, call a new UI API resource, GET /ui-api/nav-items. Filter the results by formFactor and specify the pageSize and page for displaying results.

The /ui-api/nav-items resource adds 2 string properties to the navItems object.

- currentPageUrl—URL to the current page of navigation items.
- nextPageUrl—URL to the next page of navigation items.

#### Request Only Optional Fields When Getting a Record

Now you can pass only the optionalFields parameter to the /ui-api/records/{recordId} resource

GET /ui-api/records/001d000000AtfRIAAZ?optionalFields=Name, Id, AccountNumber, AnnualRevenue

If the context user doesn't have access to a field passed in the optionalFields parameter, the request still succeeds.

In earlier API versions, a request requires either a fields or a layoutTypes parameter. If the context user doesn't have access to a field passed in the fields parameter, an error is returned.

#### **Tooling API**

Tooling API includes new and changed objects.

#### **New Objects**

#### LightningComponentBundle

Represents a Lightning web component bundle. A bundle contains a Lightning web component and its related resources.

#### LightningComponentResource

Represents a Lightning web component resource, such as HTML markup, JavaScript code, a CSS file, an SVG resource, or an XML configuration file.

#### CustomHelpMenuSection

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources.

#### **Changed Objects**

#### CleanRule

This field is new

#### MatchConfidence

Indicates how closely a Lightning Data record matches a Salesforce record. The higher the minimum value is set, the more precise the matches. This field is used in packages that support match scores for third-party data.

#### EmbeddedServiceConfig

This field is new.

#### AreGuestUsersAllowed

Specifies whether a user must be logged in to access a Snap-in.

#### **EventSubscription**

This field was changed.

#### EventType

Added the value StandardPlatformEvent. It represents a standard platform event type.

#### **FieldDefinition**

These fields are new.

#### businessOwnerId (Beta)

Indicates the person or group associated with this field.

#### businessStatus (Beta)

Indicates whether the field is in use.

#### SecurityClassification (Beta)

Indicates the sensitivity of the data contained in this field.

#### FieldMappingRow

This field was changed.

#### Operation

The Operation field is no longer read-only. The new Overwrite value fills empty fields and updates fields that already contain data. History tracking is required for fields set to Overwrite.

#### Flow

This field is new.

#### IsTemplate

Indicates whether the process or flow is a template. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones.

This field was changed.

#### ProcessType

The new ContactRequest value lets customers request that customer support get back to them.

#### PackageInstallRequest

This field is new.

#### UpgradeType

For package upgrades, specifies whether to mark all removed components as deprecated (DeprecateOnly) or to delete removed components that can be safely deleted and deprecate the others (Mixed). The default is Mixed.

#### SiteDetail

SiteDetail fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for SiteDetail fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. SiteDetail is still exposed in Tooling API to User Profiles with the View Setup permission.

#### **TabDefinition**

These fields are new. They support form factors for tabs in the Salesforce app.

#### IsAvailableInDesktop

Set to true if the tab is available in the desktop user interface.

#### IsAvailableInMobile

Set to true if the tab is available in the Salesforce app.

#### MobileUrl

If the tab is available in mobile, this is the URL that the tab directs the user to in the Salesforce app. If the tab isn't available in mobile, this is set to null.

#### OuickActionDefinition

This field was changed.

#### StandardLabel

The new ScheduleAppointment value lets customers schedule appointments using Lightning Scheduler.

#### SEE ALSO:

Tooling API: Fewer Round-Trips for the FlexiPage Object by Using SObject Collections

#### Metadata API

Metadata API includes new and changed types and fields.

#### New Metadata Types

#### CustomHelpMenuSection

Represents the section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources for the org. The custom section contains help resources added by the admin.

#### EmbeddedServiceFlowConfig

Represents a setup node for creating a Flow Snap-in.

#### LightningComponentBundle

Represents a new type of Lightning component called a Lightning web component. A bundle contains Lightning web component resources, like HTML, JavaScript, and CSS files.

The original Lightning components are now called Aura components. The metadata type is still AuraDefinitionBundle.

#### RecommendationStrategy

Represents a recommendation strategy. Recommendation strategies are applications, similar to data flows, that determine a set of recommendations to be delivered to the client through data retrieval, branching, and logic operations.

#### RecordActionDeployment

Represents a deployment that contains settings for a Guided Action List. A deployment specifies channel defaults and actions that users can add at run time.

#### PlatformEventChannel

Represents a collection of entities selected for Change Data Capture notifications in the Change Data Capture page in Salesforce. Change Data Capture sends notifications for created, updated, deleted, and undeleted records only for the selected entities.

#### **Updated Metadata Types**

These metadata types have changes or have new or changed fields.

#### Audience

These fields are new or changed.

• formula—This new field indicates the formula used to determine the audience.

• formulaFilterType—This field now includes the CustomLogicMatches value.

#### AudienceCriterion (Audience subtype)

These fields are new or changed.

- criteriaNumber—This new field indicates the number associated with the criterion in a formula.
- operator—This field now includes the values Includes and NotIncludes.
- type—This field now includes the value Permission.

#### AudienceCriteriaValue (AudienceCriterion subtype)

These fields are new and can be used only when the value of the AudienceCriterion type field is Permission.

- isEnabled—This field indicates whether the permission is enabled for a user.
- permissionName—This field indicates the valid API name of a standard user or custom permission.
- permissionType—This field indicates whether the type of permission is standard or custom.

#### Bot

These fields are new.

#### contextVariableMappings (ConversationContextVariable subtype)

Represents the mapping between a context variable, channel type, and sObject field.

#### contextVariables

Represents the context variables that enable your bot to gather customer information regardless of channel.

#### dataType (ConversationContextVariable subtype)

Represents the data type of the context variable.

#### developerName (ConversationContextVariable subtype)

Represents the name of the context variable.

#### fieldName ConversationContextVariableMapping subtype

The API name of an SObject field to be used as part of the mapping.

#### label (ConversationContextVariable subtype)

A label that identifies the context variable throughout the Salesforce user interface.

#### messageType ConversationContextVariableMapping subtype

Represents the channel, either SMS messaging or Live Agent chat.

#### SObjectType ConversationContextVariableMapping subtype

SObject type for the field property defined as part of the mapping.

#### **BotVersion**

These fields are new or changed.

#### dataType (ConversationVariable subtype)

The new Id value represents an Id data type, for example, Contact Id or User Id.

#### leftOperandType (BotStepCondition subtype)

The new values Conversation Variable and Context Variable represent the type of variable used in the bot step condition.

### sourceType (BotVariableOperand subtype)

We documented the valid values for this field: StandardConversationVariable, ConversationVariable, ContextVariable, MlSlotClass, StandardMlSlotClass, and Value.

#### targetType (BotStepCondition subtype)

We added the values Conversation Variable and Context Variable.

#### type (BotNavigation subtype)

We removed the EndChat value.

#### variableType (BotInvocationMapping subtype)

We added the values Conversation Variable and Context Variable.

#### CommunityThemeDefinition

The following field is new.

#### publisher

Defines the name of the publisher as seen in the Community Creation wizard. If no name is provided, this will be the name of the org from which the package was originally exported.

#### CommunityTemplateDefinition

The following field is new.

#### publisher

Defines the name of the publisher as seen in the Community Creation wizard. If no name is provided, this will be the name of the org from which the package was originally exported.

#### CustomField

These fields are new.

#### businessOwnerGroup (Beta)

Indicates the group associated with this field.

#### businessOwnerUser (Beta)

Indicates the person associated with this field.

#### businessStatus (Beta)

Indicates whether the field is in use.

#### securityClassification (Beta)

Indicates the sensitivity of the data contained in this field.

#### EmbeddedServiceConfig

These fields are new.

#### areGuestUsersAllowed

Specifies whether a user must be logged in to access a Snap-in.

#### embeddedServiceFlowConfig

Represents a setup node for creating a Snap-in flow.

#### embeddedServiceFlows

Lists the flows used by the Snap-in deployment.

#### FlexiPage

These fields have changed.

#### appendable, replaceable, and prependable (FlexiPageRegion subtype)

We have made these fields available for use in Communities to control the locked and unlocked regions of a FlexiPage.

#### type

The new CommFlowPage value represents an out-of-the-box flow page available in Communities.

#### Flow

These fields are new.

#### isTemplate

Indicates whether the process or flow is a template. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones.

#### textTemplates (FlowTranslation subtype)

Contains details for a translation of a text template in a flow. The FlowTextTemplateTranslation is available only in flows created via Salesforce Surveys.

These fields have changed.

#### processType

The new ContactRequestFlow value lets customers request that customer support get back to them.

#### actionType (FlowActionCall subtype)

We added these values.

- archiveKnowledgeArticles—This action archives a list of published Knowledge articles.
- contactRequestAction—This action creates a contact request record.
- createDraftFromOnlineKnowledgeArticle—This action creates a draft from a published Knowledge article.
- restoreKnowledgeArticleVersion—This action restores an archived version of a Knowledge article.

#### limit (FlowDynamicChoiceSet subtype)

This field is now Nillable.

#### ForecastingSettings

This field has changed.

#### name

We added the value **Territory\_Model\_Name\_**ProductFamily, where **Territory\_Model\_Name** is the name of your active territory model.

#### **IoTSettings**

Represents the organization's IoT settings, such as whether or not IoT or IoT Insights is enabled. Introduced in API version 44.0, this type has been added to the *Metadata API Developer Guide*.

#### LiveChatAgentConfig

The following fields have been added to the Metadata API Developer Guide.

#### customAgentName

Specifies the custom name for an agent, if one has been set. Available in API version 29.0 and later.

#### enableChatMonitoring

Indicates whether chat monitoring is enabled for support supervisors. Available in API version 29.0 and later.

#### enableChatTransferToAgent

Indicates whether agents can transfer a chat to another agent.. Available in API version 36.0 and later.

#### enableChatTransferToButton

Indicates whether agents can transfer a chat to a button. Available in API version 36.0 and later.

#### enableChatTransferToSkill

Indicates whether agents can transfer a chat to a skill group. Available in API version 36.0 and later.

#### enableWhisperMessage

Indicates whether support supervisors can send whisper messages to agents during a chat.. Available in API version 29.0 and later.

#### LiveMessageSettings

Represents an org's LiveMessage settings. Introduced in API version 42.0, this type has been added to the Metadata API Developer Guide.

#### MacroSettings

This field has changed.

#### macrosInFolders

This field, introduced in API version 44.0, indicates whether users can organize and share macros using folders. The MacroSettings type has been added to the *Metadata API Developer Guide*.

#### Network

This field is new.

#### enableMemberVisibility

Controls community user visibility on a per-community basis. If true, the Community User Visibility preference is enabled for the selected community.

#### ProfileActionOverride

Beginning with API version 45.0, this metadata type can't be defined on Profile. Instead, access ProfileActionOverride from the encompassing CustomApplication. Home page assignments related to user profile must now also have a corresponding app assignment. As a result, ProfileActionOverride is defined for CustomApplication rather than Profile.

#### Queue

This field has changed.

#### sobjectType

The new ContactRequestvalue lets you create a queue for contact requests.

#### SharingSet

These fields have changed.

#### object

The Campaign, Opportunity, and Order values are generally available.

#### userField

The Contact.RelatedAccount User value is generally available.

#### **OuickAction**

This field has changed.

#### standardLabel

The new ScheduleAppointment value lets customers schedule appointments using Lightning Scheduler.

#### Lightning Quick Action and Salesforce Classic Publisher JavaScript APIs

Use the Lightning Quick Action JavaScript APIs and the Salesforce Classic Publisher JavaScript APIs in a utility that opens in a new window. We also changed the shape of the response for the getAvailableActionFields method in the Quick Action API.

**Where**: This change applies to Lightning Experience and Salesforce Classic in Group, Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: Here are more details about the changes.

- The lightning:quickActionAPI component supports utility pop-out. However, the getCustomAction method doesn't work with utility pop-out yet.
- The Salesforce Classic Publisher APIs also support utility pop-out if you place them in a Visualforce page that's used in the utility bar. The customActionMessage doesn't support utility pop-out.

The getAvailableActionFields method now returns a response in a fields array. For example:

```
success: true,
fields:
    {fieldName: "Subject", type: "textEnumLookup"}
    {fieldName: "Description", type: "TextArea"}
    {fieldName: "WhoId", type: "Lookup"},
errors: []
```

#### SEE ALSO:

Publisher and Quick Action Developer Guide (can be outdated or unavailable during release preview)

#### Lightning Console JavaScript API

The Lightning Console JavaScript API is now at parity with the most heavily used methods and events of the classic Salesforce Console Integration Toolkit. Set tab colors, disable utility pop-out, and edit browser tab titles.

Where: This change applies to Lightning Experience in Professional, Enterprise, Performance, Unlimited, and Developer editions.

Why: The following methods are new or have changed in API version 45.0.

#### Live Agent

#### endChat()

This method, introduced in API version 43.0, ends a chat in which an agent is currently engaged. The method has been added to the *Salesforce Console Developer Guide*.

#### getChatLog()

This method, introduced in API version 43.0, returns the chat log of a chat associated with a specific recordld. This method has been added to the *Salesforce Console Developer Guide*.

#### sendCustomEvent()

This method, introduced in API version 43.0, sends a custom event to the client-side chat window for a chat with a specific chat key. This method has been added to the *Salesforce Console Developer Guide*.

#### sendMessage()

This method, introduced in API version 43.0, sends a new chat message from the agent to a chat with a specific chat key. This method has been added to the *Salesforce Console Developer Guide*.

#### **Workspace Tabs and Subtabs**

#### setTabHighlighted()

A new argument modifies the color of the highlighted tab.

#### addToBrowserTitleQueue()

Adds a string to a list of titles that rotate in the browser title bar every three seconds.

#### removeFromBrowserTitleQueue()

Removes a string from a list of titles that rotate in the browser title bar every three seconds.

#### setTabLink()

Sets a stable URL for browser navigation. This Salesforce Console Integration Toolkit API method is now supported in the Lightning Console JavaScript API.

#### Utilities

#### disableUtilityPopOut()

Disables pop-out for a utility.

#### Other

#### lightning:unsavedChanges

This component isn't part of the Lightning Console JavaScript API, but it closes a gap with the Salesforce Console Integration Toolkit API.

#### SEE ALSO:

Get Notified About Unsaved Changes

Salesforce Console Developer Guide: Classic Console API Methods Supported in the Lightning Console API

Salesforce Console Developer Guide: setTabLink()

Salesforce Console Developer Guide: setTabHighlighted() for Lightning Experience

Salesforce Console Developer Guide: addToBrowserTitleQueue() for Lightning Experience

Salesforce Console Developer Guide: removeFromBrowserTitleQueue() for Lightning Experience

Salesforce Console Developer Guide: disableUtilityPopOut () for Lightning Experience

## Salesforce CLI: New and Changed Commands

We release changes to Salesforce CLI regularly. Read the weekly release notes to learn about recent updates for v44 of the core CLI plug-ins. For more information about the pre-release version, see v45 of the Salesforce CLI Command Reference.

New commands and parameters for Lightning web components are available in salesforcedx v45. To try out Lightning Web Components, install the pre-release version. For more information about the pre-release version, see v45 of the Salesforce CLI Command Reference.

#### **New Commands**

This new command was added in a weekly release of salesforcedx v44 (version 44.4).

#### force:mdapi:deploy:cancel

Cancel an in-progress metadata deployment.

#### **Deprecated Commands**

These commands, which were previously marked as deprecated, were removed in weekly releases of salesforcedx v44 (v44.3.0 or later).

- force:package2:create
- force:package2:list
- force:package2:update
- force:package2:version:create
- force:package2:version:create:get
- force:package2:version:create:list
- force:package2:version:get
- force:package2:version:list
- force:package2:version:update
- force:package:install:get (use force:package:install:report)
- force:package:uninstall:get (use force:package:uninstall:report)

#### **New Parameters**

This parameter is new in the pre-release of v45.

#### force:lightning:component:create --type

Specifies whether to create an Aura component (--type aura, the default) or a Lightning web component (--type lwc).

These parameters were added in weekly releases of salesforcedx v44 (v44.3.0 or later).

#### force:mdapi:deploy --validatedeployrequestid | -q

Deploy a recently validated set of components without running Apex tests.

```
force:package:install --securitytype | -s
```

Indicate access to an installed package. By default, installed packages are accessible to all user profiles. You can restrict access to the admin profile and any profile with the Customize Application permission.

#### force:package:install --upgradetype | -t

For package upgrades, specifies whether to mark all removed components as deprecated (DeprecateOnly) or to delete removed components that can be safely deleted and deprecate the others (Mixed, the default).

#### **Changed Parameters**

These parameters have changed in weekly releases of salesforcedx v44 (v44.3.0 or later).

```
force:package:install --package | -p
```

Added the short name -p.

force:package:install --publishwait | -b

Added the short name -b.

#### **Deprecated Parameters**

These parameters, which were previously marked as deprecated, were removed in weekly releases of salesforcedx v44 (v44.3.0 or later).

Command	Deprecated Parameter
force:package:install	id   -i
force:package:uninstall	id   -i

SEE ALSO:

Leverage Extended Functionality for Lightning Web Components with Salesforce CLI

#### Dev Hub: New Limited Access License

Looking to use the Dev Hub in your production or business org but don't have a Salesforce user license? Look no further. The Salesforce Limited Access - Free license lets developers access the Dev Hub to create and manage scratch orgs.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Developer, Enterprise, Performance, and Unlimited editions.

**How:** Salesforce administrators can upgrade a Salesforce Limited Access - Free license to a standard Salesforce license at any time. Contact your Salesforce account representative to request the Free Limited Access License.

To give full access to the Dev Hub org, the permission set must contain these permissions. For more information, see Add Salesforce DX Users in the Salesforce DX Setup Guide.

- Object Settings > Scratch Org Info > Read, Create, and Delete
- Object Settings > Active Scratch Org > Read and Delete
- Object Settings > Namespace Registry > Read (to use a linked namespace in a scratch org)

## Scratch Orgs: Configurable Salesforce Environments

Designed to be ephemeral and easily recreated, scratch orgs are dedicated and configurable Salesforce environments that you can quickly spin up for many different purposes. They can be your own personal development environment, or you can create headless scratch orgs for automated tests. You can create scratch orgs if you turned on Dev Hub in your production org or a Developer Edition org, or have a Dev Hub trial org.

For more information, refer to the Salesforce DX Developer Guide.

#### IN THIS SECTION:

#### Configure Your Scratch Orgs with New Features

We're providing more add-on features for scratch orgs.

#### Org Preferences Deprecation Time Line

We prematurely announced the deprecation of org preferences in Winter '19. You can still use org preferences until we announce their deprecation in a future release.

#### Configure Your Scratch Orgs with New Features

We're providing more add-on features for scratch orgs.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Developer, Enterprise, Group, and Professional editions.

**When:** You can create scratch orgs if you turned on Dev Hub in your production org or in a Developer Edition org, or have a trial Dev Hub org.

How: Add the features to your scratch org definition file.

- ChatterAnswers
- CustomerNotificationType
- DevelopmentWave
- EinsteinAssistant
- Pardot
- TerritoryManagement
- TimeSheetTemplateSettings
- Ulplugin

See Scratch Org Configuration Values in the Salesforce DX Developer Guide for the complete list of supported features.

#### **Deprecated Scratch Org Features**

- CustomApps (replaced by AddCustomApps:<value>)
- CustomTabs (replaced by AddCustomTabs:<value>)

#### **Org Preferences Deprecation Time Line**

We prematurely announced the deprecation of org preferences in Winter '19. You can still use org preferences until we announce their deprecation in a future release.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the Salesforce app in Developer, Enterprise, Group, and Professional editions.

**When:** You can create scratch orgs if you turned on Dev Hub in your production org, enabled Dev Hub in a Developer Edition org, or have a trial Dev Hub org.

**Why:** Have you ever wished that you could spin up a scratch org with a specific org setting only to find out that it wasn't supported? With scratch org settings, you can configure your scratch orgs with any Metadata API setting. We encourage you to convert org preferences to settings in your scratch org definition files.

**How:** For assistance converting org preferences to settings, see Scratch Org Configuration Values in the Salesforce DX Developer Guide.

# Marketing: Google Analytics 360 Audience Activation and Social Studio Instagram Engagement and Stories

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. Plan and optimize unique customer journeys based on your business objectives. Deliver personalized content across every channel and device at precisely the right time. Measure the impact of each interaction on your business so you can optimize your approach in real time and deliver better results.

Learn about our latest features and enhancements in Marketing Cloud Release Notes.

- January 2019 Release
- October 2018 Release
- August 2018 Release
- June 2018 Release
- April 2018 Release

#### SEE ALSO:

Marketing Cloud Overview

Marketing Cloud: Earlier Release Notes

Salesforce Marketing Cloud Facebook Page

## Critical Updates

This release includes new critical updates for Lightning Experience users, utilities, communities and portals, processes and flows, enterprise territory management, the Guided Action List component, and your org schema. And we postponed critical updates for instance names in URLs and email notifications from automated field updates.

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 new in Spring '19.

#### **Turn On Lightning Experience (Critical Update)**

Salesforce will turn on Lightning Experience on a rolling basis starting in Winter '20 to empower users to move faster, do more, and be more productive. We encourage everyone to start preparing to transition to Lightning Experience soon so that your users can benefit from everything the new interface has to offer. The future of the Salesforce user experience and platform is Salesforce Lightning. Moving forward, all innovations will be in Lightning Experience. Take advantage of the lead time before Lightning Experience is turned on to understand how your org's features and customizations perform in the new interface and to prepare your users via change management. Start now to ensure a better experience for everyone when Lightning Experience is turned on later. Better yet, take control and turn on Lightning Experience for your users before this update is auto-activated, on your terms.

#### Open a Window into Productivity with Pop-Out Utilities (Critical Update)

Pop utilities out of the utility bar and into their own separate windows. You can arrange popped-out utilities, even move them onto different monitors. You can interact with a popped-out utility alongside your main window, making multitasking a breeze. When you're done using the utility, pop it back into your utility bar or close the window.

#### Enable External Org-Wide Defaults in Orgs with Communities or Portals (Critical Update)

This update enables the External Sharing Model and provides admins with a list of objects whose default external access settings must be reviewed. This update helps you secure your data by letting you set more restrictive levels of access for external users. Before Spring '19, org-wide defaults gave internal and external users the same default access to objects. After activating this update, external org-wide defaults are enabled in all orgs with communities or portals.

#### **Return Null Values in Process and Flow Formulas (Critical Update)**

This update enables process and flow formulas to return null values when the calculations involve a null record variable or null lookup relationship field.

#### Enable Manual Account Sharing in Enterprise Territory Management (Critical Update)

This update changes the TerritoryManual reason code in AccountShare records to Territory2AssociationManual and is required to let users share accounts manually with territory groups. After you activate the update in production, it can take up to two weeks before you see the changes.

#### Convert Guided Action List Settings into Deployments in Setup (Critical Update)

Migrate your existing Guided Action List settings into deployments that you manage in Setup. You can then reuse a Guided Action List configuration on different record pages and orgs. As of Spring '19, you can no longer configure these settings in component properties. Instead, use deployments that you manage in Setup. To simplify the transition, perform a one-time migration of your existing settings into deployments.

#### **Enable Improved Caching of Org Schema (Critical Update, Postponed)**

This critical update was scheduled for auto-activation in Spring '19 but has been postponed to Summer '19. This critical update enables improved caching of org schema details and resolves known issues with version-specific object and field handling.

## **Pre-Existing Critical Updates**

These critical updates were announced in a previous release and are still available.

#### Add a Namespace Prefix to pageReference.state Properties and Query Parameters

As mentioned in the Spring '19 release notes, this critical update addresses an issue with naming conflicts between package components. A namespace prefix distinguishes your package and its contents from other developers' packages. The namespace prefix prevents conflicts between components on the state or query parameter name. Query parameters and pageReference.state properties must have a namespace prefix. If they don't, this critical update removes them from the org's URLs. This critical update is enabled for Summer '19 on May 17, 2019.

#### **Open Hyperlinks in Formula Fields Correctly**

As mentioned in the Spring '19 release notes, this critical update addresses an issue when opening hyperlinks in formula fields. If you have formula fields that contain a HYPERLINK function, Lightning Experience ignores the target value when attempting to open the link. This critical update ensures that the target value for hyperlinks is honored, whether it's explicitly configured or set by default. This critical update is enabled in Summer '19 on May 17, 2019.

## **Postponed Critical Updates**

These critical updates were announced in a previous release and the auto-activation date was postponed.

## Postponed "Remove Instance Names from URLs for Visualforce, Community Builder, Site.com Studio, and Content Files" Critical Update

This critical update, released in Spring '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

#### "Stop Automated Field Updates from Suppressing Email Notifications" Critical Update Postponed

This critical update, released in Summer '17, was scheduled for auto-activation in Spring '19 but has been postponed to March 1, 2020 GMT.

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

This critical update, released in Summer '16, was scheduled for auto-activation in Spring '18, but has been postponed to Spring '19.

#### Postponed "Stabilize the Hostname for My Domain URLs in Sandboxes" (Critical Update)

This critical update, released in Summer '18, was scheduled for auto-activation in Spring '19, but has been postponed to Winter '20.

#### **Enable Improved Caching of Org Schema (Critical Update, Postponed)**

This critical update was scheduled for auto-activation in Spring '19 but has been postponed to Summer '19. This critical update enables improved caching of org schema details and resolves known issues with version-specific object and field handling.

## Help and Training

We introduced a CLI Plug-In developer guide, added content about features in the Outlook and Gmail integrations, and added omitted documentation about supported languages. We added Trailhead modules, trails, and projects, and we created and updated instructional videos.

#### IN THIS SECTION:

#### Build Your Own Salesforce CLI Plug-Ins with a New Developer Guide

Discover how to develop your own plug-ins for Salesforce CLI. Explore the Salesforce CLI architecture. Learn how to generate a plug-in using Salesforce Plug-In Generator, use Salesforce's libraries to add functionality to your plug-in, and debug issues. Learn about our suggested style guidelines for naming and messages and our recommended best practices for plug-ins.

#### Outlook and Gmail Integration Content Added

We added content to our Outlook and Gmail integration section in Salesforce Help to answer frequently asked questions about feature availability and how email tracking works.

#### Language Support Documentation Updated

We had neglected to document a few of the languages that we support in the *Metadata API Developer Guide* appendices that describe CustomObjectTranslation.

#### **Explore Features with Trailhead**

Get familiar with Salesforce or discover a new feature with Trailhead, a fun, guided, and interactive tool. You can follow guided learning paths for admins or developers, or choose your own adventure with self-paced modules.

Watch Videos (English Only)

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

## Build Your Own Salesforce CLI Plug-Ins with a New Developer Guide

Discover how to develop your own plug-ins for Salesforce CLI. Explore the Salesforce CLI architecture. Learn how to generate a plug-in using Salesforce Plug-In Generator, use Salesforce's libraries to add functionality to your plug-in, and debug issues. Learn about our suggested style guidelines for naming and messages and our recommended best practices for plug-ins.

The Salesforce CLI Plug-In Developer Guide is located on Salesforce Developers.

SEE ALSO:

Build Your Own Salesforce CLI Plug-In with Open-Source Tools

## Outlook and Gmail Integration Content Added

We added content to our Outlook and Gmail integration section in Salesforce Help to answer frequently asked questions about feature availability and how email tracking works.

**Where:** This change applies to Lightning Experience in Enterprise, Performance, and Unlimited editions. This change also applies to the Salesforce Inbox mobile app, which is available for an extra cost in Essentials, Professional, Enterprise, Performance, and Unlimited editions.

**Why:** Sharing information about features is essential to ensuring success for your sales reps. That's why we've created content to describe where features are available and to answer questions about how emails are tracked from the integrations.

- Salesforce gives your sales reps the flexibility to work with Salesforce data directly in Outlook, Gmail, or using the Salesforce Inbox
  app on iOS or Android. The features available in each environment vary. To learn more about which features are available on your
  desktop or your mobile device: Available Features in Outlook Integration and Salesforce Inbox or Available Features in Gmail Integration
  and Salesforce Inbox.
- When Inbox features are added to the Outlook or Gmail integrations, sales reps can track when recipients open emails and links in
  emails. Review the key considerations for how emails are tracked: Considerations for Tracking Emails in the Outlook Integration or
  Considerations for Tracking Emails in the Gmail Integration.

## Language Support Documentation Updated

We had neglected to document a few of the languages that we support in the *Metadata API Developer Guide* appendices that describe CustomObjectTranslation.

**Where:** This change applies to Lightning Experience, Salesforce Classic, and all versions of the mobile app in Group, Professional, Enterprise, Performance, Unlimited, Database.com, and Developer editions.

Why: You can now find information and field values for these languages.

#### **Fully Supported Languages**

Norwegian, Spanish (Mexico), and Swedish

#### **End-user Languages**

Portuguese (Portugal), Slovak, Slovenian, and, Croatian

## **Explore Features with Trailhead**

Get familiar with Salesforce or discover a new feature with Trailhead, a fun, guided, and interactive tool. 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, trails, and projects.

#### Modules

#### **Advertising Studio Implementation Basics**

Learn how to implement multichannel ad campaigns using Advertising Studio.

#### **Trails**

#### **Build Your Marketing Cloud Consulting Practice**

Build a successful consulting practice with Marketing Cloud implementation projects.

#### **Lightning Flow for Service**

Simplify onboarding and guide your agents to resolve cases quickly and consistently.

#### **Projects**

#### Create a Customer Account Portal with a Self-Registration Flow

Set up a portal with a login flow and Lightning Knowledge.

## Watch Videos (English Only)

We created and updated instructional videos to help your users learn about new and improved Salesforce features.

- The new Give Your Community Style with Pre-Built Themes video gives you an overview of pre-built themes in communities, and how you can refine your community's style with clicks, not code.
- We updated the Connecting to Saleforce in Outlook video to reflect enhancements and new features.
- We updated the Connecting to Saleforce in Gmail video to reflect enhancements and new features.
- We updated the Connect to a Service Using a Wizard video to reflect the updated wizard.

## Other Salesforce Products and Services

## Heroku

Heroku is a cloud-based application platform for building and deploying web apps.

For information on new features, go to the Heroku Changelog.

## Success Cloud

The certified experts, consultants, and innovative tools of Salesforce Success Cloud are here to help with professional services, prescriptive advice, and expertise at every stage of your journey.