

# Salesforce Field Service

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# SALESFORCE FIELD SERVICE

Field Service (formerly known as Field Service Lightning) gives you a powerful, highly customizable, mobile-friendly field service hub in Salesforce.

Running a field service business means managing numerous moving parts. With Field Service, you get the tools that you need to manage work orders, scheduling, and your mobile workforce. Here are some of the things you can do.

- Create records that represent your field service workers, dispatchers, and agents, and add details about their skills, location, and availability
- Set up multilevel service territories that represent the regions where mobile workers can provide services
- Track the location and status of your inventory, warehouses, service vehicles, and customer sites
- Schedule one-time or recurring work orders for customers, and add details about worker preferences, required skills, and parts
- Create maintenance plans and templates to standardize your field service tasks
- Generate service reports to keep customers informed about service progress

### What's Included in Field Service

#### **Core Features**

When Field Service is enabled, you gain access to a suite of standard objects that you can find in Setup and as tabs in Salesforce. These objects make up the core Field Service features, including work orders and service appointments.

#### Managed Package

The Field Service managed package builds on the core features and includes:

- A Guided Setup tool that walks you through creating Field Service records and customizing your settings
- A dynamic scheduling console that gives dispatchers and supervisors a bird's-eye view of all team members and scheduled appointments
- A scheduling optimizer that allocates resources to appointments in the most efficient way possible by accounting for worker skill level, travel time, location, and other factors
- Scheduling policies and triggers that help you customize your scheduling model and display preferences

#### **Mobile App**

The offline-friendly Field Service mobile app for iOS and Android makes work a pleasure for your mobile workers. App users can update work orders, track parts, gather customer signatures, and connect with dispatchers from their mobile devices. Download the app from the App Store or Google Play.

#### **Field Service APIs and Developer Resources**

Ready to get started developing with Field Service? Check out the Field Service Developer Guide for object relationship diagrams, API reference information, and code samples.



#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Salesforce Field Service

#### Where Do I Start with Field Service?

Whether you're just starting with Field Service or you're an experienced admin, landing pages are a compass pointing you to resources that help you understand and set up Field Service.

#### Field Service Limits and Limitations

Learn about Field Service limits and limitations.

#### Field Service Key Concepts and Glossary

List of terms used in Field Service.

#### Set Up Field Service

Build and manage Field Service. Set up your workforce, work order tracking and inventory management, and customize the Field Service mobile app to meet your business needs.

#### Einstein for Field Service

Supercharge your Field Service workforce efficiency by using generative AI and Einstein.

#### Field Service Operations Home

Track and monitor the health of your field service workforce, assets, processes, and customers with personalized KPIs and actionable insights.

#### Manage Field Service Work Orders

Work orders, which track work to be performed for customers, are the heart of Field Service. Learn how to create and customize work orders and maintenance plans.

#### Manage Field Service Shifts

Shifts are similar to operating hours in that they define when your workforce is available to be assigned service appointments. However, shifts offer more flexibility than operating hours because you can create them for specific time periods on particular dates and times when you need workforce coverage. You can then assign these shifts to service resources. This flexibility allows you to accommodate the varying availability of contractors, retail workers, healthcare workers, or on-call staff for service appointments.

#### Manage Field Service Resources

Service resources are mobile workers that can be assigned to service appointments. Learn how to create time sheets and view a service resource's travel routes and calendar.

#### Manage Field Service Crew Membership

Efficiently manage your service crews to accommodate a fast-changing field service schedule. Create crews, find and add members with the right skills, adjust membership dates to match appointment times, and view all crews' schedules and members in one place.

#### Manage Field Service Appointments

Create, schedule, reschedule, and unschedule service appointments. Fix overlaps, group nearby appointments, and fill schedule gaps.

#### Manage Service Appointment Bundling in the Field Service Dispatcher Console

Service appointment bundling lets you group multiple service appointments that make sense to be performed together and to define them as one unit, called a bundle. For example, you can bundle several visits at the same customer location or utility meter readings—or package deliveries—at an apartment complex. By creating and scheduling a bundle, you can make sure the component appointments, called bundle members, are scheduled, rescheduled, and executed together as one unit.

#### Manage Your Field Service Inventory

Stay on top of the movement of inventory in your field service operation. Learn how to request and transfer products, track consumption, and process customer returns.

#### Manage Product Service Campaigns in Field Service

Track and manage a product recall, manual firmware upgrade, safety or compliance audit, end-of-life communication, or similar product update.

#### Manage Field Service Reports

Create service reports for work orders, work order line items, or service appointments and email them directly to customers. Use standard templates, or create variations of your own.

#### Manage Field Service Outcome-Based Contracts

With Outcome-Based Contracts, service providers can provide their customers with an easy way to assess the compliance of a service contract by letting them track and measure service outcomes. Compliant service contracts ensure high quality of service and customer success.

#### Manage Field Service Optimization

Use schedule optimization to create an optimal schedule and help comply with service-level agreements while minimizing travel time, overtime, costs, and no-shows.

#### Work in the Field Service Dispatcher Console

The Field Service dispatcher console is the main working space for dispatchers. It features a dynamic map and a highly customizable Gantt chart showing upcoming appointments, active team members, and more.

#### Field Service Object Fields

Learn about the fields available on Field Service standard objects.

#### Manage Assets in Field Service

Use Field Service to track, maintain, and optimize assets.

#### Set Up Field Service Appointment Assistant

Appointment Assistant helps you keep track of your customers' service experience from the moment they contact you to the moment your mobile worker arrives.

#### Field Service Mobile App

The Field Service mobile app for Android and iOS is an all-in-one tool optimized for a modern mobile workforce. Designed as an offline-first app, you can work and have your changes saved without internet connectivity. And the app is highly customizable to meet your business needs.

#### Improve Operations with Field Service Intelligence

Field Service Intelligence is a data-driven solution that displays key contact center performance metrics. Determine whether you're meeting your customer service goals with easy-to-understand data visualizations. Field Service Intelligence includes Data Cloud, CRM Analytics, and Service Cloud. The combination of customer data, key performance indicators (KPIs), and AI help your service team improve operations and reduce costs.

# Where Do I Start with Field Service?

Whether you're just starting with Field Service or you're an experienced admin, landing pages are a compass pointing you to resources that help you understand and set up Field Service.



The landing pages direct you to resources for five key stops in the Field Service journey. If you're new to Field Service, start with Discover Field Service. Here you can find the Field Service glossary to help you learn about key concepts and terms, and curated resources to set

you up for success. Next, Build Field Service guides you through the setup process. Each successive stop in the journey builds on tasks you've completed on previous landing pages, so follow these in order.

#### **Discover Field Service**

Get to know Field Service, and learn how it can help your business.

#### **Build Field Service**

Make a thoughtful plan, switch on Field Service, and set everyone up for success.

#### Customize Field Service

Personalize the way Field Service works with custom options and time-saving automation.

#### Optimize Field Service Schedules

Use our Field Service optimization tools (enhanced or standard optimization) to build the most efficient work schedules for your team.

Monitor and Troubleshoot Field Service

Gather data on your Service Center and assets to gain valuable insights.

### **Discover Field Service**

Get to know Field Service, and learn how it can help your business.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



### Learn How Field Service can Help Your Business

What Is Salesforce Field Service?	Learn about Salesforce and how AI is transforming our Service Cloud and Field Service.	
	What is Field Service Management?	
	Playlist Service Cloud: Field Service Demo	
	Key Concepts and Glossary	
How Can It Help Me?	Learn how to work smarter with Salesforce Field Service.	

	Elevate Every Field Service Experience
	Customer Story: Mobile Technologies, Inc.
	Trail: Digital Transformation Trends
	Discover the Value of Field Service Management Software
Learn from the Experts	Find resources to guide you in your setup journey.
	Salesforce Professional Services
	Field Service Trailblazer Community
	Trailhead Academy
	Salesforce Field Service Ask an Expert Office Hours
	Considerations When Selecting a Consulting Partner
	Salesforce Admins: Upcoming and Recent Events
More Questions?	More Help!
	PDF: Field Service License Comparisons
	Salesforce Admins: Latest Blog Posts, Podcasts, Videos, and Resources

# **Build Field Service**

Make a thoughtful plan, switch on Field Service, and set everyone up for success.

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### Build Your Field Service Foundation

Plan Your Experience

Get the most out of setting up Field Service.

• Set Key Performance Indicators

	Get Ready for Scheduling and Optimization
	What's Schedule Optimization?
	What's Available in Enhanced Scheduling and Optimization
	<ul> <li>Adopt and Implement Enhanced Scheduling and Optimization (Learning Map)</li> </ul>
	Field Service Mobile App
	Common Field Service Inventory Management Tasks
	Field Service Data Objects
	More Resources:
	Video: Expert Implementation Tips
	5 Design Strategies That Help Field Service Workers Love Their Jobs More
	Trail: Organizational Change Leadership
	Trail: Release Readiness Strategies
	Video: Change Management in Salesforce Sandboxes
Enable Field Service	Activate these features and settings.
	Enable Field Service
	Install the Managed Package
	Download the Connected App
	Recommended: Install the Reports and Dashboard
	Enable Field Service for Contract Mobile Workers and Dispatchers:
	Trail: Create and Customize an Experience Builder Site
	Add the Dispatcher Console to an Experience Builder Site
	Guidelines for Setting Up Contractors
	Give Contractors Access to the Mobile App
Give Users Access	Grant users permission to use Field Service, the Field Service mobile app, and Briefcase for offline access.
	Manage Permissions
	Create Permission Sets
	Download the Field Service Connected App for the Mobile App
	Give Users Access to the Field Service Mobile App
	Trail: Offline Briefcase
	Set Up Briefcase for the Field Service Mobile App
Set Up Field Service	Get Field Service up and running for your team.
	Set Up Territories, Operating Hours, and Shifts
	Set Up Work Order Management
	Set Up Your Workforce
	Set Up Your Inventory
	Get Ready for Scheduling and Optimization

- Enable Enhanced Scheduling and Optimization
- Set Up Field Service in Experience Cloud Sites
- Set Up the Field Service Mobile App

More Resources:

- Trail: Get On The Road With Field Service
- Trail: Supercharge Field Service

# **Customize Field Service**

Personalize the way Field Service works with custom options and time-saving automation.

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### Shape How Field Service Works

Customize the Dispatcher Console	<ul> <li>Tailor the dispatcher console to work better for your business.</li> <li>Customize the Console</li> <li>Trail: Customize Console Settings</li> <li>Trail: Customize Your View</li> </ul>
Customize the Mobile App	<ul> <li>Craft custom actions, tabs, screens, and functions for your mobile workforce.</li> <li>Learn More About Mobile Settings</li> <li>Set Up Custom Actions</li> <li>Customize the Look and Feel</li> <li>Brand the Mobile App</li> <li>Customize Push Notifications</li> <li>Trail: Customize User Settings</li> </ul>

	Customize and Extend the Mobile App with Lightning Web Components
Work with Flows	Automate processes and improve efficiency with flows.
	Trail: Flow Builder Basics
	Automate Your Business Processes
	Video: Get Started with Flow Builder
	Build Flows in the Mobile App
	Considerations for Using Flows in the Mobile App
	Set Up the Mobile Widget
	Salesforce Admins – Automation and Workflows
Work with Schedules	Build work schedules for your team.
	Improve Performance with Guidelines for Service Territories
	Trail: Customize a Scheduling Policy
	Trail: Shift Appointments in the Dispatcher Console
	Schedule an Appointment Automatically
Resources for Developers and	Enhance your implementation using these additional resources.
Advanced Admins	Video: Salesforce Admins: – Use Low-Code Tools to Customize Your Salesforce Org
	Trail: Request a Developer Edition Org for Trailhead
	Field Service Developer Guide
Extend your Field Service Experience	These optional add-ons help your team get more done.
	Trail: Visual Remote Assistant
	Set Up Visual Remote Assistant (optional purchase)
	Video: Appointment Assistant Self-Service Scheduling
	Set Up Appointment Assistant Self Service Scheduling (optional purchase)
	ServiceMax Asset 360 for Salesforce (optional purchase)

# **Optimize Field Service Schedules**

Use our Field Service optimization tools (enhanced or standard optimization) to build the most efficient work schedules for your team.

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The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



### **Optimize Your Schedule**

Get Started	Learn about optimization and how to set it up so that you can build better schedules.	
	What's Schedule Optimization?	
	How Does the Field Service Optimization Engine Work?	
	Get Ready for Field Service Scheduling and Optimization	
	Learn What's New and Available in Enhanced Scheduling and Optimization	
	Explore Our Resources to Adopt and Implement Enhanced Scheduling and Optimization	
	Transition to Enhanced Scheduling and Optimization	
Optimize Your Schedule	Refine and optimize your team's schedule.	
	Global Optimization:	
	Optimize Your Schedule	
	In-Day Optimization:	
	Optimize Today's Schedule	
	Resource Optimization:	
	Optimize a Single Resource's Schedule	
	• Create Scheduling Automation with Recipes for Common Events (standard optimization)	
Explore Metrics and Troubleshoot Optimization	Learn how to fix issues and gain useful insights into optimization.	
	Explore Metrics in Field Service Optimization Hub (Enhanced Scheduling and Optimization)	
	<ul> <li>Video: Optimization Insights (standard optimization)</li> </ul>	

	Gain Visibility Into Optimizations
	Video: Check Data Issues Affecting Optimization Quality Using Health Check
	Monitor Schedule Optimization Requests
Help with Schedules	Account for additional scheduling needs and fine-tune your schedule before or after optimization.
	Maximize Your Scheduling Performance
	Explore Holiday Management (Enhanced Scheduling and Optimization)
	<ul> <li>Account for Flexible Breaks with the Resource Availability Work Rule Type (Enhanced Scheduling and Optimization)</li> </ul>
	<ul> <li>Support Locationless or Virtual Service by Using the Off Site Appointment Field (Enhanced Scheduling and Optimization)</li> </ul>
	<ul> <li>Support More Accurate Travel Times and Schedules with Travel Modes (Enhanced Scheduling and Optimization)</li> </ul>
	<ul> <li>Get Recommendations with Field Service Appointment Insights (Enhanced Scheduling and Optimization)</li> </ul>
	Check Rule Violations on the Gantt
	Group and Schedule Nearby Work with Appointment Bundler
	<ul> <li>Control How Much Work is Scheduled with the Count Work Rule Type (Enhanced Scheduling and Optimization)</li> </ul>
	<ul> <li>Further Explore How Much Work is Scheduled by Managing Work Capacity (Enhanced Scheduling and Optimization)</li> </ul>
	<ul> <li>Enable Service Appointment Sliding to Maximize Schedules (Enhanced Scheduling and Optimization)</li> </ul>

### Monitor and Troubleshoot Field Service

Gather data on your Service Center and assets to gain valuable insights.

### EDITIONS

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The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



### Keep up with your Field Service assets, and get everything running smoothly.

Set Up Operational Reporting	Gain insights into your Service Center and assets.
	Create Field Service Reports
	Set Up Salesforce Labs Field Service Dashboards
	Explore Metrics in the Optimzation Hub
	Track Asset Availability and Reliability
	About the Field Service Analytics App (optional purchase)
	Field Service Analytics Pre-Built Dashboards
	AppExchange Field Service Dashboards
	More Resources:
	Trail: Gain Insight with Einstein Discovery
	The 8 Metrics That Matter - And How To Improve Them
Help Your Mobile Workers Arrive	View your mobile worker's location.
Safely and On-time	Set Up Appointment Assistant Real-Time Location (optional purchase)
	Field Service Mobile Security
	Automatic Status Change
Keep Your Service Center and Mobile	Keep things running smoothly with these resources.
App in Top Shape	Video: Salesforce Admins: Release Resources
	Test Your Field Service Configuration with Health Check
	Field Service Mobile App FAQ

# Field Service Limits and Limitations

Learn about Field Service limits and limitations.

Note: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

# **General Limits**

Limit	Details
Maximum number of service resources per user	1
Maximum number of service territories in a service territory hierarchy	10,000
Maximum number of work orders in a work order hierarchy	10,000

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Limit	Details
Maximum number of work order line items in a work order line item hierarchy	10,000
Maximum number of maintenance work rules per maintenance plan	25,000
Maximum number of work orders that can be generated simultaneously per maintenance plan	<ul> <li>2,600</li> <li>Field service can create a combined total of up to 2,600 work order records each time it generates details for a maintenance plan.</li> <li>There's no hard limit on the number of maintenance assets that you can attach to a maintenance plan. But the limit on the number of work orders records that can be created means that the practical limit is 2,600 maintenance assets per maintenance plan. When maintenance assets have multiple maintenance rules—either applied directly or inherited from the maintenance plan—the practical number of maintenance assets is lower.</li> <li>Each maintenance work rule can generate work order and work order line item records.</li> <li>For example:</li> <li>If every maintenance asset for a maintenance plan contains two maintenance work rules, the practical limit on maintenance assets is less than 1,300.</li> <li>If a maintenance plan has four maintenance work rules, the practical limit on maintenance assets.</li> <li>Salesforce recommends that you add no more than 5 maintenance work rules to each maintenance plan or asset.</li> <li>To decrease the number of work orders generated, increase the Frequency value, decrease the Generation Timeframe value, or decrease the number of assets related to the maintenance plan.</li> </ul>
Maximum number of days that can be specified in the Generation Horizon on a maintenance plan	365
Maximum number of years that can be specified in the Generation Timeframe on a maintenance plan	20 On the Maintenance Plan, see the Generation Timeframe field and Generation Timeframe Type field (days/week/month/year). The Generation Timeframe can't be more than 20 years.
Maximum number of locations in a location hierarchy	10,000
Maximum number of signature blocks on a service report template	20
Maximum number of values in the Signature Type picklist on digital signatures	1,000

Limit	Details
Maximum number of child assets per asset	2,000
Maximum number of levels in an asset hierarchy	50
Maximum number of assets in an asset hierarchy	10,000
Maximum size of asset hierarchies that can be viewed in the tree grid view	500
Maximum number of appointments that can be scheduled at once with the Group Nearby Appointments action	50
Maximum runtime in seconds for the Group Nearby Appointments action	60
Maximum number of coordinates in a map polygon	3,200
(Recommended) Maximum number of polygons in an org	30,000
	Exceeding this limit can cause dispatcher console performance issues. To avoid such issues, set the sharing of the Map Polygon object to Private, and use sharing so that dispatchers only see polygons that are relevant to them.
Maximum number of report markers on the Gantt map	500
Maximum number of rows on the Gantt	500
Maximum number of service appointments in the appointment list	3,000
Maximum number of service appointment sharing records that can be processed when updating service appointment statuses in bulk	50,000
Exceeding this limit can cause dispatcher console performance issues. To avoid such issues, set the sharing of the Map Polygon object to Private, and use sharing so that dispatchers only see polygons that are relevant to them.	100 We recommend you don't use service territory memberships for ZIP code coverage. Instead, use the Extended Match work rule.
Maximum number of skills displayed in the Gantt Skills filter panel	2,000
When Enhanced Scheduling and Optimization is enabled, the maximum number of skills that can be assigned to a resource.	250
When Enhanced Scheduling and Optimization is enabled, the maximum number of values on a resource that can be validated by an extended match rule type. For example, if you define a Match tools extended match rule, it can't validate more than 250 tools per resource. Any value above 250 is ignored.	250
Maximum number of operating hours records displayed in the Default Operating Hours lookup field on the <b>Global Actions</b> > <b>Appointment Booking</b> settings page	2,000

#### Salesforce Field Service

Limit	Details			
Maximum number of service appointments displayed in the Long-Term view in the Gantt	1,000			
Maximum number of resource absences displayed in the Long-Term view in the Gantt	200			
Maximum number of active scheduling recipes per category	75			
Maximum number of active scheduling recipes per org	1,000			
Maximum number of service territories that can be viewed without searching	<ul> <li>t 2,000</li> <li>If you have access to 2,000 or more service territories, the service territories list shows only selected territories. Use the search bar to find territories that aren't selected.</li> </ul>			
Minimum screen resolution for a smooth dispatcher console experience	1366 x 768 pixels (minimum) 1920 x 1080 pixels (recommended)			

# Schedule Optimization Request Limits

Limit	Details		
Maximum optimization requests per hour per org	3,600		
Maximum skills per service resource	When you're using Enhanced Scheduling and Optimization, the limit is 250. When you're not using Enhanced Scheduling and Optimization, the limit is 100.		
Maximum number of service appointments per resource per day	200 A bundled appointment is counted as one service appointment. The bundled members don't count toward this limit.		
Maximum service appointments optimized per rolling 24 hours	50,000 When you're using Enhanced Scheduling and Optimization, the limit is the greater of 50,000 or 500 per Field Service Scheduling license. To check whether you're operating within the limit, monitor the actual consumption in Optimization Requests, Last 24 Hours under Company Information in Setup. All types of scheduling actions count toward this limit, for example, Gantt scheduling, get candidates, appointment booking, and global, in-day, and resource scheduing optimization request types. Nonoptimization scheduling actions, for example, the Schedule action, contribute only one toward this count (the appointment that's being scheduled). When you're not using Enhanced Scheduling and Optimization, only global, in-day, and resource schedule optimization requests count toward this limit.		

Limit	Details
	Service appointments sent to optimization for evaluation are counted against this limit, even if they aren't scheduled or rescheduled by optimization. This count includes appointments that are pinned or in the Pinned status and appointments that don't meet the filter criteria. See Optimization Horizon. A bundle is a group of service appointments that are counted as one service appointment.
Maximum service appointments optimized per request	5,000 See Optimization Horizon.
Maximum service territories optimized in a request	100 This limit is the total number of service territories selected in the optimization request. This number isn't affected by the service territory membership of the service resources in the request.
Maximum service resources optimized per request	500 This limit is the total count of service resources per request, regardless of the number of contributing service territory memberships.
Maximum days optimized per request	When you're using Enhanced Scheduling and Optimization, the limit is 30. When you're not using Enhanced Scheduling and Optimization the limit is 21. See Manage Scheduled Jobs in Field Service.
Maximum number of objects passed to the optimization service in 1 request (for example, service appointments + related objects such as skill requirements and assigned resources)	45,000 This limitation doesn't apply when you're using Enhanced Scheduling and Optimization.
Maximum number of objects returned synchronously for In-day optimization (more objects are returned asynchronously)	1,000 This limitation doesn't apply when you're using Enhanced Scheduling and Optimization.

**Note:** For usage restrictions that apply to this product, see this document.

### Limitations

### **Dispatcher Console**

- The Gantt shows information from the past four years to the current date and shows four years from the current date into the future.
- Territory utilization calculation doesn't consider secondary territory members.

- With the Gantt chart Timezone field set to Territory Timezone in Field Service Settings (under Dispatcher Console UI, Gantt Configurations), if both primary and secondary service territories are selected, the service resource is shown in the secondary service territory only if it has the same time zone as the primary service territory. If the secondary service territory has a different time zone, the service resource is shown only in the primary service territory. If only a secondary service territory is selected, the service resource is shown under that territory regardless of the time zone.
- The dispatcher console map can look different than the map shown on service territory member detail pages because of a difference in geocoding granularity. The dispatcher console map tends to be more accurate.
- If a service resource has more than 23 stops in a period of 24 hours (including starting point, ending point, appointments, and absences), the resource map shows only the first 23 stops on the route and displays an error. This is a Directions API limitation.
- The service appointment list in the dispatcher console stops loading data after 3,000 service appointment records are loaded from the server. When that limit is reached, you receive an error that the scheduling horizon is too long. If you haven't turned on advanced filtering, filtering happens on the client side. In this case, all service appointments in the selected time domain and service territories before the filter conditions are applied are loaded from the server. If you've turned on advanced filtering, the filter conditions are applied before loading data to the client.
- The limit is based on the number of service appointments loaded to the list, but the service appointment list can still show more than 3,000 service appointments if service appointments are scheduled on the Gantt that are outside the filter list criteria.

#### **Document Builder**

- Each Salesforce org is granted an allowance of 250 documents per user per month for the following licenses:
  - Field Service Dispatcher
  - Field Service Dispatcher Plus Login-Based
  - Field Service Mobile
  - Field Service Mobile Login-Based
  - Field Service Mobile Plus Login-Based
  - Field Service Standard

If you exceed the 250 per user per month limit, you have an extra 10,000 documents per month to cover your service document needs during high-volume months.

- A document template can have only one signature of each type, such as Customer, Partner, Technician, or Manager. If you expect to require two people with the same role, say Customer, to sign the same document, you can assign numbered types, such as Customer1 and Customer2, to your template.
- A related record table can have up to 1,000 records.
- The size limit for a Service Document is 300 MB.
- On the desktop site, you can create document templates for all objects, Work Order, Work Order Line Item, and Service Appointment, and generate PDFs from these entities on your desktop. The Field Service mobile app lets you create service documents from the Service Appointment and Work Order objects on iOS and only from Service Appointment on Android.
- PDFs can be up to 50 pages.
- A service document template can contain only one signature per type. To collect multiple signatures on a service document, add more signature types. In Setup, edit the Signature Type picklist field on the Digital Signature object. Create at least one value for each role that can sign a service document, for example, Technician, Customer, Supervisor, and Supplier. If you expect multiple people in one role, for example, all mobile workers who are at the appointment, to sign a service report, create numbered types: Technician 1, Technician 2, and so forth.
- You can't generate documents over 100 MB.
- On related list field tables, lookup fields show field IDs instead of field values.
- You can't use URLs to render images.

- Account names don't appear in service documents when the Account field isn't added to the template.
- If you have multiple image galleries on a template, the same set of images repeat across all image galleries.
- You must add the service document template field must be added to work order and service appointment page layouts.
- When you create a service document from a work order record detail page on the Field Service mobile app, you see a service appointment template instead of a work order template.
- With rich text, only black appears on documents.
- The parent record field value is empty in service documents.
- When you're designing a template, refreshing the browser can result in missing fields. If you must refresh, use the **Refresh** button on the design template page instead of refreshing the browser.
- Long text area fields aren't supported for related list components in Document Builder.
- Languages that read right-to-left are translated, but the document format isn't supported.
- In rich text fields, only custom labels are translated.
- In rich text fields, email addresses include a mailto: tag during design time. The mailto tag doesn't show up in preview or in the final PDF.
- Long text and picklists aren't supported for embedded expressions in rich text.
- Community users are supported only for sites with URLs ending in .site.com.

#### **Inventory Management**

- Workers using the Field Service mobile app can consume—via the Products Consumed related list—only one serialized product item per product per work order. This limitation doesn't apply to nonmobile platforms.
- The Location field on serialized product items can't be updated manually. The location auto-updates if a related product transfer is marked received. To enable serialized product transfers (a beta feature), contact Salesforce.

#### **Linked Articles**

Linked articles are knowledge articles attached to a work order, work order line item, or work type. They have the following limitations.

- Quick actions and global actions aren't supported for linked articles.
- The Article widget and Feed Articles Tool aren't available in the feed view.
- In Lightning Experience, clicking an article link in a feed item redirects you to the article page in Salesforce Classic. In the Salesforce mobile app, linked articles can't be accessed from feed items.
- The Linked Work Types related list isn't available on articles in any platform.
- The Knowledge One widget isn't available on work types in the console. To manage linked articles on work types in the console, use the Articles related list.
- Linked articles are read-only in the Salesforce mobile app.

#### **Multiday Scheduling**

With multiday scheduling, you can schedule service appointments that span multiple days. It includes the following limitations.

- Enhanced Scheduling and Optimization doesn't properly handle multiday work that starts or ends during nonworking hours at a time when travel at the resource's expense is allowed. Such cases can result in incorrect overlapping violations and inaccurate travel times.
- A service resource can't be assigned to any other appointment during a multiday service appointment.
- When you're not using Enhanced Scheduling and Optimization, multiday service appointments that overlap with other appointments don't trigger the Fix Overlaps action.
- Multiday service appointments can't be assigned to capacity-based service resources.
- The duration of multiday service appointments can't span more than 56 calandar days.

- If a multiday service appointment has a scheduling dependency, its Scheduled End date isn't calculated when the appointment is scheduled. For this reason, we recommend against creating dependencies between multiday appointments.
- You can only schedule one multiday service appointment at a time. Scheduling multiple multiday service appointments in bulk isn't supported.

#### **Operating Hours**

- You can't create a parent-child relationship between a custom object and Time Slot where Time Slot is the parent object.
- Operating hours can't span a full 24 hours. Instead, use the operating hours 00:00–23:58.
- If you aren't using Enhanced Scheduling and Optimization, operating hours for secondary service territory memberships must be identical to or contained within the resource's primary territory membership's hours.

#### Salesforce App

Most Field Service features are available in all versions of the Salesforce mobile app. Be aware of these mobile app limitations.

- In Salesforce for iOS:
  - You can't create service appointments, and the Recent related list isn't available.
  - You can't create service resources or absences, and the Recent related list isn't available on service resources or absences.
- On field service records created via a related list, the field that lists the parent record doesn't populate until you save the record. This issue applies to all versions of the Salesforce mobile app. For example, when you create a service appointment from the Service Appointments related list on a work order, the Parent Record field is blank until you tap **Save**. After you create the record, the parent record field lists the parent work order.
- If the Created Date or Last Modified Date fields are in the future, creating or updating records can cause an error when working offline with the offline sync permission disabled.
- The dispatcher console—a Field Service managed package feature—isn't available in the Salesforce mobile app.
- The Linked Work Orders and Linked Work Order Line Items related lists on articles aren't available.
- Linked articles are read-only. You can search the Knowledge base and read attached articles, but you can't attach or detach articles. To manage linked article settings and attach or detach articles, use the desktop site.
- Linked articles can't be accessed from feed items.

#### Salesforce on iPad Safari

- Creating service reports from work orders or service appointments isn't supported on Lightning Experience on iPad Safari.
- The dispatcher console isn't supported on iPad Safari. We recommend that you use Lightning Experience on a desktop to use the dispatcher console.

#### Scheduling and Optimization

- A scheduling policy can contain up to five Match Boolean work rules.
- The Gantt and Appointment Booking features can retrieve up to 2,000 scheduling policies.
- Match Fields work rules are supported for schedule optimization only when you're using Enhanced Scheduling and Optimization.
- Match Time work rules are supported for schedule optimization only when you're using Enhanced Scheduling and Optimization.
- The Emergency Chatter action doesn't support multiday service appointments, bundled service appointments, or service appointments with a scheduling dependency.
- Schedule optimization is supported only for service appointments whose parent record is a work order or work order line item.
- When you're not using Enhanced Scheduling and Optimization, scheduling and optimization is supported only for service territories with at least one primary service territory member.
- When you're using Enhanced Scheduling and Optimization, we recommend that optimization requests that include a service resource's secondary territory memberships also include the corresponding primary territory membership. However, optimization requests can still optimize a secondary territory member without the related primary. For example, if you have an optimization

request configured with the service territory Los Angeles, and a service resource has a primary service territory membership of San Diego and a secondary service territory membership of Los Angeles, the service resource's schedule for Los Angeles can be optimized. When you're not using Enhanced Scheduling and Optimization, optimization requests that include a service resource's secondary territory memberships must also include the corresponding primary territory membership.

- Only active territories included in the scheduled optimization job are optimized.
- If a service appointment or resource absence doesn't include an address, the scheduling optimizer assumes that the appointment is at the assigned resource's home base. This assumption could cause the optimizer to delete the Travel From value from the previous service appointment or resource absence with an address. To avoid deletion, add the resource's home base address (the Service Territory Member address or, if there isn't a specified address, then the Service Territory address) to the service appointment or resource absence.
- Global and In-day optimization validate that for already scheduled service appointments, the Scheduled End -Scheduled Start time = Duration, while taking resource efficiency into consideration. Service appointments that violate this requirement are unscheduled.
- If a multiday service appointment has a scheduling dependency, its Scheduled End date isn't calculated when the appointment is scheduled. For this reason, we recommend against creating dependencies between multiday appointments.
- If you drag a multiday service appointment, or manually change its Scheduled Start, the Scheduled End doesn't go beyond the due date regardless of the appointment Duration.
- Resource schedule optimization has the following limitations and considerations.
  - Under Keep these appointments scheduled, you can select a category of appointments that must remain scheduled. The optimization can move and then reschedule appointments in this category. If the optimization must keep more than 50 appointments scheduled, it fails.
  - Complex work information that's not fully available in the optimization data is considered excluded from resource schedule optimization. For example, a partial chain of a scheduling dependency is excluded.
  - Resource schedule optimizations can't run in parallel for the same service resource on the same time interval.
  - The Gantt doesn't show percentage-based progress for resource schedule optimization requests.
  - Shifts assigned to secondary territories aren't considered during resource schedule optimization. Instead, use only shifts without territories or use time slots. This limitation doesn't apply to enhanced scheduling and optimization.
- When you're not using Enhanced Scheduling and Optimization, if the Fix Overlaps feature is in use, the **Reshuffle other** assignments option is only partially supported with the **When unable to find a valid schedule for an appointment** setting. If more than one service appointment is dropped from the schedule during a Fix Overlaps operation, only one of the appointments is reshuffled.
- You can use platform encryption with standard Salesforce objects and fields. With the managed package, if you encrypt custom objects and fields, scheduling and optimization can sometimes yield unexpected results.

#### **Service Appointments**

- The Owner and Parent Record fields on service appointments aren't available in custom report types. They also can't be referenced in formulas, validation rules, workflow rules, flows, or processes. To limit the available owners or types of service appointment parent records, use an Apex trigger.
- Service appointment fields whose values are inherited from the parent record can't be referenced in formulas, validation rules, workflow rules, flows, or processes. The standard inherited fields are Work Type, Account, Parent Record Type, and Parent Record Status Category.
- Service appointments with populated Scheduled Start or Scheduled End fields, but without an Assigned Resource, can be corrupted and lead to unexpected behavior in all Field Service actions.
- Using seconds or milliseconds in the service appointment Scheduled Start and Scheduled End fields isn't supported. For example, if Scheduled Start is set to 8:00:00 AM and Scheduled End is set to 8:00:45 AM, the optimization engine can unschedule the

service appointment because the start and end time is considered the same (8:00 AM). Using seconds or milliseconds in the following service appointment fields also isn't supported:

- Due Date
- Earliest Start Permitted
- Arrival Window Start
- Arrival Window End
- Any DateTime field used in work rules of type Field Service Match Time Rule in your scheduling policy, including custom fields.

Using seconds or milliseconds in the Start and End DateTime field of the following objects isn't supported:

- Resource Absence
- Time Slot
- Shift
- Service Resource Skill
- Service Territory Member
- Custom objects used in Enhanced Match Rules

#### **Service Reports**

- Service reports can't be created on service appointments whose parent records are assets, accounts, leads, or opportunities.
- The Create Service Report action isn't available in the Salesforce mobile app.
- Section titles and rich text fields in service reports can't be translated.
- Digital signature field labels can't be customized.
- Related list filtering on service reports has the following limitations:
  - The Status field on contract line items isn't available for filtering.
  - The Filters tab isn't available in Internet Explorer 8.
- Service Report Template lookup isn't supported in Visualforce pages. To include Service Report Lookup in a Visualforce page for the edit of a Work Order, create a Custom lookup.

#### **Service Resources**

• If you deactivate a service resource, make sure to update records that were associated with that resource. For example, if a deactivated service resource was a required resource for an account, update that account to prevent scheduling issues.

#### Sharing

In Setup, **Sharing Settings** let you specify default internal and external access to Field Service records. For example, you can share dispatched service appointments to external Experience Builder site users, such as a team of contractors. But if the Default Internal Access is Private or Public Read Only, set the Default External Access to Private or Public Read Only also. If the internal setting is Public Read Write, external resources can see dispatched appointments only when the external setting is Public Read Write and you enable dispatch sharing to resources.

#### Street-Level Routing (SLR)

- If a service appointment requires a travel distance of more than 100 kilometers, aerial routing is used.
- Predictive travel isn't supported with multiday work scheduling. In multiday work scheduling, the exact departure time for each
  day is unknown, so SLR is used, corresponding to the fastest travel time (the best SLR travel time that you would get on a night
  slot with minimum traffic). Complex work uses point-to-point predictive routing in optimization, and the most optimistic SLR
  travel time for platform scheduling. This limitation isn't relevant when you're using Enhanced Scheduling and Optimization,
  because the enhanced engine doesn't use SLR.

Any scheduling action that is triggered in a transaction with data manipulation language (DML) uses aerial routing. When SLR is enabled and scheduling requires SLR travel results that aren't primed locally, you must use a callout to retrieve the results. If DML occurs in the same transaction as the callout, it causes an exception, for example, an Uncommitted Work Pending error. When the schedule falls back to aerial routing due to a failure in the callout, overlaps can appear on the Gantt after the travel time and break update runs and updates the travel to SLR or predictive travel. To avoid an exception, allow the system to use aerial routing or ensure that DML is completed in a separate transaction. If you want transactions of this type to cause an exception rather than a switch to aerial routing, from the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings > Scheduling. Select Avoid aerial calculation upon callout DML exception.

#### SEE ALSO:

Limits and Limitations for Enhanced Scheduling and Optimization

# Field Service Key Concepts and Glossary

List of terms used in Field Service.

# Key Concepts

#### Agent

An agent handles inbound calls, creates work orders, and books appointments from the service console. An agent must have the Field Service Agent permissions set.

#### **Appointment Booking**

When a service appointment requires a specific execution time for a customer-facing service, you can assign an arrival window using appointment booking. The arrival window assures that the service appointment starts within the defined time range. Customers can book their own appointment, and set the arrival window from available time slots, using the appointment assistance feature.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Asset

An asset is an item of commercial value that a customer has purchased and installed. An asset can have a warranty or entitlement for a service according to a service contract. The Asset object enables tracking relevant performance indicators, such as asset downtime. An asset can be serviced according to a maintenance plan or on an as-needed basis. When an asset requires service according to a maintenance plan, a work order is generated automatically.

#### Dispatcher

A dispatcher uses the Dispatcher console to monitor the execution of service appointments assigned to specific groups of resources by territories and handles exceptions using the Field Service tools. A dispatcher must have the Field Service Dispatcher permissions set and a Field Service Dispatcher license.

#### Mobile Worker (Service Resource)

A mobile worker (also called a service resource or technician) is a worker that executes assigned service appointment jobs according to availability. A mobile worker can update job progress in the Field Service mobile app.

#### **Resource Availability**

Time intervals during which a resource can be scheduled, composed of operating hours, time slots, and shifts.

#### **Scheduling and Optimization**

Scheduling is the process by which service appointments are assigned to mobile workers or crews. Manually constructing an efficient field service schedule can be a complex, time-consuming operation. Field Service's Scheduling and Optimization does the work for

you by generating an optimal schedule according to scheduling policies that define your organizational priorities and constraints. Schedule optimization helps you comply with service-level agreements and minimize travel time, overtime, costs, and no-shows.

You can define the scope of optimization in different ways.

- Global optimization—Assesses time slots and mobile worker options to schedule upcoming appointments in the best order.
- In-Day Optimization—Optimizes the schedule for one or more territories on the day of service.
- Resource Schedule Optimization (RSO)—Optimizes a specific mobile worker's day. Reshuffle—Moves existing appointments to schedule a high-priority appointment.

#### **Service Appointment**

A service appointment provides the scheduling and assignment details of a field service visit—onsite or remote—to a customer. A service appointment can be with or without an arrival window that is derived from a customer's appointment time.

#### **Service Territory**

A service territory is the most basic grouping of service resources in Field Service. A grouping can be based on geographic regions, such as cities, counties, and neighborhoods, or according to product lines or type of customer. You can assign service resources to territories and create territory hierarchies, depending on how your business is structured.

#### Work Order

A work order is a request for field service work. It includes the work type and other relevant information for scheduling the service appointment. A work order can include several work order line items representing different types of work that must be done or various assets to be worked on.

# **Glossary Terms**

The frequently used terms

Term	DescriptionA time period when the resource isn't available for scheduling. An absence can have locations. You sometimes need the resource absence location to schedule a service appointment before or after an absence. Absences with a location can also have travel times associated with them. Also referred to as Resource Absence.				
Absence					
Admin	A user who manages Field Service features and sets up user permissions for your org. An admin must have access to Field Service settings.				
Arrival window	A time frame that limits the scheduled start time of a service appointment that was scheduled using appointment booking. The scheduled start time must be between the start time and the end time of the window.				
Asset attributes	Describes the state of an asset and can represent its health and performance. Asset attributes provide a better understanding of the condition of assets and let mobile workers repair and maintain those assets in the field more efficiently. An asset usually has multiple attributes.				
Assigned resource	A service resource who is assigned to a service appointment and has relevant information, such as the travel time and distance.				
Briefcase Builder	This tool lets admins configure datasets of records that are required for mobile resources to interact with the Field Service mobile app when they're offline.				
Capacity-based resource	A resource representing one or more service resources with a bucket of working hours or service appointments per period (for example, 100 working hours per week or four service appointments				

Term	Descriptiona day). Scheduling service appointments to a capacity-based resource is as easy as scheduling to a regular service resource.					
Check rules	A logic service that verifies whether a service appointment conforms to the scheduling rules. When manually scheduling a service appointment, you can use this service to check whether the scheduling violates a scheduling rule.					
Complex work	A composite service appointment, composed of interdependent service appointments, each of which is performed separately. The appointment dependency defines the time relationship betwee service appointments. For example, a service appointment can only be started after the completic of another service appointment.					
Crew	A team of service resources scheduled to work together. Resources are allocated to a crew for a specific time period. During an allocation, crew members can only be scheduled as part of a crew					
Day of service	The actual execution day of the planned job.					
Dispatcher console: Gantt	A visual representation in the form of a Gantt chart of the service resources and their appointments over time. The UI provides easy access to many service appointments and resource-related activities.					
Dispatcher console: Map	A view that displays a map of service appointments, resources' home bases, and last known locations. You can add other objects with locations.					
Drip feed	A method for dispatching service appointments, one by one, as the previous service appointment are completed.					
Duration	The time that a service appointment takes to complete. Duration is used to optimize the schedul					
Enhanced Scheduling and Optimization	The Enhanced Scheduling and Optimization engine is gradually replacing the optimization functionality and associated manual and semiautomatic scheduling services. This engine provid an architecture and services that are more efficient and improve scalability, performance, and schedule quality. It includes innovative capabilities such as Travel Modes, Service Appointment Sliding, Multiple Flexible Breaks, Scheduled Jobs, Holiday Management, Offsite Appointments, a Optimization Hub. As of Summer '23, new Salesforce orgs have Enhanced Scheduling and Optimization enabled for all territories by default. Existing orgs can switch to use Enhanced Scheduling and Optimization for all service territories or per territory.					
Entitlement	The customer service level (for example, Basic, Premium, VIP) which dictates the response time.					
Field Service mobile flow	A flow that is supported in the Field Service mobile app, and uses Flow Builder and the Field Service Mobile Flow type.					
Field Service permission sets	<ul> <li>Allow users to access Field Service features by assigning them permission set licenses. Field Service includes three permission set licenses related to the managed package and mobile app.</li> <li>Field Service Dispatcher—Provides access to the dispatcher console.</li> <li>Field Service Scheduling—Allows the user to be shown on the dispatcher console Gantt to be included in scheduling and optimization.</li> <li>Field Service Mobile—Provides access to the Field Service mobile app.</li> </ul>					
Field Service settings	<ul><li>You can adjust your Field Service settings in two places.</li><li>Setup—Where you initially enable Field Service and set up features.</li></ul>					

Term	Description     Tab—Used to control adjustments.					
Flexible breaks	Admins can set a break duration and a time window for when the break must occur relative to t start of the mobile resource's day.					
Gantt chart	See Dispatcher console: Gantt.					
Get Candidates	An action that suggests which service resources can be assigned to a service appointment and when.					
Grade	A numerical score given to an assignment or an appointment slot according to the relative fulfillmer of a set of objectives.					
Holiday management	This feature lets admins account for business holiday closures. Admins can refine working hour by updating operating hours so that service appointments aren't scheduled on holidays.					
Home base	A location where a resource starts and ends work each day. You can temporarily change the horr base of a resource. You can define a home base at the Service Territory level or Service Territory Member level, which overrides the Service Territory level.					
Horizon or scheduling horizon	• The date range for scheduling a service appointment.					
	• (Mobile) The time period for priming service appointments.					
Inventory	The available serialized or not serialized products in a fixed location, such as a warehouse, or a mobile location that represents the service resource's stock. Product transfers track the moven of inventory from one location to another. The inventory numbers at storage locations are updated automatically to reflect transfers.					
Maintenance plan	Defines how often maintenance visits occur according to a schedule or based on usage criteria. For example, maintain the generator every 1,000 operating hours, start from 0 and stop at 100,000 hours. The Maintenance Plan automatically generates work orders for future visits.					
Manual scheduling	A process by which a dispatcher manually creates assignments. Manual scheduling enables manual intervention in the scheduling process.					
Мар	See Dispatcher console: Map.					
Mobile actions	Quick actions, global actions, flows, and app extensions that help your team work more efficiently from the field. Actions are displayed in a predefined order in the action launcher on record pages in the app.					
Mobile push notification	A push notification in the mobile app that informs the mobile workforce of events, such as status changes, approaching appointments, scheduling changes, or comments added. To create customized notifications, install the connect app and use the Notification Builder Platform.					
Multi-day work	A service appointment that spans over multiple days. The maximum period is 8 weeks.					
Notifications Center	A UI display of notifications relevant to the dispatcher, such as scheduling results and other action feedback information.					
Operating hours	The times when field service work can be performed by service resources (weekly recurring availability per resource and per territory), customer accounts (visiting hours per customer), and					

Term	Description					
	appointment booking. Operating hours consist of the time zone and time slots, which can be broken down into arrival windows.					
Optimization Hub	This set of dashboards shows the impact and improvements of an optimization request, formatted as standard KPIs. The optimization hub enables users to gain visibility across the scheduling of service appointments within service territories.					
Outcome-based contracts	This feature lets service providers define KPIs for their customers to measure and track service outcomes and assess the compliance of service contracts. For example, a contract is compliant if an electric vehicle's battery is strong as indicated by the charging speed of the battery. Tracking the vehicle's charging speed over a time indicates that its battery is strong and therefore, that the contract is compliant.					
Priming	Loading of data (records and metadata) to a mobile device according to the scheduling horizon, so that mobile workers can perform their job while offline.					
Priority	The importance or urgency of a service appointment, on a numeric scale. The default priority range is the $1-10$ scale, where 1 is the highest priority and 10 is the lowest. You can also choose to use a scale of $1-100$ . Used by the optimization process to ensure that when there's limited resource availability, service appointments are scheduled according to importance.					
Product item	A part for services that can be requested, required, transferred, and consumed in field service wor The Product Item object is used across clouds (Marketing, Sales, Industries, and Commerce).					
Product request	A request for one or more parts.					
Product transfer	A transfer of inventory between locations.					
Relevance group	A group of service appointments or service territory members that require their own work rules service objectives. For example, use relevance groups to enforce your company policy on brea and travel time for full-time versus part-time employees.					
Relocation	A type of service territory membership in which a service resource is temporarily moved from one territory to another. A relocation can also temporarily change the resource's home base.					
Resource efficiency	The relative speed at which a resource works (1 = the nominal rate). For example, if a service appointment is expected to take 1 hour, it takes a resource with an efficiency of 0.5 2 hours.					
Return order	A record of inventory returns or repairs.					
Scheduled job	Scheduled jobs are Apex jobs scheduled to run at a given time in the future. In Field Service, scheduled jobs are used to group a set of data to submit for optimization or share records with user territories.					
Scheduled start and scheduled end	A scheduled time slot for a service appointment.					
Scheduling dependencies	Scheduling dependencies between related service appointments helps you account for situatio when mobile resources must perform related service appointments in a certain order. For examp ensure that a particular appointment can't start until a related appointment is completed or that two appointments must start at the same time.					
Scheduling policy	A set of work rules and service objectives that guide the schedule optimizer in its decisions. You can use scheduling policies to promote or de-emphasize factors, like business priorities, travel times the second s					

Term	Description					
	and customer preferences. For example, if an organization has 100 resources, work rules look at various criteria, such as availability, territory assignment, skills, driving distance, to reduce the number of potential candidates to five. These five candidates are then analyzed by service objectives to assign a grade to each candidate. The grade determines who, out of the five, is the best resource and time slot to schedule.					
Scheduling recipe	A scheduling automation that is triggered by certain events to solve overlaps (caused by urger service appointments or late ending of service appointments) or free spaces (caused by service appointments ending early or canceled).					
Serialized product	A product with a serial number whose movements between locations, such as warehouses, depo or mobile workers, can be tracked.					
Service appointment list	A Field Service view that displays service appointments. The list provides easy access to service appointments and actions in the Gantt view of the Dispatcher console.					
Service appointment number	A unique service appointment identification number.					
Service appointment status or status category	A lifecycle sequence of stages or statuses through which a service appointment passes. The lifecy covers the time from when the service appointment enters the organization until the time it's completed. Each status category can include several statuses.					
Service appointment sliding	This feature enables moving service appointments on the Gantt for the same resource to an earlier or later time within the resource's shift. Appointment sliding lets you free up time for a new service appointment when using appointment booking and scheduling operations.					
Service appointment time properties	Field Service includes the time properties that are relevant for the four standard Match Time Rule work rules.					
	• Earliest Start Permitted—Ensures that a service appointment's Scheduled Start is equal to or later than the Earliest Start Permitted. This work rule is included in every standard scheduling policy.					
	• Due Date—Ensures that a service appointment's Scheduled End is equal to or earlier than the Due Date. This work rule is included in every standard scheduling policy.					
	• Scheduled Start—Ensures that a service appointment's Scheduled Start is equal to or later than the Arrival Window Start.					
	• Scheduled End—Ensures that a service appointment's Scheduled End is equal to or earlier than the Arrival Window End.					
Service contract	A contractual agreement to provide service to a customer based on their profile. Service contracts represent different types of customer service, such as subscriptions or service level agreements (SLAs) that stipulate a certain due date or a start-by date. The products covered by a service contract are the contract line items.					
Service objective	A logic entity that evaluates and grades assignments or schedules. Service objectives enable usin business priorities to choose the best candidate for the job. For example, if the top priority is to minimize travel, the qualified candidate closest to the job site is the best choice.					
Service report	A customer-facing report summarizing the status of service appointments and work orders.					
Service resource	See Mobile worker.					

Term	Description						
Service resource list	A part of the Gantt view that displays all the resources in the system. The Service Resource List provides easy access to resources and actions in the Gantt view of the Dispatcher console.						
Shift availability	A set of working periods for your shift-based workforce, such as contractors or on-call staff. Yo can create and assign shifts for particular dates and times when you need coverage.						
Skill	An ability required to perform a field service task. You can assign skills to service resources to represent certifications or areas of expertise. You can add skill requirements to work types, work orders, and work order line items to indicate the skills required to complete the work. Skills can all have skill levels.						
Time-phased	Refers to a property whose value varies at specified times. For example, time-phased skills of a crew that change when a resource is added or removed from the crew (applies to Skills, Territory Membership, and Crew Membership).						
Time sheets	A tool that tracks the time that your field service employees spend on tasks. Time sheets are mainly used for payment and charging.						
Travel modes	Travel modes reflect transportation type (car, light truck, heavy truck, bicycle, or walking), the us of toll roads, and hazmat considerations. Travel modes enhance predictive travel by providing mor accurate travel time predictions and improving the completion rate of service appointments.						
Work Capacity	The Work Capacity feature lets users control the amount of work that the optimization service schedule for service resources. This feature enables capacity reservation based on dynamic comp priorities. Limiting work capacity is done by adding adjustable thresholds that limit how many hours or what percentage of the total work capacity can be scheduled for working on specific service appointments. For example, you can limit the total duration of new installation jobs sched in the New York territory to 100 hours per day during weekdays for the next 2 months. You can also limit maintenance jobs to 50 hours per day on Mondays. Or set the limit as a percentage the total calculated available work capacity. For example, limit the installation jobs in Miami to of the total calculated available time in Miami per day during the same time period.						
Work order	A request for one-time or recurring field service work. It includes the work type and all relevant information for scheduling the service appointment. A work order can include several work order line items.						
Work plan or work steps	A work plan is a set of prescribed work steps that guide frontline and back-office workers on ho to complete a work order. By following steps in work plans, field service teams can complete assignments quickly, consistently, and with less guesswork.						
Work rule	A combination of rules determines which candidates can complete the job based on business policies and organizational goals. A work rule determines whether the candidates have the require skills and if they're available in the right territory at the right time. For example, a rule can require that a resource can be assigned to a service appointment only if they're both in the same distric						
Work type	A template that is used for common field service work, such as cable installations or furnace repairs. It includes the work duration, skills required for a specific work type, and so on.						

SEE ALSO:

Concepts, Products, and Services

# Set Up Field Service

Build and manage Field Service. Set up your workforce, work order tracking and inventory management, and customize the Field Service mobile app to meet your business needs.

#### **Enable Field Service**

Enable Field Service to start using Field Service features.

#### Install the Field Service Managed Package

After Field Service is enabled, install the managed package to gain access to the dispatcher console, scheduling tools, a range of custom objects, and Guided Setup.

#### Manage Field Service Permissions

Give your team access to Field Service features. Create and assign standard permission sets and permission set licenses. Then add customizations to suit your business needs.

#### Set Up Service Territories, Operating Hours, and Shifts for Field Service

Create service territories to track the places where your team performs field service work. Assign

regular operating hours to each service territory to indicate when work can be performed. Create shifts to assign resources to ad hoc hours, such as holiday hours or for workers without a set schedule.

#### Set Up Work Order Management for Field Service

A work order represents work to be performed on your customers' products. Customize your work order settings and create time-saving templates called work types.

#### Set Up Your Field Service Workforce

Create service resources and service crews to represent your mobile workforce. Then, assign permission sets to members of your team who work as dispatchers or support agents.

#### Set Up Your Field Service Inventory

Track and manage the storage, request, transfer, and consumption of every item in your inventory, and ensure that your mobile workforce has the right parts in stock to do their job.

#### Get Ready for Field Service Scheduling and Optimization

Define your service appointment lifecycle, configure appointment booking settings, and get to know your Field Service scheduling policies, optimization settings, and sharing settings. As of Summer '23 new Salesforce orgs have Enhanced Scheduling and Optimization enabled by default for all service territories. Existing orgs can continue to opt in and enable the enhanced engine for all or selected service territories. The enhanced engine is an improvement of the optimization functionality and associated manual and semiautomatic scheduling services. The enhanced architecture and services are more efficient and improve scalability, performance, and schedule quality.

#### Set Up Field Service Appointment Bundling

Group short appointments at nearby or same-site locations to create a bundle.

#### Setting Field Service Key Performance Indicators

Key Performance Indicators (KPIs) are crucial when scoping your business's needs and aligning them with what Field Service provides. For example, KPIs can help you make smart business decisions by setting efficient schedules and sending workers with the right skills and tools for the job.

#### Set Up for Product Warranties in Field Service

To have new assets automatically pick up the standard warranty for a product, set up a flow, process builder, or trigger.

#### Set Up Product Service Campaigns in Field Service

If your Salesforce org was created before Spring '21, add the Product Service Campaign Item related list to Product Service Campaign.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Set Up Field Service Asset Availability and Reliability Reporting

Get information on asset availability and reliability by recording details of asset downtime in Field Service.

#### Set Up Field Service in Experience Cloud Sites

Keep customers, partners, and contractors in the loop about field service work by adding field service objects to your Experience Cloud site.

#### Set Up Visual Remote Assistant for Field Service

Promote sustainability using Visual Remote Assistant for Field Service, boost sales, and improve efficiency while reducing costs by delivering service from anywhere.

#### Set Up After Field Service Sandbox Refresh

After you refresh a sandbox for Field Service, you must verify that sandbox remote sites are active. Then configure your Salesforce sandboxes to use independent remote sites for street-level routing (SLR) and optimization services, and verify your default policies and operating hours.

#### Report on Field Service

Create report types to track field service activity in your org. To take your reporting a step further, use the Field Service Analytics App.

#### Manage Data Integration Rules for Field Service

Set up data integration rules to ensure that service resource travel time is accurately calculated.

#### Set Up Salesforce Labs Field Service Dashboards

Download a free package of Field Service dashboards and reports from Salesforce Labs AppExchange. Track metrics and performance for many key items of interest in a field service operation. Use these optional dashboards to create customized reports and dashboards for your operation's specific needs.

SEE ALSO:

Field Service Mobile App Field Service Developer Guide *Trailhead*: Get on the Road with Field Service

### **Enable Field Service**

Enable Field Service to start using Field Service features.

- From Setup, enter *Field Service Settings* in the Quick Find box, then select **Field** Service Settings.
- 2. Enable Field Service, and click Save to display more settings.

If you don't have a Field Service add-on license, an option to enable work orders is on by default. If Field Service was enabled, but the license was removed or has expired, that option is off by default.

- **3.** Optionally, turn on in-app notifications for Salesforce app and Lightning Experience users when any of the following actions occurs on a work order or work order line item that they own or follow:
  - A text or file post is added
  - A tracked field is updated
  - The record owner changes
  - The resource assignments change on a related service appointment

If the option to track all related objects is selected in your feed tracking settings for work orders, users are also notified when child records of work orders—such as service appointments—are created or deleted.

- 4. Optionally, update the sharing settings. See Limit Access to Field Service Records.
- 5. When you set up work types, which are templates for work orders, you can opt to automatically add a service appointment to new work orders or work order line items associated with a work type. Configure the number of days between the created date and due date on auto-created service appointments.
- 6. If you want to use your knowledge base in field service, select the fields that the search engine scans to suggest articles on work orders or work order line items.
- 7. Save your changes.

Field Service Settings	
Field Service To get started, see Set Up Field Service	Field Service Conde
Notifications  Notifications Notify relevant users in Lightning Experience, the Salesforce mobile app, and the Field Service mobile app about updates to work orders and service appointments. The Enable notifications	Auto-Created Service Appointments On auto-created service appointments, set the due date to a specified number of days after the created date. Days After Created Date 7 v
Sharing         Share dispatched service appointments with their assigned resources         Share service appointments' parent work orders with their assigned resources         Let service crew members edit their service appointments	Knowledge Search Suggest articles based on these selected fields. Work Order Fields Work Order Line Item Fields Subject Subject Select Select

SEE ALSO:

Trailhead: Field Service Basics

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **USER PERMISSIONS**

To enable Field Service:

Customize Application

# Install the Field Service Managed Package

After Field Service is enabled, install the managed package to gain access to the dispatcher console, scheduling tools, a range of custom objects, and Guided Setup.

When you install the Field Service managed package, you get the following features.

- Guided Setup: There's no need to go it alone! This nifty tool walks you through key setup tasks, including assigning permission sets, creating service resources, and customizing appointment booking settings.
- Scheduling and optimization: Swiftly optimize your team's schedule in a way that enforces your business objectives. Assign appointments according to your rules and priorities, such as worker skills, location, and availability.
- Dispatcher console: Give dispatchers and supervisors a bird's-eye view of your field service operations. The dispatcher console includes a customizable appointment list, easy-to-reach scheduling actions, dynamic Gantt chart, and interactive map. Dispatchers can check that jobs are routed to the right people, receive alerts, and monitor appointments in real time.
- Administration app: Manage optimization, customize the dispatcher console, and update your managed package settings in one place.
- Click the installation link on the download page: https://d3600000z1fneac.my.salesforce-sites.com/install
   You can install the managed package on a production or sandbox org.
- 2. Select Install for Admins Only.

If you receive a request to approve third-party access, click **Yes** and **Continue**. Approving this request allows the street-level routing and optimization services to function.

 If a message indicates that the installation is taking longer than expected, click Done. You'll receive an email notification after the installation is complete.

Once the package is installed, the App Launcher includes two new apps.

App Laund	cher	Q Find an app or item			Visit AppExchange		
✓ All Apps							
₽ ₽	Service Manage customer service with accounts, contacts,	 Field Service Lighting	Field Service	:	Pet Sever Ligning	Field Service Admin	#

The Field Service app is for dispatchers. The Field Service tab in this app leads to the dispatcher console.

The **Field Service Admin** app is for administrators. The Field Service Settings tab in this app leads to the managed package settings. You can add the Field Service and Field Service Settings tabs to other apps.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

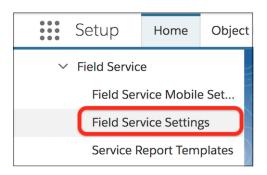
### USER PERMISSIONS

To install the Field Service managed package:

- Customize Application
- To assign a permission set license:
- Manage Users

To create a permission set:

• Manage Profiles and Permission Sets Note: Salesforce Setup includes a separate Field Service Settings page where you can customize general settings related to field service.



#### SEE ALSO:

*Trailhead*: Supercharge Field Service Field Service Mobile App Field Service Limits and Limitations

### Manage Field Service Permissions

Give your team access to Field Service features. Create and assign standard permission sets and permission set licenses. Then add customizations to suit your business needs.

#### Get to Know Field Service Personas

Learn about the different user personas in a typical field service implementation. Use standard and custom permission sets to tailor Field Service to your users' needs.

#### Field Service Permission Set Licenses

Permission set licenses are required for some Field Service users to interact with settings, the dispatcher console, and other features. Learn how permission set licenses match to different groups of users.

#### Create Field Service Permission Sets

Create Field Service permission sets from the Field Service Admin app.

#### Assign Field Service Permissions

After you create your field service permission sets, give users the permissions they need to complete their field service tasks. You can assign permissions in Setup or in Guided Setup.

#### Set Custom Permissions for Field Service

The Field Service managed package includes custom permissions that control users' access to actions and views. For example, you can control access to bulk actions, such as dispatching, optimizing, and scheduling, or the ability to drag appointments in the Gantt.

#### Assign Field Service Page Layouts

The Field Service managed package provides standard object page layouts that include field service Visualforce components and Chatter actions. Assign these page layouts to the System Administrator and Standard User profiles.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Get to Know Field Service Personas

Learn about the different user personas in a typical field service implementation. Use standard and custom permission sets to tailor Field Service to your users' needs.

Field service players usually fall into one or more of the following profiles.

User persona	Description
Admin	A Salesforce admin integrates Field Service features and sets up user permissions as needed.
Agent	Agents handle inbound cases, create work orders, and book appointments using global actions.
Contractor	Contractors are mobile workers, dispatchers, or office staff who are temporary or seasonal. Our Contractor and Contractor Plus licenses can be purchased as per-user-per-month or login-based licenses. The per-user-per-month option provides universal access to more regular contractors, while our login-based licenses are a cost-effective and flexible option for employers with large numbers of contractors.
Dispatcher	Dispatchers build and manage appointments, assign mobile workers, and optimize the schedule based on worker skills, routing, and job priority. If your business combines the dispatcher and agent roles, use the Field Service - Dispatcher permission set.
Mobile workers (technicians)	Mobile workers receive work orders and service appointments from dispatchers or agents and conduct customer site visits. They also update job progress from mobile devices with the Salesforce mobile app or the Field Service mobile app.
Self-service	Self-service users are your customers. You can grant access so that self-service users can schedule and manage their own service appointments via Experience Builder sites.
Custom personas	Sometimes users don't fit neatly into the predefined categories. For example, your company works with contractors that do the same work as employee mobile workers. In that case, we recommend mapping users to the persona that most closely matches their job

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To access field service objects:

• Field Service Standard

To assign a permission set license:

• Manage Users

To create a permission set:

• Manage Profiles and Permission Sets

User persona	Description
	function. Clone the managed package's permission sets, then add your custom permissions to assign access.

Dispatchers and field technicians can't handle inbound customer communications in call centers, manage customer cases, or complete sales-oriented tasks without additional licenses.

# Field Service Permission Set Licenses

Permission set licenses are required for some Field Service users to interact with settings, the dispatcher console, and other features. Learn how permission set licenses match to different groups of users.

All users need the Field Service Standard user permission to access field service objects. Field Service user licenses already include this permission.

Field Service also includes three permission set licenses related to the managed package and mobile app. We recommend using the managed package's Guided Setup tool to assign these permission set licenses; for steps, see Assign Field Service Permissions.

Your users don't need a Field Service permission set license to access most Field Service objects. For example, inventory managers, admins, and customer support agents probably don't need one. If Field Service is enabled, standard Salesforce users can be given access to Field Service records.

These permission sets are created when you set up Field Service.

Permission Set	Description	Who Needs It
Field Service Dispatcher	Provides access to the dispatcher console.	Dispatchers
Field Service Dispatcher Plus Login-Based	Provides login-based users with the Contractor Plus license access to the dispatcher console.	Contractor dispatchers
Field Service Scheduling	Allows the user to be shown on the dispatcher console Gantt and included in scheduling and optimization.	Mobile workers (field technicians)
Field Service Scheduling Login-Based	Provides login-based users with the Contractor license access to Field Service Scheduling features.	Contractor mobile workers (field technicians)
Field Service Scheduling Plus Login-Based	Provides login-based users with the Contractor Plus license access to Field Service Scheduling features.	Contractor mobile workers (field technicians)

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To access field service objects:

• Field Service Standard To assign a permission set license:

- Manage Users
- To create a permission set:
- Manage Profiles and Permission Sets

Permission Set	Description	Who Needs It
Field Service Mobile	Provides access to the Field Service mobile app.	Mobile users (field technicians)
Field Service Mobile Login-Based	Provides login-based users with the Contractor license access to Field Service Mobile features.	Contractor mobile users and contractor admin
Field Service Mobile Plus Login-Based	Provides login-based users with the Contractor Plus license access to Field Service Mobile features.	Contractor mobile users
Field Service Self-Service	Provides access to Experience Builder sites where users can view all global actions and their related objects. Provides access to create, book, and schedule their appointments.	Customers
Field Service Guest User	Gives unauthenticated users limited access to view and create records.	Guest users

Dispatchers and field technicians can't handle inbound customer communications in call centers, manage customer cases, or complete sales-oriented tasks without additional licenses.

SEE ALSO:

Limit Access to Field Service Records Set Up Inventory Access for Mobile Workers

# **Create Field Service Permission Sets**

Create Field Service permission sets from the Field Service Admin app.



🜐 This is a Field Service managed package feature.

Watch the video to see how to create and assign permission set licenses to give your team access to Field Service features.



Watch the video to see how to get Field Service provisioned for users.

### Watch a video

1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.

## 2. Click Getting Started and then Permission Sets.

These permission sets are created.

User Role	Permission Sets Created	Purpose
Field Service Admin	Field Service Admin Permissions AND Field Service Admin License*	Let users access and manage all Field Service objects, including the Field Service Visualforce pages and logic services. Field Service Admin Permissions contain the permissions included in the Field Service Dispatcher Permissions permission set, along with additional configuration permissions. *The Field Service Admin License isn't created in newer Salesforce orgs.
Field Service Agent	Field Service Agent Permissions AND Field Service Agent License*	Field Service Agent Permissions provides the minimum permissions needed to use the Field Service global actions, such as Book Appointment, Get Candidates, and Emergency actions. *The Field Service Agent License isn't created in newer Salesforce orgs.
Field Service Resource	Field Service Mobile License AND Field Service Scheduling License AND Field Service Resource Permissions	Field Service Mobile License provides the permission set license needed for users to log into the Field Service mobile app. Field Service Scheduling License provides the permission set license needed for the user to appear on the Gantt and to be scheduled by the scheduling engine and optimizer. Field Service Resource Permissions provides the minimum permissions needed for users to update appointment status and update their last known location.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

## USER PERMISSIONS

To configure the Field Service managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

• Manage Profiles and Permission Sets

User Role	Permission Sets Created	Purpose
Field Service Dispatcher	Field Service Dispatcher License AND Field Service Dispatcher Permissions	<ul><li>Field Service Dispatcher License gives users the permission set license needed to load the dispatcher console.</li><li>Field Service Dispatcher Permissions contain the permissions included in Field Service Agent Permissions and Field Service Resource Permissions along with permissions to operate the dispatcher console and run optimization.</li></ul>
Field Service Community Dispatcher	Field Service Community Dispatcher License AND Field Service Community Dispatcher Permissions	Users can view and use the dispatcher console, view global actions and their related objects, and schedule, optimize, and dispatch service appointments.
Field Service Self Service	Field Service Self Service License AND Field Service Self Service Permissions	Experience Builder site users can view all global actions and their related objects to create, book, and schedule their appointments.
Field Service Integration	Field Service Integration	Users can access data needed for optimization, automatic scheduling, and service appointment bundling.
Field Service Bundle for Dispatcher	Field Service Bundle for Dispatcher License AND Field Service Bundle for Dispatcher Permissions	Users can schedule and manage bundled service appointments.
Field Service Guest User	Field Service Guest User License	Field Service Guest User License provides the permissions for unauthenticated users to run appointment booking and scheduling actions.

When a permission set is current, the **Create Permissions** link on the tile is replaced by a message indicating that it's up to date.

## SEE ALSO:

How Are Field Service Permission Sets Updated?

# Assign Field Service Permissions

After you create your field service permission sets, give users the permissions they need to complete their field service tasks. You can assign permissions in Setup or in Guided Setup.

- 1. From Setup, in the Quick Find box, enter *Users*, and then select **Users**.
- 2. Click a user's name.
- **3.** Click **Permission Set Assignments** at the top of the page or scroll to the Permission Set Assignments related list.
- 4. Click Edit Assignments.
- 5. Enable the appropriate permission sets and click Save.

Tasks	Permission Sets
<b>Admin:</b> Manage all Field Service objects, including the Field Service Admin app, Field Service Visualforce pages, and logic services.	<ul> <li>Field Service Admin Permissions</li> <li>Field Service Admin License*</li> <li>*The Field Service Admin License permission set isn't created in newer Salesforce org, so it doesn't need to be assigned to users.</li> </ul>
<b>Agent:</b> Access all global actions and their related objects to create, book, and schedule service appointments.	<ul> <li>Field Service Agent Permissions</li> <li>Field Service Agent License*</li> <li>*The Field Service Agent License permission set isn't created in newer Salesforce orgs, so it doesn't need to be assigned to users.</li> </ul>
<b>Dispatcher:</b> Access all global actions and their related objects to create, book, and schedule service appointments.	<ul><li>Field Service Dispatcher License</li><li>Field Service Dispatcher Permissions</li></ul>
<b>Technician:</b> Manage service appointments and their related parent objects.	<ul><li>Field Service Mobile License</li><li>Field Service Resource License</li><li>Field Service Resource Permissions</li></ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

USER	PERM	ISSIONS
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To assign a permission set license:

• Manage Users

To create a permission set:

• Manage Profiles and Permission Sets

### How Are Field Service Permission Sets Updated?

Permission sets provided by the Field Service managed package are automatically updated at the beginning of each major release.

# How Are Field Service Permission Sets Updated?

Permission sets provided by the Field Service managed package are automatically updated at the beginning of each major release.

## 🜐 This is a Field Service managed package feature.

The managed package has three major releases each year that follows the Salesforce release cadence within 72 hours: Winter, Spring, and Summer.

Because new versions require new permissions, the permission sets provided by the managed package must be updated to include any new required permissions. All managed package-provided permission sets are updated when a user launches one of the following pages:

- Dispatcher Console (vf001\_ServiceExpert)
- Book Appointment Chatter action (AppointmentBookingVf and AppointmentBookingCommunitiesVf)
- Candidates Chatter action (GetCandidates)
- Emergency Chatter action (EmergencyWizard)

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

During this update process, any minimum permissions that were removed from the permission set are readded. Permissions added by an admin aren't removed.

Permission set auto-update is only triggered one time after every managed package upgrade.

Note: Avoid altering the default Salesforce Field Service permission sets within the managed package, as new package versions override any changes. Instead, create additional permission sets to customize permissions for specific users. If you must revoke a permission from the standard set for specific users, create a permission set group containing the Field Service standard permission sets, your custom permission sets, and a muting permission set.

To check if a permission set is current, from the App Launcher, find and open the **Field Service Admin** app. Click **Field Service Settings** > **Getting Started** > **Permission Sets**. Each permission set tile includes a message indicating that it's current. If it doesn't, click **Update Permissions** on the tile.

Note: Auto-update of permission sets is logged on the behalf of the user who triggered the update, even if the user doesn't have permission to update permission sets. To turn off this process, ask Salesforce to disable the *Auto Update of Field Service Permission Sets* feature. To update permissions for Apex Class, Record Types, and Tabs Visibility, you must be an admin or have ModifyAllData or ModifyMetadata permissions.

# Set Custom Permissions for Field Service

The Field Service managed package includes custom permissions that control users' access to actions and views. For example, you can control access to bulk actions, such as dispatching, optimizing, and scheduling, or the ability to drag appointments in the Gantt.

igoplus This is a Field Service managed package feature.

The custom permission sets apply only to the Field Service dispatcher console actions and views.

The list of Custom Permissions is on the Custom Permissions page in Setup. To assign them to users, add the custom permissions to a permission set. From Setup, in the Quick Find box, enter *Permission Sets*, and then select **Permission Sets**. Select the permission set and then select **Custom Permissions**. For example, add them to the Field Service Admin, Field Service Dispatcher, and Field Service Community Dispatcher custom permission sets before adding assigned users.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Optionally, you can give users the extended custom permissions marked in the table. To use these permissions, add them to users, and then activate them in **Field Service Settings** > **Dispatcher Console UI** > **Extended Custom Permissions**.

Note: If you activate the extended permissions without first adding them to users, you make the Gantt read-only. Activation is required only after in existing orgs and is irreversible. **Extended Custom Permissions** is automatically activated in Salesforce as of Summer '20.

The managed package custom permissions use the FSL namespace prefix.

Custom Permission	Description	
Abort Optimization Request	Abort an optimization request from the Gantt.	
Bulk Bundle	Bundle selected appointments from the appointment list.	
Bulk Dispatch	Dispatch selected appointments from the appointment list.	
Bulk Optimize	Submit an optimization request from the appointment list.	
Bulk Schedule	Schedule selected appointments from the appointment list or from polygons.	
Bulk Unbundle	Unbundle selected appointments from the appointment list.	
Bulk Unschedule	Unschedule selected appointments from the appointment list or from polygons.	
Create Absences from Gantt	Create resource absences on the Gantt.	
Create Custom Gantt Filters	Create custom filters for appointments on the Gantt.	
Fill-in	Fill in schedule gaps from the resource action menu.	
Fix Overlaps	Resolve overlapping appointments from the resource action menu.	
Enable Check Rules - All Services	Initiate a rule validation check on demand. This checks rules for all services loaded on the Gantt wher the rule validation frequency isn't <b>Always</b> .	
Enable Gantt Locker	Lock and unlock the Gantt chart using the Gantt locker. This action also disables dragging appointments to the Gantt from the appointment list or map. Standard and custom actions on the appointment list and map are still shown and enabled according to your org's setup. This permission is an extended custom permission.	
Gantt - Enable Adjusting Duration	Edit the start and end time of a service appointment or resource absence on the Gantt.	
Gantt - Enable Gantt Policy Picker	Select a nondefault policy for scheduling and calculating rule violations. This permission is an extended custom permission.	
Gantt and List - Bundle and Unbundle	Bundle and unbundle service appointments from the Gantt or from the appointment list.	
Gantt and List - Enable Bulk Check Rule	Check rules for multiple service appointments from the Gantt or from the appointment list.	
Gantt and List - Enable Check Rules	Check rules for a single service appointment from the Gantt or from the appointment list.	
Gantt and List - Show Get Candidates	Find resources for an appointment from the appointment list or from the Gantt. This permission is an extended custom permission.	

Custom Permission	Description	
Gantt and Map - Enable Drag and Drop	Drag selected services and resource absences from the appointment list, map, or Gantt, and place them on the Gantt. This permission is an extended custom permission.	
Gantt Palettes Edit	Create, edit, and delete Gantt palettes.	
Gantt Palettes View	View the Palettes tab in the Gantt, and apply the selected palette.	
Gantt - Show Change Status Action	Change the status from the Gantt. Without this permission, users can't dispatch from the map. This permission is an extended custom permission.	
Gantt - Show Pin Service	Pin or unpin appointments from the Gantt. This permission is an extended custom permission.	
Gantt - Show Unschedule	Unschedule appointments from the Gantt. This permission is an extended custom permission.	
Group Nearby	Adjust the schedule on the Gantt to find other appointments on that day that are close to the selected appointment.	
Hide map on Emergency Wizard	Hide the map view in the Emergency Wizard to show only candidates.	
Hide Live Positions from Dispatcher Console Map	Hide the Live Positions marker from the dispatcher console map.	
Hide Actual Routes from Resource Map	Hide the Actual Route from the service resource's map.	
Hide Live Positions from Resource Map	Hide the Live Positions marker from the service resource's map.	
Hide Resource's Last Seen Time from Gantt	Hide the service resource's Last-Seen indicator from the Gantt.	
Include Keep Scheduled in Optimize Window	Show the Keep Scheduled Criteria setting in the Optimize window.	
Longterm View	Show the Long-Term Gantt view in the dispatcher console. When this permission is enabled, the Long-Term Gantt view replaces the multi-day view.	
Map Polygons - Show In Jeopardy	Show the In Jeopardy flag from a map polygon. This permission is an extended custom permission.	
MDT View	Show the multi-day view in the dispatcher console. The Long-Term Gantt view replaces the multi-day view.	
Monthly Utilization	Show utilization in the Gantt resolution menu in the top-right corner.	
Policy Picker in Appointment Booking	Change the scheduling policy in the Book Appointment action.	
Policy Picker in Get Candidates	Change the scheduling policy in the Get Candidates action.	
Polygons - create\update	Create and update map polygons.	
Polygons - view	View map polygons.	
Publish custom Gantt filters	Share custom filters for appointments on the Gantt.	

<b>Custom Permission</b>	Description	
Reshuffle	Reshuffle appointments from the appointment action menu or when you right-click services on the Gantt.	
Resource Schedule Optimization	Optimize a resource's schedule from the resource action menu.	
Schedule	Schedule an appointment from the appointment list or from the map.	
Service List View - Canceled	Show the Canceled appointment list.	
Service List View - Contractors	Show the Contractors appointment list.	
Service List View - Crews	Show the Crews appointment list.	
Service List View - Exclude Bundle Members	Show service appointments that aren't bundle members in the appointment list.	
Service List View - Flagged	Show the Flagged appointment list.	
Service List View - Gantt	Show the Gantt appointment list.	
Service List View - In Jeopardy	Show the In Jeopardy appointment list.	
Service List View - Rule Violating	Show the Rule Violating appointment list.	
Service List View - Scheduled	Show the Scheduled appointment list.	
Service List View - Selected	Show the Selected appointment list.	
Service List View - Todo	Show the Todo appointment list.	
Service List View - Unscheduled	Show the Unscheduled appointment list.	
Streaming API	After activating Gantt Live Updates, use the streaming API to send live streaming updates of the Gantt. When this permission is disabled, users see only Gantt changes timed using the interval defined in <b>Field Service Settings</b> > <b>Dispatcher Console UI</b> > <b>Timed Updates</b> .	
Utilization on Service Territory	For the selected Gantt horizon, view utilization percentages for each territory's workforce.	
View resource on secondary STM	Show a resource's secondary territory membership on the Gantt.	

Example: To limit the dispatchers who can optimize your schedule so the system isn't bogged down with optimization requests, remove custom permissions for bulk actions in the dispatcher console:

- FSL.Bulk Dispatch
- FSL.Bulk Optimize
- FSL.Bulk Schedule
- FSL.Bulk Unschedule

A user with the FSL.Bulk Optimize custom permission sees the **Optimize** action. Users without it can't run an optimization. Removing any of these custom permissions hides the action in the user interface.

# Assign Field Service Page Layouts

The Field Service managed package provides standard object page layouts that include field service Visualforce components and Chatter actions. Assign these page layouts to the System Administrator and Standard User profiles.

- $\stackrel{\textcircled{}_{}_{}_{}}{\oplus}$  This is a Field Service managed package feature.
  - **Note:** If you created your own field service profiles, perform the following steps on those profiles instead of the standard profiles.
- 1. From Setup, enter *Profiles* in the Quick Find box, then click **Profiles**.
- 2. Click System Administrator.
- 3. In the Page Layouts section, find the Operating Hours object and click View Assignment.
- 4. Select all profiles and assign the FSL Operating Hours Layout.
- 5. Click Save.
- 6. Repeat the previous steps for the following objects.
  - Service Appointment: Assign the FSL Service Appointment Layout
  - Service Resource: Assign the FSL Service Resource Layout
  - Work Order: Assign the FSL Work Order Layout
  - Work Order Line Item: Assign the FSL Work Order Line Item Layout
  - Work Type: Assign the FSL Work Type Layout
- 7. Save your changes.
- 8. Repeat the previous steps for the Standard User profile.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To customize the Field Service managed package:

- Customize Application
- To assign page layouts:
  Manage Profiles and Permission Sets

# Set Up Service Territories, Operating Hours, and Shifts for Field Service

Create service territories to track the places where your team performs field service work. Assign regular operating hours to each service territory to indicate when work can be performed. Create shifts to assign resources to ad hoc hours, such as holiday hours or for workers without a set schedule.

### Create Service Territories for Field Service

Organize your field service workforce by creating service territories from Guided Setup or from the Service Territories tab. Tailor these territories to represent geographic regions—such as cities, counties, or neighborhoods—or functional areas such as field sales and field service, depending on your business needs. For utility customers, service territories can include specific business units such as Gas or Electric. The territory location is stored in the address section. If you plan to build out a hierarchy of service territories, create the highest-level territories first.

### Create Operating Hours for Field Service

Set operating hours to make sure your field service workforce is available for appointments during their working hours. Define customer availability so that appointments are scheduled

when customers can receive service, and establish default Appointment Booking and entitlement-based appointment windows to enhance service delivery. This approach ensures efficient scheduling, aligning workforce and customer availability for improved satisfaction.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### Set Up Shifts for Field Service

Shifts in Field Service let you define variable working periods for your shift-based workforce, such as contractors or on-call staff. Create shifts for particular dates and times when you need coverage, and assign them to service resources. When the Field Service managed package is installed, scheduling and optimization considers shifts assigned to service resources as availability for assigned work in addition to the service resource's Operating Hours on their Service Territory or Territory Member record.

### SEE ALSO:

Set Up Your Field Service Workforce

# Create Service Territories for Field Service

### USER PERMISSIONS

To create service territories:	Create on service territories
To view service territories and the Service Territories tab:	Read on service territories
To edit service territories:	Edit on service territories
To delete service territories:	Delete on service territories
To view service territory locations:	Read on service territories
To create, update, or delete service territory locations:	Edit on service territories
To view service territory members:	Read on service territories

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To create, update, or delete service territory Edit on service territories members:

Organize your field service workforce by creating service territories from Guided Setup or from the Service Territories tab. Tailor these territories to represent geographic regions—such as cities, counties, or neighborhoods—or functional areas such as field sales and field service, depending on your business needs. For utility customers, service territories can include specific business units such as Gas or Electric. The territory location is stored in the address section. If you plan to build out a hierarchy of service territories, create the highest-level territories first.

Before you start, make a list of the territories you want to create and who works in each territory. To keep scheduling straightforward, try to create territories with no more than 50 mobile workers assigned to them. Review Guidelines for Creating Service Territories for Field Service.

You can organize service territories into hierarchies of up to 10,000 territories. We recommend creating the highest-level territories first. For example, create a San Francisco Bay Area territory with four child territories: Peninsula, North Bay, South Bay, and East Bay.

If the Field Service managed package is installed, use Guided Setup to quickly create your service territories.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click **Go to Guided Setup**. When you launch guided setup, your Field Service permission sets are scanned to make sure that they're up-to-date. You see a message if you're missing a necessary permission.
- 3. Click Create Service Territories.
- 4. Create your territories one by one. Click a territory name to update its name, operating hours, address, and travel time buffer.

 Operating hours indicate the working hours of mobile workers in the territory. Territory members use these hours unless different hours are specified on their service territory member records. Use the lookup to select existing operating hours, or click New Operating Hours to create your own.

To create more complex or varying time slots, save your new operating hours and click Open Operating Hours Record below the Operating Hours field. Then, customize your time slots in the Time Slots related list.

To avoid issues with appointment booking, always specify a time zone on your operating hours.

6. To account for activities other than driving, such as unloading technical gear, walking time in a building complex, or finding parking, define a travel time buffer. Valid values are 0 to 120 minutes. When an appointment in this territory is scheduled, or when the schedule changes, the buffer is added to the estimated travel time of the assigned resource. Defining a value for a territory overrides the travel time buffer you define when setting up routing on page 138.

	Search All v Q. Search		*- 🖬 🌣 ? 🌣 🤌 🐯		
Field Service Admin Home	Field Service Settings Service Territories $\lor$ Operating Hours $\lor$ Work Types $\lor$ Service Resources $\lor$ User Territories $\lor$ Schedulin	ing Policies 🗸 🛛 Work Rule	es 🗸 Service Objectives 🗸 🛛 🛛		
Search Q.	Scheduling				
Getting Started	GENERAL LOGIC SCHEDULING POLICIES DYNAMIC GANTT ROUTING BUNDLING WORK CAPACITY				
<ul> <li>Service Appointment Life Cycle</li> </ul>					
Global Actions	When using SLR, it is highly recommended to change the optimization time to Medium or To change the optimization runtime go to Optimization $\rightarrow$ Logic	r High.			
Scheduling	Enable Street Level Routing 🕘				
General Logic Scheduling Policies	Enable Point to-Point Predictive Routing Learn More in Help 🛞				
Dynamic Gantt	Calculate travel and breaks (2)				
Routing	Travel speed unit	МРН	:		
Bundling Work Capacity	Default travel speed 💿	15			
Dispatcher Console UE	Travel Time Buffer (in minutes)	5			

Travel time buffers are available only when you're using Enhanced Scheduling and Optimization.

Note: The buffer doesn't affect:

- Consecutive appointments that don't have travel times, including appointments that are offsite or at the same site.
- Estimated travel times of capacity-based resources.
- 7. Drag territories within the list to create a hierarchy.

**8.** To update additional fields on a service territory or attach files, select the territory name and click **Open Service Territory Record**. If the managed package isn't installed, create and manage service territories from the Service Territories tab.

### Guidelines for Creating Service Territories for Field Service

Learn how to use service territories to track where your field service team works and to organize your field workforce.

SEE ALSO:

Service Territory Fields for Field Service Guidelines for Creating Service Territories for Field Service

# Guidelines for Creating Service Territories for Field Service

Learn how to use service territories to track where your field service team works and to organize your field workforce.

# Why Territories Are Important

The way in which Service Territories are created - what they represent, whether a geography, line of business, or both, and which and how many Service Resources they include - impact several areas of Field Service. Service Territories dictate how Service Resources are viewed within the Dispatch Console, scheduling processes, dispatching processes, optimization processes, and more.

## Service Territories

Use the Guided Setup or the Service Territories tab to create service territories representing geographic or functional areas, such as cities or lines of business.

Service territories can be associated with other territories as part of a hierarchy, which is helpful for grouping purposes. Service territory hierarchies can contain up to 10,000 territories. For example, a utility company can have Gas and Electric functional territories, with geographic child territories such as Gas - Northern CA.

Not all service territories in the hierarchy require service resources. For example, some territories serve only as a form of grouping child territories, and resources are members of the lower-level territories only. For example, Gas - Northern, CA can have resources within it, but the Gas parent territory doesn't. For lower-level service territories that include service resources, you must add an address on the service territory record. The address represents the general location of the service territory and where resources are leaving from and returning to at the start and end of their work day. This address is the home base, used for travel calculation at the start and end of the service Territory member record and used instead of the address on the service territory when scheduling for that particular service resource.

- Note: If your company provides service across multiple time zones, ensure that territories created don't encompass geographies that span multiple time zone. For example, Kentucky includes multiple time zones. Instead, create separate territories such as Eastern Kentucky and Western Kentucky. Associate each territory with map polygon KML records that define geographical boundaries aligning with the time zone line. This practice is critical to ensure that when you're scheduling work, the scheduled times are always set and communicated in the local time zone of both the customer and the technicians.
- Note: Most Field Service customers adopt a private org-wide default sharing model for service territories, service resources, and service appointments. This approach ensures that record access is granted on a need-to-know basis. Salesforce Field Service offers out-of-the-box sharing capabilities that facilitate appropriate access when a private sharing model is in place. Specifically, service resources and service appointments associated with a service territory are shared with dispatchers responsible for managing that service territory. This sharing functionality is achieved through the use of public groups, User Territory records, and the user territory scheduled job. See Limit Access to Field Service Records

If your primary and secondary service territories have the same operating hours, you don't need to apply the operating hours to both territories. It's sufficient to set only the primary service territory operating hours and leave the secondary service territory Operating Hours field empty.

# **Territory Size**

The size of your service territories has a significant impact on scheduling, optimization, and dispatching. If a service territory is too large and many service resources and dispatchers are assigned to it, optimization and dispatching become cumbersome. Try to stay within these suggested limits when designing your service territories:

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

- Up to 50 service resources per service territory
- Up to 1,000 service appointments per day per service territory
- Up to 20 qualified service resources per service appointment

## Service Territory Members

Service territory members are service resources who work within the territory. Associating them with a territory ensures that they're assigned to appointments near their home base.



**Note:** Service territory members must have their home base location geocoded so that the scheduling engine knows the resource's start and end points.

Assign service resources to service territories in the Service Territories related list on the resource detail page or the Service Territory Members related list on the territory detail page. Use the Type field to indicate whether the territory is a primary, secondary, or relocation territory for the resource. Scheduling and optimization is supported only for service territories with at least one primary service territory member.

- The primary territory is typically the territory where the resource works most often—for instance, near their home base. Resources can have only one primary territory. If a Match Territory work rule is included in the applied scheduling policy, the resource can be assigned only to appointments in their primary or relocation territories.
- Secondary territories are territories where the resource can be assigned to appointments if needed. A resource can have more than one secondary territory.
- Relocation territories represent temporary moves and, during their active dates, serve as the primary territory during scheduling. If a Working Territories work rule is included in the applied scheduling policy, the resource can also be assigned to appointments in their secondary territories.
- If you aren't using Enhanced Scheduling and Optimization, secondary territory memberships must be identical to, or contained within, the primary territory membership for a particular time and resource. If the secondary territory memberships aren't fully covered by a primary territory membership, availability applies only to the overlapping period.

# Membership Start and End Times

Follow these best practices to avoid issues during scheduling and optimization.

- Service territory memberships should be 24 hours or longer.
- Service territory memberships should start and end at the same hour, and shouldn't fall inside the operating hours listed on the membership record (or if no hours are listed, on the service territory). This way, there's no question about the resource's availability on their first day as a member of the territory. For simplicity, we recommend using midnight (00:00). For example:
  - Start Date: 1/12/2019 00:00
  - End Date: 3/12/2019 00:00
  - Note: We recommend using 00:00 because it aligns with Field Service's default Start of Day, which is 00:00. However, you can set a custom Start of Day on Service Resource Availability work rules if the default doesn't make sense—for example, if your team typically works night shifts. To enforce a custom Start of Day, from the Field Service Admin app, click Field Service Settings > Scheduling and select Set the hour that starts a new day based on the Availability rule(s). If the applied scheduling policy uses a custom Start of Day, set your service territory memberships to start and end at that time rather than at midnight.
- During scheduling and optimization, Field Service uses the service territory member's own time zone—set on the user record—to interpret the territory membership start and end times. If the user's time zone differs from the service territory's time zone, adjust the membership start and end time accordingly. For example, if the user's time zone is 3 hours behind the service territory's time zone, set the territory membership start time to 3:00 rather than 00:00.

• If you're using optimization, service territory memberships can't be longer than three years. If you need a service territory membership to be longer than three years, keep the End Date fields blank.

## **Deleting Service Territories**

You can't delete a service territory with service appointments. If you try to delete it, you're prompted to assign the appointments to a different territory.

If you delete a service territory with members, the service resources who were members no longer have a connection to the territory.

## **Deleting Service Territory Memberships**

Service resources without a primary service territory membership aren't considered in scheduling or optimization and their associated service appointments aren't automatically unscheduled or reassigned. When deleting a primary service territory membership, you need to unschedule future service appointments for the service resources that no longer have a primary service territory membership to ensure these service appointments can be reassigned to a different resource with a valid primary service territory membership.

## Locations to Service Territories

Associate location records with service territories from the Service Territory Locations related list. Add site, plant, and warehouse locations to the service territories in which they're located. Add mobile locations, like vans, to the service territories where they can be used for field service work.

### SEE ALSO:

Service Territory Fields for Field Service

# Create Operating Hours for Field Service

## USER PERMISSIONS

To view operating hours and time slots:	Read on operating hours	Ave
To create operating hours:	Create on operating hours	Clo
To assign operating hours to service resources:	Edit on service resources	Exp
To assign operating hours to service territories:	Edit on service territories	fea
To assign operating hours to accounts:	Edit on accounts	are Un
To update, create, or delete time slots:	Edit on operating hours	Edi
To assign holidays to operating hours:	Edit on operating hours	

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Set operating hours to make sure your field service workforce is available for appointments during their working hours. Define customer availability so that appointments are scheduled when customers can receive service, and establish default Appointment Booking and entitlement-based appointment windows to enhance service delivery. This approach ensures efficient scheduling, aligning workforce and customer availability for improved satisfaction.

### Salesforce Field Service

We recommend creating operating hours in Guided Setup—a Field Service managed package feature—to save time and gain visibility into how they're used. Operating hours are an element of the following Guided Setup steps.

- Create Service Territories
- Create Service Resources
- Customize Appointment Booking

You can also create and manage operating hours from the Operating Hours tab, outside of Guided Setup. By default, only System Administrators can view, create, and assign operating hours. Also, operating hours aren't available in the Organization-Wide Default Sharing Settings.

Operating hours are composed of time slots, which are managed from the Time Slots related list on an operating hours record. Time slots can vary by day. A day can have multiple time slots, but they must be adjacent for the hours to be respected during optimization. For example, an operating hours record can have the following time slots.

- Monday, 9 AM to 5 PM
- Tuesday, 9 AM to 5 PM
- Wednesday, 6 AM to 12 PM and Wednesday, 12 PM to 6 PM
- Thursday, 9 AM to 5 PM
- Friday, 9 AM to 5 PM

If a resource is unavailable during the day at a specific time slot, you must indicate this using Resource Absence, and not split availability. For example, if a service resource is available on Wednesday, 6 AM to 12 PM, and again from 1 PM to 6 PM, then extend availability from 6 AM to 6 PM and insert a Resource Absence between 12 PM and 1 PM.

Each operating hours record is associated with a time zone, which ensures that scheduling and optimization work properly. For appointment booking hours, Field Service uses the time zone listed on the operating hours of the service appointment's service territory. This way, one operating hours record can be used to represent appointment booking windows across your customer base.

**Note:** If you have access to 2,000 or more service territories, the service territories list shows only selected territories. Use the search bar to find territories that aren't selected. 24-hour operating hours coverage isn't supported for mobile workers and capacity-based resources.

# Assigning Operating Hours to Service Resources

A service resource's hours can vary depending on the service territory where the resource is working. Service resources therefore have unique operating hours for their primary and secondary territories. Service territory members automatically use their service territory's operating hours, although the Operating Hours field on the service territory member record appears blank. If a resource needs different operating hours than their territory, assign them separate operating hours on their service territory member record.

To view a service territory member record, click the member number in one of the following related lists.

- Service Territory Members list on the service territory
- Service Territories list on the service resource

Operating hours listed on a secondary territory member record are respected during scheduling only if:

- They're identical to or contained within the resource's primary territory membership's hours if you aren't using Enhanced Scheduling and Optimization.
- **Respect secondary STM operating hours** is selected. From the App Launcher, find and select the Field Service Admin app. Go to **Field Service Settings** > **Scheduling** > **General Logic**.

Otherwise, the primary service territory operating hours are used.

For example, suppose Shelly has a primary and secondary service territory. Her Monday hours are 12:00 PM to 5:00 PM in the primary territory, but 9:00 AM to 5:00 PM in the secondary territory. When she's being scheduled to a Monday service appointment in the secondary territory, her primary hours are used because they're more restrictive.

When you aren't using Enhanced Scheduling and Optimization, secondary operating hours don't contribute to resource availability because they're always fully contained in the primary operating hours. When you're using Enhanced Scheduling and Optimization, because secondary operating hours don't need to be fully contained, operating hours on secondary service territories adds resource availability. You can increase resource utilization and reduce response time by enabling your resources to service multiple time zones in one shift. Set operating hours on secondary service territories in various time zones to maximize resource availability. For example, a mobile worker can service adjacent cities in different time zones. Or, a service resource can provide technical assistance from a call center to New York, Tel Aviv, London, and Sydney.

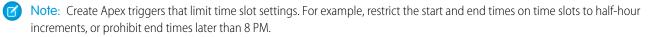
For example, Melissa has Columbus, GA, as her primary service territory with 9:00 AM to 5:00 PM operating hours and has a secondary service territory Phenix City, AL, also with 9:00 AM to 5:00 PM operating hours. Columbus, GA is in a time zone that's 1 hour ahead of Phenix City, AL. Melissa's availability is calculated from each respective territory's operating hours such that Melissa is available to work for 9 hours overall. During the first hour of her shift, Melissa services only Columbus, GA, while for the next 7 hours, she covers both territories. During the last hour of her day, Melissa services only Phenix City, AL.

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MELISSA W (Secondary) Water Systems Specialist																					

# **Enforcing Operating Hours**

If the Field Service managed package isn't installed, operating hours serve as a suggestion rather than a rule. If the managed package is installed, here's how operating hours affect scheduling.

- During schedule optimization, service resources are assigned only to appointments that fall within the operating hours listed on their service territory member record or, if none is listed, on the primary service territory record.
- The Field Service Service Appointment Visiting Hours work rule type ensures that a customer's appointments fall within their account's operating hours. Add a work rule of this type to any scheduling policy. When you're using Enhanced Scheduling and Optimization, visiting hours use the time zone of the operating hours record or the time zone of the service appointment's service territory, depending on your defined setting. When you're not using Enhanced Scheduling and Optimization, visiting hours use the time zone of the service territory.



# Setting Up Operating Hours for Contractors

For contractors who work regularly and are using our per-user-per-month Contractor or Contractor Plus Licenses, scheduling works the same as for any other regular user. For contractors who work less frequently, it can be more cost-effective to use our Contractor or Contractor Plus login-based licenses. Set up operating hours by assigning shifts instead of using standard operating hours, so it doesn't look like your contractors are always available for work.

To ensure 24-hour operating hour coverage for capacity-based resources, define their time slots to start at 12:00 AM and to end at 23.59, enabling the resources to be considered as continuously available.

To use shifts on page 408 to set availability, first assign operating hours to the service resource's territory membership (from the service resource's Related tab). Otherwise, the system defaults to assigning the contractor the operating hours for that service territory. Then, assign them shifts on the days they work, whether that's recurring or only a few times per year. If the shift spans for more than 1 day, contractors can be assigned to appointments that take place at any time during their shift, ensuring 24-hour coverage.

# Adding Holidays to Operating Hours

Modify operating hours by adding holidays, which represent closures or important dates. Holidays appear as unavailable time in the dispatcher console, and an icon near the date displays holiday details. The shift schedule view also shows holidays as unavailable time. But you can add availability with a shift marked as a holiday shift. Holiday shifts let you assign mobile workers to holiday dates that would otherwise be blocked off.

You can assign holidays to individual service resources by creating operating hours assigned to the specific service resource. Individualized operating hours let you adjust a worker's availability based on birthdays, religious holidays, or personal schedules.

To apply holiday logic during schedule optimization, make sure Enhanced Scheduling and Optimization is enabled in Field Service Settings. Otherwise, holidays are marked on the calendar but don't impact scheduling.

When you're using Enhanced Scheduling and Optimization, you can add holidays that represent the time when customers aren't available to receive services. These holidays take precedence over the customers' preferences for operating hours.

For recurring holidays, only the first upcoming holiday is shown on the Gantt and accounted for in scheduling and optimization. Subsequent holidays show on the Gantt after the first holiday passes.

### Guidelines for Creating Operating Hours for Field Service

Operating hours in Field Service can represent the availability of a mobile worker for scheduled work (defined on the Service Territory or Service Territory Member record), appointment booking arrival windows (defined as a default in Field Service Settings, or per Work Order, via Entitlements), and customer availability requirements (Visiting Hours on the Work Order). Learn how to set operating hours for each scenario.

### Add Holidays to Operating Hours

Holidays help you manage the schedule when your business is closed. Create holidays, then add the holidays to your operating hours. Scheduling and optimization processes can take your holidays into account so that work isn't scheduled.

### SEE ALSO:

Guidelines for Creating Operating Hours for Field Service Operating Hours Fields for Field Service Time Zones and Appointment Booking Work Rule Type: Service Appointment Visiting Hours Guidelines for Setting Up Field Service Contractors

# Guidelines for Creating Operating Hours for Field Service

Operating hours in Field Service can represent the availability of a mobile worker for scheduled work (defined on the Service Territory or Service Territory Member record), appointment booking arrival windows (defined as a default in Field Service Settings, or per Work Order, via Entitlements), and customer availability requirements (Visiting Hours on the Work Order). Learn how to set operating hours for each scenario.

When operating hours are associated with	They represent	How to configure
Accounts	The customer's availability for service appointments. For example, availability can be an account's normal business hours if service appointments must occur during business hours.	Update the Operating Hours field on an account with an operating hours record that has time slots aligned with when the customer is available for service at their location. The Operating Hours record is automatically transferred to the Visiting Hours field on the Work Order when a Work Order is created. This information is considered when scheduling an appointment associated with that Work Order if there is a Service Appointment Visiting Hours work rule configured in the scheduling policy.
Service territories	The default working hours for the service territory members, unless different hours are specified on a service territory member record.	Select operating hours when creating a service territory in Guided Setup. Or, update the Operating Hours field on the service territory record.
Service territory members	The hours when the member (a service resource) is available to work if these hours differ from the service territory operating hours. If the member's availability is the same as the service territory, it's a best practice not to define separate operating hours for the service territory member. In this case, the service territory's operating hours govern the resource's availability.	Update the Operating Hours field on a service territory member record.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When operating hours are associated with	They represent	How to configure
Appointment booking	The appointment booking arrival windows offered to customers during scheduling.	Select your default operating hours for appointment booking in the <b>Customize</b> <b>Appointment Booking</b> step in Guided Setup. Or, from the App Launcher, find and open the <b>Field Service Admin</b> app, and then click <b>Field Service Settings</b> > <b>Global</b> <b>Actions</b> > <b>Appointment Booking</b> . Then, update the Default Operating Hours field.
		The Timezone field on the operating hours record, used for appointment booking slots, isn't considered during scheduling. Instead, the appointment time slots are assumed to be in the service territory's time zone. You're not required to create multiple appointment booking operating hours windows for each time zone where service is offered.

Note: If different appointment booking windows are needed for different level of service, add entitlements to your work orders. For example, standard customers get 4-hour booking windows while VIP customers get 2-hour windows. In the Operating Hours field on the entitlement, select the appropriate appointment booking window operating hours.

#### SEE ALSO:

Create Operating Hours for Field Service Operating Hours Fields for Field Service Time Zones and Appointment Booking Work Rule Type: Service Appointment Visiting Hours Guidelines for Setting Up Field Service Contractors

# Add Holidays to Operating Hours

Holidays help you manage the schedule when your business is closed. Create holidays, then add the holidays to your operating hours. Scheduling and optimization processes can take your holidays into account so that work isn't scheduled.

Watch the video to see how to add holidays to operating hours to reflect when your business is open.

### Watch a video

Before you start:

- To use holiday operating hours, ensure that the Operating Hours Holidays related list is on the operating hours page layout.
- To account for holidays during schedule optimization, Enhanced Scheduling and Optimization must be enabled in Field Service Settings. Otherwise, holidays are marked on the calendar but don't impact scheduling. Make sure Enhanced Scheduling and Optimization is enabled for each service territory.
- For scheduling recurring holidays, only the first upcoming holiday is shown on the Gantt and accounted for in scheduling and optimization. Subsequent holidays show on the Gantt after the first holiday passes.
- **1.** Create holidays in Setup.
- 2. From an operating hours record, go to the Operating Hours Holidays related list and click New.
- 3. Search for and select a holiday, then save your changes.

Note: It can take a few minutes for newly created holidays to appear in the search results.

4. Repeat these steps for each holiday.

Operating Hours Gold Appointmen	ts Calendar	>	New Contact
ime Zone GMT-08:00) Pacific Standard	d Time (America/Los_Angele	New Operating Hours Holiday	
Related Details		Information Operating Hours Holiday Number	
Time Slots (6+)		Operating Hours	
Day of Week	Start Time	Gold Appointments Calendar ×	
Monday	9:00:00 AM	*Holiday	
Monday	11:00:00 AM	Thanksgiving ×	
Monday	1:00:00 PM	Line international V	
Monday	3:00:00 PM		
Tuesday	9:00:00 AM	Cancel Save & New Save	
Tuesday	11:00:00 AM	Cancer Save & New Save	
		View All	
Operating Hours	Holidays (0)	New	

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **USER PERMISSIONS**

To add holidays to operating hours:

- Edit on operating hours
- To create holidays:
- Manage Business Hours Holidays

SEE ALSO: Set Up Support Holidays Enable Enhanced Scheduling and Optimization

# Set Up Shifts for Field Service

Shifts in Field Service let you define variable working periods for your shift-based workforce, such as contractors or on-call staff. Create shifts for particular dates and times when you need coverage, and assign them to service resources. When the Field Service managed package is installed, scheduling and optimization considers shifts assigned to service resources as availability for assigned work in addition to the service resource's Operating Hours on their Service Territory or Territory Member record.

### What Are Shifts?

Shifts let you set up work intervals that vary from day to day or week to week. You can extend or replace your operating hours with shifts.

### Create a Job Profile for Shifts

With Field Service, you can describe different kinds of shifts by using a job profile. To indicate the experience or expertise required for a job, add skills to the job profile. Job profiles and related skill requirements are referenced when you're using shift-assignment tools, such as the Get Candidates shift scheduling action, or when you're assigning shifts in bulk. For example, a healthcare company can use job profiles to differentiate shifts that require on-call nurse practitioners from social workers or therapists.

### Prepare Your Org for Shift Scheduling

Add rules, objectives, and constraints that help shift managers assign the right service resources to shifts. You can account for a service resource's preferred hours with scheduling preferences. After you define your shift scheduling objectives, you can use the Get Candidates Shift action (not to be confused with the Get Candidates action for assigning service appointments to service resources) and Mass Shift Update actions to assign shifts to service resources.

### Build Repeating Shift Patterns

Save time creating shifts by defining commonly used patterns of shifts in Field Service. Create templates that define the start time and job profile. Then build a pattern that lists the shift templates to use each day.

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# What Are Shifts?

Shifts let you set up work intervals that vary from day to day or week to week. You can extend or replace your operating hours with shifts.

# Shifts Versus Operating Hours

Shifts are similar to operating hours in Salesforce, with some key differences. Operating hours let you define consistent, ongoing time slots when your team is available. Shifts, by contrast, let you define variable time slots that can vary from day to day. You can use both shifts and operating hours to assign work, so that you can assign team members to shifts where and when they're needed.

For example, if you use operating hours for your regular weekday hours, you can create shifts to define weekend on-call duties. You can use shifts instead of operating hours. For example, you can create shifts for a workforce of students or contractors who don't have regular work hours. Make sure you define an Operating Hours record with no associated time slots for the service resource's Territory Member records when using shifts instead of operating hours, as Resource Availability considers both operating hours and shifts.

## Shift Scheduling Versus Service Appointment Scheduling

**EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

Shift scheduling and service appointment scheduling are different functionalities. Shift scheduling assigns ad hoc availability hours to a service resource, while service appointment scheduling assigns work to a service resource. You can use shifts and shift scheduling in addition to service appointment scheduling.

Field Service includes specific tools and records for assigning shifts, distinct from tools used for scheduling service appointments. To avoid confusion, learn more about the differences between shift scheduling tools and service appointment scheduling tools.

SHIFT SCHEDULING	SERVICE APPOINTMENT SCHEDULING
Scheduling rules in Setup determine which service resource can be assigned a shift through shift scheduling tools.	Work rules associated with scheduling policies determine which service resource can be assigned a service appointment by using appointment scheduling tools.
Scheduling objectives in Setup determine the best service resource to be assigned a shift based on business goals.	Service objectives associated with scheduling policies determine the best service resource to be assigned a service appointment based on business goals.
Job profiles determine which skills a service resource must have to be assigned a shift.	Work types determine which skills a service resource must have to be assigned a service appointment as well as other factors such as duration and due date.
Shift scheduling constraints can be used to limit how many shifts can be assigned to a service resource within a given time frame.	Count work rules can be used to limit how many service appointments can be assigned to a service resource each day.
Shift scheduling tools include the Get Candidates shift assignment action, and bulk shift assignment by using the Mass Shift Update button on the shift list view.	Appointment scheduling tools include the Get Candidates and Book Appointment actions on the Work Order page layout and other tools for assigning service appointments.

# Prerequisites for Using Shifts

Make sure that your Salesforce org meets the following requirements to use shifts.

• You must have at least one service territory.

#### Salesforce Field Service

- You must have at least one service resource who's assigned to a service territory.
- To let them create shifts, give your shift and service managers access to view, create, and edit the following objects:
  - Shifts
  - Job Profiles
  - Service Territories
  - Service Resources
  - Service Territory Memberships
- To select job profiles when you create shifts, add the Job Profile field to shift layouts.
- To select recordset filter criteria when you create shifts, add the Recordset Filter Criteria field to shift layouts. Give users access to view the Recordset Filter Criteria object.

## Limitations for Shift Management

- Scheduling and optimization features in the managed package don't consider job profiles.
- On the Shifts tab, you can't use the quick search box to filter.
- The NOT operator isn't supported when you define filter logic for shifts. If your filter logic uses NOT, we recommend adjusting the filter type instead, for example by using the does not contain operator.

SEE ALSO:

Prepare Your Org for Shift Scheduling Manage Field Service Shifts

# Create a Job Profile for Shifts

With Field Service, you can describe different kinds of shifts by using a job profile. To indicate the experience or expertise required for a job, add skills to the job profile. Job profiles and related skill requirements are referenced when you're using shift-assignment tools, such as the Get Candidates shift scheduling action, or when you're assigning shifts in bulk. For example, a healthcare company can use job profiles to differentiate shifts that require on-call nurse practitioners from social workers or therapists.

- 1. From the App Launcher, click Job Profiles.
- 2. Click New.
- 3. Enter a name and description for the job profile.
- 4. Associate skills with the job profile.
  - **a.** In the Related tab, next to Skill Requirements, click **New**.
  - **b.** Select the skill and skill level that are required for the job profile. The skills available are based on your settings in Setup. You can also create skills.
  - c. Click Save.

To continue adding skills, repeat these steps.

5. Click Save.

### SEE ALSO:

What Are Shifts? Assign Shifts and Update the Status in Bulk Find Shift Candidates Create Skills for Field Service

# Prepare Your Org for Shift Scheduling

Add rules, objectives, and constraints that help shift managers assign the right service resources to shifts. You can account for a service resource's preferred hours with scheduling preferences. After you define your shift scheduling objectives, you can use the Get Candidates Shift action (not to be confused with the Get Candidates action for assigning service appointments to service resources) and Mass Shift Update actions to assign shifts to service resources.

When you assign shifts to service resources, Field Service includes specific tools and records used exclusively for assigning shifts, distinct from tools used for scheduling service appointments.

- Scheduling Rules (Setup): Determine how shifts are assigned based on predefined criteria.
- Scheduling Objectives (Setup): Help prioritize the assignment of shifts to meet certain goals.
- Job Profiles: Define the roles and responsibilities suitable for certain shifts.
- Skill Requirements (for Job Profiles) Make sure that service resources have the necessary skills for the shifts that they're assigned to.
- Shift Scheduling Constraints: Limit when and how service resources can be scheduled for shifts.
- Get Candidates shift assignment action: Helps identify the most suitable service resources for available shifts.

These records and actions share similar naming but serve a different purpose to the work rules, service objectives, and skill requirements associated with work orders and work order line items. The same applies to the Get Candidates action used for scheduling service

# **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update shifts and job profiles

View, create, and edit on Shifts, Job Profiles, Service Territories, Service Resources, Service Territory Memberships appointments (work) to service resources. Each set of tools serves a unique purpose within Field Service to streamline the scheduling process.

Note: Shifts and shift scheduling (assigning ad hoc availability hours to a service resource) is a different concept from service appointment scheduling (assigning work to a service resource) in Field Service. Many Salesforce Field Service customers use Field Service only to assign service appointments to their workforce and don't use shifts or shift scheduling. However, some companies use shifts and shift scheduling.

#### Create a Scheduling Objective for Shifts

Planners and administrators can optimize the shift scheduling process by adding Scheduling Objectives, which apply various business goals to the scheduling process.

#### Create a Scheduling Rule for Shifts

Create rules that define which shifts are to be assigned to which service resources. You can use the default rules, or create your own scheduling rules.

#### Scheduling Rule Types

Scheduling rules help match service resources to shifts. When the scheduling logic looks for service resources to assign to shifts, it checks your rules.

#### Add Shift Scheduling Constraints

Scheduling constraints are records that are defined on the service resource or service territory. They set the limit for how many shifts, in units or hours, can be assigned to a resource over a given time period (for example a day, week, or month). To match service resources to shifts, the work limit-type scheduling rule looks first for a constraint on the service resource. If no constraint is found, the rule looks for a scheduling constraint on the service territory.

SEE ALSO:

Assign and Update Field Service Shifts What Are Shifts? Prepare Your Org for Shift Scheduling

# Create a Scheduling Objective for Shifts

Planners and administrators can optimize the shift scheduling process by adding Scheduling Objectives, which apply various business goals to the scheduling process.

Create scheduling objectives that reflect your shift scheduling goals. When a planner schedules shifts for service resources, the shift scheduling engine gives each objective equal weight. For each objective, potential service resources are assigned a score to reflect how well the objective is met. The service resource with the highest score is prioritized for shift scheduling.

- 1. Access the Scheduling Objectives page.
  - a. From Setup, in the Quick Find box, enter *objectives*, and then select **Scheduling Objectives**.

From the Scheduling Objectives page, you can:

- Select, customize, or create your own view of the data.
- Create, edit, and delete scheduling objectives.
- 2. Create a Scheduling Objective.
  - a. From the Scheduling Objective page, click New.
  - **b.** Enter a name and description.
  - c. Select the Scheduling Objective Type.

We predefine these objective types.

Service Resource (Agent) Preference—Service resource preferences allow you, the
agent, to take ownership of your schedule. Each agent can define service resource
preferred working hours as operating hours in the Preferences related list in the service
resource records. When planners schedule shifts, Field Service shift scheduling tools
consider each service resource's availability preference when identifying candidates for
shifts.

For example, a service resource can work from 8:00 AM to 8:00 PM every day of the week, but prefers working on weekdays. You can create an operating hours record with time slots as weekdays, from 8:00 AM to 8:00 PM. Associate the record to the service resource via a related Service Resource Preference record to make sure the shift scheduling engine takes the preference into consideration.

- Balance Shifts— Scheduling balances the number of shifts across agents within the specified time period.
- Balance Non-Standard Shifts—Scheduling balances the number of non-standard shifts across agents within the specified time period.
- **d.** Save your work.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To set scheduling objectives:

 Field Service Standard AND

Customize Application

Ν	ew Scheduling Objective	
Scheduling Objective Name	Description	
Limit on nonstandard shifts	Enter Description	
Scheduling Objective Type		
Agent Preference		//
Balance Shifts Balance Non-Standard Shifts		

- 3. To edit a scheduling objective, open the dropdown action menu and select Edit.
- 4. To delete a scheduling objective, open the dropdown action menu and select **Delete**.

## SEE ALSO:

Assign and Update Field Service Shifts What Are Shifts? Prepare Your Org for Shift Scheduling

## Create a Scheduling Rule for Shifts

Create rules that define which shifts are to be assigned to which service resources. You can use the default rules, or create your own scheduling rules.

To create a scheduling rule:

- 1. From Setup, in the Quick Find box, enter *rules*, and then select **Rules**.
- 2. To create a new listview:
  - a. Click the gear icon, and select New.
  - **b.** Name your listview, and select who can view it.
  - c. Save your changes.
- 3. To create a scheduling rule, click New.
- 4. Name your scheduling rule and select a Scheduling Rule Type.



Note: You can ignore the Match Queue rule type.

5. Fill out the fields on the form and save your work.

Shift scheduling tools, including Get Candidates, batch assignment, and mass shift update, then evaluate service resources against the defined scheduling rules to identify which resources are eligible to be assigned specific shifts.

There are five default rules that you can use as examples. The default rules are turned off until you enable them.

- Availability—only assign a service resource with availability. ۲
- Match territory—only assign shifts with a service territory that matches the service resource's • service territory for the time period of the shift. The service resource can be primary, secondary, or relocation service territory members.
- Match skill—only assign shifts if the service resource's skills match the job profile skills. •
- Enforce work limits—limit the number of work hours per day, week, or month, or limit the number of shifts per day, week, or month. Define work limits in the Scheduling Constraint tab.
- Limit nonstandard shifts—Use the Non-Standard checkbox on shifts and shift templates to flag undesirable shifts to limit how many non-standard shifts are assigned to each resource per month. For example, if the limit is two then a resource assigned to two non-standard shifts won't be assigned to a third.

SEE ALSO:

Assign and Update Field Service Shifts What Are Shifts? Prepare Your Org for Shift Scheduling

**EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# **USER PERMISSIONS**

To create scheduling rules:

Field Service Standard AND

**Customize Application** 

# Scheduling Rule Types

Scheduling rules help match service resources to shifts. When the scheduling logic looks for service resources to assign to shifts, it checks your rules.

Scheduling Rule Type	Description
Availability	Checks if the service resource is available to be assigned to a shift. The Availability rule checks for the following conditions:
	• The shift doesn't overlap with an existing shift.
	• No resource absence is scheduled.
	• The operating hours on the primary territory align with the shift duration.
Limit Non-Standard Shifts	Checks if the service resource has reached the monthly limit for non-standard shifts. Specify the limit in a scheduling constraint on each service resource or service territory.
Match Skills	Checks if the service resource has the appropriate skills to be assigned to the shift. Skill levels aren't considered.
Match Queues	Checks if the service resource is a member of the appropriate queue to be assigned to the shift.
Match Territory	Required: Checks if the service resource belongs to the shift's territory.
Work Limit	Checks if the service resource can handle the work unit maximum. You decide if the work unit max is measured in hours or shifts; choose a specific scheduling constraint to define the type of work required; and decide if the max is per day, week, or month. You can create custom scheduling constraints.

# EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# Add Shift Scheduling Constraints

Scheduling constraints are records that are defined on the service resource or service territory. They set the limit for how many shifts, in units or hours, can be assigned to a resource over a given time period (for example a day, week, or month). To match service resources to shifts, the work limit-type scheduling rule looks first for a constraint on the service resource. If no constraint is found, the rule looks for a scheduling constraint on the service territory.

Define a scheduling constraint for each service resource, either on the service resource record or on the service territory. If you don't know what limits to set, it's OK to set up constraints with empty values.



Note: You can create up to 50 scheduling constraints.

- 1. Open Scheduling Constraints in the App Launcher.
- 2. Click New.
- 3. Name your scheduling constraint, then fill out the related details.
- 4. Save your changes.
- 5. Open Service Resources or Service Territories from the App Launcher.
- 6. Open the Service Resource or Service Territory where you want to add a constraint.
- 7. In the Scheduling Constraints field, add your constraint, and save your changes.

# **Build Repeating Shift Patterns**

Save time creating shifts by defining commonly used patterns of shifts in Field Service. Create templates that define the start time and job profile. Then build a pattern that lists the shift templates to use each day.

Your team can use the New from Pattern action to quickly create shifts from templates. First, you build the templates and shift patterns.

## Example: Example 1: Daily Delivery Shifts

Build a daily pattern of shift templates for your delivery workers. For example, a restaurant has a morning, afternoon, and evening delivery shift.

First, add shift templates with the following details:

Template Name	Job Profile	Start Time	Duration
Delivery, Morning	Food delivery	6:00 AM	8
Delivery, Afternoon	Food delivery	12:00 PM	8
Delivery, Evening	Food delivery	4:00 PM	8

Next, create a shift pattern.

Field	Value
Shift Template Name	Daily delivery shifts

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Shift Scheduling and Workforce Engagement are available in **Enterprise**, **Performance**, and **Unlimited** Editions.

Field	Value
Pattern Length	1

For the shift pattern entries, add the morning, afternoon, and evening delivery shift templates. Because the pattern is for a single day, the Day Position is one for each of the templates. When the shifts are created, you can optionally assign a service territory and service resource to the shifts. You can't assign multiple territories or resources, so we recommend keeping the patterns fairly simple.

### Example: Example 2: Weekly Regular Hours

Build a five- or seven-day pattern of shift templates for your regular hours. A hotel staffs a front desk clerk each day from 8:00 AM to 4:00 PM and from 4:00 PM to 12:00 AM. On Thursday, Friday, and Saturday there's an extra shift from 12:00 PM to 8:00 PM.

First, add shift templates with the following details:

Template Name	Job Profile	Start Time	Duration
Desk, Morning	Front desk	8:00 AM	8
Desk, Evening	Front desk	4:00 PM	8
Desk, Weekend Surge	Front desk	12:00 PM	8

Next, create a shift pattern.

Field	Value
Shift Template Name	Front desk shifts, Weekly (Monday)
Pattern Length	7

For the shift pattern entries, add the morning, afternoon, and weekend shift templates.

- Add the morning shift seven times, iterating through the day positions 1 through 7.
- Add the evening shift seven times, iterating through the day positions 1 through 7.
- Because the pattern starts on Monday, add the weekend surge shifts for Day Position four, five, and 6.

You now have a shift pattern that creates 17 shifts per week.

#### Create Shift Templates

Use shift templates to help manage your team's schedule. Store the details of commonly used shifts such as the duration, start time, and job profile.

#### Create Shift Patterns

Create shift patterns that store commonly used sets of shifts. Your team can use the New from Pattern action to quickly create shifts from templates.

# **Create Shift Templates**

Use shift templates to help manage your team's schedule. Store the details of commonly used shifts such as the duration, start time, and job profile.

- 1. From the App Launcher, click **Shift Templates**.
- 2. Click New.
- 3. Enter a name and description for the template.
- 4. Enter the start time and duration.
- 5. Optionally, select a job profile.
- 6. Save the template.

formation		
Shift Template Name	Active	
Electrical Standard Weekday		
Description		
nift Template Information		
• Start Time	Duration Type	
8:30 AM ()	Hours	•
Job Profile	• Duration	
Electrical ×	8.00	
Non-Standard	Recordset Filter Criteria	
	Search Recordset Filter Criteria	Q
Background Color		
Shift Cell Preview  Reset Background Color		
12:00 AM-2:00 AM		
Tentative		



Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# USER PERMISSIONS

To view, create, and update shift templates

• View, create, and edit on Shift Templates,

AND

View on Job Profiles, Service Territories

## **Create Shift Patterns**

Create shift patterns that store commonly used sets of shifts. Your team can use the New from Pattern action to quickly create shifts from templates.

- 1. From the App Launcher, select **Shift Patterns**.
- 2. Click New.
- 3. Enter a name and description for the pattern.

We recommend that you include key details in the shift pattern name. For example, you can include in the intended start day of a multi-day pattern such as *Weekly Regular Hours* (Monday).

- 4. Click Save.
- 5. Switch to the **Related** tab.
- 6. Find the Shift Pattern Entries related list and add the appropriate shift templates.
- 7. To add a template, click **New** and then fill out the form fields.

To create multiple shifts per day with the same details, you can add the same template multiple times. You can also add the same template to different days of the week by changing the day position.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Shift Scheduling and Workforce Engagement are available in **Enterprise**, **Performance**, and **Unlimited** Editions.

## USER PERMISSIONS

To view, create, and update shift patterns

• View, create, and edit on Shifts, Shift Patterns, Shift Pattern Entries

Shift Pattern Weekly Hours			New Contact	New Opportunity	New Case
attern Length	Active				
Related	Details	73 - 744(C3X).			
🕒 Shift Pa	ttern Entries (64	+)			New
Shift Pat	ttern Entries (64	+) Day Position	Sł	nift Template	New
_	ttern Entries (64			nift Template egular Day	New
Name SPE-0002	ttern Entries (6+	Day Position	Re		
Name SPE-0002 SPE-0003	ttern Entries (64	Day Position	Re	egular Day	
Name SPE-0002 SPE-0003 SPE-0004	ttern Entries (64	Day Position 1 2	Re Re	egular Day egular Day	· · · · · · · · · · · · · · · · · · ·
Name SPE-0002 SPE-0003 SPE-0004 SPE-0005	ttern Entries (6+	Day Position 1 2 3	Re Re Re	egular Day egular Day egular Day	
Name SPE-0002 SPE-0003 SPE-0004 SPE-0005 SPE-0006	ttern Entries (6+	Day Position 1 2 3 4	Re Re Re Re	egular Day egular Day egular Day egular Day	•

8. Make sure that the shift templates and the shift pattern are active.

# Set Up Work Order Management for Field Service

A work order represents work to be performed on your customers' products. Customize your work order settings and create time-saving templates called work types.

### Create Work Types for Field Service

Chances are, your business performs the same tasks for multiple customers. Work types are templates that save you time and make it easier to standardize your field service work.

## Customize Work Order Settings for Field Service

To control how your team works with work orders and work types, customize page layouts and assign user permissions.

### Set Up Knowledge for Work Orders

Attach knowledge articles to Field Service work orders, work order line items, and work types to share guidelines and specs with mobile workers in the field. Learn how to customize page layouts to let your team view or manage attached articles, also known as linked articles.

### Set Up Path for Field Service

To guide your team as they complete field service jobs, add an interactive, color-coded progress bar to work orders, work order line items, and service appointments.

## Setup for Maintenance Work Rules

For Salesforce orgs created before the Spring '21 (230) release, setup is required to take full advantage of Field Service maintenance work rules.

### SEE ALSO:

Manage Field Service Work Orders

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Create Work Types for Field Service

Chances are, your business performs the same tasks for multiple customers. Work types are templates that save you time and make it easier to standardize your field service work.

Before you start, make a list of the work types you want to create. For example, a heater installation company can create work types names Install Heater, Repair Heater, and Replace Heater. List the skills and parts required to complete each task, estimate how long that type of work takes to complete, and attach any knowledge articles to it such as specs or guidelines.

If the Field Service managed package is installed, use Guided Setup to quickly create your work types.

- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Go to Guided Setup. When you launch guided setup, your Field Service permission sets are scanned to make sure that they're up-to-date. You see a message if you're missing a necessary permission.
- 3. Click Create Work Types and Skills.
- **4.** Enter a name to create a work type, and update the Name, Description, Due Date Offset, and Estimated Duration.

Note: Hover over each field's info icon for help with filling it out.

- 5. Select **Auto-Create Service Appointment** to generate a child service appointment when a work order or work order line item is created from the work type.
- 6. Optionally, add required skills to represent the expertise or certification needed to complete the work. You can add a skill level from the work type's Skill Requirements related list, outside of Guided Setup.
- 7. To update additional fields and add supporting records, select a work type in the list and click **Open Work Type Record**.

Home	Enter a work type name Add	Filter Replacer	nent Open Work Type Record	
1. Create Service Territories     2. Create Work Types and Skills	Q. Search work types	Name 🚯	Filter Replacement	
3. Create Service Resources	Connect to Electrical Grid		Replace heating filters in building.	
4. Create Dispatchers and Agents	Emergency	Description		
5. Customize Appointment Booking	Showroom Appointment			
6. Customize Scheduling Policies	Solar Panel Installation	Due Date Offset 🚯	4320 3 Days	
	Solar Panel Maintenance	Estimated Duration	60	
	Solar Panel Repair	Duration Type	Minutes	
	Filter Replacement	Auto-Create Service Appointment 🚯		
		Skill Requirements 🚺	Filter replacement	

8. To apply a work type to a work order or work order line item, select the work type in the Work Type field on the record when creating it. When you add a work type, the record inherits settings from the work type.

If the managed package isn't installed, create and manage work types from the Work Types tab.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To create work types:

Create on work types

To apply work types to work orders or work order line items:

• Edit on work orders

#### Guidelines for Creating Work Types for Field Service

Work types help you standardize your field service processes. Learn about inherited work type settings, required skills and products, auto-created service appointments, and attaching knowledge articles.

#### Create Skills for Field Service

Assign skills to service resources to represent certifications or areas of expertise. Add skill requirements to work types, work orders, and work order line items to indicate the skills needed to complete the work. If you select the Match Skill Level field in the Match Skills work rule, service appointments are only scheduled to service resources who have the same or higher skill level requirement.

#### SEE ALSO:

Work Type Fields for Field Service Add Required Skills to Work Orders or Work Types for Field Service Attach Knowledge Articles to Work Orders or Work Types Track Required Inventory in Field Service *Trailhead*: Field Service Center Customization

# Guidelines for Creating Work Types for Field Service

Work types help you standardize your field service processes. Learn about inherited work type settings, required skills and products, auto-created service appointments, and attaching knowledge articles.

Work orders and work order line items that contain a value in the Work Type field inherit the following values from their work type:

- Duration
- Duration Type
- Required skills (found in the Skill Requirements related list)
- Required products (found in the Products Required related list)
- Linked articles (found in the Articles related list)

Service appointments with a value in the Work Type field inherit their work type's Duration and Duration Type.

Note: If a work type is updated on a work order or service appointment, the derived values, for example, skills and duration, aren't automatically updated unless no values were initially set. Also, updating a work type after it's been assigned to a work order or service appointment doesn't automatically update the derived properties.

You can update a record's settings after they're inherited from the work type.

## **Skill Requirements**

Skill requirements on work types represent the skills that are needed to complete the work. Work orders and work order line items inherit their work type's skill requirements. Define required skills in the Skill Requirements related list.

You can enforce skill requirements during schedule optimization using the Match Skills work rule in a scheduling policy. If you're not using the Field Service managed package, skill requirements serve as a suggestion rather than a requirement.

If you add a work type to an existing work order, the work order only inherits the skill requirements if the work order didn't yet have any. Similarly, updating a work type's skill requirements doesn't affect work orders that were already created using that work type.

The previous rules are also true for work order line items. Work order line items don't inherit their parent work order's skill requirements.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Note: Customizations to skill requirements, such as validation rules or Apex triggers, aren't carried over from work types to work orders and work order line items.

#### **Required Products**

Required products on work types represent the products that are needed to complete the work. Work orders and work order line items inherit their work type's required products. Define required products in the Products Required related list.

If you add a work type to an existing work order, the work order only inherits the required products if the work order didn't yet have any. Similarly, updating a work type's required products doesn't affect work orders that were already created using that work type.

The previous rules are also true for work order line items. Work order line items don't inherit their parent work order's required products.

Note: Customizations to required products, such as validation rules or Apex triggers, aren't carried over from work types to work orders and work order line items.

#### Auto-Created Service Appointments

If the Auto-Create Service Appointment option on a work type is selected, a service appointment is created when the work type is applied to a work order or work order line item. The service appointment lists the work type in its Work Type field and inherits the work type's Duration and Duration Type. A service appointment isn't created if the work order or work order line item already has an appointment.

If a user selects Auto-Create Service Appointment on an existing work type, service appointments aren't created on work orders and work order line items that were already using the work type.

#### **Exact Appointments Setting**

When you schedule a service appointment that has an associated work type, scheduling also considers the Exact Appointments field in the work type. If Exact Appointments is selected in the work type, the appointment is scheduled to start at the beginning of the time slot rather than during the time slot window.

#### **Knowledge Articles**

When you attach a knowledge article to a work type, the article shows up on work orders and work order line items that use the work type. For example, if you have a work type named Solar Panel Replacement, you can attach an article that explains how to replace a solar panel. Any work order using that work type automatically includes the article, and the person assigned to the work order has the instructions at their fingertips.

Articles on work types work a little differently than articles on work orders and work order line items. Here are the differences:

- A Linked Work Types related list isn't available on article page layouts, so you can't see which work types an article is attached to.
- The Knowledge One widget isn't available on work types in the console in Salesforce Classic, but the Articles related list is.
- To ensure that field service records are associated with the most current versions of knowledge articles, articles attached to work types don't specify an article version. For this reason:
  - When work orders and work order line items inherit an article from their work type, they inherit the latest version of the article published in their org's default Knowledge Settings language.

 An article attached to a work type can display in a different title or language in the Articles related list versus in the Knowledge Lightning component. The Articles related list shows the article version that work orders and work order line items inherit from the work type.

### SEE ALSO:

Work Type Fields for Field Service Set Up Knowledge for Work Orders Add Required Skills to Work Orders or Work Types for Field Service

# Create Skills for Field Service

# USER PERMISSIONS

Create and update skills in Setup:	Customize Application
Assign skills to service resources:	Edit on service resources
View service resources' skills:	Read on service resources
Add required skills to work orders or work order line items:	Edit on work orders
Add required skills to work types:	Edit on work types

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Assign skills to service resources to represent certifications or areas of expertise. Add skill requirements to work types, work orders, and work order line items to indicate the skills needed to complete the

work. If you select the Match Skill Level field in the Match Skills work rule, service appointments are only scheduled to service resources who have the same or higher skill level requirement.

If the Field Service managed package is installed, you can easily create and assign skills in Guided Setup when you create work types and service resources.

If you're not using Guided Setup, create skills in Setup first. Then, assign them to service resources or create skill requirements.

1. Decide how to measure skill level. Skills and skill requirements can be assigned a skill level between 0 and 99.99. For example, use the Skill Level field to indicate years of experience, or create a matrix that corresponds professional license classes to skill level numbers.

# Note:

- Create validation rules to limit potential skill level values. For example, only allow multiples of 10.
- Create field-level help to let your users know how skill level is determined.

## 2. Create skills in Setup.

- a. From Setup, enter Skill Settings in the Quick Find box, then select Skills.
- **b.** Click **New** and enter a name, like *Electrician Certification*, and a description.
- c. You can assign a Skill Type to group similar skills.
- **d.** Skip the Assign Users and Assign Profiles sections, which are specific to Chat.
- e. Save your changes.

- 3. Assign the skill to service resources (supported in both Salesforce Classic and Lightning Experience).
  - a. You can create and assign a service resource skill from a service resource record. In the Skills related list, select **New**, or select **Assign Skills** to assign an existing skill.
  - **b.** Select a skill, and enter a skill level from 0 to 99.99.
  - c. Enter a start date and, if needed, an end date. For example, if a mobile worker must be recertified in a particular skill every six months, enter an end date that's six months later than the start date.

🕜 Note:

- The Field Service managed package comes with the Skill Selector Visualforce page component (vf034\_Skill\_Selector\_V2\_Resource\_Page) that supports up to 3000 records listed alphabetically by skill name. Any other skills aren't loaded, such that even if they're assigned, they aren't displayed.
- When you enter a start and end date in the Skills related list, these dates are shown in your user timezone. When you're using the Assign Skills action, the start and end dates are shown in the service resource's timezone.
- **d.** Save your skill.
- 4. Add the skill as a requirement on work types, work orders, or work order line items (supported in both Salesforce Classic and Lightning Experience). Work orders and work order line items inherit their work type's skill requirements.
  - a. From a work type, work order, or work order line item record, create a skill requirement in the Skill Requirements related list.
  - **b.** Select a skill, and enter a skill level from 0 to 99.99.
  - c. Save your skill requirement.

Note: Skills can't be deleted. If a skill is no longer in use, add a prefix to the skill name, for example, add zDoNotUse\_ to move the skill to the bottom of the list.

SEE ALSO:

Skill Fields for Field Service Add Required Skills to Work Orders or Work Types for Field Service Create Work Types for Field Service Guidelines for Creating Work Types for Field Service Work Rule Type: Match Skills

# Customize Work Order Settings for Field Service

To control how your team works with work orders and work types, customize page layouts and assign user permissions.

**1.** Assign user permissions.

Users Who Will	Need These Permissions	Permissions Are Auto-Enabled on These Standard Profiles
Enable Field Service	Customize Application	System Administrator
View the Work Orders tab, work orders, and work order line items	Read on work orders	Read Only, Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Create or clone work orders	Create on work orders	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Edit work orders	Edit on work orders	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator
Delete work orders	Delete on work orders	System Administrator
Create, clone, edit, or delete work order line items	Edit on work orders	Standard User, Solution Manager, Contract Manager, Marketing User, and System Administrator

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To edit page layouts and set field history tracking:

- Customize Application
- To create and edit users:
- Manage Internal Users

2. Customize the fields and related lists on the following objects' page layouts.

Note: If you have your own field service terminology, remember that you can rename an object's tab and labels. In Setup, select **Rename Tabs and Labels**, and enter your own term for the object you'd like to rename.

Page Layout	Recommended Customizations
Work Order	<ul> <li>Arrange the fields. The default layout includes only some of the available fields.</li> <li>Confirm that your page layout has the desired related lists: <ul> <li>Child Work Orders: The work order's child work orders</li> <li>Object Milestones: Milestones on the work order (available only if entitlement management is set up)</li> <li>Products Consumed: Products used during the completion of the work order</li> <li>Product Requests: Products requested for the work order</li> <li>Product Request Line Items: Line items on product requests</li> </ul> </li> </ul>
	<ul> <li>Product Requests: Products requested for the work order</li> </ul>

Page Layout	Recommended Customizations
	<ul> <li>Products Required: Products needed to complete the work order</li> <li>Resource Preferences: Preferred, required, or excluded service resources on the work order</li> <li>Service Appointments: Appointments indicating when the work is scheduled</li> <li>Service Reports: Reports summarizing the work for customers</li> <li>Skill Requirements: Skills needed to complete the work order</li> <li>Time Sheet Entries: Schedule of mobile workers' time spent on the work order</li> <li>Work Order Line Items: Sub tasks or steps on the work order</li> <li>Optionally, add your own custom values to the Status picklist field. The Status field comes with these default values:</li> <li>New</li> <li>In Progress</li> <li>On Hold</li> <li>Completed</li> <li>Closed</li> <li>Canceled</li> <li>When you create a custom value, select a status category that the value falls into. The available statu categories match the default status values. For example, if you create a Customer Absent value, you may decide that it belongs in the Cannot Complete category.</li> </ul>
Work Order Line Item	<ul> <li>To learn which processes reference Status Category, see How are Status Categories Used?</li> <li>Arrange the fields. The default layout includes only some of the available fields.</li> <li>Optionally, add your own custom values to the Status picklist field. The Status field is identical to the Status field on work orders.</li> <li>Confirm that your page layout has the desired related lists: <ul> <li>Child Work Order Line Items: The line item's child line items</li> <li>Product Request Line Items: Line items on product requests</li> <li>Product Requests: Products requested for the line item</li> <li>Products Consumed: Products used during the completion of the line item</li> <li>Service Appointments: Appointments indicating when the work is scheduled</li> <li>Service Reports: Reports summarizing the work for customers</li> <li>Skill Requirements: Skills needed to complete the line item</li> </ul> </li> </ul>
Work Type	<ul> <li>Arrange the fields. The default layout includes only some of the available fields.</li> <li>Confirm that your page layout has the desired related lists:</li> </ul>

Page Layout	Recommended Customizations
	<ul> <li>Products Required: The products needed to complete the work. Work orders and work order line items inherit their work type's required products.</li> </ul>
	<ul> <li>Skill Requirements: The skills needed to complete the work. Work orders and work order line items inherit their work type's skill requirements.</li> </ul>

- a. To let users view and manage work orders in a variety of places, add the Work Orders related list to any of the following objects' page layouts.
  - Accounts
  - Assets
  - Cases
  - Contacts
  - Entitlements
  - Maintenance plans

Note: Before adding the related list, update the field-level security for the Maintenance Plan and Suggested Maintenance Date fields on work orders to make them available to users.

- Return orders
- Return order line items
- Service contracts

#### How are Status Categories Used?

Service appointments, work orders, and work order line items have two status-related fields—Status and Status Category—which come with the same standard values. Status categories, which are referenced in many field service processes, allow you to use custom status values while maintaining a consistent work classification for tracking, reporting, and business process management.

## SEE ALSO:

Work Order Fields for Field Service Work Order Line Item Fields for Field Service

# How are Status Categories Used?

Service appointments, work orders, and work order line items have two status-related fields—Status and Status Category—which come with the same standard values. Status categories, which are referenced in many field service processes, allow you to use custom status values while maintaining a consistent work classification for tracking, reporting, and business process management.

When you create a custom Status value, you must indicate which category it belongs to. For example, if you create a Customer Absent value, you may decide that it belongs in the Cannot Complete category.

View and manage status values in Setup by navigating to the Status field settings for service appointments, work orders, or work order line items.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Status Picklist Values New Reorder Replace Printa				
Action	Values	API Name	Status Category	Default
Edit   Deactivate	New	New	New	1
Edit   Del   Deactivate	In Progress	In Progress	In Progress	
Edit   Del   Deactivate	On Hold	On Hold	On Hold	
Edit   Del   Deactivate	Completed	Completed	Completed	
Edit   Del   Deactivate	Closed	Closed	Closed	
Edit   Del   Deactivate	Cannot Complete	Cannot Complete	Cannot Complete	
Edit   Del   Deactivate	Canceled	Canceled	Canceled	

Many field service triggers and processes are based on appointment, work order, or work order line item status. To ensure that these processes work as expected when custom statuses are in use, Salesforce references the Status Category field—rather than the Status field— before making changes.

The three status options include Contracted, Implementation, and Production.

## Contracted

Indicates that an agreement or contract is signed between the service provider (such as Salesforce) and the client, but the actual work on the project has not yet started. At this stage, the focus is often on planning, finalizing the scope of work, and preparing for the implementation phase. No development or deployment has taken place yet. It's the preparatory phase after sales and before delivery.

#### Implementation

Involves configuring the software, developing custom solutions, integrating with other systems, data migration, and setting up the necessary infrastructure. It's a critical phase where the project starts taking shape, and the plans and designs are executed to build the system as per the contract's specifications.

#### Production

The production status indicates that the system is fully developed, tested, and is deployed to a live environment where you can start using it. At this point, the system is considered operational, and any further changes are typically handled through maintenance or continuous improvement processes. The focus shifts to monitoring system performance, fixing any issues that arise, and adding new features or updates as required.

The following field service processes are based on status category, rather than status. If you create custom status values or reference the Status or Status Category fields in custom apps, triggers, or validation rules, keep these in mind.

- Status-based sharing rules for work orders, work order line items, and service appointments
- Status-based paths on work orders, work order line items, and service appointments
- Usage-based and criteria-based preventive maintenance. If work orders are created from maintenance work rules that are incomplete, then no new work orders are created until the active work order is completed. A work order is considered complete when its status is Cannot Complete, Canceled, Completed, or Closed.
- Dispatcher console appointment list filters
- Dispatch scheduled jobs, which are triggered by an appointment's status category being updated to Dispatched
- Dispatch drip feed—found in the **Field Service Admin app** > **Field Service Settings tab** > **Dispatch**—which dispatches one or more appointments when the assigned resource's previous appointment's status category changes from Dispatched or In-Progress to Canceled, Completed, or Cannot Complete
- Calendar syncing, which checks for appointments whose status category is Dispatched
- Completed icon on the dispatcher console map, which appears when an appointment's status category changes to Completed
- KPI for completed service appointments shown on the Gantt, capacity view, and service resource view, which is based on appointments whose status category is Completed

# Set Up Knowledge for Work Orders

Attach knowledge articles to Field Service work orders, work order line items, and work types to share guidelines and specs with mobile workers in the field. Learn how to customize page layouts to let your team view or manage attached articles, also known as linked articles.



Note: Knowledge must already be set up in your org.

- 1. Add the Articles related list to work order and work order line item page layouts.
- 2. Let Lightning Experience users manage attached articles. In Lightning Experience, add the Knowledge component to your work order, work order line item, and work type detail page layouts.
- 3. Let users view and modify attached articles from the console. In the layout editor for work orders and work order line items, select **Custom Console Components** and add the Knowledge One widget to the console sidebar.
- 4. The Knowledge One console widget suggests articles to attach based on key fields. Select the fields that suggestions are based on. (The Knowledge Lightning component doesn't offer article suggestions.)
  - a. In Setup, enter *Field Service* in the Quick Find box, then select **Field Service** Settings.
  - **b.** Select the fields that the search engine should scan to suggest relevant articles from your knowledge base.
  - c. Save your changes.
- 5. Optionally, customize linked article page layouts, fields, validation rules, and more in Setup.
  - In Lightning Experience, navigate to Linked Article in the Object Manager.
  - In Salesforce Classic, navigate to the Linked Articles page under Knowledge.

Note: Linked articles include the following limitations.

- Quick actions and global actions aren't supported for linked articles.
- The Article widget and Feed Articles Tool aren't available in the feed view.
- In Lightning Experience, clicking an article link in a feed item redirects you to the article page in Salesforce Classic. In the Salesforce mobile app, linked articles can't be accessed from feed items.
- The Linked Work Types related list isn't available on articles in any platform.
- The Knowledge One widget isn't available on work types in the console. To manage linked articles on work types in the console, use the Articles related list.
- Linked articles are read-only in the Salesforce mobile app.

#### SEE ALSO:

Attach Knowledge Articles to Work Orders or Work Types View Knowledge Articles in the Field Service Mobile App Linked Article Fields

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To attach or detach an article on a work order or work order line item:

 Read on work orders AND Read on the article type AND Knowledge enabled

To attach or detach an article on a work type:

 Read on work types AND Read on the article type AND Knowledge enabled

To edit page layouts:

Customize Application

To edit console layouts:

Customize Application
 AND Service Cloud User

# Set Up Path for Field Service

To guide your team as they complete field service jobs, add an interactive, color-coded progress bar to work orders, work order line items, and service appointments.

With Path, your team can quickly see a record's status and how close it is to completion, and update the status by clicking the desired value on the path.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## **USER PERMISSIONS**

To set up a path:

Modify All Data

To create, customize, or publish an Experience Cloud site:

 Create and Set Up Experiences AND View Setup and Configuration

					+ F	ollow	Edit	Delete	Clone	v
Owner Sita Nagappan-Alavarez 🖍	Case	Status In Progress	Star	Date	End Date	Subject Install		nel System		
~	In Progress		On Hold	$\rightarrow$	Final Status		✓ Ma	ark Stage a	as Complet	e -
EY FIELDS			Edit	GUIDANCE	FOR SUCCESS					
Subject Install Solar Panel System					In Progress mean I're waiting for a	,		0		ne
Description Install the standard system on the so	uthern section of t	he roof.		51010510 01						
Location ABC Shopping Center										

You can set up one path per record type. The steps in a path (1) correspond to the Status picklist values. Help users succeed by displaying up to five key fields and handy step-specific guidance beneath each path step (2).

Several statuses can represent the record's conclusion: Canceled, Cannot Complete, Completed, and Closed. Therefore, the last stage of the path displays as **Final Status** when the record is open. Users are prompted to select a final status from these values when they try to close the record, and the path then shows the selected final status. The order of the path steps is based on the order of the values in the Status picklist, though statuses representing conclusion are grouped in the final step.

Path is available for work orders, work order line items, and service appointments in Lightning Experience and Experience Builder sites. It isn't available in Salesforce Classic, the Salesforce mobile app, or the Field Service mobile app.

- 1. On the *Path Settings* page in Setup, enable Path. Select **Remember User's Path Preferences** to let users decide whether the path remembers its previous state or is always closed when the page loads.
- 2. If you plan to create a path based on the Status field for a field service object, assign a status category to each status. From the field settings for the object's Status picklist field in Setup, click **Edit** next to a value. Select the corresponding status category and save your changes. Status categories determine which statuses are grouped in the Final Status stage on the path, and are also used in scheduling.

tatus Picklist Valu	les	New	Reorder Replace Prin	ntable Viev
Action	Values	API Name	Status Category	Default
Edit   Deactivate	New	New	New	1
Edit   Del   Deactivate	In Progress	In Progress	In Progress	
Edit   Del   Deactivate	On Hold	On Hold	On Hold	
Edit   Del   Deactivate	Completed	Completed	Completed	
Edit   Del   Deactivate	Closed	Closed	Closed	
Edit   Del   Deactivate	Cannot Complete	Cannot Complete	Cannot Complete	
Edit   Del   Deactivate	Canceled	Canceled	Canceled	

- **3.** From the Path Settings page in Setup, follow the prompts to create a path for the Work Order, Work Order Line Item, or Service Appointment object. Paths can be based on the Status field or a custom picklist. Optionally, select key fields or add guidance for each step in the path.
- 4. To add your path to record detail pages in your org, drag the Path component onto the object detail page in Builder.
- 5. To add your path to an Experience Builder site, drag the Path component onto the object detail page in Experience Builder.

SEE ALSO:

Lightning Flow for Service and the Actions & Recommendations Component

# Setup for Maintenance Work Rules

For Salesforce orgs created before the Spring '21 (230) release, setup is required to take full advantage of Field Service maintenance work rules.

- In permission sets or profiles,
  - enable the Maintenance Work Rule tab.
  - enable Field Level Security on Maintenance Plan and Maintenance Asset fields on the Maintenance Work Rule for profiles.
- Add the Maintenance Work Rule related list to the maintenance plan and maintenance assets page layout.
- On the Maintenance Work Rule page layout, click Maintenance Asset properties in the Maintenance Work Rule Detail section and uncheck Required in the Field Properties for Maintenance Asset.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Set Up Your Field Service Workforce

Create service resources and service crews to represent your mobile workforce. Then, assign permission sets to members of your team who work as dispatchers or support agents.

#### Create Service Resources for Field Service

Service resources are individual users or groups of users—known as service crews—who can perform field service work. Create service resources so you can assign service appointments to them.

#### Create Service Crews

Set up teams who can be assigned to field service appointments as a unit. A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

#### Set Up Crew Management

Give Field Service admins and dispatchers access to a drag-and-drop service crew management tool where they can easily create service crews and update service crew membership.

#### Limit Access to Field Service Records

When you install the Field Service Managed Package, org-wide default sharing settings are set to Public Read/Write for the Work Orders, Work Order Line Item, and Service Appointment objects. Therefore, all users can view and update these records even if the records are owned by other users. However, most Field Service customers choose to limit access to these records so that their team members see only the records that are relevant to them and on a need-to-know basis, for example, a dispatcher with access only to service appointments for the service territories that they manage.

## Sync Services and Resource Absences with Events Field Service Using Calendar Sync

You can keep your services and resource absences in sync with calendar events using Calendar Sync. Syncing services and resource absences to or from calendar events lets you maintain an accurate view of your services and resource availability when you create events and request meetings from your Salesforce calendar. Events can then be synced between external calendars and Salesforce.

#### SEE ALSO:

Manage Field Service Resources

# Create Service Resources for Field Service

## USER PERMISSIONS

To create service resources:	Create on service resources
To deactivate service resources:	Edit on service resources
To view resource capacities:	Read on service resources
To create, update, or delete resource capacities:	Edit on service resources
To view service resource skills:	Read on service resources
To create, update, or delete service resource skills:	Edit on service resources

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

To view, create, edit, or delete resource absences:	Read on service resources AND Edit on service resources
To delete resource absences:	Edit on service resources

Service resources are individual users or groups of users—known as service crews—who can perform field service work. Create service resources so you can assign service appointments to them.

Note: If the Field Service managed package is installed, you can use Guided Setup to quickly create service resources and assign them the proper permission sets. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Click Go to Guided Setup > Create Service Resources and follow the guidance to update or create service resources.

- 1. From the Service Resources tab, click New.
- 2. Select a user and enter a resource name—typically, the user's name.
- 3. If the resource represents an individual user, select the user in the User field. If the resource represents a service crew, leave the User field blank and select the crew in the Service Crew field. Service resources must list a user or a service crew.
- 4. Select Active to be able to assign the resource to service appointments. Inactive resources also can't access the Field Service mobile app.
- 5. Indicate whether the resource is a technician (a mobile worker), dispatcher, or crew.

Note: Field Service users can see Asset as a picklist option in the Resource Type field. However, you can't save the record when you select **Asset** in an org that doesn't have access to Lightning Scheduler.

Resources who are dispatchers can't be capacity-based, included in schedule optimization, or added to service crews. Only users with the Field Service Dispatcher permission set license can be dispatchers.

- **6.** Enter a location if applicable. Service resources might be linked to a location if they manage or operate the location (such as a warehouse or van). A location can't be linked to more than one service resource.
- Select Capacity-Based if the resource is limited to working a certain number of hours or appointments in a specified time period. You can define the resource's capacity in the Capacities related list.

Contractors are likely capacity-based.

- Select Include in Scheduling Optimization to check if the resource has the permission set license needed for optimization.
   To be included in optimization, users need the Field Service Scheduling permission set license.
- 9. Complete the remaining fields as needed, and save your changes.

Once a resource is created, add details in their related lists.

#### **Service Territories**

Select the territories where the resource is available to work. For each territory, select a type:

- Primary: (One territory) Where the resource works most often—for instance, near their home base.
- Secondary: (One or more territories) Where they can be assigned to appointments if needed. Secondary territory membership dates can overlap.
- Relocation: (One or more territories) Represents a temporary move.

#### Skills

Assign skills to indicate the resource's areas of expertise. Optionally, enter a skill level of 0–99.99.

Try to track only skills that factor into scheduling decisions. For example, don't include skills that are common among all service resources. Aim to assign fewer than 50 skills to each service resource.

#### Define Capacity-Based Resources

Typically, contractors in field service can work a specified amount in a given time period. Define a service resource's capacity so they aren't overbooked during schedule optimization.

#### Estimate a Service Resource's Efficiency

People work at different paces depending on their skills and level of experience. Assign an efficiency score to service resources to facilitate scheduling. The scores are considered during scheduling and can affect an appointment's scheduled end time.

#### Guidelines for Creating Service Resources for Field Service

Learn how to view, create, and manage service resources to keep your field service operation running smoothly.

#### Guidelines for Setting Up Field Service Contractors

If you run a field service operation, it's likely that you work with contractors in addition to your full-time employees. Learn how to incorporate contractors into your field service processes.

## SEE ALSO:

Service Resource Fields for Field Service

# Define Capacity-Based Resources

Typically, contractors in field service can work a specified amount in a given time period. Define a service resource's capacity so they aren't overbooked during schedule optimization.

- 1. To indicate that a service resource is capacity-based, select **Capacity-Based** on the resource record and save your change.
- 2. In the Capacities related list, click New.
- **3.** Enter the capacity start and end dates. If the Time Period is set to Day, enter the same start and end dates. If the time period is Week, the end date can be up to 1 week. If the time period is Month, the end date can be until the end of the month.
- 4. Specify how much the resource can work.
  - For Time Period, select the time period that the capacity is based on. For example, if the resource can work 8 hours a day, select **Day**.

With Enhanced Scheduling and Optimization, you must select **Day**. The Week and Month options aren't supported.

- For Hours per Time Period, base the resource's capacity on the number of hours worked. For example, if the resource can work 8 hours a day, enter 8.
- For Work Items per Time Period, base the resource's capacity on the number of service appointments assigned to them. For example, if the resource can complete 5 appointments a day, enter *5*.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To create, update, or delete resource capacities:

- Edit on service resources
- **5.** Save your changes. You can create multiple capacities for a resource as long as the start and end dates don't overlap. On the Gantt, you can see the percentage of booked capacity. You can also click the banner to see more details.
- Note: To create a capacity for a date range, add the VF078\_CapacityCalendar Visualforce component to the Service Resource layout to display a Capacity Calendar. To create a capacity for only one criterion (Hours per Time Period or Work Items per Time Period), make sure to delete the default value of 0.

Show weekend	- Default Canacity 0	Nov 2022	Today	◀ ▶
Monday	New Capacity			Friday
	Hour Capacity			04
	0		Day	11
	Work Items Capacity			
	0	N 1	Week	18
	Start			
	11/09/2022	N	Ionth	25
Hour capacity:				
			Save	02

Pay attention to these considerations if you're using Enhanced Scheduling and Optimization.

- The Fix Overlaps feature isn't supported for capacity-based service resources.
- Schedule optimization supports daily capacity, but not weekly or monthly.
- Resource schedule optimization—the optimization of an individual service resource's schedule—isn't supported for capacity-based service resources.
- If a service resource is capacity-based with a defined capacity, their utilization percentage isn't shown in the Gantt.
- Capacity-based resources can't be assigned to appointments that have a scheduling dependency.
- Capacity-based resources can't be relocated.
- If Hours per Time Period or Work Items per Time Period are set to 0, the result of the performed action considers it a capacity of 0. However, on the Gantt, this value is considered empty.
- If you deselect Capacity-Based Resource, make sure you also remove the resource's defined capacities. Otherwise, the capacity still shows on the Gantt.
- Capacity-Based Resources doesn't support complex work.
- Up to 5,000 objects (service appointments and service resources) are supported overall in any optimization or scheduling actions.
- Day is the only time period supported. The Week and Month options aren't supported.
- The capacity banner on the Gantt doesn't show the capacity percentage. Additionally, if you click the capacity banner to see more details, the details window isn't updated accordingly.
- Capacity-based resources can't use the Count work rule.
- You can't schedule appointments for capacity-based resources that aren't assigned to a shift. This behavior is the same for regular resources.
- If you manually change the status of a service appointment to None, or clear the Scheduled Start and Scheduled End fields, the capacity consumption isn't updated.
- You can assign any service appointment to a capacity-based resource, as long as they're available. For appointments that span over multiple days (crossing midnight), the duration is split over each day the service appointment spans. By considering the hours set for each day separately, Field Service ensures accurate capacity tracking and optimal scheduling.

Pay attention to these considerations if you aren't using Enhanced Scheduling and Optimization.

- The Fix Overlaps feature isn't supported for capacity-based service resources.
- Resource schedule optimization—the optimization of an individual service resource's schedule—isn't supported for capacity-based service resources.
- If a service resource is capacity-based with a defined capacity, their utilization percentage isn't shown in the Gantt.
- Capacity-based resources can't be assigned to appointments that have a scheduling dependency.

- Capacity-based resources can't be relocated or assigned to a secondary service territory.
- If Hours per Time Period or Work Items per Time Period are set to 0, the result of the performed action considers it a capacity of 0. However, on the Gantt, this value is considered empty.
- If you deselect Capacity-Based Resource, make sure you also remove the resource's defined capacities. Otherwise, the capacity still shows on the Gantt.
- You can't assign capacity-based resources to appointments that are part of an appointment dependency group. Dispatchers can manually drag service appointments to capacity-based resources, but Scheduling and Optimization doesn't schedule those appointments. You can manually schedule the appointments.
- You can't schedule appointments for capacity-based resources that aren't assigned to a shift. This behavior is the same for regular resources.
- If you manually change the status of a service appointment to None, or clear the Scheduled Start and Scheduled End fields, the capacity consumption isn't updated.

SEE ALSO:

Guidelines for Setting Up Field Service Contractors Set Up Field Service in Experience Cloud Sites

# Estimate a Service Resource's Efficiency

People work at different paces depending on their skills and level of experience. Assign an efficiency score to service resources to facilitate scheduling. The scores are considered during scheduling and can affect an appointment's scheduled end time.

## 🜐 This is a Field Service managed package feature.

In the Efficiency field on a service resource record, enter a value from 0.1 through 10. An efficiency of 1 means that the mobile worker works at a typical or average speed. An efficiency greater than 1 means that the mobile worker works faster than average. Less than 1 means that the mobile worker works slower than average. Resource efficiency is rounded up when using Enhanced Scheduling and Optimization.

During schedule optimization, the following formula is used to estimate the time that a mobile worker needs to complete an appointment: *Duration / Efficiency = Actual time to perform an appointment* 



**Note:** To give preference to highly efficient service resources in schedule optimization, create a Resource Priority service objective based on the service resource Efficiency field.

**Example**: The estimated duration on the Battery Replacement work type is 60 minutes.

- Alexander, an expert, has an efficiency of 2.0. If Alexander is assigned to a Battery Replacement appointment, the appointment is scheduled to end 30 minutes after the scheduled start (60/2=30).
- Jane, a mobile worker, has an efficiency of 1.0. If Jane is assigned to a Battery Replacement appointment, the appointment is scheduled to end 1 hour after the scheduled start (60/1=60).
- Janice, a junior worker, has an efficiency of 0.5. If Janice is assigned to a Battery Replacement appointment, the appointment is scheduled to end 2 hours after the scheduled start (60/0.5=120).

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Guidelines for Creating Service Resources for Field Service

Learn how to view, create, and manage service resources to keep your field service operation running smoothly.

# **View Service Resources**

View service resources on the Create Service Resources page in Guided Setup or the Service Resources tab. In addition:

- Resources that are assigned to a service appointment appear in the Assigned Resources related list on the appointment detail page.
- Resources that belong to a service territory appear in the Service Territory Members related list on the territory detail page.
- Resources that belong to a service crew appear in the Service Crew Members related list on the service crew detail page.

## **Create Service Resources**

Create service resources from the Create Service Resources page in Guided Setup or the Service Resources tab. Service resources can represent users *or* groups of users (known as service crews). When creating service resources, follow these guidelines:

- To create a service resource that represents a user, select the user in the User lookup field and select a Resource Type of Technician.
- To create a service resource that represents a service crew, select the crew in the Service Crew field and select a Resource Type of Crew. Service resources that are crews can't be activated unless the crew has at least one active member.

# Assign Service Resources to Service Appointments

Manually assign a resource to a service appointment by scheduling an appointment to the service resource in the dispatcher console or by using automated scheduling mechanisms. When you assign a service appointment to a crew, Managed Package allocates crew members to the appointment at relevant events during the appointment's life cycle. See Manage Field Service Crew Membership.

We recommend manually creating only one Assigned Resource record per service appointment.

## Deactivate Service Resources

For tracking purposes, resources can only be deactivated, not deleted. To deactivate a user, deselect **Active** on their detail page.

Service resources that belong to service crews can't be deactivated. If you deactivate a service resource, make sure to update records that were associated with that resource. For example, if a deactivated service resource was a required resource for an account, update that account to prevent scheduling issues.

Deactivating a user deactivates the related service resource. You can't create a service resource that is linked to an inactive user.

Reactivating a user doesn't reactivate the related service resource. If you reactivate a user, you must reassign the user permissions to activate that service resource.

Note: After a user account is deactivated, the user is no longer visible on the Gantt. Let's say a user just left your company. To enable the dispatcher to work on the user's service appointments and prevent the user from logging in to your organization, freeze the user account before deactivating the user. Keep in mind that even though the user account is frozen, the service appointment can be assigned to a service related to the user.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## View Service Resource Schedules

The Service Appointments related list shows all appointments that a resource is assigned to, while the Absences related list shows define periods of time when the resource is unavailable to work. The Service Resource Availability work rule type ensures that resources aren't assigned to appointments when they're absent. Otherwise, resources can be manually assigned to appointments that conflict with their absences.

Note: Create a trigger that sends an approval request to a supervisor when a resource creates an absence.

SEE ALSO:

Service Resource Fields for Field Service Create Service Crews Freeze or Unfreeze User Accounts

# Guidelines for Setting Up Field Service Contractors

If you run a field service operation, it's likely that you work with contractors in addition to your full-time employees. Learn how to incorporate contractors into your field service processes.

## Get Set Up

The way you track contract work in Salesforce depends on how you want to track capacity, assign appointments, and exchange data with contractors. Follow these basic steps to add contractors.

#### Create an account and contacts

Create an account that represents the contractor such as Solar Installation Contracting. Then create contacts linked to the account. Create at least one contact for the contractor manager. If other contractors need access to Experience Builder sites, create contacts for each user.

#### **Choose licenses**

For contractors who work regularly, our per-user-per-month Contractor and Contractor Plus licenses give them unlimited access to everything they need. If your company employs a large

number of seasonal or temporary contractors, our Contractor and Contractor Plus Login-Based licenses are a cost-effective alternative. You can create up to 20 users for each login that you buy with the Contractor and Contractor Plus Login-Based licenses. This multiplier ensures that you have all your contractors set up in the system, even if they don't work frequently. If you know you need 100 logins, for example, our login-based licenses let you create 2,000 users. Our servers keep each login valid until midnight in most time zones, so workers can get multiple jobs done using a single login.

#### Set up access and permissions

Depending on the licenses that your organization purchased, you can assign contractors the Customer Community Plus or Partner Community license. If both license types are available, partner licenses are ideal for users who are engaged in sales or distribution with your company. Community licenses are required to access Experience Cloud sites.

If you purchase login-based licenses, each unit of the Contractor Login-Based SKU assigns 20 Customer Community Plus login-based licenses and each unit of the Contractor Plus Login-Based SKU assigns the 20 Partner Community login-based licenses.

Assign the Field Service Scheduling permission set license so that the user can be included in scheduling. Assign the Field Service Mobile permission set license to users that need access to the Field Service mobile app. Then, create a user profile for contractors (recommended) and configure their object permissions.

Note: To customize contractors' mobile app experience, assign a unique mobile settings configuration—accessible from the Field Service Mobile Settings page in Setup—to the contractor user profile.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### Create service resources and service territories

You can create service resources for every contractor worker or just for the contractor manager. Each service resource is linked to a user—in this case, the contractors at your partner organization.

Create a service territory for each contractor company, and add the contractor service resources as service territory members. Creating a contractor-specific territory lets the contractor manager see only their employees in the dispatcher console. For example, if you're contracting with Ursa Major Solar, create a territory named Ursa Major Solar Contracting.

#### Provide access to the dispatcher console

To let the manager dispatch appointments, add the dispatcher console to your Experience Builder site. For help, see Add the Field Service Dispatcher Console to an Experience Builder Site.

Note: Field Service contractor licenses can only be used by third-party contractors. They can't be assigned to internal employees.

#### Assign Service Appointments to Contractors

Ready to assign a work order to your contractor team? You've got options! Here are two common approaches to assigning work to contractors.

Note: The Contractors list view in the dispatcher console Service Appointment List shows only service appointments that are assigned to capacity-based service resources.

#### Contractors are service resources

In this example, the contract manager is an Experience Cloud site user but not a service resource. The contracting mobile workers are service resources with Field Service Mobile licenses.

This approach is best for you if it's important for the scheduling engine to consider each worker's schedule when making assignments. And you want contractor workers to view and update appointment details in the field, so you store individual worker details in Salesforce.

In this model, your process looks like this:

- 1. The dispatcher shares the work order with the contractor manager.
- 2. In your site, the contractor manager uses the Book Appointment action to assign the associated service appointment to a mobile worker.
- **3.** The mobile worker uses the mobile app. They can view their assignments and update the service appointment and work order status when the work is complete.

#### Contractor managers are service resources

In this example, the contractor manager is an Experience Cloud site user and a service resource. But the contractor manager tracks individual contracting mobile workers in a separate system.

This approach works best when you don't want to track individual worker details in Salesforce. The contractor manager is responsible for viewing and updating appointment details in the field. And you don't need the scheduling engine to assign work based on different schedules for each contractor worker.

When you use this model, your process looks like this:

- 1. The dispatcher assigns the service appointment to the contractor manager using their service resource record.
- 2. The contractor coordinates with the contractor team to complete the work.

3. After the service appointment is completed, the contractor updates the service appointment and work order status from your site.

#### SEE ALSO:

Set Up Field Service in Experience Cloud Sites Define Capacity-Based Resources Guidelines for Creating Operating Hours for Field Service

# Create Service Crews

USER PERMISSIONS		EDITIONS
To create service crews:	Create on service crews	Available in: both Salesforce
To create service crews using the crew management tool:	Create on service crews AND	Classic (not available in all orgs) and Lightning Experience
	Create on service resources AND Edit on service territories	The Field Service core features, managed package, and mobile app are available in <b>Enterprise</b> ,
To create service resources representing crews:	Create on service resources	<b>Unlimited</b> , and <b>Developer</b> Editions.
To assign service crews to service appointments:	Edit on service appointments	
To view service crew members:	Read on service crews AND Read on service resources	
To create, update, or delete service crew members:	Edit on service crews	

Set up teams who can be assigned to field service appointments as a unit. A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

Create service crews from the crew management tool or the Service Crews tab.

From the Crew Management Tool

🜐 This is a Field Service managed package feature.

- 1. Open the crew management tool by clicking the **Crew Management** tab or opening the Lightning page that contains it.
- 2. Click New Service Crew to open the crew wizard.
- **3.** Complete the fields on the Basics tab.
- 4. Optionally, add skills to the crew on the Skills tab. For example, perhaps the crew you're creating must always include someone with the Welding skill. Adding skills makes it easier to find potential crew members with the skills you need.
- 5. Select a leader on the Crew Leader tab.

6. Save your crew. This creates an active service resource of type Crew that's used during scheduling. You can now view the crew in the crew management tool and add members to it.

	New Service Crew		Mon, N	larch 4, 2019	- Fri, March	8, 2019	$\times$
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1. B	asics	2. Skills	3. Crew Lea	der	4. Summary		
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Crev	w Name *	Crew Size					_
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Sa	n Francisco	▼ Mar 4, 20	)19 🛗	None	苗		- 1
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From the Service Crews Tab

- 1. Customize page layouts to support crew features.
  - a. Update the field-level security settings of the Service Crew field on service resources so it's not hidden. Then, add the field to service resource page layouts and check that the User field is not marked as required. This lets you create service resources that represent service crews so crews can be assigned to service appointments.



🕜 Note: Though the User and Service Crew fields won't be marked required in the UI, service resource records can't be saved unless one of the fields is filled out.

- b. Update the field-level security settings of the Gantt Label field on service crew members so it's not hidden. Then, add the field to the Service Crew Member page layout.
- 2. From the Service Crews tab, click New.
- 3. Enter a crew name and ideal size, and save your changes.
- 4. Add service resources to the crew from the Service Crew Members related list. You can specify start and end dates for members and flag the crew leader.
- 5. Create a service resource to represent the crew, which is required for scheduling. Changing a crew's members doesn't affect its service appointment assignments.
  - a. From the Service Resources tab, click **New**.
  - **b.** Enter a name for the crew.
  - c. Leaving the User field blank, select the crew in the Service Crew field.
  - d. Select a Resource Type of Crew.
  - e. Select Active to be able to assign the crew to service appointments and manage its membership with the crew management tool. Service resources of type Crew can't be activated unless the crew has at least one active member.

- f. Skip the optimization option, which doesn't apply to service crews.
- g. Save your changes.

#### Considerations for Scheduling Service Crews

Field Service crews, much like individual service resources, can be assigned to service appointments. Learn how absences, efficiency, and crew settings affect service crew scheduling.

#### SEE ALSO:

Service Crew Fields View Service Crews on the Gantt Set Up Crew Management Manage Field Service Crew Membership

# Considerations for Scheduling Service Crews

Field Service crews, much like individual service resources, can be assigned to service appointments. Learn how absences, efficiency, and crew settings affect service crew scheduling.

🜐 This is a Field Service managed package feature.

#### Absences

If a service resource of type Crew has resource absences, those absences are considered in scheduling. Absences associated with individual crew members' corresponding service resources aren't considered.

#### **Appointment Assignments**

Service appointments can be assigned only to service resources. Therefore, to assign a crew to a service appointment, you need a service resource of type Crew that represents the crew. If you create your crew from the crew management tool, this resource is created automatically. Otherwise, follow the steps in Create Service Crews.

When an appointment is assigned to a service crew, the appointment gains these assigned resources:

- The service resource of type Crew
- The service resources of type Technician who are active service crew members during the appointment time

The appointment's assigned resources are refreshed when:

- The appointment is dispatched (if the last status category isn't None)
- The appointment's status is changed to In Progress (if the last status category isn't None)
- The appointment is assigned to a different resource
- Changing the appointment's Scheduled Start or Scheduled End

If you want appointments that don't require crews to be assigned only to individual service resources, use the Resource Priority service objective in your scheduling policy. Give your mobile workers a lower priority so the scheduler prefers to assign work to them. To prohibit the scheduling of all appointments to crews, assign a "No Crew" skill to your individual service resources. Then, add this skill as a requirement to the work type, work order, or work order line item in question.

#### Capacity

Capacity-based scheduling isn't supported for service crews because a service resource of type Crew can't be capacity-based.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Efficiency

When an appointment is scheduled to a crew, the Efficiency field on the crew's service resource is used to calculate the appointment's Scheduled End. The crew members' efficiencies aren't considered.

#### **Geolocation Tracking and Service Territories**

- The Last Known Location is tracked for crew leaders only. If a crew has more than one leader, the most recently captured location is displayed on the service resource's map.
- If a service resource is relocated to another service territory while they belong to a crew, the service resource membership record is drawn only on the relocation territory.
- The service resource representing the service crew is the home base considered by Field Service while belonging to the crew.
- Travel calculation follows the service territory or the service territory member's address of the service resource representing the service crew.

#### **Membership Requirements**

- Only active service resources of the Technician resource type can be added to crews. For example, you can't add a crew to a crew.
- To belong to a crew, a service resource needs service territory membership in the territory where the crew provides service. The time span of service crew membership must match or be fully contained in the time span of the service resource of type Technician service territory membership.
- A service resource can be a member of multiple crews as long as the membership dates don't overlap.
- Service resources that belong to a service crew don't receive notifications about assignments or assignment changes. Assignment notifications are sent only to service resources that are assigned individually to appointments.
- Removing all members from a service crew deactivates the related service resource of type Crew.

#### Minimum Crew Size

Work orders, work order line items, and work types come with a Minimum Crew Size and a Recommended Crew Size. For example, a crew could have a recommended size of 3, but a minimum size of 2. Work orders and work order line items inherits their work type's crew size settings.



🕜 Note: The crew size fields are hidden for all users by default. If you don't see them, update their field-level security settings in Setup.

Field Service doesn't consider the Recommended Crew Size when assigning appointments. To determine whether a service crew fits the minimum crew size requirement for an appointment, the scheduling engine either counts the crew's service crew members or checks the Service Crew Size field on the Service Crew record. You can adjust these settings on the Service Crew Resources Availability work rule. If the Minimum Crew Size is blank or 1, the scheduler can assign the work to mobile workers or to crews. When using Enhanced Scheduling and Optimization, a Minimum Crew Size of 1 requires a crew.

You can customize the Service Crew Resources Availability work rule to serve one of two purposes:

- Compare a service appointment parent record's Minimum Crew Size field to the Crew Size field on the service crew.
- Compare a service appointment parent record's Minimum Crew Size field to the actual number of allocated service crew members at the time of the assignment. Consider Service Crew Membership must be selected on the Service Crew Resources Availability work rule

If the Minimum Crew Size is blank or zero on the service appointment's parent record, only single service resources (Technician type) are considered as candidates. If the Minimum Crew Size is 1 or more on the service appointment's parent record, only Crew type service resources are considered as candidates. This is also true for optimization, although a crew isn't a candidate if it has no valid crew members and **Consider Service Crew Membership** is selected on the Service Crew Resources Availability work rule.

If your org was created before Spring '18, you must create this work rule and add it to your scheduling policies.

#### **Multiday Appointments**

When a multiday appointment is scheduled for a worker whose start date on a service crew is in the future, the multiday appointment is elongated to last the duration of the worker's membership in the service crew.

#### **Resource Notifications**

Service crew members assigned to a service appointment aren't automatically made followers when the service appointment is dispatched. Only one assigned resource can be set to automatically follow a dispatched service appointment. If you want all the crew members to be followers, customize the push notifications for the Field Service Mobile App. Using custom push notifications enables getting multiple notifications for different users based on an event, such as dispatching a service appointment.

#### **Resource Preferences**

Service resources that belong to a crew can't be candidates for appointments while they belong to a crew. Therefore, the Required Resource and Excluded Resource work rules and the Preferred Resource service objective don't apply to active service crew members.

#### **Scheduling Candidates**

When the scheduler is looking for candidates to perform a job, only service resources of type Crew and Technician are considered as candidates. If a service resource is a current member of a service crew, the resource isn't considered as a candidate. If a service resource is manually assigned to a service appointment while they belong to a crew, the dispatcher console shows a rule violation.

#### Sharing

When a service appointment is dispatched, members of the assigned service crew get Read access to the appointment and its parent record and the crew leader gets Read/Write access. If the Field Service managed package isn't installed, service crew leaders don't receive any extra permissions.

If an appointment's Scheduled Start changes or an assigned resource of type Crew is updated, the appointment's assigned resources are refreshed to keep the sharing settings current. A change in a service crew membership record doesn't trigger the refresh.

#### Skills

Skills can be assigned to service resources of any type—Technician or Crew—and are considered during scheduling if the Match Skills work rule is included in the scheduling policy.

If you want the scheduling engine to consider a service crew's combined skills—that is, all skills assigned to the service crew members—enable skill grouping. This way, if an appointment requires Drilling and Installation skills, a service crew that has members with that group of skills is considered as a candidate. When using Enhanced Scheduling and Optimization, only the skill set of the crew members is considered when skill grouping is enabled, and the skill set of the crew is ignored (when skill grouping is disabled, the Match Skills work rule considers the crew resource type skills only).

From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab. On the Scheduling tab, select **Enable resource crew skill grouping** and save your changes.

## Note:

- When skill grouping is enabled, the scheduling engine calculates the crew's skill set for that time slot. The skill set is recalculated each time the scheduling engine searches for appointment candidates because it can change based on crew member allocations and skills that expire. For example, if a resource skill requires recertification every six months, the scheduling engine considers crew members with the skill while their certifications are valid.
- If multiple members of a service crew have the same skill, the scheduling engine considers the highest skill level when calculating the crew's combined skill set.

#### Utilization

When utilization is calculated for the utilization view and metrics shown in the dispatcher console, a service crew member is considered to be utilized like the service resource representing the crew they belong to.

#### SEE ALSO:

Service Crew Fields View Service Crews on the Gantt Set Up Crew Management Manage Field Service Crew Membership View a Field Service Resource's Daily Travel Route

# Set Up Crew Management

Give Field Service admins and dispatchers access to a drag-and-drop service crew management tool where they can easily create service crews and update service crew membership.

🜐 This is a Field Service managed package feature.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To create Visualforce tabs:

Customize Application

To set Visualforce page security and create permission sets:

 Manage Profiles and Permission Sets

To assign permission sets:

Assign Permission Sets

Field Servi	Ce Home	Reports	<ul> <li>Field Service Accord</li> </ul>	ounts 🗸 Work Orders 🗸 Service Appointments 🗸 Service Resources 🗸 Crew Management More	*
Policy: Customer First	*		New Service Crew	Wed, July 31, 2019 🛗 < Today	> Daily +
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B Janice Gonzale     Expert	s		Crew Schedule		
Ralph Clark     Installer			Janice Gonzales	SCM-0001 *	
Duise Martin			Ralph Clark	SCM-0002	
SF Showroom			Louise Martin	SCM-0003	
- Los Angeles			- Los Angeles	America/Los	Angeles (GMT-7)
Aartino Castar     Installer	ion		- 😮 Erin's Dream Te	am (Crew Size- 3)	Match Crew Skills
Paul Morrison Installer			Crew Schedule	SA-, SA-, SA-,	
Pam Lawison     Expert				- SCM-0004	
Alan Reed			Installer Installer	SCM 0006	
Lamar Smith			Pam Lawison Expert		
LA Showroom			Installer	SCM-0005	

- 1. Decide which users need access to the crew management tool. Ensure that each user has at least one of these permission sets:
  - FSL Admin Permissions
  - FSL Dispatcher Permissions
- 2. Add the crew management tool to your org in one of two ways:
  - Create a Visualforce tab named Crew Management for the FSL.CrewManagement page.
  - Embed the Crew Management custom Lightning component in a Lightning page. Because the component includes a detailed chart, give it plenty of space on the page.
- 3. Create a permission set with access to the following elements, and assign it to the relevant users.
  - Crew Management tab, if you created one
  - FSL.CrewManagement Visualforce page
  - FSL.CrewsResourceLightbox Visualforce page
  - FSL.CrewsSaLightbox Visualforce page
  - FSL.CrewsWorkorderLightbox Visualforce page
  - FSL.CrewsWorkorderLineItemLightbox Visualforce page
  - FSL.CrewManagement Apex class

You're all set! For help using crew management, see Manage Field Service Crew Membership.

#### SEE ALSO:

Manage Field Service Crew Membership Create Service Crews View Service Crews on the Gantt

# Limit Access to Field Service Records

When you install the Field Service Managed Package, org-wide default sharing settings are set to Public Read/Write for the Work Orders, Work Order Line Item, and Service Appointment objects. Therefore, all users can view and update these records even if the records are owned by other users. However, most Field Service customers choose to limit access to these records so that their team members see only the records that are relevant to them and on a need-to-know basis, for example, a dispatcher with access only to service appointments for the service territories that they manage.

🜐 This is a Field Service managed package feature.

# Limit Default Access to Field Service Objects

Limit default access to core Field Service objects (Work Order, Work Order Line Item, Service Appointment, Service Resource, Service Territory).

- 1. In Setup, enter *Sharing Settings* in the Quick Find box, and then select **Sharing Settings**.
- 2. Click Edit.
- 3. In the Default Internal Access column, select **Private** for the objects that you want to limit access to.

To share dispatched service appointments to Experience Cloud site users when Default Internal Access is Private or Public Read Only, set Default External Access to Private or Public Read Only

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To limit access to field service records:

 Field Service Admin Permissions

also. If the Default Internal Access setting is Public Read/Write, Experience Cloud site users can see dispatched appointments only if the external setting is Public Read/Write and you enable dispatch sharing to resources.

4. Save your changes.

# Share Field Service Object Records with Public Groups

Configure functionality to share service appointments, work orders, service territories, and service resources with Public Groups. When using a Private sharing model for Service Resource, Service Territory, Service Appointment, Work Order, and Work Order Line Item objects, dispatchers or agents must have access to the records of service resources and service appointments within their managed territories.

- 1. In Field Service Settings, select **Sharing**, and then select **Scheduled Jobs**.
- 2. Select Enable User Territories Sharing.

When a service territory is created, a Public Group is created in Setup with its name, and the service territory is shared with the Public Group. In addition, when a service appointment is created with a service territory defined, a share rule is created to share the appointment with the service territory associated with the appointment. This sharing process ensures that any user who is a member of the Public Group for the territory has access to records shared with it.

## 3. Select Share parent Work Order when Service Appointment is shared.

This option ensures that any work order is shared with the Service Territory Public group, created in the previous step.

## 4. Select Automatically populate user groups based on User Territory.

When a User Territory record is created, the user defined on the record (typically either an agent or dispatcher that manages a specific territory) is added to the Public Group that corresponds to the territory defined on the record. This process gives the user access to all records shared with the Public Group for that service territory

# Configure the User Territory Job

Service resources require initial and regular assessments to determine if they must be added to or removed from the Public Group based on their territory assignment duration. Field Service offers a User Territory Job feature to facilitate the evaluation of service appointments for sharing.

- 1. Click the + icon next to User Territories to expand the User Territory Job menu and confirm that Active is selected.
- 2. Select which territories to check sharing for. Limit each job to fewer than 200 territories.
- 3. Select a value for Time Horizon in days.

The Time Horizon in days field determines how far in advance of a resource's territory membership they must be shared with the public group associated with their territory. Therefore, how far in advance users (agents and dispatchers) that are members of that public group have access to their service resource record and see the resource in the dispatcher console Gantt. For example, select 7 to share service resources with dispatchers 7 days before their territory membership for the territory that the dispatcher manages.

4. Select a value for Time Horizon in days (Backwards).

The Time Horizon in days (Backwards) field determines how far after a resource's territory membership has ended the resource must be shared with the public group associated with their territory. For example, select 7 to ensure dispatchers see the service resource's work in the previous week's schedule on the Gantt. After 8 days, the dispatcher no longer sees the service resource or their schedule.

- 5. Configure the job's Frequency settings.
  - a. Select Recurring.
  - **b.** Select all the months under the Month section.
  - c. Select Specific Hour and then enter a value for the Hour and Minute fields to define when the job runs. We recommended having the job run outside working hours so that record access doesn't change during a working day. For example, select 0 for the Hour field and 0 for the Minute field so that the job runs at midnight.
  - **d.** Configure how often the job should run. If a service territory membership changes frequently, select **Day of week** and then select each weekday to evaluate territory membership every day. If a service territory membership doesn't change frequently, you can schedule the job to run less often. Select **Day of month** and then select a non-working day such as Sat to run the job once every 30 days.
- 6. Save your changes.
- 7. Optionally, click **Run now** to reevaluate and update sharing records for service resources to or from Public Groups.

# Add Dispatchers and Agents to a Service Territory's Public Group

Give agents and dispatchers access to the records (Work Order, Work Order Line Item, Service Appointment, Service Resource, Service Territory) that they manage.

- 1. From the App Launcher, find and open User Territories.
- 2. Click New.
- **3.** Select a service territory.
- 4. Select the user you want to add as a member of that territory's public group.

The user is added to the public group for that territory, and the user gets access to all work orders, service appointments, service resources, and any other records shared with the public group.

# Set up Sharing for Field Service Resources

These settings allow dispatchers to control access to the appointment and its related information until they've finalized the appointment's details.

- 1. From Setup, enter Field Service Settings in the Quick Find box, and then select Field Service Settings.
- 2. Select any of these options. Hover over a setting's information icon for details.
  - a. Share dispatched service appointments with their assigned resources
  - b. Share service appointments' parent work orders with their assigned resources
  - c. Let service crew members edit their service appointments
- **3.** Save your changes.

# Considerations for Field Service Object Sharing

Before you start sharing objects, make sure you review some considerations.

# **General Considerations**

- When a service resource is removed from a service appointment, sharing is deleted only for that service appointment. Sharing on the parent work order is retained.
- When using customized sharing logic, ensure that every dispatcher gets Read/Write access and not just Read-Only access to the service appointments in their territory, so they can edit the Service Resources' schedule.
- When an appointment is canceled, it's visible only to the appointment owner and the relevant dispatchers based on the user territory object.
- You can give dispatchers access to records by sharing information across territories and syncing calendars to include absences and other events.
- In some Salesforce orgs, the Field Service Admin app has similar sharing options. We recommend disabling the app sharing settings and using the Setup settings.

# Considerations for Service Resource Sharing (User Territory Job)

- When User Territory Sharing is enabled and the option to Automatically populate user groups based on User Territory is selected, the User Territory Apex rule performs these actions.
  - If you create a service territory, a public group with the same name is created. The public group is added to the ServiceTerritoryShare object.
  - If you create a user territory record, the user is added to the public group for that service territory.
  - If you create a service appointment with that service territory, the public group is added to the ServiceAppointmentShare object to grant access to the record.
  - When a service appointment with that territory is shared, associated parent records (such as accounts, assets, opportunities, work orders, and work order line items) are also shared. The service appointment record and its parent record are shared with the associated public group and its users. If the parent record of the appointment is a work order line item, the associated work order is also shared. Optionally, in Field Service Settings under Scheduled Jobs in Sharing, select which parent objects are shared when an appointment is shared. For example, to share work orders but not accounts, select Share parent Work Order when Service Appointment is shared and deselect Share parent Account when Service Appointment is shared.
- If you don't have User Territory Sharing enabled or sharing settings weren't private when you created the service territory records, you must manually create the sharing records.

- Public group names must be unique. For example, User Territory Sharing doesn't work if you have a queue with the same name as one of your public groups.
- When a service appointment is created without a user territory, it's associated with the Field Service Default public group. This default group allows a user to access a service appointment and work order even when no territory is associated. Field Service adds users in all user territories as members of this public group. If you're a dispatcher, you can filter the Gantt and show service appointments that aren't associated with a territory.
- Dispatchers must have sharing settings for the primary service territory of a service resource in order to manage the resource's schedule.
- Example: John is a dispatcher for the New Jersey service territory. His user territory record gives him access to New Jersey field service records. Madison is a mobile worker for the Pennsylvania service territory, but on August 1 she's moving to the New Jersey territory.

To reflect Madison's move, add an end date of July 31 to her Pennsylvania service territory member record. Then, create a New Jersey service territory member record for Madison with a start date of August 1.

With the User Territory sharing job configured to run daily for all service territories, including Pennsylvania and New Jersey, this job calculates which records users need access to. Because the job's backward time horizon is set to 1 day, John receives access to Madison's field service records 1 day before she starts work in New Jersey.

#### SEE ALSO:

Field Service Permission Set Licenses

# Sync Services and Resource Absences with Events Field Service Using Calendar Sync

You can keep your services and resource absences in sync with calendar events using Calendar Sync. Syncing services and resource absences to or from calendar events lets you maintain an accurate view of your services and resource availability when you create events and request meetings from your Salesforce calendar. Events can then be synced between external calendars and Salesforce.

## 🜐 This is a Field Service managed package feature.

- Note: Calendar Sync permissions aren't included in the managed package default permission sets. To enable Calendar Sync, you must have Edit permissions on the Event object and Edit permissions on Event fields: Id, StartDateTime, EndDateTime, Subject, IsReminderSet, ReminderDateTime, Location, Ownerld, Description, WhatId, IsAllDayEvent.
- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Select Sharing > Calendar Sync, and under Service Appointments and Resource Absence configure the following settings.

Setting	Description
Synchronize Services from Salesforce calendar events	If enabled, whenever an Event record is created, and the Event Record Type field is the same as the Calendar Event Type setting, a Work Order and Service Appointment is created.
	• If the event's Subject matches the name of an existing Work Type, the service appointment's parent Work Order is created using that Work Type.
	• The event's Start Time is mapped and synced to the service appointment's Scheduled Start Time.
	• The event's End Time is mapped and synced to the service appointment's Scheduled End Time.
	<ul> <li>The event's Assigned To field is mapped and synced to the service appointment's Assigned Resource.</li> </ul>
	<ul> <li>The event's Location is mapped to the service appointment's Service Territory.</li> </ul>
	• The event's Related To field is mapped to the matching service appointment record.
Synchronize Services to Salesforce calendar events	<ul> <li>If enabled, whenever a service appointment's Status is set to Dispatched, an Event record is created for the assigned service resource.</li> <li>The service appointment's Work Type is mapped and synced to the event's Subject.</li> </ul>

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To sync services and resource absences to Salesforce calendar events:

• Create and Edit on service appointments and Edit on Resource Absence

To sync services and resource absences from Salesforce calendar events:

• Create and Edit on service appointments and Edit on Resource Absence

Setting	Description
	• The service appointment's Scheduled Start Time is mapped and synced to the event's Start Time.
	• The service appointment's Scheduled End Time is mapped and synced to the event's End Time.
	• The service appointment's Assigned Resource is mapped and synced to the event's Assigned To field.
	• The service appointment's Service Territory is mapped and synced to the event's Location.
	If there are multiple assigned resources, an Event record is only created for the first assigned resource.
	If the service appointment is reassigned, the event's assigned owner isn't updated.
	If the event's assigned owner is updated the service appointment's Assigned Resource is also updated.
	If the service appointment is rescheduled, the Event Start and End time are updated, but only if the service appointment has a parent record of type Work Order or Work Order Line Item.
	Note: For Field Service, if the service appointment's Scheduled Start to Schedule End is greater than 14 days, events aren't created in the Salesforce calendar due to a 14-day limit.
Calendar Event type	The value on the event Type field on the Event object that controls whether a Service Appointment and Work Order are created.
Enforce validations when syncing Service Appointments and Salesforce calendar events	Controls whether to ignore the update if the matching record can't be updated, or to continue without updating the matching record.
	For example, if this setting isn't enabled and you update the service appointment Scheduled Start Time, and there's a validation rule on the Event object that prevents updates to the event's Start Time, the scheduled appointment is updated, but the event isn't. The event still has the service appointment's original Start Time. If this setting is enabled, both records aren't updated.
Synchronize Absences from Salesforce calendar	If enabled, whenever an Event record is created and the event Type field is the same as the calendar event Type setting, a Resource Absence record is created for the assigned user.
	• The event's Subject is mapped and synced to the resource absence's Type. Make sure to fill in the event's Subject field. If left empty, the resource absence's Type field is set to the default value.
	• The event's Start and End fields are mapped and synced to the corresponding resource absence fields.

Setting	Description		
	• The event's Assigned To field is mapped and synced to the resource absence's Resource field. The user in the Assigned To field must have a service resource linked to it. The resource absence's Resource field is the service resource that is linked to the user in the event's Assigned To field.		
Synchronize Absences to Salesforce calendar	If enabled, whenever a Resource Absence record with Record Type Non-Availability is created for a service resource, an Event record is created for the User linked to the service resource record.		
	When you create an event with Event Type = Absence, the Resource Absence record is created and the Type field is set to the Subject of the event. An Inactive value is created for the Type field if it doesn't exist.		
Calendar Event type	The value on the Event Type field on the Event object that controls whether a Resource Absence record is created.		
Enforce validations when syncing resource absences and Salesforce calendar events	Controls whether to ignore an update if the matching record can't be updated, or to continue without updating the matching record.		

# Considerations

- Child events aren't supported.
- Recurring events create a single Service Appointment record and a single Resource Absence record.
- Crews aren't supported since the Service Resource, as a Crew, doesn't have a User to assign appointments to.
- When creating, updating, or deleting events in bulk, if one of the event records results in a failure, Calendar Sync doesn't sync any of the events in that request.
- You can't create an event of type Resource Absence or Service Appointment when the Name field is populated with a Lead, or the Related To field is populated with any value. The Related To field is preserved for the Resource Absence or Service Appointment that is created and linked after the new event is inserted. You can't relate an event to a Lead record if the event is already linked to another object through the Related To field.
- Since Site Guest Users can't be assigned with Edit Events permission, Calendar Sync with Site Guest User isn't supported. This means that events aren't created, changed, or deleted after a Guest user has changed a Service Appointment or Resource Absence.

# Set Up Your Field Service Inventory

Track and manage the storage, request, transfer, and consumption of every item in your inventory, and ensure that your mobile workforce has the right parts in stock to do their job.

First, a little vocabulary review! Field service inventory management comes with a full toolbox of features. You can find these features in Salesforce as tabs or related lists:

- **Locations** are places, like warehouses, sites, or work vehicles, where inventory is stored.
- **Product items** represent products in your inventory stored at a particular location, such as bolts stored in a warehouse. Each product item is associated with a product and a location in Salesforce. If a product is stored at multiple locations, the product will be tracked in a different product item for each location.
- Products required are products that are needed to complete a work order or work order line item.
- **Products consumed** are product items that were used to complete a work order, and are no longer in your inventory.
- **Product item transactions** describe actions performed on a product item. They're auto-generated records that help you track when a product item is replenished, consumed, or adjusted.
- **Product requests** are orders for products, which you might create when stock is running low.
- Product request line items are subdivisions of a product request.
- Product transfers track the transfer of product items between inventory locations.
- Return orders track the return or repair of products.
- Return order line items are subdivisions of a return order.
- Serialized Product are products that are serialized. Each serialized product has a serial number.
- Shipments represent the shipment of product items between locations.

Now that you've got the important terms under your belt, it's time to configure your org for inventory management.

#### Customize Inventory Settings in Field Service

To control how your team manages inventory, customize page layouts and assign user permissions.

#### Create Inventory Locations for Field Service

Locations are places, like warehouses, customer sites, or work vehicles, where inventory is stored for a field service operation. Create locations so you can track the items stored there and restock when necessary.

#### Create Product Items to Represent Inventory

After you customize your field service inventory settings, track where your inventory is stored by creating product items.

#### Create Serialized Inventory

In Field Service, use serialized products to assign a serial number to an asset type to track and manage your inventory.

#### SEE ALSO:

Manage Your Field Service Inventory Set Up Inventory Access for Mobile Workers

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Customize Inventory Settings in Field Service

To control how your team manages inventory, customize page layouts and assign user permissions.

**1.** Assign user permissions.

Users Who Will	Need These Permissions
Enable Field Service	Customize Application
View the Locations, Products, Product Items, Product Requests, Product Transfers, Return Orders, or Shipments tab and records	Read on the object
Create, edit, or delete locations, products, product items, product requests, product transfers, return orders, or shipments	Create, Edit, or Delete on the object
Add products required to work orders, work order line items, or work types	Edit on work orders, work order line items, or work types
Create, edit, or delete products consumed on work orders or work order line items	Create on work orders AND Read on product items
View product item transactions	Read on product items
Edit product item transactions	Edit on product items
Create addresses for locations	Create on Addresses

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To edit page layouts and set field history tracking:

Customize Application

To create and edit users:

• Manage Internal Users

2. Customize the fields and related lists on the following objects' page layouts.

Note: If you have your own field service terminology, remember that you can rename an object's tab and labels. In Setup, select **Rename Tabs and Labels**, and enter your own term for the object you'd like to rename.

Page Layout	Recommended Customizations for Inventory Management
Location	• Arrange the fields.
	Note:
	<ul> <li>Add the Inventory Location field so you can track where inventory is stored.</li> </ul>
	- Add the Mobile Location field so you can flag mobile locations such as service vehicles.
	<ul> <li>If you plan to create location hierarchies, add the Parent Location field, and optionally the read-only Root Location and Hierarchy Level fields.</li> </ul>
	<ul> <li>Optionally, customize the values in the Location Type field. Its out-of-the-box values are Warehouse, Van, Site, and Plant.</li> </ul>
	Confirm that your layout includes the desired related lists:
	<ul> <li>The Addresses related list shows addresses related to the location, such as billing and shipping addresses.</li> </ul>
	<ul> <li>The Assets related list shows assets at the location.</li> </ul>

Page Layout	Recommended Customizations for Inventory Management
	<ul> <li>The Associated Locations related list shows related accounts.</li> <li>The Child Locations related list shows locations within the location, such as vehicles which are parked at a warehouse when not in use.</li> <li>The Maintenance Plans related list shows maintenance plans linked to the location.</li> <li>The Product Items related list shows product items (inventory) stored at the location.</li> <li>The Product Transfers (Source) related list shows product transfers that originated at the location.</li> <li>The Product Transfers (Destination) related list shows product transfers in which items were transferred to the location.</li> <li>The Service Territory Locations related list shows related service territories, which usually indicates that the location is within the territory.</li> </ul>
Address	<ul> <li>Arrange the fields, which appear in the Addresses related list on locations.</li> <li>Optionally, customize the values in the Address Type field. Its default values are Mailing, Shipping, Billing, and Home.</li> </ul>
Associated Location	<ul> <li>Associated locations let you associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts.</li> <li>Arrange the fields, which appear in the Associated Locations related list on locations and accounts.</li> </ul>
Product	<ul> <li>Confirm that your layout includes the following related lists: <ul> <li>The Product Items related list shows product items that track the storage of the product in an inventory location.</li> <li>The Return Order Line Items shows return order line items that track the return or repair of the product.</li> </ul> </li> <li>Define values for the Quantity Unit of Measure picklist field, which comes with one value (Each). These values are reflected in the Quantity Unit of Measure field on product items, product request line items, product transfers, products consumed, and products required.</li> <li>a. From Setup, enter <i>Products</i> in the Quick Find box, then select <b>Fields</b> under Products.</li> <li>b. Click <b>Quantity Unit of Measure</b>.</li> <li>c. In the Quantity Unit of Measure Picklist Values related list, click <b>Edit</b> to change the default or <b>New</b> to add values. For example, you may need values like Kilograms or Liters.</li> <li>d. Save your changes.</li> </ul>
Product consumed	Arrange the fields that appear in the Products Consumed related list.
Product item	<ul> <li>Arrange the fields.</li> <li>Confirm that your layout includes the following related lists.</li> <li>The Product Item Transactions related list automatically tracks the replenishment, consumption, and adjustment of product items.</li> <li>The Product Transfers related list shows transfers of the inventory.</li> </ul>

Page Layout	Recommended Customizations for Inventory Management
Product item transaction	Arrange the fields that appear in the Product Item Transactions related list.
Product request	<ul> <li>Arrange the fields.</li> <li>Optionally, customize the Status field values. The default values are Draft, Submitted, and Received.</li> <li>Confirm that your layout includes the following related lists.</li> <li>The Product Transfers related list shows transfers that are created to fulfill the request.</li> <li>The Product Request Line Items related list shows the request's line items (each associated with a product).</li> <li>The Return Orders related list shows return orders associated with the request.</li> </ul>
Product request line item	<ul> <li>Arrange the fields.</li> <li>Optionally, customize the Status field values. The default values are Draft, Submitted, and Received.</li> <li>Confirm that your layout includes the following related lists: <ul> <li>The Product Transfers related list shows transfers created to fulfill the request.</li> <li>The Return Order Line Items related list shows return order line items associated with the product request line item.</li> </ul> </li> </ul>
Product required	Arrange the fields that appear in the Products Required related list.
Product transfer	<ul> <li>Arrange the fields. The default layout includes only some of the available fields.</li> <li>Optionally, customize the Status field values. The default values are Ready for Pickup and Completed.</li> <li>Confirm that your layout includes the Product Item Transactions related list, which automatically tracks the replenishment, consumption, and adjustment of the product items being transferred.</li> </ul>
Return order	<ul> <li>Arrange the fields.</li> <li>Confirm that your layout includes the following related lists: <ul> <li>The Product Transfers related list shows product transfers related to the return</li> <li>The Return Order Line Items related list shows subdivisions of the return, each associated with a specific product</li> <li>The Work Orders related list shows work orders related to the return</li> <li>The Work Order Line Items related list shows work order line items related to the return</li> </ul> </li> </ul>
Return order line item	<ul> <li>Arrange the fields.</li> <li>Confirm that your layout includes the following related lists: <ul> <li>The Product Transfers related list shows product transfers related to the return</li> <li>The Work Orders related list shows work orders related to the return</li> <li>The Work Order Line Items related list shows work order line items related to the return</li> </ul> </li> </ul>
Shipment	<ul> <li>Arrange the fields.</li> <li>Optionally, customize the Status field values. The default values are Shipped and Delivered.</li> </ul>

Page Layout	Recommended Customizations for Inventory Management
	• Confirm that your layout includes the Product Transfers related list, which shows transfers that the shipment fulfills.
Work order	Confirm that your layouts include the following related lists.
Work order line item	• The Products Required related list shows products needed to complete the work.
	• The Products Consumed related list shows product items used to complete the work.
	• The Product Requests related list shows product requests created to ensure that the assigned service resources have the parts they need to complete the work.
	• The Product Request Line Items related list shows product request line items associated with the work.
	• The Return Orders related list shows return orders associated with the work.
	• The Return Order Line Items related list shows return order line items associated with the work.

#### **3.** Make the following tabs visible to your users:

- Locations
- Products
- Product Items
- Product Requests
- Product Request Line Items
- Product Transfers
- Return Orders
- Shipments

You can add the tabs to a custom app or instruct users to add them in Salesforce.

# SEE ALSO:

Product Item and Inventory Fields Product Request and Transfer Fields Location Fields for Field Service

# Create Inventory Locations for Field Service

# USER PERMISSIONSTo create locations:Create on locationsTo view associated locations:Read on accountsTo create, update, or delete associated<br/>locations:Edit on accountsTo view addresses:Read on locationsTo create, update, or delete addresses:Edit on locations

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Locations are places, like warehouses, customer sites, or work vehicles, where inventory is stored for a field service operation. Create locations so you can track the items stored there and restock when necessary.

- 1. From the Locations tab, click **New**.
- 2. Enter a location name.
- 3. Select a location type:
  - Warehouse (default)
  - Site
  - Van
  - Plant
- 4. If inventory is stored at the location, select **Inventory Location**. This allows you to you associate the location with items in your inventory, known as product items.
- 5. If the location can be moved, like a van or tool box, select Mobile Location.
- 6. Complete the other fields as appropriate.
- 7. Click Save.
- 8. In the Addresses related list, create addresses for the location. The available types of addresses are Mailing, Shipping, Billing, and Home.
- 9. In the Files related list, attach files like blueprints, photographs, or registration information.
- **10.** In the Service Territory Locations related list, create records to indicate which service territories the location belongs to. Service territory locations are warehouses, customer sites, or vehicles that are located or operate in the service territory.
- SEE ALSO:

Location Fields for Field Service

# Create Product Items to Represent Inventory

After you customize your field service inventory settings, track where your inventory is stored by creating product items.

Product items represent your inventory. Each product item is linked to a storage location, such as a van or warehouse, and to a specific product, indicating the item being stored. Create product items so you can track inventory usage and restock when necessary.

Ø

**Note:** Before you get started, choose whether to assign serial numbers to product items for identification purposes.

- If you assign a serial number, each product item represents a single item in your inventory: for example, create one product item representing a motor with serial number 012345 stored at Warehouse A. Before serializing product items, review the Inventory Management limitations in Field Service Limits and Limitations.
- If you choose not to assign serial numbers, you can specify a quantity on each product item. Product item quantities auto-update to reflect transfers between locations. Create one product item for every location that has the product in stock. For example, create:
  - One product item representing 100 batteries stored at Warehouse A
  - One product item representing 15 batteries stored in Service Van 1
- 1. From the Product Items tab, click New.
- 2. Use the lookup field to select a product.

Note: To add products to your org, see Guidelines for Creating Products.

- **3.** Use the lookup field to select the location where the product item is stored. Only locations that have the **Inventory Location** option selected can be associated with product items.
- 4. Enter the Quantity on Hand, which is the amount at this location. If you intend to add a serial number, this value will likely be 1.
- 5. If needed, add a unit of measure; for example, grams, packs, or units. These values are inherited from the Quantity Unit of Measure field on products.
- 6. If the Quantity on Hand is 1, enter a serial number.

# 7. Click Save.

The product item now appears in the Product Items related list on the associated location and product records. In addition, the Product Item Transactions related list on the product item now contains a "Replenished" transaction that tells you when the product item was created.

If you update a product item, a new product item transaction is created with a type of "Adjusted" and a quantity that is the difference between the old and new Quantity On Hand. Deleting a product item deletes all related product item transactions.

SEE ALSO:

Product Item and Inventory Fields Manage Your Field Service Inventory **EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To create product items:

Create on product items

To view product item transactions:

• Read on product items

To create, update, or delete product item transactions:

• Edit on product items

# Create Serialized Inventory

USER PERMISSIONS	
To create product items:	Create on product items
To view product item transactions:	Read on product items
To create product item transactions:	Create on product items
To update product item transactions:	Edit on product items
To delete product item transactions:	Modify All Records or Modify All Data on product items
To create serialized products	Create on serialized products

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

In Field Service, use serialized products to assign a serial number to an asset type to track and manage your inventory.

Before you can send serialized products in a product transfer, you must create a product that is serialized, and create the product item with serialized products. When creating product items, you can only use locations that are designated Create Inventory Locations for Field Service.

- 1. Create a product that is serialized.
  - a. From the App Launcher, open Products and click New.
  - b. For the Transfer Record Mode, select Send and Receive or Receive only.
  - c. Enter the Product Name.
  - d. Check Serialized.
  - e. To create an additional product that is serialized, click Save and New.
  - f. Save your work.
- 2. Create the product item by entering the product name and location.
  - a. From the App Launcher, open Product Items and click New.
  - **b.** Use the lookup field to select a **Product Name**.
  - c. Use the lookup field to select the Location where the product item is stored.
  - **d.** Enter *0.00* for the **Quantity on Hand**. The quantity on hand is updated when you add serialized products to the product item.
  - e. Save your work.
- 3. Add the serialized items for the product that are at the location.
  - a. On the Related tab of the Product Item, go to Serialized Products and click New.
  - b. Enter the Serial Number.
  - c. Use the lookup field to select a serialized **Product**.
  - d. To add additional serialized products, click Save and New.
  - e. Save your work.

# Get Ready for Field Service Scheduling and Optimization

Define your service appointment lifecycle, configure appointment booking settings, and get to know your Field Service scheduling policies, optimization settings, and sharing settings. As of Summer '23 new Salesforce orgs have Enhanced Scheduling and Optimization enabled by default for all service territories. Existing orgs can continue to opt in and enable the enhanced engine for all or selected service territories. The enhanced engine is an improvement of the optimization functionality and associated manual and semiautomatic scheduling services. The enhanced architecture and services are more efficient and improve scalability, performance, and schedule quality.

# 🜐 This is a Field Service managed package feature.

Watch the video to see how to optimize scheduling using the innovative new engine, built for greater scalability, precision, schedule quality, and performance alongside some new features such as Travel Modes, Holiday Management, and Service Appointment Sliding.

# Watch a video

Watch the video to see how you can benefit from improved schedule quality using the innovative new engine available by default for new users as of Summer '23, and easily transitioned to by existing users, for all territories. The video covers additional supported features and the new offsite service appointment feature.

# Watch a video

#### Get Started with Schedule Automation and Optimization in Field Service

Field Service provides several tools for automating and optimizing your workforce's schedule. Learn about the benefits and differences of each method, when to use each tool, and how to set up schedule automation and optimization.

#### What's Schedule Optimization?

Manually constructing an efficient field service schedule can drive even the most serene administrator to madness. Field Service's optimization tool does the work for you by generating an optimal schedule according to your priorities and constraints.

#### How Does the Field Service Optimization Engine Work?

Need a few contractors onsite a week from now and need to know who's available? Absolutely have to have a specialist arrive to a service location in an hour? What about a regularly scheduled appointment for both the contractors and the specialist to service the same location?

# Adopt and Implement Field Service Enhanced Scheduling and Optimization

Field Service's Enhanced Scheduling and Optimization replaces the optimization functionality and associated manual and semiautomatic scheduling services you've been using. The new architecture and services are more efficient and improve scalability, performance, and schedule quality. Built on the Hyperforce platform, Enhanced Scheduling and Optimization has performance and scale like never before and provides a framework to host innovative new functionality to take Salesforce Field Service to the next level. Learn more about setting up optimization and creating optimization jobs, explore optimization metrics, and get scheduling recommendations. Start your journey to Enhanced Scheduling and Optimization, with resources for every step of your way.

#### Transition to Enhanced Scheduling and Optimization

Salesforce orgs created in Summer '23 and later have Enhanced Scheduling and Optimization enabled by default for all service territories. Orgs created before Summer '23 can opt in and enable the enhanced engine for all or selected service territories and benefit from advanced features, more efficient services, and improved scalability, performance, and schedule quality.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Activate Field Service Schedule Optimization

Configure optimization so you can schedule appointments and address last-minute challenges. You can set up optimization to run automatically, or run it manually. Activate optimization to create an optimization user and profile required for accessing a optimization services. When you're using Enhanced Scheduling and Optimization, this activation isn't required, because Enhanced Scheduling and Optimization user a Platform Integration User.

#### Create the Field Service Integration Permission Set

Create or update the Field Service Integration permission set to access the object attributes. The Field Service Integration permission set lets users manage permissions needed for optimization and scheduling services related to Enhanced Scheduling and Optimization and service appointment bundling.

# Customize the Field Service Appointment Life Cycle

A service appointment life cycle shows the sequence of stages that a service appointment passes through. The life cycle starts when the appointment is created and ends when it reaches its final status.

#### Customize Derivation Settings

Use derivations to map the fields on standard objects to fields required for scheduling, including the Address and Service Territory (where), start and end times (when), Scheduling Policy (how), and Work Type (what).

#### Customize Appointment Booking Settings

Users can schedule service appointments for a work order, work order line item, or other record by using the **Book Appointment** Chatter action. Customize this scheduling experience from the Field Service Admin app.

# Set Up Routing for Travel Time Calculations

Field Service uses aerial routing to estimate travel time between job sites. You can improve the accuracy of these estimates by enabling street-level routing (SLR), which considers real turn-by-turn data. To further fine-tune travel time calculation, enable predictive travel. For even more accurate travel time calculations using the exact service appointment location and incorporating time of day, enable point-to-point predictive routing.

# Set Up Sliding and Reshuffling for Scheduling and Appointment Booking

Free up time for scheduling more appointments when using appointment booking and scheduling. With sliding, service appointments on the Gantt can move to an earlier or later time, within the resource's availability for the same shift. By using reshuffling and sliding together, service appointments on the Gantt can also move to a different day or to a different resource. Reshuffling and sliding service appointments provide more time slot availability and faster SLA compliance and enable the scheduling of longer service appointments by reducing white spaces.

# Set Up Travel Modes

Optimization services with different travel modes enhance predictive travel by providing more accurate travel time predictions and improving the completion rate of service appointments. By leveraging different types of travel modes, admins define the travel mode per territory, per primary service territory member, or both, to reflect transportation type (car, light truck, heavy truck, bicycle, or walking), the use of toll roads, and hazmat considerations.

# Create and Manage Field Service Scheduling Policies

Scheduling policies in Salesforce Field Service define the rules and objectives (scheduling priorities) for assigning work to service resources. These policies optimize resource allocation by considering factors such as resource skills, job proximity, and urgency, to make sure the right person is assigned to the right job efficiently. By considering scheduling preferences such as minimizing travel time, scheduling as early as possible, and prioritizing preferred resources, scheduling policies improve operational efficiency and customer satisfaction.

#### Create and Manage Field Service Work Rules

Work rules refine the list of candidates for a service appointment by rejecting service resources that violate any rule. Add work rules to any Field Service scheduling policy to guide schedule optimization.

# Manage Rule Validation Checks

Set how often rules are checked for violations, and what triggers automatic rule validation checks.

# Create and Manage Field Service Objectives

Add service objectives to a scheduling policy to indicate your scheduling goals. You can weight each objective to indicate its importance. During schedule optimization, each appointment assignment receives a score from 0 to 100 for every service objective based on how fully the objective was met.

# Optimize Field Service Appointments Using Priorities

When your team's availability is limited, prioritize critical service appointments over less pressing work. You can assign dynamic priorities, such as values that increase as due dates approach. Optimization can consider priority values when it assigns appointments to time slots.

#### Create Relevance Groups

A relevance group in Field Service is a group of appointments or 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.

# Fix Overlaps by Using an Automated Scheduling Flow (Beta)

Tackle Field Service scheduling challenges with an automated flow that addresses and fixes schedule overlaps that occur due to an appointment ending late. Use the flow template recommendations or adjust the template to suit your specific use case. Fix Schedule Overlaps flow (Beta) is available only when you're using Enhanced Scheduling and Optimization.

#### Create Scheduling Recipes for Common Events

Tackle common Field Service scheduling challenges with simple optimization "recipes" that address what happens to your schedule after appointment cancellations, time changes, and overlaps. Cover all scenarios by creating multiple recipes for each category.

#### Field Service Scheduling and Optimization Services

Scheduling and optimization includes services used to schedule, reschedule, and unschedule service appointments.

#### Manage Optimization Conflicts

Enhance operational stability and reduce your optimization partial completion rate by preventing optimization conflicts when multiple optimization requests are made simultaneously on the same dataset. For example, prevent two users from creating optimization requests simultaneously for the same territory and horizon. Also configure what happens when schedule changes are made while optimization is running, for example, if a new job is automatically scheduled or a dispatcher reschedules a job while optimization is running.

# Reserve Time Slots for Designated Types of Work

Create specific time slots in Field Service dedicated to service appointments that meet your criteria.

#### Enable Multiday Field Service Appointments

Some Field Service industries have service appointments that span multiple days, for example, utility infrastructure repairs and installations. With multiday service appointments you can schedule service appointments that span resources' nonavailability without rule violations.

#### Manage Work Capacity in Field Service

Control the work performed by your workforce according to dynamic company priorities.

#### What's Available in Enhanced Scheduling and Optimization

Review some highlights of the Field Service Enhanced Scheduling and Optimization engine.

# Enable Enhanced Scheduling and Optimization

Enhanced Scheduling and Optimization must be enabled to start using its features. As of Summer '23, new Salesforce orgs have Enhanced Scheduling and Optimization enabled by default for all service territories. Existing orgs can opt in and enable the enhanced engine for all or selected service territories. The enhanced engine is an improvement of the optimization functionality and associated manual and semiautomatic scheduling services you've been using. The enhanced architecture and services are more efficient and improve scalability, performance, and schedule quality. Make sure you examine the Enhanced Scheduling and Optimization considerations and limitations before using the enhanced engine.

# Set Up Enhanced Optimization for Field Service Territories

As of Summer '23 new Salesforce orgs have Enhanced Scheduling and Optimization enabled for all service territories. Existing orgs can switch to use Enhanced Scheduling and Optimization for all service territories or per territory. Enhanced Optimization per Territory enables you to deploy Enhanced Scheduling and Optimization only on selected territories, for example, territories with simpler scheduling scenarios. This gradual rollout lets you keep the more complex scheduling scenarios for later releases, when all the service territory features are supported.

#### Field Service Scheduling and Optimization Solutions

Salesforce Field Service is used by a wide variety of customers across many industries. The tasks and activities that you do can vary significantly depending on your industry, business model, and service operations model. At Salesforce, we relate your core business objectives, needs, and user workflows to a job you need to do. The jobs framework helps us understand what customers want to achieve by focusing on their needs and how the product or service can address them. The use cases identify the core job, large or small, that a user must perform, solve, or complete to succeed. Review the different use cases, understand what industries they're most common in, and learn about the scheduling and optimization features and solutions Field Service offers to solve them.

SEE ALSO:

Manage Field Service Optimization Adopt and Implement Field Service Enhanced Scheduling and Optimization

# Get Started with Schedule Automation and Optimization in Field Service

Field Service provides several tools for automating and optimizing your workforce's schedule. Learn about the benefits and differences of each method, when to use each tool, and how to set up schedule automation and optimization.

🜐 This is a Field Service managed package feature.

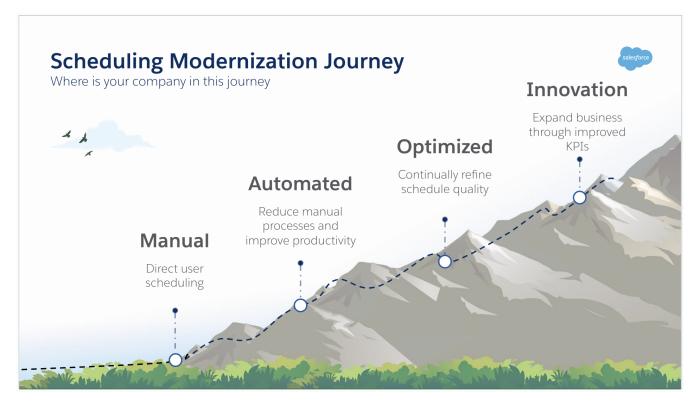
# **Optimization Journey**

Implementing a system that fully automates and optimizes your workforce's schedule is a journey that starts with understanding where you are now and visualizing how to transform scheduling operations in the future. Schedule automation and optimization aren't required for every implementation, but they can drastically improve dispatcher productivity and the cost-effectiveness of schedules.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



Here's how scheduling automation can help you.

- Free up dispatchers to spend more time working with field resources and other higher-priority tasks instead of spending time manually figuring out a full-day schedule for the territory.
- Produce the most efficient schedule based on your business goals. For example, minimize travel time, schedule jobs as soon as possible, or schedule jobs to lower-cost resources. Automatically evaluate thousands of different scheduling options.
- Improve utilization of your field workforce by automatically evaluating, reevaluating, and adjusting schedules when new work is
  created or unplanned events arise. Field Service maintains commitments and adheres to your configured scheduling constraints
  and preferences.

# Schedule Automation Versus Optimization

Automating the creation of your workforce's schedule and optimizing it are two distinct phases of the schedule creation journey. Optimization is a great way to automate the schedule, but you can also automate the creation of the schedule without needing to set up any optimization processes.

Schedule automation is the process of generating a schedule for your workforce without manual intervention. Automatically creating a schedule reduces the burden on the dispatcher by using your company's scheduling rules and preferences to find suitable schedules for service appointments.

You can automate the creation of your schedule in several ways.

Select the Auto Schedule checkbox on the Service Appointment record.

When you manually create a service appointment, you can automatically schedule it to a resource that Field Service ranks best. To do this, define a scheduling policy in the **Scheduling Policy Used** field and select the **Auto Schedule** checkbox. You can also set these fields automatically by using triggers or flows on the creation or update of the service appointment, or set them directly on the service appointment when it's integrated into Salesforce from another application.

• Use the ScheduleService class for more flexibility in scheduling.

Use ScheduleService class methods to automatically schedule your appointments when they're created or updated. With Apex code, you can define the scenarios when a service appointment must be scheduled and how to schedule it.

For example, to book an appointment through integration, you can use the GetSlots() method to retrieve available time options for scheduling a service appointment. When you call GetSlots(), you can pass a scheduling policy that doesn't include service objectives to minimize time spent evaluating and grading scheduling options, which improves performance and decreases latency. Then, use the Schedule() method to schedule the appointment to the best possible and highest-scoring service resource by using a scheduling policy that includes all your required service objectives. By using Apex, you can define different scheduling policies and customize the events in which a service appointment is automatically scheduled.

• Use optimization processes to automatically create a schedule.

Optimization processes such as global, in-day, and resource schedule optimization not only create a schedule, but also evaluate thousands of scheduling options in the background to find an optimal schedule quickly.

Schedule optimization is the process of refining the schedule by evaluating thousands of scheduling options to find an optimal schedule. As events happen throughout the day —, for example, as new service appointments are created and schedules change —, optimization processes ensure that your schedule is continuously improved to produce an optimal schedule over time.

You can optimize your schedule in several ways, either proactively or reactively.

• Global optimization evaluates schedules for all resources in one or more territories over a longer period of time than the other optimization methods do. With more time to evaluate more scheduling permutations, the optimizer produces better scheduling results. Depending on the amount of data and the complexity of the schedule, global optimization can take up to 2 hours to complete processing, but the result is an improved schedule over other optimization methods.

To use global optimization, trigger an optimization process with a scheduling policy that doesn't have the In-Day Optimization checkbox selected. You can run global optimization by clicking **Optimize** in the dispatcher console, but it's more commonly run as a background process during low-volume periods. Global optimization can take a long time to finish, so it's best to schedule it as a background process when there's not much activity on the schedule that can conflict with results. For example, schedule it to run once, sometime after midnight in the territory's time zone.

For global optimization, we recommend that you choose the lowest time horizon that has the most schedule activity, allowing optimization to concentrate its resources on producing a schedule for what's more time-critical. For example, if most service appointments must be scheduled within the next 3 days, set your optimization horizon from today to 3 days from now for the best results. Increasing the time horizon means the optimizer spends time generating a schedule that isn't as critical as the immediate next few days. Because global optimization can be scheduled to run every night, it progressively moves through future days when it's within the horizon date range. Automate future day schedules without global optimization by using other methods, or use a separate global optimization job for a future time period.

• In-day optimization evaluates schedules for all resources in one or more territories in a short period of time. This optimization responds to the dynamic nature of updates that happen throughout the day, such as reschedules, cancellations, and onsite time updates. Because in-day optimization is typically run within the business day to quickly optimize the schedule, the process caps its run time to provide a rapid result. This process runs for up to 5 minutes for Enhanced Scheduling and Optimization, and up to 10 minutes if you're not using Enhanced Scheduling and Optimization.

To use in-day optimization, trigger an optimization process with a scheduling policy that has the In-Day Optimization checkbox selected. You can run in-day optimization by clicking Optimize in the dispatcher console, or you can run it recursively throughout the day using a scheduled job. When you create an optimization job with an in-day scheduling policy, the Schedule tab provides additional options to run optimization at set intervals throughout the day to continuously optimize as your day progresses.

For in-day optimization, we recommend that you run the optimization for a time horizon of a maximum of 2 days, for example, today and tomorrow. You can run in-day optimization for more days, but because the run time for in-day optimization is limited, it's best to prioritize what's most critical for optimization processing. Most reschedules, cancellations, and onsite time updates that happen throughout the day affect today and tomorrow's schedule, so it's most efficient to focus on those days.

While in-day optimization can fix schedule exceptions and optimize schedules according to service objectives to improve efficiency, global optimization is a faster-running optimization process that yields better schedule metrics.

- Resource schedule optimization is an optimization process that evaluates and creates a schedule for a resource when last-minute changes occur, such as canceled jobs, jobs running late, scheduling conflicts (overlaps), or emergencies. While resource schedule optimization can be run programmatically to react to certain scheduling events, you typically run it from the dispatcher console. To run the optimization from the dispatcher console, select **Resource Schedule Optimization** from the action menu of the resource whose schedule you want to optimize. For resource schedule optimization, we recommend that you choose the lowest time horizon for the resource that you want to impact. Typically, choose one day for the best results. Use global or in-day optimization to optimize longer time periods.
- Scheduling recipes are configurable actions that you can set to automatically perform Resource Schedule Optimization for a given
  service resource when certain criteria are met. For example, create a recipe to resolve schedule conflicts that occur when a job runs
  late. You can also create a recipe to fill gaps in the schedule when an appointment is canceled. Scheduling recipes are triggered
  immediately when changes are made to the schedule, so you don't have to intervene manually.

Note: Scheduling Recipes aren't supported in Enhanced Scheduling and Optimization.

- Fix Overlaps by Using an Automated Scheduling Flow provides the same outcome and functionality as scheduling recipes. It enables you to perform and trigger Resource Schedule Optimization from Flow based on user-defined criteria and events, such as an appointment running late. The value of this feature compared to Scheduling Recipes is that it's configurable in Flow. Also, other event-based automation can exist, and this feature has a greater ability to integrate with current business processes and automation.
- Fix overlaps can be used to automatically resolve overlaps created in the schedule, for example, an appointment ending late. Overlapping service appointments are unrealistic as a service resource can't perform more than one service at a time. Fix overlaps can quickly resolve overlaps to produce a more realistic schedule. Fix Overlaps can resolve schedule overlaps, but it doesn't schedule new work to a service resource or optimize a resource's schedule according to service objectives. Fix Overlaps is a good choice when you want to resolve an overlap without disrupting the schedule too much. If you want to resolve an overlap and optimize a resource's schedule too much. If you want to resolve an overlap and optimize a resource's schedule too much. If you want to resolve an overlap and optimize a resource's schedule according to service, then Resource Schedule Optimization is a better choice.

The methods described in this topic are the most common automated scheduling and optimization methods used to produce efficient schedules. For a full list of scheduling services, see Field Service Scheduling and Optimization Services.

Learn how to set up your data for success in Considerations for Effective Schedule Automation and Optimization in Field Service.

# Guidelines for Effective Schedule Automation and Optimization in Field Service

Before you use the Field Service tools for automating and optimizing your workforce's schedule, make sure you review some key aspects and considerations.

SEE ALSO:

- What's Schedule Optimization?
- Manage Field Service Optimization
- Schedule Service Appointments for Field Service
- Adopt and Implement Field Service Enhanced Scheduling and Optimization

# Guidelines for Effective Schedule Automation and Optimization in Field Service

Before you use the Field Service tools for automating and optimizing your workforce's schedule, make sure you review some key aspects and considerations.

 $fill \oplus$  This is a Field Service managed package feature.

# Defining Your Scheduling Goals

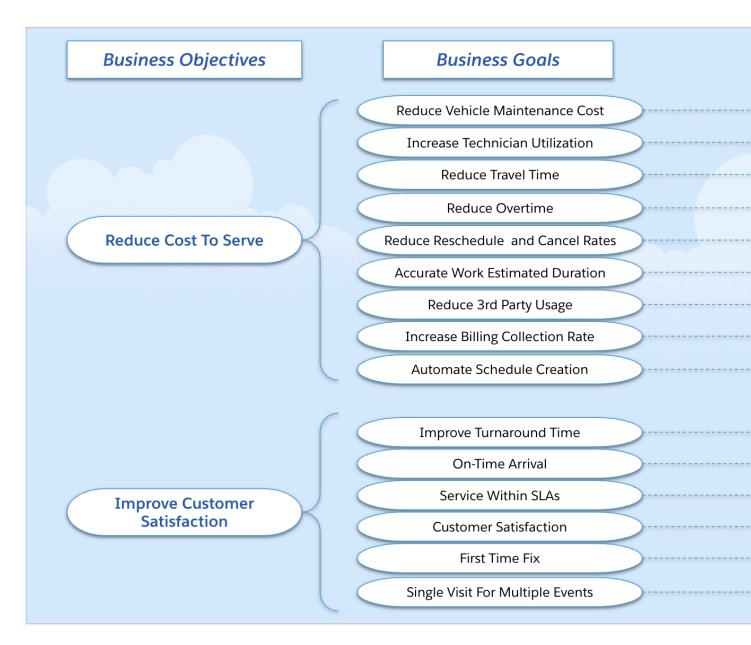
Before you start setting up schedule automation, define the measurable goals that you want to achieve. For example, are you looking to reduce your cost to serve by creating schedules with the most efficient route and minimal travel time? What other goals do you have? How do these goals and KPIs rank relative to each other? What's the most important KPI if no scheduling option exists that scores highest across these goals? Every business has its own goals when you're creating a schedule. Salesforce Field Service helps you achieve these goals through its flexible configuration. The best way to define your scheduling goals is to start with a high-level vision of what you want to achieve and work your way down to specific metrics that you can measure.

Here's an example:

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



After you define your metrics, be clear about what level of improvement you expect to see and how it impacts your business objectives. For example, if one of your metrics is Utilization, what level of improvement impacts your Cost to Serve?

Before implementing automation, find the baseline measurements for each of your defined metrics so that you can measure the improvement automation has on those metrics. Use Field Service tools to track the progress of your metrics over time.

- Optimization Hub: Capture before-and-after data on common scheduling metrics when you run optimization. This data helps you visualize and measure the impact and value that schedule optimization has on a technician's schedule metrics.
- Field Service Intelligence: Use the prebuilt dashboard to gain visibility into your scheduling metrics without having to run optimization. These metrics help you identify how your company is tracking against your KPIs, how healthy your operation is, and where you can improve.
- Reports and Dashboards: Customize your Salesforce reports and dashboards.

# Data Setup and Quality Considerations

To generate an accurate schedule, automation and optimization tools rely on meaningful and correct input data. While it's not always possible to have perfect data, the higher the quality of the input data, the more accurate the schedule generated by the system, and the less manual intervention is required.



**Note:** When designing your scheduling and optimization solution, make sure you consider Salesforce limits and considerations to avoid failures.

Consider some aspects.

- Accurate geolocations: Salesforce Field Service has a built-in data integration service that resolves addresses on records into
  geolocations or latitude and longitude coordinates. These geolocations calculate travel times between appointments so that the
  best resource and time for an appointment can be scheduled. If the record addresses have data issues, such as missing a house
  number or ZIP code, the service can't accurately resolve the address to a geolocation. This missing information affects the resulting
  schedule and travel metrics, so it's important to ensure data and address integrity. Use Address field validation rules and reporting
  on API-accessible latitude and longitude fields to ensure data integrity.
- Service territory hierarchy: Create a defined structure for your business's service territories to help you manage your service resources more easily. A defined structure modularizes data into segments, which enhances the optimization's ability to build an effective schedule. See Guidelines for Creating Service Territories for Field Service.
- Operating hours: Operating hours define when your resources are available to be scheduled for work and when your customers are available for onsite visits. Several types of operating hours help the optimizer find the best schedule for your work. See Guidelines for Creating Operating Hours for Field Service.
- Estimated duration: Service appointments require an estimated duration to complete the appointment. The better the estimate, the less uncertainty in the schedule. The most common way to define the duration of work is by work type. To set up work types, consider how long each type of work takes to complete based on historical data as well as feedback from service resources. Regularly review work durations for accuracy, more frequently at the beginning of your implementation to make sure you have a good baseline, and then less frequently as estimates become more accurate. See Guidelines for Creating Work Types for Field Service.

# Scheduling Criteria Management

Scheduling criteria for a work order, work order line item, and service appointment define when and to whom a service appointment can be scheduled. A common scheduling criteria type is time restrictions. For example, the earliest a service appointment can occur (Earliest Start Permitted), the latest it can be scheduled (Due Date). When the technician can arrive to begin service (Arrival Windows), and any additional time requirements and SLAs. Another type of scheduling criteria is requirements, which determine which service resources can be assigned to a job. For example, areas of expertise critical to completing a job successfully, such as skill requirements on the work order or work order line item, and territory restrictions.

What's the importance of accurately defining scheduling criteria? Accurate scheduling criteria are essential for completing jobs effectively and efficiently and to ensure customer satisfaction. Define your scheduling criteria to reflect your company's business logic so that your schedule meets your requirements.

What are the consequences of not defining scheduling criteria? Not defining precise scheduling criteria can lead to ineffective schedules created by the engine that require manual intervention to correct. No criteria can also result in reduced service resource satisfaction by assigning work to the wrong resources or times. Define the work rules that your scheduling policy must follow, and make sure the underlying data drives the correct behavior that your work rules enforce.

For example, a customer requests an appointment for a service but a critical part isn't available until next month. You must set the Earliest Start Permitted on the Service Appointment so that a service resource isn't assigned and dispatched to the customer's location before the part is available. Similarly, if a job requires a certain skill set, it's important to list the required skills on the work order or a similar record to make sure that you assign only the job to a resource that has those skills. Listing the skills prevents customer dissatisfaction and increased costs.

In addition to the accuracy of the schedule, not being specific with scheduling criteria can lead to a lower-quality schedule. As the number of possible permutations of the schedule increases, it requires more calculations and time to find a suitable schedule. For example, if five service appointments are to be scheduled to two candidate service resources over two time options, there are 1,024 schedule options available. By slightly increasing the complexity to schedule five service appointments to five candidates over five time options, the number of schedule options increases to over 9.7 million. By keeping the number of candidates and time options lower, the complexity of optimization is reduced and a better result can be found quicker.

Note: Candidate service resources is the number of service resources eligible to be assigned a service appointment after work rules are applied.

The number of candidate service resources, the scheduling horizon (how far out you're scheduling), and variables such as appointment window granularity (30 minutes versus 2 hours) have an impact on the performance and run-time of scheduling and optimization services.

What are the consequences of defining too many or unnecessary scheduling criteria? Defining too many scheduling criteria can make it more difficult to find a service resource for an appointment. You can define as many scheduling criteria as needed, but each criterion is applied in addition to the others, which further reduces the number of scheduling options and resources that can perform the work.

For example, a service appointment is in a remote area where only one service resource has the skills within that area to service it. If that service resource calls out sick, the customer's appointment is missed and can incur an SLA penalty.

Review your resource coverage to make sure that you have enough alternate scheduling options so the optimizer can reassign jobs in cases of low resource availability.

If multiple specialized skills are necessary for job completion, define these as criteria. However, if some criteria aren't requirements to complete the job, define these as a Preferred type Service Resource Preference and not as a Required Service Resource Preference. This setting reduces the candidates to only that specific resource.

When you define scheduling criteria, make sure that the appointment can be scheduled.

For example, an appointment with a 30-day delta between Earliest Start Permitted and Due Date, yields more scheduling options than a 3-day period, which is a tight turnaround. While a shorter turnaround time is more appealing to some end customers, it's important to set customer expectations and time requirements on service appointments to something that the company can commit to.

Consider these best practices to simplify optimization complexity.

- Reduce your optimization horizon to the lowest possible date range that makes sense for your business.
- Increase the duration of your appointment slot windows to the extent it makes sense for your business to reduce the number of time options.
- Use work rules such as Maximum Travel from Home and Extended Match to reduce the number of candidate service resources.

Learn how to improve the performance of scheduling and optimization processes. See Guidelines for Avoiding Apex CPU Timeouts in Field Service.

SEE ALSO:

Adopt and Implement Field Service Enhanced Scheduling and Optimization

What's Schedule Optimization?

Manage Field Service Optimization

Schedule Service Appointments for Field Service

Field Service Limits and Limitations

Limits and Limitations for Enhanced Scheduling and Optimization

# What's Schedule Optimization?

Manually constructing an efficient field service schedule can drive even the most serene administrator to madness. Field Service's optimization tool does the work for you by generating an optimal schedule according to your priorities and constraints.

🜐 This is a Field Service managed package feature.

Here's an example of how schedule optimization can boost your efficiency.

Before Optimization	After Optimization
62 scheduled hours	69.5 scheduled hours
24 minutes average travel	15 minutes average travel
51 scheduled appointments	56 scheduled appointments

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# **Optimization Options**

Define the scope of optimization to include an entire service territory's schedule or just a single resource's schedule.

- **Global optimization**—Optimize your team's schedule for one or more service territories across a specified range of days. You can configure this type of optimization to run regularly—for example, every evening. Or, you can run it manually as needed. Global optimization is the most thorough and powerful type of optimization, and therefore takes the most time to complete.
- In-day optimization: Navigate last-minute schedule upsets by rapidly optimizing your team's schedule for one or more service territories on the day of service.
- **Resource optimization**—Optimize an individual service resource's schedule on the day of service.

# Terms to Know

Schedule optimization is based on several custom components that help you fine-tune your scheduling operations.

Component	Description
Scheduling policy	A set of rules and objectives that guide the schedule optimizer. Use a scheduling policy to promote or de-emphasize factors such as business priorities, travel time, and customer preferences. When you optimize your team's schedule, you can select a guiding scheduling policy.
Work rule	A rule that refines the list of candidates for a service appointment by rejecting service resources that don't match the rule. For example, the Match Skill rule ensures that service appointments are assigned only to service resources with the required skills. A scheduling policy can have one or more work rules.
Service objective	A scheduling goal or target. You can weight service objectives to prioritize one over another. Every appointment assignment has a score for each service objective. The score indicates how fully the objective was met. The highest-scoring assignments are preferred. A scheduling policy can have one or more service objectives.

Component	Description
Relevance group	A subset of service resources or service appointments. Use relevance group to apply work rules or service objectives to certain resources—for example, full-time resources only—or service appointments. You can create modified versions of work rules and service objectives for each group and assign them to the group using Visualforce components.

For a given time horizon, optimization grades assignments based on service objectives, and compares overall scores for different schedule iterations. When the optimization is completed, it chooses the schedule with the highest score, and assigns appointments accordingly.

Optimization can move appointments that were previously scheduled. For example, optimization can reassign an appointment when it finds a slot with a better grade or when it tries to fix an overlap. If an optimization unschedules an appointment and can't find another suitable slot, the appointment remains unscheduled after the optimization is completed. Scheduled service appointments that have already started (Scheduled Start time is in the past) are considered by the optimizer as pinned and aren't moved or unscheduled. The service appointment's travel time can be updated since the next service appointment can be updated.

When optimizing your team's or a service resource's schedule, appointments with rule violations remain pinned. With Enhanced Scheduling and Optimization, the optimization engine tries to fix rule violations to improve the schedule by rescheduling or unscheduling rule violating appointments. To keep these appointments scheduled as is on the Gantt, the service appointments must first be pinned or in a pinned status.

Note: If Fix Overlaps is selected in the scheduling policy, any existing appointment overlaps are addressed during in-day or global optimization. When overlaps are being fixed, the overlapping appointments are unscheduled. If the optimization engine is unable to find a valid schedule for any appointments, these appointments remain unscheduled. If Fix Overlaps isn't selected, overlaps are left as is. This is not to be confused with the Fix Overlaps feature in the dynamic Gantt, which is used to reschedule overlapping appointments. In the Fix Overlaps managed package feature, you can configure fix overlap settings. For example, when unable to find a valid schedule for an appointment, you can select to put the appointment in jeopardy, unschedule it, or reshuffle other assignments.

**Note**: Not sure where to start? Create a scheduling recipe to address common scheduling challenges, like appointment cancellations or overlaps.

# SEE ALSO:

Adopt and Implement Field Service Enhanced Scheduling and Optimization Get Ready for Field Service Scheduling and Optimization

# How Does the Field Service Optimization Engine Work?

Need a few contractors onsite a week from now and need to know who's available? Absolutely have to have a specialist arrive to a service location in an hour? What about a regularly scheduled appointment for both the contractors and the specialist to service the same location?

# Why You Should Optimize

These tasks can be simple to schedule individually. Manually constructing an efficient schedule for collective tasks can be a nightmare even for an expert administrator!

The good news is that you can let Field Service's optimization engine do the work for you. By generating an optimal schedule for your team and customers, according to your priorities and constraints, schedule optimization helps you comply with service-level agreements and minimize travel time, overtime, costs, and no-shows.

How is this done? For a given time horizon, optimization grades assignments based on service objectives in the scheduling policy, and compares overall scores for different schedule iterations. When the optimization is completed, it chooses the schedule with the highest score, and assigns appointments accordingly.

It's important to prepare for the inevitability of scale. Scale in customer calls, scale in resource appointments, scale in travel time and even overtime expense.

Schedules and availability are key to assigning resources, tracking projects, and ensuring customer satisfaction. The optimization engine considers all of the available resources and appointment times and uses the scheduling policies that you set to find the most qualified candidate and time slot based on your service objectives. Scheduled service appointments that have already started (Scheduled Start time is in the past) are considered by the optimizer as pinned and aren't moved or unscheduled. The service appointment's travel time can be updated since the next service appointment can be updated.

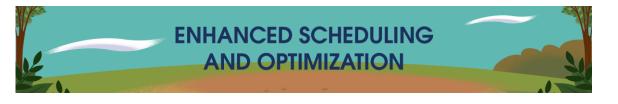
# **Optimization Process**

- 1. The optimization engine receives all the relevant service appointment, service territory, and service resource data for the given time horizon.
- 2. The appointments are then ordered according to priority, and evaluated accordingly. The priority is defined using the Work Order Priority Field, Work Order Line Item Priority Field, and Service Appointment Priority Field options in Field Service Settings. Then it starts to evaluate the highest priority appointment first.
- 3. The optimization engine then compares the prioritized appointment's details, such as territory, required skills, and due date, to the scheduling policy's work rules.
- 4. Work rules help filter out unqualified or unavailable candidates.
- 5. It views the scheduling policy's work rules. Work rules remove candidates who can't complete the appointment because they're unqualified or unavailable. Now it has a pool of candidates who are ready and able to do the job.
- 6. The optimization engine searches for available time slots between a service appointment's earliest start permitted and due date (or arrival window start and end dates if they're available) within the time horizon.
- 7. Each available time slot and qualified candidate is then evaluated according to the scheduling policy's service objectives.
- **8.** This process is then repeated for remaining slots and candidates, adds the scores, and assigns the appointment to the candidate and time slot with the highest score.

The optimizer continues to the next appointment on the list (ordered by priority) and repeats the process. When all service appointments sent to optimization are scheduled on the Gantt, or the Gantt is full, the schedule receives an overall Utilization grade.

# Adopt and Implement Field Service Enhanced Scheduling and Optimization

Field Service's Enhanced Scheduling and Optimization replaces the optimization functionality and associated manual and semiautomatic scheduling services you've been using. The new architecture and services are more efficient and improve scalability, performance, and schedule quality. Built on the Hyperforce platform, Enhanced Scheduling and Optimization has performance and scale like never before and provides a framework to host innovative new functionality to take Salesforce Field Service to the next level. Learn more about setting up optimization and creating optimization jobs, explore optimization metrics, and get scheduling recommendations. Start your journey to Enhanced Scheduling and Optimization, with resources for every step of your way.



# Your Guide to Enhanced Scheduling and Optimization

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Get Started	Set Up Enhanced Scheduling and Optimization	Create a Scheduled Optimization Job
Get Ready for Scheduling and Optimization	Enable Enhanced Scheduling and Optimization	Manage Scheduled Jobs
(IIII) What's Available in Enhanced Scheduling and Optimization	Create the Field Service Integration Permission Set	
What's Schedule Optimization?	Configure Remote Site Settings	
Video: Enhanced Scheduling and Optimization (Summer '23)	(Enable Point-to-Point Routing) Set Up Routing for Travel Time Calculations	
What's the Fate of Existing Salesforce Customizations?	Considerations for Point-to-Point Predictive Routing	
Additional Resources:	Set Up Enhanced Optimization per Territory	
Video: Enhanced Scheduling and Optimization (Spring '23)	Additional Resources:	
<ul> <li>Video: Optimization Enablement Basics</li> <li>Optimization Challenge</li> </ul>	Transition to Enhanced Scheduling and Optimization	
Create and Manage Scheduling Policies		
Create and Manage Work Rules		
Create and Manage Service Objectives		
Optimize your Schedule	Enhanced Features	Considerations and Limitations

		(AC)
Optimize Your Field Service Schedule	Video: Travel Modes	Limits and Limitations for Enhanced Scheduling and Optimization
Optimize Today's Schedule	Set Up Travel Modes	Limitations for Enhanced Optimization per Territory
Optimize a Single Resource's Schedule	Video: Service Appointment Sliding	Considerations for Enhanced Scheduling and Optimization
(*) Trailhead: Field Service Optimization	Enable Service Appointment Sliding	Field Service Limits and Limitations
	Video: Flexible Breaks	
	(Flexible Breaks) Work Rule Type: Service Resource Availability and Work Rule Entry Type: Service Resource Availability	
	Video: Holiday Management	
	Add Holidays to Operating Hours	
	Video: Complex Work	
	Complex Work in Field Service	
	Q	Q
Best Practices	Explore Metrics in the Optimization Hub	Improve your Schedule with Appointment Insights
Coming soon	Explore Metrics in Optimization Hub	( Get Recommendations with Appointment Insights
	Learn About Optimization Hub	
	Set Up Optimization Hub	
	Wiew Optimization Hub	
Q		
Monitor and Troubleshoot:		



# Transition to Enhanced Scheduling and Optimization

USER PERMISSIONS		EDITIONS
To enable Field Service:	Customize Application	Available in: Available in
To install the Field Service managed package:	Customize Application	Lightning Experience and Salesforce Classic in these editions where Field Service
To assign a permission set license:	Manage Users	is enabled: <b>Enterprise</b> , <b>Unlimited</b> , and <b>Developer</b>
To create a permission set:	Manage Profiles and Permission Sets	Editions
To enable Enhanced Scheduling and Optimization:	Customize Application	

Salesforce orgs created in Summer '23 and later have Enhanced Scheduling and Optimization enabled by default for all service territories. Orgs created before Summer '23 can opt in and enable the enhanced engine for all or selected service territories and benefit from advanced features, more efficient services, and improved scalability, performance, and schedule quality.

# 🜐 This is a Field Service managed package feature.

To transition to Enhanced Scheduling and Optimization, make sure that you meet these requirements.

- Field Service is enabled.
- The latest version of the Salesforce Field Service managed package is installed.

Note: Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings.

Automatically Transition to Enhanced Scheduling and Optimization

Users prior to Summer '23 can easily upgrade all service territories to use Enhanced Scheduling and Optimization with a guided flow (recommended) comprising readiness checks and links to Salesforce Help. Discover what configuration updates are required for your Salesforce org, get workarounds for unsupported features, and review the differences in behavior when using the enhanced engine.

- 1. In the Field Service Admin app, go to Field Service Settings.
- 2. Select Getting Started and then select the Home tab, or go directly to the Activation page under Optimization.
- 3. Click Run Readiness Check.

4. Review the information and click to learn more in Salesforce Help. Only the steps relevant to your Salesforce org are shown. Then enable Enhanced Scheduling and Optimization for all service territories. All the required settings are automatically

Optimization	
ACTIVATION LOGIC SCHEDULED JOBS ADVANCED PARAMETERS	
Enhanced Scheduling and Optimization Improve scalability, performance and schedule quality with Enhanced Scheduling and Optimization. The architecture and services are more efficient and improve scalability, performance and schedule quality. Before using Enhanced Scheduling and Optimization, let's check if there are any issues that need to be resolved. We recommend testing the optimization first in a sandbox environment. Run Readiness Check	

Manually Transition to Enhanced Scheduling and Optimization

Transition to Enhanced Scheduling and Optimization for all or selected territories. Configure your Salesforce org to transition smoothly to the enhanced engine.

- 1. Enable Enhanced Scheduling and Optimization and Field Service Integration in Setup under Field Service Settings.
- 2. Create or update the required permission sets in Field Service Settings.
- **3.** Check whether the Enhanced Scheduling and Optimization service is configured in Remote Sites Settings. This service is typically created automatically.
- 4. Check that point-to-point predictive routing is enabled in Field Service Settings > Scheduling > Routing. Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings.
- 5. Configure Enhanced Scheduling and Optimization per territory. To enable Enhanced Scheduling and Optimization for a territory, select Use enhanced scheduling and optimization in the service territory record. If the checkbox isn't available, add it to the Service Territory page layout. Review the limits and considerations that apply when you're using Enhanced Optimization per Territory.
  - Note: Use of the Enhanced Scheduling and Optimization services is controlled by the service territory. Some territories can be enabled to use Enhanced Scheduling and Optimization while others aren't, based on your rollout strategy. You can select to enable all service territories to use Enhanced Scheduling and Optimization in Field Service Settings > Scheduling > General Logic.
- 6. (Optional) To use background optimization such as global or in-day optimization, create a scheduled optimization job. The Enhanced Optimization job type includes additional options.
  - Time periods let you set up one job for multiple optimization horizons instead of separate jobs.
  - Territory grouping lets you create multiple optimization groups within the same optimization job. Each optimization request includes all the service territories in the group for each time period. For example, if you have three time periods and five groups, 15 optimization requests run. You can only add territories enabled for Enhanced Scheduling and Optimization to a group.
- 7. To reserve time slots for designated types of work create a recordset filter criteria for designated work.
- 8. Check all your Service Resource Availability work rules. If either or both of the Travel From Home (minutes) and Travel To Home (minutes) fields are empty, this means that you allow service resources to travel for an unlimited time outside of their shift times. To maintain the same behavior when transitioning to Enhanced Scheduling and Optimization, enter a very high value, for example, 500 minutes in the Travel To/From Home fields.

- **9.** Review your customizations related to Enhanced Scheduling and Optimization to assess their impact. For insights into how potential changes can affect your custom code, see What's the Fate of Older Salesforce Customizations?
- **10.** Determine whether you have custom batch processes that update data in service territories. If these bulk actions use different engines, split these processes into different datasets so that service territories from the same engine are processed together. All service appointment territories and service resource territories within the same optimization request must use the same optimization engine. A notification is shown when you're running bulk operations such as global optimization with different territory optimization settings, because it can't be determined which optimization engine to use. See Limitations for Enhanced Optimization per Territory.
- **11.** Update the Field Service Integration permission set, assigned to the Platform Integration User, to have Read access for any custom fields that are referenced by the scheduling logic. Enhanced Scheduling and Optimization uses the Platform Integration User.
- **12.** (Optional) Enhanced Scheduling and Optimization provides innovative features that were previously unavailable. Explore and apply these features to your solution as needed. Examples of such features include:
  - Set up travel modes and define different modes of transportation per service territory or service territory member to calculate travel based on that mode of transportation.
  - Set up sliding to allow Appointment Booking to find more available time slots by sliding scheduled appointments left or right to squeeze in a new appointment.
  - Create multiple flexible breaks with break timings that have a configurable offset from the start of the working day instead of a static hour. Create up to three breaks in a day and set a latest scheduled time for breaks.
  - Create holidays to set non-working times for the duration of the holiday period. Create holiday shifts for service resources who are available to work during the holiday.
  - Explore metrics in Optimization Hub. Use this enhanced version of Optimization Insights to provide KPI metric data on optimization requests and to show statistical improvements the optimizer made.
  - Create time and resource dependencies between appointments to enforce scheduling constraints. Enhanced Scheduling and Optimization supports up to five Service appointments in a complex work chain.
  - Use Gradeless Appointment Booking to improve the performance of appointment booking response time by removing objectives from your appointment booking scheduling policy. By not specifying objectives, you save processing time required for scoring the slot, and appointment booking only needs to find the first slot available instead of comparing against all service resources that offer the slot.
  - Use Schedule Mode to get more information on what action caused the most recent change in schedule. Additional options in Schedule Mode, available with Enhanced Scheduling and Optimization, provide more transparency: Manual, Drag and Drop, Schedule, Global Optimization, In-Day Optimization, and Resource Optimization. Schedule Mode appears on the service appointment record.
  - Mark Offsite Appointments to indicate that the appointment can be done remotely, with no travel time added to the schedule. For example, work such as remote technical assistance, filling out reports, or renewal of health and safety certification can be done from anywhere.
  - Fix Schedule Overlaps using an automated scheduling flow. The flow optimizes resource schedules to resolve schedule overlaps that occur due to an appointment ending late. Use the flow template recommendations or adjust the template to suit your specific use case.



Note: The enhanced optimizer can automatically unschedule and try to resolve appointments that are scheduled in violation of rules. Manual intervention is no longer required to resolve rule violations before optimization. Appointments that need to stay in rule violation can be pinned.

# **13.** Fine-tune the scheduling policy.

**14.** After testing Enhanced Scheduling and Optimization in a test environment, enable Enhanced Scheduling and Optimization for one or two service territories in production and evaluate the results. Use the Optimization Hub to collect scheduling KPI data and get

feedback from business users. After you've verified that the pilot tests are successful, enable more service territories and make adjustments where required.

Note: You enable Enhanced Scheduling and Optimization scheduling services by service territory. This configuration lets you use the standard optimization engine for any service territories with use cases that aren't supported by Enhanced Scheduling and Optimization. When optimizing multiple territories, you must enable or disable all the territories for Enhanced Scheduling and Optimization. Create separate optimization jobs for Enhanced Scheduling and Optimization and for territories that aren't enabled for Enhanced Scheduling and Optimization.

#### SEE ALSO:

Enable Field Service Install the Field Service Managed Package Assign Field Service Permissions Limits and Limitations for Enhanced Scheduling and Optimization Create Field Service Permission Sets Set Up Routing for Travel Time Calculations Adopt and Implement Enhanced Scheduling and Optimization What's Available in Enhanced Scheduling and Optimization

# Activate Field Service Schedule Optimization

Configure optimization so you can schedule appointments and address last-minute challenges. You can set up optimization to run automatically, or run it manually. Activate optimization to create an optimization user and profile required for accessing a optimization services. When you're using Enhanced Scheduling and Optimization, this activation isn't required, because Enhanced Scheduling and Optimization uses a Platform Integration User.

- 💼 This is a Field Service managed package feature.
- Note: Setting up optimization consumes one Salesforce license, so check that a license is available.
- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- Click Optimization > Activation. Click Create Optimization Profile to create an optimization profile and an optimization user that submits optimization requests.
- 3. When you're prompted, switch to the newly created optimization user.
  - a. From Setup, navigate to the Users page and locate the optimization user.
  - b. Click Edit next to the user and select Active on their profile.
     If you deactivate the optimization user, you can't use optimization.
  - c. Select Generate new password and notify user immediately.
  - d. Log out.
- 4. When you receive the password reset email, click the link and complete the steps to log in as the optimization user.
  - Note: You must log in as the FSL Optimization user from the Salesforce login screen and not by clicking Log In next to the FSL Optimization user in Setup.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To create users:

Manage Internal Users

#### Salesforce Field Service

- 5. When you're logged in, click the + icon in the tab bar to see your full list of tabs. Click the **Field Service Settings** tab.
- 6. Click Activate Optimization.
- 7. Click Allow to allow remote site access and be redirected back to Field Service Settings.
- 8. Log out as the optimization user and log back in with your regular username and password.

Optimization is now ready to use in your org.

Review the available scheduling and optimization services.

#### SEE ALSO:

Manage Field Service Optimization What's Schedule Optimization? Enable Enhanced Scheduling and Optimization

# Create the Field Service Integration Permission Set

Create or update the Field Service Integration permission set to access the object attributes. The Field Service Integration permission set lets users manage permissions needed for optimization and scheduling services related to Enhanced Scheduling and Optimization and service appointment bundling.

oxplue This is a Field Service managed package feature.

- Note: The Field Service Integration permission set must have Read access to custom fields used in scheduling and optimization processes. For example, if a recordset filter criteria is defined for a Designated Shift, the Field Service Integration permission set requires Read access to fields that the recordset filter criteria uses. Or, if Dynamic Priority uses a formula field to calculate priority, the Field Service Integration permission set requires Read access to that custom formula field and any custom fields that the formula references.
- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Getting Started and then Permission Sets.
- 3. On the Field Service Integration tile, click Create Permissions or Update Permissions.

When a permission set is current, the Create Permissions or Update Permissions link on the tile is replaced by a message indicating that it's up to date.

The Field Service Integration permission set isn't tied to a license, and you can enable permissions to fit your organization's needs without relying on one. This allows you to enable permissions for the Field Service Integration permission set on your own and give the Platform Integration User

access to fields and objects when they need to be modified. The Field Service Integration is exclusive to the Platform Integration User.

SEE ALSO:

Assign Field Service Permissions Create Field Service Permission Sets

# **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

# **USER PERMISSIONS**

To configure the Field Service managed package:

Customize Application

To assign a permission set license:

Manage Users

•

To create a permission set:

Manage Profiles and Permission Sets

# Customize the Field Service Appointment Life Cycle

A service appointment life cycle shows the sequence of stages that a service appointment passes through. The life cycle starts when the appointment is created and ends when it reaches its final status.

🜐 This is a Field Service managed package feature.

Service appointments come with the following statuses to represent stages in their life cycle.

- None
- Scheduled
- Dispatched
- In Progress
- Completed
- Cannot Complete
- Canceled

**Note:** Update the status names to fit your business by editing the Status picklist values in Setup. Changing the name doesn't change a status's automatic transition behavior.

Note: When creating custom statuses, consider the status naming as there's a 40-character limit for status transitions. The status transition is defined as: Status 1 - Status 2. If this definition exceeds 40 characters, including the dash and the spaces, then the status transition isn't saved.

Here's how to customize your service appointment life cycle.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Service Appointment Life Cycle.
- 3. Click SA Status. Select a status value for each description.
- 4. Save your changes.
- 5. Click the Status Transitions tab.
- 6. Each row represents a flow or transition in the service appointment life cycle. Modify the existing flows, delete flows, or add new ones.

Note: When a service appointment is unscheduled, its status changes to None.

When Fix Overlaps unschedules and reschedules service appointments from the Gantt, it ignores the settings in the service appointment lifecycle.

Emergency service appointments don't consider status transitions when their status is changed to any status in the Dispatched status category.

7. Optionally, click **More Details** to limit the user profiles that can make each status change. You can also select a custom Visualforce page to display when a user tries to make the status change. Changing an appointment status in this way is only available from the status change chatter action on the service appointment record Feed tab, and not from the Gantt. Only status values that are permitted in your service appointment life cycle settings are shown there. The status flow diagram at the bottom of the Status Transitions page shows your status flows, but doesn't show profile-based restrictions.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. 8. Save your changes.

#### SEE ALSO:

Service Appointment Fields for Field Service Manage Field Service Appointments

# **Customize Derivation Settings**

Use derivations to map the fields on standard objects to fields required for scheduling, including the Address and Service Territory (where), start and end times (when), Scheduling Policy (how), and Work Type (what).



# 🜐 This is a Field Service managed package feature.

Choose any object and map fields from the record where the action is used so that the values are automatically derived to the Work Order and Service Appointment created through that action. Set default values from the object to the global action interface and override the values.

Derivations apply to all field service scheduling actions of Appointment Booking, Get Candidates, and Emergency Dispatch. Field mapping isn't required, but mapping all fields helps ensure that the appointment is scheduled properly.

- 1. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field** Service Settings tab. You can only map to the fields listed on the Field Service Settings tab. Use process automation to set additional fields.
- 2. Select Global Actions > Appointment Booking.
- 3. From the dropdown, select an object and click Add Object. After you select the object, you can select fields from the source object to map to the service appointment fields listed on the Field Service Settings tab.

# **Customize Appointment Booking Settings**

Users can schedule service appointments for a work order, work order line item, or other record by using the **Book Appointment** Chatter action. Customize this scheduling experience from the Field Service Admin app.

# ( This is a Field Service managed package feature.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Select Global Actions > Appointment Booking.
- 3. Configure your settings.

Note: Use a scheduling policy without service objectives to improve performance if you aren't using slot grades in Appointment Booking. If you're using Enhanced Scheduling and Optimization, booking appointments with a scheduling policy that doesn't have service objectives is called gradeless appointment booking. In this case, appointment booking finds the first eligible candidate for each slot without having to grade all the possible options. When you're not using Enhanced Scheduling and Optimization, appointment booking grades all the possible options. However, if you don't have service objectives in the scheduling policy, the processing time is shorter.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer **Editions** 

#### **Global Actions**

DERIVATIONS APPOINTMENT BOOKING EMERGENCY WIZARD

Field Name	Description
Default scheduling policy	The scheduling policy used to generate a list of arrival windows or time slots when a user clicks <b>Book Appointment</b> or <b>Candidates</b> in the feed. By default, these actions use the Customer First scheduling policy. This policy aims first to use the customer's preferred service resources, then to schedule the appointment as soon as possible, and finally to minimize the resource's travel time.
	<ul> <li>You can also change this setting on the Customize Appointment Booking page in Guided Setup.</li> </ul>
	<ul> <li>Optionally, create a custom Scheduling Policy lookup field for an object and map it to the object on the Derivations tab in Global Actions. This way, records of that object type use the policy you selected rather than the default policy.</li> </ul>
Default operating hours	The operating hours that determine the arrival window time slots that are offered to customers. Each appointment's scheduled start falls within the arrival window requested by the customer.
	By default, the Gold Appointments Calendar operating hours are used, which consist of two-hour time slots, Monday–Friday, from 9 AM to 5 PM. You can change the arrival window operating hours on the <b>Customize Appointment Booking</b> page in Guided Setup—which also lets you quickly define and preview your hours—or from the Operating Hours tab.
	If different appointment booking windows are needed for different level of service, add entitlements to your work orders. For example, standard customers get 4-hour booking windows while VIP customers get 2-hour windows. In the Operating Hours field on the entitlement, select the appropriate appointment booking window operating hours.
	The Operating Hours records that represent appointment booking slots offered to customers (specifically, the slots that you've chosen for the Default Operating Hours setting and specified in the Entitlements records) are the only two specific instances where the Timezone field on the Operating Hours record is ignored. This approach ensures that you don't need to create different appointment window Operating Hours records for each time zone in which you offer services. Instead, when you retrieve appointment booking slots, the scheduling engine considers the time zone of the service territory associated with the service appointment or work order that you're requesting slots for. This behavior ensures

Field Name	Description
	that your appointment booking slots are aligned with the relevant time zone.
Ideal grading threshold	An appointment's grade represents its adherence to the scheduling policy's service objectives. Enter a value 0–100. When potential appointments are shown in the Book Appointment action, appointments with a grade equal to or higher than the ideal grading threshold have an Ideal flag.
Recommended grading threshold	An appointment's grade represents its adherence to the scheduling policy's service objectives. Enter a value 0–100. When potential appointment times are shown in the Book Appointment action, appointments with a grade below the ideal grading threshold and equal to or higher than the recommended grading threshold have a Recommended flag.
Minimum Grade	An appointment's grade represents its adherence to the scheduling policy's service objectives. Enter a value 0–100. When potential appointments are shown in the Book Appointment action, appointments below this value aren't shown in the list.
Number of hours for initial appointment search	If the difference between the earliest start permitted and due date is greater than this value, the appointment is displayed in an initial list while the search continues for additional candidates. This initial list provides some scheduling options so the agent has some slots to offer the customer while you're waiting for all options to load.
Show grades explanation	When this option is selected, clicking the info icon next to an option shows its score for each service objective in the applied scheduling policy. These scores are averaged to form the overall score.
Custom CSS (cascading style sheet)	To customize the appearance of the Book Appointment and Candidates actions, enter a name of a CSS file.
Disable service territory picker in appointment booking	Hide the service territory field in the Book Appointment action.
Pin three highest graded time slots to the top	Highlight the three highest-graded time slots and pin them to the top of the list in a Golden Slots section.
Open extended view by default	Display appointment details in the extended view. When this option isn't selected, users must click <b>Show More Options</b> to see the Earliest Start Permitted and Due Date fields.
	For an appointment to be scheduled, the following information is required: scheduling policy, work type, earliest start permitted, and due date. While a service territory isn't required, it's recommended.

Field Name	Description
Automatically search for scheduling options	The global action automatically searches for available scheduling options and shows them while the record page is loading.
	When the action runs automatically, it can update the record, making your layout or record page outdated. To avoid this, turn off this setting.

#### Time Zones and Appointment Booking

In large field service operations, the service appointment's support agent, assigned resource, and customer could all be in different time zones. Field Service's appointment booking process shows each user's appointment details in their own time zone.

#### SEE ALSO:

Manage Field Service Appointments

# Time Zones and Appointment Booking

In large field service operations, the service appointment's support agent, assigned resource, and customer could all be in different time zones. Field Service's appointment booking process shows each user's appointment details in their own time zone.

#### 🜐 This is a Field Service managed package feature.

If your operation spans multiple time zones, follow these guidelines when creating records.

- For work orders, complete the Service Territory field. A service appointment inherits its parent record's service territory when the parent is a work order or work order line item, but you can set a unique service territory on an appointment.
- Ensure that each service territory is aligned with one time zone only and doesn't span multiple time zones. Every service territory must be associated with one Operating Hours record that specifies one time zone. For example, if your operations cover Kentucky, United States, you must have at least two service territories: one for the Eastern time zone and another for the Central time zone. Use Map Polygons to define the geographical boundaries of these territories

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

to ensure that service appointments created with specific geolocations are linked to the correct service territory. By implementing this architecture, you can guarantee that your service and communication with customers are conducted according to their local time zones.

- Create operating hours in Guided Setup that represent the arrival windows offered in the Book Appointment action.
  - 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.

#### 2. Select Go to Guided Setup > Customize Appointment Booking.

3. Update the operating hours, and save your changes.

You can also update the operating hours from Field Service Settings > Global Actions > Appointment Booking.

When the Book Appointment action is used, Field Service doesn't consider the time zone defined on the arrival windows operating hours record. Instead, it uses the time zone of the service appointment's service territory's operating hours. This way, when a customer selects a time slot, the appointment is scheduled according to the customer's time zone.

# S Example:

- A support agent's time zone is Eastern Standard Time (EST).
- A service resource's time zone is Mountain Time (MT) on both the user record and the primary service territory.

A customer in Nevada, which is in the Pacific Standard (PST) time zone, calls the company for an appointment, and the support agent creates a work order. The work order is identified as being within the customer's service territory (PST) because the Map Polygon record associates the job's geographical location with the PST territory.

On the Book Appointment page, the customer selects an arrival window of 1:00 PM-3:00 PM. The arrival window is in the customer's time zone (PT) because it uses the work order's service territory's time zone.

After the appointment is booked, each person involved can view its details in their time zone.

- When the customer (PT) receives an email confirmation, the arrival window is shown as 1:00 PM-3:00 PM.
- When the support agent (ET) views the service appointment, the arrival window is shown as 4:00 PM–6:00 PM. The agent's arrival window differs from the customer's because the date and time fields are automatically converted to the viewer's time zone. To ensure agents communicate with customers in the customer's local time, consider creating formula text fields that show the service appointment times in the customer's time zone, referencing the Operating Hours associated with the service appointment's territory.
- When the assigned resource (MT) checks the schedule in the Field Service mobile app, the arrival window is shown as 2:00 PM-4:00 PM. The service resource's arrival window is in the MT local time because the date and time fields are converted to the user's time zone. To ensure technicians communicate with customers in the customer's local time, consider creating formula text fields that show service appointment times in the customer's time zone, referencing the time zone from the Operating Hours associated with the service appointment's territory.

For more information on scheduling across time zones in Field Service and example configurations, see this webinar.

# SEE ALSO:

Create and Manage Map Polygons

# Set Up Routing for Travel Time Calculations

Field Service uses aerial routing to estimate travel time between job sites. You can improve the accuracy of these estimates by enabling street-level routing (SLR), which considers real turn-by-turn data. To further fine-tune travel time calculation, enable predictive travel. For even more accurate travel time calculations using the exact service appointment location and incorporating time of day, enable point-to-point predictive routing.

# 🜐 This is a Field Service managed package feature.

Point-to-point predictive routing is gradually replacing predictive travel and street-level routing and is available in all scheduling and optimization operations. As of Spring '21, new Salesforce orgs get point-to-point predictive routing by default. Salesforce orgs before this retain predictive travel and their configuration but can switch to point-to-point predictive routing.

Per-appointment travel time is one of the most important KPIs that a field service organization tracks. A small improvement can give a mobile worker more time to work, drive less, reduce their carbon footprint, and promptly reach the customer. Accurate route planning helps your mobile workforce perform at the highest level.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Field Service uses routing to calculate and minimize travel time and distance between appointments, and shares this information with users. Travel time also factors into the scores assigned to available time slots and service resources during scheduling. Several routing options are available:

- Aerial routing—Computes the shortest distance between two locations based on a straight-line route.
- Street-level routing—Computes the distance along roads or transportation routes. SLR is based on actual road speed measurements and the expected travel speed based on road type. SLR calculation takes a bit longer than aerial routing calculation.
- Predictive travel Builds on SLR by incorporating time-of-day data into the calculation. Predictive travel applies only to optimization operations; scheduling operations like the Book Appointment and Candidates actions don't use it.
- Point-to-point predictive routing—Estimates travel time using the exact service appointment location and considers time of day. This routing is used across all scheduling and optimization operations. Point-to-point predictive travel supports calculating routes that include transport by ferries. Transport by ferry is calculated at a fixed rate of 5 km/hr (or 3.1 mph). Create travel modes per territory, resource, or both for accurate routing calculations based on transportation type, toll road preferences, and the presence of hazardous materials. The default travel mode is set to car, using toll roads, and not carrying hazardous materials.
- Note: You must be registered to use SLR, predictive travel, and point-to-point predictive routing. Registration is automatic. A **Register** button appears if necessary, for example, after you refresh a sandbox for Field Service. Registration isn't required when using Enhanced Scheduling and Optimization.

With predictive travel, traffic patterns such as rush hours are used when estimating travel time for more accurate predictions. For example, traveling from A to B at 8 AM can yield a different travel time prediction than when leaving at 9 AM, due to anticipated traffic variations.

Emergency work uses Real-Time Travel provided by Google.

To set your travel time calculation preferences, open the Field Service Admin app from the App Launcher. Select **Field Service Settings** > **Scheduling** > **Routing**.

Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings. Aerial routing is used when Enhanced Scheduling and Optimization can't calculate travel time using predictive travel. A route can be unfeasible with predictive travel if travel mode limitations apply, a location is more than 1.5 kilometers from an official road, or data coverage is partial. For example, the dispatcher wants to manually assign the work to Alan as he's the only available resource. Alan drives a truck, but the route that Alan is assigned to doesn't allow trucks. Or, Alan is assigned to maintain an asset that's located 2 kilometers from a road, or in a new neighborhood. The travel source used to calculate the travel time to the service appointment, resource absence, or home base is automatically shown in the Estimated Travel Time From Source and Estimated Travel Time To Source fields for the assigned resource or resource absence.

With Enhanced Scheduling and Optimization you can take activities into consideration when calculating the travel time. Travel time calculates the time it takes to drive from one location to another. However, the calculation doesn't include additional setup time such as time for finding parking or time to get from the parking to the customer. In Travel Time Buffer, define the number of minutes to add for activities other than driving. The additional travel time is added to new service appointments when they're scheduled or to existing appointments if the schedule changes. The buffer is added only to service appointments with geocodes or with travel times. The buffer isn't added to consecutive appointments that don't have travel times, for example, appointments that are at the same site. You can also define buffers per territory. See Create Service Territories for Field Service on page 44.

# Considerations

- Travel time is calculated according to the order of the schedule. The assigned resource object includes three travel time fields. Actual Travel Time (Minutes) is an optional field for you to indicate the actual travel time. Estimated Travel Time (Minutes) is automatically populated by the system and represents the travel time estimation to the service appointment. Approximate Travel Time From (Minutes) is automatically populated by the system only for the last service appointment of the day, and is an estimate of the travel time from the service appointment to the service resource's home base.
- The Estimated Travel Distance From field on the assigned resource object is used to show the estimated mileage (travel distance in kilometers or miles) from the service resource's assigned appointment location to their home base. The Estimated Travel Distance

To field is used to show the estimated mileage to the service resource's assigned appointment location from a service appointment, another resource absence location, or their home base.

• Field Service is continually calculating travel time to make sure that it is up-to-date. As a result, if the updated travel time is longer than the original travel time, and an appointment is scheduled to occur immediately afterward, an overlap can occur. This overlap can usually be resolved automatically, but in some cases you must manually resolve the overlap.

# Considerations When Using Enhanced Scheduling and Optimization

Pay attention to the considerations if you're using Enhanced Scheduling and Optimization.

- Point-to-point predictive routing is used regardless of the travel distance.
- Service resources must have their home base location geocoded so that the scheduling engine knows the resource's start and end points.
- When a service appointment is dragged onto the Gantt to be scheduled, the routing calculation depends on the chosen start time. The time of day can affect typical road speed measurements, for example.
- The Estimated Travel Time From Source field on Assigned Resources displays Aerial as the calculation method for all appointments, except for the last appointment of the day. Because Travel From is calculated only for the last service appointment of the day, its value is zero for every other appointment. The last appointment of the day is calculated with SLR.
- The Maximum Travel from Home work rule always uses aerial routing calculation regardless of point-to-point predictive routing or SLR.
- Travel time is calculated based on the assumption that a resource travels as soon as possible from the home base from which their shift starts. For example, if a resource's shift starts at 9:00 AM and the first service appointment is at 11:00 AM, the calculation assumes the resource must depart at 9:00 AM. The calculation doesn't consider the time required to reach the service appointment.
- If you define Travel From Home (minutes) as part of the Service Resource Availability work rules, resources can travel before the start of the work day. This additional time is considered when calculating the departure time.

# Considerations When Not Using Enhanced Scheduling and Optimization

Pay attention to the considerations if you aren't using Enhanced Scheduling and Optimization.

- Point-to-point predictive routing considers using toll roads when relevant. SLR and Predictive travel avoid toll roads, which can result in longer travel times.
- Service resources must have their home base location geocoded so that the scheduling engine knows the resource's start and end points.
- When you switch from aerial routing to SLR, scheduling recalculates travel times, including times for already scheduled appointments.
- When SLR is activated, resource travel speed isn't considered. However, if the calculation returns to aerial routing, travel speed is considered.
- The Street Level Routing Cache custom object improves SLR calculation time for distances that were calculated in the previous 30 days between two given points. Don't delete this object.
- The travel time is based on the Driving profile in Google maps and can't be changed.
- SLR creates a grid of 200-meter squares. Every service appointment within the grid gets the same geolocation for routing purposes.
- When a service appointment is dragged onto the Gantt to be scheduled, the routing calculation depends on the chosen start time. The time of day can affect typical road speed measurements, for example.
- If you're scheduling work using Queueable Apex, use the Database.AllowsCallouts annotation to estimate travel time with SLR. If you don't include this annotation, aerial routing is used instead. For more information, see Queueable Apex: More Than an @future.

- The Estimated Travel Time From Source field on Assigned Resources displays Aerial as the calculation method for all appointments, except for the last appointment of the day. Because Travel From is calculated only for the last service appointment of the day, its value is zero for every other appointment. The last appointment of the day is calculated with SLR.
- If a service appointment requires a travel distance of more than 100 kilometers, aerial routing is used.
- Predictive travel isn't supported with multiday work scheduling. In multiday work scheduling, the exact departure time for each day is unknown, so SLR is used, corresponding to the fastest travel time (the best SLR travel time that you would get on a night slot with minimum traffic). Complex work uses point-to-point predictive routing in optimization, and the most optimistic SLR travel time for platform scheduling. This limitation isn't relevant when you're using Enhanced Scheduling and Optimization, because the enhanced engine doesn't use SLR.
- Any scheduling action that is triggered in a transaction with data manipulation language (DML) uses aerial routing. When SLR is enabled and scheduling requires SLR travel results that aren't primed locally, you must use a callout to retrieve the results. If DML occurs in the same transaction as the callout, it causes an exception, for example, an Uncommitted Work Pending error. When the schedule falls back to aerial routing due to a failure in the callout, overlaps can appear on the Gantt after the travel time and break update runs and updates the travel to SLR or predictive travel. To avoid an exception, allow the system to use aerial routing or ensure that DML is completed in a separate transaction. If you want transactions of this type to cause an exception rather than a switch to aerial routing, from the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings > Scheduling. Select Avoid aerial calculation upon callout DML exception.
- Optimization can use aerial, SLR, or predictive travel, and can report which routing method was used.

# Additional Considerations for Point-to-Point Predictive Routing

- In Salesforce orgs before Spring '21, if you haven't turned on point-to-point predictive routing, you can still switch to SLR or predictive travel.
- Unlike SLR, which creates a grid of 200-meter squares, point-to-point predictive routing uses the exact locations of objects for scheduling.
- For a location (source or destination) that's more than 1.5 kilometers from the nearest road, aerial routing is used instead of point-to-point predictive routing.
- Aerial routing is used when Enhanced Scheduling and Optimization can't calculate travel time using point-to-point predictive routing. A route can be unfeasible with predictive travel if travel mode limitations apply or data coverage is partial.
- Check which territories are fully covered by point-to-point predictive routing in the list of navigable countries.
- Note: When you switch to point-to-point predictive routing, scheduling and optimization recalculate travel times, including times for already scheduled appointments. You can incur an overlap of appointments because of the more accurate, slightly longer, travel times. Use resource schedule optimization to fix overlaps locally (for specific resources), or run global or in-day optimization to reoptimize the whole schedule (this takes longer). If you aren't using Enhanced Scheduling and Optimization, you must apply the Fix Overlaps scheduling policy.

#### Navigable Countries

The availability of point-to-point predictive routing in a region depends on the map coverage level for that region.

# Navigable Countries

The availability of point-to-point predictive routing in a region depends on the map coverage level for that region.

🜐 This is a Field Service managed package feature.

The following countries support this level of routing.

- Algeria
- Albania
- American Samoa
- Andorra
- Argentina
- Australia
- Bahamas
- Bahrain
- Belgium
- Bosnia and Herzegovina
- Botswana
- Brazil
- Brunei
- Bulgaria
- Burkina Faso
- Cameroon
- Canada
- Cayman Islands
- Central African Republic
- Chad
- Chile
- Colombia
- Congo, Republic of the
- Costa Rica
- Cote d'Ivoire (Ivory Coast)
- Croatia
- Cyprus
- Czechia
- Denmark
- Egypt
- Equatorial Guinea
- Estonia
- Eswatini
- Falkland Islands (Islas Malvinas)



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- Finland
- France
- French Guiana
- Gabon
- Germany
- Gibraltar
- Greece
- Guadeloupe
- Guam
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jordan
- Kazakhstan
- Kenya
- Kosovo
- Kuwait
- Latvia
- Lebanon
- Lesotho
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macau
- Malaysia
- Malta
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Monaco

- Montenegro
- Morocco
- Mozambique
- Namibia
- Netherlands
- New Zealand
- Nigeria
- North Macedonia
- Norway
- Oman
- Panama
- Paraguay
- Peru
- Philippines
- Poland
- Portugal (Azores, Madeira)
- Puerto Rico
- Qatar
- Reunion Island
- Romania
- Russia
- Saint Barthélemy
- Saint Helena
- San Marino
- Sao Tome and Principe
- Saudi Arabia
- Serbia
- Singapore
- Slovakia
- Slovenia
- South Africa
- Spain
- Sweden
- Switzerland
- Sweden
- Switzerland
- Taiwan
- Thailand
- Tunisia
- Türkiye

- Ukraine
- United Arab Emirates
- United Kingdom (UK)
- Uruguay
- USA
- Vatican City
- Venezuela
- Vietnam
- Virgin Islands (USA)
- Zambia
- Zimbabwe

# Low Coverage Countries

Low coverage areas provide minimum map coverage. These countries are missing routes or traffic information required for accurate point-to-point travel predictions.

- Belarus
- Japan
- Moldova

# Set Up Sliding and Reshuffling for Scheduling and Appointment Booking

Free up time for scheduling more appointments when using appointment booking and scheduling. With sliding, service appointments on the Gantt can move to an earlier or later time, within the resource's availability for the same shift. By using reshuffling and sliding together, service appointments on the Gantt can also move to a different day or to a different resource. Reshuffling and sliding service appointments provide more time slot availability and faster SLA compliance and enable the scheduling of longer service appointments by reducing white spaces.

 $\oplus$  This is a Field Service managed package feature.

**Note:** Sliding is available only with Enhanced Scheduling and Optimization.

# Enable Service Appointments Sliding and Reshuffling When Using Enhanced Scheduling and Optimization

Watch the video to see how to free up time for a new service appointment when using appointment booking and scheduling operations by sliding service appointments on the Gantt to an earlier or later time, within the resource's availability.

### Watch a video

To schedule critical service appointments even when the Gantt is full, the service appointments' priorities are considered when using sliding and reshuffling together. If a scheduling action can't find an available time slot by sliding and reshuffling, service appointments with lower or equal priorities can drop from the schedule. See Book and Schedule Appointments by Using Priorities on page 464.

Before you enable service appointment sliding and reshuffling, make sure you meet these requirements.

### **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

### USER PERMISSIONS

To enable service appointment sliding: • Customize Application

- Field Service is enabled.
- The latest version of the Salesforce Field Service managed package is installed.
- Enhanced Scheduling and Optimization is enabled.
- 1. From the App Launcher, open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Select Scheduling | General Logic.
- 3. Under Sliding and Reshuffling select one of the options:
  - **a.** Select **Sliding only** to enable service appointments to move between time slots for the same resource within the same shift. Sliding is the default value.

Select **Enable complex work sliding by territory** for complex work chains scheduled to multiple resources (for example, same start appointments).

**b.** Select **Sliding and reshuffling** to enable service appointments to move between time slots on any day or to another resource.

From the Keep Scheduled Criteria picklist, select a service appointment status to use as criteria to make sure that the appointments aren't dropped from the Gantt during scheduling and appointment booking. These appointments can be moved to a different time slot or to a different resource.

- c. Select None prevents appointments on the Gantt from moving.
- **4.** From the Pin Criteria picklist, select service appointment statuses to use as criteria to pin appointments to the Gantt (maximum 155 characters). These appointments are excluded from scheduling and appointment booking.

### 5. Click Save.

Considerations for using sliding only:

- Service appointment sliding doesn't violate any scheduling rules.
- Service appointments can't move from one resource to another.
- Service appointments can't be unscheduled.
- Service appointments can move left and right within the shift without changing the order of the service appointments scheduled in the shift. They can also move from before lunch breaks to after lunch breaks.
- Sliding service appointment functionality is applicable to appointment booking and schedule services only.
- Service appointments that are part of a complex work chain and are scheduled to multiple resources can move only to the right.
- If a service appointment that's part of a complex work chain is violating a work rule, the entire chain is considered pinned.
- Sliding isn't supported for service appointments that are part of a complex work chain and that are scheduled during shifts that span over midnight, except for service appointments with a same-start dependency.

Considerations for using sliding with reshuffling:

- Service appointments with **Schedule over lower priority appointment** selected, can cause a lower priority appointment to be dropped from the Gantt.
- All candidates are considered when a different resource is assigned to an appointment, for example, not only candidates with the relevant skills.
- Reshuffling maximizes the possibility of finding available time slots, but it takes longer than sliding alone.
- Service appointments that are pinned to the Gantt aren't moved.
- Service appointments with a status that matches one of the statuses defined in the Pin Criteria field on the General Logic tab aren't moved.

# Customize Service Appointment Reshuffling When Not Using Enhanced Scheduling and Optimization

You can define the time period in which lower priority appointments can be postponed when reshuffling.

1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.

### 2. Click Scheduling | Dynamic Gantt.

- 3. Under Reshuffle Assignments, define the time period in which lower-priority appointments can be postponed. When appointments are reshuffled, lower-priority appointments are rescheduled during the time period between their Earliest Start Permitted—or the current date, if the Earliest Start Permitted has passed—and this many days later.
- 4. Save your change.

### SEE ALSO:

Schedule Appointments from the Record Feed Schedule Appointments from the Dispatcher Console Book and Schedule Appointments by Using Priorities Get Ready for Field Service Scheduling and Optimization

# Set Up Travel Modes

Optimization services with different travel modes enhance predictive travel by providing more accurate travel time predictions and improving the completion rate of service appointments. By leveraging different types of travel modes, admins define the travel mode per territory, per primary service territory member, or both, to reflect transportation type (car, light truck, heavy truck, bicycle, or walking), the use of toll roads, and hazmat considerations.

### 🜐 This is a Field Service managed package feature.

Watch the video to see how to calculate accurate travel times when scheduling service appointments, based on transportation type, permission to use toll roads, and the presence of hazardous materials.

Watch a video

Before you set up Travel Modes, make sure you meet these requirements.

- Field Service is enabled.
- The latest version of the Salesforce Field Service managed package is installed.
- Enhanced Scheduling and Optimization is enabled.
- Note: Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings.

Travel modes are applied only to territories using Enhanced Scheduling and Optimization. Travel mode can't be assigned to a secondary service territory member. All Limits and Limitations for Enhanced Scheduling and Optimization apply to travel modes.

### Configure Travel Modes

Configure your Travel Modes settings and assign user permissions.

### Create Travel Modes for Field Service

Create travel modes per territory, resource, or both so that routing calculations are accurate based on the transportation type, whether the resource can drive through toll roads, and whether the resource is carrying hazardous materials.

### **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

### Assign a Travel Mode to a Service Territory or Service Territory Member

Assign a travel mode to a service territory or to a service territory member so that the Enhanced Scheduling and Optimization engine can consider the resource's routing and travel preferences. Routing requests are based on the travel mode selected at the service territory level unless specified otherwise at the resource level. In this case, the resource territory membership setting overrides the territory-level setting. Only primary territory members can have a travel mode assigned to them.

#### SEE ALSO:

Enable Enhanced Scheduling and Optimization Set Up Enhanced Optimization for Field Service Territories Set Up Routing for Travel Time Calculations

# **Configure Travel Modes**

Configure your Travel Modes settings and assign user permissions.

(
 This is a Field Service managed package feature.

- 1. From Setup, in the Quick Find box, enter *Object Manager*, and then select **Object** Manager. Next, click Service Territory or Service Territory Member, and then scroll to the Page Layouts section.
- 2. Click Page Layouts, and then click FSL Service Territory Layout or FSL Service Territory Member Layout.
- 3. Click Edit, drag the Travel Modes field to the page layout, and then save your changes.

### **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: Enterprise, Unlimited, and Developer Editions

### **USER PERMISSIONS**

To enable travel modes:

Customize Application

To view travel modes:

Read on travel modes • OR

> Any of these custom permission sets:

- Field Service Admin Permissions
- Field Service Agent Permissions
- Field Service Dispatcher Permissions

To create, update, or delete travel modes:

• Edit on travel modes

To assign a travel mode to a service territory or service territory member:

Edit on service territory and/or service territory member

# **Create Travel Modes for Field Service**

Create travel modes per territory, resource, or both so that routing calculations are accurate based on the transportation type, whether the resource can drive through toll roads, and whether the resource is carrying hazardous materials.



🜐 This is a Field Service managed package feature.

- 1. From the Travel Modes tab, click New.
- 2. Select a travel mode name.

		New Tr	avel Mode		
information					
Name	1		<ul> <li>Transport Type</li> </ul>	-None	
Can Use Toll Roads			is framporting Hazmat		

**EDITIONS** 

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: Enterprise, Unlimited, and Developer Editions

### **USER PERMISSIONS**

To view travel modes:

Read on travel modes

To create, update, or delete travel modes:

- Edit on travel modes
- 3. Select the transport type: Car (default), Light Truck, Heavy Truck, Bicycle, or Walking. The truck category that you select is based on the truck's measurements and maximum load capacity.

Transport Type	Weight (kg)	Height (m)	Length (m)	Width (m)
Light Truck	8,500	4.3	12.5	2.5
Heavy Truck	15,000	4.6	19	3.5

4. Indicate whether the travel mode can use toll roads and whether it's transporting hazmat, and then save your changes.

Note: When you select walking or bicycle, the hazmat and toll roads settings are ignored during calculation. 

### Assign a Travel Mode to a Service Territory or Service Territory Member

Assign a travel mode to a service territory or to a service territory member so that the Enhanced Scheduling and Optimization engine can consider the resource's routing and travel preferences. Routing requests are based on the travel mode selected at the service territory level unless specified otherwise at the resource level. In this case, the resource territory membership setting overrides the territory-level setting. Only primary territory members can have a travel mode assigned to them.

This is a Field Service managed package feature.

**Note:** Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings.

Travel modes are applied only to territories using Enhanced Scheduling and Optimization. Travel mode can't be assigned to a secondary service territory member. All Limits and Limitations for Enhanced Scheduling and Optimization apply to travel modes.

- Related Details Information Name Los Angeles Parent Territory Operating Hours Field Availability Los Angeles ~ Active Address 101 S Main St Los Angeles, CA 90012 USA 0M BUNKER HILL LITTLE TOKYO Japanes nerican 😭 National Museum DOWNTOWN E ard SI ANGELES COCCO TOY D Map data @2022 Google Internal SLR HomeAddress 34.052286 , -118.243507 Geolocation Description Owner SDO\_A4 Travel Mode Heavy Truck With Hazmat Use enhanced scheduling ~ and optimization
- 1. From the Service Territories tab, click a service territory, and then edit the Travel Mode field.



Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

### USER PERMISSIONS

To view travel modes:

Read on travel modes

To create, update, or delete travel modes:

Edit on travel modes

To assign a travel mode to a service territory or service territory member:

• Edit on service territory and/or service territory member

- 2. Select a travel mode, and then save your changes.
- **3.** To select a travel mode for a particular service territory member, click the service territory Related tab, and then click the required service resource name under Service Territory Members. The service resource must be a primary territory member.
- **4.** Edit the resource's service territory.

Travel Mode	Search Travel Modes			9
Operating Hours	Search Operating Hours			0,
	Zip/Postal Code		Country	
	City		State/Province	
	Address			
Address	٩	Search Address		
<ul> <li>Territory Type</li> </ul>	Primary			•
Service Territory	Los Angeles			
<ul> <li>Service Resource</li> </ul>	Andy James			×
Member Number	STM-0011			

5. Select the travel mode for that resource and save.

# Create and Manage Field Service Scheduling Policies

Scheduling policies in Salesforce Field Service define the rules and objectives (scheduling priorities) for assigning work to service resources. These policies optimize resource allocation by considering factors such as resource skills, job proximity, and urgency, to make sure the right person is assigned to the right job efficiently. By considering scheduling preferences such as minimizing travel time, scheduling as early as possible, and prioritizing preferred resources, scheduling policies improve operational efficiency and customer satisfaction.

🜐 This is a Field Service managed package feature.

Scheduling policies are made up of two elements:

- Work rules help you refine the list of candidates for a service appointment. You can use work rules to set specific criteria and filter out service resources that don't meet your needs.
- Service objectives reflect your business's scheduling priorities. You can weight each objective to indicate its level of importance.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### Standard Scheduling Policies

Field Service includes four standard scheduling policies. You can customize these policies or create your own.

Scheduling Policy	Description
Customer First	Balances great customer service with travel minimization. Appointments are graded first by the customer's selection of a preferred employee and then by the ability to schedule the appointment as soon as possible. Travel minimization is the second priority.
High Intensity	Typically used in times of high service volumes, like a storm scenario, where your need for employee productivity is higher priority than customer preferences.
Soft Boundaries	Identical to the Customer First policy, but allows the sharing of employees between territories to enhance service coverage.

Scheduling Policy	Description
Emergency	Used with the Emergency Chatter action to dispatch emergency service appointments.

# Manage Scheduling Policies

Create and manage scheduling policies from Guided Setup or the Scheduling Policies tab. To open Guided Setup, from the App Launcher, find and open the **Field Service Admin** app. Click **Field Service Settings** > **Go to Guided Setup** > **Customize Scheduling Policies**. Check your page layout settings before you begin; sometimes fields need to be added to your layout.

Outside of Guided Setup, you can view a policy's work rules and weighted service objectives in its related lists.

Scheduling Policy Work Rule (6+)		New
WORK RULE NAME		
Active Resources		
Due Date		
Earliest Start Permitted		
Finish		
Match Skills		
Match Territory		
	View All	
Scheduling Policy Objectives (3)		New
SERVICE GOAL NAME	WEIGHT	

# Apply a Scheduling Policy

You can apply a scheduling policy to your scheduling process in several ways.

Action	Steps	
Select a policy for scheduled optimization jobs	From the App Launcher, find and open the <b>Field Service Admin</b> app, and then click the <b>Field Service Settings</b> tab. Then, click <b>Optimization</b> > <b>Scheduled Jobs</b> . Update the Scheduling Policy field on any scheduled job to list your preferred policy.	
Select a default scheduling policy for scheduling from the dispatcher console	From the App Launcher, find and open the <b>Field Service Admin</b> app, and then click the <b>Field Service Settings</b> tab. Click <b>Dispatcher Console UI</b> and update the Default scheduling policy field.	
Select a default scheduling policy for the Book Appointment and Candidates actions	From the App Launcher, find and open the <b>Field Service Admin</b> app, and then click the <b>Field Service Settings</b> tab. Click <b>Global Actions</b> > <b>Appointment Booking</b> and update the Default scheduling policy field.	

Action	Steps
Select a policy in the dispatcher console appointment list	The Policy field in the appointment list shows the default dispatcher console scheduling policy, but can be updated before a dispatcher optimizes the schedule.

Note: To automatically schedule a service appointment, select a scheduling policy using the Scheduling Policy Used field. Then select the checkbox for Auto Schedule. If the Scheduling Policy Used field is blank, Field Service uses your org's default scheduling policy.

# Scheduling Policy Fields

Scheduling policies have the following fields. Sometimes they need to be added to your page layouts.

Field Name	Description
Commit Mode	Define what happens when a dispatcher or scheduling operation makes a change to the schedule that conflicts with an ongoing global, in-day, or resource schedule optimization process. Select <i>Always Commit</i> or <i>Rollback</i> . See Handle Conflicts During Optimization.
Description	Description of the policy.
Fix Overlaps	(Checkbox) If this option is selected, any existing appointment overlaps are addressed during in-day or global optimization. The way the overlap is addressed depends on:
	<ul> <li>The start time and priority of the overlapping appointments.</li> <li>Whether either appointment has a pinned status. To choose which appointments are pinned (excluded from rescheduling) during optimization, from the Field Service Settings tab, click <b>Optimization</b> &gt; Logic.</li> </ul>
	<b>Fix Overlaps</b> in global optimization and in-day optimization addresses only overlaps between service appointments and ignores overlaps with Resource Absences.
	If <b>Fix Overlaps</b> isn't selected, overlaps are left as is.
	When you're using Enhanced Scheduling and Optimization, the fix Overlaps option isn't relevant, because overlaps are always resolved if the overlapping service appointments aren't pinned.
In-Day Optimization	(Checkbox) If this option is selected, the scheduling policy uses in-day optimization rather than global optimization. Policies that use global optimization run for several hours, while in-day policies run for up to 5 minutes for Enhanced Scheduling and Optimization and up to 10 minutes if you're not using Enhanced Scheduling and Optimization. This approach makes it ideal for dispatchers to handle last-minute changes. Dispatchers select in-day optimization scheduling policies when optimizing their team's schedule for one

Field Name	Description
	or more service territories on the day of service. You can also schedule to run in-day optimization automatically several times a day by using a scheduled job with an in-day optimization scheduling policy.
Scheduling Policy Name	Name of the policy. If you select In-Day Optimization, we recommend adding "In-Day" to the name of this policy for easy identification when creating jobs and when optimizing from the dispatcher console.

**Note:** Several fix overlap features are available in Field Service.

#### Guidelines for Setting Up a Scheduling Policy

To automate a schedule, you must first configure a scheduling policy that reflects your business's scheduling requirements and preferences. Learn how to create a scheduling policy.

#### Fine-Tune the Scheduling Policy

In scheduling policies, you set weights to service objectives. These weights represent the importance of each objective when the engine generates an optimal schedule. You can fine-tune the weights through an iterative tuning process to set weight values in your scheduling policy that closely align with your business KPIs.

# Guidelines for Setting Up a Scheduling Policy

To automate a schedule, you must first configure a scheduling policy that reflects your business's scheduling requirements and preferences. Learn how to create a scheduling policy.

### 🜐 This is a Field Service managed package feature.

To create an effective scheduling policy, follow the process covered in this topic.

- Defining your Requirements for Scheduling with Work Rules on page 155
- Defining your Preferences for Scheduling with Service Objectives on page 157
- Ranking the Selected Service Objectives on page 157
- Determining Relative Importance of Service Objectives on page 158
- Setting Service Objective Weights on page 158
- Testing Schedule Policy Effectiveness Through Simulation on page 159

### Defining your Requirements for Scheduling with Work Rules

To create a valid schedule, you must define the rules that scheduling must follow. Consider factors such as when to schedule breaks during the day and what criteria from the work order or service appointment to match to a service resource. Also, consider the date and time constraints for the appointment. Work rules help reduce the complexity of the scheduling problem by reducing the number of candidates, allowing the engine to focus on the best solutions. For example, you can limit the radius that a service resource can travel.

To find out how to configure work rules to meet your business's scheduling requirements, see Field Service work rules.

To get started on configuring work rules, review some scenarios.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

SCHEDULING REQUIREMENTS SCENARIOS	CONFIGURATION CONSIDERATIONS
<ul> <li>Do work orders require service resources with relevant skills?</li> <li>Do work orders require service resources with specific proficiency levels?</li> </ul>	Match Skills work rule Extended Match work rule
• Work orders have other factors besides skills that must be considered. For example, are service resources assigned specific postal codes they can service?	Match Boolean work rule Match Skills work rule Extended Match work rule
<ul> <li>Service resources require break(s) throughout the day.</li> <li>What time should Service Resources take a break in the day?</li> <li>Are there multiple break times within a day?</li> </ul>	Service Resource Availability work rule Work Rule Entry: Service Resource Availability
• Can I schedule work in overtime periods to service resources?	Service Resource Availability work rule
• Can a service resource travel outside working hours or only within working hours?	Service Resource Availability work rule
• Is there a maximum number of service appointments or duration of service appointments that can be assigned in a day per service resource?	Count work rule
• Can I require a specific service resource be assigned to a work order?	Required Resources work rule
• Can I require a specific service resource not be assigned to a work order?	Excluded Resources work rule
• My customer has specific times for service calls. How do I make sure those times are considered during scheduling?	Service Appointment Visiting Hour work rule
• How do I ensure crew resources get scheduled work?	Service Crew Resources Availability work rule

SCHEDULING REQUIREMENTS SCENARIOS	CONFIGURATION CONSIDERATIONS
• Do service appointments have arrival windows that indicate what time a service resource must arrive?	Match Time work rule
<ul> <li>Is there a maximum distance a service resource can travel from their starting location?</li> <li>What can I do to help with travel costs across a large service territory?</li> </ul>	Maximum Travel from Home work rule
• How can I assign specific types of work to a service resource during a portion or the full day?	TimeSlot Designated work rule
• I want to ensure service resources are assigned work only into their primary or relocated service territory?	Match Territory work rule
• I want to assign work to a service resource's	Working Territories work rule

I want to assign work to a service resource's Working Territories work rule primary and secondary service territories.

Note: The Service Resource Availability work rule, and the Earliest Start Permitted and Due Date Match Time work rules are mandatory for all scheduling policies.

# Defining your Preferences for Scheduling with Service Objectives

After you've defined a valid schedule using work rules, you need to define what your preferences are for an optimal schedule. For example, given a set of possible valid schedules, which schedule does Field Service choose based on scheduling preferences?

Consider factors such as minimizing travel, reducing overtime, and scheduling as soon as possible. Go through the Service objectives to find out how to configure objectives to meet your business's scheduling requirements. Try to include only those service objectives that are important to your business to avoid overcomplicating your scheduling criteria.

Note: Use a scheduling policy without service objectives to improve performance if you aren't using slot grades in Appointment Booking. If you're using Enhanced Scheduling and Optimization, booking appointments with a scheduling policy that doesn't have service objectives is called gradeless appointment booking. In this case, appointment booking finds the first eligible candidate for each slot without having to grade all the possible options. When you're not using Enhanced Scheduling and Optimization, appointment booking grades all the possible options. However, if you don't have service objectives in the scheduling policy, the processing time is shorter.

# Ranking the Selected Service Objectives

After you've defined a valid schedule using work rules, you need to define what your preferences are for an optimal schedule. For example, given a set of possible valid schedules, which schedule does Field Service choose based on scheduling preferences?

The next step is to prioritize your scheduling preferences. Rank the service objectives from most important to least important. Some can be similar in importance, but consider which preference is more desirable if all other factors remain the same.

For example:

Service Objective	Rank
Minimize Travel	2
Schedule ASAP	3
Preferred Resources	1

Compare rankings with other service managers and discuss any differences to understand the reasons behind them.

### Determining Relative Importance of Service Objectives

If you know which service objectives are most important, you can go a step further to determine how much more important a service objective is over another. For example, minimizing travel can be more important than scheduling as soon as possible, but that's not necessarily always true.

For example, scheduling an appointment tomorrow can add 30 minutes of travel, but if you schedule the same appointment today to fill in an available gap in the schedule, it can add 45 minutes of travel. While scheduling the appointment tomorrow does save on travel time, you can prefer to schedule the service appointment today with slightly more travel so the service resource isn't left idle.

Understanding how much more important one service objective is over another would helps define the actual values of the service objective weights.

# Setting Service Objective Weights

There are many ways to derive service objective weights in a scheduling policy. A simple method is to use an allocation system. This approach gives you a starting point for your weights and helps you understand the trade-offs between scheduling objectives and how the weight, or sum of weights, can affect each objective.

First, decide how many points you can distribute. Let's use 500 points. (If you're not using Enhanced Scheduling and Optimization, choose a maximum value of 500 to make sure the sum of the weights of all the objectives doesn't go over 500. Then, weight points on each service objective based on how important it is to your business. You must distribute all the points.

Here's an example of how to distribute points based on how you ranked your service objectives and how important each service objective is.

Service Objective	Weight
Minimize Travel	210
Schedule ASAP	50
Preferred Resources	240

Here's an example of how you choose these values.

• Scheduling an appointment to a preferred resource is most important to my business, even if it's at the expense of longer travel and scheduling at a later time rather than earlier.

- The best case scenario for minimizing travel is if there's is zero travel and the best case scenario for scheduling as soon as possible (ASAP) is scheduling right now. If an appointment can be scheduled right now with zero travel, I'd rather that option than scheduling to a preferred resource. Adding up the combined weight of Minimize Travel and Schedule ASAP (210+50=260) is more than the bonus of scheduling the appointment to a preferred resource (260>240).
- My business prefers to minimize travel over scheduling an appointment as soon as possible since we want to reduce the travel time and the time not spent being productive. However, if traveling to a service appointment today isn't too bad, I don't mind scheduling it today to get it done earlier rather than waiting to save some travel time tomorrow.

### Testing Schedule Policy Effectiveness Through Simulation

It's important to understand that there's no one solution for balancing service objective weights that will solve all scenarios and businesses when it comes to a non-deterministic problem like workforce scheduling. Going through a process to tune a schedule policy helps you understand the schedule quality results for different scenarios and come up with a schedule policy that reacts to differing needs.

The best way to evaluate the effectiveness of a scheduling policy is to try it out and measure the results. See Fine-Tune the Scheduling Policy for a methodology on how to perform optimization simulations.

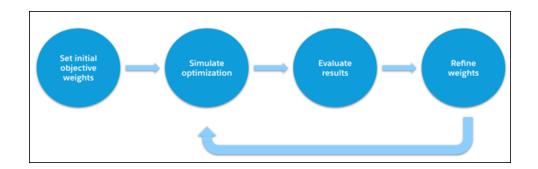
Review the Gantt in the dispatcher console to inspect the schedule created by the optimizer. Does it make sense? Did service appointments get scheduled to the right service resources and time? If not, review the work rules in your scheduling policy to see if something needs to be added or updated.

(8)	James Clifton Installation Expert		<u>_</u>		S.,	-	S	_ S	S	· S	S	SA
	Janet Jones Installation Expert	Hmm, over 1 hour of travel seems like a lot. Maybe I'll reduce the Maximum Travel	-	S	· S	=	s	· s	S	S	• SA	-
	Jim Matthews Repair Expert	from Home		S	S.,		SA-2		SA-28.	-	s	SA
Ø	Martino Castanon Electric Engineer		-	S	<b>_</b> S	-	_ s.	<mark>.</mark> S	S	<b>_</b> S	s	ы́А
	Mary Adams		_	S		s		S	S	S	SA	

If the service appointment assignments are correct, you can then evaluate the quality of the schedule.

Use Optimization Hub (when you're using Enhanced Scheduling and Optimization) or Optimization Insights (when you're not using Enhanced Scheduling and Optimization) to measure the results of optimization. These results represent your baseline.

Unless you were lucky with choosing the service objective weight values, there's usually room for improvement. Change the weight values slightly while keeping the total sum of weights the same and rerun the simulation. Are the results better or worse? Continue this process until you're satisfied with the results.



#### SEE ALSO:

Create and Manage Field Service Scheduling Policies Create and Manage Field Service Work Rules Create and Manage Field Service Objectives Create Relevance Groups

# Fine-Tune the Scheduling Policy

In scheduling policies, you set weights to service objectives. These weights represent the importance of each objective when the engine generates an optimal schedule. You can fine-tune the weights through an iterative tuning process to set weight values in your scheduling policy that closely align with your business KPIs.

### 🜐 This is a Field Service managed package feature.

These steps are a starting point. They outline a general framework for fine-tuning your scheduling policy weights through an iterative process: simulate, collect data, analyze, and refine. You can modify and expand these steps to meet your specific requirements.

- 1. Collect production-like data in a sandbox to use for simulation testing. Preferably perform a refresh from production into a full sandbox.
- **2.** Select two or three service territories to perform simulation testing on. Preferably choose diverse territories so you can test on a dataset that is representative of all your Salesforce data.
- **3.** Select a future date range start time to perform testing, depending on how long you expect testing to take. It's better to select a date range in the future so the passing of the current time doesn't affect the optimization window. For example, if today is January 1, 2024, and you expect the tuning exercise to take 3 days, select a date range for optimization to start no later than lanuary 5, 2024. This way the current date doesn't everlap with your optimization date range of

January 5, 2024. This way the current date doesn't overlap with your optimization date range and interfere with results.

Note: For a more realistic test dataset, update the dates within the dataset based on the amount of test data available for the selected date range.

- **4.** The optimization horizon date range must match what you intend to configure in production. For example, if you are testing the global optimizer that has a horizon of 3 days, the optimization horizon for the testing is January 5, 2024 to January 7, 2024.
- 5. Create a copy of the scheduling policy that you're testing for fine-tuning and rename it to show that it's the baseline scheduling policy. For example, ABC\_Baseline.
- 6. Set up Optimization Insights, or, if you're using Enhanced Scheduling and Optimization, set up the Optimization Hub.
- 7. Unschedule all the appointments in the testing data domain.

### EDITIONS

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

### **USER PERMISSIONS**

To enable Enhanced Scheduling and Optimization:

Customize Application

- 8. Run Global Optimization on the selected service territories for the time horizon that you selected. It's easier to use the OAAS API to run the test because it gives you the flexibility to choose future dates. When you're using Enhanced Scheduling and Optimization, you can control the time range directly from the scheduled job page.
- 9. Measure the results.
  - Measure runtime.
  - Collect results using Optimization Insights or the Optimization Hub to determine how many appointments were scheduled, utilization, travel time, and more metrics, according to your specific business KPIs.
  - Take screenshots of the Gantt.
  - If possible, save the schedule by exporting the service appointment schedule times and Assigned Resource records for analysis.
- 10. Run the same test one or two more times and average out the result. The result acts as the baseline metric to compare against.
- **11.** Review the Gantt and the metrics and identify areas where you want to improve and which KPIs to focus on. Consider the types of service territories you chose and analyze the differences in results among the territories.
- 12. Copy the scheduling policy and rename it to show the test number and what you are planning to change in this policy.
- **13.** Update the service objective weights to impact the KPI that you want to see an improvement on. We recommend you change only one variable at a time, and test how it affects the results. Otherwise, it can be difficult to determine which change impacted the results. Keep in mind that objective weights are relative to each other.
- 14. Repeat the process from step 8.
- 15. Continue the simulation tests until you see no significant improvements from further tuning of the scheduling policy.

When you're happy with the results, you can use your newly tuned scheduling policy in your production environment. We recommend you test the new policy with a few service territories first and get feedback from users before you roll it out to all service territories.

SEE ALSO:

OAAS Class Manage Scheduled Jobs in Field Service Optimization Horizon Gain Visibility into Optimizations with Field Service Optimization Insights Explore Metrics in Field Service Optimization Hub

# Create and Manage Field Service Work Rules

Work rules refine the list of candidates for a service appointment by rejecting service resources that violate any rule. Add work rules to any Field Service scheduling policy to guide schedule optimization.

🜐 This is a Field Service managed package feature.

Watch the video to see how to optimize scheduling performance using work rules.

Watch a video

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Note: If a user doesn't see a particular work rule type, they need profile-based access to it. Navigate to the user's profile in Setup. Under Custom Record Type Settings, click **Edit** next to Work Rules and move the record type to Selected Record Types.

### Considerations

Work rules are either database or Apex rules. Each has their own impact on performance and efficiency.

Database rules are applied at the SOQL query clause level. These rules immediately disqualify resources and query only the resources that you need, so performance isn't impacted.

Apex rules are applied after the initial set of service resources are returned from the database SOQL query. Like an Apex "for loop", Apex rules iterate over all resources returned and must validate that the resources meet specified rule criteria. The additional Apex processing impacts performance.

Even though Apex rules have a greater impact on performance than database rules do, Apex rules can still be used. Without Apex or database rules to limit the resources found eligible to perform the work, too much work can create a bigger issue for overall performance and even trigger a CPU timeout.

All database rules are aggregated into one SOQL query and applied in no particular order. Also, because they're used for grading resources, applying service objectives happens after applying all work rules, increasing the amount of Apex processing.

Even though service objectives in your scheduling policy can affect performance, specifying service objectives can be necessary and required from a business value standpoint. You can choose to apply service objectives to get the best candidate according to the work rules and company scheduling policy. Or you can choose to get a valid candidate quickly, without affecting performance, by applying just the work rules.

Database rules are specific work rules used to filter service resources during Appointment Booking, Get Candidates, Schedule, and Emergency Scheduling actions. They're more efficient than other work rules, which filter resources against CPU time. You must include at least 1 database rule in your scheduling policy to minimize the number of candidates during the Appointment Booking and Get Candidates actions. To avoid performance issues, we recommend you use database rules to filter the number of candidates to 20.

These rules are considered database rules:

- Maximum Travel From Home
- Working Territories
- Match Territory
- Enhanced Match

When you're using Enhanced Scheduling and Optimization, these work rules are also considered database rules:

- Match Boolean
- Match Fields
- Required Resource
- Excluded Resource

# Field Service Work Rule Types

#### Work Rule Type: Count Rule

Use a Field Service Apex Count work rule to restrict appointment scheduling based on assignments, hours worked, or a custom value. It's a great way to prevent overloading your workers or their vehicles.

#### Salesforce Field Service

### Work Rule Type: Excluded Resources

The Excluded Resources Apex work rule type prevents service resources, listed as an Excluded service resource preference on a work order or work order line item, from being assigned to the corresponding appointment when the scheduling policy in use includes this work rule.

#### Work Rule Type: Extended Match

Use the Extended Match database work rule type to schedule service appointments using custom criteria. It uses a junction, or linking, object to match a field on the Service Appointment object to a related list on the Service Resource object.

#### Work Rule Type: Match Boolean

Match Boolean is a Field Service Apex work rule type that enforces scheduling preferences based on a checkbox (Boolean) field on service resources.

#### Work Rule Type: Match Fields

Match Fields is a Field Service Apex work rule type that matches a service appointment field with a service resources field. It's a great way to enforce requirements based on custom fields.

#### Work Rule Type: Match Skills

Match Skills is a Field Service Apex work rule type that matches a service appointment's skill requirements with a service resource's assigned skills. It can also be used to enforce skill level requirements.

#### Work Rule Type: Match Territory

Match Territory is a database work rule type that ensures service appointments are assigned only to Field Service resources who are primary or relocation members of the appointment's service territory.

#### Work Rule Type: Match Time Rule

Match Time Rule is a Field Service Apex work rule type that limits the scheduling time frame based on an appointment's date and time properties. For example, the Due Date work rule ensures that the appointment's scheduled end is before its due date.

#### Work Rule Type: Maximum Travel from Home

Maximum Travel from Home is a Field Service database work rule type for setting the maximum distance or travel time between a resource's home base and any appointment assigned to the resource. It's a useful way to minimize mobile workers' travel time.

#### Work Rule Type: Required Resources

Required Resources is a Field Service Apex work rule type that ensures that a service appointment's required resource preferences are respected. If a work order or work order line item has a related Resource Preference record of type Required for a particular service resource, a Required Resources work rule ensures that the related service appointments are assigned to that service resource.

#### Work Rule Type: Service Appointment Visiting Hours

Service Appointment Visiting Hours is an Apex work rule type that enforces your customers' operating hours. For example, if an account's operating hours are weekdays between 8:00 AM and noon, appointments for that customer are scheduled only within those hours.

#### Work Rule Type: Service Crew Resources Availability

Service Crew Resources Availability is an Apex work rule type that ensures that a service resource of type Crew is assigned to an appointment only if the crew complies with the appointment's parent record's minimum crew size.

#### Work Rule Type: Service Resource Availability

Service Resource Availability is an Apex work rule type that ensures that a service resource is available to perform a service appointment. You can schedule breaks automatically, account for travel time, or set up short breaks between service appointments. A work rule of this type is mandatory for all scheduling policies to ensure that both resource absences and availability are respected during the scheduling process.

#### Work Rule Type: TimeSlot Designated Work

The Field Service TimeSlot Designated Work Apex work rule type ensures that if a time slot or shift is reserved for a specific type of work, only appointments of that type are scheduled during that time period.

### Work Rule Type: Work Capacity

The Work Capacity Apex work rule type sets limits for the work capacity of service resources in a given service territory according to specified criteria. This work rule is available only when you're using Enhanced Scheduling and Optimization.

Work Rule Type: Working Territories

Working Territories is a Field Service database work rule type that enforces primary and secondary service territory memberships.

# Work Rule Type: Count Rule

Use a Field Service Apex Count work rule to restrict appointment scheduling based on assignments, hours worked, or a custom value. It's a great way to prevent overloading your workers or their vehicles.

(f) This is a Field Service managed package feature.

Use Case

A healthcare company can configure a nurse practitioner's operating hours availability to be on-call continually for 24 hours but use a Count work rule to cap daily scheduled appointments at 8 hours. This limit safeguards the clinician from being overworked and ensures compliance with labor regulations. You can also use the Count work rule to restrict the total number of service appointments assigned to a service resource or even count and limit a custom attribute on a service appointment. For example, a commercial waste management company can use a Count work rule to limit the number of service appointments assigned to a garbage truck, ensuring the truck's total cargo

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

capacity isn't exceeded. You can then create a Units/Space Consumed attribute on the Service Appointment object and define the number of units or cargo space each service appointment waste pickup job consumes (or removes) from the truck's capacity when assigned to the truck.

# Settings

A work rule of this type contains the following settings.

Field	Description
Time Resolution	The duration for which the defined count limit applies and is reset for a service resource. The available resolution is Daily.
Count Type	What the rule counts: assignments, durations, or a custom field value.
Count Object	Object used in the count. If the rule counts assignments or durations, the object is a service appointment. If the rule counts a custom value, select the object that has the custom field: service appointment, work order, or work order line item.
Custom Field	Custom field name.
Default Limit	Default count limit.
Resource Property	API name of a numeric custom field on a service resource, enabling you to set a specific limit for each resource. If this field is null, for any service resource, the system uses the default limit specified in the Count work rule record.

### Create a Count Work Rule

Note: To create work rules, you need the Field Service Admin custom permission set. If the Count work rule isn't listed as a work rule type, update the Field Service custom permission sets.

To create a Count Rule, manually enter API names for the Service Resource limit and Service Appointment attributes on the Count Rule record type page layout. Alternatively, use the Count Rule custom Lightning Web Component (LWC) UI for a guided experience. To add this LWC to the Count Rule record page layout and get assistance with populating these fields by showing all available metadata to select from, go to the Lightning record page editor and drag the countRule component (found under Custom - Managed in the component list sidebar) onto the page. Save the Lightning record page and then use the UI to create the Count rule.

Time Resolution	
Daily	*
Count Type	
Custom Value	*
Default Limit	
5.00000	
Count Object	
Service Appointment	*
Custom Field Name	
Select	v
Resource Property 0	
None	*

Add the work rule to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or by using the Scheduling Policy Work Rule related list. When you use this scheduling policy, the work rule ensures that scheduling and optimization considers service resources as eligible for work assignments only up to their specified limit.

When a manual schedule change causes a limit to be exceeded, the Gantt shows rule violations on all appointments that contribute to the count. Violations include rule names, so use meaningful names.

For example, a dispatcher wants to create schedules that respect how many solar panels workers can deliver and install. A custom field on work orders represents the panel quantity for each installation. Because workers drive different vehicles, a resource property indicates how many panels a worker can transport. To set limits for large versus small trucks, add workers to relevance groups based on truck size and create rules using those groups.

### Considerations When Using Enhanced Scheduling and Optimization

Pay attention to these considerations if you're using Enhanced Scheduling and Optimization.

- In a policy, you can add up to ten rules that count custom field values. You can also add more rules that count assignments and durations.
- If a resource has reached a count limit, scheduling actions still consider the resource's availability for appointments in which the Count work rule doesn't apply. For example, when an appliance installer has reached their vehicle's item limit, scheduling can still consider them for other jobs such as maintenance.
- The Count work rule uses midnight as the Start of Day even if it's customized to a different value.
- Multiday work isn't supported with Count work rules.
- You can set up Count work rules for crews. Count work rules don't apply to individual service resources while they're part of a crew.

- Count work rules ignore capacity-based resources.
- If you use the Count work rule on a custom field, the limitation considers the order of scheduled appointments, ensuring that your
  workers don't exceed the set limit at any point throughout the day. For example, you have a custom field that checks the capacity
  of your workers' vehicle, and the Count work rule is set to 10. Throughout the day, a driver picks up five units, picks up another eight
  units, and then drops off four units. The Count work rule registers this violation on the second service appointment and on all the
  following appointments that day. The total count value at any time during the day can't be negative.
- The Count work rule doesn't apply to capacity-based resources.

### Considerations When Not Using Enhanced Scheduling and Optimization

Pay attention to these considerations if you aren't using Enhanced Scheduling and Optimization.

- In a policy, you can add up to ten rules that count custom field values. You can also add more rules that count assignments and durations.
- If a resource has reached a count limit, scheduling actions still consider the resource's availability for appointments in which the Count work rule doesn't apply. For example, when an appliance installer has reached their vehicle's item limit, scheduling can still consider them for other jobs such as maintenance.
- The Count work rule uses midnight as the Start of Day even if it's customized to a different value.
- Multiday work isn't supported with Count work rules.
- Complex work isn't supported with Count work rules.
- You can use Count rules with relevance groups that consist of service territory members, but not with relevance groups that are based on service appointments.
- You can set up Count work rules for crews. Count work rules don't apply to individual service resources while they're part of a crew.
- Count work rules ignore capacity-based resources.
- The Count work rule doesn't apply to capacity-based resources.

#### SEE ALSO:

Create Relevance Groups Work Rules: Considerations

# Work Rule Type: Excluded Resources

The Excluded Resources Apex work rule type prevents service resources, listed as an Excluded service resource preference on a work order or work order line item, from being assigned to the corresponding appointment when the scheduling policy in use includes this work rule.

### 🜐 This is a Field Service managed package feature.

Sometimes, customers have a poor experience with a service resource and request not to work with them in the future. Use this work rule type to enforce customer resource preferences, such as those resulting from a complaint. Other work rules can exclude service resources based on skills, availability, and proximity.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Create work rules from the Work Rules tab. To view or add work rule fields open the Object Manager in Setup and select the Work Rule custom object. Add work rules to a scheduling policy from the Customize Scheduling Policies page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Add Service Resource Preferences in Field Service Work Rules: Considerations

# Work Rule Type: Extended Match

Use the Extended Match database work rule type to schedule service appointments using custom criteria. It uses a junction, or linking, object to match a field on the Service Appointment object to a related list on the Service Resource object.



(f) This is a Field Service managed package feature.

Because you can use an Extended Match work rule to match appointments to resources using your own customizations, writing a rule requires some prior setup. Before you get started, create a data model or make sure that you have an existing data model with the appropriate fields. We suggest using Schema Builder.

You can apply Extended Match work rules when scheduling appointments. To use them with optimization, set up optimization on page 131.

A work rule of this type contains the following settings.

Field	Description
Service Appointment Matching Field	The service appointment lookup field value that you're matching. The field must be of the type Lookup. When using Enhanced Scheduling and Optimization, if the service appointment matching field is empty, all resources are considered valid.
Linking Object	The junction object used to link service resources to the object that the service appointment matching field references.
Linking Object Reference Field	The reference field on the linking object that is matched with the Service Appointment Matching Field. When using Enhanced Scheduling and Optimization, if the Linking Object Reference Field is empty, then the service resource isn't a valid candidate for any service appointment with matching field requirements.
Time-Phased	Indicates whether the work rule applies only to a certain time period.
Start Date Field Name	The Date-Time field name on the Linking Object that represents the start time. This field is required when you select Time-Phased.
End Date Field Name	The Date-Time field name on the Linking Object that represents the end time. This field is required when you select Time-Phased.

Note: To avoid a potential scheduling or optimization crash, we recommend that when you create Linking Object records, you populate both the Linking Object Reference field and the Service Resource Reference field.

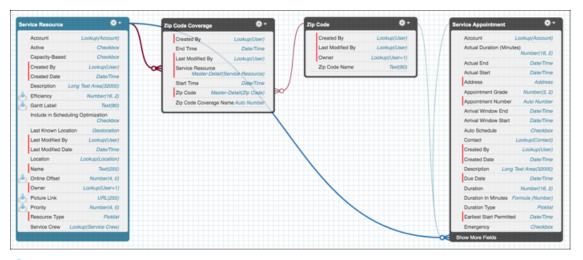
After you create the data model for your work rule, finish setting it up by creating a work rule from the Work Rules tab. Use the Extended Match Rule custom Lightning Component helper, or enter the fields manually.

You can add work rules to a scheduling policy from the Customize Scheduling Policies page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy. A policy can have up to five Extended Match work rules. Applying more than two Extended Match work rules with complex scenarios, such as multiday or crew scheduling, can affect scheduling performance. The scheduling operation can fail if a Salesforce platform limit is reached.

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**Example:** If your mobile workers support specific ZIP codes, use an Extended Match work rule to assign them appointments within their area. Create a ZIP Code lookup field on the Service Appointment object. Then create a ZIP Code Coverage linking object, add the ZIP Code field, and attach it to the Service Resource object as a related list. Use the Extended Match Rule Lightning Component to create a work rule.

The ZIP Code Coverage example has this data model.



Note: In this example, if a service appointment has an empty ZIP Code field, the work rule returns all Service Resources. Define other work rules in your policy, such as Match Skills or Match Territory, that can narrow resources when there's no ZIP code on the appointment.

Considerations:

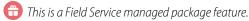
- Time-phased Extended Match work rules can consume up to 80 records on a service resource during the selected time period. Work rules that aren't time-phased can consume up to 200 records.
- You can't use relevance groups with Extended Match work rules.

### SEE ALSO:

Work Rules: Considerations

# Work Rule Type: Match Boolean

Match Boolean is a Field Service Apex work rule type that enforces scheduling preferences based on a checkbox (Boolean) field on service resources.



Work rules of this type contain two key settings.

Field Name	Description
Resource Property	The API name of the checkbox field on service resources that defines the scheduling requirement. For example, IsActive.
Value is True	If selected, the Resource Property must be True (selected) for a service resource to be assigned to a service appointment. If not selected, the Resource Property must be false (deselected) for a resource to be assigned to an appointment. When using Enhanced Scheduling and Optimization, if the Boolean field on the service resource is empty, the rule isn't applied.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To control which checkbox fields are available as resource properties:

- Add the API name of any checkbox field as a picklist value in the Resource Property field on the Work Rule custom object in Setup.
- Make sure that the value has been enabled for the record type.

Field Service includes a standard Match Boolean work rule named Active Resources. This work rule:

- Assures that only active service resources are considered for scheduling.
- Lets you preserve historical data on the Gantt. When a service resource leaves your company, their assignment data remains.

Work Rule Active R	lesources		
RELATED	DETAILS	MENERGIIZAN ZAMEN	
• Work Rule Nar			
Active Resource Prope		Description	
IsActive		·	



Note: A scheduling policy can contain up to five Match Boolean work rules.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Service Resource Fields for Field Service Work Rules: Considerations

# Work Rule Type: Match Fields

Match Fields is a Field Service Apex work rule type that matches a service appointment field with a service resources field. It's a great way to enforce requirements based on custom fields.

🜐 This is a Field Service managed package feature.

**Note:** Use the Match Fields work rule for direct one-to-one field comparisons between a service appointment and a service resource, for example, matching required skills. If you must compare a field from the service appointment to multiple properties on the service resource, we recommend you use the Extended Match work rule type, which provides enhanced flexibility and performance.

Work rules of this type contain three key settings.

Field Name	Description
Service Property	The API name of the field on service appointments that helps define the scheduling requirement. All primitive data types are supported. When using Enhanced Scheduling and Optimization, if the service appointment matching field is empty, all service resources are considered valid.
Boolean Operator	The required relationship between the Service Property and the Resource Property. For example, if =, a service appointment's Service Property value must equal a service resource's Resource Property value for the resource to be assigned to the appointment.
Resource Property	The API name of the field on service resources that helps define the scheduling requirement. All primitive data types are supported. When using Enhanced Scheduling and Optimization, if the resource matching field is empty, then the service resource isn't a valid candidate for any service appointment with matching field requirements.

To control which fields are available as resource and service properties:

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- Add the API name of any field as a picklist value in the Resource Property or Service Property fields on the Work Rule custom object in Setup.
- Make sure that the value has been enabled for the record type.

Note: Match Fields work rules are supported for schedule optimization only when you're using Enhanced Scheduling and Optimization.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

#### SEE ALSO:

Service Resource Fields for Field Service Service Appointment Fields for Field Service Work Rules: Considerations

# Work Rule Type: Match Skills

Match Skills is a Field Service Apex work rule type that matches a service appointment's skill requirements with a service resource's assigned skills. It can also be used to enforce skill level requirements.

🜐 This is a Field Service managed package feature.

The Match Skill work rule is time-phased, meaning the rule validates that the service resource has the required skills and skill level when a work order is assigned, as these values can change.

Work rules of this type contain the following settings.

Field Name	Description
Match Skill Level	If selected, service resources whose skill level is lower than the level listed on an appointment's parent record's Skill Requirement record aren't considered as candidates. Match Skill Level isn't supported when you're using the Match Skills work rule with At Least One Skill Matches (OR) selected for the Skill Type Logic.
Skill Type Developer Name	The Skill Type group of skills the object refers to, for example, Language. The Skill Type can be found on the Skill record in Setup.
Skill Type Logic	Defines the logic between the skill requirements as <b>All Skills Match (AND)</b> (this is the default) or <b>At Least One Skill Matches (OR)</b> . You set the logic for each skill type. Using the OR logic, you can qualify more service resources to match at least one, but not necessarily all, skill requirements of a certain skill type.
	At Least One Skill Matches (OR) is supported only when you're using Enhanced Scheduling and Optimization. If you aren't using Enhanced Scheduling and Optimization, the All Skills Match (AND) logic is used regardless of this setting.
	For example, a service appointment requires a caregiver who can perform procedures required for diabetes care and the caregiver must speak English or Spanish. If speaking only one of the languages specified on a Work Order

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
	is required, you can use the Skill Type Logic of At Least One Skill Matches (OR) so that candidates aren't required to have all the skills in the Match Skills work rule. In Setup, set the Skill Type for this set of skills to a common name, such as Language. The Match Skills work rule checks if the service resource has at least one of the Language type skills for the resource to be a match.
	By using the All Skills Match (AND) logic, candidates must have all the skills for the skill type. If no Skill Type Developer Name is entered, the skill type logic applies to all the skills that have no skill type. If you don't want to apply a Skill Type Logic, keep the Skill Type field empty for all your skills to make sure the Match Skills rule is applied. If no Skill Type Logic value is entered the default is All Skills Match (AND).

Note: If a service appointment doesn't have the required skills specified, all service resources are considered valid candidates. If a service resource has no assigned skills, the resource isn't a valid candidate for any service appointment with skill requirements.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Create Skills for Field Service Add Required Skills to Work Orders or Work Types for Field Service Work Rules: Considerations

# Work Rule Type: Match Territory

Match Territory is a database work rule type that ensures service appointments are assigned only to Field Service resources who are primary or relocation members of the appointment's service territory.

🜐 This is a Field Service managed package feature.

This rule compares the Service Territory field value on service appointments with the Service Territory field value on service territory member records. When using Enhanced Scheduling and Optimization, if the service appointment territory field is empty, all service resources from all territories are considered valid candidates.



- While this rule restricts service resources eligible for a service appointment based on service territory, service territories in Field Service influence much more. Service territories control dispatcher console views, the grouping of service resources, optimization, sharing, and dispatch processes. Service territories must align with time zones. Therefore, make sure that service territories are created to support these other areas of the product first. If you must restrict resource assignments based on specific criteria, consider also using other work rules such as Match Skill or Extended Match.
- A scheduling policy can't include both a Working Territories work rule and a Match Territory work rule.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Create Service Resources for Field Service Work Rules: Considerations

# Work Rule Type: Match Time Rule

Match Time Rule is a Field Service Apex work rule type that limits the scheduling time frame based on an appointment's date and time properties. For example, the Due Date work rule ensures that the appointment's scheduled end is before its due date.

🜐 This is a Field Service managed package feature.

Work rules of this type contain the following settings.

Field Name	Description
Service Schedule Time Property	Indicates whether the rule controls the service appointment's scheduled start time or scheduled end time. Custom date/time fields aren't supported.
Service Time Operator	The required relationship between the Service Schedule Time Property and the Service Time Property. For example, if you select <b>Equal</b> , a service appointment's Service Schedule Time Property value must equal the appointment's Service Time Property value.
Service Time Property	<ul> <li>The service appointment field that defines the work rule requirement. There are four options.</li> <li>EarliestStartTime and DueDate together represent the total time frame during which an appointment must start and complete.</li> <li>The ArrivalWindowStart and EndTime together represent the arrival window time frame promised to the customer.</li> <li>Note: Match Time work rules with custom date/time fields are fully supported for schedule optimization only when you're using Enhanced Scheduling and Optimization. When you aren't using Enhanced Scheduling and Optimization, custom date/time fields are supported only for platform scheduling and Get</li> </ul>

# **EDITIONS**

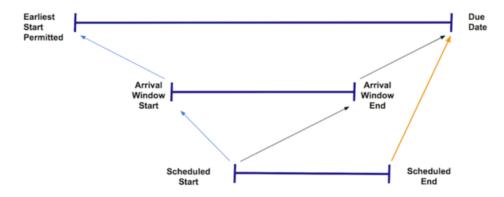
Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
	Candidates, but not for optimization services.
Pass Empty Values	If you select this option and any of the Service Time Property values are empty, the Match Time rule is ignored.

Field Service includes four standard Match Time Rule work rules.

- Earliest Start Permitted: Ensures that a service appointment's Scheduled Start is equal to or later than the Earliest Start Permitted. This work rule is included in every standard scheduling policy.
- Due Date: Ensures a service appointment's Scheduled End is equal to or earlier than the Due Date. This work rule is included in every standard scheduling policy.
- Scheduled Start: Ensures that a service appointment's Scheduled Start is equal to or later than the Arrival Window Start.
- Scheduled End: Ensures that a service appointment's Scheduled Start is equal to or earlier than the Arrival Window End.

An appointment's Scheduled Start is based on the travel time recorded for previous appointments. The Scheduled End is calculated by adding the Duration to the Scheduled Start.



Work rules that impose time constraints limit your optimization flexibility. When you create Match Time Rule work rules, consider the commitments that you've made to customers and your goals regarding wait time.

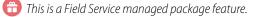
Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Service Appointment Fields for Field Service Work Rules: Considerations

# Work Rule Type: Maximum Travel from Home

Maximum Travel from Home is a Field Service database work rule type for setting the maximum distance or travel time between a resource's home base and any appointment assigned to the resource. It's a useful way to minimize mobile workers' travel time.



Note: To calculate maximum travel time or distance, Field Service uses aerial routing (as the crow flies).

Work rules of this type are particularly useful if your service territories are functional rather than geographical.

Work rules of this type contain the following settings.

Field	Description
Maximum Travel From Home Type	Indicates whether the work rule enforces a maximum travel time or maximum distance.
Maximum Travel From Home	The maximum, which is measured in minutes for travel time and miles or kilometers for distance. The miles or kilometers preference is set in the Field Service Admin app.
Relevance Groups	Available only if relevance groups are implemented. Relevance groups let you apply the work rule to a subset of service resources. For example, use relevance groups to enforce these policies:
	• Don't assign resources to maintenance appointments that are more than 20 miles from their home base.
	• Don't assign highly qualified workers to appointments that are more than 20 miles from their home base.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

If a service resource's home base (address) isn't specified, the resource isn't a candidate for any service appointment. If a service appointment lacks geocoordinates (calculated from an address), it can be assigned to any service resource with a home base.

SEE ALSO:

Set Up Routing for Travel Time Calculations Work Rules: Considerations

# Work Rule Type: Required Resources

Required Resources is a Field Service Apex work rule type that ensures that a service appointment's required resource preferences are respected. If a work order or work order line item has a related Resource Preference record of type Required for a particular service resource, a Required Resources work rule ensures that the related service appointments are assigned to that service resource.

### 🜐 This is a Field Service managed package feature.

You can also create Resource Preference records at the account level. However these preference records are enforced only when listed on the work order or work order line item. When listing these records on the account, a built-in trigger logic is used with standard actions such as Book Appointment and Get Candidates. This logic automatically creates Resource Preference records related to the work order or work order line item based on the resource preferences defined at the account level.

If you're creating a work order or work order line item from custom code or automation, and you've populated the account on the work order or work order line item that has Resource Preferences, those records aren't automatically recreated on the work order or work order line item automatically.

Required Resources work rules are a useful way to preserve one-on-one customer-provider relationships, such as home healthcare. These work rules are highly restrictive, because they limit the pool of potential assigned resources to consider only those who are listed as required in the Resource Preferences related list on the related work order or account.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO: Add Service Resource Preferences in Field Service Work Rules: Considerations

# Work Rule Type: Service Appointment Visiting Hours

Service Appointment Visiting Hours is an Apex work rule type that enforces your customers' operating hours. For example, if an account's operating hours are weekdays between 8:00 AM and noon, appointments for that customer are scheduled only within those hours.

 ${f eta}$  This is a Field Service managed package feature.

To define a customer's preferred hours of service, create operating hours for them from the Operating Hours tab. Select the operating hours in the Operating Hours ID field on the account. Work orders created for the account always inherit the account's operating hours in the Visiting Hours field, and service appointments use their work order's visiting hours.

When you're not using Enhanced Scheduling and Optimization:

- Visiting hours use the time zone of the service territory.
- If the location has no time zone specified, GMT is used.

When you're using Enhanced Scheduling and Optimization:

• Visiting hours use the time zone of the operating hours record or the time zone of the service appointment's service territory, depending on your defined setting. When you work across multiple time zones, we recommend that you deselect the **Use the** 

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Visiting Hours object's time zone when an appointment has visiting hours setting, so that you use the time zone of the appointment's service territory. To access the setting, in the Field Service Settings tab, click Scheduling > General Logic.

- You can add holidays to visiting Operating Hours that represent the time when customers aren't available to receive services. These holidays take precedence over the customers' preferences for visiting operating hours.
- Multiday work doesn't support visiting hours. •

Note: Dispatchers can still manually schedule appointments outside a customer's operating hours, but a rule violation is shown.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work** Rule custom object. Add work rules to a scheduling policy from the Customize Scheduling Policies page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

#### SEE ALSO:

Guidelines for Creating Operating Hours for Field Service Work Rules: Considerations

## Work Rule Type: Service Crew Resources Availability

Service Crew Resources Availability is an Apex work rule type that ensures that a service resource of type Crew is assigned to an appointment only if the crew complies with the appointment's parent record's minimum crew size.



#### 🜐 This is a Field Service managed package feature.

If the Minimum Crew Size field on work orders, work order line items, and work types is completed, this work rule type comes into play. You can configure the rule to compare this Minimum Crew Size with either of the following:

- Crew Size field on the service crew record
- Actual number of allocated service crew members at the time of assignment

For example, if a work order's Minimum Crew size is 4 and a scheduling policy is applied with a work rule of this type, the appointment won't be assigned to a crew with fewer than four members.

Note: For tips on scheduling service crews, see Considerations for Scheduling Service Crews.

Service Crew Resources Availability work rules have the following settings.

Field Name	Description
Consider Service Crew Membership	Select this option if you want to check the actual number of service crew members, rather than the crew size listed on the service crew record.
Maximum Additional Service Resources	Ensure that crews are optimally utilized and that no resources are idle by defining the maximum number of additional service resources, available when using Enhanced Scheduling and Optimization. For example, if a service appointment requires a minimum of 3 service resources in a crew, specify that a maximum of 2 additional resources are allocated to the crew. This maximum means that you can schedule a service appointment to a crew of size 3 to 5 service resources.

# **EDITIONS**

Available in both Salesforce Classic (not available in all orgs) and Lightning Experience

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

#### SEE ALSO:

Work Rules: Considerations

## Work Rule Type: Service Resource Availability

Service Resource Availability is an Apex work rule type that ensures that a service resource is available to perform a service appointment. You can schedule breaks automatically, account for travel time, or set up short breaks between service appointments. A work rule of this type is mandatory for all scheduling policies to ensure that both resource absences and availability are respected during the scheduling process.

#### 🜐 This is a Field Service managed package feature.

The work rules consider these factors.

- The service resource's operating hours, which are defined on their service territory member record or—if no hours are specified there—on their service territory record
- Travel time
- Break times
- The scheduled start and end time of other scheduled appointments, shifts, and resource absences.

During the scheduling of capacity-based service resources, a Service Resource Availability work rule results in a rule violation in any of these cases.

- The number of scheduled working hours exceeds the resource's capacity
- The number of scheduled work items exceeds the resource's capacity
- A capacity record was deleted or updated after the related service resource was assigned to a service appointment

You can apply different scheduling rules to each service resource. For example, you have different policies on breaks, overtime, or beforeand after-work travel time for full-time versus part-time employees. Service Resource Availability work rules let you capture these differences.

Service Resource Availability work rules have these settings.

Field Name	Description
Fixed Gap	Enforce a minimum break time between service appointments. This setting is useful for remote consultants. For example, you want to provide 20 minutes between appointments for record-keeping.
	Note: If a fixed gap is defined, travel time isn't considered during scheduling. However, travel time is still displayed on the Gantt.
Minimum Gap (minutes)	The minimum number of minutes between service appointments. The Minimum Gap value applies only if Fixed Gap is selected.
Break Start	Set a single break time that the scheduling engine inserts between scheduled service appointments. For example, if service resources prefer to take lunch at 12:00 PM, enter 12:00. Breaks are scheduled as close as possible to the Break Start time, allowing for flexibility to start and complete appointments.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Break Duration	The length of the break.
Overtime	Allow service appointments to be scheduled during time slots or shifts of the Extended type.
Travel From Home (minutes)	The number of minutes that the resource has available for travel before the start of the work day (at the resource's expense). When using Enhanced Scheduling and Optimization, if this field is empty, all travel will be scheduled within the work day. When not using Enhanced Scheduling and Optimization, if this field is empty, any amount of travel before the start of the work day is valid.
Travel To Home (minutes)	The number of minutes that the resource has available for travel after the end of the work day (at the resource's expense). When using Enhanced Scheduling and Optimization, if this field is empty, all travel will be scheduled within the work day. When not using Enhanced Scheduling and Optimization, if this field is empty, any amount of travel after the end of the work day is valid.

Note: To create a Service Resource Availability work rule that creates breaks and calculates travel time, enable the Calculate travel and breaks setting in Field Service Settings.

### Travel

Complete the travel fields according to where service resources are expected to be at the beginning and end of their periods of availability.

- **On-site:** If a service resource is expected to begin work on-site at the beginning of their availability, for example, if they start work at 9:00 AM, then travel must occur before that time. In this case, fill out the Travel To and From Home fields and include the duration of expected travel time outside the service resource's working hours..
- **Start driving:** If a service resource is expected to start traveling at the beginning of their availability, set the Travel To and From Home fields to zero.

### **Break Schedules**

There are two ways to add breaks to Service Resource Availability work rules.

- To set a single break, fill out the Break Schedule fields.
- To create up to three breaks that start relative to the beginning of the day, add work rule entries. Enhanced Scheduling and Optimization must be enabled.

If you don't want to use breaks, leave these sections empty. You can't set both a single break and add work rule entries.

When you use the Break Schedule settings, these conditions apply.

- A service resource's lunch break is created at the time defined in the Service Resource Availability work rule when the first service appointment is scheduled in the day. When you drag an appointment or schedule a new one, the Service Resource Availability work rule ensures that the service resource takes a break either at the set Break Start time or immediately after the last appointment that started before the Break Start. The scheduling engine allows for some flexibility.
- When a service appointment starts before the Break Start time and ends after, then the break is pushed forward to the end of the service appointment. For example, with Break Start set to 12:00 PM, the scheduling engine can schedule a service appointment from 11:30 AM to 12:30 PM, and move the break to 12:30 PM, so that the service resource's break starts as soon as the resource has completed that appointment. The lunch break can be moved forward as long as there's availability.
- If the travel time to the next appointment prevents the break from being scheduled at the set Break Start time, the break is pushed back until the end of the first service appointment scheduled on that day. For example, if the Break Start is set to 12:00 PM and lasts

30 minutes, and a service appointment is scheduled at 12:30 PM to 13:30 PM, but includes a 30-minutes travel time to the appointment, then the break is pushed back and scheduled from 11:30 AM to 12:00 PM.

• If there are multiple service appointments after the Break Start and there's no room for the break, or if an appointment is extended so that the break after it overlaps with the next appointment's travel time, the break defaults to the Break Start time set in the availability rule. This overlap results in a rule violation. For example, if a Break Start is set to 12:00 PM and a service appointment is scheduled from 11:00 AM to 12:00 PM, and then you drag another service appointment to 12:00 PM until 1:00 PM, the break doesn't move to 1:00 PM. A resource availability rule violation is displayed. Also, if you drag an appointment to after the break but its travel time overlaps with the break, the scheduling engine doesn't move the break, and a rule violation is displayed.

Note: We recommend that you avoid creating manual breaks so that only the scheduling engine creates and modifies breaks.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

#### Work Rule Entry: Service Resource Availability

Use work rule entries to add multiple flexible breaks that start relative to the beginning of a service resource's availability.

#### SEE ALSO:

View a Field Service Resource's Calendar Work Rules: Considerations

### Work Rule Entry: Service Resource Availability

Use work rule entries to add multiple flexible breaks that start relative to the beginning of a service resource's availability.

🜐 This is a Field Service managed package feature.

Work rules entries have these fields.

Field Name	Description
Break Duration	The length of the break in minutes.
Earliest Break Start (minutes)	The minimum number of minutes between the start of the day and the beginning of the break. For example, enter 120 for a break at least two hours after the day starts.
Latest Break End (minutes)	The maximum number of minutes between the start of the day and the end of the break. For example, enter 300 for a break that ends five hours after the day starts.
Work Rule	The name of the associated work rule.
Work Rule Entry Name	An auto-number name for the work rule entry.

To view or add work rule entry fields, open the Object Manager in Setup and select the Work Rule custom object. Under Page Layouts, select **Related Lists** and drag Work Rule Entries to add it to your page layout.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Note: To create a Service Resource Availability work rule that creates breaks and calculates travel time, enable the Calculate travel and breaks setting in Field Service Settings.

#### **Flexible Breaks**

Watch the video to see how to schedule multiple flexible breaks with enhanced work rules.

#### Watch a video

Flexible breaks are scheduled based on their duration and a time window relative to the beginning of the service resource's day. You can add up to three work rule entry breaks to work rules of the Service Resource Availability type. You can't add a break schedule to the parent work rule and use work rule entries.

💿 Example: Let's say you want to schedule breaks for mobile workers, and their shifts last about 10 hours. You want to schedule a 20-minute break about two hours into the day, a 45-minute meal break in the middle of the day, and another 20-minute break about two hours before the end of the shift. Create three work rule entries, with these settings:

Work Rule Entry	<b>Break Duration</b>	Earliest Break Start	Latest Break End
First break	20	100	180
Meal break	45	240	360
Second break	20	460	580

If the worker's availability starts at 8:00 AM, the first break is scheduled between 9:40 AM and 11:00 AM. The meal break happens between 12:00 PM and 2:00 PM, and the last break happens between 3:40 PM and 5:00 PM.

## Work Rule Type: TimeSlot Designated Work

The Field Service TimeSlot Designated Work Apex work rule type ensures that if a time slot or shift is reserved for a specific type of work, only appointments of that type are scheduled during that time period.

(
 This is a Field Service managed package feature.

When this rule is configured in a scheduling policy, if a slot or shift has defined criteria, service appointments that don't meet the criteria of the designation aren't scheduled during that slot or shift.

You can reserve time slots and define shifts for specific types of appointments.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the Work Rule custom object. Add work rules to a scheduling policy from the Customize Scheduling Policies page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

This rule applies to all resources and service appointments, regardless of the rule's relevance group.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Note: If a service appointment doesn't have a service territory defined, for that service appointment to be assigned to a service resource, the service appointment must meet the criteria defined in the time slot or shift in each of the service resource's assigned service territories.

#### SEE ALSO:

Reserve Time Slots for Designated Types of Work Create Filters to Match Field Service Appointments and Shifts Work Rules: Considerations

## Work Rule Type: Work Capacity

The Work Capacity Apex work rule type sets limits for the work capacity of service resources in a given service territory according to specified criteria. This work rule is available only when you're using Enhanced Scheduling and Optimization.

## 🜐 This is a Field Service managed package feature.

This rule enables adding capacity limits to scheduling policies. If you add a Work Capacity work rule to your scheduling policy, the Work Capacity Limit records defined for the service territories are considered. These records allow you to set limits on the amount of specific types of work that you can book within a territory. For example, you can limit installation work to 80% of the total capacity of the service territory. Total capacity refers to the combined working hours availability for all service resources in that territory for a given time frame.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

## Check Work Capacity Rule Violations

You can see notifications for Work Capacity rule violations for all service appointments in a service territory in the Notification Center. The violations for individual service appointments aren't shown on the Gantt.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience



#### SEE ALSO:

Manage Work Capacity in Field Service Create and Manage Field Service Work Rules

## Work Rule Type: Working Territories

Working Territories is a Field Service database work rule type that enforces primary and secondary service territory memberships.

## 🜐 This is a Field Service managed package feature.

Service resources can have only one primary service territory at a time, but multiple secondary territories. Optimization requests that include a service resource's secondary territory memberships must also include the corresponding primary territory membership. Secondary territory memberships must be identical to, or contained within, the primary territory membership for a particular time and resource. If the secondary territory memberships aren't fully covered by a primary territory membership, availability applies only to the overlapping period. When using Enhanced Scheduling and Optimization, the secondary service territory doesn't need to be contained within the primary service territory. Scheduling and optimization is supported only for service territories with at least one primary service territory member. By default, the Working Territories rule considers only secondary territories. If you want the optimizer to consider the primary territory as well, select **Working Location Enable Primary** on the work rule.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

A scheduling policy can't include both a Working Territories work rule and a Match Territory work rule. To choose between them, consider the number of service resources and service territories in your field service operation, and how often service resources are called to work in different territories.

If service resources frequently move between service territories, use a Working Territories work rule. Use relevance groups to differentiate between service resources if some resources move less than others.

Create work rules from the Work Rules tab. To view or add work rule fields open the **Object Manager** in Setup and select the **Work Rule** custom object. Add work rules to a scheduling policy from the **Customize Scheduling Policies** page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

SEE ALSO:

Create Service Resources for Field Service Work Rules: Considerations

# Manage Rule Validation Checks

Set how often rules are checked for violations, and what triggers automatic rule validation checks.

- 🜐 This is a Field Service managed package feature.
- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Then, click Dispatcher Console UI > Gantt Configurations.
- 2. Under Rules Validations, configure the following settings.

Setting	Description
Validate rules after indirect Gantt updates	If this option is selected, any indirect Gantt updates not made by the dispatcher trigger rule violation calculation.
Rule Validation Frequency	• <b>On Demand</b> : Check rules only when initiated manually by the dispatcher. The dispatcher initiates rule validation for single or multiple service appointments using the right-click menu on the Gantt chart or appointment list. The Check Rules button is used to initiate rule validation for all loaded data appearing on the Gantt chart and appointment list. This setting is the default for Salesforce orgs as of Summer '21.
	• After Direct Gantt Updates: Check rules after every update initiated by the dispatcher on the Gantt. Updates include scheduling by drag and drop, unscheduling a service appointment, or adding, removing, or modifying a Resource Absence.
	• <b>Always</b> : Check rules after every operation. This setting is the default for Salesforce orgs before Summer '21.
	If you set the frequency to After Direct Gantt Updates or to Always, rule validation checks are triggered after these updates only.
	• When you update the Scheduled Start or Scheduled End fields of a service appointment, or when you update the Service Resource or Estimated Travel Time fields of an assigned resource associated with the service appointment.
	• When you update the Scheduled Start or Scheduled End fields of an absence, or when you update the Service Resource or

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To enable dispatchers to check rules manually:

- Custom permission sets:
  - Field Service Dispatcher Permissions
  - Field Service Dispatcher License

Custom permissions:

- Enable Check Rules
   All Services
- Gantt and List -Enable Check Rules
- Gantt and List -Enable Bulk Check Rule

Setting	Description
	<ul><li>Estimated Travel Time fields of an assigned resource associated with the absence.</li><li>When you unschedule or delete a service appointment, an assigned resource, or an absence.</li></ul>

#### SEE ALSO:

Set Custom Permissions for Field Service Check Rule Violations on the Gantt

# Create and Manage Field Service Objectives

Add service objectives to a scheduling policy to indicate your scheduling goals. You can weight each objective to indicate its importance. During schedule optimization, each appointment assignment receives a score from 0 to 100 for every service objective based on how fully the objective was met.

This is a Field Service managed package feature.

Create and manage service objectives from the Service Objectives tab. Add service objectives to a scheduling policy from the Customize Scheduling Policies page in Guided Setup or the Scheduling Policy Objectives related list on a policy.

When you create a service objective, select a record type to define the category that the objective falls into. The following categories are available.

Objective Type	Description
ASAP	Measures the ability to schedule an appointment as soon as possible. The latest scheduling option receives a score of zero, and the soonest option receives a score of 100. If multiple appointments are evaluated simultaneously, the score is based on a range of 0–30 days in the future. The optimization engine considers an objective's weight when scheduling tasks. The relationship between the Minimize Travel Time objective and the ASAP objective is such that 1 hour of travel time = 1 hour of ASAP task / 30 days × 24 hours.
	An ASAP objective can contradict other objectives. For example, scheduling an appointment as soon as possible can result in more travel time. Weight your objectives accordingly.
Minimize Overtime	Measures the use of overtime hours. The objective's score compares the number of overtime hours with the service appointment's estimated duration. For example, if an hour-long appointment is scheduled entirely on overtime, its score is zero. If half of the scheduled time is overtime, its score is 50.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Objective Type	Description
Minimize Travel	Measures the travel time required for a service appointment.
	When you're not using Enhanced Scheduling and Optimization:
	In optimization operations—global optimization, resource schedule optimization, in-day optimization, and the Reshuffle action—each scheduling option is scored with the assumption that travel time ranges from zero to 120 minutes. For example, an option with a travel time of 120 minutes receives a score of zero, and an option with a travel time of 60 minutes receives a score of zero.
	In non-optimization scheduling operations—such as the Book Appointment, Candidates, Schedule, Fill-In Schedule, and Group Nearby Appointments actions—this objective's score is relative to the travel times available. For example, if an appointment has three scheduling options, here's how the options are scored.
	• Option 1: Schedule it after an appointment at the same site. The travel time is zero minutes so the objective score is 100.
	• Option 2: Schedule it after an appointment in a neighboring city. The travel time is 60 minutes, and because it's the appointment's maximum potential travel time, the objective score is zero.
	• Option 3: Schedule it after an appointment in a site located 30 minutes away. Because it's exactly in the middle of the previous options, the objective score is 50.
	To set the scheduling to exclude from minimize travel consideration the first and last travel of the day, to and from the service resource home base, select <b>Exclude Home Base Travel</b> This option isn't supported when you're using Enhanced Scheduling and Optimization.
	When you're using Enhanced Scheduling and Optimization:
	The Minimize Travel Objective scores every minute of added travel, with no upper limit on travel time scoring. For example, 120 minutes of added travel time is considered better than 150 minutes. Travel time is calculated in minutes, such that travel time less than 60 seconds isn't considered.
Preferred Resource	Measures adherence to a work order's resource preferences of type Preferred. The objective's score is 100 if an appointment is assigned to the parent work order's preferred resource, and zero if not. (Excluded and Required resource preferences are enforced using work rules.)
Resource Priority	Ranks appointments based on their assigned resource's priority, which is defined in the Priority field on service resources. The lower the resource priority, the higher the objective's score.
Same Site	Ensures that a minimal number of mobile workers visit the same location by having the optimization services group service appointments located at the same site. Use the Same Site service objective to prefer that jobs get scheduled together while considering all other objectives and KPIs.
	This objective applies only when you use Enhanced Scheduling and Optimization.
Skill Level	Measures assigned resources' adherence to a work order's skill requirements. When creating an objective of this type, select whether to favor the least- or most-qualified service resources
	• Least qualified: Favors the least qualified valid candidate. This option lets you dispatch a resource who is "good enough" to complete an appointment. For example, if a work order

Objective Type	Description	
	requires the Drilling skill at level 50, a resource with a Drilling skill level of 55 is favored over a resource with a Drilling skill level of 80.	
	• Most qualified: Favors the most qualified valid candidate. Use this option with relevance groups to assign your most qualified resources only to work orders for high-priority accounts.	
	If a work order has multiple skill requirements, the objective evaluates all skills and calculates an average score.	
Skill Preference	Ranks candidates with a skill of a certain skill type that reflects the service appointment's skill preferences. For example, a service appointment requires a caregiver who speaks English or Spanish but the preferred choice is Spanish.	
	When you're creating a skill requirement for a work order or a work order line item, the applicable values for ranking a skill priority are 1 to 10, where 1 is the highest priority and 10 is the lowest. If you enter a value that's less than 1, the skill priority is set to 1. If you enter a value that's greater than 10, the skill priority is set to 10. If you don't enter a value, the skill priority is set to 10.	
	Use the Skill Type Developer Name field in the Objective object to apply the objective's ranking only on skills of certain skill types.	
	This objective applies only when you use Enhanced Scheduling and Optimization.	

SEE ALSO:

Create and Manage Field Service Work Rules

# **Optimize Field Service Appointments Using Priorities**

When your team's availability is limited, prioritize critical service appointments over less pressing work. You can assign dynamic priorities, such as values that increase as due dates approach. Optimization can consider priority values when it assigns appointments to time slots.

### 🜐 This is a Field Service managed package feature.

How you use priority values in scheduling depends on your business. Service level agreements and other factors can affect how you prioritize work. The type of work, due dates, or a combination of factors can influence appointment priorities.

After you identify what drives your priorities, define settings so that optimization and scheduling can prioritize visits.

**1.** Specify a priority field.

In the Field Service Admin app, under **Field Service Settings** > **Scheduling** > **General Logic**, select a priority field. You can choose one or more fields on service appointments, work orders, and work order line items.

- Assign a fixed priority. For example, the managed package provides the Scheduling Priority field on parent work orders and work order line items. By default, Scheduling Priority values are 1–4, where 1 is Critical and 4 is Low.
- Create a dynamic priority field using a custom formula field. For example, create a formula that sets appointment priorities based on the difference between today's date and the due date.

Scheduling and optimization look at the service appointment priority field first. If that field is not defined or empty, then the appointment's priority is derived from the field on the parent work order or work order line item.

2. Select a priority scale.

The default priority range is a 1–10 scale, where 1 is the highest priority and 10 is the lowest priority. The 1–10 scale works well for most priority cases. If your use case requires a broad range of values, go to **Field Service Settings** > **Scheduling** > **General Logic** in the Field Service Admin app, and select the optional 1–100 scale.

Field Service supports only whole numbers such that decimal points are ignored when calculating priorities. For example, 3.94 is considered as 3. Any number above the priority range is considered as lowest priority.

After you configure priority settings, you're ready to optimize. If you want to schedule and prioritize many appointments, use Global or In-Day optimization. When availability is limited, optimization bumps lower priority assignments from the schedule and schedules higher priority appointments in those slots.

If you have just a few urgent appointments, you can use priorities with scheduling actions, such as Get Candidates, Book Appointments, or Schedule. Add the field Schedule over lower priority appointment to the service appointment page layout. When you select this Boolean field on appointments, scheduling actions consider the appointment's priority. If a service appointment in a lower priority is in a pinned status, other appointments aren't scheduled over this pinned appointment, and there's no overlap.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To configure priority settings:

 FSL Admin custom permission set

To optimize from the dispatcher console:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

# Create Relevance Groups

A relevance group in Field Service is a group of appointments or 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.

### 🜐 This is a Field Service managed package feature.

You can base a relevance group on any standard or custom Boolean (true or false) field for service appointments or service territory members. When you create a work rule or service objective, select a field to limit the scope of the rule or objective.

To use relevance groups, add the relevance group Visualforce pages to your work rule and service objective page layouts.

- 1. In the layout editor, open a work rule or service objective page layout—for example, the Match Boolean work rule page.
- 2. Select Visualforce pages, and drag one of the following pages onto the detail page layout. We recommend giving it its own section for clarity.
  - Work rules: Vf001GroupOnWorkRules
  - Service objectives: Vf002GroupOnObjectives
- 3. Save your changes.

You can apply a work rule or service objective to a subset of service territory members or service appointments. Select the limiting Boolean field on the work rule or service objective detail page.

**Note:** Relevance groups can use primary service territory memberships and relocation service territory memberships. Secondary service territory memberships aren't supported.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Work Rule     Maximum Travel from Home (Full-Time)			
Related <b>Details</b>			
Work Rule Name Maximum Travel from Home (Full-Time)		Active	
Description Enforces our policy on maximum travel from home for full-time technicians.			
Maximum Travel From Home Type Travel Time		Maximum Travel From Home 🕚 60.00	
Last Modified By Teresa Admin, 16/10/2018 20:46			
✓ Relevance Groups			
Service Territory Member: All 🗘 Service Appointments: All Save	٢		

Section 2.1. Section of the section

- 1. Add the appropriate Visualforce page to the Maximum Travel From Home work rule page layout.
- 2. On the service territory member object, create two checkbox fields:
  - Part-Time
  - Full-Time: A formula field that updates to false when Part-Time is true
- 3. Create a Maximum Travel From Home work rule that reflects your travel time policy for part-time employees. For Service Territory Member, select **Part-Time**.
- 4. Create another Maximum Travel From Home work rule that reflects your travel time policy for full-time employees. For Service Territory Member, select **Full-Time**.
- 5. Add both rules to a scheduling policy. When the policy is applied, part-time and full-time employees are evaluated based on the requirements outlined in the respective work rules.

Relevance groups must be mutually exclusive. If two work rules with relevance groups overlap, the more restrictive rule is used. If Service Resource Availability work rules use relevance groups, any rule overlaps will lead to an error.

#### SEE ALSO:

Create and Manage Field Service Work Rules

# Fix Overlaps by Using an Automated Scheduling Flow (Beta)

Tackle Field Service scheduling challenges with an automated flow that addresses and fixes schedule overlaps that occur due to an appointment ending late. Use the flow template recommendations or adjust the template to suit your specific use case. Fix Schedule Overlaps flow (Beta) is available only when you're using Enhanced Scheduling and Optimization.

- 🜐 This is a Field Service managed package feature.
  - Note: This feature is a Beta Service. A customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at Agreements and Terms.

If an appointment is taking longer than expected, the rest of the day is at risk. The Fix Schedule Overlaps flow uses resource schedule optimization, such that only the affected service resource's schedule is optimized. The optimization minimizes any changes to the schedule by leaving as many scheduled appointments as is. This flow, available when you're using Enhanced Scheduling and Optimization, replaces the Late-End Overlap scheduling recipes scenario.

- 1. In the Field Service Admin app, go to Field Service Settings.
- 2. Select Scheduling and then in the General Logic tab select Enable the Fix Schedule Overlaps flow (Beta).
- 3. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- **4.** Open the Fix Schedule Overlaps flow template.
- 5. To create your own version of the flow based on the template (recommended), click Save As and add the required details.

Note: When you create a flow by using the Fix Schedule Overlaps template, make sure you use a flow name that's different from the original flow name.

- 6. The flow is triggered only for in-day of service changes to address last-minute issues to an individual service resource's schedule due to late ending appointments that overlap the following appointment. The minimum overlap for the flow to apply is 10 minutes. Use the flow as is, or modify it according to your needs. The flow template includes components.
  - Check if Overlap is Today component—Call an action that checks whether the overlap occurred today in the service resource's timezone. An overlap occurs due to unexpected changes in the schedule on the day of service.
  - Is Overlap Today component—Determine whether the overlap occurred today according to the Check if Overlap is Today result. If the overlap is today then continue with the flow.
  - Is Late End component—Determine whether the status of the service appointment that triggered the overlap is In Progress, Completed, or Cannot Complete resulting in a late end. If the service appointment ended late or is expected to end late then continue with the flow.
  - Is Overlap Long component—Determine whether the schedule overlap is considered long. If the schedule overlap is 10 minutes or longer then continue with the flow. You can adjust the minimum overlap length.
  - Get Scheduling Policy component—Filter the scheduling policy records to get the Customer First scheduling policy used when running the Fix Schedule Overlaps action. You can select a different scheduling policy according to your use case.
  - Fix Schedule Overlaps component—Fix the schedule when an overlap occurs because a service appointment ended late or is expected to end late. To keep the schedule as close as possible to the original schedule, the Fix Schedule Overlaps flow only considers service appointments that are scheduled to the resource for the day that the overlap occurs.
- 7. Save the flow.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

8. If you created a flow by using the Fix Schedule Overlaps flow template, make sure you change the Fix Schedule Overlaps flow (Beta) API name field value to the new flow's API name.

To control user permissions to run flows, see How Does Flow Security Work?



Note: Several fix overlaps features are available in Field Service.

## Considerations for the Fix Schedule Overlaps Flow

Before you start using the Fix Schedule Overlaps flow, make sure you review some considerations.

- The Fix Schedule Overlaps action triggers resource scheduling optimization. During this optimization, the engine optimizes service appointments that are schedulable (not in a pinned status). In Field Service Settings, in the Logic tab under Optimization, we recommend leaving the Dispatched status deselected for In-Day and Resource Schedule Optimization, so that dispatched work can be moved if a previous job runs late. During resource schedule optimization, service appointments aren't moved if the Dispatched status is selected.
- The Fix Schedule Overlaps action can trigger multiple resource scheduling optimization requests. For example, a service appointment status change (if a status category is added to the Late End component) triggers an optimization request, and a service appointment overlap with another appointment triggers another optimization request.
- Appointments dropped due to fix overlaps aren't marked as In Jeopardy.
- An overlap is recognized when one appointment overlaps another for a minimum duration, as defined in the Fix Schedule Overlaps flow. Overlaps during travel time don't trigger the flow.
- If a service appointment ends late and creates an overlap with the next service appointment whose start time is now in the past, the Fix Schedule Overlaps flow runs, but schedule overlaps aren't fixed.
- An autolaunched flow type doesn't require activation. The Enable the Fix Schedule Overlaps flow (Beta) setting in Field Service Settings is used to activate the Fix Schedule Overlaps flow. This setting is disabled by default.

SEE ALSO:

Manage Field Service Scheduling Overlaps

# Create Scheduling Recipes for Common Events

Tackle common Field Service scheduling challenges with simple optimization "recipes" that address what happens to your schedule after appointment cancellations, time changes, and overlaps. Cover all scenarios by creating multiple recipes for each category.

#### 🜐 This is a Field Service managed package feature.

Scheduling recipes are an optimization feature. They use resource schedule optimization, which means that only the affected service resource's schedule is optimized. Scheduling recipes aren't available when using Enhanced Scheduling and Optimization, which uses the Fix Schedule Overlaps automated flow instead.

Note: Several fix overlaps features are available in Field Service.

- 1. From the App Launcher, find and open the Field Service Admin app.
- 2. Click the Field Service Settings tab, and then click Automated Scheduling.
- **3.** In the New Recipe menu, select a category. We've provided some example recipes to get you started. You can activate them or create your own.
- 4. Customize your recipe's settings. Then, activate and save it. Inactive recipes aren't enforced.
  - The Status Categories field lets you limit which appointments the recipe applies to. For example, if you select only the Scheduled value on a recipe for shortened appointments, the recipe runs only if an appointment's status is in the Scheduled status category when the appointment is shortened. Excluding the Canceled status category, the appointment's status must also be a pinned status, which is set in Field Service Settings > Optimization > Logic.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create a scheduling recipe:

- Custom permission set: Field Service Admin Permissions
- The Initiating User Permission Set field lets you decide which users can trigger the recipe. For example, if you're creating a recipe for canceled appointments, select **Community** to run the recipe only for appointments canceled by an Experience Builder site user (typically, a customer). The values in this field correspond to the permission sets provided by the managed package.

Initiating User Permission Set Value	Corresponding Permission Set
Resource	Field Service Resource
Dispatcher	Field Service Dispatcher Field Service Community Dispatcher
Agent	Field Service Agent
Admin	Field Service Admin
Community	Field Service Self Service

5. To change the priority order of recipes within a category, click ↑↓ on the Automated Scheduling home page. Drag the recipes into the desired order and click **Save**.

Considerations for Scheduling Recipes

- You can create up to 75 active recipes per category, and up to 1000 recipes per org.
- For Shortened Appointment scenarios, scheduling recipes only try to fill one empty space per day for each service resource.
- For Shortened Appointment scenarios, scheduling recipes support only a single operating hours timeslot per day.

- Scheduling recipes support only operating hours and timeslots, not shifts.
- A triggering service appointment is the appointment that actually triggers resource scheduling optimization. For Shortened Appointments, Late-End Overlap, and Emergency Overlap scenarios, scheduling recipes are only triggered if the triggering service appointment's status has been selected as a pinned status for In-Day Optimization. The optimization engine then optimizes service appointments that are schedulable (not in a pinned status). We recommend leaving the Dispatch status deselected so dispatched work can be moved if a previous job runs late or emergency work is needed.
- If you have access to 2,000 or more service territories, the service territories list shows only selected territories. Use the search bar to find territories that aren't selected.

#### Scheduling Recipe Scenarios

Automate how Field Service handles common situations that cause gaps or overlaps in your schedule, like the following.

- An appointment is canceled
- A mobile worker finishes early
- A mobile worker finishes late and has overlapping appointments
- An emergency causes appointments to overlap

Certain conditions trigger a scheduling recipe, for example, appointment status categories. Recipes are triggered only for in-day of service changes to address last-minute issues to an individual service resource's schedule.

You can set the scheduled appointment's Status Category to change after optimization to Scheduled or Dispatched, and mark resulting unscheduled appointments as In Jeopardy with a jeopardy reason.

Scenario	Trigger Criteria	Expected Behavior (Result)
Canceled Appointment	<ul> <li>Status Category = Canceled</li> <li>The service appointment is canceled on the day of service.</li> <li>Service appointments must meet the set recipe criteria.</li> </ul>	<ul> <li>Preserve Current Schedule - The optimization minimizes any changes to the schedule by leaving as many scheduled appointments as is, and filling the gap with the best match from the next 100 appointments scheduled for that resource.</li> <li>If the resource's Last Known Location is valid (last updated within the set time limit), this location is also considered when scheduling to prevent unnecessary travel.</li> </ul>
Shortened Appointment	<ul> <li>Status Category = Completed/Cannot Complete/Canceled</li> <li>Service appointments must meet the set recipe criteria.</li> <li>The service appointment's Scheduled End is shortened and the gap created is large enough to fill. The minimum schedule space created for the recipe to apply is 10 minutes (default is 15 minutes).</li> </ul>	• <b>Preserve Current Schedule and Fill Gaps</b> - Finishing work early frees up the schedule. The optimization minimizes any changes to the schedule by leaving as many scheduled appointments as is, and filling the gap with the best match from the next 100 appointments scheduled for that resource.
Late-End Overlap	• The service appointment's Scheduled End is updated to a later time. The minimum overlap for the	• <b>Preserve Current Schedule</b> - If an appointment is taking longer than expected, the rest of the day is at risk. The optimization minimizes any changes to the schedule by leaving as many scheduled appointments as is, and scheduling an

Scenario	Trigger Criteria	Expected Behavior (Result)
	<ul><li>recipe to apply is 1 minute (default is 10 minutes).</li><li>Service appointments must meet the set recipe criteria.</li></ul>	appointment from the next 100 appointments scheduled for that resource.
Emergency Overlap	<ul> <li>The service appointment's Emergency = True, and the Status Category = Scheduled/Dispatched.</li> <li>The minimum overlap for the recipe to apply is 1 minute (default is 10 minutes).</li> </ul>	<ul> <li>Emergency dispatches can take the resource off-route. When an emergency appointment is dispatched and results in scheduling issues, optimization reschedules the rest of the resource's day as needed in order to revolve around the emergency location and other pinned service appointments, while adhering to the scheduling policy objectives.</li> <li>The next appointment is scheduled from the next 100 appointments scheduled for that resource.</li> </ul>

Example: Here's a recipe that controls what happens to the assigned resource's schedule when a solar appointment in the San Francisco service territory ends early and results in 60 unused minutes on the schedule.

EDULING RECIPES	
Solar appointment ends early (SF)	Active
Re-optimize the resource's schedule using the Customer First policy	
Choose what to do with the available time in the schedule when an appointment ends early.	Preserve Current Schedule & Fill Gaps
When a service appointment's Scheduled End is updated to an earlier while minimizing changes to the resource's schedule.	time, try to schedule other appointments in the available t
60 Minimum schedule space created for recipe to apply (minu	tes)
Run this recipe only for service appointments that meet the following cr appointments the recipe applies to.	iteria. Optionally, add custom criteria to further limit which
Service Territories San Francisco.	Select Territorie
Work Types Solar Panel Installation, Solar Panel Repair, Solar Panel Maintenance	Select Work Typ
Status Categories 🚺	
6 Options Selected 💌	
Initiating User Permission Set 🕚	
4 Options Selected 🔹	
Custom Criteria Logic	
Select 💌	
+ Add	
Optimize with Scheduling Policy 🚺	
Customer First 💌	
<ul> <li>Actions to Take After Optimization</li> </ul>	
Change scheduled appointments' status	Keep Original Status
Mark unscheduled appointments as In Jeopardy 🕕	

# Field Service Scheduling and Optimization Services

Scheduling and optimization includes services used to schedule, reschedule, and unschedule service appointments.



🜐 This is a Field Service managed package feature.

Review the scheduling and optimization services available.

Feature	Description
Scheduling Services	
Auto Schedule	Schedule an appointment in a hurry with Auto Schedule, right from the appointment itself. Auto Schedule finds the best available slot based on your scheduling policy.
Book Appointments	Use Book Appointment to agree with your customer on a visiting time window, and ensure that automatic scheduling and optimization processes adhere to the agreed visiting times.
Auto Schedule	
Drag and Drop, Schedule, Bulk Schedule	Schedule an appointment by dragging it from the appointment list, directly from the dispatcher console map, or from the service appointment mini view. Use the Mass Schedule action to bulk schedule appointments from the appointment list.
Emergency Wizard	Quickly schedule, dispatch, and track emergency work.
Get Candidates	Quickly find resources who are best-matched to work on an individual Service Appointment.
Optimization Services	
Global Optimization	Optimize your team's schedule for one or more service territories across a specified range of days. You can configure the optimization to run regularly, for example, every night, or run it manually as needed.
In Day Optimization	Navigate last-minute schedule upsets by rapidly optimizing your team's schedule for one or more service territories on the day of service.
Reshuffle	Make space in a full schedule for a high-priority appointment. The Reshuffle action in the Gantt postpones lower-priority appointments. This feature isn't supported by Enhanced Scheduling and Optimization.



Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: Enterprise, Unlimited, and Developer Editions

Feature	Description
Resource Schedule Optimization (RSO)	When last-minute developments occur like canceled jobs, lateness, or emergencies, optimize an individual service resource's schedule to design the best schedule for them.
Schedule Recipes	Tackle common scheduling challenges with simple optimization "recipes" that address what happens to your schedule after appointment cancellations, time changes, and overlaps. Cover all scenarios by creating multiple recipes for each category. The Fix Schedule Overlaps flow (Beta) replaces scheduling recipes when you're using Enhanced Scheduling and Optimization to resolve overlaps that occur when a mobile worker finishes an appointment late.
Dynamic Gantt Services	
Fill-In Schedule	Fill gaps in a service resource's schedule. This feature fills gaps in the service resource's schedule with non-urgent work that has no defined execution time, such as maintenance work. This feature isn't supported yet by Enhanced Scheduling and Optimization.
Fix Overlaps	If a service appointment overlaps with other appointments or absences, use the Fix Overlaps feature to harmoniously reschedule appointments.
	This feature isn't supported for capacity-based service resources. When you're using Enhanced Scheduling and Optimization, refer to Fix Schedule Overlaps flow (Beta).
Group Nearby	Minimize travel time or gaps between appointments. This feature unschedules appointments that were scheduled later that day and replaces them with appointments that are close in location to the source appointment.
	This feature isn't supported yet by Enhanced Scheduling and Optimization.
Transparency Services	
Appointment Insights	Help users understand why a service appointment can't be scheduled, and which work rules are preventing its scheduling. Discover what changes can be made to the scheduling policy's work rules to qualify time slots and candidates for scheduling.
Optimization Hub	View Optimization Hub to learn what improvements optimization made to the scheduling of service appointments across multiple territories and how to get the best results from optimization.

# Manage Optimization Conflicts

Enhance operational stability and reduce your optimization partial completion rate by preventing optimization conflicts when multiple optimization requests are made simultaneously on the same dataset. For example, prevent two users from creating optimization requests simultaneously for the same territory and horizon. Also configure what happens when schedule changes are made while optimization is running, for example, if a new job is automatically scheduled or a dispatcher reschedules a job while optimization is running.

 ${f eta}$  This is a Field Service managed package feature.

#### Prevent Overlapping Field Service Optimization Requests

When initiating resource schedule optimization, in-day optimization, or global optimization, Field Service checks for other such optimization requests that are being processed simultaneously for the same territory or service resources with at least 1 day of overlap in the optimization horizon. For example, a dispatcher activates resource schedule optimization for a resource that's EDITIONS

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part of a dataset being optimized through in-day optimization. If an overlap is detected, a message is shown and the newly initiated optimization request is aborted. Similarly, when a dispatcher tries to make changes to the Gantt, which is being processed by a background optimization request such as in-day optimization, a message is shown notifying the dispatcher that their changes can create unwanted results. The dispatcher can choose whether to continue with the manual changes or not.

#### Handle Conflicts During Optimization

Define the Commit Mode in the scheduling policy to determine what happens when schedule conflicts occur during global, in-day, or resource schedule optimization.

#### Guidelines for Using the Scheduling Policy Commit Mode

Define what happens when a dispatcher or scheduling operation makes a change to the schedule that conflicts with an ongoing optimization process.

## Prevent Overlapping Field Service Optimization Requests

When initiating resource schedule optimization, in-day optimization, or global optimization, Field Service checks for other such optimization requests that are being processed simultaneously for the same territory or service resources with at least 1 day of overlap in the optimization horizon. For example, a dispatcher activates resource schedule optimization for a resource that's part of a dataset being optimized through in-day optimization. If an overlap is detected, a message is shown and the newly initiated optimization request is aborted. Similarly, when a dispatcher tries to make changes to the Gantt, which is being processed by a background optimization request such as in-day optimization, a message is shown notifying the dispatcher that their changes can create unwanted results. The dispatcher can choose whether to continue with the manual changes or not.

🜐 This is a Field Service managed package feature.

- 1. In Setup, go to Field Service Settings and verify that Field Service Enhanced Scheduling and Optimization is enabled.
- 2. In the Field Service Admin app, go to Field Service Settings. Select Optimization, and then select the Logic tab.
- 3. Verify that Enable optimization overlaps prevention is enabled (default on).

If Enable optimization overlaps prevention is selected and you try to run an optimization request while an overlapping optimization request is being processed, the new optimization request fails. An overlapping request occurs when there's an overlap of optimized resources (caused by running on the same territory, or resource schedule optimization) and a time horizon overlap. A message is shown stating which request ID has overlapping service territories and which territories overlap, for easy troubleshooting. If the overlapping optimization request is running for a timeout period defined for the operation and isn't responding, the system aborts this request, and the new optimization request runs instead. The timeout for in-day and resource schedule optimization is 15 minutes. The timeout for global optimization is 5 hours if the optimization is in progress or queued, or 1 hour if the optimization request is new.

For enhanced scheduled jobs, if you try to create a scheduled job with multiple time periods that overlap for the same service territory, the parallel requests with overlapping data can conflict and result in incorrect schedules. When using Enhanced Scheduling and Optimization, ensure that Enable optimization overlaps prevention is selected in Field Service Settings (enabled by default) to avoid saving an enhanced scheduled job with overlapping time periods.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To enable optimization overlaps prevention:

 Custom permission set: FSL Admin Permissions

To run Resource Schedule Optimization (RSO), in-day, or global optimization:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

SEE ALSO:

Get Ready for Field Service Scheduling and Optimization Manage Scheduled Jobs in Field Service

## Handle Conflicts During Optimization

Define the Commit Mode in the scheduling policy to determine what happens when schedule conflicts occur during global, in-day, or resource schedule optimization.

## 🜐 This is a Field Service managed package feature.

The Commit Mode field in the scheduling policy determines how the system handles schedule changes made during an optimization run. For example, if a dispatcher reschedules an appointment or schedules a new job, creating discrepancies between the schedule's state at the start and completion of optimization. These changes can cause scheduling conflicts. Make sure the Commit Mode field is added to the Scheduling Policy page layout.

- 1. Create and manage scheduling policies from the Field Service Admin app in the Field Service settings tab. Click Guided Setup under Getting Started, or click New in the Scheduling Policies tab under Scheduling.
- 2. Select the scheduling policy Commit Mode according to the guidelines.
  - Note: When you aren't using Enhanced Scheduling and Optimization, global optimization runs in the Always Commit mode regardless of the Commit Mode setting.

SEE ALSO:

Get Ready for Field Service Scheduling and Optimization Create and Manage Field Service Scheduling Policies

## Guidelines for Using the Scheduling Policy Commit Mode

Define what happens when a dispatcher or scheduling operation makes a change to the schedule that conflicts with an ongoing optimization process.



🜐 This is a Field Service managed package feature.

Various conflicts can occur in the schedule during an optimization run. For example, while optimization is running, a dispatcher pins a service appointment, a customer cancels an appointment at the last minute, or an emergency service appointment is created and scheduled automatically. These actions can result in discrepancies between the schedule at the start of optimization and the schedule upon completion. If a scheduling change during optimization creates scheduling conflicts, you can commit the optimization recommendations despite the conflicts or roll back to the original schedule without making any changes.

Always Commit (default for Salesforce orgs created before Summer '24): If a user tries to make a potentially conflicting change to the schedule while optimization is in progress, a message is shown to warn the user that their change can conflict with the optimization results, but lets

them opt to save the change. If the conflicting change is made by automation or a user outside of the dispatcher console, no message is shown.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise. Unlimited, and Developer Editions.

## **USER PERMISSIONS**

To enable optimization overlaps prevention:

Custom permission set: FSL Admin Permissions

To run Resource Schedule Optimization (RSO), in-day, or global optimization:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

## **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

• Rollback (default for Salesforce orgs created after Summer '24): If a potentially conflicting change is made to the schedule for the dates being optimized—with a buffer day before and after—don't complete the optimization. This choice is a conservative scheduling option that helps you avoid possible conflicts. For example, if you begin a scheduled job to optimize from April 2 to April 5, any change made to the April 1 to April 6 schedule causes the optimization to be rolled back. Changes include creating, updating, and deleting resource absences and service appointments.

The default when you're using Enhanced Scheduling and Optimization is Rollback, but consider selecting Always Commit during global optimization. Rollback is recommended with in-day optimization schedule policies due to a high chance of conflicts. During night-optimization, where conflicts are limited, consider selecting Always Commit.

Here are examples of potentially conflicting schedule changes and what happens depending on the selected Commit Mode.

Scenario	Always Commit	Rollback
The dispatcher pins a service appointment while an optimization request is running (the Pinned checkbox on the service appointment is selected).	The pinned service appointment remains in its place. An overlap can occur with another service appointment if optimization had planned to move the pinned appointment to schedule another job in place of it.	The pinned service appointment remains in its place. An overlap can occur with another service appointment.
The status of a service appointment is updated.	The schedule is updated. The service appointment can move to another time and resource as per the optimization results. The status remains unchanged from the latest update.	No changes are made to the schedule.
A service appointment is created and scheduled.	The schedule is updated as per the optimization results. An overlap can occur with another service appointment.	No changes are made to the schedule.
The dispatcher schedules an appointment that is currently unscheduled.	During optimization, the optimization run also assigns this appointment to another service resource, resulting in the appointment having two assigned resources, which is invalid.	No changes are made to the schedule.
A scheduled service appointment is canceled.	If a scheduled service appointment is canceled during an optimization run, the service appointment remains canceled and doesn't appear on the Gantt.	No changes are made to the schedule.
A scheduled service appointment is unscheduled.	The schedule is updated as per the optimization results.	No changes are made to the schedule.
Optimization tries to schedule a service appointment and the unscheduled appointment is canceled.	Scheduled Start and Scheduled End times are added to the service appointment. No assigned resource is added to the service appointment.	No changes are made to the schedule.
A resource absence is created within the optimization horizon.	The schedule is updated as per the optimization results. An overlap can occur with another service appointment.	No changes are made to the schedule.

Scenario	Always Commit	Rollback
A resource absence is updated within the optimization horizon.	The schedule is updated as per the optimization results. An overlap can occur with another service appointment.	No changes are made to the schedule.
A resource absence is deleted within the optimization horizon.	The schedule is updated as per the optimization results.	No changes are made to the schedule.
A scheduled service appointment is rescheduled to another time (the Scheduled Start Time or Scheduled End time, or both, is updated).	The service appointment moves to another time or service resource, or both, as per the optimization results.	No changes are made to the schedule.
A scheduled service appointment is rescheduled to another service resource (Assigned Resource is updated).	The service appointment moves to another time or service resource, or both, as per the optimization results.	No changes are made to the schedule.
The Arrival Window Start time of a service appointment or Arrival Window End time, or both, is updated.	The service appointment moves to another time or service resource, or both, as per the optimization results.	No changes are made to the schedule.

#### SEE ALSO:

Get Ready for Field Service Scheduling and Optimization Create and Manage Field Service Scheduling Policies

# Reserve Time Slots for Designated Types of Work

Create specific time slots in Field Service dedicated to service appointments that meet your criteria.

(f) This is a Field Service managed package feature.

Service resources can perform any type of work during their available working hours according to the defined work rules in your scheduling policy. You can reserve certain time slots within those available working hours and designate them for specific types of work. For example, you can designate a time slot on an operating hours or shift record to support only service appointments whose **Emergency** field is selected.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Set Up Designated Work for Time Slots When Using Enhanced Scheduling and Optimization

Create specific time slots in Field Service dedicated to service appointments that meet your criteria when using Enhanced Scheduling and Optimization.

- 1. Add the TimeSlot Designated Work work rule to one or more scheduling policies. When the policy is in use, the scheduling optimizer respects your designated time slot preferences during scheduling.
  - **a.** Click the Scheduling Policies tab and select a policy.
  - b. In the Scheduling Policy Work Rules related list, click New.
  - c. In the Work Rule field, select New Work Rule.
  - d. Select Field Service TimeSlot Designated Work and click Next.
  - e. Add a name and description.
  - f. Save your changes.
- 2. Add recordset filter criteria columns to the lookup window.
  - a. From the object management settings for recordset filter criteria, go to Search Layouts and click **Edit** on the System Administrator profile.
  - b. Add Source Object, Filtered Object, and Active to the search layout.
  - c. Click Save.
- **3.** Create a recordset filter criteria for designated work.
  - a. In the App Launcher, click **Recordset Filter Criteria**.
  - **b.** In the Recordset Filter Criteria list view, click **New**.

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*Source Object	*Fit	Itered Object 🔘	
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Conditions The filter criteria is valid when			
All the conditions are met	*		
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- c. Enter a name and description for the criteria.
- d. In the Source Object field, select Time Slot.
- e. In the Filtered Object field, select Service Appointment.
- f. Select Active.
- g. In the Conditions section, select the relevant condition for when the recordset filter criteria is valid.

#### **USER PERMISSIONS**

To view, create, and update recordset filter criteria:

 View, create, and edit on Service Appointments, Time Slots, Operating Hours, Recordset Filter Criteria, and Recordset Filter Criteria Rules

AND

Delete on Recordset Filter Criteria Rules

- **h.** To add filter conditions, select the Criteria Field, the Operator, and the field Value to match on. The Value input changes depending on the field you select. For example, picklist fields show the list of available choices. Add another condition if you need to.
- i. Save the recordset filter criteria.
- 4. Designate a time slot for service appointments of a specified type.
  - a. In the App Launcher, click Operating Hours.
  - **b.** In the Operating Hours list view, select an operating hours record.
  - c. From the Details tab, in the calendar editor, right-click a time slot and select **Enhanced Designated Work**.

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**d.** From the lookup window, select a recordset filter criteria.

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🕜 Note: Select an active recordset filter criteria with the source object Time Slot and filtered object Service Appointment.

- e. Click Save.
- f. From the calendar editor, you can change a designation by selecting a different recordset filter criteria from the lookup window.
- **g.** You can delete a designation only from the Related tab. In the time slots related list, click **Edit** on the action menu of the relevant time slot. Then clear your selection from the Recordset Filter Criteria field and click **Save**.

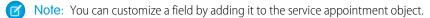
If an appointment doesn't meet the criteria of your designated time slot, the scheduling optimizer won't schedule it within the time slot.

## Set Up Designated Work for Time Slots When Not Using Enhanced Scheduling and Optimization

Create specific time slots in Field Service dedicated to service appointments that meet your criteria when not using Enhanced Scheduling and Optimization.

1. Decide which service appointment fields can be used to reserve time slots.

- a. From the Object Manager, find the Service Appointment object and click Field Sets.
- b. Open the Designated Work Fields field set.
- c. Drag any checkbox field into the field set.



- 2. Add the TimeSlot Designated Work work rule to one or more scheduling policies. When the policy is in use, the scheduling optimizer respects your designated time slot preferences during scheduling.
  - **a.** Click the Scheduling Policies tab and select a policy.
  - **b.** In the Scheduling Policy Work Rules related list, click **New**.
  - c. In the Work Rule field, select New Work Rule.
  - d. Select Field Service TimeSlot Designated Work and click Next.
  - **e.** Add a name and description.
  - f. Save your changes.
- 3. Reserve a time slot for service appointments of a specified type.
  - **a.** From the operating hours tab, select an operating hours record.
  - **b.** From the detail view, right-click a time slot.
  - c. Hover over **Designate Work** and select a checkbox.

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If an appointment doesn't meet the criteria of your designated time slot, the scheduling optimizer won't schedule it within the time slot.

SEE ALSO:

Work Rule Type: TimeSlot Designated Work Create Work Types for Field Service Guidelines for Recordset Filter Criteria

# Enable Multiday Field Service Appointments

Some Field Service industries have service appointments that span multiple days, for example, utility infrastructure repairs and installations. With multiday service appointments you can schedule service appointments that span resources' nonavailability without rule violations.

#### 🜐 This is a Field Service managed package feature.

- 1. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab.
- 2. Click Scheduling > General Logic.
- 3. In the Multi-day service appointment field field, select Is MultiDay.
- 4. In Setup, add the Is MultiDay field to your service appointment page layout and save your changes.
- 5. From Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets** under Users.
- 6. Click Field Service Dispatcher Permissions.
- 7. In the Apps section, click Custom Permissions.
- 8. Click Edit.
- **9.** Add the Longterm View custom permission to the Field Service Dispatcher permission set. This permission lets dispatchers select the Long-Term view in the Gantt, which displays up to 6 months at a time. The Long-Term view displays up to 1000 service appointments. The Long-Term view comes with filtering options, including the option to show only multiday appointments. Customize your Long-Term view settings from the Gantt filter's Hours tab.

Note: The Long-Term view replaces the Multiday view, which displays 5 weeks at a time but doesn't include filtering options.

#### 10. Click Save.

11. To indicate that a service appointment must span multiple days, select Is Multiday on the appointment.

The length of the multiday appointment is based on its duration and the assigned resource's availability.

Example: Let's say you want to find the best resource to complete a multiday service appointment in San Francisco. Your service resources in San Francisco have operating hours from 9:00 AM to 6:00 PM, and their Resource Availability Work Rule gives them 30 minutes of travel time to and from appointments.

You need to schedule a multiday service appointment that lasts 10 hours. Given your service resources' travel and time constraints, the Dispatcher Console finds the best service resource for the job. In this example, Alan Reed is the service resource who's most available for this service appointment.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To customize the Field Service managed package:

- Customize Application
- To use the Long-Term Gantt view:
- Longterm View custom permission

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The Dispatcher Console automatically takes your service resources' travel and break times into account to optimize your multiday appointments.

#### Considerations for Multiday Scheduling

Keep these considerations in mind when you implement multiday scheduling in your org.

## Considerations for Multiday Scheduling

Keep these considerations in mind when you implement multiday scheduling in your org.

- 🜐 This is a Field Service managed package feature.
- Lunch breaks are shown on the Gantt as an overlap with the multiday service appointment when using Enhanced Scheduling and Optimization.

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- Multiday scheduling is supported in all Enhanced Scheduling and Optimization services except Appointment Booking.
- On multiday service appointments, the Scheduled Start and Scheduled End times must fall within the assigned resource's time slots in their operating hours.

#### Salesforce Field Service

- Multiday scheduling doesn't consider customer availability (visiting hours) listed on the work order.
- Multiday work calculations are run when the assigned resource changes or the service appointment Duration, Scheduled Start, or geolocation changes. This behavior isn't supported when using Enhanced Scheduling and Optimization.
- If you drag and drop a multiday service appointment, or manually change its Scheduled Start, the appointment's Scheduled End isn't automatically extended beyond the due date. The appointment can be manually moved beyond the Due Date, but its Duration remains unchanged.
- To prevent the scheduling optimizer from proposing time slots that don't fully respect resources' availability, configure a TimeSlot Designated Work work rule.
- When scheduling multiday service appointments, the time between the Scheduled Start and Scheduled End includes the duration of the job as well as travel time from and to the assigned resource's home base for each day of the appointment. The duration of any Break type Resource Absence records is also included if the Service Resource Availability work rule is set to create breaks for the service resource.

Note: To change the travel time logic, update the Travel From Home and Travel To Home fields on the Service Resource Availability work rule. These fields let you allocate a number of minutes at the day's start and end for the resource's travel at their own expense. If they're left blank, the schedule automatically includes calculated travel time. For example, enter 60 in each field if resources must be present at the site at the start of the day. This way, the schedule doesn't include travel time for resources whose home base is less than an hour from the site.

- Multiday scheduling has these additional limitations:
  - When you're using Enhanced Scheduling and Optimization, and the Sliding and Reshuffling option is enabled:
    - When you try to schedule a multiday service appointment, other service appointments can only slide to earlier or later in the day. They can't be reshuffled or dropped.
    - When you try to schedule a high-priority service appointment, multiday service appointments can't be reshuffled or dropped, even if they have a lower priority.
  - Enhanced Scheduling and Optimization doesn't properly handle multiday work that starts or ends during nonworking hours at a time when travel at the resource's expense is allowed. Such cases can result in incorrect overlapping violations and inaccurate travel times.
  - A service resource can't be assigned to any other appointment during a multiday service appointment.
  - When you're not using Enhanced Scheduling and Optimization, multiday service appointments that overlap with other appointments don't trigger the Fix Overlaps action.
  - Multiday service appointments can't be assigned to capacity-based service resources.
  - Multiday service appointments can't span more than eight weeks (calendar days).
  - The combination of multiday scheduling and complex work isn't supported. If a multiday service appointment has a scheduling dependency, its Scheduled End date isn't calculated when the appointment is scheduled. We recommend that you don't create dependencies between multiday appointments.
  - When you're not using Enhanced Scheduling and Optimization, you can only schedule one multiday service appointment at a time.

SEE ALSO:

Complex Work in Field Service Field Service Limits and Limitations

# Manage Work Capacity in Field Service

Control the work performed by your workforce according to dynamic company priorities.

Work capacity limits let you control the amount of work you can schedule for service resources. Limiting work capacity enables capacity reservation based on dynamic company priorities. Using capacity reservation can also help your company comply with its SLA, for example, by ensuring that maintenance tasks are performed regularly and not concentrated in one calendar period. Seeing as some work is seasonal, you might want to focus in the summer months on new installs and limit maintenance work to increase revenue. Or, during a recall or mandatory repairs when limit new installations to make more room for break-fix or maintenance type of work.

Limiting work capacity is done by adding thresholds that limit how many hours or what percentage of the total work capacity you can schedule for a specific service territory or a specific value of a service appointment attribute field in a service territory. The work on service appointments with a specific value of a service appointment attribute field is referred to as a workstream.

Limits define the maximum hours of schedulable capacity for a service territory or a specific

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

workstream. For example, you can limit the total duration of new installation jobs scheduled in the New York territory to 100 hours per day during weekdays for the next two months. You can also limit maintenance jobs to 50 hours per day on Mondays. Or set the limit as a percentage of the total calculated available work capacity. For example, limit the installation jobs in Miami to 15% of the total calculated available time in Miami per day during the same time period. The limits are defined per day. Restrict limits to a date range or start on a specific date and be open-ended.

You can set a limit to the work capacity for a specific workstream. A workstream with a defined limit is called a limited workstream. For example, limiting the work capacity of service appointments for the Breakfix work type to 140 hours on a specific day in Los Angeles defines a limited Breakfix workstream. Use out-of-the-box service appointment attributes to define these limits or create custom attributes. For example, use work type categories.

Note: This feature is available only with Enhanced Scheduling and Optimization.

#### Set Up Field Service Work Capacity

Before you create work capacity limits, set up Work Capacity in Field Service. You can define a Limit Override policy for the work capacity limit and allow work to be scheduled, even when the limit set for that day was exceeded. You can also enable automatically sharing the work capacity object records (Work Capacity Limit, Work Capacity Availability, and Work Capacity Usage) with users according to the service territories they're permitted to access. Work Capacity is also available in Experience Cloud sites. Set up the site to share information with relevant external users.

#### Work Capacity Limits (WCL)

Capacity limits are defined per service territory, for a certain time resolution, and over a given open or closed-end date range. You can define the work capacity limit for the whole service territory or restrict it to a specific workstream according to your company's business objectives.

#### Work Capacity Usage (WCU)

When a work capacity limit (WCL) is activated, Work Capacity Usage (WCU) records with the same criteria are created for each day that has scheduled service appointments within the WCL time range. The time consumed for each WCU aggregates the total scheduled hours of service appointments that conform to the limit criteria that belong to a specific work stream.

#### Work Capacity Availability Calculations

Work capacity availability calculations enable setting limits on work capacity as a percentage of the total work capacity.

#### Monitoring Workstream Usage in Summary View

The Summary view shows the consumption relative to the defined limits for the service territory if a service territory limit is defined and for all limited workstreams in selected territories for a specific day or week.

#### View Workforce Availability in the Work Capacity Dashboard

The dashboard includes two reports related to work capacity availability.

#### Work Capacity Considerations and Limitations

When you set up work capacity, there are some considerations and limitations to keep in mind.

## Set Up Field Service Work Capacity

Before you create work capacity limits, set up Work Capacity in Field Service. You can define a Limit Override policy for the work capacity limit and allow work to be scheduled, even when the limit set for that day was exceeded. You can also enable automatically sharing the work capacity object records (Work Capacity Limit, Work Capacity Availability, and Work Capacity Usage) with users according to the service territories they're permitted to access. Work Capacity is also available in Experience Cloud sites. Set up the site to share information with relevant external users.

1. From Setup, in the Quick Find box, enter *Field Service Settings*, and then select **Field Service Settings**.

#### 2. Select Allow defining work capacity limits.

- 3. From Setup, in the Quick Find box, enter Users Profiles, and then select Profiles.
- 4. Make sure the tab is set to Default On for:
  - Work Capacity Limits
  - Work Capacity Usages
  - Work Capacity Availabilities
- 5. If your service appointments have custom fields, give read and edit access to the fields.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. For the Field Service Integration permission set, click Object Settings and select Service Appointments.
  - c. For each custom field, select Read Access and Edit Access.
- 6. Make sure all permission sets are current.
  - a. From the App Launcher, find and select the Field Service Admin app.
  - b. Click Field Service Settings, select Getting Started, and then click the Permission Sets tab.
  - c. If the permission set tile indicates that it's not current, click Update Permissions.
- 7. Make sure that a default scheduling policy is selected for the Dispatcher Console UI.
  - a. From the App Launcher, find and select the Field Service Admin app.
  - **b.** Click **Field Service Settings**, select **Dispatcher Console UI**, and in the Gantt Configurations tab check that a default scheduling policy is selected.
- 8. To let dispatchers update service appointments, share the work capacity object records with users according to the service territories they're permitted to access.
  - **a.** From the App Launcher, find and select the **Field Service Admin** app.
  - b. From the Field Service Settings, select Sharing.
  - c. On the Scheduled Jobs tab, make sure that Enable user territory sharing and Enable automatic population of user groups based on User Territory are selected.
  - d. Select Share all work capacity records with public groups associated with the service territory.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To set up Work Capacity:

Admin on Field Service

- e. If you manually defined triggers for capturing newly created work capacity object records in Spring '24, remove the triggers
- 9. (Optional) To set up the limit override policy of the work capacity limits:
  - **a.** From the App Launcher, find and select the **Field Service Admin** app.
  - **b.** From the Field Service settings, select **Scheduling**.
  - c. On the Work Capacity tab, select the limit override policy.

If you select to set a limit override policy per limit, users can configure each limit to be overridden up to two weeks before or up to one day after midnight on the day of service.

#### Set Up Work Capacity in Experience Cloud

The Experience Cloud site enables your partner community dispatchers to see consumption relative to the defined limit in service territories to which they have access. Based on their permissions, they can also create and edit work capacity limits for those service territories.

#### Apply the Work Capacity Rule to Scheduling Policies

You can enforce work capacity limits by adding the Work Capacity work rule to policies. If the work rule is applied to the policy, and the work capacity limit is exceeded, Field Service doesn't schedule a service appointment or return a slot in appointment booking.

SEE ALSO:

Enable Field Service Work Capacity Considerations and Limitations Set Up and Configure Your Org for Experience Cloud Sites

# Set Up Work Capacity in Experience Cloud

The Experience Cloud site enables your partner community dispatchers to see consumption relative to the defined limit in service territories to which they have access. Based on their permissions, they can also create and edit work capacity limits for those service territories.

#### 🜐 This is a Field Service managed package feature.

- 1. Set up permission sets and sharing.
  - a. From Setup, in the Quick Find box, enter Users, and then select **Permission Sets**. Click the **Field Service Community Dispatcher Permissions** permission set. In Apex Class Access, verify that the FSL.capacityLimit Apex class exists.
  - b. Create a user territory for any territory that you want to show in the Experience Cloud site. In Setup, click the Object Manager tab and add the User field to the User Territory page layout. From the App Launcher, find and select User Territories and create a user territory with the Experience Cloud user and service territory you want the user to access.
  - c. In the Field Service Settings, on the Scheduled Jobs tab, make sure that Share all work capacity records with public user groups associated with the service territory is selected.
- **2.** Create an Experience Builder site.
  - a. In Setup, in the Quick Find box, enter All Sites.
  - b. Select All Sites under Digital Experience and click New.
  - c. Click Build Your Own (Aura) and create your Experience Cloud site.
  - d. Click Builder and delete the sample component.
  - **e.** In Experience Builder, from the components option, drag a Tab Layout (New) component to the header section.
- 3. Add the Gantt to your Experience Builder site (optional):
  - a. Select the first tab and enter a name for it. Make it publicly available and save it.
  - b. From the Components menu, drag a Visualforce Page component to the Content section of the page you created for the Gantt. Set the component's properties. For the VF Page name, enter vf001\_ServiceExpert. The recommended height is 800 pixels.
  - c. Create an Experience Builder site. For specific instructions, see step 2 in this article.
  - **d.** For Gantt setup instructions, refer to step 9a in this article.
- 4. Add Work Capacity objects and the Work Capacity tab to the Experience Builder site. See Add Tabs to Your Experience Cloud Site .
  - a. In the components list, scroll down to the Capacity Limit Summary View component and drag it to the first tab in the page.
  - **b.** Drag a Record list component to a tab, for each of the Work Capacity objects (WorkCapacityLimit, WorkCapacityUsage, and WorkCapacityyAvailability), and from the record list dialog box choose the object that you want to add to this tab.
- 5. Publish the new site.
- 6. Add the required partner or community profiles in the Members section, and select the Field Service Community Dispatcher Permissions to be allowed in the site.
- 7. In the Administrator section, activate the new site.
- 8. Give site users access to the new work capacity page.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **USER PERMISSIONS**

To create, customize, or publish an Experience Cloud site:

Create and Set Up
 Experiences AND View
 Setup and Configuration

To create a permission set:

 Manage Profiles and Permission Sets

To assign a permission set license:

• Manage Users

- a. Confirm that the site users who need access to the work capacity page have a Partner Community user license.
- b. Create the site dispatcher permission sets. From the App Launcher, find and open the Field Service Admin app, and then click
   Field Service Settings. Then, click Permission Sets in Getting Started.
- c. Confirm that the Field Service Community Dispatcher tile shows a message indicating that the permission set is current. If it doesn't, click **Create Permissions**.
- **d.** Assign two permission sets to the site users who need access to the work capacity page: Field Service Community Dispatcher License and Field Service and Community Dispatcher Permissions.
- 9. To show rule violations on the Gantt in the Experience Cloud site, share the Work Capacity work type rule.
  - a. Add the dispatcher console to your Experience Builder site. See Add the Field Service Dispatcher Console to an Experience Builder Site.
  - **b.** From the App Launcher, find and select **Work Rules** and share the Work Capacity work rule with the partner community user.

## Apply the Work Capacity Rule to Scheduling Policies

You can enforce work capacity limits by adding the Work Capacity work rule to policies. If the work rule is applied to the policy, and the work capacity limit is exceeded, Field Service doesn't schedule a service appointment or return a slot in appointment booking.

- 1. From Setup, in the Quick Find box, enter Object Manager, and then select Work Rules.
- 2. Verify that Field Service Work Capacity Rule has the Capacity Limit layout. If not, edit the layout.
- 3. From the App Launcher, find and select Work Rules.
- 4. Click New.
- 5. Select Field Service Work Capacity Rule, and then click Next.
- 6. Enter a name for the work rule and optionally a description.
- 7. Save the work rule.

You can add the work rule to any scheduling policy from the Customize Scheduling Policies page in Guided Setup or from the Scheduling Policy Work Rules related list on a scheduling policy.

You can add only one Work Capacity rule to a scheduling policy.

**Note:** If the work rule isn't added to the policy, after activating a work capacity limit, you can see the work capacity usage and compare it to the limit, but the limit isn't enforced.

SEE ALSO:

Work Rule Type: Work Capacity

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To apply the Work Capacity rule:

Create on Work Rules

# Work Capacity Limits (WCL)

Capacity limits are defined per service territory, for a certain time resolution, and over a given open or closed-end date range. You can define the work capacity limit for the whole service territory or restrict it to a specific workstream according to your company's business objectives.

The limit can set the threshold as the maximum number of hours or what percentage of the available work capacity you can schedule for a service territory or a specific workstream. For example, set a service territory limit of 100 hours in Los Angeles from August 25, 2024, to September 25, 2024, or limit installation work to 50% of the available work capacity in New York every Monday in August 2024

However, you can set workstream limits only according to a unique service appointment attribute. Therefore, after you create a WCL with an attribute, any other WCL you create can have only that same attribute, with, optionally, a different attribute value. For example, if you create a WCL with the Work Type attribute and the Break Fix value, you can create WCLs only with the same or different value of the Work Type attribute (for example, Maintenance).

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Work capacity limits are enforced by the Capacity Limit work rule type. To provide some scheduling flexibility, override the limit on or close to the day of service, defined according to the time zone of the service appointment's service territory, in Field Service Settings. This override enables scheduling a service appointment even if it violates the set limit. For example, a service appointment must be scheduled for this Wednesday but can't be scheduled because the work capacity limit was reached. If the override policy was set to start the override 2 days before the day of service, the service appointment can be scheduled for Wednesday starting midnight between Monday and Tuesday.

When you create a WCL, it's created as inactive and ignored by the scheduling optimization process. Activate the WCL to consider it in the schedule optimization.

When you activate a WCL, daily work capacity usage records are created for the relevant days in the time range. The work hours of service appointments scheduled for each date are filtered according to the workstream defined for the WCL. They're then accumulated as time consumed in the relevant work capacity usage (WCU) for this date.

Two WCLs, one open-ended and one close-ended, can include the same date. However, each date can have only one WCU. In this case, the WCU is created according to the close-ended WCL. Create a close-ended time range limitation to override an open-ended WCL. For example, if you have an open-ended limitation of 100 hours on installation work type on Mondays, and a nonworking holiday occurs on a Monday, create a close-ended WCL for this day and set the limitation to 0.

The Work Capacity Limits list view presents a tabular view of the WCLs defined, their definitions, and whether they're active. It also enables activating and deactivating a WCL.

To show the Work Capacity Limits list view, from the App Launcher, find and select Work Capacity Limits.

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		1	Limit Number †	$\sim$	Service Te v	Service Appointme	~	Field Value	$\sim$	Field Value Di $ \lor $	Time Perl 🗸	Start Date	~	End Date	~	Limitation $\vee$	Limitatio.	. ~	Active	~	
1		3,	WCL-000000032		51-01	SACustmAsset		0210000000004HWEAA2		Asset-01	Day	8/1/2023		8/31/2023		Hours	100.00				۳
2		) )	WCL-000000033		St-01	SACustmAsset		021xx0000004HWEAA2		Asset-01	Day	8/31/2023		9/30/2023		Hours	200.00				¥

#### Salesforce Field Service

#### Create a Work Capacity Limit

Work capacity limits let you control the amount of work scheduled for service resources according to specific values of a service appointment's attribute (workstream). Work capacity limits are defined per service territory, for a certain time resolution, and over a given open or closed-end date range. Define the work capacity limit for the whole service territory or restrict it to a specific value of a service appointment's attribute (workstream). Define the limit threshold as the maximum number of hours or what percentage of the available work capacity you can schedule for a service territory or the specific workstream. After you create a work capacity limit, you can edit its description, limitation value, start and end dates, and days of the week. You can edit WCLs only if they're inactive. You can also edit the limit for a specific date by editing the work capacity usage object. Editing the daily limit doesn't change the limit value in the work capacity limit object.

## Create a Work Capacity Limit

Work capacity limits let you control the amount of work scheduled for service resources according to specific values of a service appointment's attribute (workstream). Work capacity limits are defined per service territory, for a certain time resolution, and over a given open or closed-end date range. Define the work capacity limit for the whole service territory or restrict it to a specific value of a service appointment's attribute (workstream). Define the limit threshold as the maximum number of hours or what percentage of the available work capacity you can schedule for a service territory or the specific workstream. After you create a work capacity limit, you can edit its description, limitation value, start and end dates, and days of the week. You can edit WCLs only if they're inactive. You can also edit the limit for a specific date by editing the work capacity usage object. Editing the daily limit doesn't change the limit value in the work capacity limit object.

- 1. From the App Launcher, find and select Work Capacity Limits.
- 2. From the Work Capacity Limit list view, click New. The Limit Number is added automatically.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create, edit, or delete a Work Capacity Limit:

 Create, Update, or Delete on the Work Capacity Limits object

	New Work C	apacity Limit	
			* = Required Informati
General Information			
Service Territory	٩	Service Territory Limit 0	
Description		Service Appointment Field None	•
• Field Value		Field Value Display Name	
cheduling Information			
*Time Period		* Start Date	
Day	•		<b></b>
End Date		Limitation Value	
	ä		
* Limitation Units Hours	•	Limit Override Policy	
Days of the Week			
Monday  Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			
system Information			
Owner 🖰 Admin User			
	Cancel Sav	e & New Save	

- **3.** Select the service territory.
- 4. To limit the work at the service territory level select Service Territory Limit.
- 5. To apply to a specific workstream in the service territory:
  - Select the field that represents the attribute to use for limiting capacity from the Service Appointment Field.
     The service appointment field is set the first time a work capacity limit is created for your Salesforce org. If you select another service appointment field, you get an error.

The data types supported for service appointment fields are Number (int, double), Text (string), Checkbox, Picklist, and Lookup.

- In Field Value, enter the value of the service appointment field.
   For example, for the Work Type attribute, enter *Maintenance*.
- **6.** Enter the scheduling information:
  - Time period
  - Limitation units: Hours or Percentage
  - Limitation value in whole numbers greater or equal to zero
  - Start date

• (Optional) End date

Close-ended time ranges take precedence over overlapping open-ended time ranges when you're limiting work.

- 7. Select the days of the week to which the limitation applies. Select at least one day.
- 8. If the limit override policy is set per limit in Field Service Settings define the override policy for this limit...
  - Leave empty for no limit override.
  - Enter *O* for the relaxation to start at midnight on the day of service.
  - Enter a positive integer to set the limit override to start this number of hours after midnight on the day of service (maximum 23 hours).
  - Enter a negative integer to set the limit override to start this number of hours before midnight on the day of service (maximum 336 hours, 14 days).

If the limit override policy isn't set per limit in Field Service Settings, this value is ignored.

- **9.** Save the new work capacity limit.
- **10.** (Optional) To activate the work capacity limit, on the Work Capacity Limit list view, click **Edit**, and select **Active**. You can also activate it directly from the Work Capacity Limit list view.

# Work Capacity Usage (WCU)

When a work capacity limit (WCL) is activated, Work Capacity Usage (WCU) records with the same criteria are created for each day that has scheduled service appointments within the WCL time range. The time consumed for each WCU aggregates the total scheduled hours of service appointments that conform to the limit criteria that belong to a specific work stream.

WCU records are updated in real time. When a relevant service appointment is scheduled, rescheduled, or changed in a way that affects its relevance to the limit, the WCU record is updated.

When you deactivate or delete a WCL, all WCU records related to future dates are deleted.

To show the Work Capacity Usages list view, from the App Launcher, find and select **Work Capacity Usages**.

The Work Capacity Usages list view includes the currently active WCLs. It shows the service appointment limit criteria and the time consumed in hours and minutes. If **Average Travel Time** (in minutes) is defined for the service territory, consumption includes travel time.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

This view lets you compare the planned limit versus actual scheduled consumption per service territory, day, and type of work. From the WCU list view, you can change the daily limit. You can also change the daily limit from the WCU object via API, the WCU form, and the Summary tab daily view. You can only update the daily limit if service appointments are scheduled for this date. You can't update the daily limit if the limit is overridden, or not enforced. If the limit changes in the WCL object, any changes you made via the WCU object are overridden. Changes made to the daily limit in the WCU object don't change the WCL object.

	Work Capacity Usages       I         All Work Capacity Usages >       I         3 tems - Soried by Usage Number - Filtered by All work capacity usages - Updated a filer societies age       Q. Search this Int																
	Usage Number 1	$\sim$	Service Te V	Service Appoint v	Field Value	~	Field Value $\vee$	Time Period $$	Start Date v		End Date 🗸 🗸	Ava	lable 🗸	Limitation $\vee$	Limitation $\vee$	Time Cons $\lor$	
1	WCU-0000000021		51-01	SACustmAsset	02xxx0000004HWEAA2		Asset-01	Day	8/2/2023		8/2/2023	-1.0	D	-1.00	100.00	1	¥
2	WCU-000000022		51-01	SACustmAsset	021xx0000004HWEAA2		Asset-01	Day	8/3/2023		8/3/2023	-1.0	þ	-1.00	100.00	1	¥
3	WCU-000000023		51-01	SACustmAsset	021xx0000004HWEAA2		Asset-01	Day	8/4/2023		8/4/2023	-1.0	D	-1.00	100.00	1	۳

# Work Capacity Availability Calculations

Work capacity availability calculations enable setting limits on work capacity as a percentage of the total work capacity.

Work Capacity Availability (WCA) represents the availability in service territories that have a work capacity limit, for each day in the defined time horizon.

Let's assume three workstreams in New York on August 14 and a total availability of 400 hours. You can set the limit as 25% for the breakfix work type, 10% for the installs work type, and 50% for the maintenance work type. You can then keep the business considerations indicated by these percentages if the total availability decreases to 300 hours.

The work capacity availability is calculated periodically at scheduled times, for example, daily at a certain time. In addition, specific events trigger an automatic recalculation.

- Service territory membership changes(for example, a service resource was moved in or out of a relevant service territory)
- Service resource absences changes (for example, a service resource added or removed an absence)
- Shift changes (for example, adding or removing a shift).

This recalculation keeps the work capacity availability for the service territory within the defined time horizon up to date.

The availability for a regular service resource is calculated using this equation: (Normal Hours + Overtime Hours - Absences - Breaks).

- Normal Hours: Hours in time slots of type Normal in the service resource's operating hours and confirmed shifts minus holiday hours(optional)
- Overtime Hours: Hours in time slots of type Extended in the service resource's operating hours
- Absences: Hours of the service resource approved absences
- Breaks: Hours of the service resource absences of type Break. For breaks of the Lunch Break type, the duration is added based on the default scheduling policy set for the Dispatcher Console UI in Field Service Settings.

The total availability on a specific day for a service territory is composed of:

- The availability of all service resources where the service territory is the primary or secondary territory.
- The hours per time period of capacity-based resources belonging to the service territory.
- The operating hours of an active crew belonging to the service territory are added as one resource. The operating hours of service resources that are allocated to a crew are excluded from the calculation.

Note: The availability service also considers the default policy set in Field Service Settings Dispatcher Console UI.

When work capacity availability calculations are enabled, a Work Capacity Availability record is created for service territories with defined work capacity limits for each day in the configured time horizon.

To show the Work Capacity Availabilities list view, from the App Launcher, find and select Work Capacity Availabilities.

The list view shows the daily availability in minutes and in hours for all service territories that have defined limits in the time horizon (the default is 30 days). For example, if WCLs exist for New York and Miami, 60 availability records are shown.

tems	Sorted by Availability Number • Filter	ed by Al	work capacity availabilities • U	Ipdated	a few seconds ago						Search this list	\$• C /	6 1
	Availability Number 1	~	Service Territory	~	Time Period	~	Start Date	~	End Date	~	Available Capacity (in $ \lor $	Available Capacity (in \	/
	WCA-0000000005		Los Angeles		Day		6/30/2023		6/30/2023		1,620.00	27.00	
	WCA-0000000006		Los Angeles		Day		6/29/2023		6/29/2023		1,620.00	27.00	
	WCA-0000000007		Los Angeles		Day		6/28/2023		6/28/2023		1,620.00	27.00	Ţ
	WCA-000000008		Los Angeles		Day		6/27/2023		6/27/2023		1,620.00	27.00	
	WCA-0000000010		Los Angeles		Day		7/2/2023		7/2/2023		0.00	0.00	
6	WCA-0000000011		Los Angeles		Day		7/1/2023		7/1/2023		1,620.00	27.00	

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Set Up Availability Calculations in Field Service Settings

Configure the availability calculations.

Set Up Availability Calculations in the Field Service Admin App

When setting up work capacity availability calculations, you must enable the availability calculations job.

### Set Up Availability Calculations in Field Service Settings

Configure the availability calculations.

- 1. Make sure that all capacity limit remote sites are active.
  - a. From Setup, in the Quick Find box, enter *Field Service Settings*, and then select Remote Site Settings.
     A list of all registered remote sites is shown.
  - **b.** Make sure all remote sites whose name starts with FSL CapacityLimit are active.
- 2. From Setup, in the Quick Find box, enter Field Service Settings, and then select Field Service Settings.
- 3. Under Availability Considerations:
  - a. To always include overtime as available time, select Include Overtime.
  - **b.** Choose whether to include only primary members or both primary and secondary members of the service territory. If you consider secondary members, their time isn't exclusively available for the selected service territory.

#### Set Up Availability Calculations in the Field Service Admin App

When setting up work capacity availability calculations, you must enable the availability calculations job.

By default, the job runs on weekdays at 10:00 AM for 30 days ahead. You can schedule the availability calculation process to run during your low-activity times. You can also determine how many days ahead to calculate availability.

- 1. From the App Launcher, find and select **Field Service Settings**.
- 2. Click Scheduling, and then click Work Capacity.

Scheduling General Logic Scheduling Policies Dynamic Gantt Bouting B	UNDLING WORK CAPACITY		
Availability Calculation			
Schedule       Schedule the availability process during low-activity times.       Days of the Week       Sun     Thu       Fri     Sut       Calculation       Calculate availability for 30 days	Hour Minutes	14	1 🖘 Activ
Work Capacity Limits			
Limit Override Policy Set a limit override policy per limit			
			Restore Defaults Save

- **3.** Enable the calculation process (1).
- 4. Select the days of the week and time to perform the availability calculations. The default is weekdays at 10:00 PM.
- 5. Click Apply.

### USER PERMISSIONS

To set up Work Capacity Availability:

• Admin on Field Service

#### USER PERMISSIONS

To set up Work Capacity Availability:

• Admin on Field Service

- 6. Enter the number of days ahead to calculate availability for (the maximum is 90 days).
- **7.** Save your changes.

### Monitoring Workstream Usage in Summary View

The Summary view shows the consumption relative to the defined limits for the service territory if a service territory limit is defined and for all limited workstreams in selected territories for a specific day or week.

The view provides a summary of the Work Capacity consumption relative to the limits of workstreams for which limitations exist in selected service territories at specific dates in hours and percentage. It also shows the total work capacity availability for the service territories on the selected dates.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

mary Limits Usage Availability						
ce Territory					Time Period	
selected				Today	iii ▶ Day	▼ C <sup>1</sup> ↑↓
		Tuesday, M	arch 13 2023			
Binghamton 3				Total avai	lability: 600hr • Time cor	sumed by limited work:
<ul> <li>Service Territory Consumption: 50%</li> </ul>	4					
Consumed: 800hr 5min (50%) Limit: 90%	6 🕕					
Mark Tuna 5 :	Work Tupe	6	Work Turne	:	Work Type	
Work Type 5 :	Work Type Check-In	6	Work Type Computer Repa	ir	Work Type Maintenance	
		6		ir 38hr 17min (51%)		148hr 9min (119%
Consumed 23hr 2min (21%)	Check-In Consumed	24hr 12min (65%)	Computer Repa	38hr 17min (51%)	Maintenance Consumed	148hr 9min (119%
Breakfix	Check-In		Computer Repa		Maintenance	148hr 9min (119% 124h
Consumed 23hr 2min (21%)	Check-In Consumed	24hr 12min (65%)	Computer Repa	38hr 17min (51%)	Maintenance Consumed	
Breakfix       Consumed       23hr 2min (21%)       Limit ()       111hr	Check-In Consumed Limit ()	24hr 12min (65%) 37hr	Computer Repa	38hr 17min (51%)	Maintenance Consumed	
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Breakfix Consumed 23hr 2min (21%) Limit  111hr Work Type New Installs	Check-In Consumed Limit  Work Type Promotion	24hr 12min (65%) 37hr	Computer Repared Consumed Limit Work Type Rewire	38hr 17min (51%) 75hr :	Maintenance Consumed	

To access the Summary view, from the App Launcher, find and select **Work Capacity**, and then select the **Summary** tab. The Actions menu (1) provides direct access to:

- The Field Service Work Capacity Dashboard.
- Creating a work capacity limit. Refresh the view to show the new workstream card if you add a work capacity limit.

In the first panel (2):

- Select the service territories that have active work capacity limits you want to show in the Summary view. You can select only your service territories or service territories shared with you.
- Select the date.
- Select the display period: Day view or Week view (for a 7-day period starting at the selected date).

The second panel (2) provides a Work Capacity summary for each selected service territory for the selected time period.

#### **Total availability:**

All available resource hours for the service territory on the specific date (including idle time and scheduled time). The system admin can configure available hours to include overtime.

#### Time consumed by limited workstream:

The hours consumed by the workstreams that have work capacity limitations in a specific time period.

The third panel (3) changes according to the selected time period.david

In the Day view, the panel includes a card for the service territory limit if it's defined (4) and cards (5) for all workstreams with a limit defined for this day (for example, the Work Type attribute with the Breakfix value). Each card includes a progress bar that visualizes the consumption of the limit on the workstream. When consumption exceeds 100% (for example, due to manual scheduling), the bar changes to red.

It also includes these values:

#### Consumed:

The number of hours consumed by this workstream and the percentage of time consumed relative to the limit.

#### Limit:

The limit set for the service territory or workstream in percentage of availability or in hours. If the limitation unit was set to hours, hover over the card to see the calculated percentage from the total availability. If the limitation unit is Percentage, hovering over the card shows the calculated hours.

If service appointments are scheduled for the day, the Actions menu in the card (6) enables you to directly update the daily work capacity limit for a workstream by updating the Work Capacity Usage record without changing the Work Capacity Limit object. Other daily instances of the limit aren't affected. When you select the Edit Daily Limit action, the Edit Daily Limit dialog is shown, enabling you to type a new limitation value in the limitation unit of the defined limit (hours or percentage). The limitation value must be an integer equal to or greater than 0. You can't update overridden limits or limits that are not enforced. If the Work Capacity Limit object is subsequently updated, updating the WCL overrides the change you made.

In the Week view, the panel is shown for each day of the week the service territory limit (Territory Limit) card if it is defined and limited workstream cards. The cards show the consumption as a percentage of the limit for that day. Hover over a card to show additional information. You can sort the workstreams with limits valid for each day of the week alphabetically or in descending order according to the current consumption in percentage of the availability. For example, let's assume a daily limit of 100 hours for installation work next week and a 200-hour limit for breakfixes. The alphabetically sorted weekly view can alert the planner if only 20 hours are consumed for installations while breakfixes have reached the 200 hours limit, preventing additional breakfixes from being scheduled. The planner can then decrease the limit for installations and increase the limit for breakfixes to ensure better resource utilization.

ammary Limits Usage	Availability										
nvice Territory 3 selected	*						Today	(1)	Time Period Week	• C	†4
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				March 12 - March	18, 2023	3			Sort		
Non, Mar 12	Tue, Mar 13	Wed, Mar 14		Thu, Mar 15		Fri, Mar 16		Sat, Mar 17		Alphabetically	
/ Los Angeles						Tota	l availability:	600 hours - Time o		By consumption	0
erritory Limit 12%	Territory Limit 12	No Territo	ry Limit	Territory Limit	47%	No Territory	Linit	Territory Limit	130%	Territory Limit	-
omputer Repairs 150%	Breakfix 7	3% Car Repairs	64%	Breakfix	12%	Car Repairs	27%	New Installs	82%	Breakfix	
Maintenance 14%	Check-In 4	3% Check-In	140%	Car Repairs	180%	Cleaning	115%	Rewire	34%	Maintenance	1
lew Installs 82%	Cleaning 3	8% Maintenance	4%	Computer Repairs	24%	Check-In	53%			New installs	
romotion 88%	Computer Repairs 8	5% New Installs	92%	New Installs	61%	New Installs	49%			Promotion	
	Maintenance 8	2% Rewire	38%	Promotion	28%						
	Promotion	2%		Rewire	75%						
Tel Aviv						Total	availability: 1	000 hours - Time o	onsumed by	y limited workstream	s: 400
New York								00 hours + Time co			

# View Workforce Availability in the Work Capacity Dashboard

The dashboard includes two reports related to work capacity availability.

### Total Availability by Day

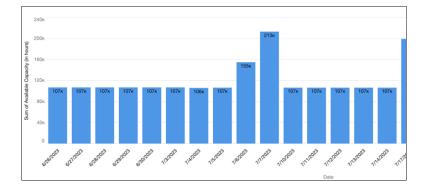
Use the report to:

- See how many available hours your workforce has each day in all service territories.
- Identify trends and seasonal behavior by analyzing historical availability.
- Ensure your workforce has the required work capacity by using future predictions.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

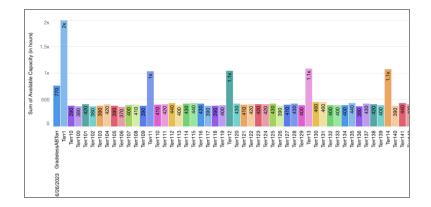
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



### Availability by Service Territory

Use the report to:

- See how many available hours your workforce has in each service territory on specific dates.
- Compare the workforce availability across different Service Territories.



#### SEE ALSO:

#### Build a Dashboard

# Work Capacity Considerations and Limitations

When you set up work capacity, there are some considerations and limitations to keep in mind.

### Considerations

- To let dispatchers update service appointments, share the work capacity object records with users according to the service territories they're permitted to access.
- You can set work capacity limits (WCLs) only according to a unique service appointment attribute, optionally with different attribute values. For example, if you create a work capacity limit with the Work Type attribute and the Breakfix value, you can only create additional limits with the Work Type attribute and the Break Fix value or a different value of the Work Type attribute (for example, Maintenance).
- Only these service appointment field types are supported: Number (int, double), Text (string), Checkbox, Picklist, and Lookup.
- When a lookup attribute value of a derived service appointment changes as a result of a change in the service appointment's parent entity, the relevant consumption instance isn't updated.
- Concurrent WCL activation and service appointment updates can cause consumption miscalculations. Activate WCLs during times when fewer service appointment updates occur.
- The travel time calculated for an overnight service appointment is added to consumption the day the service appointment starts.
- Days with zero consumption are shown only if the consumption was previously calculated to be nonzero.
- The availability service considers the default policy set in Field Service Settings Dispatcher Console UI. Suppose the default policy has a Service Resource Availability work rule with a travel from home and a travel to home value of 2 hours each. In that case, the availability calculation adds 4 hours to the availability of each resource.

### Limitations

- Consumption calculation doesn't support these features:
  - Multiday work.
  - Service appointments longer than 24 hours.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

- When Allow definition of work capacity limits is turned off in the admin settings, WCL and WCU data is still saved in Field Service but isn't accessible to users. To maintain data integrity, disable all active WCLs before turning off this setting, and enable them after the setting is turned on.
- Records of work capacity usage are limited to 2,500 per day.
- You can define Work Capacity Limits (WCLs) by hours or percentage. If you define the work capacity limit by percentage but the availability can't be calculated (for example, because of a long time horizon), the limit in hours can't be calculated and isn't shown in the Summary view. Because the services (for example, appointment booking) use the hours limit, the limit can't be enforced.
- The Limit, Usage, and Availability tabs accessed from Work Capacity via the Work Capacity tab show only 30 records and can't be filtered or searched. Go to the out-of-the-box list views to see the full list.
- Don't change the limitation units. If needed create another WCL.
- You can edit and save the out-of-the-box reports or use the Save as option and create a customized report.
- Special characters aren't supported for service appointment field values when the service appointment field is of a string data type.
- Profiles created in Summer '23 and later have full access to the out-of-the-box Work Capacity Limit object. Reduce the access permissions of users with these profiles if they're not needed.
- Restoring the Work Capacity Limit and Work Capacity Usage objects isn't supported.
- If the availability of a WCA record is reduced to zero (for example, if all resources were deactivated), the availability calculation job doesn't update the record's availability value. Scheduling-related services aren't affected because the resources aren't available.
- If a service resource included in availability calculations has one or more secondary service territory memberships, but no primary service territory membership, the availability calculation fails.

# What's Available in Enhanced Scheduling and Optimization

Review some highlights of the Field Service Enhanced Scheduling and Optimization engine. The Enhanced Scheduling and Optimization engine includes innovative capabilities.

Feature	Description
Activity Reports (Beta)	Easily monitor the activities and processes that you initiate in your Salesforce org. Generate an activity report for a specific request type and easily identify whether it succeeded or failed. For example, generate a report on a Global Optimization request that failed. The report output details the reasons for the failure, allowing you to take action and troubleshoot the issue quickly.
Appointment Insights (Beta)	Helps you understand why service appointments can't be scheduled and shows what changes you can make to qualify more time slots and candidates for scheduling.
Enhanced Optimization per Territory	Enables you to deploy enhanced scheduling and optimization at the territory level. Define for each territory whether to use Enhanced Scheduling and Optimization. By moving the territories with simpler scheduling scenarios to use Enhanced Scheduling and Optimization, you keep the more complex scenarios for later releases, when all the service territory features are supported. This gradual rollout reduces risk and provides focused support to those territories where the new functionality has been enabled.

### EDITIONS

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

Feature	Description
Fix Schedule Overlaps Automated Flow (Beta)	Addresses what happens to your schedule during resource schedule optimization to resolve schedule overlaps that occur due to an appointment ending late. Use the flow template recommendations or adjust the template to suit your specific use case.
Flexible Breaks	Add multiple breaks to availability-based work rules. Flexible break times are calculated at the start of each work day. Set a break duration and a time window for when the break must occur relative to the start of the resource's day. Optimization can then schedule appointments and break times.
Holiday Management	Account for holiday closures. Refine your working hours by updating operating hours so that service appointments aren't scheduled on holidays.
Keep Scheduled	Keep service appointments with certain values on the schedule. During optimization, or when scheduling or booking appointments, these service appointments aren't dropped and can be moved to a different time slot or service resource.
Offsite Appointments	Indicates whether an appointment can be done remotely, with no travel time added to the schedule. For example, work such as remote technical assistance, filling out reports, or renewal of health and safety certification can be done from anywhere.
Optimization Hub	Shows the improvements that optimization makes to the scheduling of service appointments across multiple territories in one unified hub.
Optimization Request Files (Beta)	Quickly retrieve the request and response files of an optimization request. Review the files in a JSON file format to find out what happened to a specific request and to resolve related issues.
Optimization Request Owner	Shows which user who initiated the global, in-day, or resource schedule optimization request or who configured the scheduled job. The Owner field in the optimization request lets service managers easily identify the user involved, providing insights into scheduling and optimization actions. This functionality facilitates system tracking, troubleshooting, and traceability.
Same Site Objective	Ensures that a minimal number of mobile workers visit the same location by having the optimization services group service appointments located at the same site. Use the Same Site service objective to prefer that jobs get scheduled together while considering all other objectives and KPIs.
Schedule Across Multiple Time Zones	Add operating hours on secondary service territories in various time zones to maximize resource availability. For example, a mobile worker can service adjacent cities in different time zones. Or, a service resource can provide technical assistance from a call center to New York, Tel Aviv, London, and Sydney.
Scheduled Jobs	Enables you to better manage the volume of your optimization runs by setting up scheduled jobs that run separately for defined groups of service territories. Scheduled jobs gives you more control over when and how often a job runs. To avoid setting up overlapping optimization requests when you're using enhanced scheduled jobs, make sure <b>Enable optimization overlaps prevention</b> is selected in Field Service Settings.
Service Appointment Sliding	Enables you to free up time for a new service appointment when using appointment booking and scheduling operations. Service appointments on the Gantt can move for the same resource to an earlier or later time, within the resource's shift.

Feature	Description
Service Appointment Reshuffling and Support for High-Over-Low Prioritization	Enables you to free up time for a new service appointment when using appointment booking and scheduling operations. Service appointments on the Gantt can move to an earlier or later time for the same resource within the resource's shift, to another day for the same resource, or to a different resource. In addition, when <b>Schedule over lower priority appointment</b> is selected on the service appointment, a lower or equal priority appointment can be dropped from the Gantt.
Skill Preference Objective	Identifies the best-qualified candidates when optimizing your schedule. Use the Skill Preference service objective to find candidates with a skill of a certain skill type that reflects the service appointment's skill preferences. For example, a service appointment requires a caregiver who speaks English or Spanish but the preferred choice is Spanish.
Travel Modes	Enhances predictive travel by providing more accurate travel time predictions and improving the completion rate of service appointments. By leveraging different types of travel modes, admins define the travel mode per territory, per primary service territory member, or both, to reflect transportation type (car, light truck, heavy truck, bicycle, or walking), the use of toll roads, and hazmat considerations.
Travel Time Buffer	Adds a buffer to your estimated travel time to account for additional arrival time considerations like unloading technical gear, walking time in a building complex, or finding parking. You can define this at the org and territorial levels.
Work Capacity Limits	Control the work performed by your workforce according to dynamic company priorities. Limit the number of hours or percentage of the available work capacity on certain days for specific service territories according to the value of a specific service appointment attribute.

Review the scheduling and optimization services available with Enhanced Scheduling and Optimization.

Note: These tables list only the main services and features available in Enhanced Scheduling and Optimization. Features listed as unavailable are on the roadmap for later releases.

# Scheduling and Optimization Services

Scheduling and optimization includes services used to create, schedule, reschedule, and unschedule service appointments.

Scheduling Services

Feature	Available	Not Yet Available	Notes
Appointment Booking	~		• The Objective Calculation explanation is missing.
Bulk Schedule	<		
Drag & Drop	<		
Emergency Wizard	*		

Feature	Available	Not Yet Available	Notes
Get Candidates	~		• The Objective Calculation explanation is missing.
Keep Scheduled	~		
Reshuffle	~		• Available for scheduling and appointment booking.
Schedule	~		
Schedule over lower priority appointment	~		

#### Dynamic Gantt

Feature	Available	Not Yet Available	Notes
Fill-in Schedule		✓	
Fix Overlaps		~	
Group Nearby		<b>v</b>	

#### **Optimization Services**

Optimization services improve schedule quality by fixing non pinned rule-violating service appointments. If no valid schedule for these appointments exists, these service appointments are unscheduled at the end of the optimization process. Pinned service appointments remain in place during optimization.

Feature	Available	Not Yet Available	Notes
Global optimization	<b>v</b>		
In-day optimization	<b>v</b>		
Resource Schedule Optimization (RSO)	<b>v</b>		
Scheduling recipes		*	• The Fix Schedule Overlaps automated flow (beta) replaces scheduling recipes when using Enhanced Scheduling and Optimization to resolve overlaps that occur when a mobile worker finishes an appointment late.

#### Transparency Services

Feature	Available	Not Yet Available	Notes
Activity Reports (Beta)	<b>v</b>		
Appointment Insights (Beta)	~		
Optimization Hub	<b>v</b>		
Optimization Request Files (Beta)	<		

# Work Rules

Work rules refine the list of candidates for a service appointment by rejecting service resources that don't match the rule. Add work rules to a scheduling policy to guide schedule optimization.

Feature	Available	Not Yet Available	Notes
Count Rule			<ul> <li>Complex work is supported with the Count work rule.</li> <li>You can use the Count work rule with relevance groups that consist of service territory members and with relevance groups that are based on service appointments.</li> <li>If you use the Count work rule on a custom field, the limitation considers the order of scheduled appointments, ensuring that your workers don't exceed the set limit at any point throughout the day. For example, you have a custom field that checks the capacity of your workers' vehicle, and the Count work rule is set to 10. Throughout the day, a driver picks up five units, picks up another eight units, and then drops off four units. The Count work rule registers this violation on the second service appointments that day. The total count value at any time during the day can't be negative.</li> <li>Shifts spanning over midnight aren't supported. For example, a nurse has a shift that starts on Monday at 5 PM and ends on Tuesday at 5 AM, and the Count work rule is set to 10 service appointments per day. The nurse</li> </ul>
			completes 8 service appointments on Monday and another 5 service appointments on Tuesday. Even though the nurse completed under 10 service appointments each day, the Count work rule recognizes it as 13 service

Feature	Available	Not Yet Available	Notes
			appointments, which currently violates the rule.
Designated Work (shifts and time slots)	<b>v</b>		
Excluded Resources	<		
Extended Match	*		• Performance and schedule quality can be affected while using time-phased Extended Match in global optimization.
Match Boolean	~		
Match Fields	<b>v</b>		
Match Skills	<b>~</b>		
Match Territory	~		• Scheduling outside working hours can result in a rule violation.
Match Time	~		• Check Rules doesn't distinguish which time rule led to a violation.
Maximum Travel from Home	~		
Overtime	*		• Overtime is supported only after a shift. Overtime during a shift is considered part of regular working hours.
Required Resources	~		
Service Crew Resources Availability	*		
Service Resource Availability	*		<ul> <li>You must include a Service Resource Availability rule in the scheduling policy.</li> <li>Endless travel at the expense of the resource isn't supported, so you can't leave the Travel From Home or Travel To Home fields empty.</li> <li>When two separate working shifts or time slots are defined for a service resource, these shifts or time slots are considered unified during the scheduling and optimization process if the time between them is 1 minute. To define two separate shifts or time slots per resource, the time between the shifts or time slots must be greater than 1 minute. For example, define a night shift by using operating hours as 9:00 PM until 11:59 PM on Monday and 12:00 AM until</li> </ul>

Feature	Available	Not Yet Available	Notes
			<ul> <li>6:00 AM Tuesday, as these hours are unified for a continuous night shift.</li> <li>When the travel time of a service appointment overlaps with another service appointment, a rule violation is shown only for the appointment with the overlapping travel time.</li> </ul>
Service Resource Availability - Flexible Breaks	~		• A limit of up to three breaks applies.
Visiting Hours	<		
Working Territories (for secondary territories)	~		• Scheduling outside working hours can result in a rule violation.

# Service Objectives

A service objective is a scheduling goal or target. You can weigh service objectives to prioritize one over another. Each appointment assignment has a score of 0 to 100 for each service objective based on how fully the objective is met. The highest-scoring assignments are preferred. A scheduling policy can have one or more service objectives.

Feature	Available	Not Yet Available	Notes
Custom Objects		~	
Minimize Overtime	*		• Relevance groups are supported based on service territory members only. You can't select to apply the Minimize Overtime service objective only for specific service appointments.
Minimize Travel	*		<ul> <li>Relevance groups are supported based on service territory members only. You can't select to apply the Minimize Travel service objective only for specific service appointments.</li> <li>The Exclude Home Base Travel option isn't supported by Enhanced Scheduling and Optimization.</li> </ul>
Preferred Resource	✓		
Resource Priority	~		
Same Site	~		

Feature	Available	Not Yet Available	Notes
Schedule ASAP	~		• Relevance groups are supported based on service appointment definitions only. You can't select to apply the Schedule ASAP service objective only when scheduling to specific resources.
Service Appointment Priority (nonconfigurable objective)	*		
Skill Level	~		
Skill Preference	~		

# Resource and Service Types

Several types of service resources and service appointments are available in Field Service.

Feature	Available	Not Yet Available	Notes
Capacity-based resource	<b>~</b>		
Complex work	~		
Crews	~		
Individual service resources	~		
Multiday work	*		<ul> <li>Multiday scheduling is supported in all Enhanced Scheduling and Optimization services except Appointment Booking.</li> <li>Lunch breaks are shown on the Gantt as an overlap with the multiday service appointment when using Enhanced Scheduling and Optimization.</li> <li>Multiday work doesn't support visiting hours when using Enhanced Scheduling and Optimization.</li> </ul>
Resource Efficiency	*		• Resource efficiency is rounded up when using Enhanced Scheduling and Optimization.
Standard service appointments	~		

#### SEE ALSO:

Get Started with Schedule Automation and Optimization in Field Service Adopt and Implement Field Service Enhanced Scheduling and Optimization Set Up Enhanced Optimization for Field Service Territories 

# Enable Enhanced Scheduling and Optimization

USER PERMISSIONS	
To enable Field Service:	Customize Application
To install the Field Service managed package:	Customize Application
To assign a permission set license:	Manage Users
To create a permission set:	Manage Profiles and Permission Sets
To enable Enhanced Scheduling and Optimization:	Customize Application

# **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: Enterprise, Unlimited, and Developer **Editions** 

Enhanced Scheduling and Optimization must be enabled to start using its features. As of Summer '23, new Salesforce orgs have Enhanced Scheduling and Optimization enabled by default for all service territories. Existing orgs can opt in and enable the enhanced engine for all or selected service territories. The enhanced engine is an improvement of the optimization functionality and associated manual and semiautomatic scheduling services you've been using. The enhanced architecture and services are more efficient and improve scalability, performance, and schedule quality. Make sure you examine the Enhanced Scheduling and Optimization considerations and limitations before using the enhanced engine.

🜐 This is a Field Service managed package feature.

Make sure that you meet these requirements.

- Field Service is enabled. •
- The latest version of the Salesforce Field Service managed package is installed.

Note: Enhanced Scheduling and Optimization uses point-to-point predictive routing regardless of the travel time calculation preferences set in the Routing section of Field Service Settings.

- 1. From Setup, in the Quick Find box, enter Field Service, and then select Field Service Settings.
- 2. Select Field Service Enhanced Scheduling and Optimization and then save your changes.

Note: Turning on Field Service Enhanced Scheduling and Optimization also turns on Field Service Integration.

Field Service Settings	
Field Service To get started, see Set Up Field Service.	
Sharing Share dispatched service appointments	with their assigned resources 0
Field Service Integration  Permissions to access data needed for o appointment bundling.  Field Service Enhanced Scheduling	ptimization, automatic scheduling, and service and Optimization
Use enhanced scheduling and optimizati  Appointment Assistant	on. O
Enable Appointment Assistant through Exp Appointment Assistant Status Update	rrience Cloud Sites
The value that prompts the first event for Ap Status Select an Option	pointment Assistant.
Appointment Assistant ETA URL Paste the Site URL to enable Appointment As Site URL	isistant.
Paste Site URL	

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

Orgs existing prior to Summer '23 can enable Enhanced Scheduling and Optimization for all or selected service territories. Enhanced Scheduling and Optimization is backward compatible so your existing implementations remain in place after you enable it.

#### Considerations for Enhanced Scheduling and Optimization

Before using Enhanced Scheduling and Optimization, make sure you review some considerations.

#### Limits and Limitations for Enhanced Scheduling and Optimization

Learn about the Enhanced Scheduling and Optimization limits and limitations.

#### SEE ALSO:

- Enable Field Service
- Install the Field Service Managed Package
- Assign Field Service Permissions
- Create Field Service Permission Sets
- Set Up Enhanced Optimization for Field Service Territories
- Set Up Routing for Travel Time Calculations
- Transition to Enhanced Scheduling and Optimization

# What's the Fate of Older Salesforce Customizations?

Orgs existing prior to Summer '23 can enable Enhanced Scheduling and Optimization for all or selected service territories. Enhanced Scheduling and Optimization is backward compatible so your existing implementations remain in place after you enable it.

If you're scheduling work using Queueable Apex, use the Database.AllowsCallouts annotation for the Enhanced Scheduling and Optimization engine. If you don't include this annotation, the request causes an exception. See Queueable Apex: More Than an @future.

Enhanced Scheduling and Optimization uses processes and information that aren't locally primed. A callout is used to trigger a requested service and retrieve information. If DML occurs before the callout, it causes an exception, for example, an uncommitted work pending error. To avoid an exception, ensure that DML is completed in a separate DML transaction.

# Considerations for Enhanced Scheduling and Optimization

Before using Enhanced Scheduling and Optimization, make sure you review some considerations.

🜐 This is a Field Service managed package feature.

These considerations highlight the differences in functionality between the older scheduling engine and Enhanced Scheduling and Optimization.

**Note:** Consider the differences in the limits and limitations when you're using Enhanced Scheduling and Optimization. For details on additional Enhanced Scheduling and Optimization capabilities, see What's Available in Enhanced Scheduling and Optimization .

Feature	CONSIDERATIONS
Activate Field Service schedule optimization	When you're using Enhanced Scheduling and Optimization, this activation isn't required, because Enhanced Scheduling and Optimization uses a Platform Integration User. See Adopt and Implement Field Service Enhanced Scheduling and Optimization for guidance on how to enable Enhanced Scheduling and Optimization.
	Activate Field Service Schedule Optimization.
Apex customizations	What's the Fate of Older Salesforce Customizations?
Avoiding Apex CPU timeouts	Guidelines for Avoiding Apex CPU Timeouts in Field Service
Complex work	Considerations and Limitations for Complex Work
Count work rule	Work Rule Type: Count Rule
Defining capacity-based resources	Define Capacity-Based Resources
Fix overlaps	Manage Field Service Scheduling Overlaps
In-day optimization	The in-day optimizer run-time differs if you're using Enhanced Scheduling and Optimization. Optimize Today's Field Service Schedule

EDITIONS

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

**EDITIONS** 

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

Feature	CONSIDERATIONS
Managing optimization conflicts	Manage Optimization Conflicts
Match Boolean work Rule	When you're using Enhanced Scheduling and Optimization, if the Boolean field on the service resource is empty, the rule isn't applied.
	Work Rule Type: Match Boolean
Match Fields work rule	Match Fields work rules are supported for schedule optimization only when you're using Enhanced Scheduling and Optimization. Also, empty fields are handled differerently if you're using Enhanced Scheduling and Optimization. Work Rule Type: Match Fields
Match Skills work rule	The Match Skills work rule includes an additional Skill Type Logic: At Least One Skill Matches (OR). Work Rule Type: Match Skills
Match Time work rule	Match Time work rules with custom date/time fields are fully supported for schedule optimization only when you're using Enhanced Scheduling and Optimization. Work Rule Type: Match Time Rule
Monitoring the progress of an optimization request	When you view the progress of an optimization request from the Gantt, the percentage completed isn't shown if you're using Enhanced Scheduling and Optimization. Monitor Field Service Schedule Optimization Requests
Multi-day service appointments	Considerations for Multiday Scheduling
Optimization Insights	Optimization Insights isn't available if you're using Enhanced Scheduling and Optimization. Use the Optimization Hub instead.
	Gain Visibility into Optimizations with Field Service Optimization Insights
Optimize Field Service appointments using priorities	Optimize Field Service Appointments Using Priorities
Optimizing rule-violating appointments	When you're not using Enhanced Scheduling and Optimization, rule-violating service appointments can't be optimized. When you're using Enhanced Scheduling and Optimization, the engine can find an acceptable schedule for rule-violating service appointments or drop these appointments from the schedule. Optimization Horizon
Reservet time sots for designated types of work	Reserve Time Slots for Designated Types of Work
Resource absences	Review the travel routing considerations for resource absences with no address. Create Service Resource Absences for Field Service

Feature	CONSIDERATIONS
Resource Schedule Optimization	If you select to only schedule appointments assigned to the service resource, the appointments considered for scheduling during optimization process differ if you're using Enhanced Scheduling and Optimization.
	Optimize a Single Field Service Resource's Schedule
Scheduled optimization jobs	When you set up a scheduled optimization job, the user interface and features differ if you're using Enhanced Scheduling and Optimization.
	Manage Scheduled Jobs in Field Service
Scheduling recipes	Scheduling recipes aren't available when using Enhanced Scheduling and Optimization, which uses the Fix Schedule Overlaps automated flow instead.
	Create Scheduling Recipes for Common Events
Scheduling service crews	When you're using Enhanced Scheduling and Optimization, a minimum crew size of 1 requires a crew, and the skill set considerations differ if you enable resource crew skill grouping.
	Considerations for Scheduling Service Crews
Service appointment fields	Service Appointment Fields for Field Service
Service aAppointment Visiting Hours work rule	Work Rule Type: Service Appointment Visiting Hours
Service Crew Resources Availability work rule	You can define a maximum number of additional service resources when you're using Enhanced Scheduling and Optimization.
	Work Rule Type: Service Crew Resources Availability
Service Resource Availability work rule	Work Rule Type: Service Resource Availability
Service resource efficiency	Resource efficiency is rounded up when you're using Enhanced Scheduling and Optimization.
	Estimate a Service Resource's Efficiency
Service territory operating hours and visiting hours	Guidelines for Creating Operating Hours for Field Service
Travel calculations	Set Up Routing for Travel Time Calculations
Travel mode in the dispatcher console map	You can view a service resource's travel profile in the map's route details pane in the dispatcher console if you're using Enhanced Scheduling and Optimization.
	View a Field Service Resource's Daily Travel Route
Travel time on the Gantt	Travel time to the next appointment is shown on the Gantt before the lunch break.
Using priorities when booking and scheduling appointments	Schedule Appointments Using Priorities

Feature	CONSIDERATIONS
Using relevance groups in work rules and service objectives	Support for relevance groups can be different if you're using Enhanced Scheduling and Optimization.
	Create Relevance Groups

SEE ALSO:

Field Service Limits and Limitations

Limits and Limitations for Enhanced Scheduling and Optimization

# Limits and Limitations for Enhanced Scheduling and Optimization

Learn about the Enhanced Scheduling and Optimization limits and limitations.

🜐 This is a Field Service managed package feature.

## Platform Limits Affecting Field Service

One of the main benefits of using Enhanced Scheduling and Optimization is fewer limitations, as seen when comparing engine limits side by side.

	Optimization	Scheduling and Optimization
Maximum number of Apex classes scheduled concurrently (Scheduled Jobs)	100	100, but you're not likely to reach this limit because you can configure many optimization runs per scheduled job. Each job consumes one Apex scheduled job. See Manage Scheduled Jobs in Field Service. See Manage Scheduled Jobs in Field Service.         Mote: If you set up a recurring schedule that runs every x minutes, multiple Apex scheduled jobs are created accordingly. For example, if you

# EDITIONS

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

Limit	Scheduling and Optimization	Enhanced Scheduling and Optimization
		set it up to recur every 15 minutes, this is counted as 4 Apex scheduled jobs.
Number of synchronous concurrent transactions for long-running transactions that last longer than 5 seconds for each org	10	Not applicable
Apex batch job executing in parallel	5	Not applicable
Maximum service appointments optimized per rolling 24 hours	50,000 Only global, in-day, and resource schedule optimization requests count toward this limit.	The limit is the greater of 50,000 or 500 per Field Service Scheduling licence. All types of scheduling actions count toward this limit, for example, Gantt scheduling, get candidates, appointment booking, and global, in-day, and resource scheduling optimization request types.
		Nonoptimization scheduling actions, for example, the Schedule action, contribute only one toward this count (the appointment that's being scheduled).
Maximum skills per service resource	100	250

### Limitations

Before using Enhanced Scheduling and Optimization, make sure you review some limitations.

Note: Enhanced Scheduling and Optimization uses processes and information that aren't locally primed. A callout is used to trigger a requested service and retrieve information. If DML occurs before the callout, it causes an exception, for example, an Uncommitted Work Pending error. To avoid an exception, ensure that DML is completed in a separate transaction.

#### Separate DML Transactions

Callouts aren't permitted when an uncommitted transaction is pending. When you're retrieving available time slots or scheduling an appointment, if a DML statement was executed before the service is called, an exception is raised. You must first commit or roll back before calling out.

This exception is also raised when you use the standard engine and not Enhanced Scheduling and Optimization, specifically when a callout occurs to calculate travel time and either street-level routing or point-to-point predictive routing is enabled. In this scenario, the exception isn't raised when Avoid aerial calculation upon callout DML exception is disabled in the Field Service Settings, because travel time reverts to aerial routing calculation. This setting isn't relevant when you're using Enhanced Scheduling and Optimization, because a callout is always performed.

You can avoid the exception.

- Perform any required DML operations in a separate transaction before calling Enhanced Scheduling and Optimization. Consider creating an Apex REST API endpoint that performs the DML operations, which can be called from Apex code.
- Utilize a flow, performing the DML operations in the steps before calling Enhanced Scheduling and Optimization as an invocable action. The action element has advanced settings that allow you to configure the action to be executed as part of a new transaction. These settings aren't supported for autolaunched flows.

See Splitting transactions to enable the use of Enhanced Scheduling and Optimization.

#### Scheduling and Optimization

• The Objective Calculation explanation is missing for Get Candidates and Appointment Booking.

Daniel Rogers 2. options	100/100		
Wed, May 5, 2021 9:00 AM	Schedule 0/100		
ASAP Invalid date			
Minimize Travel	-		

- Scheduling a service appointment outside of a resource's working hours using drag and drop results in a rule violation. Travel time to and from the service appointment isn't calculated, and other rules aren't validated.
- Travel time to and from a resource absence created outside of a resource's working hours isn't calculated.
- Scheduling a service appointment partially outside working hours can result in a Match Territory rule violation.
- Scheduling over a lower-priority appointment isn't supported by Enhanced Scheduling and Optimization.
- When all the service appointments for a day are optimized and then unscheduled, utilization isn't shown accurately on the Gantt. Utilization is updated again when appointments are scheduled.
- The Calculate travel and breaks option in the Routing section of Field Service Setting isn't supported. Enhanced Scheduling and Optimization always calculates travel time and breaks.
- The Objects Scheduled field of the optimization request isn't populated when you're using Enhanced Scheduling and Optimization. However, the Scheduled Service Appointments data field is populated in the Scheduled Service Appointments section of the Optimization Hub.
- If you have an implementation that uses resource efficiencies, enhanced optimization can result in overlaps if service appointments are pinned, or unscheduling of appointments if unpinned (since there isn't enough space in the schedule). This is because Enhanced Scheduling and Optimization rounds up the service appointment duration.
- Enhanced Scheduling and Optimization can't schedule a service appointment exactly at the start time of a lunch break (the time set in the Break Start field in the Resource Availability work rule). When you're using Appointment Booking, the scheduling engine doesn't return this time slot, and when you manually schedule the service appointment on the Gantt, the appointment overlaps with the lunch break. We recommend that you schedule the service appointment for a minute before or after the break start. For Appointment Booking, set the time slot in the Appointment Booking operating hours to start a minute before or after the break.
- During optimization, trigger results are updated in a batch with a maximum CPU time of 60 seconds, because the transition is asynchronous. When using Enhanced Scheduling and Optimization, this CPU time is reduced to 10 seconds, because the transaction is synchronous. To improve the trigger performance, optimize the logic developed in Apex Triggers on the Service Appointment and Resource Absence object. Consider moving logic to run as part of an asynchronous process, for example, Queueable Apex. Contact Salesforce Customer Support to optimize the batch size that is used to write the results back to Salesforce.
- A scheduled path in a record-triggered flow doesn't always work with optimization when Enhanced Scheduling and Optimization is enabled. In this case, the optimization updates are done by the platform integration user who has a session-based permission set that isn't active during the scheduled path's execution. To grant this user the necessary permission, clone the Field Service Integration

permission set, disable the Session Activation Required option, and then save. Then assign this permission set to the platform integration user. You can add more permission sets to this user if it's necessary.

- Enhanced Scheduling and Optimization uses the Platform Integration User, which uses the Cloud Integration User license. Some of
  your customizations and product OOTB features can be impacted due to this limitation. You must add all the custom fields used in
  rules and objectives to the Field Service Integration permission set before you assign the rule or objective to a scheduling policy.
  We recommend you check that all your customizations and product OOTB features have the required access and are working as
  designed. Add permissions to the Platform Integration User as required. When using Calendar sync with Enhanced Scheduling and
  Optimization enabled, Dispatched service appointments must be in a pinned status.
- 24-hour operating hours coverage isn't supported for mobile workers.
- If you're using Enhanced Scheduling and Optimization, when service resource efficiencies are used and applied to the duration of the service appointment assignment, the engine rounds up duration values to the nearest minute. If you're not using Enhanced Scheduling and Optimization, the engine rounds down to the nearest minute.
- When you create or modify resource absences or modify scheduled service appointments, the horizon of the request is limited to 30 days. For example, if you create a resource absence in February and a resource absence in April in the same transaction, travel time and lunch breaks aren't created or updated.
- If a dispatcher manually schedules a service appointment or resource absence during an overlapping time, and the remaining time isn't long enough for the actual travel to or from home, no appointments can be scheduled for the resource for that day.
- If the engine schedules a lunch break after a service appointment, and you manually schedule another service appointment where the travel time overlaps with the lunch break, the lunch break moves to the earliest start time and overlaps with the travel time. The rule violation is shown on the service appointment that you manually scheduled causing the violation, and not on the service appointment that overlaps with the break.
- The maximum number of service territories you can select for a group (per request) for enhanced scheduled jobs is 200.
- Enhanced Scheduling and Optimization doesn't properly handle multiday work that starts or ends during nonworking hours at a time when travel at the resource's expense is allowed. Such cases can result in incorrect overlapping violations and inaccurate travel times.

Service Appointments and Service Resources

- When two working shifts or time slots are defined for a resource on the same day, each shift or time slot is considered as if it's a different "day", such that it includes the resource traveling to and from the home base.
- Snapping (scheduling using ctrl/cmd + drag and drop) a service appointment to a resource absence isn't supported and doesn't change the schedule.
- When manually scheduling a multiday service appointment using drag and drop, the scheduled start time must be within a valid timeframe for the duration to be calculated correctly. For example, if the multiday service appointment is scheduled to start when the service resource isn't available (during a non-availability shift, resource absence, or lunch break), then the multiday service appointment duration isn't calculated accurately to account only for working hours.
- The combination of multiday scheduling and complex work isn't supported. If a multiday service appointment is part of a scheduling dependency, its scheduled end date isn't calculated when the appointment is scheduled.
- When using Enhanced Scheduling and Optimization, utilization on the Gantt doesn't consider multiday service appointments.

#### SEE ALSO:

Field Service Limits and Limitations

# Set Up Enhanced Optimization for Field Service Territories

As of Summer '23 new Salesforce orgs have Enhanced Scheduling and Optimization enabled for all service territories. Existing orgs can switch to use Enhanced Scheduling and Optimization for all service territories or per territory. Enhanced Optimization per Territory enables you to deploy Enhanced Scheduling and Optimization only on selected territories, for example, territories with simpler scheduling scenarios. This gradual rollout lets you keep the more complex scheduling scenarios for later releases, when all the service territory features are supported.

# 🜐 This is a Field Service managed package feature.

To enable all service territories to use Enhanced Scheduling and Optimization, in Field Service Settings, select **Scheduling > General Logic** and then select **Use enhanced scheduling and optimization for all service territories**.

Use Enhanced Scheduling and Optimization when service appointments or service resources don't have an associated service territory. In Field Service Settings, select **Scheduling > General Logic** and then check that **Use enhanced scheduling and optimization when there isn't an associated service territory** is enabled.

Note: All service appointment territories and service resource territories within the same optimization request, bulk schedule action, or any batch process that updates service appoinments, must use the same optimization engine. A notification is shown when you're running bulk operations such as global optimization with different territory optimization settings, because it can't be determined which optimization engine to use.

Before you set up Enhanced Optimization per Territory, make sure that you meet these requirements.

- Field Service is enabled.
- The latest version of the Salesforce Field Service managed package is installed.
- Enhanced Scheduling and Optimization is enabled.

The operation you're performing determines the selected optimization engine.

- For service appointment operations (Drag and Drop, Get Candidates, Schedule, Unschedule, and Check Rules), the associated territory of the appointment determines the optimization engine.
- For global optimization operations, the selected territory determines the optimization engine.
- For resource absence operations (Drag and Drop, create new, and delete), the resource's associated territory member determines the optimization engine.

#### Configure Enhanced Optimization per Territory

Configure your Enhanced Optimization per Territory settings and assign user permissions.

Limitations for Enhanced Optimization per Territory

All Limits and Limitations for Enhanced Scheduling and Optimization apply to Enhanced Optimization per Territory.

SEE ALSO:

Get Ready for Field Service Scheduling and Optimization Enable Enhanced Scheduling and Optimization Transition to Enhanced Scheduling and Optimization

# **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

#### USER PERMISSIONS

To enable Enhanced Optimization Per Territory:

Customize Application

# Configure Enhanced Optimization per Territory

Configure your Enhanced Optimization per Territory settings and assign user permissions.

- This is a Field Service managed package feature.
- From Setup, in the Quick Find box, enter *Object Manager*, and then select **Object** Manager. Next, click Service Territory, and then scroll to the Page Layouts section.
- 2. Click Page Layouts, and then click SFS Service Territory Layout.
- 3. Click Edit.
- **4.** Drag the **Use enhanced scheduling and optimization** field to the page layout, and then save your changes.
- 5. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Service Territories** tab.
- 6. Click the service territory name for which you want to enable enhanced optimization.
- 7. Select Use enhanced scheduling and optimization.
- 8. When you're using the Enhanced Scheduling and Optimization engine, the way a schedule is built can differ from how a schedule is built when you aren't using this engine. To avoid misalignments in the schedule due to scheduling with different engines, pin the service appointments scheduled for the next day, and then unschedule all appointments from the following day onwards so that the Gantt is empty.
- 9. Run optimization using the enhanced optimization engine, or reschedule all service appointments.
  - Note: We recommend unscheduling and rescheduling the service appointments during off-hours to avoid the possibility of double-booking.

#### SEE ALSO:

Limits and Limitations for Enhanced Scheduling and Optimization Limitations for Enhanced Optimization per Territory Set Up and Run Enhanced Optimization Jobs Transition to Enhanced Scheduling and Optimization

# Limitations for Enhanced Optimization per Territory

All Limits and Limitations for Enhanced Scheduling and Optimization apply to Enhanced Optimization per Territory.

### 🜐 This is a Field Service managed package feature.

Consider these limitations when **Use enhanced scheduling and optimization for all service territories** is disabled in the Field Service Settings and only selected territories are using Enhanced Scheduling and Optimization.

• All service appointment territories and service resource territories within the same optimization request, bulk schedule action, or any batch process that updates service appointments, must use the same optimization engine. A notification is shown when you're running bulk operations such as global optimization with different territory optimization settings, because it can't be determined which optimization engine to use.

### **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

### USER PERMISSIONS

To enable Enhanced Optimization Per Territory:

Customize Application

# **EDITIONS**

Available in: Available in Lightning Experience and Salesforce Classic in these editions where Field Service is enabled: **Enterprise**, **Unlimited**, and **Developer** Editions

- If there are customizations that update these fields in a single process or transaction, all the service appointments within that process must be associated with service territories configured to use the same optimization engine: ServiceAppointment.SchedStartTime, ServiceAppointment.SchedEndTime, and AssignedResource.ServiceResource.
- Service appointments assigned in territories enabled for Enhanced Scheduling and Optimization can be scheduled only to resources whose primary territory is also enabled to use Enhanced Scheduling and Optimization.
- Resources with multiple primary territories, where each territory is set for a different date, must have all territories assigned to the • same optimization engine.

#### SEE ALSO:

Limits and Limitations for Enhanced Scheduling and Optimization Set Up Enhanced Optimization for Field Service Territories

# Field Service Scheduling and Optimization Solutions

Salesforce Field Service is used by a wide variety of customers across many industries. The tasks and activities that you do can vary significantly depending on your industry, business model, and service operations model. At Salesforce, we relate your core business objectives, needs, and user workflows to a job you need to do. The jobs framework helps us understand what customers want to achieve by focusing on their needs and how the product or service can address them. The use cases identify the core job, large or small, that a user must perform, solve, or complete to succeed. Review the different use cases, understand what industries they're most common in, and learn about the scheduling and optimization features and solutions Field Service offers to solve them.

🜐 This is a Field Service managed package feature.

Note: These are some common workforce and scheduling-related jobs and use cases that are essential for Field Service to support your core business objectives. We've identified the industries that these use cases typically apply to, but they can also be used in other industries that aren't listed in the Industries Categories.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When setting up your workforce, consider your main jobs and the related jobs. Your main job is the core task that you want to achieve. The related jobs are supplementary tasks that enhance your overall experience and make you more successful.

#### Represent My Workforce in Field Service

To effectively schedule, track, and maintain service appointments, you must first set up your workforce and various types of workers as service resources in Field Service.

#### Define Which Field Service Resources Perform Work and Where

Configure Field Service to make sure that your workforce is scheduled only for appointments they're qualified to perform, based on their expertise, supported work types, and relevant geographies or lines of business.

#### Define When Field Service Resources Perform Work

Like any worker, Field Service resources have specific days and hours that they're available for work, and times they are unavailable. Learn how to configure workforce availability to make sure your service resources are assigned work only when they're available.

#### Define Field Service Work

Define the various types of work and their details—such as duration, due date, and job requirements—in Field Service to schedule and execute work efficiently and effectively.

#### Manage the Field Service Schedule

Learn how to create schedules for your workforce, and manage them when unexpected events occur. Discover the tools that Field Service provides to help you create optimal schedules that fit your business constraints and goals.

# Represent My Workforce in Field Service

To effectively schedule, track, and maintain service appointments, you must first set up your workforce and various types of workers as service resources in Field Service.

🜐 This is a Field Service managed package feature.

Consider these related jobs when setting up your workforce.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Make my capacity-based resources (contractors) available for scheduling.	Set Up Field Service in Experience Cloud Sites Define Capacity-Based Resources Create Service Resources for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Make service resources available for scheduling.	Create Service Resources for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> </ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

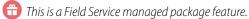
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			<ul> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Make equipment and assets available for scheduling.	Create Service Resources for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Make sure service resources who work together are scheduled as a group (crews).	Set Up Crew Management Create Service Crews Create Service Resources for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			<ul> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>

# Define Which Field Service Resources Perform Work and Where

Configure Field Service to make sure that your workforce is scheduled only for appointments they're qualified to perform, based on their expertise, supported work types, and relevant geographies or lines of business.



Consider these related jobs when setting up your workforce.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Define my workforce structure by business units and geographies.	Create Service Territories for Field Service Enable Map Polygons in Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Define which workforce members of my workforce can be assigned certain work based on skills, qualifications, and expertise.	Create Skills for Field Service Work Rule Type: Match Skills Work Rule Type: Extended Match	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>

# Define When Field Service Resources Perform Work

Like any worker, Field Service resources have specific days and hours that they're available for work, and times they are unavailable. Learn how to configure workforce availability to make sure your service resources are assigned work only when they're available.

(f) This is a Field Service managed package feature.

Consider these related jobs when setting up your workforce.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Define standard hours that a service resource can be scheduled work.	Create Operating Hours for Field Service Guidelines for Creating Operating Hours for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> </ul>

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Define nonstandard hours that a service resource can be scheduled work.	Manage Field Service Shifts	Admin	<ul> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and</li> </ul>
Prevent service resources from being assigned work when they're not supposed to work, for example, during a public holiday.	Add Holidays to Operating Hours Work with Resource Absences Work Rule Entry: Service Resource Availability	Admin	<ul> <li>Hospitality</li> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			• Travel, Transport, and Hospitality

# Define Field Service Work

Define the various types of work and their details—such as duration, due date, and job requirements—in Field Service to schedule and execute work efficiently and effectively.



(f) This is a Field Service managed package feature.

Consider these related jobs when defining Field Service work.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Create work in Field Services and define the work requirements.	Guidelines for Creating Work Types for Field Service Add Required Skills to Work Orders or Work Types for Field Service Work Rule Type: Extended Match	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Define where work occurs and make sure that the service resource travel time is accurately calculated using geolocation information.	Work Rule Type: Extended Match	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> </ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			<ul> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Mark service appointments as offsite so that service resources can perform work remotely.	Schedule Appointments Without Travel	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Specify the duration of the work.	Guidelines for Creating Work Types for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			<ul> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Manage customer SLAs.	Work with Entitlements	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Create work that spans across multiple days.	Enable Multiday Field Service Appointments	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>

# Manage the Field Service Schedule

Learn how to create schedules for your workforce, and manage them when unexpected events occur. Discover the tools that Field Service provides to help you create optimal schedules that fit your business constraints and goals.

(f) This is a Field Service managed package feature.

Consider these related jobs when managing the Field Service schedule.

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Schedule or reschedule a single appointment.	Customize Appointment Booking Settings Enable Service Appointment Sliding Schedule Appointments from the Record Feed	Agent	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Schedule or reschedule a service appointment.	Schedule Appointments from the Record Feed Schedule Appointments from the Dispatcher Console	Dispatcher	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> </ul>

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
	Create Custom Actions for the Field Service Dispatcher Console		<ul><li>Financial Services</li><li>Healthcare and Life Sciences</li></ul>
	Set Custom Permissions for Field Service (Candidates action in the dispatcher console Gantt		<ul> <li>Manufacturing and Automotive</li> <li>Retail and Consume Goods</li> </ul>
	appointment list)		Travel, Transport, an Hospitality
Schedule several service appointments from the dispatcher console.	Schedule Appointments from the Dispatcher Console	Dispatcher	Communication, Media, and Technology
	Create and Manage Map Polygons		<ul><li>Education</li><li>Energy and Utilities</li></ul>
	Manage Field Service Optimization		Engineering and     Construction
	Optimize Today's Field Service Schedule		Healthcare and Life     Sciences
	Optimize a Single Field Service Resource's		Manufacturing and     Automotive
	Schedule		Retail and Consume Goods
			• Travel, Transport, an Hospitality
Schedule work based on priority so that emergency and high-priority appointments get scheduled first.	Schedule Emergency Appointments		Communication, Media, and
Or, optimize appointments using Priorities.	Reshuffle Service		Technology
	Appointments in Field		Education
	Service		Energy and Utilities
	Schedule Appointments Using Priorities		Engineering and     Construction
	Filter the Gantt in Field Service		<ul><li>Financial Services</li><li>Healthcare and Life</li></ul>
	Optimize Field Service		Sciences
	Appointments Using Priorities		Manufacturing and     Automotive
	Manage Field Service Optimization		Retail and Consume Goods

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
	Optimize Today's Field Service Schedule Optimize a Single Field Service Resource's Schedule		<ul> <li>Travel, Transport, and Hospitality</li> </ul>
Optimize the schedule and fix schedule violations such as schedule overlaps, and gaps.	Manage Field Service Scheduling Overlaps Fix Overlaps by Using an Automated Scheduling Flow (Beta) Fill Schedule Gaps in Field Service Manage Field Service Optimization Optimize Today's Field Service Schedule Optimize a Single Field Service Resource's Schedule	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Automate scheduling and rescheduling of service appointments.	Schedule an Appointment Automatically Scheduling APIs - ScheduleService Class Manage Scheduled Jobs in Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Make sure that travel time calculations are accurate.	Set Up Routing for Travel Time Calculations	Admin	<ul> <li>Communication, Media, and Technology</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
	Set Up Travel Modes		<ul> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Visualize work priorities, types of jobs, statuses, and due dates, and manage exceptions, for example, service appointments that are awaiting an action from the dispatcher, or marked In Jeopardy and aren't canceled.	Work in the Field Service Dispatcher Console Work in the Field Service Dispatcher Console Gantt Color-Code the Gantt Working in the Field Service Dispatcher Console Map Customize the Field Service Dispatcher Console	Dispatcher	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Travel, Transport, and Hospitality</li> </ul>
Schedule work that's geographically close together by bundling service appointments or grouping appointments located at the same site, for example, deliveries in an apartment complex.	Set Up Field Service Appointment Bundling Create and Manage Field Service Objectives	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			Travel, Transport, and Hospitality
Schedule work to myself (field resource self-assignment).	Customize and Extend the Field Service Mobile App with Lightning Web Components	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Define the hours that my customer is available for work to be performed at their location.	Work Rule Type: Service Appointment Visiting Hours Guidelines for Creating Operating Hours for Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Fix the schedule for one service resource when last-minute developments occur like canceled jobs, lateness, or emergencies.	Optimize a Single Field Service Resource's Schedule Fix Overlaps by Using an Automated Scheduling Flow (Beta)		<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			<ul> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Schedule interdependent or related jobs to multiple service resources.	Create Service Crews Set Up Crew Management Complex Work in Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Travel, Transport, and Hospitality</li> </ul>
Make sure that service appointments occur in a specific sequence.	Complex Work in Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			Travel, Transport, and Hospitality
Limit the number of service appointments that a service resource is assigned in 1 day.	Work Rule Type: Count Rule	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Define service resource preferences for customers and specific jobs.	Add Service Resource Preferences in Field Service	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Schedule work based on priority.	Schedule Appointments Using Priorities	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
Limit the amount of work that can be scheduled in	Manage Work Capacity in	Admin	<ul> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> <li>Communication,</li> </ul>
a service territory to reserve capacity for unplanned or other work.	Field Service Set Up Field Service Work Capacity		<ul> <li>Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> <li>Travel, Transport, and Hospitality</li> </ul>
Automate dispatching of work to mobile workers.	Drip Feed Field Service Appointments Auto-Dispatch Service Resources	Admin	<ul> <li>Communication, Media, and Technology</li> <li>Education</li> <li>Energy and Utilities</li> <li>Engineering and Construction</li> <li>Financial Services</li> <li>Healthcare and Life Sciences</li> <li>Manufacturing and Automotive</li> <li>Retail and Consumer Goods</li> </ul>

I WANT TO	HOW DO I DO THIS?	PERSONA	INDUSTRIES CATEGORIES
			• Travel, Transport, and Hospitality

# Set Up Field Service Appointment Bundling

Group short appointments at nearby or same-site locations to create a bundle.

Watch the video to see how grouping short appointments at nearby or same-site locations to create a bundle helps you and your customers.

### Watch a video

Watch the video to learn how to configure Appointment Bundling.

#### Watch a video

Service appointment bundling lets you collect multiple service appointments and define them as a single entity, called a bundle. The bundle:

- Simplifies the dispatcher's work by treating a set of relatively small service appointments as one, large unified job.
- Helps mobile workers work more efficiently by organizing the service appointments in an assembly line manner.
- Improves customer satisfaction by scheduling a mobile worker to perform all the customer's service appointments in a single visit.

Consider the job of reading 100 water meters in the utility room of a high-rise apartment complex. The job can be scheduled in several ways.

- **100 short appointments**—Create and schedule a service appointment for each meter. Each service appointment has a duration of 30 seconds. This approach provides maximum flexibility. You can schedule each service appointment independently of the others. However, this approach also has high computational overhead because the system must schedule numerous service appointments, and having 100 short service appointments on the Gantt is confusing for the dispatcher. The schedule specifies a precise sequence in which the meters must be read, even if the mobile worker finds another sequence more convenient. This approach could cause other inefficiencies, too. Suppose the mobile worker must get the key to unlock the utility room. If you schedule the service appointments individually, the mobile worker must technically unlock the room multiple times.
- **One long appointment**—Create and schedule the entire job as a single service appointment. This approach has low computational overhead and is easy to understand. It implements economies of scale, such as unlocking the utility room only one time. The disadvantage is the lack of flexibility. You must schedule the entire service appointment to a single mobile worker in a single assignment. You can't schedule an urgent job in the middle of the long service appointment. And you can't reschedule meters that the mobile worker couldn't access during the service appointment.
- A single bundle appointment—Create a service appointment for each meter and bundle them together to create a single entity. The individual service appointments then become bundle members. You can apply constraints to ensure that the bundle is efficient, for example, that only similar service appointments in the same location can be bundle members. This approach has all the advantages of the long service appointment approach, plus the flexibility of the short service appointments approach.
  - Low computational overhead—Only the bundle is scheduled, not the bundle members.
  - **Easy to understand**—The dispatcher sees only one service appointment on the Gantt. The dispatcher can drill down and view the bundle members as required.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- **Flexibility**—The mobile worker can perform the service appointments in any sequence. You can add or remove service appointments from the bundle if needed.
- **Better tracking**—If a meter can't be accessed, it can be skipped without being forgotten because the system marks the individual service appointment as incomplete.
- **Economies of scale**—In our example, the mobile worker unlocks the utility room only one time, unless returning for incomplete bundle members.

Meter reading is only one example of how bundling service appointments can improve the efficiency of a schedule. Other scenarios include:

- **Same customer scheduling**—Bundle together all the service appointments of a single customer. The customer is pleased because a single mobile worker arrives at a single time to perform all the services.
- **Same site scheduling**—Bundle together all the service appointments in a large office building, even if they are for different customers. The mobile worker saves time by traveling, parking, and passing the building security only one time.
- **Out-of-town scheduling**—Bundle together all the service appointments for an out-of-town job. For example, a Chicago-based organization has several appointments in Cleveland. Bundle together all the Cleveland appointments and schedule the bundle to a single mobile worker. The mobile worker can then stay overnight in Cleveland until all the service appointments are complete.
- Scheduling similar tasks—Bundle together service appointments of a similar type. For example, an organization prefers to assign a single mobile worker to perform all its network-related service appointments on a single day.

### Add Permissions for Service Appointment Bundling

Add the permissions for service appointment bundling.

### Enable Service Appointment Bundling

Enable appointment bundling in Field Service Settings.

### Set Up Automatic Bundling

Use automatic bundling to create and update bundles instead of managing them manually. Automatic bundling includes two modes: Automated Bundling and Live Bundling. The automatic bundling process looks for service appointments in a particular service territory and then looks at the priority of the bundle policy. After the bundles are created, they appear in the work list and can be scheduled.

### Create Recordset Filter Criteria for Bundling Appointments

You can create filters to bundle only the appointments that meet the criteria that you set. Creating recordset filter criteria is optional, but if you want to use them in the bundle policies, you must create them first.

### Create an Appointment Bundle Policy

Use the default policy, or create multiple policies. You can use the policies for manual bundling, automatic bundling, or both.

### Create an Appointment Bundle Config

Use the default configuration, or edit it to determine the status behavior when bundling and unbundling service appointments. These configuration settings apply to all your bundles.

### Test Your Appointment Bundling Configuration

After completing the configuration steps for appointment bundling, test it in Field Service.

### Appointment Bundling Limitations

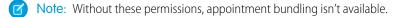
Review the limitations of Appointment Bundling.

#### SEE ALSO:

Salesforce Developer: Appointment Bundling

# Add Permissions for Service Appointment Bundling

Add the permissions for service appointment bundling.



- 1. From the App Launcher, find and select Field Service Settings.
- 2. From Getting Started, click Permission Sets.
- 3. Add these permissions.
  - Field Service Admin: Required for configuring the appointment bundling settings.



• Field Service Integration: Required for accessing the Hyperforce appointment bundling services.





Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To add permissions:

 Manage Profiles and Permission Sets



Note: If the Field Service Integration card doesn't appear, contact Salesforce Customer Support.

- 4. If your org has processes that use create, update, and delete actions for the Work Orders, Service Appointments, or Skills objects, enable object permissions.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Click Field Service Integration.
  - c. Under Apps, click Object Settings.
  - **d.** Click the required object.
  - e. Click Edit.
  - f. Enable these permissions.

Permission Sets		
ield Service Integra		
Q, Find Settings  rmission Set Overview > Objec	Clone Edit Properties Manage Assignment     Settings      Work Orders	
Work Orders	Save Cancel	
ab Settings		
ab Settings Available	Visible	
-	Visible	
Available		
Available		
Available		
Available bject Permissions Permission Name	Enabled	
Available bject Permissions Permission Name Read	Enabled	
Available bject Permissions Permission Name Read Create	Enabled C	
Available  bject Permissions  Permission Name  Read  Create Edit	Enabled C	

- g. Save your changes.
- h. Repeat this procedure for the remaining objects.
- If you use Experience Builder sites, add the appointment bundling custom permissions also to the Field Service Community Dispatcher permission set. Experience Site users don't have the Bundle Policy field in the service appointment's Bundle tab. See Appointment Bundling Limitations.

# **Enable Service Appointment Bundling**

Enable appointment bundling in Field Service Settings.

- 1. From the App Launcher, open Field Service Settings.
- 2. Click Scheduling, and then click Bundling.

Scheduling	
GENERAL LOGIC SCHEDULING POLICIES DYNAMIC GANTY ROUTING BUNDLING	
Bundle your service appointments 🥑	
Restore De	faults Save

- 3. Enable bundling service appointments and save your changes.
- 4. To access the additional settings, refresh your browser.

#### Default Appointment Bundle Policy and Related Policies

If no policies exist, a default appointment bundle policy is created along with some of its related policies. Access Appointment Bundle Policy from the App Launcher. Access the remaining policies from the Related tab of the appointment bundle policy.

### Default Appointment Bundle Config

If an appointment bundle config doesn't exist, a default one is created. Access Appointment Bundle Config from the App Launcher.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To enable appointment bundling:

# Default Appointment Bundle Policy and Related Policies

If no policies exist, a default appointment bundle policy is created along with some of its related policies. Access Appointment Bundle Policy from the App Launcher. Access the remaining policies from the Related tab of the appointment bundle policy.

## Default Appointment Bundle Policy

Field	Default Value	Result
Priority	1	The default bundle policy is applied first.
Manual Bundling	True	This policy is available when the dispatcher manually bundles service appointments in the dispatcher console.
Automatic Bundling	True	This policy is available when automatic bundling is triggered.
Limit Amount of Bundle Members	200	You can include up to 200 bundle members in a bundle. This field is relevant only for automatic bundling, not for manual bundling.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Default Appointment Bundle Sort Policy

Field	Default Value	Result
Sort Field Name	Due Date	The bundle members are sorted according to their due date.
Sort Direction	Ascending	The bundle members are in an ascending order.
Sort Type	Sort Within a Bundle	The default sort policy defines the order of bundle members in the bundle.
Sort Order	1	The default sort policy is triggered first.

## Default Appointment Bundle Restriction Policy

Field	Default Value	Result
Restriction Field Name	Street	You can bundle service appointments that are on the same street.

Field	Default Value	Result
Allow Empty	False	You can't bundle service appointments that have an empty restriction field with service appointments that have a value in the restriction field.
Restrict in Manual Mode	True	The default restriction policy applies to manual bundling.
Restrict in Automatic Mode	True	The default restriction policy applies to automatic bundling.
Restrict by Date Only	True	If Restriction Field Name is of type Date/Time, the bundle is restricted by the time of day and by the calendar date.

# Default Appointment Bundle Aggregation Policies

Field in Bundle Service Appointment	Aggregation	Result
Address	Address of the first bundle member service appointment according to the sort policy.	The bundle service appointment's address is pulled from the first bundle member service appointment.
Due Date	Earliest due date of all bundle member service appointments	The bundle service appointment's due date is pulled from the earliest due date of the bundle member service appointments.
Duration	Sum of the duration of the bundle member service appointments	The bundle service appointment's duration is equal to the sum of all bundle member service appointments' duration.
Earliest Start Permitted	Latest start time of all bundle member service appointments	The bundle service appointment's earliest start permitted is pulled from the latest start of the bundle member service appointments.
Pinned	False	When the bundle is created, the bundle service appointment isn't pinned.
Service Territory	Copied from one of the bundle member service appointments	The bundle service appointment's service territory field is pulled from one of the bundle member service appointments.
Skill Requirements (in Work Order)	Sum of the skills of the bundle member service appointments, without duplication	The bundle service appointment's work order lists the skills of all bundle member service appointments.
		If the skills are updated in a bundle member service appointment after the bundle is created, the skills aren't aggregated to the bundle service appointment. Update the

Field in Bundle Service Appointment	Aggregation	Result
		bundle service appointment's skills manually.

Note: The default configuration of the Service Territory and Address fields don't appear in the list of default aggregation policies.

# Default Appointment Bundle Config

If an appointment bundle config doesn't exist, a default one is created. Access Appointment Bundle Config from the App Launcher.

Field	Default Value	Result
Add to Bundle Statuses	<ul><li>None</li><li>Scheduled</li><li>Dispatched</li><li>In Progress</li></ul>	You can add service appointments in these statuses to a bundle.
Remove from Bundle Statuses	<ul> <li>Canceled</li> <li>None</li> <li>Scheduled</li> <li>Dispatched</li> <li>In Progress</li> </ul>	You can remove service appointments in these statuses from a bundle.
Add travel time to bundle duration	False	Travel time between bundle member service appointments isn't included in the bundle's duration.
Status on Removal from Bundle	• None	When a service appointment is removed from a bundle, it receives the None status.
Statuses not to Update on Unbundling	<ul><li>Canceled</li><li>Completed</li><li>Cannot Complete</li></ul>	The status of service appointments in these statuses isn't updated when a bundle is unbundled.
Bundle Statuses to Propagate	All statuses are selected.	The status of bundle member service appointments is always overridden by the status of the bundle service appointment.
Bundle Member Statuses not to be Propagated	<ul><li>Canceled</li><li>Completed</li></ul>	The status of bundle member service appointments with these statuses isn't overridden.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field	Default Value	Result
	Cannot Complete	
Criteria for Automatic Unbundling	Empty	Automatic unbundling doesn't occur.

# Set Up Automatic Bundling

Use automatic bundling to create and update bundles instead of managing them manually. Automatic bundling includes two modes: Automated Bundling and Live Bundling. The automatic bundling process looks for service appointments in a particular service territory and then looks at the priority of the bundle policy. After the bundles are created, they appear in the work list and can be scheduled.

The automatic bundling process creates bundles:

- If at least two service appointments can be bundled
- Split by service territories that are part of the bundle policy
- Without service appointments that have scheduling dependencies
- For Automated Bundling, if the time between the Earliest Start Permitted and the Due Date of the service appointments overlaps with a 7-day period that starts at the time of the scheduled automatic bundling process. For example, if the Earliest Start Permitted of a service appointment is before the start of the 7-day period and the Due Date is after the end of the 7-day period, it can still be added to the bundle.

For Live Bundling, if the time between the Earliest Start Permitted and the Due Date of the service appointments overlaps with a 2-day period that starts at the time of the scheduled automatic bundling process. For example, if the Earliest Start Permitted of a service appointment is before the start of the 2-day period and the Due Date is after the end of the 2-day period, it can still be added to the bundle.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To set up automatic bundling:

- Customize Application
- In the service appointment details of the created bundle, the Manually Bundled field is deselected. If you manually update the service
  territory of the bundle or of one of the bundle members after the bundle was automatically created, the Manually Bundled field is
  selected and the bundle isn't considered for automatic bundling processes.

It's recommended to configure restriction policies for the Earliest Start Permitted and Due Date fields. That way, the automatic bundling process doesn't fail because of service appointments that have an earlier due date than the earliest start permitted.

Note: Automatic bundling requires at least one of each of these policies:

- Restriction policy with Restrict in Automatic Mode selected
- Service territory policy
- Bundle policy with Automatic Bundling selected

### SEE ALSO:

Create an Appointment Bundle Policy Monitor Optimization Requests

# Configure the Settings

1. From the App Launcher, find and select Field Service Settings.

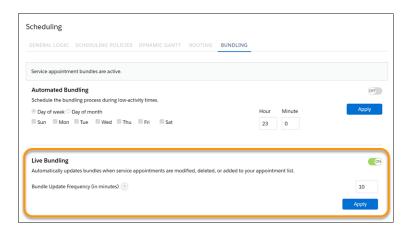
- 2. Click Scheduling, and then click Bundling.
- 3. Set up Automated Bundling to schedule the bundling process during low-activity times.
  - a. Turn on Automated Bundling.
  - **b.** Schedule the process.
  - c. Click Apply. In this example, the automated bundling process is scheduled to run daily at 11 PM.

ENERAL LOGIC SCHEDULING POLICIES DYNAMIC GANTT ROUTING	BUNDLING	
Service appointment bundles are active.		
Automated Bundling		00
Schedule the bundling process during low-activity times.		
Day of week O Day of month	Hour Minute	Apply
🛿 Sun 🖾 Mon 🖾 Tue 🗖 Wed 🖾 Thu 🗳 Fri 💭 Sat	23 0	

4. Set up Live Bundling to update or create bundles when service appointments are modified or added to your appointment list.

Live bundling adds bundle members only to bundles that were created with automatic bundling. It doesn't add bundle members to bundles that were created manually. If a bundle member is manually removed from a bundle, live bundling doesn't add it to the same bundle again.

- a. Turn on Live Bundling.
- **b.** Define the frequency of the updates, from 5 to 15 minutes.
- c. Click Apply.



Service appointments are reconsidered for Live Bundling when you update any of these fields.

- Service Territory
- Due Date
- Early Start
- Status
- Pinned

- Any other field defined in a bundle restriction policy
- Any other field defined in a recordset filter criteria

## Monitor the Automatic Bundling Requests

- 1. You can receive an email when the automated bundling process fails. To activate the flow that sends the email, take these steps.
  - **a.** From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
  - **b.** Open the Send Email for Automated Bundling Failures flow.
  - c. To use the flow as is, click Activate.
  - d. To modify the flow, click Save As.

A warning is shown, but if you've verified that the Automated Process user has an email address entered in the settings, you can ignore this warning. To check whether it's entered, from Setup, in the Quick Find box, enter *Process Automation*, and then select **Process Automation Settings**. Make sure that Automated Process User Email Address is populated.

- e. To check the start time of the flow, edit the Start element and change it as needed. The time is set according to the Automated Process user's time zone.
- f. The email is sent to the first admin user, according to alphabetical order. To change the recipient of the email, edit the Send Email element, and in the Recipient Address List, enter one or more email addresses.
- g. Activate your version of the flow.
- 2. Dispatchers can see the status of automatic bundling requests by clicking the light bulb in the Dispatcher Console. Automatic bundling requests can also be monitored in the Optimization Requests tab. Automated bundling requests that didn't manage to run aren't monitored. If the automatic bundling optimization requests don't appear, take these steps.
  - a. From the object management setting for Optimization Requests, go to Fields & Relationships.
  - b. Search for and open the Type field.
  - c. If you're using a new Salesforce org, activate the Automated Bundling and Live Bundling picklist values. If you're using an upgraded Salesforce org, create the Automated Bundling and Live Bundling picklist values.

# Create Recordset Filter Criteria for Bundling Appointments

You can create filters to bundle only the appointments that meet the criteria that you set. Creating recordset filter criteria is optional, but if you want to use them in the bundle policies, you must create them first.

- 1. Create recordset filter criteria for the bundle policies.
- 2. For Source Object, select if the recordset filter criteria is intended for the:

Appointment Bundle Aggregation Policy	Determines on which group of service appointments the aggregation applies.
Appointment Bundle Config	Determines in which criteria a bundle is automatically unbundled.
Appointment Bundle Policy	Determines which service appointments can be bundled using this policy.

3. For Filtered Object, select Service Appointment.

## 4. Select Active.

Considerations:

- Inactive recordset filter criteria aren't supported. See Appointment Bundling Limitations.
- All service appointment fields used in recordset filter criteria must be enabled in the Field Service Integration permission set.

SEE ALSO:

Create Filters to Match Appointments and Shifts Create an Appointment Bundle Aggregation Policy Create an Appointment Bundle Config

Create an Appointment Bundle Policy

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create recordset filter criteria:

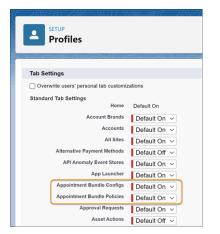
# Create an Appointment Bundle Policy

Use the default policy, or create multiple policies. You can use the policies for manual bundling, automatic bundling, or both.

- 1. If your service appointments have custom fields, make sure to give the fields read access. See Appointment Bundling Limitations.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Click Field Service Integration.
  - c. Click Object Settings.
  - d. Click Service Appointment.
  - e. For each custom field, select Read Access.
- 2. From the App Launcher, open Appointment Bundle Policies.

If you don't see Appointment Bundle Policies in the App Launcher:

- a. From Setup, in the Quick Find box, enter Users, and then select Profiles.
- **b.** On the Salesforce admin profile, click **Edit**.
- c. From Profile Detail, click Edit.
- d. Under Tab Settings, set the bundle tabs to Default On.



- e. Save your changes and refresh your browser.
- 3. On the Appointment Bundle Policies page, click New.
- **4.** Give the policy a unique name.
- 5. To make this policy available when the dispatcher manually bundles service appointments in the dispatcher console, select **Manual Bundling**.
- 6. To make this policy available when automatic bundling is triggered, select **Automatic Bundling** and enter the details. Automatic bundling includes two modes, Automated Bundling and Live Bundling. You can have manual bundling and automatic bundling enabled at the same time.
  - **a.** For Priority, enter a unique policy priority number. The priority determines the order that the policies are applied.
  - **b.** For Limit Amount of Bundle Members, enter the maximum number of bundle members to include, up to 200.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create items:

c. For Limit Duration of Bundle, enter the maximum duration of a bundle, in minutes. The recommended limit is 240 minutes.

Note: The Limit Amount of Bundle Members and Limit Duration of Bundle fields are relevant only for automatic bundling, not for manual bundling.

- 7. For Filter Criteria, select an active recordset filter to determine the bundle members. Only the service appointments that meet the criteria are bundled.
- **8.** To make sure that enough time is allocated for the bundle, calculate the difference between the bundle's start time and the bundle's end time. If that amount of time is shorter than the bundle's duration, replace the duration with a predefined constant value.
  - a. Under Duration Calculation, select Time Calculation by Bundle Duration Field.
  - b. For Bundle Start Time Field Name, select the bundle service appointment field used for the bundle's start time.
  - c. For Bundle End Time Field Name, select the bundle service appointment field used for the bundle's end time.
  - d. For Constant Time Value, enter the bundle's total time as a constant value, in minutes.
- 9. Save your changes.
- The Allow Scheduling Dependencies in Bundle field isn't supported.
- Deleting a bundle policy that's in use isn't recommended.
- Note: Don't create triggers that update fields in any of the Appointment Bundling policies. If your configuration includes these triggers, you must delete them and apply a different configuration solution. For example, if you have a trigger that calculates duration, delete the trigger and create an aggregation duration downscale policy instead.

#### Create an Appointment Bundle Sort Policy

Use the default policy, or create multiple sort policies. For manual bundling, define a policy for sorting the bundle members within a bundle. The sorting is applied when bundling and unbundling service appointments. For automatic bundling, define a policy that determines the order that's used to examine the bundling candidates.

#### Create an Appointment Bundle Restriction Policy

Use an appointment bundle restriction policy to define restriction fields so that only service appointments with the same field values can be bundled together. Use the default policy, or create multiple restriction policies. For automatic bundling, you must have at least one restriction policy.

#### Create an Appointment Bundle Propagation Policy

Create a policy to determine when and how the bundle service appointment updates the fields of the bundle member service appointments. And you can create multiple propagation policies for each bundle policy. Each propagation policy controls how one bundle member service appointment field is populated.

#### Create an Appointment Bundle Aggregation Policy

Use the default aggregation policies, or create policies to determine when and how bundle member service appointments update the bundle service appointment fields. And you can create multiple aggregation policies for each bundle policy. Each aggregation policy controls how one bundle service appointment field is populated.

#### Create Appointment Bundle Aggregation Duration Downscales

Account for one-time tasks that are part of a bundle by downscaling the duration of the bundle member service appointments. You can create multiple aggregation duration downscales.

### Create Appointment Bundle Policy Service Territories

Define one service territory for each bundle policy. Only service appointments in the defined service territory can be added to the bundle. For automatic bundling, you need at least one Appointment Bundle Policy Service Territory. For manual bundling, Appointment Bundle Policy Service Territories are optional.

SEE ALSO:

Appointment Bundling Limitations Default Appointment Bundle Policy Create Appointment Bundle Aggregation Duration Downscales

# Create an Appointment Bundle Sort Policy

Use the default policy, or create multiple sort policies. For manual bundling, define a policy for sorting the bundle members within a bundle. The sorting is applied when bundling and unbundling service appointments. For automatic bundling, define a policy that determines the order that's used to examine the bundling candidates.

- 1. If your service appointments have custom fields, make sure to give the fields read access. See Appointment Bundling Limitations.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Click Field Service Integration.
  - c. Click Object Settings.
  - d. Click Service Appointment.
  - e. For each custom field, select Read Access.
- 2. In the Appointment Bundle Policy, go to the Related tab.
- 3. In the Appointment Bundle Sort Policies panel, click New.
- **4.** Give the policy a unique name.
- **5.** For Sort Field Name, select the service appointment field that sorts the bundle members. The fields in the list are service appointment fields, not work order fields. The only exception is Skill Requirements, which is a work order field.
- 6. For Sort Direction, set the order of the appointments in a bundle to ascending or descending.
- **7.** For Sort Type, select one of these options.

### Sort Within a Bundle

Defines the order of bundle members. It's also used when you unbundle to define the order that the service appointments are scheduled on the Gantt.

### Sort for Automatic Bundling

Defines the order that automatic bundling uses to evaluate the candidate service appointments to be bundled.

- 8. For Sort Order, determine in which order the sort policy is triggered. For example, enter 1 to trigger this policy first.
- 9. Save your changes.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create items:

- **Example**: A mobile worker must read all the water meters on a long street. According to the default sort policy, the worker must complete the appointments in ascending order according to their due date, without considering the house numbers. To save time, let the mobile worker complete all appointments on one side of the street before continuing to the other side.
  - 1. Create a custom numeric field for the house number.
  - 2. Create a numeric formula field that differentiates between odd and even house numbers. If the house number is even, leave it as is. If the house number is odd, multiply the number by -1.

```
IF(MOD( HouseNumber_c, 2)=0, HouseNumber_c, -1*HouseNumber_c)
```

- 3. Create restriction policies for the City and Street fields, meaning that all bundle members must be in the same city and on the same street.
- **4.** Create a sort policy for the numeric formula field that you created. Set the policy to sort the bundle members in ascending order. For example, on a street with 10 houses, the appointments are now sorted in this order: -9, -7, -5, -3, -1, 2, 4, 6, 8, 10.

### SEE ALSO:

Create an Appointment Bundle Restriction Policy Default Appointment Bundle Policy

## Create an Appointment Bundle Restriction Policy

Use an appointment bundle restriction policy to define restriction fields so that only service appointments with the same field values can be bundled together. Use the default policy, or create multiple restriction policies. For automatic bundling, you must have at least one restriction policy.

- 1. If your service appointments have custom fields, make sure to give the fields read access. See Appointment Bundling Limitations.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Click Field Service Integration.
  - c. Click Object Settings.
  - d. Click Service Appointment.
  - e. For each custom field, select Read Access.
- 2. In the Appointment Bundle Policy, go to the Related tab.
- 3. In the Appointment Bundle Restriction Policies panel, click New.
- **4.** Give the policy a unique name.
- **5.** For Restriction Field Name, select the bundle member service appointment field used to apply the restriction.

Considerations:

- Only service appointments with the same value can be bundled together.
- The fields in the list are service appointment fields, not work order fields. The only exception is Skill Requirements, which is a work order field.
- Unsupported lookup fields don't appear in the list of fields for selection.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create items:

- 6. To allow bundling service appointments that have an empty restriction field with service appointments that have a value in the restriction field, select **Allow Empty**.
- 7. To apply this restriction with manual bundling, select **Restrict in Manual Mode**.
- 8. If the Restriction Field Name is of type Date/Time, you can restrict the bundle based on the calendar date rather than the time of day by selecting **Restrict by Date Only**.
- 9. To apply this restriction to automatic bundling, select **Restrict in Automatic Mode**.
- 10. Save your changes.
- SEE ALSO:

### Default Appointment Bundle Policy

## Create an Appointment Bundle Propagation Policy

Create a policy to determine when and how the bundle service appointment updates the fields of the bundle member service appointments. And you can create multiple propagation policies for each bundle policy. Each propagation policy controls how one bundle member service appointment field is populated.

- 1. If your service appointments have custom fields, make sure to give the fields read and edit access. See Appointment Bundling Limitations.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Click Field Service Integration.
  - c. Click Object Settings.
  - d. Click Service Appointment.
  - e. For each custom field, select Read Access and Edit Access.
- 2. In the Appointment Bundle Policy, go to the Related tab.
- 3. In the Appointment Bundle Propagation Policies panel, click New.
- 4. Under Information:
  - **a.** Give the policy a unique name.
  - **b.** Select at least one option for whether the bundle member service appointments' fields are updated when they're added to or removed from the bundle or are unbundled.
- 5. Under Propagation Settings:
  - **a.** In Bundle Member Field Name, select the field that's populated by this policy. The fields in the list are service appointment fields, not work order fields. The only exception is Skill Requirements, which is a work order field.

Don't configure the Status field in a propagation policy. Use the Appointment Bundle Config to control how the Status field behaves.

- **b.** Complete the remaining fields according to the type of field selected in Bundle Member Field Name.
- 6. Save your changes.

### Propagation Configurations

Configure your propagation policies according to the selected Bundle Member Field Name type.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create tasks:

# **Propagation Configurations**

Configure your propagation policies according to the selected Bundle Member Field Name type.

Bundle Member Field Type—Boolean

Fields to Populate	Result
Bundle Field Name	Replace the checkbox selection in the bundle member service appointments according to the checkbox selection in the bundle service appointment.
Constant Value: Enter <i>True</i> or <i>False</i>	Replace the checkbox selection in the bundle member service appointments according to the entered constant value of true or false.
Add Constant Value: Select the checkbox AND Constant Value: Enter <i>True</i> or <i>False</i>	Check the setting in the bundle service appointment and the entered Constant Value. If one of them is False, set the checkbox in the bundle member service appointments to False.

# Bundle Member Field Type—Date

Fields to Populate	Result
Bundle Field Name	Replace the bundle member service appointments' date field value with the bundle service appointment date field.
Constant Date Value: Select Null, Now, End of Day, or Start of Day	Replace the bundle member service appointments' date field value with the selected Constant Date Value.
Add Constant Value: Select the checkbox AND Constant Date Value: Select <b>Null, Now, End of Day,</b> or <b>Start of</b> <b>Day</b>	Take the selected Constant Date Value, add the entered Additional Constant Value, and populate the selected bundle member service appointments' field with this value.
AND	
Additional Constant Value: Enter the number of days, hours, and minutes	

Bundle Member Field Type—Lookup

Fields to Populate	Result
Bundle Field Name	Replace the bundle member service appointments' field value with the bundle service appointment field value.
Constant Value: Enter text	Replace the bundle member service appointments' field value with the entered ID.

Fields to Populate	Result
Add Constant Value: Select the checkbox AND Constant Value: Enter text	Add the bundle service appointment's field value to the bundle member service appointments' field value.

Note: Unsupported lookup fields don't appear in the list of fields for selection.

Bundle Member Field Type—Numeric

Fields to Populate	Result
Bundle Field Name	Replace the bundle member service appointments' field value with the bundle service appointment field value.
Constant Value: Enter a number	Replace the bundle member service appointments' field value with the entered Constant Value.
Add Constant Value: Select the checkbox AND Constant Value: Enter a number	Add the bundle service appointment's field value to the bundle member service appointments' field value.

Bundle Member Field Type—Picklist

Fields to Populate	Result
Bundle Field Name	Replace the bundle member service appointments' field value with the bundle service appointment field value.
Constant Value: Enter a picklist value	Replace the bundle member service appointments' field value with the entered Constant Value.

Bundle Member Field Type—String

Fields to Populate	Result
Bundle Field Name	Replace the bundle member service appointments' field value with the bundle service appointment field value.
Constant Value: Enter text	Replace the bundle member service appointments' field value with the entered Constant Value.

Fields to Populate	Result
Add Constant Value: Select the checkbox AND	Add the bundle service appointment's field value to the bundle member service appointments' field value.
Constant Value: Enter text	

### SEE ALSO:

### Create an Appointment Bundle Config

## Create an Appointment Bundle Aggregation Policy

Use the default aggregation policies, or create policies to determine when and how bundle member service appointments update the bundle service appointment fields. And you can create multiple aggregation policies for each bundle policy. Each aggregation policy controls how one bundle service appointment field is populated.

- 1. If your service appointments have custom fields, make sure to give the fields read and edit access. See Appointment Bundling Limitations.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - **b.** Click Field Service Integration.
  - c. Click Object Settings.
  - d. Click Service Appointment.
  - e. For each custom field, select Read Access and Edit Access.
- 2. In the Appointment Bundle Policy, go to the Related tab.
- 3. In the Appointment Bundle Aggregation Policies panel, click New.
- 4. Under Information:
  - **a.** Give the policy a unique name.
  - **b.** To set the order that triggers this aggregation, in Aggregation Order, enter a unique number. For example, enter 1 to trigger this policy first.
  - c. In Recordset Filter Criteria, enter a recordset filter criteria to aggregate the bundle members. You can aggregate only the service appointments that meet this criteria.
  - **d.** If you don't want this aggregation policy to apply to bundle members that are added after the bundle is created, select **Aggregate only when the bundle is created**.
- **5.** Under Aggregation Settings:
  - a. In the Bundle's Target Field, select a bundle service appointment field. This field is populated by the aggregation. The fields in the list are service appointment fields, not work order fields. The only exception is Skill Requirements, which is a work order field. Don't configure the Status field in an aggregation policy. Use the Appointment Bundle Config to control how the Status field behaves.

If you select a formula field in the Source Field, select a matching field type in the Bundle's Target Field.

- **b.** Select an aggregation action that works with the type of field selected for the bundle's target field.
- c. Complete the remaining fields according to the type of field selected for the bundle's target field.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create items:

6. Save your changes.

### Aggregation Configurations

You can create a custom aggregation for any bundle service appointment field.

## Aggregation Configurations

You can create a custom aggregation for any bundle service appointment field.

## Aggregation Field Type—Boolean

Aggregation Actions	Fields to Populate	Result
Apply OR operation	Source Field	If the selected bundle member field's value for any bundle members is set to true, set the selected bundle field's value to true. If not, set it to false.
Apply AND operation	Source Field	If the selected bundle member field's value for all bundle members is set to true, set the selected bundle field's value to true. If not, set it to false.
Set constant value	Constant Value—Enter <i>True</i> or <i>False</i>	Ignore the values of the bundle member's field, and set the selected bundle's field to this value (true or false).
Has at least one bundle member in filter criteria	Recordset Filter Criteria	If at least one bundle member meets the recordset filter criteria, set the selected bundle's field value to true. If not, set it to false.

## Aggregation Field Type—Date

Aggregation Actions	Fields to Populate	Result
Find earliest	Source Field	Find the bundle member that has the earliest date, and enter this date in the selected bundle field.
Find latest	Source Field	Find the bundle member that has the latest date in the selected bundle member field, and enter this date in the selected bundle field.
Set constant value	Constant Date Value—Select <b>Null, Now,</b> <b>End of Day</b> , or <b>Start of Day</b>	Ignore the values of the bundle member's field, and set the selected bundle's field to this constant value (Null, Now, End of Day, or Start of Day).

Aggregation Actions	Fields to Populate	Result
Sum based on bundle fields	<ul> <li>Source Field</li> <li>Constant Value—in hours</li> <li>OR</li> <li>Source Field</li> <li>Additional Source Field (must be a numeric field in hours)</li> </ul>	Take the selected bundle field's value, add the constant value, and enter this date in the selected bundle field. OR Take the selected bundle field's value, add the additional bundle field's value, and enter this date in the selected bundle field.
Subtract based on bundle fields	<ul> <li>Source Field</li> <li>Constant Value—in hours</li> <li>OR</li> <li>Source Field</li> <li>Additional Source Field (must be a numeric field in hours)</li> </ul>	Take the selected bundle field's value, subtract the entered constant value, and enter this date in the selected bundle field. OR Take the selected bundle field's value, subtract the additional bundle field's value, and enter this date in the selected bundle field.

## Aggregation Field Type—Lookup

Aggregation Actions	Fields to Populate	Result
Find minimum	Source Field	Find the bundle member that has the lowest ID, and enter this value in the selected bundle field.
Find maximum	Source Field	Find the bundle member that has the highest ID, and enter this value in the selected bundle field.
Set constant value	Constant Value—Enter an ID	Enter this ID in the selected bundle's field.

Note: Unsupported lookup fields don't appear in the list of fields for selection.

## Aggregation Field Type—Numeric

Aggregation Actions	Fields to Populate	Result
Find minimum	Source Field	Find the bundle member that has the lowest numeric value, and enter this value in the selected bundle field.
Find maximum	Source Field	Find the bundle member that has the highest numeric value, and enter this value in the selected bundle field.

Aggregation Actions	Fields to Populate	Result
Set constant value	Constant Value	Ignore the values of the bundle member's field, and enter this constant value in the selected bundle's field.
Set downscaled duration You can apply this action to any numeric field, not just duration fields.	<ul> <li>Downscale Sorting Direction</li> <li>(Optional) Maximum Bundle Duration</li> <li>Source Field</li> <li>At least one Appointment Bundle Aggregation Duration Downscale form (see Create Appointment Bundle Aggregation Duration Downscales)</li> </ul>	<ol> <li>Sort the bundle members according to the selected source field in the direction defined in the Downscale Sorting Direction field.</li> <li>Take the bundle members in the range defined by the From Bundle Member Number and To Bundle Member Number fields (in the Appointment Bundle Aggregation Duration Downscales form).</li> <li>Calculate the reduction applied to each bundle member according to the Percentage of Reduction field.</li> <li>For each bundle member, compare the result to the Max Reduction field.</li> <li>If the max reduction is higher, reduce the result of the Percentage of Reduction calculation from the duration of the bundle member.</li> <li>If the max reduction is lower, reduce the value of the Max Reduction field from the duration of the bundle member.</li> <li>If you have defined additional Aggregation Duration Downscaling forms, also consider them.</li> <li>Sum the results of all the calculated durations of the bundle members.</li> <li>Compare the calculated bundle duration result to the value entered in the Maximum Bundle Duration field. If the maximum bundle duration is lower, use this value.</li> </ol>
Subtract based on bundle fields	<ul> <li>Source Field</li> <li>Constant Value</li> <li>OR</li> </ul>	Take the selected bundle field's value, subtract the entered constant value, and enter this number in the selected bundle field.
	Source Field	OR

Aggregation Actions	Fields to Populate	Result
	• Additional Source Field (must be a numeric field in hours)	Take the selected bundle field's value, subtract the additional bundle field's value, and enter this number in the selected bundle field.
Sum based on bundle fields	<ul> <li>Source Field</li> <li>Constant Value</li> <li>OR</li> <li>Source Field</li> <li>Additional Source Field (must be a numeric field in hours)</li> </ul>	Take the selected bundle field's value, add the entered constant value, and enter this number in the selected bundle field. OR Take the selected bundle field's value, add the additional bundle field's value, and enter this number in the selected bundle field.
Sum based on bundle members	<ul><li>Source Field</li><li>(Optional) Constant Value</li></ul>	Sum the values of the selected bundle member field, and enter this number in the selected bundle field. OR Add the constant value to each bundle member's field value, sum the values, and enter this number in the selected bundle field.
Count Bundle Members in Filter Criteria	Recordset Filter Criteria	Count how many bundle members answer the recordset filter criteria, and enter this number in the selected bundle field.

# Aggregation Field Type—Picklist

Aggregation Actions	Fields to Populate	Result
Find minimum	Source Field	Find the bundle member that has the lowest alphabetic or numeric value, and enter this value in the selected bundle field.
Find maximum	Source Field	Find the bundle member that has the highest alphabetic or numeric value, and enter this value in the selected bundle field.
Set constant value	Constant value—According to the values in this field's picklist	Use the entered constant value for the selected bundle field's value.

### Aggregation Field Type—Picklist-Multi

Aggregation Actions	Fields to Populate	Result
Clear value	_	Leave the selected bundle's field empty.
Intersect	Source Field	Take only the values from the bundle member field that appear in all of the bundle members, and list them in the bundle's field.
Unite	Source Field	Take all the values from the bundle member's field and list them in the bundle's field.

Aggregation Field Type—Skills, Bundle's Target Field—Skill Requirements

Aggregation Actions	Fields to Populate	Result
Clear value	_	Leave the selected bundle's field empty.
Intersect		Take only the skills that appear in all the bundle members, and list them in the bundle's field.
		The level for each skill is taken from the bundle member with the lowest level. Null is considered the lowest level.
Unite	_	Take all the skills from the bundle members and list them in the bundle's field.
		The level for each skill is taken from the bundle member with the lowest level. Null is considered the lowest level.

Note: If the skills are updated in a bundle member service appointment after the bundle is created, the skills aren't aggregated to the bundle service appointment. Update the bundle service appointment's skills manually.

### Aggregation Field Type—String

Aggregation Actions	Fields to Populate	Result
Find minimum	Source Field	Find the bundle member that has the lowest alphabetic value, and enter this value in the selected bundle field.
Find maximum	Source Field	Find the bundle member that has the highest alphabetic value, and enter this value in the selected bundle field.

Aggregation Actions	Fields to Populate	Result
Set constant value	Constant Value	Enter this constant value in the selected bundle's field.
Sum based on bundle members	<ul><li>Source Field</li><li>(Optional) Allow the same value to appear more than once</li></ul>	List the values of the selected bundle member field in the selected bundle field. To allow the same value to appear more than once, select <b>Allow the same value</b> <b>to appear more than once</b> .
		<ul><li>Appointment Bundling Limitations:</li><li>Make sure that the length of the string</li></ul>
		field can contain enough values to populate the bundle service appointment field. From Setup, open the Object Manager. Click <b>Service</b> <b>Appointment</b> , and then click <b>Fields &amp;</b> <b>Relationships</b> . Edit the length under Text Options.
		<ul> <li>If you select to allow the same value to appear more than once, make sure that the field's configuration settings support it. From Setup, open the Object Manager. Click Service Appointment and then click Fields &amp; Relationships Edit the relevant field, and deselect De not allow duplicate values.</li> </ul>
Sum based on bundle fields	<ul><li>Source Field</li><li>Additional Source Field</li><li>OR</li></ul>	Take the selected bundle field value, add the additional bundle field value, and ente this value in the selected bundle field. OR
	<ul><li>Constant Value</li><li>Additional Source Field</li></ul>	Take the entered constant value, add the additional bundle field value, and enter th value in the selected bundle field.

SEE ALSO:

Create an Appointment Bundle Config Default Appointment Bundle Policy

## Create Appointment Bundle Aggregation Duration Downscales

Account for one-time tasks that are part of a bundle by downscaling the duration of the bundle member service appointments. You can create multiple aggregation duration downscales.

- 1. If your service appointments have custom fields, make sure to give the fields read and edit access. See Appointment Bundling Limitations.
- **2.** Open an appointment bundle aggregation policy that has Aggregation Action defined as Set downscaled duration.
- 3. In the Appointment Bundle Aggregation Policy, go to the Related tab.
- 4. In the Appointment Bundle Aggregation Duration Downscales panel, click New.
- **5.** Give the policy a unique name.
- **6.** For From Bundle Member Number, enter the first bundle member's number that the downscale applies to.
- 7. For To Bundle Member Number, enter the last bundle member's number that the downscale applies to. To always downscale to the last bundle member, leave this field empty.
- 8. Enter the percentage of reduction.
- **9.** For Max Reduction, enter the maximum reduction for a bundle member service appointment, in minutes.
- 10. Save your changes.
- Example: A printer maintenance company must fix multiple printers in the same office building. For the first service appointment, the mobile worker needs time for parking, passing the building's security clearance, organizing the tools, and then fixing the printer. But when the mobile worker gets to the second service appointment, they can go straight to fixing the printer. In this scenario, to get a better estimate of the bundle's duration, configure the downscaling to start from the second bundle member.
- Note: If you define aggregation duration downscales where the service appointments overlap and include Max Reduction values, it can lead to inaccurate results. See Appointment Bundling Limitations.

## Create Appointment Bundle Policy Service Territories

Define one service territory for each bundle policy. Only service appointments in the defined service territory can be added to the bundle. For automatic bundling, you need at least one Appointment Bundle Policy Service Territory. For manual bundling, Appointment Bundle Policy Service Territories are optional.

Note: Although you can define more than one service territory for a bundle policy, it isn't recommended. If you do define more than one service territory for a bundle policy, make sure that the enhanced scheduling and optimization setting for all the service territories matches. If this setting is enabled in one service territory and disabled in another, the bundles created with the bundle policy can't be updated. See Appointment Bundling Limitations.

- 1. In the Appointment Bundle Policy, go to the Related tab.
- 2. In the Appointment Bundle Policy Service Territories panel, click New.
- **3.** Give the policy a unique name.
- **4.** Select the service territory for the bundle policy.
  - **Note:** You can bundle together only service appointments with the same service territory in the same time zone. See Appointment Bundling Limitations.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create items:

Customize Application

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create items:

Customize Application

5. Save your changes.

## Create an Appointment Bundle Config

Use the default configuration, or edit it to determine the status behavior when bundling and unbundling service appointments. These configuration settings apply to all your bundles.

Note: The bundle config must match the configured Status Transitions. See Customize the Service Appointment Life Cycle.

1. From the App Launcher, open Appointment Bundle Configs.

If you don't see Appointment Bundle Configs in the App Launcher:

- a. From Setup, in the Quick Find box, enter *Users*, and then select **Profiles**.
- **b.** On the Salesforce admin profile, click **Edit**.
- c. From Profile Detail, click Edit.
- d. Under Tab Settings, set the bundle tabs to **Default On**.

#### **EDITIONS**

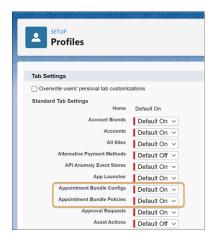
Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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#### **USER PERMISSIONS**

To create items:

Customize Application



- e. Save your changes and refresh your browser.
- 2. On the Appointment Bundle Configs page, edit the default bundle configuration.
- 3. Under General Settings:
  - **a.** Give the bundle a unique name.
  - **b.** Select the statuses in which you can add or remove service appointments from a bundle. If you don't select any statuses, appointments with any status can be added or removed from a bundle. We recommend selecting at least the **None** and **Scheduled** statuses.
  - c. To add travel time between the bundle member service appointments to the bundle's duration according to their sort order, select Add travel time to bundle duration.

Considerations:

• Travel time is added only if the bundle member service appointments include coordinates and the travel speed is set. To make sure the values are set for travel speed unit and default travel speed, open Field Service Settings, select **Scheduling**, and then select **Routing**.

Register to the Street Level Routing service	Register
Enable Street Level Routing (?)	
Drable Point to Point Predictive Routing Learn More in Help 🛞	
Calculate travel and breaks 🛞	
Travel speed unit M9H	
Default travel speed ③	

- The entered default travel speed is used for calculating the travel time between bundle member service appointments, even if travel speed is specified for the service resources assigned to the service appointments.
- The distance between the service appointments is based on aerial distance.
- Travel time between the bundle member service appointments is also affected by the service resource's efficiency. See Appointment Bundling Limitations.

Example: A service resource is assigned to a bundle that includes two service appointments of two hours each and a travel time between them of one hour. If the service resource doesn't have a defined efficiency, the duration of the bundle is 2 hr (service appointment A) + 1 hr (travel time) + 2 hr (service appointment B) = 5 hr. If the service resource has a defined efficiency of 0.5, the duration of the bundle is: 1 hr (service appointment A) + 0.5 hr (travel time) + 1 hr (service appointment B) = 2.5 hr.

- 4. Under Unbundling Settings:
  - a. Select the status of a service appointment after it's removed from a bundle, and select the statuses you don't want to update.
  - **b.** To prevent automatic unbundling, leave the Criteria for Automatic Unbundling field blank. Otherwise, enter the recordset filter criteria.
- 5. Under Status Transition Settings, select which bundle service appointment statuses to add or not propagate.
- **6.** Save your changes.

## Test Your Appointment Bundling Configuration

After completing the configuration steps for appointment bundling, test it in Field Service.

- 1. Open Field Service.
- 2. From the appointment list, select one or two service appointments.
- 3. From the global actions list, select Bundle.

All S	ervice Ap	pointment	ts		8
0 -	Horizon:	02/28/2021	苗	✔ Match Gan	tt Dates
1-12 o	f 12 (3 selecte	d) Sch	nedule	Dispatch	•
Searc	h Service App	ointment	* 0	Optimize	
•	APPOINTME	N STATUS		lag / Unflag Inschedule	
✓	SA-0009	None	88 B	lundle	Î
~	SA-0010	None	Ξ.	Inbundle	
<b>~</b>	SA-0011	None	SA	3_66NMOw	
	SA-0012	None	SA	4_66NMOw	
	SA-0023	None			

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Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To manage bundles:

Field Service Dispatcher

To update configuration:

- Customize Application
- **4.** In the Bundle Appointments window, select **Create bundle**, and then select a bundle policy.

11	Service Appoints	nents							
2	SA Number 4	Duration in Minutes	Address	Early Start	Due Date	Work Type	Account	Required Skills	
2	SA-0202	60		11/25/2022 4:18 AM	2/25/2023 4:18 AM				
63	ate Bundle	Add to Existin	g Bundle						
	*Bundle Policy		g Bundle						
			g Bundle						

- **5.** Save the bundle.
- 6. If you get error messages, resolve the configuration issues accordingly.
- 7. If you get a system error message about your remote site settings:
  - **a.** Copy the URL from the error message.
  - b. From Setup, in the Quick Find box, enter Security, and then select Remote Site Settings.
  - c. Click New Remote Site.
  - d. Enter a name, for example AppointmentBundling.
  - e. For Remote Site URL, enter the URL that you copied from the error message.
  - f. Save the remote site.

When a bundle is created:

• Appointment list—The new bundle service appointment appears in the appointment list.

B Indicates that the appointment is a bundle service appointment. When the bundle is scheduled, the icon also appears on the Gantt.

- **I**Indicates that the appointment is a bundle member service appointment.
- Gantt—If all the service appointments in the bundle are scheduled, assigned to the same resource, and on the same day, the bundle is scheduled on the Gantt. If not, the bundle must be scheduled.
- Bundle tab of the bundle service appointment's details window—If an Appointment Bundle Sort Policy is defined, the service appointments are sorted according to the policy. If an Appointment Bundle Sort Policy isn't defined, the service appointments are sorted according to their due date in ascending order.
- Service Appointments tab—Shows the bundle information related to each bundle service appointment and bundle member service appointment. This information can't be edited.

-					All 🔻 🔍 Search		
	Field Servi	ice Hor	ne Reports	<ul> <li>Field Service</li> </ul>	Accounts 🗸 🛛 Work Orders 🗸	Service Appointments 🗸 🗸	Service Resources 🗸 🗸
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>	Actual Times	5					
>	System Infor	mation					
~	Bundler Info	rmation					
	Related Bundle					Manually Bundled	
	Sundle Member					Bundle	

The Bundle Information fields can't be selected to display in a list view. See Appointment Bundling Limitations

## **Appointment Bundling Limitations**

Review the limitations of Appointment Bundling.

### Aggregation Duration Downscales

- When you define more than one aggregation duration downscale, they aren't evaluated in any particular order. If your duration downscales include overlapping service appointments and include Max Reduction values, it can lead to inaccurate results.
- Custom fields for service appointments used in aggregation duration downscales must have read and edit access.

See Create Appointment Bundle Aggregation Duration Downscales.

## Aggregation policies

- Custom fields for service appointments used in aggregation policies must have read and edit access.
- For the **Allow the same value to appear more than once** option, make sure that **Do not allow duplicate values** isn't selected in the field's configuration settings.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. • For string aggregations with the Sum Based on Bundle Members action, make sure that the length of the string field can contain enough values to populate the bundle service appointment field.

See Create an Appointment Bundle Aggregation Policy.

## Bundle Member Service Appointments related list

- The Sort By option is set to Default. Other options aren't supported.
- The expanded view of the related list indicates that the appointments are sorted by due date, even if the order is determined by the Appointment Bundle Sort Policy.
- Using the arrow that changes the order of the appointments according to a specific column overrides the order determined in the Appointment Bundle Sort Policy.

## **Bundle policies**

- The Allow Scheduling Dependencies in Bundle field isn't supported.
- You can create more than one service territory policy for a bundle policy, but it isn't recommended. The dispatcher can only bundle together service appointments with the same service territory in the same time zone. If you define more than one service territory for a bundle policy, make sure that the enhanced scheduling and optimization setting in all the service territories matches. If the setting is enabled in one service territory and disabled in another, the bundles created with the bundle policy can't be updated.
- You can delete a bundle policy even if it's already in use. However, you can't perform actions on a bundle that was created using that policy, such as add or remove bundle members or unbundle a bundle.
- Custom fields for service appointments used in bundle policies must have read access.

See Create an Appointment Bundle Policy.

## **Experience Site users**

Experience Site users don't have the Bundle Policy field in the service appointment's Bundle tab. See Add Permissions for Service Appointment Bundling.

## Localization

If you change the API name of the None status after enabling Appointment Bundling, you must refresh the cache. To refresh the cache, edit and save your Bundle Config or any bundle policy.

## Optimization

A scheduled path in a record-triggered flow doesn't always work with optimization when Enhanced Scheduling and Optimization is enabled. In this case, the optimization updates are done by the platform integration user who has a session-based permission set that isn't active during the scheduled path's execution. To grant this user the necessary permission, clone the Field Service Integration permission set, disable the Session Activation Required option, and then save. Then assign this permission set to the platform integration user. You can add more permission sets to this user if it's necessary.

## **Propagation policies**

Custom fields for service appointments used in aggregation policies must have read and edit access. See Create an Appointment Bundle Propagation Policy.

## Recordset filter criteria

Inactive recordset filter criteria aren't supported. See Create Recordset Filter Criteria for Bundling Appointments.

## **Restriction policies**

Custom fields for service appointments used in sort policies must have read access. See Create an Appointment Bundle Restriction Policy.

## Scheduling

Bundle member service appointments can't be part of complex work with scheduling dependencies. See Create a Field Service Bundle Manually.

## Service Appointments list view

The Bundle Information fields from the service appointment's details can't be selected to display in a list view. See Create a Field Service Bundle Manually and Test Your Appointment Bundling Configuration.

## Sort policies

Custom fields for service appointments used in sort policies must have read access. See Create an Appointment Bundle Sort Policy.

## Travel time

- Travel time between the bundle member service appointments is also affected by the service resource's efficiency.
- When you unbundle a bundle that includes travel time, the line that indicates travel between service appointments doesn't appear on the Gantt.

See Create an Appointment Bundle Config.

## Setting Field Service Key Performance Indicators

Key Performance Indicators (KPIs) are crucial when scoping your business's needs and aligning them with what Field Service provides. For example, KPIs can help you make smart business decisions by setting efficient schedules and sending workers with the right skills and tools for the job.

## Implementing KPI Improvements

The mobile worker needs to be equipped with both information, knowledge and parts (when needed):

- Where the job is.
- History of the customer.
- History of any assets.
- How to complete all the steps of the work, or have the ability to collaborate remotely with another resource.
- Checklists and work plans for the necessary steps required.
- Visibility into all safety protocols and compliance requirements.

There are six provided metrics to measure progress, from the tactical – such as first-time fix rate and time to site – to the strategic: customer satisfaction.

## **Reduce Call Volume**

If your dispatchers are still fielding a high volume of calls with scheduling requests and status updates, implement the following:

- Self-service capabilities: Enable self-service through a customer portal on your site or your customer-facing app.
- Automated notifications: Keep customers in the know with automated updates via email, SMS, or the customer portal when a mobile worker is nearby or if there is a delay.
- Live tracking: Give customers the ability to see where a mobile worker is on a map with an arrival calculation, similar to what you would see on a ride-sharing app.

## Improve Time to Site

If you've implemented a connected solution but mobile workers are still not getting to their job sites on time, leverage the following:

- Route optimization: Help dispatchers effectively manage each location, find the shortest routes, and facilitate planning journeys with a full map view from their screen.
- Intelligent planning: Eliminate dispatcher bias by using intelligence with a full view of the field to assign (and reassign) the right mobile worker for each job based on location, availability, skill set, and equipment.
- Geolocation tracking: Embed GPS technology into the field service app to navigate mobile workers to the shortest route to site and give dispatchers a bird's eye view of resources in the field.

## Boost Number of Jobs Per Day

Ensure dispatchers are using workforce analytics to assign jobs based on a set of business rules:

- Location
- Skill set
- Worker availability
- Equipment availability
- Inventory on hand

## Increase First-Time Fix Rates

If mobile workers still struggle with first-visit resolution, ensure they have the best mobile capabilities in the field:

- Consolidated information: Give mobile workers access to job information, customer data, task details, asset history, connected device insight, and schedules from their mobile devices to prepare them before they even walk through the door.
- Offline and online capabilities: With offline capabilities, mobile workers can download customer information ahead of time and log updates offline that sync once reconnected to data or Wi-Fi.
- Ongoing support: Empower mobile workers with helpful resources for more complex cases, such as knowledge articles and video tutorials available from their app.

## **Reduce Costs**

To reduce costs, consider the following:

- Faster time to invoice: By giving mobile workers a digital notice through their app, job completion is confirmed from their mobile device, and customers are invoiced faster.
- Flow of processes: Optimize field service with a simple flow of processes that require minimal effort through field service automation.

• Job status: Mobile workers log updates before, during, and after appointments to give dispatchers a real-time view of job status and effectively create planning journeys.

## Improve Customer Satisfaction

You can close the feedback loop with a short survey, open-ended questionnaire, or direct outreach on everything from appointment booking to the experience with a mobile worker.

## Set Up for Product Warranties in Field Service

To have new assets automatically pick up the standard warranty for a product, set up a flow, process builder, or trigger.

SEE ALSO: Build a Flow Create a Process Triggers

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Set Up Product Service Campaigns in Field Service

If your Salesforce org was created before Spring '21, add the Product Service Campaign Item related list to Product Service Campaign.

SEE ALSO:

Manage Product Service Campaigns in Field Service Add the Files Related List to Page Layouts

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Set Up Field Service Asset Availability and Reliability Reporting

Get information on asset availability and reliability by recording details of asset downtime in Field Service.

- 1. From Setup, enter *Profiles* in the *Quick Find* box, then select **Profiles**.
- 2. Click the profile you want to provide with access.
- 3. Click Edit.
- 4. Under Administrative permissions, select Field Service Standard.
- 5. Under Standard Object Permissions, give read or read/write access to Assets. Save your changes.
- 6. Under Field-Level Security, click View next to Asset.
- 7. Click Edit and grant:
  - **a.** read access to the Availability, Reliability, Cumulative Downtime, and Cumulative Unplanned Downtime fields.
  - **b.** read/write access to the Average Uptime Per Day, Uptime Record End Date, and Uptime Record Start Date fields.
- 8. Save your changes.
- 9. Add the Average Uptime Per Day, Uptime Record End Date, and Uptime Record Start Date fields to the Asset page layout. Also add your choice of Availability, Reliability, Cumulative Downtime, and Cumulative Unplanned Downtime fields.

#### SEE ALSO:

Track Availability and Reliability in Field Service

# Set Up Field Service in Experience Cloud Sites

Keep customers, partners, and contractors in the loop about field service work by adding field service objects to your Experience Cloud site.

If you use an Experience Cloud site to connect with your business partners, employees, or customers, keeping the communication lines open is key to field service success. For example, add work orders and service appointments to a partner site to stay in sync with contractors. Or, add return orders and return order line items to a site to coordinate customer returns. Field service objects are supported in Experience Builder sites and in Salesforce Tabs + Visualforce sites.

- 1. To set up field service objects in an Experience Builder site:
  - a. Create an object page in the Pages menu in Experience Builder.
  - **b.** When prompted to choose a Salesforce object, choose a field service object. Three related pages are automatically created for the new object page: a record detail page, a record list page, and a related list page. To use a Visualforce Lightning component in an Experience Builder site, add the Visualforce page from the managed package to the record detail page.
  - c. To expose the field in your customer-facing site add it to the Navigation Menu.
- 2. To set up field service objects in a Salesforce Tabs + Visualforce site, add the objects as tabs. For help adding tabs and giving users access to them, see Add Tabs to Your Experience Cloud Site.
- **3.** Optionally, configure guest user access to work orders. By default, guest users in sites can't view or create work orders.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create, customize, or publish an Experience Cloud site:

Create and Set Up
 Experiences AND View
 Setup and Configuration

- **a.** From Setup, enter *Digital Experiences* in the Quick Find box, then select **All Sites**.
- b. Select Builder next to the site whose guest users need access to work orders.
- c. In the left-hand panel, click **Settings**, and then click the name of the guest user profile.
- d. In the Standard Object Permissions section, configure access to work orders and save your changes.

Note: Linked articles, which are knowledge articles attached to supported field service records, aren't supported in Experience Builder sites.

#### Add the Field Service Dispatcher Console to an Experience Builder Site

Hand over the dispatching reins to a field service contractor manager by embedding the dispatcher console in an Experience Builder site.

Provide Access to Asset Availability and Reliability Information in Field Service Let Experience Cloud site users view or record asset downtime details and view information on asset availability and reliability.

- SEE ALSO:
  - Set Up and Manage Experience Cloud Sites
  - Objects Supported by Out-of-the-Box Components and Pages in Experience Builder Templates
  - Visualforce Page Component
  - Field Service Objects
  - Guidelines for Setting Up Field Service Contractors

## Add the Field Service Dispatcher Console to an Experience Builder Site

Hand over the dispatching reins to a field service contractor manager by embedding the dispatcher console in an Experience Builder site.



🜐 This is a Field Service managed package feature.

- 1. Add the dispatcher console to your Experience Builder site.
  - **a.** In Experience Builder, open the Pages menu on the top toolbar.
  - **b.** Click **New Page** at the bottom of the Pages menu.
  - c. Click Standard Page, and follow the prompts to create your page. Give it a helpful name, like Dispatcher Console.
  - **d.** Assign the page a one-column layout.
  - e. From the Components menu, drag a Visualforce Page component to the Content section of the page. Set the component's properties as follows:
    - VF Page name: vf001 ServiceExpert
    - Height: Any value (we suggest 800 pixels)
    - Record ID: Leave unchanged—{!recordId}
  - **f.** Open the navigation menu and add a menu item. Use the following settings:
    - Name: Any value (for example, *Dispatcher Console*)
    - Type: Community Page
    - Page: Select the page you created earlier
  - g. In the Members section, select the Field Service Community Dispatcher Permissions to be allowed in the site.
  - h. Publish your changes.
- 2. Give site users access to the new dispatcher console page.
  - a. Confirm that the site users who need access to the dispatcher console have a Partner Community user license.
  - b. Confirm that a service territory has been created for the contractor. For details, see Guidelines for Setting Up Field Service Contractors.
  - c. Create the site dispatcher permission sets. From the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings. Then, click Getting Started > Permission Sets.
  - d. Find the Field Service Community Dispatcher tile. Confirm that the tile shows a message indicating that the permission set is current. If it doesn't, click Create Permissions.
  - e. Assign two permission sets to the site users who need access to the dispatcher console:
    - Field Service Community Dispatcher License permission set
    - Field Service Community Dispatcher Permissions permission set

### **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

#### USER PERMISSIONS

To create, customize, or publish an Experience Cloud site:

- Create and Set Up Experiences AND View Setup and Configuration
- To create a permission set:
- Manage Profiles and Permission Sets

To assign a permission set license:

Manage Users

To use the dispatcher console in a site:

Partner Community license and Field Service **Dispatcher** permission set license

Note: Site dispatchers can't access the complex work feature—for details, see Complex Work in Field Service—or Live Gantt updates.

#### SEE ALSO:

Customize the Field Service Dispatcher Console Work in the Field Service Dispatcher Console Gantt

## Provide Access to Asset Availability and Reliability Information in Field Service

Let Experience Cloud site users view or record asset downtime details and view information on asset availability and reliability.

- 1. From Setup, enter *Profiles* in the *Quick Find* box, then select **Profiles**.
- 2. Click the Experience Cloud site user profile you want to provide with access.
- 3. Click Edit.
- 4. Under Administrative permissions, select Field Service Standard.
- 5. Under Standard Object Permissions, give read or read/write access to Assets. Save your changes.
- 6. Under Field-Level Security, click View next to Asset.
- 7. Click Edit and grant read access to the Availability and Reliability fields. Click Save your changes.
- Note: Access to asset downtime related list is not available for guest users.

#### SEE ALSO:

Track Availability and Reliability in Field Service

## Set Up Visual Remote Assistant for Field Service

Promote sustainability using Visual Remote Assistant for Field Service, boost sales, and improve efficiency while reducing costs by delivering service from anywhere.

Watch the video to learn about Visual Remote Assistant from an agent's perspective.

#### Watch a video

Watch the video to learn how Visual Remote Assistant can impact your customer engagement practices.

#### Watch a video

Customers prefer to resolve their issues effortlessly, right now, and without bringing technicians on site. Businesses and workers are concerned for employee safety. Remote sales people, call center agents or field technicians can solve a customer's problem visually, while guiding them on-screen through each step and verifying a successful resolution.

Visual sessions imagery is retained for future reference and becomes an integral part of the company's customer journey assets.

• No app download or additional software installation is required.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

- Customers launch the visual session in a mobile web browser by clicking a link sent to them via SMS, email or in a digital communications platform message.
- Visual Remote Assistant works even on low or variable bandwidth connections to preserve the visual session.

If you're a Salesforce admin or a Salesforce implementer, these instructions and reference resources are for you. Follow the sections in sequence to ensure optimal use of Visual Remote Assistant for superior customer experience. Consider involving additional stakeholders who are in charge of new systems implementations.

#### Install Visual Remote Assistant

To use the Visual Remote Assistant, install the managed package. See Install a Package.

To configure Visual Remote Assistant with other Salesforce products, see Visual Remote Assistant for Salesforce.



#### **Roll Out Visual Remote Assistant**

A successful rollout ensures full business KPI impact potential, and allows for optimal processes redesign and business outcomes. Two rollout approaches are available.

- Simplified, quick onboarding, suitable for a very small number of Visual Remote Assistant users. See the essential Visual Remote Assistant self-learning Trailhead module (login required).
- Thorough, methodical, and fully customizable, suitable for more complex customer journeys and larger number of licenses. See:
  - Complete onboarding methodology guide
  - Customizable agent training slide deck

#### **Advanced Visual Remote Assistant Implementations**

Access these resources to learn more about verticals, use cases, and Salesforce products together with Visual Remote Assistant such as flows, scheduling, Community Portal, Experience Cloud site. Each link covers a different dimension of extended Visual Remote Assistant implementations:

- Empower customers with real-time visual support
- Deliver Service Anytime, Anywhere With Visual Remote Assistance
- Drive Revenue with VRA Solutions using this vertical by use-case matrix

#### Visual Remote Assistant Community in Trailhead

The Visual Remote Assistant Trailhead group is the community's gate. Visual Remote Assistant users, admins, and partners can find responses to their questions, speak with Salesforce's experts, suggest ideas, and get guidance and advice. Trailhead is regularly updated and enriched to make sure that Visual Remote Assistant can enhance customer experience throughout their journey. See the Visual Remote Assistant Trailhead group.



Note: To use Visual Remote Assistant, you must provide your own internet or package of data and phone line. Neither are included in the managed package.

#### SEE ALSO:

Admin Manual: Visual Remote Assistant Agent Manual Installation & Configuration Manual Product Description Security & Privacy Document Trailhead: Visual Remote Assistant

# Set Up After Field Service Sandbox Refresh

After you refresh a sandbox for Field Service, you must verify that sandbox remote sites are active. Then configure your Salesforce sandboxes to use independent remote sites for street-level routing (SLR) and optimization services, and verify your default policies and operating hours.

### 🜐 This is a Field Service managed package feature.

- Verify that sandbox remote sites are active. From Setup, in the Quick Find box, enter *Remote Site Settings*, and then select **Remote Site Settings**. Activate the FSL\_GIS\_SB and FSL\_Optimize\_SB sites. Reauthenticate your optimization user and register street-level routing.
- Register street-level routing. To register SLR, in the Field Service Admin app, select the Field Service Settings tab and then select Scheduling. Select Routing and click the Register button if shown.
- 3. Reactivate Optimization. See Set Up Optimization
- 4. In the managed package Field Service Settings app, verify the following:

If you refreshed a developer sandbox, you must first create operating hours and scheduling policies and then verify.

- a. Default Emergency Policy and Default Scheduling Policies. See Create and Manage Scheduling Policies
- b. Default Operating Hours. See Guidelines for Creating Operating Hours for Field Service
- c. Optimization Scheduled Jobs policy. See Set Up and Run Optimization Jobs
- d. Scheduling Recipes Policies. See Create Scheduling Recipes for Common Events
- 5. Run health check. See Test Your Field Service Configuration with Health Check

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To configure settings in the Field Service Admin app and Field Service Settings app:

 Field Service Admin Permission Set

To configure remote settings:

Customize Application
 or Modify All Data

# **Report on Field Service**

Create report types to track field service activity in your org. To take your reporting a step further, use the Field Service Analytics App.

You can create a variety of custom report types to stay informed about field service records.

- 1. From Setup, enter *Report Types* in the Quick Find box, then select **Report Types** and click **New Custom Report Type**.
- 2. In the Primary Object dropdown menu, select the field service object you want to report on:
  - Note: This table doesn't include feed objects that are available as secondary objects.

Primary Object	Description	Available Secondary Objects
Accounts	View accounts' maintenance plans, product requests, return orders, resource preferences, and work orders.	Field service objects: Maintenance Plans Product Requests Product Request Line Items Resource Preferences Return Orders Work Orders
Assets	View assets' maintenance plans, replacements, and work orders.	<i>Field service objects:</i> Asset Relationships Maintenance Assets Work Orders
Cases	View cases' work orders, return orders, and product requests.	Field service objects: Product Requests Product Request Line Items Return Orders Work Orders
Contacts	View contacts' maintenance plans, service appointments, return orders, and work orders.	Field service objects: Maintenance Plans Return Orders Service Appointments Work Orders
Locations	View locations' maintenance plans, parts, part transfers, and more.	Addresses Assets Maintenance Plans

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create or update custom report types:

 Manage Custom Report Types

To create a public reports folder:

• Manage Public Reports

Primary Object	Description	Available Secondary Objects
		Product Items
		Product Requests (Source Location)
		Product Requests (Destination Location)
		Product Request Line Items (Source Location)
		Product Request Line Items (Destination Location)
		Product Transfers (Source Location)
		Product Transfers (Destination Location)
		Service Resources
		Service Territory Locations
		Shipments (Source Location)
		Shipments (Destination Location)
		Return Orders (Source Location)
		Return Orders (Destination Location)
		Work Orders
		Work Order Line Items
Maintenance Plans	View maintenance plans' work orders and assets.	Maintenance Assets Work Orders
Operating Hours	View the operating hours of service territories and their members.	Service Territories Time Slots
Orders	View an order's associated return orders.	<i>Field service objects:</i> Return Orders
Product Items	View the transfer, consumption, and	Product Transfers
	replenishment of parts in your inventory.	Products Consumed
		Product Item Transactions
Product Request Line Items	View the transfers related to parts in your inventory.	Product Transfers
Product Requests	View the line items and return orders	Product Request Line Items
	associated with product requests.	Return Orders
Products	View product requirements, transfers,	Field service objects:
	requests, return order line items, and parts.	Assets
		Product Items

Primary Object	Description	Available Secondary Objects
		Products Required
		Product Request Line Items
		Product Transfers
		Return Order Line Items
Product Transfers	View product quantity, origin and destination locations, and owner of product transfers.	None
Return Orders	View return orders' line items.	Return Order Line Items
Service Appointments	Compare the differences between scheduled and actual appointment times, and analyze trends in resource assignment on appointments.	Assigned Resources
Service Contracts	View service contracts' maintenance plans and work orders.	<i>Field service objects:</i> Maintenance Plans Work Orders
Service Crews	View appointments that crews are assigned to and information about crew members.	Assigned Resources Service Crew Members
Service Resources	Compare service resources' capacities, absences, and skills, and view the territories they belong to and service appointments and crews they are assigned to. And, see which accounts or work orders list resources as preferred.	Assigned Resources Resource Absences Resource Capacities Resource Preferences Service Crew Members Service Resource Skills Service Territory Members Time Sheets
Service Territories	Compare the number and types of service appointments, work orders, and work order line items across service territories, and view the service resources that belong to each territory.	Service Appointments Service Territory Members Service Territory Locations Work Orders Work Order Line Items
Shipments	View shipment address and transfer information.	Product Transfers
Time Sheets	View time sheets' owners, entries, and duration.	Time Sheet Entries

Primary Object	Description	Available Secondary Objects
Users	View field service records created by,	Field service objects:
	modified by, or associated with users.	Assets (Asset Owner, Created By, Last Modified By)
		Locations (Created By, Last Modified By)
		Maintenance Plans (Created By, Last Modified By)
		Operating Hours (Created By, Last Modified By)
		Product Items (Created By, Last Modified By)
		Product Requests (Created By, Last Modified By)
		Product Request Line Items (Created By, Last Modified By)
		Product Transfers (Created By, Last Modified By)
		Return Orders (Created By, Last Modified By, Returned By)
		Service Appointments (Created By, Last Modified By)
		Service Crews (Created By, Last Modified By)
		Service Resources (User, Created By, Last Modified By)
		Service Territories (Created By, Last Modified By)
		Shipments (Created By, Last Modified By)
		Time Sheets (Created By, Last Modified By
		Work Orders (Owner, Created By, Last Modified By)
		Work Types (Created By, Last Modified By
Work Orders	Compare information such as the numbe	er Object Milestones
	of appointments or line items per work	Products Consumed
	order, or work order service territories. And analyze how resource preferences and ski	Due also at Die aussie ate
	requirements vary between work orders	
		Product Request Line Items
		Resource Preferences
		Service Appointments

Primary Object	Description	Available Secondary Objects
		Skill Requirements
		Time Sheet Entries
		Work Order Line Items
		Work Order Line Items
	Compare information such as work type duration and skill requirements.	Maintenance Plans
		Products Required
		Skill Requirements

#### 3. Complete the required fields and click Next.

Note: In the Store in Category dropdown menu, we recommend choosing Customer Support Reports or Other Reports. This is the category where users find the custom report type on the Reports tab. You can also create your own field service report folder. Make your choices on the Define Report Records Set page.

#### 4. Click Save.

5. As needed, remove and rearrange fields from your report layout.

Salesforce also offers the Field Service Analytics App, which is bundled with the Service Analytics App. To learn more, see The Field Service Analytics App.

Note: To view work orders with milestones in your org, use the Object Milestones custom report type. The Milestone Status and Milestone Status Icon fields are not available in work order reports.

# Manage Data Integration Rules for Field Service

Set up data integration rules to ensure that service resource travel time is accurately calculated.

When you add a street address to certain types of field service records, Salesforce calculates the address's latitude, longitude, and location accuracy. You can reference this data, which is visible only in the API, in any custom field service applications. Geolocation information is used to calculate service resource travel times if the Field Service managed package is installed.

This geolocation data feature, known as "geocoding", is enabled for all supported field service objects when you enable Field Service. The API contains values for the three fields in the following table on:

- Work orders
- Work order line items
- Service appointments
- Service territories
- Resource absences
- Service territory members

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Field Name	Description	
Latitude	The latitude of the street address.	
Longitude	The longitude of the street address.	
GeocodeAccuracy	<ul> <li>The accuracy of the latitude and longitude. This field contains one of the following values, listed in order from most to least accurate:</li> <li>Address: In the same building</li> <li>NearAddress: Near the address</li> <li>Block: Midway point of the block</li> <li>Street: Midway point of the street</li> <li>ExtendedZip: Center of the extended ZIP code area</li> <li>Zip: Center of the ZIP code area</li> <li>Neighborhood: Center of the neighborhood</li> <li>City: Center of the county</li> <li>State: Center of the state</li> <li>Unknown: No match for the address was found (for instance, the address is invalid)</li> </ul>	

Note: Because Google Maps is restricted in China, Field Service features that depend on Google Maps don't work there.

## Keep Geocoding Data Current

Salesforce uses data integration rules to periodically refresh these three fields. A refresh occurs when:

- The record is created or updated
- The record type's data integration rule is deactivated and reactivated

Allow some time for the geocoding fields to refresh. The processing time varies based on the number of records being updated.

Note: If bulk geocoding is turned off for a data integration rule, deactivating or reactivating the rule doesn't refresh the geocoding fields. Bulk geocoding is enabled by default.

To keep an eye on the status of a record's geocoding data:

- In Lightning Experience: On the record, select Check for New Data in the action menu.
- In Salesforce Classic: Add the Data Integration Rules related list to the detail page layout of the records you'd like to track. The related list includes:
  - The time the record's geocoding data was last refreshed.
  - The record's geocoding status. To learn what each status means, see Statuses for Data Integration. A status of In Sync means that your geocoding data is current.
  - An **Update** link that lets you manually run an instant refresh.

## Opt out of Geocoding

If you're already using another geocoding service, opt out of Field Service geocoding:

- 1. From Setup, enter Data Integration in the Quick Find box, then select Data Integration Rules.
- 2. Click Deactivate next to the following rules.
  - Geocodes for Work Order Address
  - Geocodes for Work Order Line Item Address
  - Geocodes for Service Appointment Address
  - Geocodes for Service Territory Address
  - Geocodes for Service Territory Member Address
  - Geocodes for Resource Absence Address

#### SEE ALSO:

Track Service Resource Geolocation with the Field Service Mobile App

# Set Up Salesforce Labs Field Service Dashboards

Download a free package of Field Service dashboards and reports from Salesforce Labs AppExchange. Track metrics and performance for many key items of interest in a field service operation. Use these optional dashboards to create customized reports and dashboards for your operation's specific needs.

Note: Salesforce Labs apps are free to use, but aren't official Salesforce products and are considered community projects. These apps aren't officially tested or documented. For help on any Salesforce Labs app, consult the Salesforce Trailblazer Community. Salesforce Customer Support isn't available for these applications.

The package easily installs three standard dashboards that chart objects in your Field Service org. It's a good starting point for customizing performance and management dashboards that you can reconfigure and modify as needed.

Some of metrics tracked include:

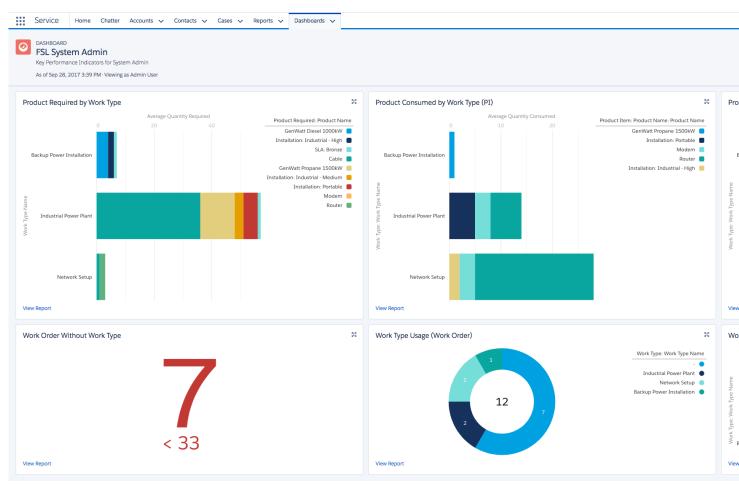
- Number of completed appointments by a resource
- Management by territory and utility
- Total hours worked by resource
- Number of maintenance plan checkins
- Resource capacity by territory
- Upcoming priority appointments
- Total number of completed appointments by week
- Products consumed by work orders
- Average appointment and travel times

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

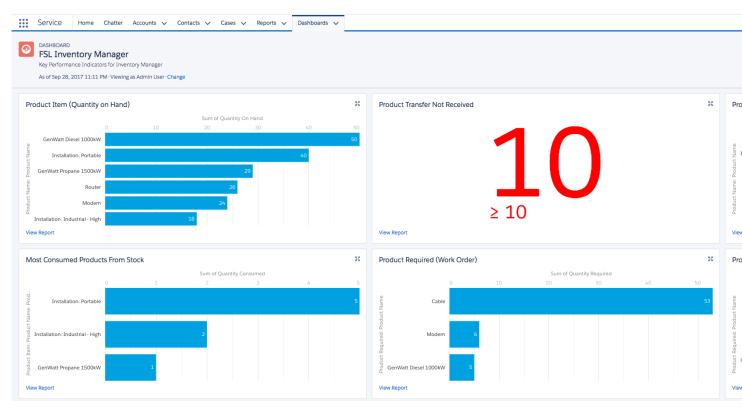
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## System Administrator Dashboard



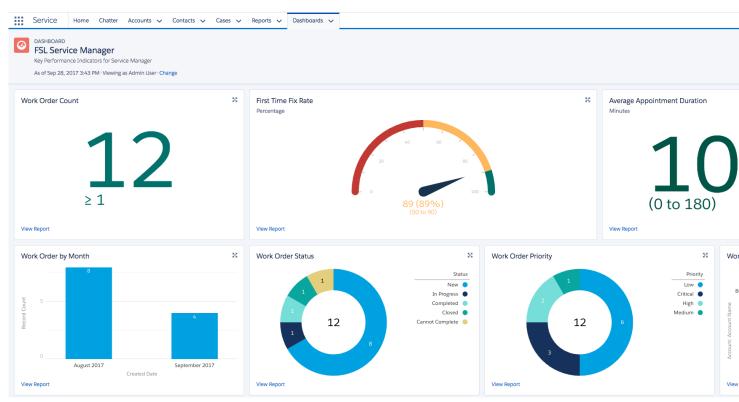
This dashboard displays metrics - such as products needed and consumed, and overall performance for each type of work.

## Inventory Manager Dashboard



This dashboard displays information on how products are consumed and used, and by work order types.

## Service Manager Dashboard



This dashboard focuses on the work performance of resources and additional work order metrics.

## Download

To download the dashboards, click **Get It Now** on the the Field Service Dashboards page on AppExchange.

#### SEE ALSO:

AppExchange: Installing Packages Reports and Dashboards

# Einstein for Field Service

Supercharge your Field Service workforce efficiency by using generative AI and Einstein.

#### Einstein Generative Al for Field Service

Einstein generative AI gives you access to powerful features in Field Service.

#### Einstein Copilot for Field Service

Einstein Copilot lets you tap into Al without hard-coding responses. See how you can use Einstein Copilot to make the Field Service workforce more efficient.

SEE ALSO:

About Einstein Generative Al

## Einstein Generative AI for Field Service

Einstein generative AI gives you access to powerful features in Field Service.

#### Set Up Einstein Generative AI for Field Service

Set up Einstein generative AI to get access to generative AI features in Field Service.

#### Set Up Pre-Work Brief for Field Service Mobile Workers

Show mobile workers a brief that uses generative AI to tell them everything they need to know about their upcoming work order.

### **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

### **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

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To purchase Einstein 1 Field Service, contact your Salesforce account executive.

## Set Up Einstein Generative AI for Field Service

Set up Einstein generative AI to get access to generative AI features in Field Service. Before you begin, follow the steps in Set Up Einstein Generative AI.

Note: Don't skip the steps for setting up Data Cloud.

- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Click Einstein Field Service User.
- 3. Click Manage Assignments, and then click Add Assignments.
- 4. Assign the permission set to Field Service Einstein users and admin users.
- 5. (For mobile users) Enable access to Lightning web components.
  - a. From Permission Sets, click New.
  - **b.** For Label, enter the name of the permission set, for example, *Einstein for Field Service Mobile*.
  - **c.** Click the API Name field to populate it.
  - d. For License, select Field Service Mobile.
  - e. Save the permission set.
  - f. In the Einstein for Field Service Mobile permission set that you created, click **System Permissions**, and then click **Edit**.
  - g. Enable the Lightning SDK for Field Service Mobile permission.
  - h. Save your changes.
  - i. In the Einstein for Field Service Mobile permission set, click **Manage Assignments**, and then click **Add Assignments**.
  - j. Assign the permission set to mobile users and to the admin users.

### **EDITIONS**

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### USER PERMISSIONS

To create and assign permission sets:

 Manage Profiles and Permission Sets

## Set Up Pre-Work Brief for Field Service Mobile Workers

Show mobile workers a brief that uses generative AI to tell them everything they need to know about their upcoming work order.

Before you begin, follow the steps in Set Up Einstein Generative AI for Field Service on page 313.

## **Enable Pre-Work Brief**

- 1. Assign the Pre-Work Brief permission.
  - a. From Setup, in the Quick Find box, enter Users, and then select **Permission Sets**.
  - **b.** In the Einstein for Field Service Mobile permission set, click **System Permissions** and then click **Edit**.
  - c. Enable the Show Pre-Work Brief permission and save your changes.
  - **d.** In the Einstein for Field Service Mobile permission set, click **Manage Assignments** and then click **Add Assignments**.
  - e. Select the mobile and admin users and click Assign.
  - f. Click Done.
- 2. Assign the Prompt Template permissions.
  - **a.** Assign the Prompt Template Manager permission set to users that need to create and manage prompt templates in Prompt Builder.
  - **b.** Assign the separate Prompt Template User permission set for end users that need to access and run prompt templates.

See Enable Prompt Builder.

- 3. Activate the prompt.
  - **a.** From Setup, in the Quick Find box, enter *Einstein Generative AI*, and then select **Prompt Builder**.
  - b. Click New Prompt Template.
  - c. For Prompt Template Type, select Field Service Pre-Work Brief.
  - d. Enter a name. The API name is populated for you.
  - e. Save your template.
  - f. For Resource, select Flows, and then select Field Service Mobile: Generate Pre-Work Brief.
  - g. To see a preview of the brief that mobile workers see, for Work Order, enter a work order ID, and click **Preview**.

In the Resolution pane, you can see the prompt that generates the brief. In the Response pane, you can see the brief that the mobile worker sees. If you want to make any changes, see Modify the Brief on page 315.

- **h.** Save and activate the prompt template.
- 4. If the Pre-Work Brief flow doesn't run, check the fields used in the flow.
  - a. Review the list of objects and fields used in the flow. See Pre-Work Brief and Your Data on page 317.
  - **b.** From Setup, go to the Object Manager tab.

### **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To access the Field Service mobile app, users need the Field Service Mobile user license.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

#### **USER PERMISSIONS**

To build and manage Pre-Work Brief:

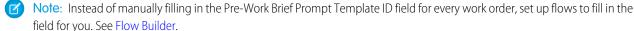
Customize Application

To create and assign permission sets:

 Manage Profiles and Permission Sets

- c. Select one of the objects that the brief uses.
- d. Click Fields & Relationships.
- e. Check that all of the fields that the brief uses exist in your Salesforce org. If any of the fields don't exist, delete them from the flow.
- f. Select one of the fields that the brief uses.
- g. Click Set Field-Level Security.
- h. Mark the required profiles as Visible.
- i. Save your changes and repeat the process for the remaining fields in the required objects.
- j. Give mobile workers permission to access these fields.
- 5. Add the Pre-Work Brief Prompt Template ID field to the page layout.
  - a. From Object Manager, open the Work Order object.
  - **b.** Click **Page Layouts** and open the layout that's assigned to the mobile workers.
  - c. Add the Pre-Work Brief Prompt Template ID field to the layout.
  - **d.** Save your changes.
  - e. Open the layout that's assigned to the admin user and add the Pre-Work Brief Prompt Template ID field to the layout.
  - f. Save your changes.
  - g. From the Work Order object, click Fields & Relationships.
  - h. Click Pre-Work Brief Prompt Template ID.
  - i. Click Set Field-Level Security.
  - j. For the profile of the user who is assigning prompt templates, select Visible.
- 6. In the work order, enter the ID of the prompt template in the Pre-Work Brief Prompt Template ID field. To find the ID, from Prompt Builder, open the prompt template and look at the URL. The ID is located after the phrase EinsteinPromptStudio. For example, if the URL is

https://testcom98.test1.my.pc-md.salesforce-setup.com/lightning/setup/EinsteinPromptStudio/OhfSG000001SUFVYA4/edit?c\_versionId=3vNSG000000g8v2AA, the ID is 0hfSG0000001SUFVYA4.



can also provide feedback about the brief.

7. Ask your mobile workers to pay attention to the brief in the Overview tab of each work order in the Field Service mobile app. The brief is generated the first time that the mobile worker views the work order when they're connected to the internet. Mobile workers

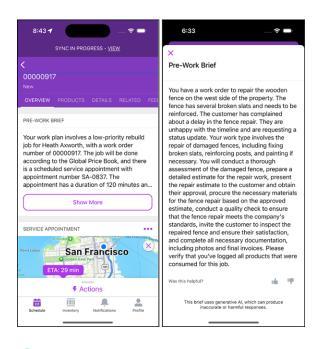
# Modify the Brief

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. Select the Field Service Mobile: Generate Pre-Work Brief flow template.
- 3. Click Save As to create your own version of the flow.
- 4. Add, modify, or remove elements from the flow. For example, you can make these changes.
  - Modify the Serialize Pre-Work Brief Records action to include additional objects that are required for your business needs.
  - Add fields to the Get Contacts element.

- Add an element for a custom field that's used in your Salesforce org.
- 5. To modify the prompt, from the flow, open the Add Pre-Work Brief Prompt Instructions element. Remove instructions that aren't relevant to you, or add instructions according to your business needs. For example, consider adding one of these instructions.
  - Make sure that the brief is no longer than 200 words.
  - Present the brief in bullet points.

Note:

- Add examples for what you expect the brief to look like.
- Avoid telling the prompt to always include a specific field. If the value is missing, generative AI can hallucinate and give you inaccurate results.
- 6. Connect the prompt template to your version of the flow.
  - a. From Setup, in the Quick Find box, enter Einstein Generative AI, and then select Prompt Builder.
  - b. Click New Prompt Template.
  - c. For Prompt Template Type, select Field Service Pre-Work Brief.
  - d. Enter a name. The API name is populated for you.
  - e. Save your template.
  - f. For Resource, select Flows, and then select the flow that you created.
  - g. To show a preview of the brief that mobile workers see, for Work Order, enter a work order ID.
  - **h.** Save and activate the prompt template.
- 7. In the work order, for Prompt Template, enter the prompt template ID. To find the ID, from Prompt Builder, open the prompt template and look at the URL. The ID is located after the phrase EinsteinPromptStudio. For example, if the URL is https://testcom9&test1.mypc-mdsalesforce-setup.com/lightning/setup/EinsteinPromptStudio/0hfSG000001SUFVYA4/edit?c\_versionId=3vNSG000000g8v2AA, the ID is 0hfSG000001SUFVYA4
- **8.** If you have various scenarios to address, set up more than one variation of the flow. For example, to create a different type of brief for emergency appointments:
  - a. Save another version of the flow and make your changes.
  - **b.** From Prompt Builder, create a prompt template for emergency appointments. For Resource, select the flow that you created for emergency appointments.
  - c. In the work order, for Prompt Template, enter the emergency appointments prompt template ID.



Note: This tool uses generative AI, which is known to include inaccurate or harmful responses. Before using, review the output for accuracy and safety. You assume responsibility for the output when making business decisions.

## Pre-Work Brief and Your Data

The default prompt for Pre-Work Brief uses your data to add context and personalization to your prompt. You can modify this data by editing the flow or the prompt.

Note: You can see this data in the Field Service Pre-Work Brief prompt template in Prompt Builder.

Object	Fields	Description
Account	<ul> <li>Account</li> <li>Number</li> <li>Description</li> <li>Industry</li> <li>Name:</li> </ul>	General customer information related to the work.
Case (by ID)	<ul> <li>Comments</li> <li>Description</li> <li>Priority</li> <li>Reason</li> <li>RecordTypeld</li> <li>Subject</li> <li>Type</li> </ul>	The record where the agent defines the details of the issue as provided by the customer.

Object	Fields	Description
Contact (by ID)	<ul> <li>Name: FirstName, LastName, Salutation</li> <li>Phone</li> <li>Pronouns</li> <li>Title</li> </ul>	Specific details of the person to contact for the required work or the person at the job site.
Pricebook 2 (by ID)	<ul><li>Description</li><li>Name</li></ul>	Related price book data.
Service Appointment (by ID)	<ul> <li>Address</li> <li>AppointmentNumber</li> <li>Description</li> <li>Duration</li> <li>SchedEndTime</li> <li>SchedStartTime</li> <li>ServiceNote</li> <li>Status</li> <li>Subject</li> <li>WorkTypeld: Description, Name</li> </ul>	Details about the specific job. A work order can have multiple service appointments.
Work Order (by ID)	<ul> <li>Address</li> <li>Description</li> <li>Duration</li> <li>EndDate</li> <li>ID</li> <li>Priority</li> <li>StartDate</li> <li>Status</li> <li>Subject</li> <li>WorkOrderNumber</li> </ul>	The main object that holds information about the work that is required.
Work Order Line Item (based on Work Order ID)	<ul> <li>Description</li> <li>LineltemNumber</li> <li>Priority</li> <li>WorkOrderld (Parent Work Order)</li> </ul>	Detailed information about the work that needs to be done.
Work Plans (based on Work Order Line Item or Work Order)	<ul><li>Description</li><li>ExecutionOrder</li><li>Name</li></ul>	A process that defines the work in steps.

Object	Fields	Description
	<ul> <li>ParentRecordId: IDWorkOrderId (Parent Work Order): ID</li> <li>WorkOrderLineItemId (Parent Work Order Line Item): ID</li> <li>WorkPlanTemplate: Description, Name, RelativeExecutionOrder</li> </ul>	
Work Step (based on link to Work Plan)	<ul> <li>ActionType</li> <li>Description</li> <li>ExecutionOrder</li> <li>Name</li> <li>ParentRecordId</li> <li>Status</li> <li>StartTime</li> <li>WorkPlanId</li> </ul>	The steps of the work plan.

SEE ALSO:

Einstein Generative Al Trusted Generative Al

# Einstein Copilot for Field Service

Einstein Copilot lets you tap into Al without hard-coding responses. See how you can use Einstein Copilot to make the Field Service workforce more efficient.

### Set Up Einstein Copilot for Field Service

Einstein Copilot gives you an easy way to surface rich customer data within Field Service with natural language interactions. With out-of-the-box copilot actions, you can quickly get up and running to boost the productivity of your Field Service workforce.

Agent Topics and Actions for Field Service

Learn how agent topics and actions work for Field Service.

#### Agent Builder for Field Service

Learn how Agent Builder works for Field Service.

#### Build Your Copilot for Field Service Experience

Review the standard topics and create your own as needed. Add standard or custom agent actions to your topics according to your business needs.

Recommended Utterances for Field Service Users

Einstein Copilot can help you find information quickly and efficiently with natural language.

## **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

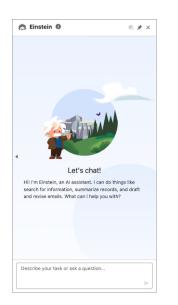
# Set Up Einstein Copilot for Field Service

Einstein Copilot gives you an easy way to surface rich customer data within Field Service with natural language interactions. With out-of-the-box copilot actions, you can quickly get up and running to boost the productivity of your Field Service workforce.

Before you begin, follow the steps in Set Up Einstein Copilot.

- 1. Verify the activation on the desktop site.
  - a. From the App Launcher, find and select Field Service.
  - **b.** Click the Einstein icon in the top right corner. If you see this view, Einstein Copilot is active.

If you see this view, Einstein Copilot is active.



- c. Ask Einstein a question and make sure that you get an answer.
- 2. Verify the activation on the Field Service mobile app.
  - **a.** Open the Field Service mobile app.
  - **b.** Tap Actions.

If you see this view, Einstein Copilot is active.

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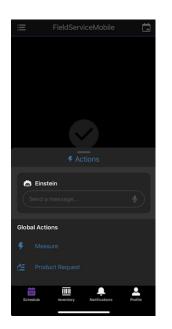
## USER PERMISSIONS

To create and assign permission sets:

 Manage Profiles and Permission Sets

To use the Field Service actions:

Access Field Service
 Copilot Actions



c. Ask Einstein a question and make sure that you get an answer.

# Agent Topics and Actions for Field Service

Learn how agent topics and actions work for Field Service.

Before setting up topics and actions for Field Service, learn about Salesforce topics and actions. Then, learn what the topics and actions mean for Field Service.

You can add any of the topics from the Asset Library. See Add a Topic from the Asset Library. Review the Field Service topics and add the ones that you want to use.

# Standard Field Service Topics

Торіс	Description	Included Actions
Field Service Dispatcher Actions	Helps dispatchers find appointments that require immediate attention and shows them in the appointment list for subsequent follow-up actions. Dispatchers can ask the agent to summarize the schedule and get a summary of the total number of appointments that require immediate attention. A filter is then created for each of the exception categories.	<ul> <li>Create Appointment List Filter</li> <li>Summarize Scheduling Issues</li> <li>Query Records</li> </ul>

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Торіс	Description	Included Actions
	Dispatchers can also search for specific appointments and ask the agent to create a filter for these service appointments. See Use Einstein Copilot in the Dispatcher Console on page 646	
Post-Work Summary for Field Service (Beta)	Helps mobile workers generate a comprehensive report of their work orders for them. You can also set up a flow that populates the Post-Work Summary field on the work order for the mobile workers.	<ul> <li>Identify Record by Name</li> <li>Summarize Record</li> <li>Refine Post-Work Summary for Field Service</li> </ul>

# Additional Field Service Actions

Action	Description
Summarize Service Appointment Notes	Creates a summary of service appointment notes based on status category, start date, and end date. The scheduled, or actual, start and end times are checked to make sure that they fall within the specified date range. If a date range isn't provided, the agent action considers appointments for the past 6 months for the provided status category.
	To use this action, create a topic and add the action to it. See Create a Custom Topic.

# Understanding Standard Agent Actions

From Agent Actions in Setup, explore the available standard actions to learn how you can use them in Field Service. Here are some examples.

Identify Object by Name: Finds the Salesforce object API name by extracting an object name from the user input.

Туре	Name	What Do the Instructions Mean?	
Input	objectName	The name of the object extracted from the user's input.	
Output	objectApiNames	For each object name, a list of matching Salesforce object API names is returned.	

Identify Record by Name: Searches for Salesforce CRM records by name and returns a list of matching Salesforce CRM record IDs.

Туре	Name	What Do the Instructions Mean?	
Input	recordName	Based on user input, the name is matched to a CRM record.	
Input	objectApiName	This input is used along with the recordName input to best match the CRM record that the user referenced in the prompt. It's possible that the Identify Record by Name action calls the Identify	

Туре	Name	What Do the Instructions Mean?	
		Object by Name action to get the relevant object name. However, we instruct it to call Identify Object by Name only if an object name has been identified in the user's query.	
Output	searchResults	If the output includes multiple results, they're ranked in order of relevance.	

**Summarize Record**: Summarizes a Salesforce CRM record. You must call summarizeRecord only if the user explicitly asks for a summary (for example, 'Summary', 'Recap', or 'Highlights'). Call this action only when you can't find a more specific summarization action.

Туре	Name	What Do the Instructions Mean?
Input	Record ID	The ID of the requested record.
Output	Record Summary	The requested summary is in a rich text format.

SEE ALSO:

Explore Standard Agent Topics and Actions

# Agent Builder for Field Service

Learn how Agent Builder works for Field Service.

Before you try out Agent Builder for Field Service, learn how to activate your copilot.

In the Conversation Preview panel of Agent Builder, enter the prompts that Field Service workers are likely to enter, and then review the plan that the agent executes to obtain the response. For example, try these prompts.

Prompt	Result
Show me all of the turbine assets.	The agent uses the General CRM topic with the Query Records agent action to get all relevant Field Service assets.
How many installed 10 kW Turbine assets do I have?	The agent uses the General CRM topic with the Query Records With Aggregate agent action to count the number of Field Service assets.
How do I make a return? Format the answer in bullet points.	The agent uses the General CRM topic with the Answer Questions With Knowledge agent action to get the detailed instructions.

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# Build Your Copilot for Field Service Experience

Review the standard topics and create your own as needed. Add standard or custom agent actions to your topics according to your business needs.



**Note:** Consider the limitations of an LLM when developing your custom action use cases. Generative AI results can vary. For example, LLMs struggle with mathematical operations. If you're building a custom action that performs mathematical operations, consider using a preexisting field, formula field, flow, or Apex to do the math and then return the results to the prompt.

### Example: Create a Field Service Product Order with Einstein Copilot

Placing a product order can be cumbersome. With Einstein Copilot, you can create a flow that triggers an agent topic to place the product order for you.

#### Example: Update the Work Order's Post-Work Summary Field

Automate the completion of a work order by creating a flow that takes the summary created by the Post-Work Summary for Field Service (Beta) topic and updates the Post-Work Summary field on the work order.

SEE ALSO:

Customize Your Agents and Copilot with Topics and Actions

### EDITIONS

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# USER PERMISSIONS

To build agent topics and actions:

Einstein Copilot for Salesforce Admin

		Product Request PR-0005	Product Request Vehicle Inspection Edit	
Order product for WO 143 for 6 connector cables		Submitted 00000143		
	due 6/14. Related Details Activity			
ø	Great, your product order for 6 connector cables due on 6/14 for WO 143 has been processed.	Product Request Line Items (1)		
	Product Request# PR-0005 was created for product: Connector Cables. 6 were requested and expected by 2024-06-14 00:00:00Z	Product Request Lin. Quantity Requested Quantity Unit Of Ma., Need By Date PBL-0001 6.00 6 View All	Only show activities with insights      U      Fitter: Within 2 months - All activities -     Logged calls, final, Events, List email, and     Tasks     Refresh - Expand All - View All	
	Сору	Product Transfers (0)	New Vipcoming & Overdue No activities to show.	

## Step 1: Create a Flow

Create a flow that generates a product order, which is represented in the system as a product request and a product request line item.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. Click New Flow.
- 3. Select Start From Scratch and click Next.
- 4. Select Autolaunched Flow (No Trigger) and click Create.
- 5. From the Toolbox, click New Resource.

- a. For Resource Type, select Variable.
- **b.** For API Name, enter *inputProductName*.
- c. For Description, enter The name of the requested product.
- d. For Data Type, select Text.
- e. Select Available for Input.
- 6. From the Toolbox, click New Resource.
  - a. For Resource Type, select Variable.
  - **b.** For API Name, enter *inputNeedDate*.
  - c. For Description, enter The date when the order must be placed.
  - d. For Data Type, select Date.
- 7. From the Toolbox, click New Resource.
  - a. For Resource Type, select Variable.
  - **b.** For API Name, enter *inputNeedDateText*.
  - c. For Description, enter The date entered by the user.
  - d. For Data Type, select Text.
  - e. Select Available for Input.
- 8. From the Toolbox, click New Resource.
  - **a.** For Resource Type, select **Variable**.
  - **b.** For API Name, enter *inputQuantity*.
  - c. For Description, enter The requested quantity.
  - d. For Data Type, select Number.
  - e. For Decimal Places, enter 0.
  - f. For Default Value, enter 1.
  - g. Select Available for Input.
- 9. From the Toolbox, click New Resource.
  - a. For Resource Type, select Variable.
  - **b.** For API Name, enter *inputWorkOrderNumber*.
  - c. For Description, enter The work order number that the product request is for.
  - d. For Data Type, select Text.
  - e. Select Available for Input.

#### 10. From the Toolbox, click New Resource.

- **a.** For Resource Type, select **Variable**.
- **b.** For API Name, enter *outputInfo*.
- **c.** For Description, enter Additional information.
- d. For Data Type, select Text.

#### e. Select Available for Output.

- 11. This step isn't required, but it's a recommended practice to ensure that the flow can handle imperfect input and provide clear error messages. From the Toolbox, click **New Resource**.
  - a. For Resource Type, select Formula.
  - **b.** For API Name, enter *formulaValidateDate*.
  - c. For Description, enter Validates the date.
  - d. For Data Type, select Boolean.
  - e. For Formula, enter:

```
REGEX({!inputNeedDateText},
'((?:19|20)\\d\\d)-(0?[1-9]|1[012])-([12][0-9]|3[01]|0?[1-9])')
```

- f. To validate the formula, click **Check Syntax**.
- 12. This step isn't required, but it's a recommended practice to ensure that the flow can handle imperfect input and provide clear error messages. From the Toolbox, click **New Resource**.
  - a. For Resource Type, select Formula.
  - **b.** For API Name, enter *formulaBadDateOutput*.
  - c. For Description, enter Error message that the user sees if the date isn't valid.
  - d. For Data Type, select Text.
  - e. For Formula, enter:

 $\{! \texttt{inputNeedDateText}\}$  + ' has the wrong format. Enter the date as YYYY-MM-DD and try again.'

- f. To validate the formula, click **Check Syntax**.
- 13. This step isn't required, but it's a recommended practice to ensure that the flow can handle imperfect input and provide clear error messages. From the Toolbox, click **New Resource**.
  - a. For Resource Type, select Formula.
  - **b.** For API Name, enter *formulaConvertDate*.
  - **c.** For Description, enter *Converts the date entered by the user to the format used in the system*.
  - d. For Data Type, select Date.
  - e. For Formula, enter: DATEVALUE ({!inputNeedDateText})
  - f. To validate the formula, click **Check Syntax**.
- 14. In a sequential flow line without branching, add elements to the flow. Add a Get Records element.
  - a. For Label, enter Get Product.
  - **b.** For Description, enter Retrieves the product item by name passed to the flow.
  - c. For Data Source, select Salesforce Object
  - d. For Object, select Product.
  - e. Fill in the condition requirements.

Field: Name Operator: Equals Value: {!inputProductName}

- 15. Add a Get Records element.
  - a. For Label, enter Get Service Resource.
  - **b.** For Description, enter Retrieves the ID of the mobile worker that's running the flow.
  - c. For Data Source, select Salesforce Object
  - d. For Object, select Service Resource.
  - e. Fill in the condition requirements.
    - Field: RelatedRecordId Operator: Equals
    - Value: {!\$User.ld}

16. Add a Get Records element.

- a. For Label, enter Get Work Order.
- **b.** For Description, enter Retrieves a work order by the number passed to the flow.
- c. For Data Source, select Salesforce Object
- d. For Object, select Work Order.
- e. Fill in the condition requirements. Field: Work Order Number Operator: Contains Value: {!inputWorkOrderNumber}
- 17. To create a product request based on the flow inputs, add a Create Records elements to the flow.
  - a. For Label, enter Create Product Request.
  - b. For How to Set Record Field Values, select Manually.
  - c. For Object, select Product Request.
  - Add these fields and field values.
     Description: Requested by Technician
     NeedByDate: inputNeedDate
     ShipmentType: Pick Up
     Status: Submitted
     WorkOrderld: {!Get Work Order.ld}
- **18.** To create the required product request line items based on the flow inputs, add a Create Records elements to the flow.
  - a. For Label, enter Create PRLI.
  - b. For How to Set Record Field Values, select Manually.
  - c. For Object, select Product Request Line Item.
  - **d.** Add these fields and field values.

Parentld: {!Create\_Product\_Request} Product2ld: {!Get\_product.ld} QuantityRequested: inputQuantity QuantityUnitOfMeasure: Each WorkOrderld: {!Get\_Work\_Order.ld}

- **19.** To retrieve the created product request to pass as output of the flow in the Return the Info assignment, add a Get Records elements to the flow.
  - a. For Label, enter Get New Product Request.
  - b. For Data Source, select Salesforce Object
  - c. For Object, select Product Request.
  - Fill in the condition requirements.
     Field: Id (Product Request ID)
     Operator: Equals
     Value: {!Create\_Product\_Request}
- **20.** To retrieve the created product request line items to pass as output of the flow in the Return the Info assignment, add a Get Records elements to the flow.
  - a. For Label, enter Get New PRLI.
  - **b.** For Data Source, select **Salesforce Object**
  - c. For Object, select Product Request Line Item.
  - Fill in the condition requirements.
     Field: Id (Product Request Line Item ID)
     Operator: Equals
     Value: {!Create PRLI}
- 21. From the Toolbox, click New Resource.
  - a. For Resource Type, select Formula.
  - **b.** For API Name, enter *formulaOutput*.
  - c. For Data Type, select Text.
  - d. For Formula, enter:

```
'Product Request# ' + {!Get_New_Product_Request.ProductRequestNumber} + ' was
created for product: ' + {!Get_Product.Name} + '. ' +
text({!Get_New_PRLI.QuantityRequested}) + ' were requested and expected by ' +
text({!Get_New_Product_Request.NeedByDate})
```

e. To validate the formula, click Check Syntax.

22. Add an Assignment element to the flow.

- a. For Label, enter Return the Info.
- **b.** Enter these conditions.

Field: outputInfo

Operator: Equals Value: formulaOutput

- 23. To ensure that the input text date is a valid date, add a Decision element at the top of the flow.
  - **a.** For Label, enter *Is* the date format valid?
  - **b.** The top outcome is what happens if the date is valid. For Label, enter Yes.
  - Enter these conditions.
     Resource: formulaValidDate
     Operator: Equals
     Value: True
  - **d.** For Default Outcome, change the label to *No*.

24. In the Yes branch, add an Assignment element.

- **a.** For Label, enter *Valid Date*.
- b. Enter these conditions.Variable: inputNeedDate

Operator: Equals

Value: formulaConvertDate

- 25. In the No branch, add an Assignment element. If the date isn't valid, the flow returns an error message.
  - **a.** For Label, enter *Invalid Date*.
  - **b.** Enter these conditions.

Variable: outputInfo

Operator: Equals Value: formulaBadDateOutput

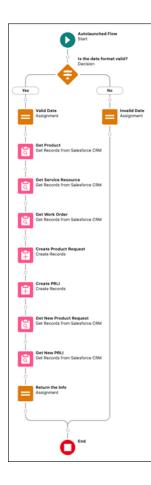
- c. Click the Assignment element and select Connect to element.
- **d.** Select the End element.

### 26. Save the flow.

- a. For Label, enter Create Product Request.
- **b.** For Description, enter Flow that generates a Product Request and a Product Request Line Item based on the needed date, product name, quantity, and work order number.

## 27. Click Activate.

If you've used the suggested labels, the flow looks like this.

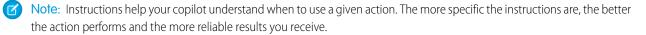


#### Step 2: Create an Agent Action

Set up an agent action that triggers the Create Product Request flow that you created.

- 1. From Setup, in the Quick Find box, enter Agent Studio, and then select Agent Actions.
- 2. Click New Agent Action.
- 3. For Reference Action Type, select Flow.
- 4. For Reference Action, select Create Product Request.
- 5. For Agent Action Label, enter Order Product.
- 6. For API Name, enter OrderProduct.
- 7. Click Next.
- 8. For Agent Action Instructions, enter:

This action is triggered by phrases like "order product" or "order product request" or "product request". The user will be providing the work order number, the product description, the quantity required, and the needed date.



- 9. The action pulls the inputs from the flow that you specified. All you have to do is add the details.
  - a. For inputNeedDateText, select Collect data from user and enter these instructions.

This is the date that the product is needed by. Its format is YYYY-MM-DD. If only the month name is provided, convert this to the last day of that month. If no date is provided by the user, use the current date plus 7 days. Convert Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday into actual dates, with YYYY-MM-DD as the format.

b. For inputProductName, select Collect data from user and Require Input. Then, enter these instructions.

This is the product name. It might be referred to as the product, the part, the item. It might be several words, for example, Small Battery.

c. For inputQuantity, select Collect data from user and enter these instructions.

This is the quantity required. It's an integer. If no value is provided, then use 1 for the value.

d. For inputWorkOrderNumber, select Collect data from user and Require Input. Then, enter these instructions.

This is the work order number. It might be referred to as the WO or the WO num or the WO number. It will be in the form of an integer and it may have leading zeroes. Important: Prepend the number with the necessary zeros to achieve the length of 8 digits.

10. Add the output details.

a. For outputInfo, select Show in Conversation and enter these instructions.

This is a text field returned from the flow. It's a simple text string. Use a casual tone in the response. If the word error is present, then display this field in bold. Otherwise precede the text with a thumbs up emoji. If a date is present, present it in MM DD format.

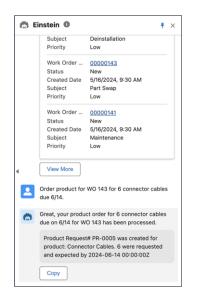
#### 11. Click Finish.

### Step 3: Create an Agent Topic

- 1. From Setup, in the Quick Find box, enter Agent Studio, and then select Agents.
- 2. Click the name of your copilot agent.
- 3. Click Open in Builder.
- 4. Click the arrow and select New Topic.
- 5. Fill in the information for the topic and click Next.
- 6. Select the Agent Action that you created and click **Finish**.

#### Step 4: Verify on Desktop

- 1. From the App Launcher, find and select Field Service.
- 2. Click the Einstein icon 💿 in the top right corner.
- **3.** Ask Einstein to order a product for you. Make sure you provide the number of the work order, the product order, and the due date. The response indicates that the action was executed and the product request was created for you.



4. Search for the product request number to verify that everything went smoothly in the system.

Product R PR-00				[	Product Request	Vehicle Inspection	Edit	•
Status Submitted	Work Order 00000143							
Related	Details				Activity			
🔁 Produ	ct Request Line Items (1)			New		• 😫 👻		
Product Reque	est Lin Quantity Requested	Quantity Unit Of Me	Need By Date		🙃 Only s	how activities with insigh	ts 🔵	
PRLI-0001	6.00	6 View All		•		in 2 months • All activitie 5, Email, Events, List ema	- (	\$
						Refresh • Expan	d All • Vie	w All
Produ	ct Transfers (0)			New	∨ Upcon	ning & Overdue		
					Get started	No activities to show. by sending an email, sch	eduling a t	task.

5. Test out the errors by entering an invalid date such as 2025-dfgs-24 and see whether the flow generates an error message.

### Step 5: Verify on the Field Service Mobile App

- 1. Make sure that you're defined as a mobile worker in the Salesforce org and have access to the Field Service mobile app. See Give Users Access to the Field Service Mobile App on page 844.
- 2. Open the Field Service mobile app.
- 3. Tap Actions.
- **4.** Ask Einstein to order a product for you. Make sure you provide the number of the work order, the product order, and the due date. Einstein creates the product request for you with the required details.

×	Einstein
	Jane Order product for WO 268 for 6 connector cables due 6/7
0	Einstein Alright, the product order for WO 268, 6 connector cables, due 6/7 has been processed.
	Product Request# PR-0007 was created for product: Connector Cables. 6 were requested and expected by 2023-06-07 00:00:002
	Сору
Me	essage Einstein 🖉

## Example: Update the Work Order's Post-Work Summary Field

Automate the completion of a work order by creating a flow that takes the summary created by the Post-Work Summary for Field Service (Beta) topic and updates the Post-Work Summary field on the work order.

### Step 1: Create a Flow

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. Click New Flow.
- 3. Select Start From Scratch and click Next.
- 4. Select Autolaunched Flow (No Trigger) and click Create.
- 5. Open the Toolbox.
- 6. Create a variable for the work order ID.
  - a. Click New Resource.
  - **b.** For Resource Type, select **Variable**.
  - c. For API Name, enter WorkOrderId.
  - **d.** For Description, enter *The ID of the work order*.
  - e. For Data Type, select Text.
  - f. Select Available for input and Available for output.
  - g. Click Done.
- 7. Create a variable for the summary.
  - a. Click New Resource.
  - b. For Resource Type, select Variable.
  - c. For API Name, enter *PostWorkSummaryText*.
  - **d.** For Description, enter *The summary used for updating the Post-Work Summary field on the work order.*
  - e. For Data Type, select Text.
  - f. Select Available for input.
  - g. Click Done.
- 8. In a sequential flow line without branching, add an Update Records element.
  - **a.** Enter a label. The API name is entered for you.
  - b. Select Specify conditions to identify records, and set fields individually.
  - c. For Object, select Work Order.
  - d. For Condition Requirements, specify that Id equals the WorkOrderId variable that you created.
  - e. In Set Field Values, for Field, select **PostWorkSummary**. For Value, select the **PostWorkSummaryText** variable that you created.
- **9.** In Flow Builder, click **Save**.
- 10. Enter a label. The API name is entered for you.
- 11. For Description, enter Updates the Post-Work Summary field on the work order.

## **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

### USER PERMISSIONS

To build agent topics and actions:

 Einstein Copilot for Salesforce Admin **12.** Activate the flow.

### Step 2: Create an Agent Action

Create an action that connects to the flow.

- 1. From Setup, in the Quick Find box, enter Agent Studio, and then select Agent Actions.
- 2. Click New Agent Action.
- 3. For Reference Action Type, select Flow.
- For Reference Action, select the flow that you created.
   The inputs and outputs are populated according to the information entered when you created the flow.
- 5. Click Next.
- 6. For Agent Action Instructions, enter Activate this action when you're asked to save the summary.
- 7. For the PostWorkSummaryText input, select Require input.
- 8. For the WorkOrderID input, select Require input.
- 9. For the WorkOrderID output, select Show in conversation.
- 10. Click Finish.

### Step 3: Add the Action to the Topic and Activate the Agent

- 1. Add the Post-Work Summary for Field Service (Beta) topic. See Add a Topic from the Asset Library.
- 2. Edit the topic and add the action that you created. See Edit a Standard Topic.
- 3. In Agent Builder, click Activate.

## Step 4: Verify that it Works

- 1. In Agent Builder, ask Einstein to summarize a work order.
- 2. Review the received summary and review the performed actions in the middle pane.
- 3. If the summary looks good, ask Einstein to save it for you.
- 4. Open the work order and verify that the summary is saved in the Post-Work Summary field.

# Recommended Utterances for Field Service Users

Einstein Copilot can help you find information quickly and efficiently with natural language.

## **Examples of Dispatcher Utterances**

Here's a list of recommended utterances that give Field Service dispatchers the best results when searching for specific appointments.

For a list of utterances that you can use with the Create Appointment List Filter and Summarize Scheduling Issues Field Service actions, see Interacting with Einstein Copilot in the Dispatcher Console on page 651.

Expected Result	Examples of Recommended Utterances
Today's unscheduled appointments	Show me all unscheduled appointments that are due today.
Unscheduled appointments in a specific service territory	Show me all unscheduled appointments in the <service name="" territory=""> service territory.</service>
	Example: Show me all unscheduled appointments in the San Francisco service territory.
Today's scheduled appointments that can't be completed	Show me scheduled appointments for today that can't be completed.
Late appointments	Show me incomplete appointments that have passed their due date.
Appointments that are currently in progress	Show me all appointments that are in progress.
Appointments on a specific date	Show me all appointments that are scheduled on <date>.</date>
	Example: Show me all appointments that are scheduled for June 6.
Appointments for a specific account	Show me all appointments that are scheduled for <account name="">.</account>
	Example: Show me all appointments that are scheduled for Ursa Major.
Unscheduled appointments for a specific account	Show me all unscheduled appointments for <a>account name&gt;.</a>
	Example: Show me all unscheduled appointments for Ursa Major.
Related appointments of a specific account	Show me all service appointments that are related to <account name="">.</account>
	Example: Show me all service appointments that are related to Ursa Major.

## EDITIONS

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The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

Expected Result	Examples of Recommended Utterances
Scheduled appointments for a specific service type on a specific date	Show me all appointments with the " <service type="">" subject that are scheduled on <date>.</date></service>
	Example: Show me all appointments with the "maintenance" subject that are scheduled on June 6.
Today's unscheduled appointments for a specific service type	Show me all unscheduled appointments that their due date is today with the " <service type="">" subject.</service>
	Example: Show me all unscheduled appointments that their due date is today with the "repair" subject.
Emergency appointments that are scheduled on a specific date	Show me all appointments that are scheduled on <date> with "emergency"=true</date>
	Example: Show me all appointments that are scheduled on June 6 with "emergency"=true
Number of appointments on a specific date	How many appointments are scheduled on <date>?</date>
	Example: How many appointments are scheduled on June 6?
Number of today's scheduled appointments in a specific service territory	How many appointments are scheduled for today in the <service name="" territory=""> service territory?</service>
	Example: How many appointments are scheduled today in territory San Francisco?
Number of scheduled appointments that were completed on a	How many scheduled appointments were completed on <date>?</date>
specific date	Example: How many scheduled appointments were completed on June 5?
Total duration of completed appointments on a specific date	What is the total job duration of the scheduled appointments on <date> that were completed?</date>
	What is the total job duration of the scheduled appointments on June 5 that were completed?
Total duration of completed appointments for a specific service type on a specific date	What is the total job duration of the scheduled appointments on <date> with the "<service type="">" subject?</service></date>
	Example: What is the total job duration of the scheduled appointments on June 5 with the "Installation" subject?
Name of the service resource who is assigned to a specific service appointment	Who is the service resource for <service appointment="" number="">? Example: Who is the service resource for sa-0027?</service>
	•
The scheduled time of a specific service appointment	When is <service appointment="" number=""> scheduled?</service>
	Example: When is sa-0027 scheduled?

# Examples of Mobile Worker Utterances

Here's a list of recommended utterances that give Field Service mobile workers the best results.

Expected Result	Examples of Recommended Utterances
The details of my next appointment	What's my next service appointment?
The details of my next work order	Show me my next work order
The details of my next work order line item	Find my next work order line item
Today's appointments	Show me my service appointments scheduled for today
Today's work orders	Show me my work orders scheduled for today
This week's work orders	Show me my work orders for the upcoming week
The address of the next scheduled appointment	What's the address of my next service appointment?
The details of the asset that's relevant to the next appointment	What's the asset for my next appointment?

# Field Service Operations Home

Track and monitor the health of your field service workforce, assets, processes, and customers with personalized KPIs and actionable insights.

To access the Field Service Home, complete the Field Service Intelligence Setup on page 951.

# Access Essential Tools Quickly

Streamline and enhance the management of your field service workforce. Use actionable insights to improve business outcomes, drive strategic decision-making, and automate repetitive tasks to enhance efficiency. Field Service Operations Home enhances the efficiency and effectiveness of your field service teams by providing real-time insights and quick access to essential tools and apps. To access your Field Service apps, select **All Field Service Features**.

# EDITIONS

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To purchase Einstein 1 Field Service, contact your Salesforce account executive.

Field Service Home Operation	None Fold	niceIntelligence Anelotics ServiceApp		Q. Search.	unio in Mari Color				*• <b>0</b> @ ? :
Feld Service Features	140.7	na nageo - xapo - ano ay			note v nototet				E Marage
Welcome, Michelle	Here's a sna	pshot of how things are runnin	g right now.						
Modified 💌 🛛 🥙	e	My Views 💌	e		e	Myllevs •	æ		6
Thresholds Filters		AWarning 85.87% First-Time Rate	/ Fix	Thresholds Lover limit 0-100	Fiters	0 Cilical 141.72 Average Response	Work Order se Time	1.08 Average Travel Time	1
Constal Date with All which Type with All which the second	·] -]	(7) The percentage of complete versus con incomplete service appointments Field Service Intelligence	rpleted and	Upper limit		The average time it takes to schedule a it's created. Fis created.		The average time that it takes for an Assign to travel to an appointment. Field Service Intelligence	ed Resource
	e	Real-time traight	e	MyVess •	•••	As of Aug 28, 2024 at 07:08 AM		⊘ Real-time Insight	
▲ Warning	/	@ Cilical	× /	O Cilical	· ·				
1.11 Average Ag	pointment	874 Can't Com Appointm	plete Service ent		Unscheduled Service Appointments				
To manage your resources effectively, track of service appointments.	the duration	The total number of service appointments of Cennot Complete.	with a status	The total number of unsched with a status of None.	uled service appointments				
Field Service Intelligence		Field Service Intelligence Vie @ Real-time Insight	e Records	Field Service Intelligence	View Records			D:	

# Transform Operations with Insight Cards

Insight cards highlight key performance indicators (KPIs) to guide your strategic choices. You can monitor the metrics and catch potential issues early. Badges indicate whether your metrics are in Good, Warning, or Critical status. Insights are available for assets, resources, service appointments, and work orders.

To focus on the metrics that matter most to you, click **Manage Insights**. To prioritize how they're displayed, click **Reorder Followed Insights**.

Adjust KPI thresholds to set specific performance benchmarks and identify areas that need attention. You can set lower and upper limits and apply filters that focus on the data you want to highlight. If you need to see a KPI from several perspectives, custom views let you save a specific set of thresholds and filters. From My Views, select **Save View**. To switch between view, select **Manage Views**. When you're using views and an update is applied, saved views and insights are reset and need to be re-created.

Category	Insight	How You Use It		
Assets	Average Time Between Failures	For better maintenance insights, track the length of time between asset failures.		
	Unscheduled Downtime	To boost operational efficiency, track the unscheduled downtime count based on the average of Asset Downtime Period records that are categorized as Unplanned .		
Resources	Average Travel Time	To optimize your resources, track the average time that it takes for an assigned resource to travel to an appointment.		
	Resource Utilization Rate	To use resources optimally, track the percentage of hours that a resource works out of their total available hours. Hours worked is the total of all service appointments, travel time, and breaks compared to resource absences. Availability is the total operating hours compared to the resource's time slot and shifts.		
Service Appointments	First-Time Fix Rate	To improve performance, track the percentage of service appointments marked as Complete.		
	Average Appointment Duration	To manage your resources effectively, track the average duration of service appointments marked as Complete. This value is calculated from the Duration field on service appointments.		
	On-Time Arrival Rate	To track how often appointments start on time, the number of appointments whose Actual Start time occurs before the Scheduled Start time.		

Category	Insight	How You Use It		
	Due Date Violations	To stay on top of overdue tasks and ensure timely follow-ups, track the total number of service appointments that are assigned to a resource, a past due date, and a status of None.		
	Can't Complete Service Appointment	To identify and address obstacles, track the total number of service appointments with a status of Cannot Complete.		
	Unscheduled Service Appointments	To proactively manage your schedule, track the total number of unscheduled service appointments with a status of None.		
Work Orders	Average Work Order Response Time	To keep your workflow efficient, track the average time taken to schedule a work order after it's created.		
	New Work Orders	To stay on top of customer needs, track the total number of work orders with a status of New.		

# Manage Field Service Work Orders

Work orders, which track work to be performed for customers, are the heart of Field Service. Learn how to create and customize work orders and maintenance plans.

### Create Field Service Work Orders

Create work orders to track work that your team does for customers.

#### Create Field Service Work Plans

Learn how to create and use Field Service work plans to deliver consistent service.

### Create Field Service Maintenance Plans

Create Field Service preventive maintenance plans for assets so your customers never miss a beat. With maintenance plans you define how often maintenance visits occur and generate work orders for future visits.

### Troubleshooting Work Order Generations in Field Service

If work orders aren't generating as expected these guidelines can help you resolve any issues.

### SEE ALSO:

Set Up Work Order Management for Field Service

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Create Field Service Work Orders

Create work orders to track work that your team does for customers.

- 1. From the Work Orders tab or the Work Orders related list on a record, click New.
- 2. Optionally, select a work type. Work types are templates that auto-populate these settings on work orders:

Duration	
Duration Type	
Minimum Crew Size	
Recommended Crew Size	
Service Report Template	
Skill Requirements	
Products Required	
Auto-creation of a service appointment	
Attached knowledge articles	

- **3.** Enter the address for the work order. The work order's service appointments and line items inherit its address, though the address on line items can be updated.
- 4. Optionally, to link each work order line item to a price book entry (product), select a price book.
- **5.** To track pricing on work orders, enter the tax amount. For example, in a work order whose total price is \$200, enter *20* to apply a 10 percent tax. You can enter a number with or without the currency symbol and use up to two decimal places.
- 6. Complete the remaining fields as needed.
- 7. Save your work.
- 8. Optionally, add details in the work order's related lists.

#### Work Order Line Items Subtasks or steps that must be performed to complete the work order. Line items can be marked as completed one by one, and can each have their own active service appointment, work type, and required skills and products. Pricing details like discounts and unit price are set at the line item level. **Child Work Orders** Child records of the work order, which are useful in complex jobs. **Service Appointments** Records of visits to the customer. Work orders and work order line items can have multiple service appointments. To create a service appointment at the same time as the work order, select Auto-Complete Service Appointment on the associated work type. **Products Required** Inventory require to complete the work order. For details, see Track Required Inventory in Field Service. Skills required to complete the work order. For help, see Add Required Skills to Work Orders or **Skill Requirements** Work Types for Field Service.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create work orders:

Create on work orders

To view work order line items:

Read on work orders

To create, update, or delete work order line items:

• Edit on work orders

Articles	Relevant knowledge articles.
Resource Preferences	Service resource for the work order that's preferred, required, or excluded. Resource preference is set based on the resource preference on the work order's asset, location, or account, in that order. Salesforce sets the preference using the first resource preference it finds on asset, then location, then account. If a resource preference exists, Salesforce doesn't create a new one.

#### Add Service Resource Preferences in Field Service

Designate certain service resources as preferred, required, or excluded on accounts, assets, locations, work orders, and work order line items. Ensure great customer service by matching the best worker to the job.

#### Add Required Skills to Work Orders or Work Types for Field Service

Ensure that every field service appointment is assigned to a service resource with the right skills. Add skill requirements to work types, work orders, and work order line items so they can be checked against a service resource's assigned skills.

### Attach Knowledge Articles to Work Orders or Work Types

Interact with knowledge articles on Field Service work orders, work order line items, and work types.

#### Guidelines for Creating Work Orders for Field Service

Work orders help you track tasks to be performed on a product. Learn how to create and manage work orders.

#### Work Order Pricing Guidelines for Field Service

Work orders and work order line items have several price-related settings. Learn about these settings and how to apply them to your business.

SEE ALSO:

Work Order Fields for Field Service Customize Work Order Settings for Field Service *Trailhead*: Field Service Center Customization

# Add Service Resource Preferences in Field Service

Designate certain service resources as preferred, required, or excluded on accounts, assets, locations, work orders, and work order line items. Ensure great customer service by matching the best worker to the job.

Work orders and work order line items inherit the resource preference from one of the work order's related records: asset, location, or account. The system looks for a resource preference first on asset, then location, then account, and copies the first preference it finds. The resource preference used for scheduling depends on which record (work order or work order line item) is the direct parent of the service appointment. If you don't want to establish resource preferences at the account level, add them to individual work orders or work order line items.

To enforce resource preferences during scheduling, use the Required Resources and Excluded Resources work rules.

Scheduling and optimization considers resource preferences in different ways.

- Through scheduling rules: To determine whether the service appointment is scheduled to the specified resource, use the Required Resources and Excluded Resources work rules in your scheduling policy.
- Through scheduling objectives: To set a preference for scheduling the service appointment to the specified resource, use the Resource Preference service objective.
- 1. On a work order or account, click **New** in the Resource Preferences related list.
- 2. Select a service resource. You can't add preferences for service resources who are inactive or dispatchers.
- 3. Select a preference type: Preferred, Excluded, or Required.
- 4. Save your changes.
- S Example:
  - If your customer had a positive experience with Alicia, a service resource, create a resource preference on the customer's account that designates Alicia as Preferred. The Preferred Resource service objective prefers scheduling to Alicia depending on the weight you set on the service objective in the scheduling policy.
  - If your customer had a bad experience with Nigel, a service resource, create a resource preference on the customer's account that designates Nigel as Excluded. The Excluded Resource work rule in the scheduling policy ensures that Nigel isn't assigned service appointments from this account.
  - If your customer purchased a complex piece of equipment that was installed by Evan, a service resource, create a resource preference on the customer's account that designates Evan as Required. The Required Resource work rule in the scheduling policy makes sure that Evan is assigned service appointments from this account.

The customer's work orders automatically list those three preferences. This helps the dispatcher know to assign their service appointments to Evan and, if a second worker is needed, to Alicia

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To view resource preferences:

 Read on the parent object (work orders or accounts) AND Read on service resources

To create, edit or delete resource preferences on work orders:

 Edit on work orders AND Read on service resources

To create, edit or delete resource preferences on accounts:

 Edit on accounts AND Read on service resources if she is available. The dispatcher also knows never to assign the account's service appointments to Nigel.

#### SEE ALSO:

Work Rule Type: Excluded Resources Work Rule Type: Required Resources Create and Manage Field Service Objectives

# Add Required Skills to Work Orders or Work Types for Field Service

Ensure that every field service appointment is assigned to a service resource with the right skills. Add skill requirements to work types, work orders, and work order line items so they can be checked against a service resource's assigned skills.

Adding required skills to work types saves you time and keeps your business processes consistent. Work orders and work order line items inherit their work type's required skills. For example, a refrigeration company can add a skill requirement of Refrigerator Maintenance—skill level 50—to their Annual Maintenance work type. When an agent creates a work order for their customer's annual fridge maintenance, selecting that work type on the work order adds the required skill.

If the Field Service managed package is installed, you can use Guided Setup to add required skills to work types. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab. Then, click **Go to Guided Setup**, select **Create Work Types and Skills**, and enter skills in the Skill Requirements field of any work type.

You can also add required skills to work orders, work order line items, or work types from the Skill Requirements related list, outside of Guided Setup.

- 1. Navigate to the record that needs required skills.
- 2. In the Skill Requirements related list, click New.
- **3.** Select a skill. When you're not using of Guided Setup, skills must be created before they can be added as a requirement; to learn how, see Create Skills for Field Service.
- 4. Enter a skill level from 0 to 99.99 based on how your business measures skill level.
- 5. Click Save. The skill now appears in the Skill Requirements related list on the record.

You can enforce skill requirements during schedule optimization using the Match Skills work rule. This rule ensures that appointments are assigned only to service resources who possess the required skills listed on the parent record. If you're not using the Field Service managed package, skill requirements serve as a suggestion rather than a rule.

SEE ALSO: Skill Fields for Field Service Create Skills for Field Service

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To view skill requirements:

 Read on the parent object (work orders or work types) AND Read on skills

To create, edit or delete skill requirements on work orders or work order line items:

• Edit on work orders AND Read on skills

To create, edit or delete skill requirements on work types:

• Edit on work types AND Read on skills

# Attach Knowledge Articles to Work Orders or Work Types

Interact with knowledge articles on Field Service work orders, work order line items, and work types.

# Attach an Article

Search for and attach articles to a record from the Articles related list, the Knowledge One console widget, or the Knowledge component in Lightning Experience.

- In Salesforce Classic: In the Articles related list on a record, click Find Article to search for an article, and then attach it.
- In the Salesforce Classic console: To attach articles to work types, use the Articles related list on the work type. To attach articles to work orders or work order line items, use the Knowledge One widget or the Articles related list.
- In Lightning Experience and the Lightning Experience console: In the Knowledge component on • a record, search for the article and then attach it.

# View an Attached Article

Attached articles appear in the Articles related list, Knowledge Lightning component, and Knowledge One console widget. View an article by clicking its title. If feed tracking for related lists is enabled, you can navigate to attached articles from the record feed.

On article detail pages in Salesforce Classic, the Linked Work Orders and Linked Work Order Line Items related lists show the records that an article is attached to. A Linked Work Types related list isn't available.

# Update an Attached Article

To publish a new version of an article, open the article and click Edit.

When you attach an article to a work order or work order line item, that version of the article stays associated with the record even if later versions are published. If needed, detach and reattach an article to ensure that the record is linked to the latest version of the article. The Linked Article Version field on the linked article detail page leads to the attached version.



Note: Only one version of an article can be attached to a record.

# Detach an Article

Detach articles from the Articles related list or Knowledge One console widget in Salesforce Classic, and from the Knowledge component in Lightning Experience.

Note: Linked articles have the following limitations.

- Quick actions and global actions aren't supported for linked articles.
- The Article widget and Feed Articles Tool aren't available in the feed view. •
- In Lightning Experience, clicking an article link in a feed item redirects you to the article page in Salesforce Classic. In the Salesforce mobile app, linked articles can't be accessed from feed items.
- The Linked Work Types related list isn't available on articles in any platform.
- The Knowledge One widget isn't available on work types in the console. To manage linked articles on work types in the console, • use the Articles related list.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

• Linked articles are read-only in the Salesforce mobile app.

#### SEE ALSO:

Set Up Knowledge for Work Orders View Knowledge Articles in the Field Service Mobile App

# Guidelines for Creating Work Orders for Field Service

Work orders help you track tasks to be performed on a product. Learn how to create and manage work orders.

## **View Work Orders**

View work orders from the Work Orders tab or the Work Orders related list on the following types of records:

- Accounts
- Assets
- Cases
- Contacts
- Entitlements
- Maintenance plans
- Service contracts
- Return orders
- Return order line items
- Service contracts

Note: Add work orders to the console to manage work orders and their associated records in one place.

## **Create Work Orders**

Create and edit work orders from the Work Orders tab or the Work Orders related list.

When you create a work order, add line items to the work order from the Work Order Line Items related list. Work order line items are tasks that a mobile worker must perform to complete a work order. They can be marked as completed one by one, and they make it easier to track and improve field service processes. Pricing details like discounts and unit price are set at the line item level on work orders.

## **Delete Work Orders**

Delete work orders on the work order's detail page or the Work Orders related list. Deleting a work order moves it to the Recycle Bin. Any notes, attachments, activities, line items, and service appointments associated with the work order are also deleted. If you undelete the work order, the associated items are undeleted.

## **Create Work Order Hierarchies**

Work orders can have child work orders, which are standalone records that can be scheduled, given statuses, and assigned.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Child work orders help you account for cancellations. When work is canceled, you can set the work order status to Canceled and create a child work order. This lets you track first-time rates and analyze cancellation reasons.

## Share Work Orders

You may be able to grant extra access to work orders beyond what your org's default sharing model allows. However, you can't make the sharing model more restrictive than the default.

To see who has access to a work order, click **Sharing** on the work order's detail page. Work order line items inherit their parent work order's sharing settings. To learn more, see Limit Access to Field Service Records.

## How Work Orders and Service Appointments Intersect

Service appointments on work orders and work order line items represent service visits to the customer. While work orders and work order line items let you enter general information about a task, service appointments track details about when, where, and how a visit occurs. Schedule optimization is based on service appointment data.

Work orders and work order line items provide important capabilities, including price book association and Salesforce Knowledge integration. The Field Service mobile app experience is also optimized for service appointments whose parent record is a work order or work order line item.

## Service Resource Preferences

The resource preference related list stores a preferred, required, or excluded resource. When a work order or work order line item is created, the resource preference is copied from the record's asset, location, or account. Salesforce sets the preference using the first resource preference it finds on asset, then location, then account. If a resource preference exists, Salesforce doesn't create a new one.

#### SEE ALSO:

Work Order Fields for Field Service

# Work Order Pricing Guidelines for Field Service

Work orders and work order line items have several price-related settings. Learn about these settings and how to apply them to your business.

If you've set up a product catalog in Salesforce to track the goods and services that you offer, you can associate items in your price books with work orders and their line items, similar to the way you can associate products with opportunities or orders. If a work order lists a price book, you can link each work order line item to a price book entry (product) from the price book.

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

Work orders contain these price-related fields.

Work Order Field Description	
Discount	(Read only) The weighted average of the discounts on all line items on the work order. It can be any positive number up to 100.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Work Order Field	Description
Subtotal	(Read only) The total of the work order line items before discounts and taxes are applied.
Total Price	(Read only) The total of the work order line items' price after discounts but before tax is added.
Grand Total	(Read only) The total price of the work order with tax added.
Price Book	The price book associated with the work order. Adding a price book to the work order lets you link each work order line item to a product included in the price book.
Tax	The total tax on the work order in a currency format. (Do not enter a percentage.) For example, in a work order whose total price is \$100, enter \$10 to apply a 10 percent tax. You can enter a number with or without the currency symbol and you can use up to two decimal places.

Work order line items contain these price-related fields.

Work Order Line Item Field	Description			
Discount	The percent discount to be applied to the line item's subtotal. You can enter a number with or without the percent symbol and you can use up to two decimal places.			
Subtotal	(Read only) The line item's unit price multiplied by the quantity.			
Total Price	(Read only) The line item's subtotal with discounts applied. This field is blank until you add a unit price and save the line item.			
List Price	(Read only) The price of the line item (product) as listed in its corresponding price book entry. If a product isn't selected, the list price defaults to zero. When you select a product to link to the line item, you can see the product's list price next to its name and ID in the lookup window. The list price field populates when you save the line item.			
Product	The name of the product associated with the line item. The lookup only lists products that are included in the parent work order's price book. When you select a product and save the line item, the following fields are populated on the line item:			
	List Price			
	Unit Price			
	Subtotal			
	Total Price			
	Inline editing isn't supported on the Product field. To change the product on a line item, click <b>Edit</b> . Adding a product updates the list price, unit price, subtotal, and total price based on the related entry in the work order's price book.			
Unit Price	By default, the unit price for a work order line item is the line item's list price from the price book, but you can change it.			

# **Completing Price Fields**

• When completing work order price fields, complete only the Price Book and Tax fields. The Discount, Subtotal, Total Price, and Grand Total fields are automatically calculated based on line item fields.

- When completing work order line item price fields, complete only the Product and Discount fields. The Subtotal, Total Price, List Price, and Unit Price fields are automatically calculated based on other line item fields.
- Apply discounts to work orders at the line item level. If your work order doesn't have line items, its discount is zero.
- Work order line items don't have to be linked to a product. For example, perhaps you use line items only to track tasks. Just keep in mind that if the Product field is blank, you can't use the List Price, Unit Price, Discount, Quantity, Subtotal, or Total Price fields.
- If you plan to use price books for work orders, users need "Use" sharing access to the price book object to complete the following actions:
  - Create or edit work orders with the Price Book field completed
  - Create work order line items with the Product field completed
  - Create products consumed with the Price Book Entry field completed
- A price book entry is returned in search results only if its currency matches the work order's currency.

## **Deleting Products and Price Books**

- You can't delete a price book that's linked to a work order.
- You can't delete a product that's linked to a work order line item.
- You can't delete a price book entry that's linked to a work order line item. Price book entries are linked to work order line items via the Product lookup field.
- You can't remove a price book from a work order if its line items are linked to products from that price book.

#### SEE ALSO:

Work Order Fields for Field Service Work Order Line Item Fields for Field Service

# **Create Field Service Work Plans**

Learn how to create and use Field Service work plans to deliver consistent service.

#### Learn About Work Plans

Keep Field Service workers on track with guided steps for completing their work.

#### Set Up Work Plans

Customize your work plans settings, assign users permissions to manage work plans, and map fields that display information for work plans and work steps.

#### Build and Manage Work Plans

Create and maintain work plans by defining templates for work steps and work plans, and create work plan selection rules.

#### View and Complete Work Plans

Back-office workers can view and complete work plans on their desktop.

### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# Learn About Work Plans

Keep Field Service workers on track with guided steps for completing their work.

Work plans are a set of prescribed steps that guide front-line and back-office workers on how to complete a work order. By following steps in work plans, field service teams can complete assignments quickly, consistently, and with less guesswork.

Work plans appear on a work order or work order line item. Each plan shows an ordered list of work steps. A work step can be a simple instruction such as "Put on your safety goggles." Or it can be a quick action or a field service mobile flow that guides workers through a procedure.

To make work steps and work plans easier to manage, they're created from templates. Templates help reuse plans and common steps across these plans. For example, service managers can reuse a work plan template for safety checks and add steps for work in an earthquake zone.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

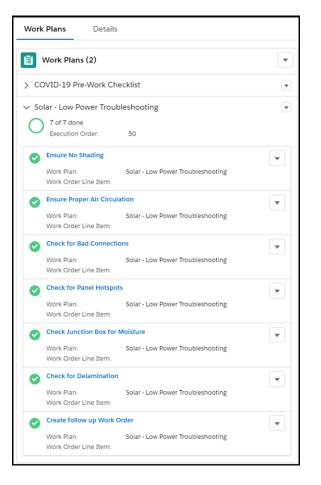
When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

Work Plan Templates					
PPE Safety Check			San Francisco F	PPE Safety Check	
	Assess Fall Risk				
	Assess Fire Risk				
	Assess Electrocu	tion Risk			
Copied to			Assess Earthquake	Risk	
v	Vork Ord	ers			
	WO 1	w	0 2	WO 3	

Automate how work plans are assigned to work orders or work order line items using work plan selection rules. Service managers configure rules that add plans based on fields such as work type, asset, location, and service contract. A selection rule generates a point-in-time copy of a work plan and its steps from the templates, and it adds them to work orders or work order line items.

For example, for break-fix procedures, define work step templates and work plan templates for different assets. The selection rules map required work plans to asset types. When the service manager creates a work order or work order line item for an asset, the rules add instances of the right plans and steps.

Front-line and back-office workers view work plans on the work order or work order line item. As they complete steps, quick actions and flows guide them through the work.



Creating, maintaining, and using work plans is a team effort.

- Service managers, operations managers, or dispatchers typically build and maintain work plans. They define templates for work steps and work plans, and they create work plan selection rules.
- Salesforce Admins assign the right permissions for users to use and manage work plans. Also, if there's a work step that uses a field service mobile flow, the admin usually creates it.
- Front-line and back-office workers are the consumers of work plans. They're often a great resource to help admins build and refine work step and work plan templates.

Here's a summary of objects related to work plans.

- Work Step Template: A reusable pattern that describes a task. It can include a quick action or a field service mobile flow.
- Work Plan Template: A reusable pattern that describes an ordered list of steps.
- Work Plan Template Entry: A step, in the form of a work step template, that's added to a work plan template.
- Work Plan Selection Rule: The logic that selects which work plan templates and steps to associate with a work order or work order line item.
- Work Plan: A checklist that's displayed on a work order or work order line item.
- Work Step: A task on a checklist that the worker can complete.

# Set Up Work Plans

Customize your work plans settings, assign users permissions to manage work plans, and map fields that display information for work plans and work steps.

### Enable Work Plans

Before you customize its settings, enable your work plans.

**Customizing Work Plans Settings** 

Adjust work plans settings to accommodate your needs.

Assign User Permissions for Work Plans

Give users access to work plans.

#### Map Fields for Work Plans

Learn how standard fields for work plans are mapped from templates and how to map custom fields.

## **Enable Work Plans**

Before you customize its settings, enable your work plans.

- 1. From Setup, in the Quick Find box, enter Work Plans, and then select Generate Work Plans and Work Steps from templates and selection rules.
- Optionally, to configure the flow logic that changes the work step status, select Manually update a work step's status when flows are launched. To automatically set a work step's status to Complete or Failed when flows are launched, deselect this option.
- 3. In Object Manager, edit page layouts for work order and work order line item objects. Add Work Steps and Work Plans to the layout in Related Lists. Under Mobile & Lightning Actions, add Generate Work Plans, Add Work Plans, and Delete Work Plans so that these actions appear in the action menu.

SEE ALSO:

Flows

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To enable work plans:

Customize Application

# **Customizing Work Plans Settings**

Adjust work plans settings to accommodate your needs.

- Display the Work Plans Lightning web component on the work order or work order line item record page.
  - Add the related lists for your work steps and work plans to the page layout of the work order or work order line item.
  - Use the Lightning App Builder to add the component to the layout of the work order or work order line item record page.
  - Activate the record page to make it available to your Lightning Experience and mobile users by using the Activation function in the Lightning App Builder.
  - Note: If you haven't already customized the work order or work order line item record page, the Work Plans component is added to the record page layout by default.

The Work Plans component is also available for Experience Builder sites. To learn how to add it to your site's page, see Edit Pages and Components in Experience Builder.

• For the Work Plans Lightning web component and mobile app, create custom actions to display on the action menu of the work plan and work step records.

# - In Object Manager, go to Buttons, Links, and Actions and create a new action for the work plan or work step object.

- Add the action to the page layout of the work plan or work step record. For the mobile app, add the action to Quick Actions in the Salesforce Classic Publisher.
  - Note: For an optimal experience with the Work Plans component, we recommend that you customize the action menu to display the Complete and Not Applicable actions first.

The mobile app doesn't support custom actions that are associated with mobile flows and lightning actions.

- Customize the fields displayed on the work plan and work step records. In the page layout of the work plans and work steps' related lists, select the fields to display.
  - Note: For the information to appear properly on the Work Plans Lightning Web Component, we recommend that you first include these fields in the layout:
    - For work plans: Execution Order, Name, and Work Order Line Item
    - For work steps: Execution Order, Name, and Status
- In Object Manager, edit page layouts for the work plan template object. To display the standard New Work Plan Selection Rule screen to users, select the **New** button to show in the layout of the work plan selection rule related list. To display the enhanced New Work Plan Selection Rule screen, select the **New Rule** button.
- Adjust service reports to include work plans and work steps information. To do that, adjust your service report template on page 516 to include work plans and work steps related lists information in reports. By default, work steps are grouped by work plan.

## **Considerations for Work Plans**

- Only standard fields are supported for work plan selection rules.
- When the user clicks the **Complete** button for a work step and the step is completed successfully, we assign the first status value from the Completed status category. If the work step gets paused, we assign the first status value from the Paused status category.
- In Process Builder, if you want to use objects related to work plans, enter w in the picklist to show them. Otherwise, Process Builder doesn't list them.

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

- In work steps, predefined and custom global quick actions, custom object-specific actions defined on work order and work step objects, and field service mobile flows are supported.
  - For the mobile app, we support Create, Update, and Flow quick actions.
  - If a quick action or mobile flow fails to load for a work step, an error icon appears next to the step's status icon. For actions
    showing errors, confirm that the action still exists and that it works on mobile. For flows showing errors, confirm that the user
    has Flow permissions.
- For the mobile app, we recommend that you create a page layout specific for mobile profiles when using work plans.
- If you have customizations such as validation rules or lookup filters that prevent the creation of a work step connected to a work plan, that work plan doesn't auto-generate.
- Work plans can't be auto-generated if the following two conditions are true:
  - The work orders are created and updated to set the Owner to be a Queue during Create by a Flow, Workflow, or similar automation.
  - The work plan template has an associated work plan template and work step.

The Work Step object has a child relationship to Work Plans. Work Step doesn't have an Owner ID field and is derived only from the associated work plan. The auto-generation process validates the work step owner, checks if it can be assigned to a queue (which it can't), and silently fails in the background. As a result, the work order is created without the work plan.

#### SEE ALSO:

Introducing Lightning Web Components Quick Actions Flows Activate Lightning Experience Record Pages Create and Configure Lightning Experience Record Pages Manage Service Reports Customize Related Lists Set Up and Manage Experience Cloud Sites

### Assign User Permissions for Work Plans

Give users access to work plans.

- For users who create or manage work plans, assign them Read, Create, Edit, Delete, and View All permissions on work plan templates, work step templates, and work plan selection rules.
- For users who work with work plans on desktop or mobile, assign them Read and Update permissions on work plans and work step records.
- To let users run quick actions and flows from work steps, assign them these permissions.
  - For global quick actions, give users the Create permission on related objects and the Update permission on records. For example, to run the action Create New Account, users need the Create permission on the Account object. To modify account records, users need the Update permission for those records.
  - To execute field service mobile flows, users need the Run Flows permission or the Flow User field enabled on the user detail page. To allow users with the standard user profile to create and run flows, give them the Manage Flows permission.
- To let users work with the Manage Work Plan Template Entries window, assign them Read and Edit permissions on the Execution Order field of the Work Plan Template Entry object.
- To view the Work Plans Lightning web component, assign users Read access on the Execution Order, Status, and Status Category fields.

SEE ALSO:

Introducing Lightning Web Components Quick Actions Flows **EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### Map Fields for Work Plans

Learn how standard fields for work plans are mapped from templates and how to map custom fields.

Standard fields for work plan templates, work step templates, and work plan template entries are automatically mapped to work plans and work steps. The mapping of these fields can't be changed. The standard fields that are mapped from work plan templates to work plans are Name, Description, and Execution Order. The fields that are mapped from work step templates and work plan template entries to work steps are Action Definition, Action Type, Description, Execution Order, Name, and Work Plan Execution Order.

You can also add custom fields to work plan templates, work step templates, and work plan template entries so that your workers have all the information they need to efficiently and accurately complete their work. You can then map which fields to copy from the templates to a work plan or work step record.

- 1. Add custom fields to the work plan template / work step template / work plan template entry and to the work plan / work step.
- 2. From Setup, in the Quick Find box, enter *Work Plans*. On the Custom Field Mapping card in Work Plans Settings, select which custom field values to include from templates in work plans and work steps. You can:
  - a. Map custom fields from work plan templates to work plans.
  - b. Map custom fields from work step templates and work plan template entries to work steps.
  - Note: You can't delete a custom field mapped to a work plan or a work step.
- **3.** Save your work. When work plans are generated, the custom fields are copied from the templates to the work plan and work steps of a work order or work order line item.

In the Field Service mobile app, custom fields that take numerical inputs show plus and minus buttons only if the custom field name starts with Quantity. All other custom fields that take numerical inputs show a text box.

#### Guidelines for Mapping Custom Fields for Work Plans

Learn the best practices for mapping custom fields from templates to work plans and work steps. Mapping custom fields helps your front-line workers retain important information that they use to complete their work.

#### Guidelines for Mapping Custom Fields for Work Plans

Learn the best practices for mapping custom fields from templates to work plans and work steps. Mapping custom fields helps your front-line workers retain important information that they use to complete their work.

- Map any of these field types to custom fields of the same data type.
  - Formula
  - Auto Number
  - Checkbox
  - Currency
  - Date
  - Date / Time
  - Email

### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To customize work plans custom field mapping:

Customize Application

- Geolocation
- Number
- Percent
- Phone
- Picklist
- Multi-select Picklist
- Text
- Text Area
- Text Area (Long)
- Text Area (Rich)
- Text (Encrypted)
- Time
- URL
- Each target field can have one source field mapped to it.
- You can map Auto Number fields to field types Text or Text Area.
- You can map Text and Text Area fields to custom field types of Text, Text Area, Text Area (Long), and Picklist. If you map to a Picklist field, the picklist must be unrestricted.
- You can map custom Picklist fields to custom field types of Text, Text Area, and Picklist (unrestricted), but not Text Area (Long).
- When mapping between Picklist and Text fields, if the source field value is longer than the target field allows, your data truncates.
- You can map custom lookup fields to custom lookup fields pointing to the same object.
- When mapping source entity custom fields (Work Plan Templates / Work Step Templates / Work Plan Template Entries), the selected target entity custom field (Work Plan / Work Step) must be of equal or greater length.
- You can't delete mapped custom fields from the source entity or the target entity. To delete a field, remove its mapping first.
- You can't change the field type of a mapped field. To change a field's type, remove its mapping first.
- You can't uninstall a package that references fields included in Work Plans Custom Field Mapping. Before uninstalling the package, remove any mappings of referenced fields.
- When mapping custom number, currency, or percent fields, the target field must have the same length and number of decimal places.
- Don't map custom formula fields to other formula fields or any other type of field.

# Build and Manage Work Plans

Create and maintain work plans by defining templates for work steps and work plans, and create work plan selection rules.

#### Before You Begin

Create and design sample work plans.

#### Get Started with Work Plans

Here's a quick overview of how to get started with work plans.

#### Create Work Step Templates

Start by creating work step templates for the smallest individual units of work.

#### Create Work Plan Templates

Build work plan templates from your work step templates.

#### Manage Work Step Templates

Manage the work plan template entries that store the work step templates associated with your work plan template.

#### Create Work Plan Selection Rules

Add selection rules to automate how work plans are assigned to work orders.

#### Generate Work Plans

Generate work plans automatically on work orders and work order line items.

#### Adjust Plans and Steps on Work

Tweak work plans and work steps on a work order or work order line item.

#### Delete Work Plans and Steps

If you modify a work plan, you can delete the previous plan and its steps on an existing work order or work order line item.

### Before You Begin

Create and design sample work plans.

Collaborate with your team and outline sample work plans. For example, to design work plans for wind turbine maintenance, you capture typical maintenance steps at 6-month and annual intervals. A table or spreadsheet can help you identify how to reuse and revise work plans.

Work Plan	Work Steps	6-Month	Annual
Safety & PPE	<ul><li>Log arrival</li><li>Put on safety gear</li></ul>	*	✓ ✓
Generator maintenance	<ul><li>Lubricate generator bearings</li><li>Change generator filter</li><li>Replace gear oil</li></ul>	× × ×	* *
Hydraulic systems	<ul><li>Check fluid levels</li><li>Refill reservoirs</li></ul>	×	✓ ✓

### EDITIONS

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Work Plan	Work Steps	6-Month	Annual
	• Drain and replace hydraulic fluid	×	*
Blade/bearing maintenance	<ul><li>Lubricate main bearings</li><li>Lubricate pitch and yaw bearings</li><li>Retorque bolts</li></ul>	✓ ✓ ✓	✓ ✓ ✓

For this planned maintenance example, work plan selection rules use the work type field to represent the type of visit. Because the same safety and blade/bearing maintenance procedures occur at both visits, the rules can replicate the work plans for both visit types.

### Get Started with Work Plans

Here's a quick overview of how to get started with work plans.

Create a library of work step templates for individual tasks (1). Organize those step templates into work plan templates. You can create a library of work plan templates, such as a library of asset maintenance procedures (2), and then define rules that select the right plans for work assignments (3).

When you create a work order or work order line item, your rules add a point-in-time copy of plans and their steps based on your rules. Also, you can generate work plans on existing work orders or work order line items (4).

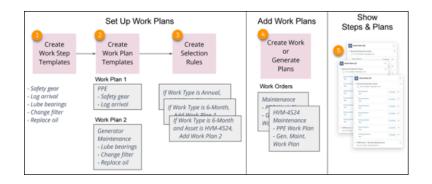
Your workers can then see what to do in the work plans that appear. Front-line workers can view the work plans on-site on their mobile app and back-office workers can view them on their desktops. As they perform steps, they can mark them as completed (5).

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### **Create Work Step Templates**

Start by creating work step templates for the smallest individual units of work.

- 1. In the app launcher, click Work Step Templates.
- 2. Click New, and enter a name for the work step template.
- **3.** Optionally, in Action Definition, select a quick action, a screen flow, or a field service mobile flow.
  - Note: On the Field Service mobile app, use flows of type Field Service Mobile only. When you use work plans on a web browser, work steps that have a quick action that launches a Lightning web component (LWC) in Action Definition don't work. They're supported only in the Field Service mobile app.

Quick actions defined on work steps and work orders can be added to Action Definition.

- 4. Enter an optional description.
- 5. Click Active.
- 6. Save the work step template.

	New Work Step Template	
nformation		
•Name	Active	
HYD - Hydraulic Check		
Action Definition		
	Q,	
Description		
Description		
Description		le
Description		le

SEE ALSO:

Quick Actions Flows

### **EDITIONS**

Available in: Lightning Experience

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When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To create work step templates:

 Create and Read on work step templates

To view work step templates:

 Read on work step templates

To update work step templates:

• Edit and Read on work step templates

To delete work step templates:

 Delete and Read on work step templates

### Create Work Plan Templates

# USER PERMISSIONS

To create work plan templates:	Create and Read on work plan templates
To view work plan templates:	Read on work plan templates
To update work plan templates:	Edit and Read on work plan templates
To delete work plan templates:	Delete and Read on work plan templates
To associate a work step template with a work plan template:	Create and Read on work plan template

Build work plan templates from your work step templates.

- 1. In the app launcher, click Work Plan Templates.
- 2. Click New, and enter a name for the work plan template.
- 3. Optionally, enter a positive value for relative execution order and a description.
- 4. Click Active.
- 5. Save the work plan template.

formation		
*Name HPM - Annual Maintenance	Active	
Relative Execution Order	Category	
10	None	*
escription		
Description		
HON Planned Annual Maintenance		
		h

EDITIONS

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6. To associate a work step template with a work plan template, see Manage Work Step Templates on page 364.

### Manage Work Step Templates

Manage the work plan template entries that store the work step templates associated with your work plan template.

1. On the work plan template, open the Related tab. On the Work Plan Template Entries related list, click **Manage**.

Name	~	Work Step Template	$\sim$	Execution Order
WPTE-0016		Ensure No Shading		1
WPTE-0017		Ensure Proper Air Circulation		2
WPTE-0018		Check for Bad Connections		3
WPTE-0019		Check for Panel Hotspots		4
WPTE-0020		Check Junction Box for Moisture		5
WPTE-0021		Check for Delamination		6
WPTE-0022		Create follow up Work Order		7

2. To add steps to the work plan template, click Add, and select work step templates from the list.

	Add work step temp	lates			
Search	h Work Step Templates				Q
how Se	elected (1)				
	Name	~	Description	~ A	~
	"Take Five" executed		ABB - General data & Safety	1	
	AC Panel - Inspect and clean casing		Solar - Half Yearly Maintenance	1	
	AC Panel - Measure o/p current		Solar - Half Yearly Maintenance	1	
	Adjust date and time, reset service scheduler		ABB - Controller inspection task	1	
	Air condition (option)		ABB - Paint controller	1	
	All fans removed and cleaned		ABB - Internal cleaning & check	1	
	Availability of system keys/lic./special add-in setup		ABB - Software & backup	1	
	Backup external for the customer and webconfig		ABB - Software & backup	1	
	Backup internal on robots harddrive		ABB - Software & backup	1	

- 3. Save your work.
- 4. To remove steps from the work plan template, select the relevant work step templates, and click **Remove Selected**.
- 5. To confirm the action, click **Remove**.
- 6. To reorder the work step templates, click Reorder, and select the relevant work step templates.

			Manage Work Step Templa	atos				
			wanage work step tempt	ates				
						Ŧ	Ť	+ ±
-	Name	~	Work Step Template	~	Execution Order			~
	WPTE-0016		Ensure No Shading		1			
	WPTE-0017		Ensure Proper Air Circulation		2			
~	WPTE-0018		Check for Bad Connections		3			
	WPTE-0019		Check for Panel Hotspots		4			
	WPTE-0020		Check Junction Box for Moisture		5			
	WPTE-0021		Check for Delamination		6			
	WPTE-0022		Create follow up Work Order		7			
						-		
					Cancel Reorder		Save R	leorder



Available in: Lightning Experience

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When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To manage work plan template entries:

• Create, Update, and Delete on work plan templates

To add work plan template entries:

 Create on work plan templates

To reorder work plan template entries:

 Update on work plan templates

To remove work plan template entries:

 Update and Delete on work plan templates

- 7. To reorder the steps, click Move to Top 🔹, Move Up 🔹, Move Down 😉, or Move to Bottom 🛓, and then click Save Reorder.
- 8. If you're done, click **Done**.

### **Create Work Plan Selection Rules**

Add selection rules to automate how work plans are assigned to work orders.

Work plan selection rules generate point-in-time copies of work plans from templates. For example, when you create a work order with a work type of monthly maintenance, your rule can copy the monthly maintenance work plan template and its steps to the work order.

The criteria in a work plan selection rule is the trigger. It tells Salesforce which plan to copy to the work order or work order line item.



Note: If an annual maintenance visit includes the steps for monthly maintenance, define multiple rules, where one rule adds the annual work plan and another rule adds the monthly work plan. For example, you can use the work type field as a trigger in your rules.

If your Salesforce admin configured the standard New Work Plan Selection Rule screen for you, follow these instructions to create a work plan selection rule.

- 1. In the app launcher, click Work Plan Templates.
- 2. On the work plan template, open the Related tab. On the work plan selection rules related list, click **New**.
- **3.** Select one or more fields as rule criteria. Values for work types, assets, locations, service contracts, products, or service territories can be specified in the work plan selection rule criteria. These fields are matched with the corresponding fields on the work order or work order line item to determine whether this selection rule is applicable to the work order or work order line item. If applicable, the corresponding work plan template is copied as a work plan for the work order or work order line item.
  - Note: The rule generates a work plan when all fields in the rule match corresponding fields in the work order or work order line item. For example, if the rule specifies a work type and an asset as the selection criteria, it adds the work plan only when both fields match on the work order.

nformation	
Name	Description
	Assign yearly tasks to Annual WTs
* Work Plan Template	Asset
10 HPM - Annual Maintenance	× Search Assets
Work Type	Product
Annual Maintenance - Gold	× Search Products
Location	Service Territory
Search Locations	Q, Search Service Territories
Active	
ystem Information	
Owner Admin User	Last Modified By
Created By	

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#### USER PERMISSIONS

To create work plan selection rules:

Create and Read on
 work plan selection rules

Read permissions on objects

To view work plan selection rules:

 Read on work plan selection rules

To update work plan selection rules:

• Edit and Read on work plan selection rules

Read permissions on objects if changed

To delete work plan selection rules:

 Delete and Read on work plan selection rules

- 4. Enter an optional description for your rule.
- 5. Click Active.
- 6. To create more rules, click Save & New. If you're done, click Save.

Note: You can also create work plan selection rules by clicking **New** in the Work Plan Selection Rules list view.

If your Salesforce admin configured the enhanced New Work Plan Selection Rule screen for you, follow these instructions to create a work plan selection rule.

- 1. In the app launcher, click Work Plan Templates.
- 2. On the work plan template, open the Related tab. On the work plan selection rules related list, click New Rule.
- **3.** Enter an optional description for your rule.
- 4. Click Active.
- 5. Select one or more selection rule values as rule criteria. Values for work types, assets, locations, service contracts, products, or service territories can be specified in the work plan selection rule criteria. These field values are matched with the corresponding fields on the work order or work order line item to determine whether this selection rule is applicable to the work order or work order line item. If applicable, the corresponding work plan template is copied as a work plan for the work order or work order line item.

**Note:** The rule generates a work plan when all fields in the rule match corresponding fields in the work order or work order line item. For example, if the rule specifies a work type and an asset as the selection criteria, it adds the work plan only when both fields match on the work order.

If a rule specifies a product as the selection criteria, the rule doesn't look for the corresponding field on the work order because no product field exists there. Instead, it looks at the Asset field and finds the matching product on the corresponding asset.

Define whe correspond		ate to work orders. Add a wo	ork plan when the selection rule values match the	work orders'
Work Plan			Description	
-	- Monthly Maintenance V2	×		Æ
Active			* Owner	
			Admin User	
	Field	Operator	Value	
	Field	<b>Operator</b> Equals	Value Search Accounts	Q
AND				م
AND	Account	Equals	Search Accounts	
AND	Account	Equals Equals	Search Accounts Search Assets	Q
	Account Asset Location	Equais Equais Equais	Search Accounts Search Assets Search Locations	م م م
AND	Account Asset Location Product	Equals Equals Equals Equals	Search Accounts Search Assets Search Locations Search Products	٩

Note: If you don't select any values and the work plan selection rule is active, the related work plan template is added to all new work orders or work order line items.

6. Save your work.

### **Generate Work Plans**

Generate work plans automatically on work orders and work order line items. After you define templates and rules, you can generate work plans on new or existing work. Here's how to generate work plans on a new work order or work order line item.

- 1. In the app launcher, click **Work Orders** or **Work Order Line Items**.
- 2. Click New.
- **3.** To match the trigger in your selection rule, select one or more fields. For example, select Work Type.

	New W	ork Order	
ormation			
Work Order Number		Owner Admin User	
Status		Priority	
New	•	Low	*
Parent Work Order		Contact	
Search Work Orders	Q,	Search Contacts	Q
Account		Work Type	
Search Accounts	Q,	Solar - Half Yearly Maintenance	×
Case		Asset	
Search Cases	Q	Search Assets	Q
		Service Territory	
		Search Service Territories	Q
escription			
Subject			
Solar - Half Yearly Maintenance			
Description			
			_

#### 4. Click Save.

5. To see the work steps and work plans that your rules generated, open the work order or work order line item, and view the Work Plans Lightning web component.

	** E &	? 忠 皋 🤅
Work Plans Work Orders 🗸 Work Plan Templates 🧹 Work Step Templates 🤟	sets 🗸 Products 🗸 Maintenance Plans 🗸	5.5.00000 - 1100 - 0
Low Power Output	+ Rollow Create Service Report Delet	e Cone e
ork Type Sonus Work Order Number Islar - Low Power Troubleshooting Closed 00000066		
Feed Related	Work Plans Details	
Sort by	Work Plans (2)	6
Most Recent Activity 🔹	is feed	
Set the customers permission to work today — Karthik Shankar created a work step. December 11, 2020 at 1047 AM	2 of 3 done     Citegory:	
Get the customers permission to work today	View Face Mark	*
View more	Action Type: Work Plan: COVID-19 Pre-Work Checklist	
de Like 🚳 Connect	Action Type: West Pare: COVID-18 Pre-West Checkles	٣
Write a comment.	Get the customers permission to work today	Complete 👻
Santice Hands — Karthik Sharkar created a work step. December 11, 2020 at 1047 AM	Action Type: Work Plan: COVID-18 Pre-Work Checklist	

### **EDITIONS**

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#### USER PERMISSIONS

To generate work plans on a work order or work order line item:

• Edit and Read on work order or work order line item

> Read and View All on work plan templates and work step templates to use the Add Work Plan and Generate Work Plans actions

Read on work plan selection rules

**Note:** If you have customizations such as validation rules or lookup filters that prevent the creation of a work step connected to a work plan, that work plan doesn't auto-generate.

On a work order or work order line item, you can select **Generate Work Plans** from the action menu. When columns in a rule match a field in the work order or work order line item, the rule generates a work plan on that record. This action doesn't change preexisting work plans, but it's a handy way to add a plan.

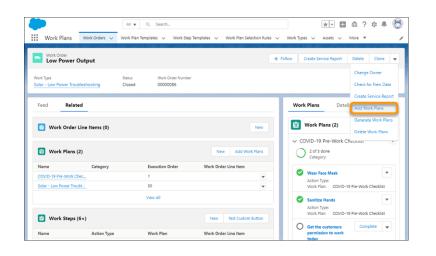
### Adjust Plans and Steps on Work

Tweak work plans and work steps on a work order or work order line item.

Sometimes it's necessary to adjust plans and steps on a work order or work order line item. For example, suppose your company requires a new safety procedure on every job. Create a work plan template with the procedure, and use that template to add the plan to outstanding work orders. If you don't have an existing template, you can use the **New** button.

To add a work plan from a work plan template, follow these steps.

1. On the work order or work order line item, select Add Work Plans from the action menu.



2. Select one or more work plans to add from the list of work plan templates. You can search and select plans from your search results. The Show Selected link lets you see what's selected.

ork Plan Templates							۹
ed (1)							
Name	~	Description	$\sim$	Relative Exec	$\sim$	Active	
HPM - Quarterly Maintenance		HON		10		<b>~</b>	
HPM - Annual Maintenance		HON		10		<b>v</b>	
HPM - Monthly Maintenance		HON		10			
	lame IPM - Quarterly Maintenance IPM - Annual Maintenance	Aame  V IPM - Quarterly Maintenance IPM - Annual Maintenance	Aame V Description IPM - Quarterly Maintenance HON IPM - Annual Maintenance HON	Aame V Description V IPM - Quarterly Maintenance HON IPM - Annual Maintenance HON	Name         Description         Relative Exec           IPM - Quarterly Maintenance         HON         10           IPM - Annual Maintenance         HON         10	Name         Description         Relative Exec         Procession           iPM - Quarterly Maintenance         HON         10           iPM - Annual Maintenance         HON         10	Name         Description         Relative Exec         Active           iPM - Quarterly Maintenance         HON         10         ✓           iPM - Annual Maintenance         HON         10         ✓

3. Click Add. Added work plans and work step instances appear in the related lists.

Note: You can add work plans more than one time. We don't prevent duplicates.

To add another work step from a work step template.

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#### USER PERMISSIONS

To add work plans on a work order or work order line item:

 Edit and Read on work order or work order line item

Create, Edit, and View All on work plan templates, work step templates, and work plan selection rules

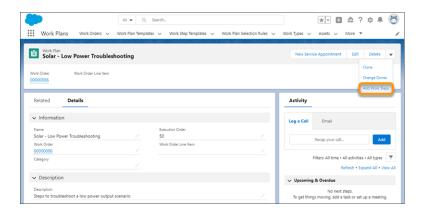
To add work steps to a work plan:

 Edit and Read on work order or work order line item

Edit and Read on work plans

Read on work step templates

- 1. On the work order or work order line item, go to the Work Plans related list.
- 2. Select a work plan, or create a new one.
- 3. On the work plan record, select Add Work Steps from the action menu.



4. Select work step templates and click Add.

	Add work st	ер	s to work plan			
Search \	Work Step Templates				Q	
View All Show Sele	cted (1)					
	Name	~	Description	$\sim$	Active	$\sim$
~	AC Panel - Measure o/p current		Solar - Half Yearly Maintenance		<ul> <li>Image: A start of the start of</li></ul>	
	AC Panel - Inspect and clean casing		Solar - Half Yearly Maintenance		<b>V</b>	
						_
				Cance	Add	

### Delete Work Plans and Steps

If you modify a work plan, you can delete the previous plan and its steps on an existing work order or work order line item.



Note: This action deletes all work plans on the work order or work order line item.

- 1. On the work order or work order line item, select **Delete Work Plans** from the action menu.
  - Note: If the work order includes a work order line item that has its own plans, we don't delete the plans from the child work order line item.

	All 🔻 Q. Search			**	🗄 ? 🌣 🐥 🌔
Sales Home Opport	unities 🗸 Leads 🗸	Tasks 🗸 Files 🗸 Accounts	Contacts V Dashboard	śs ↓ Reports ↓ • Work Orde	rs ∨ × More ▼
THE WELL WADDING D	regi ( <i>1411</i> -5.11617-18	MOMUTER JACON STREEM	H NAROMA INSTUTA	さいには、いめいかん、 カルシリし	Alle Sali (T. SSIII) Juli
Work Order Troubleshoot Low Po	wer		+	Follow Create Service Report	Delete Clone 👻
ork Type	Status	Work Order Number			Change Owner
ork type plar - Low Power Troubleshooting	New	00000111			Check for New Data
				(((1) - 2)) - 2)	Create Service Report
Feed Related				Details	Add Work Plans
					Generate Work Plans
-				<b>E</b>	
Work Plans (2)			New Add Work Plans	Work Plans (2)	Delete Work Plans
Work Plans (2)	Execution Order	Work Order Line		<ul> <li>Work Plans (2)</li> <li>✓ COVID-19 Pre-Work Ch</li> </ul>	
-	Execution Order			COVID-19 Pre-Work Ch     0 of 2 done	
Name	1		e item	✓ COVID-19 Pre-Work Ch	
Name COVID-19 Pre-Work Checklist	1 50		e Item	COVID-19 Pre-Work Ch     0 of 2 done	
Name COVID-19 Pre-Work Checklist	1 50	Work Order Line	e Item	COVID-19 Pre-Work Ch O of 2 done Execution 1 C check masks Status: New	vecklist v
Name COVID-19 Pre-Work Checklist	1 50	Work Order Line	e Item	COVID-19 Pre-Work Ch     Ord 2 done     Bexcution _ 1      Check masks     Status: New     Execution _ 1	complete
Name COVID-19 Pre-Work Checklist Solar - Low Power Troubleshooting Work Steps (4)	1 50 Vi	Work Order Line	e Item V	COVID-19 Pre-Work Ch     O of 2 done     Execution1      check masks     Status: New     Execution1      santize the hands	vecklist v
Name COVID-19 Pre-Work Checklist Solar - Low Power Troubleshooting	1 50	Work Order Line	e Item V	COVID-19 Pre-Work Ch     Ord 2 done     Bexcution _ 1      Check masks     Status: New     Execution _ 1	ccmplete v

2. To add the latest versions of your plans and steps, select **Generate Work Plans** from the action menu.

# View and Complete Work Plans

Back-office workers can view and complete work plans on their desktop.

As a back-office worker, you want to complete assignments quickly and accurately. To help you reach this goal:

- Use the Work Plans Lightning web component on the work order or work order line item.
- Use the related list of work steps on the work order or work order line item.

#### Complete Work with Work Plans Lightning Web Component

The Work Plans component displays the work plans and work steps associated with the work order or work order line item. You can use it to view and complete assignments quickly and accurately.

#### Complete Work with the Work Steps Related List

Use the work steps related list associated with a work order or work order line item to view and complete your work.

#### SEE ALSO:

Introducing Lightning Web Components

### **EDITIONS**

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The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To delete work plans:

 Delete and Read on work plans

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### Complete Work with Work Plans Lightning Web Component

The Work Plans component displays the work plans and work steps associated with the work order or work order line item. You can use it to view and complete assignments quickly and accurately.

1. On the Work Plans component, expand the relevant work plan record to view its details and its associated work steps.

1	Work Plans (2)			
С	OVID-19 Pre-Work Ch	ecklist		
0	1 of 3 done Execution Order:	1		
Ø	Wear Face Mask			¥
	Work Plan: Work Order Line Item:	COVID-19 Pre-Work Checklist		
0	Sanitize Hands		Complete	-
	Work Plan: Work Order Line Item:	COVID-19 Pre-Work Checklist		
0	Get the customers perm	ission to work today	Complete	-
	Work Plan: Work Order Line Item:	COVID-19 Pre-Work Checklist		

- 2. On the work plan record, view the progress of the work plan on the progress ring. The progress ring is updated based on the real-time progress of the work plan.
- 3. On the work step record, view the status of the step on the step's status icon.
- 4. To mark a step's status completed, click **Complete** on the work step record, or select **Complete** on the action menu of the step.

Note: You can also mark a step Not Applicable on the work step's action menu.

If the step is a simple instruction, such as "Put on your safety gear", we mark the step's status as completed. If the step includes a quick action or a field service mobile flow, selecting

**Complete** starts it. When a quick action starts, we change the work step's status to Complete when the action is completed. When a flow starts, the status changes according to the way the flow is configured. Completed work steps remain on the work plan record.

#### SEE ALSO:

Introducing Lightning Web Components Quick Actions Flows



Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To view the work plan record:

 Read on Execution Order, Name, and Work Order Line Item fields

To view the work step record:

 Read on Execution
 Order, Action Definition, and Action Type fields

To update the work step record:

 Update on Status and Status Category fields

Note: You can load only the first two fields from the Work Steps related list on the Work Plan.

### Complete Work with the Work Steps Related List

Use the work steps related list associated with a work order or work order line item to view and complete your work.

- 1. On the work order or work order line item, open the work steps related list. The list shows steps from the plans and the recommended execution order.
- 2. On the action menu of a step, select Complete.

	Worl	k Plans Work Orders V Work Plan Terr	Q nplate	Search s V Work Step Te	mpi	lates 🗸 Work Plan Selection Rules 🗸	Work Types 🗸	Assets V Pr	oducts ∨	🕸 🌲	•
	Orders	> 0000086	-11:38	SIME TREAL	10	IZMUTNO I ONSULI	%*511677-11980	NEC NECH	1111er-ss	617 \\\	Ú)
Nor	k Ste	ps						Nev		Custom But	
0 iten	ıs • Sor	ted by Status • Updated a few seconds ago							3	\$ * C	Ľ
		Name	$\sim$	Action Type	/	Work Plan 🗸	Work Orde $\lor$	Execution $\lor$	Status †	~	
1		Get the customers permission to work today				COVID-19 Pre-Work Checklist		3	New		
2		Ensure Proper Air Circulation				Solar - Low Power Troubleshooting		2	Complet	Complete	
3		Check for Bad Connections				Solar - Low Power Troubleshooting		3	Complet	Not Applica	ble
4		Check for Panel Hotspots				Solar - Low Power Troubleshooting		4	Complet	Ed.	
5		Create follow up Work Order		Quick Action		Solar - Low Power Troubleshooting		7	Complet	Delete	
6		Check Junction Box for Moisture		Quick Action		Solar - Low Power Troubleshooting		5	Complet	Delete	
7		Check for Delamination				Solar - Low Power Troubleshooting		6	Complete	d	6
8		Ensure No Shading		Flow		Solar - Low Power Troubleshooting		1	Complete	d	
9		Wear Face Mask				COVID-19 Pre-Work Checklist		1	Complete	d	
10		Sanitize Hands				COVID-19 Pre-Work Checklist		2	Complete	d	- Fe



Note: You can also mark a step Not Applicable on the work step's action menu.

If the step is a simple instruction, such as "Put on your safety gear", we mark the step's status as completed. If the step includes a guick action or a field service mobile flow, selecting **Complete** starts it. For example, this step starts the Log a Call quick action.

	Log	a Call	
Subject			
Call			Q
Comments			
Name		Related To	
Name Search Contacts	Q	Related To	×
	Q		×
	Q	E Log a call	Cancel Save

**EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### USER PERMISSIONS

To view work steps:

Read on work plans

To update work steps:

• Edit on work plans

When a quick action starts, we change the work step's status to Complete when the action is completed. When a flow starts, the status changes according to the way the flow is configured. Completed work steps remain on the work step related list.

SEE ALSO:

**Quick Actions** Flows

# Create Field Service Maintenance Plans

USER PERMISSIONS		EDITIONS
To create maintenance plans:	Create on maintenance plans	Available in: both Salesforce
To view maintenance assets:	Read on maintenance plans and assets	Classic (not available in all orgs) and Lightning
To create, update, or delete maintenance	Edit on maintenance plans	Experience
assets:		The Field Service core
To generate work orders for a maintenance plan:	Read on assets and work types AND Create on work orders and service appointments	features, managed package, and mobile app are available in <b>Enterprise</b> ,
To edit page layouts:	Customize Application	Unlimited, and Developer Editions.

Create Field Service preventive maintenance plans for assets so your customers never miss a beat. With maintenance plans you define how often maintenance visits occur and generate work orders for future visits.



Note: The fields displayed depend on your page layout settings.

- 1. From the Maintenance Plans tab or related list, click **New**.
- 2. Enter a start date, If applicable, enter an end date, for example, where you've a service contract that entitles the customer to two years of maintenance visits. All work orders related to the plan must fall within this date range.
- 3. Select a work type. Maintenance work rules for and maintenance assets covered by the plan inherit the same work type, though you can update them to use a different work type.
- 4. Select an account and contact that represent the customer.
- 5. If the maintenance plan tracks work that's outlined in a service contract, select the service contract. You can associate assets covered by the maintenance plan with contract line items on the service contract.
- 6. If the maintenance visits are at a location that's tracked in Salesforce, such as a customer site, select the location.
- 7. In the Generation Timeframe and Generation Timeframe Type fields, enter how far in advance you want work orders to be generated at one time.

For example, to generate 3 months' worth of work orders at a time, enter 3 and select Months.

8. Enter the date of the first work order in the next batch, which corresponds to the work order's Suggested Maintenance Date.

For example, if you want the first maintenance visit to take place on May 1, enter May 1. When you generate work orders, the earliest work order shows a Suggested Maintenance Date of May 1. The dates on the later work orders are based on the Generation Timeframe, Frequency, and End Date settings. Also, batch timing is calculated at the maintenance asset level or at the work rule level. So if the maintenance plan includes assets or work rules, after each batch is run, the Suggested Maintenance Date auto-updates on:

- if assets have no work rules, the maintenance assets
- if assets have work rules, on the work rules. ٠
- 9. Optionally, enter the days for the maintenance window start and end. These settings impact the Earliest Start Permitted and Due Date fields on the maintenance plan's work orders' service appointments. If the maintenance window fields are left blank, the service appointment date fields list their work order's suggested maintenance date.

For example, enter 3 for both the maintenance window start and end. The Earliest Start Permitted and the Due Date will be, respectively, 3 days before and 3 days after the Suggested Maintenance Date on each work order.

- 10. To create work orders automatically, select Auto-generate work orders. If this option isn't selected, you must click Generate Work Orders on the maintenance plan to generate a new batch.
  - a. To run batch generation before the maintenance plan's Date of the first work order in the next batch, enter a Generation Horizon. For example, a generation horizon of 5 means that a new batch of work orders is generated 5 days before the maintenance plan's date of the first work order in the next batch. If you don't specify a generation horizon, it defaults to zero.
  - If you don't want a new batch of work orders to be generated until the final work order in the current batch is completed, select
     Generate new batch upon completion. A work order is considered completed when its status falls into one of the following status categories: Cannot Complete, Canceled, Completed, or Closed.

A separate work order is created for each maintenance asset for each maintenance date. Therefore, batch size reflects the generation timeframe, frequency, and the number of assets covered by the plan. For example, if the plan covers two assets and has a generation timeframe of 2 months and a frequency of 1 month, four work orders are generated at a time.

- 11. If more than one asset is associated with this maintenance plan, select a Work Order Generation Method: one work order for each asset or one work order line item for each asset.
- 12. If work order generation method is **One work order line item per asset**, select a Service Appointment Generation Method: one service appointment for the parent work order or one service appointment for each work order line item.

To learn more about work order and service appointment generation, see How Do Generation Methods Work?.

- 13. Enter a title and description for the maintenance plan.
- 14. Save your changes.
- **15.** Add assets covered by the plan in the Assets related list. Maintenance assets inherit their plan's work type and date of the first work order in the next batch.

Note: To control which fields appear in the related list, edit the Related List on the Maintenance Assets page layout in Setup.

- **16.** To use advanced recurrence, add maintenance work rules in the Maintenance Work Rules related list to schedule maintenance for all of the plan's assets. These rules act as the default for any assets without their own maintenance work rules. If not all assets are covered by the same maintenance schedule, add maintenance work rules to those assets to override the maintenance work rules on the maintenance plan.
- 17. If you didn't select the option to auto-generate work orders, click **Generate Work Orders** on the maintenance plan to generate a batch of work orders. Otherwise, they're automatically generated for you.

Generation can't create a combined total of more than 2,600 work orders and work order line items at a time. To decrease the number of work orders and work order line items generated, make one of these changes:

- Increase the Frequency value
- Decrease the Generation Timeframe value
- Remove assets from the maintenance plan

#### Guidelines for Generating Work Orders from a Maintenance Plan

Field Service maintenance plans offer a quick way to automate the creation of work orders for periodic maintenance visits. Learn how to generate work orders from a maintenance plan.

#### Guidelines for Working with Maintenance Work Rules

With maintenance work rules you set up multiple recurring maintenance schedules for maintenance assets. Learn how maintenance work rule settings affect work order generation.

#### Salesforce Field Service

#### Guidelines for Preventive Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create preventive maintenance plans for your assets.

SEE ALSO:

Maintenance Plan Fields *Trailhead:* Field Service Preventive Maintenance

# Guidelines for Generating Work Orders from a Maintenance Plan

Field Service maintenance plans offer a quick way to automate the creation of work orders for periodic maintenance visits. Learn how to generate work orders from a maintenance plan.

**Note:** Refer to Guidelines for Working with Maintenance Work Rules on page 380 for details on how work orders are generated from maintenance work rules.

### How Many Work Orders Are Generated at a Time?

Maintenance plan work orders are generated in batches. The number of work orders in a batch is based on several maintenance plan settings:

- Generation timeframe: determines how far into the future work orders are generated
- Frequency: determines the amount of time between work order dates
- Number of maintenance assets: work order is created per asset, per suggested maintenance date

For example, with a generation timeframe of 1 year, a frequency of 2 months, and two maintenance assets, one batch contains 14 work orders that cover 1 year's worth of maintenance visits. Work orders are also generated for the final day of the timeframe. If the generation timeframe is 1 year and the Date of the first work order in the next batch is January 1, 2020, work orders are also generated for January 1, 2021.

Note that the **Work Order Number** field might not correspond sequentially with the **Suggested Maintenance Date** field. For more information, refer to the Work Order developer documentation.

### How Do I Generate Work Orders?

You can manually generate each batch of work orders or choose to have a new batch generated automatically. If frequent changes are needed after each visit, manual generation gives you more control. Automatic generation provides the assurance that you're delivering the maintenance you promised to your customer.

Both methods allow you to customize batch generation timing using Generation Horizon (Days) or select **Generate new batch upon completion**. For details, see Maintenance Plan Fields.

Note: If Generate new batch upon completion is selected, a new batch of work orders isn't generated for a maintenance asset until the final work order for that asset in the current batch is completed. If one maintenance asset's final work order is completed but another's is stalled, work orders are generated only for the first maintenance asset. This behavior results in a staggered batch generation schedule for the maintenance plan.

To manually generate work orders from a maintenance plan:

- Confirm that **Auto-generate work orders** isn't selected.
- Click **Generate work orders**. When the Work order generation status on the maintenance plan changes to Complete, the generated work orders appear in the Work Orders related list.
- If the maintenance work rules date of the first work order in the next batch is earlier than the current date minus the generation time frame, the update **Next Suggested Maintenance Date** to fall into the eligible date range.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create work orders from maintenance plans

 Create, view, and edit on Service Appointments, Work Orders, and Work Order Line Items

> View and edit on Maintenance Plan, Maintenance Work Rules, and Maintenance Assets

AND

View on Assets

To view, create, and update recordset filter criteria

 View, create, and edit on Service Appointments, Shifts, Recordset Filter Criteria, and Recordset Filter Criteria Rules

AND

Delete on Recordset Filter Criteria and Recordset Filter Criteria Rules

View access on the Source Object, Filtered Object, and Filtered Object fields • If the **Next Suggested Maintenance Date** is outside the eligible generation window, adjust that date to align with the date of generation to yield expected results. For example, if you expect work orders to be created on a specific date of the month, ensure that the **Next Suggested Maintenance Date** is within the eligible generation window.

To turn on automatic generation, select Auto-generate work orders.

### If Auto-Generation Is Turned On, When Is a New Batch Generated?

When you're using maintenance plans without maintenance work rules:

- If the maintenance plan includes assets, a new batch is generated for each maintenance asset on the maintenance asset's Date of the first work order in the next batch.
- If the maintenance plan doesn't include any assets, a new batch is generated on the maintenance plan's Date of the first work order in the next batch.

When you're using maintenance plans with maintenance work rules, the maintenance plan gets picked up regardless of the next suggested maintenance date on the maintenance plan or the maintenance asset.

To further customize batch generation timing, specify a Generation Horizon (Days) or select **Generate new batch upon completion**. For details, see Maintenance Plan Fields.

### Can I Get a Report of the Work Orders Generated?

To receive a Chatter post detailing the work orders, work order items, and service appointments generated for each maintenance plan, see the following topics:

- Customize chatter feed tracking
- Turn on field history tracking on work order generation status
- Create a report type on the feed to see all the feeds in one report

### How Do Generation Methods Work?

Generation methods can help simplify dispatch by combining work for the same day into a parent work order with a work order line item for the relevant asset covered by the maintenance plan. Also, you can choose to create a service appointment for the work order or suite work order line item.

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. Where you have maintenance work rules on a maintenance asset, it means one work order or one work order line item for each maintenance work rule.
- 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 with the same suggested maintenance date 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**.

When **One work order line item per asset** is set, a work order line item is generated for each relevant asset and maintenance work rule. All work order line items sharing Next Suggested Maintenance Date are grouped under a work order.

Note: To provide guidance on which asset to service first, second, and so on, create guided actions, or flows, in the parent work order.

If Work Order Generation Method is left as None, the generation is defaulted to one work order per asset.

Work Orde Generation		Service Ap Generatio	pointment n Method	Result
One work order per asset	One work order line item per asset	One service appointment per work order	One service appointment per work order line item	
~		×	×	If Work Order Generation Method is set to One work order per asset, you can't set a Service Appointment Generation Method.
				Each asset and relevant maintenance work rule creates a work order. If a work type is associated with auto-create service appointment enabled, a service appointment is created for each work order.
				<b>Example:</b> A maintenance plan with four assets, a generation time frame of 6 months, and a frequency of 1 month produces:
				• Four work orders a month, 24 work orders for 6 months.
				• A service appointment for each work order, if the auto-create service appointment is enabled on an associated work type.
	*			Invalid: If Work Order Generation Method is set to One work order line item per asset, you must select a Service Appointment Generation Method
	*	*		One parent work order is created, a work order line item is created for each asse and relevant maintenance work rule, and one service appointment is created for the parent work order, even if the associated work type doesn't have auto-create service appointment enabled.
				<b>Example:</b> A maintenance plan with four assets, a generation time frame of 6 months, and a frequency of 1 month produces:
				• One work order each month, six work orders for 6 months.
				• Four work order line items on each work order.
				• A service appointment for each parent work order, 1 per month, and six work orders for 6 months.
	~		~	One parent work order is created, a work order line item is created for each asse and relevant maintenance work rule, and if the associated work type has auto-create service appointment enabled for work order line items, one service appointment is created for each work order line item.
				<b>Example:</b> A maintenance plan with four assets, a generation time frame of 6 months, and a frequency of 1 month produces:
				• One work order each month, six work orders for 6 months.
				• Four work order line items on each work order.
				• If auto-create service appointment for work order line item is enabled on the work type, a service appointment for each work order line item, four service appointments per month, 24 work orders for 6 months.

### Why Aren't Service Appointment Due Dates Following Maintenance Plan Settings?

When a service appointment is created for a generated work order, the work type Due Date Offset overrides the due date set by the maintenance plan.

To avoid this override, create two work types, one for non-maintenance plan service appointments and another for maintenance plan service appointments. Leave the Due Date Offset empty in the work type for maintenance plan service appointments. For example, create a Site Survey work type with a Due Date Offset of 5 days and Site Survey - Maintenance Plan with Due Date Offset left empty.

### How Are Addresses Added to Work Orders?

You can automatically add an address to the work orders in an org. The address on the work order is then automatically added to any resulting service appointments. To determine the address, the work order or work order line item looks for an address to add in this order: the asset address, the visitor address on the asset's location, and then the shipping address on the maintenance plan account.

The address field on the work order or work order line item is populated only if:

- The Populate Address for Work Orders or Work Order Line Items permission is selected in Field Service Settings.
- The maintenance plan uses maintenance work rules.
- The generation method isn't one work order line item per asset, and the service appointment isn't one service appointment per work order.

Before you select this option, review the addresses for your assets, locations, and accounts. Clean up the addresses so that they're consistent with your maintenance plan conventions. For example, if all assets have an address or location address and use 1asset1WOLI and 1SA1WOLI, make sure all assets under the same maintenance plan have the same address or location address.

### How is the Work Order Subject Created?

The work order Subject field consists of the **Suggested Maintenance Date** and the **Asset** or **Account** fields from the maintenance plan. The subject is formatted as follows:

Maintenance <Asset/Account/Empty>: <Suggested Maintenance Date>

Where <Asset/Account/Empty> is based on the following precedence:

- If the asset field is available, it takes precedence and is used.
- If the asset field isn't available, the account field is used.
- If the asset or account fields aren't available, the section is left empty.

### How Do I Change Generation Methods or Maintenance Schedules After Work Orders Are Generated?

If your maintenance plans have work orders or work order line items associated with them, changing their generation schedule on the maintenance asset or in the maintenance work rules isn't recommended. To change maintenance plan generation frequencies, either delete the incomplete work orders and regenerate them. Or set an end date to expire the current maintenance plan and create one with the appropriate generation method and recurrences.

SEE ALSO:

Create Field Service Maintenance Plans Maintenance Plan Fields *Trailhead*: Field Service Preventive Maintenance

# Guidelines for Working with Maintenance Work Rules

With maintenance work rules you set up multiple recurring maintenance schedules for maintenance assets. Learn how maintenance work rule settings affect work order generation.

### Number of Maintenance Work Rules Per Maintenance Plan

We recommend that there are no more than the equivalent of 2,000 maintenance work rules per maintenance plan. The number of maintenance work rules on a maintenance plan is the sum of:

- the number of maintenance work rules on maintenance assets.
- the equivalent number of maintenance work rules on maintenance assets derived from the maintenance plan for maintenance assets without maintenance work rules.
- Example: Number of Maintenance Work Rules Per Maintenance PlanA maintenance plan has ten maintenance assets. The maintenance plan has three maintenance work rules. Two of the maintenance assets have maintenance work rules, one has one rule and the other two. The number of equivalent maintenance work rules is as follows:
  - Maintenance work rules on maintenance assets: 1 + 2 = 3
  - Maintenance work rules derived from the maintenance plan: 8 (maintenance assets without maintenance work rules) \* 3 = 24

This configuration gives an equivalent work rule count of 27.

We recommend no more than 5 maintenance work rules per maintenance plan and no more than 5 maintenance work rules per maintenance asset.

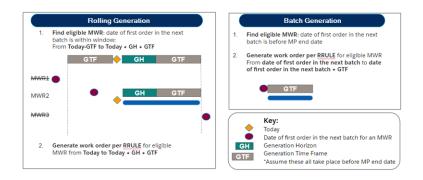
### Understanding Work Order Generation

You can generate work orders from information on the maintenance plan alone. Or you can generate work orders from information on the maintenance plan and the maintenance work rules associated with the maintenance plan or its assets. The following table illustrates the differences in how these two approaches generate work orders automatically and manually.

Recurrence scenario	Maintenance plan without maintenance work rules	Maintenance plan without maintenance work rules	Maintenance plan with maintenance work rules	Maintenance plan with maintenance work rules
Generation mode	Rolling	Batch	Rolling	Batch
Date range that determines eligible for work order generation	Date of first work order in the next batch in the range of today minus Generation Time Frame to the first of today plus Generation Horizon or maintenance plan End Date.	<b>in the next batch</b> is before maintenance plan	Date of first work order in the next batch in the range of today minus Generation Time Frame to today plus Generation Horizon plus Generation Time Frame, as long as this range is before the maintenance plan End Date	<b>in the next batch</b> is before maintenance plan
Last possible suggested	The earliest of Date of first work order in the	The earliest of Date of first work order in the	Today plus <b>Generation</b> <b>Horizon</b> plus	The earliest of <b>Date of first work order in the</b>

Recurrence scenario	Maintenance plan without maintenance work rules	Maintenance plan without maintenance work rules	Maintenance plan with maintenance work rules	Maintenance plan with maintenance work rules
maintenance date that work orders are generated for	next batch plus Generation Time Frame or maintenance plan End Date.	next batch plus Generation Time Frame or maintenance plan End Date.	Generation Time Frame.	next batch plus Generation Time Frame or maintenance plan End Date.
Last day in the generation window	Work orders generated can include the last day.	Work orders generated can include the last day.	Work orders generated exclude the last day.	Work orders generated exclude the last day.
<b>Generation approach</b> , see Batch Versus Rolling Generation on page 383	Batch window	Batch window	Rolling window	Batch window
Automatic generation upon work order completion	Yes	N/A	Yes	N/A
Respects sort order	N/A	N/A	If Generate new batch upon completion isn't selected, then Sort Order is respected.	Yes. except when the <b>Date of first work order</b> <b>in the next batch</b> values are offset.
			If Generate new batch upon completion is selected, then maintenance work rules associated with the last incomplete work orders or work order line items aren't considered when evaluating sort order.	See also, Manual generation example on page 382 in Sort Order and the Generate New Batch Upon Completion Setting.
			See also, Automatic generation example on page 382 in Sort Order and the Generate New Batch Upon Completion Setting.	
Work Order Generation Limit Enforcement	Generates up to 2,600 work orders and advises of limit enforcement in a Chatter message.	Show an online error message and doesn't generate any work orders.	Sends a Chatter notification and doesn't generate any work orders.	Sends a Chatter notification and doesn't generate any work orders.

The following diagram shows how work orders are created in rolling generation versus batch generation.

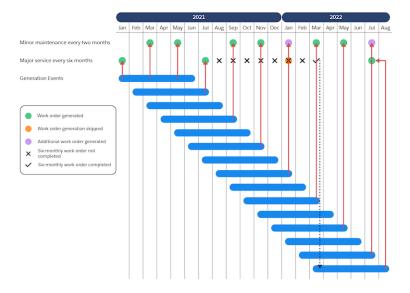


#### Example: Rolling Generation

The following diagram shows the generation of work orders for an asset that has **Generate new batch upon completion** set, **Generation Timeframe** set to 6 months and maintenance work rules for:

- Major maintenance to be performed every six months
- Minor maintenance to be performed every two months, but skipped when major maintenance is performed

When the major maintenance for July 2021 is then delayed by 7 months, the work order for the major maintenance in January 2022 isn't generated. Instead the work order for the minor maintenance is created. Before the major maintenance for July 2021 is completed, the generation window opens for July 2022 and generates work orders for the minor maintenance. When the major maintenance is completed, its maintenance work rule becomes eligible in the next generation window and the work order for the major maintenance in July 2022 is generated. After this, assuming work orders are completed on time, the schedule generates as expected.



#### Example: Batch Generation

Take a maintenance work rule recurring monthly for 12 months. The first maintenance work rule starts on 7/1 and has a sort order of 1 and the second maintenance work rule starts on 8/1 with a sort order of 2. From 7/1/2020 to 6/1/2021 only the first maintenance work rule, because of its lower sort order number, generates work orders. But on 7/1/2021, the second maintenance work rule generates work orders when the first maintenance work rule is no longer attempting to generate work orders.

### Batch Versus Rolling Generation

In batch generation, work orders are generated for the asset's generation timeframe and then not considered for generation again until the generation timeframe has passed. The **Generation Horizon** and **Generation Upon Completion** features aren't available for batch generation.

In rolling window generation, when work order generation runs it creates work orders according to the recurrence pattern for eligible maintenance work rules from the current date to the current date plus the generation horizon plus the generation timeframe.

By default, manual and automatic work order generation use a rolling window for calendar-based preventive maintenance. You can still opt to use a batch window to create work orders manually for calendar-based maintenance plans. However, that option doesn't support advanced features such as **Generation Horizon** and **Generation Upon Completion**. To generate work orders using a batch window, go to Field Service Settings and select **Use batch generation to create work orders manually**.

In the following diagram, the generation timeframe is 6 months and the generation horizon is 0 days. The blue bar represents the batch generation window. The start of the blue bar is when auto generation runs. Not all generation events are shown, automatic generation runs 3 times daily.

	2021						2022												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Minor maintenance every two months			•		9				•		•				•		•		
Major service every six months Generation Events	Ĩ						Ĩ						1						I

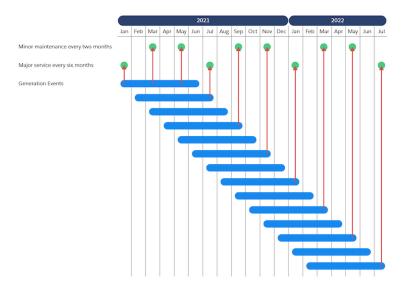
### Eligible Maintenance Work Rules

Eligible maintenance work rules are rules whose date of first work order in the next batch is between:

- the current date minus the generation time frame and
- the current date plus the generation time frame plus the generation horizon.

If an eligible maintenance work rule's date of first work order in the next batch is earlier than the current date, generation doesn't create work orders for the period between the date of the first work order in the next batch and the current date.

Maintenance work rules whose date of first work order in the next batch is earlier then the current date minus the generation time frame will start generating work orders when the date of first work order in the next batch is updated to fall into the eligible date range.



For example, take the case where today is 1/8 and a maintenance work rule has a generation time frame of 10 days and generation horizon of 8 days:

- If the date of first work order in the next batch is 1/11, the maintenance work rule is eligible for generation and work orders following the recurrence pattern are generated from 1/11 to 1/26.
- If the date of first work order in the next batch is 1/1, the maintenance work rule is eligible for generation and work orders following the recurrence pattern are generated from 1/8 to 1/26.
- If the date of first work order in the next batch is 12/15, then no work orders are generated because 12/15 is before today's date minus the generation timeframe that is 1/8 minus 10 days giving 12/29.

### Understanding Work Order Recurrence

A recurrence pattern determines how often maintenance visits are scheduled based on the maintenance plan. To create a maintenance schedule, you can use a maintenance work rule on the maintenance asset or maintenance plan, or you can use the frequency fields on the maintenance plan. Additionally, if you need more flexibility to meet your work order generation needs, define RRULE in the API to create a highly customized schedule.



**Note:** We've started the process for retiring the maintenance plan frequency fields. Update your maintenance plans to take advantage of maintenance work rules instead. Learn more

When a work order is scheduled, the recurrence frequency is determined in this order:

# Maintenance asset maintenance work rules > Maintenance plan maintenance work rules > Maintenance plan frequency fields

Maintenance work rules on the maintenance asset override any recurrence defined on the maintenance plan. If there are no maintenance work rules defined for the maintenance asset, the maintenance work rules on the maintenance plan are used to set the recurrence. If there are no maintenance work rules defined on the maintenance asset or maintenance plan, then the frequency fields on the maintenance plans are used to define the recurrence pattern.

Example: Recurrence Hierarchy There's a maintenance plan with 2 maintenance assets (MA). The maintenance work rules (MWR) are defined as:

- The maintenance plan has MWR1
- MA1 has no MWR
- MA2 has MWR2

MA1 uses MWR1 (inherits from the maintenance plan). MA2 uses MWR2 (overrides what's on maintenance plan).

#### Using MONTHDAY

The RRULE property MONTHDAY allows you to schedule an event that occurs monthly on a specific date. For example, you can use the MONTHDAY property to generate work orders on the first of every month:

```
"FREQ=MONTHLY; INTERVAL=1; BYMONTHDAY=1;"
```

While generating work orders on the first of every month is straightforward, generating work orders on the 31st of every month requires you to specify additional RRULE properties. To generate work orders on the 31st of every month, you could use this RRULE:

```
"FREQ=MONTHLY; INTERVAL=1; BYMONTHDAY=31;"
```

However in Salesforce, that RRULE generates work orders on the last day of every month: Jan 31, Feb 28, Mar 31, April 30, May 31, June 30, July 31, Aug 31, Sep 30, Oct 31, Nov 30, Dec 31. In the API, you can specify additional properties in your RRULE to produce work orders only for months with 31 days:

FREQ=MONTHLY;COUNT=30;INTERVAL=1;WKST=MO;BYMONTH=1,3,5,7,8,10,12;BYMONTHDAY=31

This RRULE ensures that work orders are only generated on Jan 31, Mar 31, May 31, Jul 31, Aug 31, Oct 31, Dec 31.

### Date of the First Work Order in the Next Batch and Maintenance Work Rule Alignment

If the entered Date of first work order in the next batch doesn't match the RRULE pattern, the system uses the earliest date in the current month or later that matches the RRULE and is within the generation time frame. It's possible that a date matching the RRULE in the current month isn't within the generation time frame, as shown in most of the following examples.

For example, if the RRULE is set to generate work orders on the first day of every other month, with a generation time frame of 2 months, and today is 8/19/2020 the following occurs:

Entered Date of first work order in the next batch	Earliest date in the current month according to the RRULE	Suggested maintenance date of work orders or work order line items generated
8/19, meaning today	8/1, but it's in the past	10/1
8/4, or any date in the past in the current month	8/1, but it's in the past	10/1
8/29, a date in the future in the current month	8/1, but it's in the past	10/1
7/30, a date in the past in a past month	7/1, but it's in the past	9/1
9/20, a date in the future in a future month	9/1, it's in the future, but the generation time frame is 9/20 to 11/20	11/1
9/1, the earliest date matching the RRULE after the current date	9/1	9/1

### Using Sort Order

Sort order determines how work orders are generated for a maintenance asset when that maintenance asset has two or more maintenance work rules attempting to generate a work order for the same date. Sort order works as follows:

- When maintenance work rules for generation have different sort orders, only work orders for the rules with the lowest sort order value are generated.
- When maintenance work rules for generation have the same sort order, all the work orders are generated.

After consideration for generation, maintenance work rules have their Date of first work order in the next batch advanced as though all their work orders were generated, as shown in the Multiple Rules with Multiple Sort Orders example.

#### Example: Multiple Rules with Multiple Sort Orders

Albert, the service manager at Red Brick Building Services, receives details of a new contract to maintain an air conditioning system. The contract provides for minor maintenance every 3 months and a major service once a year. On February 10, Albert sets up maintenance work rules as follows:

• Annual maintenance starting on February 1 of the following year with a sort order of 1

- Minor maintenance starting on May 1 with a sort order of 2.
- These work orders are generated:

	Minor maintenance rule	Annual maintenance rule
May 1	Work orders generated	NA
August 1	Work orders generated	NA
November 1	Work orders generated	NA
February 1	No work orders generated, but <b>Date of</b> <b>first work order in the next batch</b> advanced to May 1	Work orders generated

### Example: Multiple Rules with the Same Sort Orders

Georgia, the pool hygiene manager for Crystal Clear Pools, receives details for a cleaning contract for a new pool installation. This contract includes a monthly pool clean and the application of a chemical treatment every 3 months.

After Georgia adds the customer details and creates a maintenance plan and the pool asset, she sets up two maintenance work rules:

- A rule for the monthly service to take place on the 10th of each month, with a sort order of 1.
- A rule for the 3-month chemical treatment to take place on the 10th of every third month, with a sort order of 1. But because the initial treatment was applied when the pool was installed, Georgia sets the **Date of first work order in the next batch** 3 months in the future.

These work orders are generated:

	Monthly service rule	Three-month chemical treatment rule
First month	Work orders generated	NA
Second month	Work orders generated	NA
Third month	Work orders generated	Work orders generated

### Edge Cases in Sort Order and the Generate New Batch Upon Completion Setting

When the **Generate new batch upon completion** option is selected and a maintenance work rule with the lowest sort order value is eligible for a generation but its last work order is incomplete, the maintenance work rule's work order isn't generated. The rule's **Date of first work order in the next batch** is advanced as though it was generated. Then:

- If there are other maintenance work rules with the lowest sort order value eligible for generation, work orders corresponding to these rules are generated else,
- If there are maintenance work rules with a higher sort order value eligible for generation, work orders corresponding to these rules are generated.

When the maintenance work rule's last work order is marked as complete, the rule will be considered for generation in the next generation cycle.

### Understanding the Work Order Generation Limit

The maximum number of work orders that can be generated per maintenance plan is 2,600. As a result, there's a practical limit of 2,600 maintenance assets per maintenance plan.

The 2600 limit refers to the number of work orders generated per plan per each round of work order generation. It doesn't count the work orders already generated in the previous round of generation. This limit depends on the number of maintenance assets, the eligible maintenance work rules, their recurrence pattern, and the generation timeframe of the maintenance plan.

The limit is further reduced when:

- using maintenance work rules, there are multiple maintenance work rules on the maintenance plan or its maintenance assets, or
- using maintenance plans alone (without maintenance work rules), **Inclusive of Last Day of Generation Window** is in effect, and more work orders could be generated for the last day.
- Note: A maintenance plan with a maintenance work rule using COUNT is limited to 2,000 maintenance assets. If such a maintenance plan has more than 2,000 maintenance assets, no work orders are generated.

Example: Work Order Generation Limit f a maintenance plan has 1 maintenance work rule (MWR), and 5 maintenance assets (MA), and the recurrence pattern is daily:

- If the generation timeframe is **1 year**, then each generation at a *maximum* generates 5 (MA) x 365 = 1825 work orders. So within the 2600 limit.
- However, if the generation timeframe is **2 years**, then each generation at a *maximum* generates 5 (MA) x 365 x 2 = 3650 work order. That exceeds the 2600 limit.
- Note: Since the maintenance work rule uses a rolling window for work order generation, the maximum is already reached when the maintenance work rule first started generation. In subsequent generations, the number of work orders generated is fewer.

### What Happens if Work Order Generation Tries to Create More Than 2,600 Work Orders?

When work order generation tries to create more than 2,600 work orders:

- If maintenance work rules are used, for either automatic or manual generation: doesn't generate work orders and provides an error
  message. This behavior occurs because, unlike work orders based on maintenance frequency specified in the maintenance plan, the
  presence of multiple work rules whose generation is determined by sort order could result in partial creation of the required work
  orders when the 2,600 limit is reached. To rectify, reduce the maintenance plan generation timeframe.
- If manual generation for maintenance plan with frequencies is used: doesn't generate work orders and provides an error message. To rectify, reduce the maintenance plan generation timeframe.
- If automatic generation for maintenance plans with frequencies is used: generates 2,600 work orders and posts a message on chatter advising that the limit was reached. No further action is needed.

#### What Happens When the Option to Generate One Asset to One Work Order Line Item is Selected?

When the option to Generate One Asset to One Work Order Line Item is selected:

- If maintenance work rules are used, the system puts the limit on the count of work order line items if generating work order line items and on the count of work orders if there are only work orders generated. Take the case where a plan has 2,600 assets each with 3 maintenance work rules for generation. Because of the limit, we report an exception when there are more than 2,600 work order line items generated.
- If maintenance plans with frequencies are used, 2,600 work order line items are generated. If all the maintenance assets have the same next suggested maintenance date, one work order is generated. If the maintenance assets have different next suggested maintenance dates, then work order is generated for each of the next suggested maintenance dates.

### Working with COUNT and UNTIL

Where you have an asset with several maintenance work rules, each with different sort orders, that you want to start and end together, we recommend you use UNTIL rather than COUNT. COUNT only counts work orders generated from the maintenance work rule. So maintenance work rules with higher sort order value don't always generate work orders on the intended end date, resulting in these work order rules ending later than those rules with lower sort values.

For example, you want a monthly recurrence that ends in 2 years and set COUNT =24. If any of the 24 work orders weren't generated because another rule had a higher sort order, then work order generation would continue after the 2-year end date, until the count reached 24.

### User Access

To generate work orders, a user needs access to maintenance plans, work orders, and service appointments. The user is either the one who generates work orders manually, or is the owner of the maintenance plan for auto generation. We recommend you set up a generic user to eliminate potential problems that can result from changes in personnel.

### Field Inheritance

When a work order is created, information is pulled from the maintenance work rules, maintenance asset, and maintenance plan. A maintenance plan can have assets with maintenance work rules defined on the maintenance asset and maintenance plan. However, specific information comes from each entity.

Entity	Information
Maintenance work rule	Date of first work order in the next batch
	Work Type
Maintenance asset	Account
	Contact
	Date of first work order in the next batch*
	Location
	Work Type*
	*If not defined in the maintenance work rule
Maintenance plan	Owner
	Service Contract
	Work Type*
	Date of first work order in the next batch*
	*If not defined in the maintenance work rule or maintenance asset

### Field Inheritance—Date of First Work Order in the Next Batch

When a maintenance work rule is created and you don't enter a value for the Date of first work order in the next batch (NextSuggestedMaintenanceDate):

- If the Date of first work order in the next batch is defined on the maintenance asset, the maintenance work rule's Date of first work order in the next batch is set to the asset's Date of first work order in the next batch.
- If the maintenance asset has no Date of first work order in the next batch, the maintenance work rule's Date of first work order in the next batch is set to the maintenance plan's Date of first work order in the next batch.

Later, a maintenance work rule's Date of first work order in the next batch can be set to a new date or cleared. If the rule's Date of first work order in the next batch is empty when the work order generation is triggered, Date of first work order in the next batch is determined using the same logic as setting the value on creation.

### Field Inheritance—Work Type

You can define the work type on a maintenance plan. Maintenance plan assets inherit this work type when they're created. You can update the work type on maintenance assets to a different value from the maintenance plan.

If a work type isn't entered when a maintenance work rule is created, it defaults to the work type on the maintenance asset. You can then update or remove the work type for the maintenance work. Work orders or work order line items generated from the maintenance work rule take the maintenance work rule's work type, unless it's blank when they take the maintenance asset's work type.

### Rolling Up Work Order Line Items

If the option to generate one work order line item per asset is selected, the system puts one or more work order line items that share a suggested maintenance date into a work order.

- **Example**: Take a maintenance plan where one asset to one work order line item is set with:
  - A turbine with weekly on Monday and monthly on the first Monday of the month recurring maintenance work rules with the same sort order (see Using Sort Order on page 385 for more details.
  - A chiller with monthly recurrence on the first Monday of the month.

The weekly turbine maintenance requires work on 6/22, 6/29, 7/6, and 7/13. The monthly turbine and chiller maintenance requires work on 7/6. So on 7/6, there's one work order with three work order line items for the weekly turbine, monthly turbine, and monthly chiller maintenance. But on 6/22, 6/29, and 7/13, there's one work order with one work order line item for the weekly turbine maintenance.

**Example**: Take a maintenance plan with one work order line item per asset selected and four maintenance assets divided into two sets of two, that share a next suggested maintenance date where:

- Each maintenance asset has a maintenance work rule with recurrence every 6 months.
- The first two maintenance work rules have the same next suggested maintenance date of 7/1.
- The last two maintenance work rules are offset by 1 month, to 8/1, from the first group.

In this case, the:

- First two are grouped in one work order (on 1/July) with two work order line item, and one service appointment.
- Last two are grouped in a separate work order (1/August) with two work order line item, and one service appointment.

**Example**: There's no rollup of work order line item details into work orders when you select the option for one work order line item to be generated per asset.

Take a maintenance plan with one work order line item per asset selected and two assets. Each asset has a maintenance work rule with different work types. For example, the first asset has a work type for filter replacement that takes 2 hours and the second for battery replacement that takes 5 hours. Each maintenance work has the same frequency and next suggested maintenance date.

If the option for one service appointment per work order line item is selected:

- one parent work order is created
- a work order line item is created for each asset, and
- if the associated work type has auto-create service appointment enabled for work order line items. one service appointment is created for each work order line item. The service appointment duration is populated from the work type, for example 2 hours for a filter replacement and 5 hours for battery replacement.

If one service appointment per work order is selected:

- one parent work order is created
- a work order line item is created for each asset, and
- one service appointment is created for the parent work order, even if the associated work type doesn't have auto-create service appointment enabled.
- The duration of the service appointment isn't populated.

If you populate the work type of the work order after it's generated, the work order inherits the work type's duration, duration type, and required skills.

### Maintenance Work Rule Deletion

When a maintenance work rule is deleted, any association to that maintenance work rule on generated work orders and work order line items is set to NULL. After the maintenance work rule is deleted, it's not possible to determine whether a maintenance work rule generated the work order or work order line item.

### Reparenting

The parent item of a maintenance work rule can be changed. But to ensure data integrity, don't reparent a maintenance work rule after it has generated work orders.

### Field Tracking and Logging

We recommend that you turn on field tracking and debug logging when you expect to make regular changes to maintenance work rules.

#### Create Multiple Maintenance Schedules

To keep assets in tip-top shape, you often need multiple maintenance schedules running at different frequencies.

SEE ALSO:

Set Up Debug Logging Track Field History for Standard Objects

### Create Multiple Maintenance Schedules

To keep assets in tip-top shape, you often need multiple maintenance schedules running at different frequencies.

For example, a building maintenance company performs minor maintenance on an air conditioning system every three months and a major service, which includes the three monthly service tasks, once a year. With enhanced preventative maintenance, the service manager sets up the minor maintenance on its three-month schedule and the major service yearly. Field service then generates three quarterly service calls for minor maintenance followed by one annual service call for the major service.

Similarly, a pool maintenance company cleans a pool monthly and applies a chemical treatment every three months. With enhanced preventative maintenance, the pool service manager sets up schedules for both activities. Field service then generates monthly pool cleaning jobs and every three months adds the chemical treatment task.

Multiple maintenance schedules are defined using maintenance work rules. These rules can be defined:

- On maintenance plans to define schedules for all of the plan's maintenance assets that don't have maintenance work rules.
- On maintenance assets.

To add maintenance work rules, open a maintenance plan or, from Related Lists, one of its maintenance assets. In the maintenance plan or asset, open the Maintenance Work Rule related list and click New to create a maintenance work rule item.

	New Maintenance Work Rule	
<ul> <li>Description</li> </ul>		
• Work Rule Type		
Calendar Based Work Rule	▼	
Maintenance Work Rule Title		
Enter Work Rule Title		
✓ General Information		
Maintenance Asset	Work Type 💿	
MA-0123	× Search Work Types	Q
Maintenance Plan		
Search Maintenance Plans	Q	
	r this rule and at what point scheduling should stop.	
Define how often work is scheduled for		
Define how often work is scheduled for • Date of the first work order in the next is Select a date	* Sort Order	
Define how often work is scheduled for • Date of the first work order in the next i	alth O • Sort Order O	
Define how often work is scheduled fr • Date of the first work order in the next is Select a date V Recurrence Pattern	alth O • Sort Order O	
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Define how often work is scheduled fr Date of the first work order in the next Select a date Recurrence Pattern Pacurence Period Frequen 3	alth O • Sort Order O	
Define how often work is scheduled fr Date of the first work order in the next Select a date Recurrence Pattern Pays Recurrence End * Frequent	alth O • Sort Order O	
Define how often work is scheduled fo * Date of the first work order in the next Select a date  * Recurrence Patiern  * Recurrence Period  * Frequen  Days * 3  * Recurrence End Never	alth O • Sort Order O	
Define how often work is scheduled fo Date of the first work order in the next Select a date	alth O • Sort Order O	
Define how often work is scheduled fr Date of the first work order in the next Select a date Recurrence Pattern Recurrence Period Recurrence End Never After Occurrences 16	alth O • Sort Order O	

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Note: Don't use the New button on the Work Order and Work Order Line Item related lists or list views on Maintenance Work Rules. This button creates work order and work order line item records, but it doesn't link the maintenance work rules to the work order and work order line item record. It doesn't establish a link because the MaintenanceWorkRule field on Work Order and Work Order Line Item is read-only. This field can't be updated with the API.

# Guidelines for Preventive Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create preventive maintenance plans for your assets.

### **Recordset Filter Criteria Fields**

The fields that are available when you're defining your recordset filter criteria are based on the filtered object: Asset or Service Appointment. The fields that are visible depend on your field-level security settings and field types. To access a calculated field that isn't available by default, create a custom formula field for the related field.

These field types aren't supported.

- URL
- Multipicklist
- Encrypted string
- Text area

For usage-based maintenance, there are additional considerations.

- You can use a formula to set the value of the asset field specified as the **Usage Field** in the recordset filter criteria rule. However, the asset field specified by the **Next Occurrence Field** in the recordset filter criteria rule can't be a formula field because it's updated by the system.
- Currency field types can't be used to define recordset filter criteria.

### Guidelines for Using Asset Attributes and Custom Fields

You can use asset attributes on page 734, custom integrations, or custom fields to track manually maintained values in your fixed or floating preventive maintenance work orders.

#### Example: Criteria-Based Maintenance with Asset Attributes

- You set up criteria-based maintenance for an automatic door that has major maintenance performed after 60,000 activations. If you create an asset attribute to record Activation Since Custom Overhaul, you can track the number of activations on each regular maintenance visit. You can create a recordset filter criteria with a rule that activation since last overhaul is greater than or equal to 60,000. Then to generate the overhaul work orders, attach this filter to a maintenance work rule. On completion of the overhaul, the engineer sets the activation since the last overhaul back to zero.
- Also, if you create an asset attribute to track the Months Since Last Overhaul, the recordset filter criteria can generate work orders when:
  - The activation since last overhaul is greater than or equal to 60,000, OR
  - The months since last overhaul is greater than or equal to 6

Activation Since Custom Overhaul

- CriteriaField: ActivationSinceLastOverhaul
- Operator: >=

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

- Value: 60,000
- Months Since Last Overhaul
- CriteriaField: MonthsSinceLastOverhaul
- Operator: >=
- Value: 6

## **Custom Fields**

Alternatively, you can use custom fields to track manually maintained values. If you have assets that provide IoT data, you can use a third-party IoT platform to update your custom asset field. If you don't have an IoT platform, check AppExchange.

## Simulating Usage-Based Work Order Creation

To achieve usage-based work order creation using criteria-based preventive maintenance, set up a custom field and update it as the work order is completed. A work order is considered complete when its status falls into one of these status categories: Cannot Complete, Canceled, Completed, or Closed. Such custom fields can include operating hours since last maintenance or cumulative downtime since last maintenance.

## Maintenance Work Rule and Recordset Filter Criteria Object Settings

To maintain the correct function of usage or criteria-based maintenance rules, ensure that the Maintenance Work Rule and Recordset Filter Criteria objects have the same full access permissions and sharing rules.

### Create Criteria-Based Maintenance

Create recordset filter criteria using standard or customized fields on assets to identify thresholds that trigger maintenance work.

#### Create Usage-Based Maintenance

Use maintenance work rules to create work orders and schedule preventive maintenance based on asset usage.

## Create Criteria-Based Maintenance

Create recordset filter criteria using standard or customized fields on assets to identify thresholds that trigger maintenance work.

- 1. From the App Launcher, click Recordset Filter Criteria.
- 2. Click New.
- 3. Enter a name and description for the criteria.
- 4. Add filter conditions:
  - **a.** To define if the criteria is valid if all conditions are true or at least one of the conditions is true, select a **Logical Operator**.
  - **b.** Select the criteria field, operator field, and fill in the value field. The **Value** input changes depending on the asset field that you choose. For example, picklist fields show the list of available choices.
  - c. To add another condition, click + Add Condition. Continue adding criteria rules as needed.
- 5. Save the filter criteria.
- 6. Create a criteria-based maintenance work rule:
  - a. In Maintenance Work Rule Type select Criteria-based.
  - b. In Recordset Filter Criteria, search for and select the recordset filter criteria to use.
  - c. Complete the remaining maintenance work rule details as appropriate.
  - d. Save your changes.

#### Guidelines for Criteria-Based Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create criteria-based maintenance work rules for maintenance assets.

### Guidelines for Criteria-Based Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create criteria-based maintenance work rules for maintenance assets.

Watch the video to see how to use maintenance work rules to generate work orders and schedule preventive maintenance based on asset usage.

Watch a video

Watch the video to see how to define maintenance work rules based on product characteristics and maintenance conditions.

Watch a video

### Next Work Order Generation

Criteria-based maintenance work rules behave as though **Generate new batch upon completion** is set. This behavior applies to the generation of work orders, and, when one work order line item per asset is selected, work order line items.



Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update recordset filter criteria

 View, create, and edit on Service Appointments, Shifts, Recordset Filter Criteria, and Recordset Filter Criteria Rules

AND

Delete on Recordset Filter Criteria Rules

View access on the Source Object, Filtered Object, and Filtered Object fields If an incomplete work order is created from a criteria-based maintenance work rule, no new work orders are created until the active work order is completed. A work order is considered complete when its status is Cannot Complete, Canceled, Completed, or Closed. After the work order is completed, if the criteria are still true at the next work order generation, a new work order is generated.

For example, take a filter with the rule that cumulative downtime is greater than or equal to 1,000 hours. If the cumulative downtime value moves from 982 to 1,024, a work order is created. After that work order is completed, because cumulative downtime is still greater than 1,000, a new work order is created. If **One work order line item per asset** is selected on the maintenance plan, this example applies in the same way to work order line item generation.

#### Sort Order

The effect of sort order on criteria-based maintenance work rules is independent of sort order on calendar-based maintenance work rules. For example, a criteria-based maintenance work rule with sort order 1 and a calendar-based maintenance work rule with sort order 2 generate work orders, although they have the same suggested maintenance date.

## Create Usage-Based Maintenance

Use maintenance work rules to create work orders and schedule preventive maintenance based on asset usage.

- 1. Create the Recordset Filter Criteria. From the App Launcher, open Recordset Filter Criteria and click **New**.
- 2. Enter a name and description for the criteria.
- 3. Select Maintenance Work Rule as the Source Object and Asset as the Filtered Object.
- 4. Select whether the filter criteria is valid if all or at least one of the conditions is met.
- 5. Add filter conditions.
  - **a.** Select a rule type. Select **Usage** for the type to define a recurring condition at a particular frequency of usage.
  - b. Usage Field: Select a field that determines whether the conditions are true.
  - c. Next Occurrence Field: This field's value is compared to the Usage field to determine whether the rule is true.
  - d. Frequency: Enter a value to set a frequency for maintenance.
  - e. First Occurrence: Set the start value. To determine whether the rule is true, this value is compared to the Usage Field value.
  - f. Last Occurrence: (Optional) Set the end value.
- 6. To add another condition, click + Add Condition. Continue adding criteria rules as needed.
- 7. To generate work orders ahead of the target usage value, select Add lead-time to usage-based work rules. In the Usage Rate field, enter the daily usage rate of the asset. The unit for the usage rate must be per day.
- 8. Save the filter criteria.
- 9. On the Maintenance Asset's related tab, select New Maintenance Work Rule.
- 10. In Maintenance Work Rule Type, select Criteria-Based.
- **11.** In Recordset Filter Criteria, search for and select the recordset filter criteria to use.
- 12. To create work orders on a floating schedule, select Generate on a floating schedule.

If the last work order was completed at 8 months, the next work order is targeted at 6 months from completion to 14 months.

If not selected, the recurrence cadence for work orders is fixed. For example, perform work every six months (6, 12, 18) regardless of when the previous work order was completed. If selected, the recurrence cadence for the work orders is floating based on when the last work order was completed.

- **13.** Complete the remaining maintenance work rule details as appropriate.
- 14. Save your changes.

#### Guidelines for Usage-Based Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create criteria-based maintenance work rules for maintenance assets.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update recordset filter criteria

 View, create, and edit on Service Appointments, Shifts, Recordset Filter Criteria, and Recordset Filter Criteria Rules

Edit on the NextOccurrence field on the Asset Filtered Object

Delete on Recordset Filter Criteria Rules

View access on the Source Object, Filtered Object, and Filtered Object fields

## Guidelines for Usage-Based Maintenance

To optimize technician productivity and increase uptime and mean time to failure of equipment, create criteria-based maintenance work rules for maintenance assets.

#### Next Work Order Generation

Usage-based maintenance work rules behave as though **Generate new batch upon completion** is set. This behavior applies to the creation of work orders, and, when one work order line item per asset is selected, work order line items.

For example, if an incomplete work order is created from a usage-based maintenance work rule, no new work orders are generated until the active work order is completed. A work order is considered complete when its status is Cannot Complete, Canceled, Completed, or Closed. After the work order is completed, if the criteria are true at the next work order generation, a new work order is generated.

Work orders are triggered based on the value in the **Next Occurrence** field. If Frequency is < 0, when the value of **Usage Field** is LESS than or equal to the **Next Occurrence** field and is between the values of the **First Occurrence Field** and **Last Occurrence Field**, a work order is generated.

The Next Occurrence field is updated with the new value: Next Occurrence = Current Next Occurrence + Frequency.

Example: You have a usage rule of every 1,000 hours that starts at 1,000 hours.

When the usage value moves from 982 to 1024, a work order is generated, and the Next **Occurrence Field** value is updated to 2000 hours.

If the usage moves from 1999 to 2030 and a work order is still open, no new work order is created. However, when the existing work order is complete, a new work order is generated and the **Next Occurrence Field** value is updated to 3000 hours. The **Next Occurrence Field** value is updated every time a work order is generated.

If **One work order line item per asset** is selected on the maintenance plan, this example applies in the same way to work order line item generation.

#### Sort Order

When applying sort order to criteria-based maintenance rules, the rule with the higher sort order takes priority.

**Example**: You have two usage rules.

- Rule1 tracks oil changes and maintains every 5 K, starting at 5 K, sort order = 2, and NextOccurrenceField is NextOilChangeMileage.
- Rule2 tracks oil changes and tire rotation and maintains every 10 K, starting at 10 K, sort order = 1, and **NextOccurrenceField** is **NextOilandTireChangeMileage**.

When a car first reaches 5 K, Rule1 generates a work order at 5 K and updates the **NextOilChangeMileage** to 10 K. When the car reaches 10 K, Rule 1 and Rule 2 try to generate a work order for the next day. However, only Rule 2 generates because it has a higher priority. Rule1 updates its **NextOilChangeMileage** to 15 K, and Rule2 updates its **NextOilandTireChangeMileage** to 20 K.

You can apply sort order within calendar-based rules or criteria-based rules. However, you can't apply sort order across calendar-based and criteria-based rules.

#### Floating Work Order Generation

With **Generate on a Floating Schedule**, work orders that are completed ahead of or behind schedule generate the subsequent work order based on the recurrence cadence. Floating work orders are based on the usage of an asset and can be created only with maintenance work rules.

For example, a floating work order with a six-month recurrence cadence that's completed in May is next scheduled for November. With a fixed schedule, recurring work orders are scheduled at exact intervals based on the work order start date. When you're generating work orders on a floating schedule, the **NextOccurrence** field is updated with the fixed schedule and no work order is generated. After the work order status is updated to **Closed** or **Completed**, the **NextOccurrence** field is updated with the floating schedule based on the current **UsageField** value.

Each status is mapped to a status category. When the work order is updated to a status mapped to the **Closed** or **Completed** status category, the floating work order generation is triggered. Additionally, the recurrence cadence for the work orders is adjusted when the work order or work order line item's status category is changed to **Closed** or **Completed**. When a work order is closed and marked as **Completed**, the **NextOccurrence** field on all upcoming work orders is updated.

Note: The floating work order generation is only triggered if the status is mapped to either the **Closed** or **Completed** Status Category. If you don't map the status to one of those status categories, the next milestone recalculation and update won't happen in the Filtered Object (Asset).

To display this field, from Setup enter Field Service Settings and select Update the work order generation based on the completion date of the previous work order.

#### Considerations for Work Order Lead Time

Lead time is used to create a **Suggested Maintenance Date** for fixed and floating work orders ahead of the targeted usage value.

To find the **Suggested Maintenance Date** for a UsageCounter rule type, we use this formula if **NextOccurrence** isn't empty:

SMD offset by days = (NextOccurrence - CriteriaField) / UsageRate

If **NextOccurrence** is null, we use this formula:

SMD offset by days = (FirstOccurrence - CriteriaField) / UsageRate

If the asset's usage criteria is greater than the expected usage rate (**Next Occurrence**), then the **Suggested Maintenance Date** for the work order is today since the value is greater than or equal to zero. The next occurrence field is updated after closing the work order when lead time rules are used.

For a UsageDuration rule, lead time is the same as the generation horizon.

#### Example: With Usage Counter Only

Maintenance Plan:

**Generation Horizon** = 30

Recordset Filter Criteria:

- **RFCR1**: Usage Counter
- UsageField: UsageField
- NextOccurrence: NextOccurrenceField
- Frequency: 4000
- FirstOccurrence: 4000
- Operator: >=
- UsageRate: UsageRateField

If the **NextOccurrence** is null, any value greater than 3550 results in true evaluation for this RFCR.

For SMD calculation, let us consider these subexamples:

#### 1

Asset:

- UsageField: 3550
- NextOccurrenceField: null
- UsageRateField: 15
- SMD
  - = (4000-3550)/15
  - = 30 days from today

## 2

Asset

- UsageField: 3880
- NextOccurrenceField: 4000
- UsageRateField:15
- SMD

= (4000-3880)/15

= 8 days from today

### 3

Asset

- UsageField: 3960
- NextOccurrenceField: 4000
- UsageRateField: 15
- SMD
  - = (4000-3960)/15
  - = 3 days from today

4

Asset

- UsageField: 4200
- NextOccurrenceField: 4000
- UsageRateField: 15
- **SMD** = today



Maintenance Plan:

**Generation Horizon** = 30

Recordset Filter Criteria:

- **RFCR1**: Usage Duration
- UsageField: UsageField

- NextOccurrence: NextOccurrenceField •
- Frequency: 365 •
- FirstOccurrence: 365 •
- Operator: >=

Asset

- UsageField: 350
- NextOccurrenceField: null •
- SMD •
  - = 30 (Same as Generation Horizon)



#### Example: With Mix Rule Types

Recordset Filter Criteria: AND

RFCR1: Usage Counter

- UsageField: UsageField1
- NextOccurrence: NextOccurrenceField1 •
- Frequency: 4000 •
- FirstOccurrence: 4000 •
- Operator: >=
- UsageRate: UsageRateField •

RFCR2: Usage Duration

- UsageField: UsageField2 •
- NextOccurrence: NextOccurrenceField2 •
- Frequency: 365 •
- FirstOccurrence: 365 •
- Operator: >= •

Asset

- UsageField1: 3960 •
- NextOccurrenceField1: 4000 •
- UsageRateField: 15 ٠
- UsageField2: 350 •
- NextOccurrenceField2: null •

Internally, the SMD is evaluated for each RFCR. The SMD is determined based on the logical operator. In this example, each RFCR evaluates to the following lead time offset:

RFCR1.SMD = 3

RFCR2.SMD = 30

Since AND is the operator, the combined SMD = 30 (furthest offset). If we use OR instead of AND, the SMD becomes 3.

Available for Maintenance Assets Only

You can add usage-based maintenance rules to maintenance assets only.

Usage for Multiple Recordset Filter Criteria Rules

If you use the same usage parameter in multiple recordset filter criteria rules, you must use a different **Next Occurrence Field** for each recordset filter criteria rule.

Example: You have a minor maintenance for every 1-K hours and a major maintenance for every 5-K hours. Set up two recordset filter criteria, each with a recordset filter criteria rule. Both recordset filter criteria rules share a usage field: OpHrsSinceInstall. However, the minor recordset filter criteria rule and major recordset filter criteria rule refer to a different NextOccurrenceField. The minor recordset filter criteria rule triggers at 1 K, 2 K, 3 K, and so on. The major recordset filter criteria rule triggers at 5 K, 10K, 15 K, and so on.

# Troubleshooting Work Order Generations in Field Service

If work orders aren't generating as expected these guidelines can help you resolve any issues.

Note: Refer to Guidelines for Working with Maintenance Work Rules on page 380 for details on how work orders are generated from maintenance work rules.

Watch the video to see how to get an overall view of the work order generation status.

Watch a video

## Work Order Status

The Work Order Generation Status field on maintenance plans provides a status to help determine how to handle work order generation errors:

- **Completed** indicates that the work orders were created successfully.
- **Unsuccessful** indicates that a work order wasn't generated due to a possible unexpected error.
- No Work Order Generated indicates that based on the configuration, no work order was supposed to be created, so no action is required.
- Needs Review indicates that to continue the work order creation an action is required.

If the work order generation status is Unsuccessful or Needs Review, the following errors can appear in the Maintenance Plan Chatter feed.

Error	Description	Possible Solutions
Generate new batch upon completion not met	We couldn't generate work orders for this maintenance plan. This maintenance plan uses the Generate new batch upon completion option. When the last work order is marked complete, a new batch of work orders will be generated.	When Generate new batch upon completion is enabled, new work orders won't be created until the last work order from the previous work order generation is completed. A work order is considered complete when its status falls into one of the following status categories: Cannot Complete, Canceled, Completed, or Closed.

#### **Table 1: Work Order Generation Error Messages**

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Error	Description	Possible Solutions
Suggested maintenance date is out of range	Your dates are out of range, so we couldn't generate work orders for this maintenance Plan's maintenance Assets. For each maintenance asset, check that the Date of the first work order in the next batch is earlier than the maintenance plan's maintenance plan end date. Also check that the date of the first work order in the next batch isn't so obsolete that the Suggested Maintenance Date on the work orders would be in the past.	<ul> <li>The end date of the maintenance plan is in the past. On the maintenance asset, update the Date of the first work order in the next batch to a date:</li> <li>Earlier than the maintenance plan's End Date.</li> <li>That doesn't cause the Suggested Maintenance Date on the work orders to occur in the past.</li> </ul>
No work orders to create	We couldn't generate work orders for the maintenance plan because no conditions for generation were met.	<ul> <li>Work orders cannot be created for the specified timeframe.</li> <li>Check if the work order dates are in the past.</li> <li>Check that the COUNT and UNTIL conditions of RRULES are met.</li> <li>If some but not all work orders were generated, check that the criteria and usage conditions on at least one of the maintenance work rules was met.</li> </ul>
End date in the past	We couldn't generate work orders because the maintenance plan has reached its end date. To continue generating work orders, update the end date.	The maintenance plan has expired. Update the maintenance plan with a new end date.
Max limit of Work Orders exceeded	We couldn't generate work orders because the work order limit for this maintenance plan was exceeded. To decrease the number of work orders, decrease cadence of work order, decrease the Maintenance Plan Generation Time Frame, or remove some	The maximum number of work orders you can generate in any run is 2,600. When using auto generation and frequency fields, up to 2600 work orders are created and then the process exits. To reduce the number of work orders generated, update one or more of the following on the maintenance plan:
	maintenance assets.	<ul> <li>Adjust the generation time frame to increase the span between future work orders generations.</li> <li>Reduce the number of maintenance assets. Work orders are created per asset, per suggested maintenance date.</li> <li>Reduce the number of Maintenance Work Rules.</li> <li>Decrease the frequency to increase the time between work order dates.</li> <li>Note: A maintenance plan with a maintenance work rule using COUNT is limited to 2,000 maintenance assets. If such a maintenance plan has more than 2,000 maintenance assets, no work orders are generated.</li> </ul>

Error	Description	Possible Solutions			
User does not have access	We couldn't generate work orders because the maintenance plan owner doesn't have permission to create work orders or service appointments. Ask your Salesforce admin for help.	The user doesn't have rights to create service appointments,work orders or work order line items. Have the Salesforce admin grant rights. If Auto-generate work orders is enabled for maintenance plans, the work order is created even if the maintenance plan owner doesn't have permission to create work orders or service appointments.			
Invalid values for Generation Horizon and Generation Time Frame	We couldn't generate work orders because some of your Maintenance Plan dates are out of range. Enter a maintenance plan Generation Horizon (Days) of 365 or less, and a maintenance plan Generation Time Frame equivalent to 20 years or less.	<ul> <li>the allowed timeframe.</li> <li>Update the Generation Horizon to a value of 365 or lead</li> <li>Update the Concretion Time Frame to 20 years or lead</li> </ul>			
Missing maintenance work rule after frequency fields migration	We couldn't generate work orders because the maintenance plan's frequency fields are blank, and it has no maintenance work rules on the maintenance plan or any of its Maintenance assets.	The org has hidden the Frequency fields in Setup, but maintenance work rules still need to be set up for the maintenance plan.			
Missing maintenance work rules and frequency fields	We couldn't generate work orders because the maintenance plan's frequency fields are blank, and it has no maintenance work rules on the maintenance plan.	<ul> <li>rule or frequency fields (Generation time frame and generation time frame type) defined.</li> <li>rk Refer to Determine Whether Customizations are Disruptin Generation for additional solutions.</li> </ul>			
Errors due to customization	We generated x of y work orders, a of b work order line items, and c of d service appointments for your maintenance plan. However, some work orders couldn't be generated. To find out why, ask your Salesforce admin. Learn More in Salesforce Help.				

## Resolve Issues that Need Review

When troubleshooting issues that have the **Needs Review** status, complete these steps:

- 1. Address the issue based on the solution in the "Work Order Generation Error Messages" table.
- 2. Turn off Auto-generate work orders and run manual generation for the work orders.
- 3. After the status becomes successful, turn on Auto-generate work orders.

## Determine Whether Customizations are Disrupting Generation

Work order generation can fail when objects related to the process, such as Work Order or Service Appointment, have customizations. If a generation fails, take these steps to determine which of your changes is causing the failure and make corrections. If you don't think your changes are the cause of the generation failure, contact Salesforce Support for assistance.

- 1. Verify that you can create a work order manually. If manual creation fails, correct any errors.
- 2. Verify that any custom-required fields on the following objects have a default value configured. Default values ensure that the maintenance plan generation process knows what value to set for the custom fields.
  - Work Order
  - Work Order Line Item
  - Asset
  - Service Appointment (if the work order generation includes creating Service Appointment)
  - Assigned Resource (if you have automation to auto-schedule Service Appointments)
- **3.** Verify that custom automation, including triggers, processes, and workflows, on the following objects aren't interfering with the process by disabling them and rerunning work order generation:
  - Maintenance Plan
  - Work Order
  - Work Order Line Item
  - Asset
  - Service Appointment, if the Work Order Generation includes creating Service Appointment
  - Assigned Resource, if you have automation to auto-schedule Service Appointments
- 4. Verify whether you can generate work orders with custom validation rules on the following objects disabled:
  - Work Order
  - Work Order Line Item
  - Asset
  - Service Appointment
  - Assigned Resource
- 5. Verify whether you can generate work orders after deactivating custom lookup filters on fields from the following objects:
  - Work Order
  - Work Order Line Item
  - Asset
  - Service Appointment
  - Assigned Resource

## Get More Information Using Debug Logs

To get more information on why generation failed, turn on debugging, Work order generation is an automatic process that uses an automated process user in the background. By default this process doesn't generate debug logs. To enable debug logging for the automated process user:

- From Setup, in the Quick Find box, enter *Debug Logs*, and then select **Debug Logs**.
- Click **New**.
- In Traced Entity Type select Automated Process.
- Enter a start date for the logging period.
- In Debug Level choose SFDC\_DevConsole.
- Save your changes.

You can also make these settings in the Developer Console.

When you generate these logs, note the following:

- Allow up to 24 hours for the logs to become available.
- Use the finest log level for the Automated Process log.
- Review all logs and inspect their content. This review should include all logs with the success status, as exceptions are handled during maintenance plan generation and don't result in the logging of unhandled exceptions.

SEE ALSO:

Set Up Debug Logging

# Manage Field Service Shifts

Shifts are similar to operating hours in that they define when your workforce is available to be assigned service appointments. However, shifts offer more flexibility than operating hours because you can create them for specific time periods on particular dates and times when you need workforce coverage. You can then assign these shifts to service resources. This flexibility allows you to accommodate the varying availability of contractors, retail workers, healthcare workers, or on-call staff for service appointments.

#### Manage Your Shift Schedule in Field Service

Identify which shifts are covered, and which ones still require a worker to confirm that they're available. The list view for shifts lets you examine upcoming shifts and their status. Switch to the schedule view to see shifts grouped by service territory or job profile in a calendar.

#### Add Field Service Shifts

Shifts in Field Service determine when your workforce is available to be assigned service appointments. Shifts differ from Operating Hours in that for shifts you can define single time periods for which you need workforce coverage. This capability lets you flexibly assign your shift-based workforce to service appointments. Shift-based workforces have varying availability, such as contractors, retail workers, healthcare workers, and on-call staff. You can use predefined patterns to quickly create a set of standard shifts for weekdays and weekends.

#### Define Which Appointments Can Be Scheduled During Shifts

Similar to how you use designated time slots on operating hours, in Field Service, you can use Record set Filter Criteria to define and designate which appointments can be scheduled to service resources during shifts. Create Recordset Filter Criteria based on service appointment field values, and then add the filter to a shift so that only relevant appointments get scheduled.

#### Assign and Update Field Service Shifts

In Field Service, make sure that shifts are staffed by assigning them to a service resource. You can assign shifts individually or update the assignee and status in bulk.

#### Color-Code Field Service Shifts

Use a background color to identify different types of shifts in the Field Service schedule view and dispatch console. Background colors let you add visual information that works along with status-based horizontal color bars in shift cells. You can add a background color to a shift or a shift template.

#### Nonstandard Field Service Shifts

Nonstandard shifts in Field Service are shifts not sought by mobile workers for various reasons, such as inconvenient hours or increased workload. Identifying and marking shifts as non-standard helps the shift planner assign shifts in a more equitable and balanced way, which can reduce dissatisfaction and attrition.

#### Field Service Guidelines for Shift Availability

Learn how to define valid shifts and show when your workers are available for shift work. Shifts can work alone or alongside operating hours and service territory memberships to define workforce availability. Designate shifts to show availability for specific types of work or tasks, or for specific territories. For example, you can designate an on-call shift for emergency appointments only.

# Manage Your Shift Schedule in Field Service

Identify which shifts are covered, and which ones still require a worker to confirm that they're available. The list view for shifts lets you examine upcoming shifts and their status. Switch to the schedule view to see shifts grouped by service territory or job profile in a calendar.

- 1. From the App Launcher, click Shifts.
- 2. Navigate to a list view other than the Recently Viewed list view, such as the All Shifts list view or a custom list view. Click the dropdown menu next to the list view name, and select the name of the list view that contains the shifts you want to see.
- **3.** Optionally, define filters to change which shifts appear.
- 4. To view upcoming shifts in a calendar, click and select -.



- **a.** To see a calendar of shifts that are assigned to each job profile, click the **Shifts** tab.
- **b.** To see a calendar of shifts that are assigned to each service resource, click the **Resources** tab.

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### **USER PERMISSIONS**

To view shifts

Field Service Standard
 AND

View on Shift, Job Profiles, Service Resource, and Service Territory

***	Field Service	Admin	Home	Field Service Settings	Service Territories 🗸	Operating Hours $$	Work Types 🗸	* Anglia Route Shifts   Shi	✓ × More ▼ 🕻
Shifts Anglia Route Shifts ▼						New New from Path	tern New from 1	Template Mass Shift Upda	te New for Team
11 items • Filtered by All shifts - Service Territory, Service Territory • Updated a minute ago					a minute ago		Q Search this I	list 🏚 🔻	₩. C' C' Y
Resou	Resources Shifts					Territory T	ime Zone 🔽	< > Today	ä
		SUN, JA	AN 30	MON, JAN 31	TUE, FEB 01	WED, FEB 02	THU, FEB 03	FRI, FEB 04	SAT, FEB 05
~	Anglia Route (G	GMT)							
2	Frank West			<b>4:00 PM-10:00 P</b> Pre-Planning	8:00 AM-8:00 PM Current	8:00 AM-8:00 PM Pre-Planning	8:00 AM-8:00 PM Current	4	
				6:00 PM-11:00 PM Medical			2/3 6:00 PM-2/4 12:00 AM (*) Pre-Planning		

Keep these considerations in mind when you work with shifts.

#### General

- To create a shift, choose from the New, New from Pattern, and New from Template actions. Or hover in an empty space and select + New Shift.
- In the calendar view, to see shift assignments in the time zone of the resource, turn on the Territory Time Zone toggle. Toggle it off to see the schedule in your time zone.
- If the managed package is installed, availability for confirmed shifts appears on the Gantt.

#### **Color-coding and icons**

- A horizontal color stripe on each shift shows the status. You can't customize the status color-coding. The colors are:
  - Tentative—orange
  - Published—blue
  - Confirmed—green
- Background colors can identify or highlight shifts of different types. You set the background color on the shift, or the color is inherited from the shift template.
- Resource absences are shown on the shift schedule. Absence cells are color-coded with a gray background.
- Nonstandard shifts are marked with a red icon.

#### Limitations

- The maximum supported shift duration is 23 hours and 59 minutes.
- Up to 300 resource absences display in the Shift tab. If a resource belongs to multiple territories, you see an absence for the resource in each service territory.
- On the Shifts tab, you can't use the quick search box to filter.
- The NOT operator isn't supported when you define filter logic for shifts. If your filter logic uses NOT, we recommend adjusting the filter type instead, for example by using the does not contain operator.
- Bulk actions aren't visible on the schedule view.

# Add Field Service Shifts

Shifts in Field Service determine when your workforce is available to be assigned service appointments. Shifts differ from Operating Hours in that for shifts you can define single time periods for which you need workforce coverage. This capability lets you flexibly assign your shift-based workforce to service appointments. Shift-based workforces have varying availability, such as contractors, retail workers, healthcare workers, and on-call staff. You can use predefined patterns to quickly create a set of standard shifts for weekdays and weekends.

### Create Flexible Work Shifts

Create shifts that define availability for your mobile workers in Field Service. Shifts can vary from day to day or week to week so that you can assign workers for time periods that don't follow a rigid pattern, such as rotating on-call duties or occasional overtime.

#### Create Shifts from a Pattern

In Field Service, create a set of shifts from a predefined pattern of shift templates. Assign a service territory and resource to quickly prepare the schedule.

## Create Flexible Work Shifts

Create shifts that define availability for your mobile workers in Field Service. Shifts can vary from day to day or week to week so that you can assign workers for time periods that don't follow a rigid pattern, such as rotating on-call duties or occasional overtime.

- 1. From the App Launcher, click Shifts.
- 2. Do one of the following.
  - a. Click New.
  - **b.** From the schedule view, hover in an empty space and click **+ New Shift**.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update shifts:

 View, create, and edit on Shifts, Service Territories, Service Resources, Service Territory Memberships

To add job profiles to shifts:

View on Job Profiles

To add recordset filter criteria to shifts:

 View on Recordset Filter Criteria

Shifts Resources			
SUN, OCT 13	MON, OCT 14	TUE, OCT 15	WED, OCT 16
✓ Carpentry			
✓ Electrical			
	<b>10:30 AM-7:30 PM</b> Confirmed · Brian Pitt	11:00 AM-7:00 PM Confirmed · Brian Pitt	6:00 AM-4:00 PM Confirmed Brian Pitt
		+ New Shift	7:30 PM-9:30 PM Tentative
✓ Plumbing			

- **3.** Define the settings for the shift.
  - **a.** Enter a label for the shift.
  - **b.** Enter dates and times for the shift's start and end. A second set of time fields show the shift's start and end in the time zone of the service territory.
  - c. To provide coverage for a specific service territory, define the name of the service territory. A service resource assigned to a shift within a defined territory is available for work during the shift hours only within that territory. If the territory is left empty, the resource assigned to the shift can be assigned appointments in all the territories they're a member of during the shift time frame. If you assign a service territory to the shift, the assigned service resource must be a member of the service territory.
  - **d.** For Time Slot Type, select the type of working hours for the shift. Select **Normal** if the service resource can be assigned to any appointment during the time period. Select **Extended** if the resource can be assigned appointments during the shift time period only if the scheduling policy used to schedule appointments has a Resource Availability work rule that allows overtime.
  - e. If only certain resources can should be able to be assigned to the shift, choose a job profile that defines the skills required to work during this shift. If a Match Skills work rule is defined in Setup, only service resources that have the skills associated with the job profile on the shift are eligible to be assigned the shift when you're using automated shift scheduling tools.
  - f. Optionally, choose a Background Color.
  - g. Optionally, mark the shift Non-Standard.
  - **h.** Optional: Optionally, choose a filter in the Recordset Filter Criteria field to limit which service appointments can be scheduled during the shift.
  - i. If you know which service resource you want to assign to the shift, you can select this resource in the Service Resource field on the Shift record. If you want shift scheduling tools to automatically find a service resource that can work the shift, leave the Service Resource field blank. This field is automatically populated when the shift is scheduled.
  - j. Select a status.

Option	Description
Tentative	The shift is tentatively defined. This is a good status to use when the time period for when coverage is needed is defined on the shift but you haven't yet decided on or assigned a service resource.
Published	The shift manager is ready to publish the shift to service resources. This status is optional and can be helpful if you've assigned a service resource to the shift but you aren't ready for the scheduling engine to consider the shift as the resource's availability to be assigned a service appointment.
Confirmed	The shift has an assigned service resource. The scheduling engine considers confirmed shifts. This status is correct when you're ready for the scheduling engine to consider the shift as the resource's availability to be assigned a service appointment.

4. Save your changes.

#### SEE ALSO:

Build Repeating Shift Patterns Field Service Guidelines for Shift Availability

## Create Shifts from a Pattern

In Field Service, create a set of shifts from a predefined pattern of shift templates. Assign a service territory and resource to quickly prepare the schedule.

- 1. From the App Launcher, click Shifts.
- 2. Click New from Pattern.
- 3. Select the shift pattern.
- 4. Select a start date.
- **5.** Do one of the following:
  - a. To end the pattern on a specific date, choose On a date.
  - **b.** To repeat the pattern, choose **After a number of occurrences** and enter the number of times to repeat it.

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update shifts:

 View, create, and edit on Shifts, Job Profiles, Service Territories, Service Resources, Service Territory Memberships

New Shifts	from Pattern	
Select Shift Pattern To create new shifts, select a shift pattern. Shift p a set or recurring cycle of shifts. * Shift Pattern	patterns are made up of shift templ	ates to define
Weekly Hours		×
Pattern Settings *Scheduling Start Jan 4, 2021	<ul> <li>Scheduling End</li> <li>On a date</li> <li>After a number of occurren Occurrences</li> <li>4</li> </ul>	ces
Service Territory     San Francisco		×
Assigned Service Resource		
Search Service Resources		Q
	Cancel	Create Shifts

6. Optionally, select a service territory. If you select a territory, you can also assign a service resource.

## 7. Click Create Shifts.

SEE ALSO:

Build Repeating Shift Patterns Field Service Guidelines for Shift Availability

# Define Which Appointments Can Be Scheduled During Shifts

Similar to how you use designated time slots on operating hours, in Field Service, you can use Record set Filter Criteria to define and designate which appointments can be scheduled to service resources during shifts. Create Recordset Filter Criteria based on service appointment field values, and then add the filter to a shift so that only relevant appointments get scheduled.

- 1. In the App Launcher, click Recordset Filter Criteria.
- 2. In the Recordset Filter Criteria list view, click New.

	set Filter Criteria Name	Iters for the source object			
	intments in Jeopardy				
Descripti	ion				
In Jeo	pardy appointments with due dat	e approaching			
• Source	Object 🔘		*Filtered Object		
Shift		*	Service Appointme	nt	Ŧ
Active Condition	ons				
Condition	ons criteria is valid when conditions are met	¥			
Condition	criteria is valid when	* Operator		Value	
Condition	criteria is valid when conditions are met			Value R	
Condition	criteria is valid when conditions are met Criteria Field	* Operator			
Condition	criteria is valid when conditions are met "Criteria Field In Jeopardy	• Operator • Equals	¥		

- 3. Enter a name and description for the criteria.
- 4. In the Source Object field, select Shift.
- 5. In the Filtered Object field, select **Service Appointment**.
- 6. Select Active.
- **7.** In the Conditions section, select the relevant condition for when the recordset filter criteria is valid.
- 8. Add filter conditions.
  - **a.** Select the Criteria Field, the Operator, and the field Value to match on. The Value input changes depending on the field you select. For example, picklist fields show the list of available choices.
  - **b.** Add another condition if you must.
- 9. Save the recordset filter criteria.
- **10.** Assign your new record set filter criteria record to a shift record to make sure the scheduling and optimization engine only allows service appointments that meet the criteria to be assigned during the shift time-frame.

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and update recordset filter criteria

 View, create, and edit on Service Appointments, Shifts, Recordset Filter Criteria, and Recordset Filter Criteria Rules

AND

Delete on Recordset Filter Criteria Rules

### Guidelines for Recordset Filter Criteria

Field Service filter criteria let you match records in one object against records in another. For example, you can choose criteria to filter which service appointments can be scheduled during a shift.

#### SEE ALSO:

Guidelines for Recordset Filter Criteria

## Guidelines for Recordset Filter Criteria

Field Service filter criteria let you match records in one object against records in another. For example, you can choose criteria to filter which service appointments can be scheduled during a shift.

## **Recordset Filter Criteria Considerations**

Keep these considerations in mind when you create and edit recordset filter criteria.

- Only Recordset Filter Criteria marked Active are used in scheduling.
- When you add multiple filter conditions, only appointments matching all the conditions can be scheduled.
- The Value input changes depending on the service appointment field you choose. For example, picklist fields show the list of available choices.
- You can't match on text field values that include apostrophes ('), commas (,), or double quotation marks (").
- Users without access to a service appointment field used in a filter condition don't see the field name or value. They also can't edit or delete the filter condition.
- When you use inline edit on a recordset filter criteria, the filter conditions are shown in the related list. You can manage filter conditions individually from the related list. Or to see all the filter conditions in one place, use the Edit action.
- The Recordset Filter Criteria field must be added to the Shift page layout.
- After you add a custom field to the filtered object, it can take around 15 minutes for the new field to appear in the Criteria Field picklist.
- You can add a maximum of 5 considerations to the Recordset Filter Criteria field.
- The asset fields Availability, Reliability, Average Time to Repair, and Average Time Between Failures are calculated internally, so they can't be used to define Usage-Based, Usage-Counter, or Usage-Duration rule types.

## Guidelines for Custom Logic

- Build the filter logic with parentheses and the AND or OR Boolean operators. To group conditions, use parentheses around the parameters, for example 1 AND (2 OR 3). If you add another condition, the custom logic is updated automatically to 1 AND (2 OR 3) AND 4.
- Every index must have a corresponding recordset filter criteria rule, but every rule doesn't need to be used in the custom logic.
- If no custom logic is defined, all recordset filter criteria rules are treated with an AND, meaning all conditions must be True.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### USER PERMISSIONS

To view, create, and update recordset filter criteria for shifts

 View, create, and edit on Recordset Filter Criteria and Recordset Filter Criteria Rules

AND

View on the filtered object, source object, and filtered object's fields

AND

Delete on Recordset Filter Criteria Rules

- You can't delete a recordset filter criteria rule that's referenced in custom logic. Alternatively, you can follow these steps:
  - 1. Update RFC.CustomLogic as empty, or remove the index reference in custom logic.
  - 2. Delete the recordset filter criteria rule.
  - **3.** Update RFC.CustomLogic with the correct value.

### SEE ALSO:

Field Service Guidelines for Shift Availability Define Which Appointments Can Be Scheduled During Shifts

# Assign and Update Field Service Shifts

In Field Service, make sure that shifts are staffed by assigning them to a service resource. You can assign shifts individually or update the assignee and status in bulk.

### Find Shift Candidates

Find the right service resources for a specific shift using the Shift Get Candidates action. With this action, you can assign the best available resources according to your scheduling rules and objectives.

#### Assign Shifts and Update the Status in Bulk

Save time and effort with mass updates for shifts. Quickly assign a group of shifts to service resources who are matched based on your business' shift scheduling rules and their own shift scheduling preferences.

# Find Shift Candidates

Find the right service resources for a specific shift using the Shift Get Candidates action. With this action, you can assign the best available resources according to your scheduling rules and objectives.

- 1. Open Shifts in the App Launcher.
- 2. Select a listview other than Recently Viewed.
- 3. Set the Display As icon to Schedule.
- 4. Hover over the shift you'd like to assign, and select Get Candidates.

The list of service resource candidates is generated based on your scheduling rules defined in Setup. For example, the list can include service resources matching the skills required for the shift, based on the associated job profile. The list is sorted so the service resources most closely matching your scheduling service objectives appear at the top. You can define these objectives in Setup, for example, service resource preferences or balancing nonstandard shift assignments.

5. Select the service resource to assign, then save your changes.

The selected service resource is associated with the shift via the service resource lookup field. Make sure the shift status is Confirmed so that the scheduling and optimization engine considers the shift time period when interpreting the service resource's availability for assigning service appointments.

SEE ALSO:

Prepare Your Org for Shift Scheduling

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To assign shifts:

Field Service Standard
 AND

View and edit on shifts

To appear in the list of service resource candidates:

Field Service Scheduling

## Assign Shifts and Update the Status in Bulk

Save time and effort with mass updates for shifts. Quickly assign a group of shifts to service resources who are matched based on your business' shift scheduling rules and their own shift scheduling preferences.

- 1. Open Shifts in the App Launcher.
- 2. Click Mass Shift Update.
- 3. Select whether to update the status, assign shifts, or do both.
- **4.** Define criteria that selects the shifts to update. You can specify dates, service territories, and job profiles.
- 5. If you're updating the status, specify the current status and the new status.
- 6. Do one of the following:
  - a. If you're updating the assignee and status, click Assign and Update Status.
  - **b.** If you're updating the assignee, click **Assign**.
  - c. If you're updating the status, click Update Status.

A background process starts that looks for shifts that match the criteria and takes the appropriate action. To learn if the process is completed, open the Shift Scheduling Operation record. The record shows how many shifts were considered, how many were successfully processed, and how many failed.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To mass update shifts:

Field Service Standard
 AND

View and edit on Shifts

To appear in the list of service resource candidates:

Field Service Scheduling

# Color-Code Field Service Shifts

Use a background color to identify different types of shifts in the Field Service schedule view and dispatch console. Background colors let you add visual information that works along with status-based horizontal color bars in shift cells. You can add a background color to a shift or a shift template.

- 1. Edit the shift or shift template for which you want to add a background color. When you add a background color to a shift template, shifts created from the template inherit the background color.
- 2. Select a color in the Background Color field. You can use the color picker or enter a value in hexadecimal format.
- 3. Review the shift cell preview, then save your work.

Keep these considerations in mind for managing shift colors:

- To avoid visual clutter in the schedule view and dispatcher console, limit the number of background colors that you use. For example, pick 3-5 colors that your shift managers use to differentiate shift types.
- The text color changes automatically depending on the background color that you select. The shift text color is either white or black, whichever creates the highest color contrast to promote readability and accessibility.
- The shift status determines the color of a horizontal bar in each shift cell. You can't update the default color scheme or replace it with a custom palette.
- Tentative shifts that don't have a background color are highlighted in orange.
- Within a shift, the shift cell preview updates only if a service resource is assigned.

## **EDITIONS**

Available in: Lightning Experience

## USER PERMISSIONS

To view, create, and edit shifts:

 View, create, and edit on Shifts, Job Profiles, Service Territories, Service Resources, Service Territory Memberships

To view, create, and edit shift templates:

 View, create, and edit on Shifts Templates, Job Profiles, Service Territories, Service Resources, Service Territory Memberships

# Nonstandard Field Service Shifts

Nonstandard shifts in Field Service are shifts not sought by mobile workers for various reasons, such as inconvenient hours or increased workload. Identifying and marking shifts as non-standard helps the shift planner assign shifts in a more equitable and balanced way, which can reduce dissatisfaction and attrition.

## Marking Shifts as Nonstandard

- To mark a shift as nonstandard, select the **Non-Standard** checkbox when creating or editing a shift.
- To mark a shift template as nonstandard, select the **Non-Standard** checkbox when creating or editing a shift template.

# Identifying Nonstandard Shifts

Shifts marked as nonstandard are flagged in the various views. In the shift schedule view and the Gantt, nonstandard shifts are flagged with a red icon.

In the table view, add the Non-Standard field to see which shifts aren't standard.

**Note**: The Dispatcher console Gantt is a managed package feature.

# Limiting Monthly Nonstandard Shifts

Managers and planners can restrict how many nonstandard shifts are assigned monthly to each worker.

- 1. Specify the maximum number of monthly non-standard shifts in a scheduling constraint on each service resource or service territory.
- 2. Create a scheduling rule using the Limit Non-Standard Shifts rule type.

When assigning service resources to shifts, the scheduling logic looks for individuals that haven't reached their monthly limit for nonstandard shifts.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view, create, and edit shifts:

 View, create, and edit on Shifts, Job Profiles, Service Territories, Service Resources, Service Territory Memberships

To view, create, and edit shift templates:

 View, create, and edit on Shifts Templates, Job Profiles, Service Territories, Service Resources, Service Territory Memberships

# Field Service Guidelines for Shift Availability

Learn how to define valid shifts and show when your workers are available for shift work. Shifts can work alone or alongside operating hours and service territory memberships to define workforce availability. Designate shifts to show availability for specific types of work or tasks, or for specific territories. For example, you can designate an on-call shift for emergency appointments only.

## Considerations

For shifts to be valid, they must meet the following criteria.

## All shifts

- To create shifts, you must have at least one service territory and one service resource that's assigned to that service territory. A shift must be fully contained within a primary service territory membership for a service resource in that territory.
- If you're not using Enhanced Scheduling and Optimization, when you schedule designated shifts for secondary service territories, use optimization rather than scheduling operations. Scheduling operations, such as Book Appointments or Get Candidates, don't consider designated shifts with secondary service territories.

## **EDITIONS**

#### Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

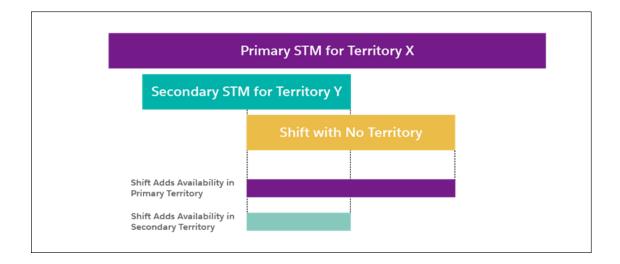
- Add the Timeslot Designated work rule to the scheduling policy for scheduling and
   optimization to respect shift and time slot designations. The **Overtime** field in the Service
   Resource Availability work rule enables scheduling service appointments on Extended shifts. You may need to add the **Overtime** field to the layout.
- Shift availability (Extended or Normal) must correspond across all of a resource's service territories.
- Add the Limit Non-Standard Shifts scheduling rule to balance less desirable shifts amongst your team. The Non-Standard field on shifts marks the shift as nonstandard.

## Shifts with a specified service territory

• When you create a shift with a specified service territory, the shift's time span must be fully contained within the service resource's primary service territory membership for that territory.

## Shifts without a specified service territory

• When you want to define workforce availability across many territories, create the shift without a specified territory. A shift without a specified service territory must be fully contained in a primary service territory membership (STM). It adds availability in *all* territories based on territory memberships; availability is added where the shift intersects service territory memberships.



# Scheduling, Optimization, and Shift Availability

When the managed package is installed, scheduling and optimization consider workforce availability during shifts.

## Shifts and worker availability

- Shifts always add availability.
- Shifts have priority over overlapping time slots.
- Shifts relax time slots for designated work or extended work (overtime). For example, if you assign a time period for emergency work and create a shift that overlaps, scheduling can assign non-emergency appointments during the shift. Or, if you create a shift for weekend on-call duties, you can schedule appointments although the shift is during extended hours.
- When Shifts overlap for a certain resource, territory-specific shifts have priority over shifts that aren't territory-specific.
- When shifts overlap for a certain resource and the overlapping shifts are both territory-specific or both non territory-specific, the first shift of the day takes precedence.
- Shifts with designation don't take precedence over shifts without designation.
- For shifts that aren't territory-specific, you can apply work rules to narrow the territories in which scheduling uses shift availability. To use shift availability in the primary service territory, use a Match Territory work rule in your scheduling policy. To use shift availability in the primary and other territories, use the Working Territories work rule.
- If a service resource is unavailable during the day at a specific time slot or during a specific shift, you must indicate this using Resource Absence, and not split availability. For example, if a resource is available on Wednesday, 6 AM to 12 PM, and again from 1 PM to 6 PM, then extend availability from 6 AM to 6 PM and insert a Resource Absence between 12 PM and 1 PM.
- When you use Enhanced Scheduling and Optimization, if a service appointment doesn't have a territory and a shift with designation is configured, the service appointment must match the designation in order to be scheduled. If a resource has primary and secondary territories and each territory has a shift with a different designation, the service appointment without territory must match both designations.

### Scheduling processes

- When you schedule work using the dispatcher console or Book Appointments or Candidates global actions, scheduling uses availability from confirmed shifts. Optimization also uses available resources from confirmed shifts.
- When you use the Get Candidates and Mass Shift Update features, the scheduling logic takes into account any scheduling rules and objectives.
- Scheduling and optimization match shifts to service appointments according to the shift's filter criteria. Recordset filter criteria help you narrow the scope so that only appointments matching the criteria get scheduled.

## Example: Adding Availability with Shifts

Rotating on-call duties are split into two shifts for Saturday morning and afternoon. The shift is associated with the San Francisco territory and is fully contained in the service territory membership. The shifts are assigned to two workers that have accepted the shift work. The managed package is installed in this org, so the Gantt displays the workers' additional availability. When the dispatcher looks for candidates, scheduling considers availability from the confirmed shifts (1) and from service territory membership (2).

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#### SEE ALSO:

Guidelines for Creating Operating Hours for Field Service Guidelines for Recordset Filter Criteria Guidelines for Creating Service Territories for Field Service Reserve Time Slots for Designated Types of Work

# Manage Field Service Resources

Service resources are mobile workers that can be assigned to service appointments. Learn how to create time sheets and view a service resource's travel routes and calendar.

#### Get Started with Field Service Time Sheets

Before your mobile workers can start logging their hours using time sheets, lay down the foundation. Enable time sheets on the Field Service mobile app, set up an approval process, and customize time sheet fields.

#### Create Service Resource Absences for Field Service

Create resource absences to indicate when a service resource is unavailable to work. During schedule optimization, service resources aren't assigned to appointments that conflict with their absences. View and manage absences from the Absences related list on service resource records.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Salesforce Field Service

#### View a Field Service Resource's Daily Travel Route

The scheduling optimizer uses street-level routing to schedule your mobile worker's day appropriately. On the day of service, the Field Service mobile app's geocoding feature tracks the actual route taken. You can see both the planned and actual routes together on the resource map view.

#### View a Field Service Resource's Calendar

Resource detail pages include a customizable calendar that shows the resource's scheduled appointments and absences. The calendar gives dispatchers a snapshot of the resource's availability, and helps resources stay on top of their schedule.

#### Geolocation-Based Actions

Learn about the workflows that you can automate to help you manage mobile workers.

#### SEE ALSO:

Create Service Resources for Field Service Service Resource Fields for Field Service

# Get Started with Field Service Time Sheets

Before your mobile workers can start logging their hours using time sheets, lay down the foundation. Enable time sheets on the Field Service mobile app, set up an approval process, and customize time sheet fields.

- **1.** Enable mobile time sheets.
  - **a.** From Setup, enter *Field Service Mobile Settings* in the Quick Find box, then select **Field Service Mobile Settings**.
  - **b.** Click **Edit** next to your Field Service Mobile Settings configuration.
  - c. Select Enable mobile time sheets.
  - d. Click Save.
- 2. Create an approval process.
  - a. From Setup, enter *Approval Processes* in the Quick Find box, then select **Approval Processes**.
  - **b.** Select **Time Sheet** from the dropdown menu.
  - c. Click Create New Approval Process > Use Jump Start Wizard.
  - d. Create an approval process with the Jump Start Wizard.

Note: When a mobile worker submits a time sheet, it initiates your approval process. If you don't have an approval process set up, workers can't submit their time sheets.

- **3.** Customize fields for time sheets.
  - a. In the Object Manager, enter Time Sheet in the Quick Find box, then select Time Sheet.
  - **b.** Select Page Layout > Time Sheet Layout.
  - c. Under Time Sheet Detail, add or remove fields. Up to four fields can be shown on the Field Service mobile app.
  - d. Click Save.
- 4. Create time sheet templates on page 423.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To enable time sheets:

Customize Application

Considerations for time sheets:

- Users can view up to 100 past time sheets offline on their mobile devices.
- The first field on Time Sheet Detail displays as the header. Three more fields can be displayed as details below the header.
- Sharing button isn't available for time sheets.

### Create Time Sheet Templates

You can automatically create time sheets from a template so that service resources can track their time and work. Specify the time period each time sheet covers, such as a week or month, and track specific tasks, travel time, and break time. Time sheets are created one day before their start date. You can only create time sheets for service resources of the type Technician.

## **Create Time Sheet Templates**

You can automatically create time sheets from a template so that service resources can track their time and work. Specify the time period each time sheet covers, such as a week or month, and track specific tasks, travel time, and break time. Time sheets are created one day before their start date. You can only create time sheets for service resources of the type Technician.

- 1. From Setup, enter *Time Sheet Settings* in the Quick Find box, then select **Time Sheet Settings**.
- 2. Click New and enter details for the time sheet template.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To create time sheets:

- Create on time sheets
- To view time sheet entries:Read on time sheets

To create, update, or delete time sheet entries:

• Edit on time sheets

New Time	Sheet Template
Information	
*Label	* Name
Mon-Fri Biweekly	Mon_Fri_Biweekly
* Start Date	* Frequency
4/1/2019	Every Two Weeks
* Work Week Start Day	* Work Week End Day
Monday •	Friday
Description	
Biweekly time sheet for service resources who work Monday through Friday.	
•Active	
	Save

- a. For Label, enter a descriptive name for the template so that you can distinguish it from others.
- **b.** For **Name**, enter an API name for the template that uses underscores instead of spaces.
- c. For **Start Date**, enter the date that you want the time sheet template to take effect. Because the time sheet autocreation job runs once per day, we recommend setting a start date that is at least 24 hours in the future.
- **d.** For **Frequency**, select the time range that you want each time sheet to cover. New time sheets are automatically created on the frequency you specify. For example, if you select **Daily**, a time sheet is created every day. If you select **Monthly**, each time sheet covers an entire month, beginning on the start date that you entered.
- e. For Work Week Start Day, select the day that you want each work week to begin on.
- f. For Work Week End Day, select the day that you want each work week to end on.
- g. Enter a description for the time sheet template.
- **h.** Mark the time sheet template as **Active**.

Note: Time sheets are automatically created only if the template is marked Active.

- **3.** Assign the time sheet template to user profiles.
  - a. Click Assign to Profiles.
  - **b.** Select at least one user profile that you want to assign the time sheet template to, and click **Change Assignments**.
  - c. Under Time Sheet Setting, select the time sheet template you want the profiles to use, and click Save.

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Assign Time S	Assign Time Sheet Setting to Profiles	Change Assignments
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The template name appears next to each profile that you assigned it to.

To confirm that time sheets were created successfully, navigate to Time Sheets in the App Launcher, and create list view filters. If the autocreation process can't create a time sheet, it doesn't retry. If a time sheet isn't created as expected, you can manually create it.

Note: Editing the frequency of an existing time sheet template isn't recommended. To avoid errors, first deactivate the existing template. Then create a template with the correct frequency, mark it as active, and assign it to the desired user profiles.

Considerations for time sheets:

- If you add a required custom field that uses custom values, time sheets aren't automatically created.
- Using the same work week start day and work week end day results in a work week that is one day long.
- The Twice a month frequency uses days 1–15 as the first half of the month and days 16–31 as the second half of the month.
- Start date defines the day your time sheet begins. So if your time sheet template's start date is on a Tuesday, your work week start day is Monday, and you set the frequency to every two weeks, the first time sheet starts on Tuesday. The time sheet autocreation job creates the first batch of time sheets when it runs on Monday. Thereafter, time sheets start on Mondays, and they are automatically created when the job runs on Sundays.
- Time sheet templates aren't included in updates to the managed package.

SEE ALSO: Time Sheet Fields

# Create Service Resource Absences for Field Service

Create resource absences to indicate when a service resource is unavailable to work. During schedule optimization, service resources aren't assigned to appointments that conflict with their absences. View and manage absences from the Absences related list on service resource records.

1. From the Absences related list on a service resource, click **New**. To create a set of regularly scheduled absences, click **New Recurring Absence** and fill out the form.

When modifying recurring absences, you can only modify them one at a time. For example, if a resource had a regularly scheduled appointment every Wednesday, and now that appointment occurs every Thursday, you must create a new recurring absence. If they must change their appointment time and date only a few times, you can modify individual absences in the pattern.

- 2. Select Non Availability as the record type. The Break record type is used to automatically create breaks during schedule optimization.
- 3. Select an absence type: Vacation, Meeting, Training, or Medical.

Note: Add more absence types by updating the Type picklist on the resource absence object in Setup. Don't use *Break* as a picklist value; the managed package uses that name.

## USER PERMISSIONS

To view resource absences:

Read on service
 resources

To create and update resource absences:

 Read on service resources

To add or edit picklist values:

Customize Application

To customize the Field Service managed package:

Customize Application

- 4. Enter a start and end time and description.
- 5. Optionally, add a Gantt label. The Gantt label appears on the absence in the Gantt. For example, *Bahamas* or *Driver Training*.

Note: Gantt labels aren't available on Break resource absence or Recurring absence types.

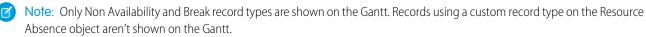
6. Optionally, enter an address, such as a training location. For absences that don't span an entire shift, like a morning medical appointment, the absence address is used to determine travel time to and from adjacent service appointments. Appointments aren't scheduled during dedicated travel time.

If the Field Service managed package isn't installed, you don't see options to select a record type or enter a Gantt label.

The Gantt shows breaks to the left of travel to appointments. If a break is planned during travel time, optimization can still schedule the appointment. The resource can drive, take the break at the specified time, and then complete the travel.

If you're using Enhanced Scheduling and Optimization and there's no address on the resource absence, optimization and scheduling actions use the location of the last event (Service Appointment or Resource Absence) that has a location to calculate the travel time to the next event. If the resource absence overlaps with the shift end, the resource's home base location is used to calculate the travel time. If you're not using Enhanced Scheduling and Optimization and there's no address on the resource absence, optimization uses the resource's home base to calculate travel time to the next service appointment. For a more precise travel estimate, add an address to the absence, such as the location of the previous appointment or an address for the break.

Non Availability absences are shown on the Gantt with a "no entry" icon, while Break absences are shown with a cup icon. To customize the color of a resource absence on the Gantt, update the Gantt Color field.



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With Enhanced Scheduling and Optimization, a lunch break is created when there's a full-day resource absence.

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Gloria Barnes Installation Expert	Ø TRAINING -	HEALTH & SAFETY																			
Harry Long Installation Expert						-	Mai	Correctiv	Batt	😑 – Re	cl D	leinstallat	ion _	Break-Fix	-						

Note: If a service resource of type Crew has resource absences, those absences are considered in scheduling and shown on the Gantt. Absences associated with individual crew members' corresponding service resources aren't considered.

### SEE ALSO:

- Work with Resource Absences
- View a Field Service Resource's Calendar
- Create Resource Absences in the Field Service Mobile App
- Work Rule Type: Service Resource Availability
- Service Resource Fields for Field Service

# View a Field Service Resource's Daily Travel Route

The scheduling optimizer uses street-level routing to schedule your mobile worker's day appropriately. On the day of service, the Field Service mobile app's geocoding feature tracks the actual route taken. You can see both the planned and actual routes together on the resource map view.

 ${f \widehat{m}}$  This is a Field Service managed package feature.

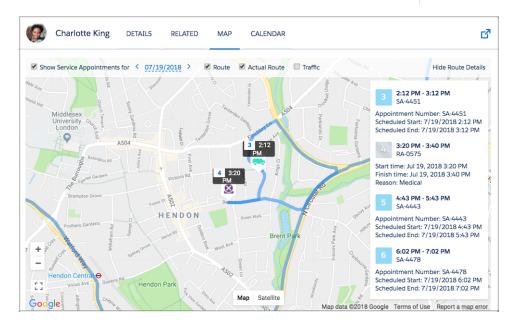
Note: To view travel routes, enable street-level routing.

To navigate to a service resource's map, start from the dispatcher console resource list. Click **Details** in a resource's action menu, and then click the **Map** tab. You can also view a service resource's scheduled appointments on the main dispatcher console map by selecting the service resource in the Map Layers settings.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

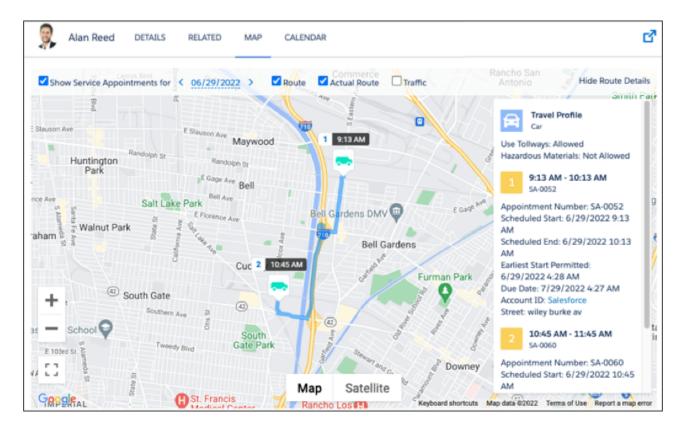


At the top of the map, select which date to show, and choose one or more types of data to display: **Route** (shown in blue), **Actual Route** (shown in pink), and **Traffic**. The actual route can be shown only if history tracking is set on the service resource's Last Known Location field and geolocation tracking is turned on for them. See Field History Tracking.

A truck icon signifies an appointment. An X icon signifies a resource absence with a valid address, meaning its latitude and longitude can be calculated.

Note: To show or hide resource absences on the map, from the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings. Then, click Dispatcher Console UI > Gantt Configurations and select or deselect Show absences on resource map.

On the right-hand side of the map, you can show or hide the route details pane. The pane shows the travel profile with details such as the vehicle type and the route according to the selected travel mode. For example, quickly see whether the route includes the use of toll roads or whether hazmat considerations exist. The travel profile is shown when you're using Enhanced Scheduling and Optimization and a travel mode is assigned to that territory or territory member. To zoom in on an appointment, hover over the appointment number in the pane and click **Center on Map**.



Note: If a service resource has more than 23 stops in a period of 24 hours (including starting point, ending point, appointments, and absences), the resource map shows only the first 23 stops on the route and displays an error. This is a Directions API limitation.

SEE ALSO:

Set Up Routing for Travel Time Calculations Track Service Resource Geolocation with the Field Service Mobile App Set Up Travel Modes

# View a Field Service Resource's Calendar

Resource detail pages include a customizable calendar that shows the resource's scheduled appointments and absences. The calendar gives dispatchers a snapshot of the resource's availability, and helps resources stay on top of their schedule.

## $fill \oplus$ This is a Field Service managed package feature.

To view a service resource's calendar, navigate to their detail page from the Service Resources tab and scroll to the Calendar tab. Click a field on a calendar entry to open the corresponding record in a new tab.

**Note:** If you don't see the calendar on resource pages, add the VF079\_ResourceCalendar Visualforce component to the service resource page layout.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To edit field sets:

Customize Application

To edit page layouts:

Customize Application

To view resource absences:

• Read on service resources

To view service appointments:

Read on service
 appointments

Monday, 6 Aug 2018         Tuesday, 7 Aug         Wednesday, 8 Aug         Thursday, 9 Aug         Friday, 10 Aug 2018         Saturday, 11 Aug         Sunday           00:15	day
00:1511	
00:30 00:34Image: state of the state of t	12 Au
00.45Image: selection of the sel	
01:00     Image: sector s	
01:15     Image: sector of the s	
01:30     Image: sector s	
0145     Image: state	
02:00         Image: selection of the sele	
02:15       Image: Constraint of the sector of	
02:30       Image: Constraint of the state	
02:45         Image: state s	
03:00     Image: Constraint of the second of t	
03:15     Image: Constraint of the second of t	
03:30	
03:45         Image: Constraint of the constraint of	
04:00	
04:15	
04:30	

Here's how to control which information appears in the calendar.

- 1. To control which fields appear in calendar entries for service appointments and resource absences, customize field sets.
  - The Service Appointment Resource Calendar Display field set controls what information appears on the calendar entry.
  - The Service Appointment Resource Calendar Tooltip field set controls what information appears in a tooltip when you hover over the calendar entry.
  - The Resource Absence Resource Calendar field set controls what information appears on a resource absence calendar entry.
  - The Absence Resource Calendar Tooltip field set controls what information appears in a tool tip when you hover over the calendar entry.

For more details, see Customize the Dispatcher Console with Field Sets.

2. To color-code resource absences on the calendar, update the Gantt Color field on resource absences with a 6-digit hex code. This field lets you represent different types of absences with different colors—for example, lunch breaks in red and internal meetings in green.



# **Geolocation-Based Actions**

Learn about the workflows that you can automate to help you manage mobile workers.

You can trigger geolocation-based actions by using any one of these options.

- Platform Alerts on page 432
- Quick Actions on page 432
- View Records on page 433

# Actions Based on Platform Alerts

## Example: Automate Site Check-Ins and Check-Outs

#### Why?

Keep track of the times that mobile workers arrived and left job sites. With automated timestamps for geolocation-based actions, you can then create reports that give insights on the time that mobile workers spend at each location. Timestamps are captured even when the mobile app is offline and are more reliable than the manual input given by mobile workers.

#### How?

Create two geolocation-based actions: one that's silently triggered by a platform alert when the mobile worker arrives at a location, and another that's silently triggered by a platform alert when they leave the location. Then, create a report that lists the timestamps of the first check-in and the last check-out, taking into account that it's possible that the mobile worker has come and gone more than once. See Build a Report.

Joined Report Geolocation-Based Actions Report									
Appointment Number 🔶 💌	Service Resource: Name 💌	Assigned Resource ID	Action Name 💌	First Time Invoked 💌	Last Time Invoked 💌				
SA-0001	Doron	03rSB000000A4D	Site Check-In	8/27/2023, 1:02 PM	8/28/2023, 10:48 AM				
			Site Check-Out	8/28/2023, 10:00 AM	8/28/2023, 12:00 PM				
SA-0002	Jenny	03rSB000000ANZ	Site Check-In	8/28/2023, 12:30 PM	8/28/2023, 12:30 PM				
			Site Check-Out	8/28/2023, 2:30 PM	8/28/2023, 2:30 PM				
SA-0004	Doron	03rSB0000006S1	Site Check-In	8/27/2023, 12:00 PM	8/27/2023, 12:00 PM				
			Site Check-Out	8/29/2023, 12:00 PM	8/29/2023, 12:00 PM				
SA-0005	Jenny	03rSB00000080n	Site Check-In	8/28/2023, 12:00 PM	8/28/2023, 12:00 PM				
			Site Check-Out	8/28/2023, 2:00 PM	8/28/2023, 2:00 PM				

# Actions Based on Quick Actions

# Example: Get Mobile Workers to Complete a Site Arrival Checklist

### Why?

Make sure that mobile workers never forget to fill out your site arrival checklist to keep the workers and your customers safe.

#### How?

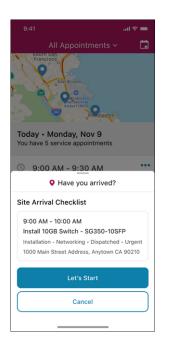
Create a quick action that opens a checklist. Then, create a geolocation-based action that prompts the mobile worker to open the checklist when they arrive at a location.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.



# Actions Based on View Records

# Example: Show Mobile Workers the Work Plans

### Why?

Give mobile workers the information they need to get the job done.

#### How?

Create a geolocation-based action that prompts the mobile worker to view a record when they arrive at a location.

SEE ALSO:

Set Up Geolocation-Based Actions for Field Service Mobile Workers

# Manage Field Service Crew Membership

Efficiently manage your service crews to accommodate a fast-changing field service schedule. Create crews, find and add members with the right skills, adjust membership dates to match appointment times, and view all crews' schedules and members in one place.

While you can manually manage service crew membership from the Service Crew Members related list on service crew records, we recommend using the drag-and-drop crew management tool.

### 🜐 This is a Field Service managed package feature.

1. Create your service crews. The crew management tool only shows crews with an active service resource of type Crew.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To view service crew members:

Read on service crews
 AND

Read on service resources

To create service crews using the crew management tool:

Create on service crews
 AND

Create on service resources

AND

Edit on service territories

To create, update, or delete service crew members:

Edit on service crews

Service Resou Trailblaze				
	source Type rew	Active		
			(0#/\$  /A\\\\5/\\5/\\5/\	
Related	Details			
$\checkmark$ Information				
Name			Active	
Trailblazers			~	
User			Include in Scheduling Optimization	
Service Crew			Travel Speed	
Trailblazers				

2. Open the crew management tool by clicking the Crew Management tab or opening the Lightning page that contains it.

**Note:** If you have trouble finding it, ask your admin to follow the steps in Set Up Crew Management and let you know where the tool is located.

Field Service	Home F	Reports	<ul> <li>Field Service Account</li> </ul>	unts v Work Orders v Service Appointments v Service Resources v Crew Management More *
Policy: Customer First	*		New Service Crew	Wed, July 31, 2019
Search service resources	•	<b>7</b> (3)		WED, JULY 31, 2019
D resources selected			- San Francisco	12 1 AM 2 AM 3 AM 4 AM 5 AM 6 AM 7 AM 8 AM 9 AM 10 11 12 1 PM 2 PM 3 PM 4 PM 5 PM 6 PM 7 PM 8 PM 9 PM 10 11 America/Los_Angeles (GMT-7)
San Francisco			- 😌 SF Roof Repair Cr	rew (Crew Size: 3) Match Crew Skills
Janice Gonzales Expert			Crew Schedule	SA-
Balph Clark			Janice Gonzales	SCM-0001 •
Description Louise Martin			Ralph Clark	SCM-0002
SF Showroom			Louise Martin	SCM-0003
Los Angeles     Martino Castanon			- Los Angeles	America/Los_Angeles (GMT-7)
Installer			- 🕒 Erin's Dream Tear	m (Crew Size: 3) Match Crew Skills
Installer			Crew Schedule	SAr., SAr., SAr.,
Pam Lawison     Expert			Martino Castan	SCM 0004
Alan Reed			Pam Lawison	SCM-0006
Lamar Smith			Lamar Smith	SCM-0005
LA Showroom			Installer	

- 3. In the top-right corner, select a date and number of days to display.
- 4. In the sidebar, click the map icon to view a list of service territories with active service crews. Select service territories whose crews you want to see and click **Save**. After you select service territories, each crew's schedule and members appear in the chart.

Now that your dates and service territories are selected, it's time to manage crew membership.

### **View Crew Details**

Hover over a crew name in the chart to see the skills that its members need. To update these skills, navigate to the associated service resource record of type Crew and update the Skills related list.



Hover over a service crew membership in the chart to view the membership start and end dates. Crew leaders appear with a star.

- 😛 SF Roof Repair Cre	w (Crew Size: 3)		Match Crew Skills
Crew Schedule		SA-0062	
Aartino Castan	SCM-0004 ★		
Paul Morrison Installer		SCM-0004 Membership Start Sun, Mar 3, 2019 12:00 AM	
Pam Lawison Expert		Membership End Fri, Mar 8, 2019 12:00 AM	

#### View Appointment Details

In any Crew Schedule row, hover over an appointment to view its details. A red flag icon means that the assigned service crew doesn't yet comply with the minimum crew size or skill requirements listed on the appointment's parent record. View skill and crew size alerts at the bottom of the hover window. You can determine which details to show using the Crew Management Tooltip field set on page 599.

Crew Schedule	SA-9501				
ма Арру	SCM-0023	SA-9501			
		Minimum Size	Recommended Size	Currently Assigned	
Cloudy	SCM-0024 LEADER	5	6	3	
💮 Einstein	SCM-0018		epair, Fix, Maintenance, I ay, December 15, 2018 1		
- Los Angeles			Thursday, December 6, 2		
- 😬 Hollywood Hills	s (Crew Size: 3)	Scheduled End: To	uesday, December 11, 20	)18 11:24 AM	
Crew Schedule			ore members to meet th skills: Maintenance, Insta		um of 5
					SCM

Double-click an appointment to open a window that shows the appointment's fields and its parent record's fields and related records.

#### Find the Right Crew Member

If the territory filter is visible in the sidebar, click the map icon to hide it and show the service resource list. The sidebar shows service resources who are members of the selected service territories during the dates shown on the chart.

- Click a service resource's name in the sidebar to view their skills, service territory membership, and service crew membership. Click the card icon to the right of their name to view the service resource record.
- Select a scheduling policy using the Policy dropdown menu.
- Filter service resources by skill in one of two ways:
  - Click the filter icon in the resource list to select skills to filter for.
  - Click Match Crew Skills on a crew to show only service resources with the skills listed on the crew's service resource record
    of type Crew.

Policy: Customer First	New Service Crew	Wed, July 31, 2019	Today > Daily
Search service resources	Image: Search crees         12         1 AM         2 AM         3 AM         4 AM         5 AM         6 AM	WED, JULY 31, 2019 7 AM 8 AM 9 AM 10 11 12 1 PM 2 PM	3 PM 4 PM 5 PM 6 PM 7 PM 8 PM 9 PM 10 11
D resources selected	Filter Logic: AND - Deselect All Select All		America/Los_Angeles (GMT-7)
San Francisco	Search skills		Match Crew Skills
Banice Gonzales     Expert	Climbing Connect to Elect Dancing	SA	
Balph Clark	Emergency     Filter replacement     Showroom     SP Installation     SP Maintenance     SP Resair		
Louise Martin     Installer	SP Instatution SP Maintenance SP Repair		
SF Showroom			
Gioria Barnes Showroom Staff			
Ane Austin     Showroom Staff			

• To filter crews by skills, click the crew filter icon. Then, search for and select the required skills.

New Service Crew	<b>T</b>	Thu, June 8,	2023 - M	on, Jun	e 12, 20	)23					<b>ii</b> <	Today	>
Search crews	SKILLS				E 10, 202				11, 202			ION, JUN	
Los Angeles	Fitter Logic: AND +	Deselect All Select All	12 AM	6 AM	12 PM	6 PM	12 AM	6 AM	12 PM	6 PM		6 AM	
- 🕞 A-Team (Cri	Search skills												
-	Change Check Emergency Maintenance	C Destroy											
- 🕞 Crew A83 (C	new Size: 3)												C
Crew Schedule													
Dave Ingles	SCM-0002												
George Was	6 SCM-0001 .												

• Search for crews and crew members. You can search for multiple resources by separating the names with a comma. Each crew is marked with a different color on the Gantt.

New Service Crew						Thu, Jur	ne 8, 20	)23 - Ma	on, Jun	e 12, 20	)23					<b>ii</b> (	Today	
Search crews	THU, JU	NE 8, 2023			FRI, JUN	E 9, 2023			LAT, JUNE	E 10, 202	3	5	UN, JUN	E 11, 202	3		MON, JU	NE
search crews	12 AM 6 AM	12 PM	6 PM	12 AM	6 AM	12 PM	6 PM	12 AM	6 AM	12 PM	6 PM	12 AM	6 AM	12 PM	6 PM	12 AN	6 AM	
Los Angeles	-																acific Day	le <sup>n</sup>
- 🕞 A-Team (Crew Size	1)																	
Crew Schedule																		
Eithan Ben	SCM 0001 💽																	
Kevin Moreno	SCM-0002																	
- 🕒 Crew A83 (Crew Si	ize: 3)																	
Crew Schedule																		
Dave Ingles	SCM-0002																	1
George Wash	SCM-0001 .																	

• If an appointment shows missing skills or members, right-click the appointment and click **Get Candidates** to filter the resource list based on skills, availability, and operating hours. If the crew just needs members, all available resources are shown. If skills are missing, available service resources with the missing skills are shown first. Select one or more resources and click **Assign Selected** to add them to the crew for the appointment's time frame.

- 😀 Trailblazers (Crew	Size: 4)
Crew Schedule	SA-9501
🎽 Арру	SCM-0025

equired Skills: Maintenance, Installation   dissing Skills: Installation     Members     Janice Gonzales   Skills: Break-Fix, Field Connect (level 9), Field   Upgrade (level 7), Maintenance (level 4)     andidates   Alan Reed   Relevant Skills: Installation   Has Missing Skills: Installation	Ainimum Size: 3 (current assigned:	1)
Members         Janice Gonzales         Skills: Break-Fix, Field Connect (level 9), Field Upgrade (level 7), Maintenance (level 4)         andidates         Alan Reed         Relevant Skills: Installation         Has Missing Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Has Missing Sk	ecommended Size: Undefined	
Members         Janice Gonzales         Skills: Break-Fix, Field Connect (level 9), Field Upgrade (level 7), Maintenance (level 4)         andidates         Alan Reed         Relevant Skills: Installation         Has Missing Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Has Missing Skills: Installation         Wailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	equired Skills: Maintenance, Insta	llation
Janice Gonzales Skills: Break-Fix, Field Connect (level 9), Field Upgrade (level 7), Maintenance (level 4) andidates Alan Reed Relevant Skills: Installation Has Missing Skills: Installation Alexander Raneri Relevant Skills: Installation Alexander Raneri Relevant Skills: Installation Jane Austin Relevant Skills: Installation Jane Austin Relevant Skills: Installation Louise Martin Relevant Skills: Installation Ralph Clark Relevant Skills: Installation Has Missing Skills: Installation Gloria Barnes Resource has no relevant skills Harry Long Resource has no relevant skills	lissing Skills: Installation	
Skills: Break-Fix, Field Connect (level 9), Field Upgrade (level 7), Maintenance (level 4)         andidates         Alan Reed         Relevant Skills: Installation         Has Missing Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Has Missing Skills: Installation         Louise Martin         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Wailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	lembers	
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iandidates         Alan Reed         Relevant Skills: Installation         Has Missing Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Relevant Skills: Installation         Relevant Skills: Installation         Relevant Skills: Installation         Has Missing Skills: Installation         Relevant Skills: Installation         Has Missing Skills: Installation         Wailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	,	
<ul> <li>Alan Reed Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Alexander Raneri Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Jane Austin Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Louise Martin Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation</li> <li>Gloria Barnes Resource has no relevant skills</li> <li>Harry Long Resource has no relevant skills</li> </ul>	Upgrade (level 7), Maintenance (le	vel 4)
<ul> <li>Alan Reed Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Alexander Raneri Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Jane Austin Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Louise Martin Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation</li> <li>Gloria Barnes Resource has no relevant skills</li> <li>Harry Long Resource has no relevant skills</li> </ul>		
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Has Missing Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Louise Martin         Relevant Skills: Installation         Alexander Raneri         Relevant Skills: Installation         Relevant Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Has Missing Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         Wailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	0	
<ul> <li>Alexander Raneri Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Jane Austin Relevant Skills: Installation</li> <li>Louise Martin Relevant Skills: Installation</li> <li>Louise Martin Relevant Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation</li> <li>Gloria Barnes Resource has no relevant skills</li> <li>Harry Long Resource has no relevant skills</li> </ul>		
Relevant Skills: Installation         Has Missing Skills: Installation         Jane Austin         Relevant Skills: Installation         Louise Martin         Relevant Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         Vailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	Has Missing Skills: Installation	
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Jane Austin         Relevant Skills: Installation         Has Missing Skills: Installation         Louise Martin         Relevant Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         Vailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills		
Relevant Skills: Installation         Has Missing Skills: Installation         Louise Martin         Relevant Skills: Installation         Has Missing Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         Vailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	Has Missing Skills: Installation	1
Has Missing Skills: Installation         Louise Martin         Relevant Skills: Installation         Has Missing Skills: Installation         Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         wailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	🗌 Jane Austin	
<ul> <li>Louise Martin Relevant Skills: Installation Has Missing Skills: Installation</li> <li>Ralph Clark Relevant Skills: Installation Has Missing Skills: Installation</li> </ul> vailable Resources (no relevant skills) <ul> <li>Gloria Barnes Resource has no relevant skills</li> <li>Harry Long Resource has no relevant skills</li> </ul>		
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Has Missing Skills: Installation          Ralph Clark         Relevant Skills: Installation         Has Missing Skills: Installation         vailable Resources (no relevant skills)         Gloria Barnes         Resource has no relevant skills         Harry Long         Resource has no relevant skills	Louise Martin	
Ralph Clark     Relevant Skills: Installation     Has Missing Skills: Installation     Gloria Barnes     Resource has no relevant skills     Harry Long     Resource has no relevant skills		
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Resource has no relevant skills <ul> <li>Harry Long</li> <li>Resource has no relevant skills</li> </ul>	vailable Resources (no relevant	t skills)
<ul> <li>Harry Long Resource has no relevant skills</li> </ul>	🗌 Gloria Barnes	
Resource has no relevant skills	0	
Resource has no relevant skills	O Harry Lang	
	_ , 0	
	Resource has no relevant SKIIIS	
Matthew Parker	Matthew Parker	

#### Add a Service Resource to a Crew

Add service resources to crews by dragging them from the resource list. To add multiple resources at once, select them in the list before dragging.

- Drag a resource onto a crew's name to add them to the crew for the dates shown on the chart. A window opens where you can update crew membership dates and make the resource the crew leader.
- Drag a resource onto another resource's service crew membership to create an identical crew membership.
- Drag a resource onto an appointment to create a crew membership for the appointment's time frame.

- 😛 SF Roof Repair Cre	w (Crew Size: 3)		Match Crew S	kills
Crew Schedule		SA-0062		
Martino Castan Installer	SCM-0004 ★			
Paul Morrison Installer		SCM-0003		
Pam Lawison Expert		SCM-0002		

**Note:** If you're not using Enhanced Scheduling and Optimization, when creating a service crew membership, align it with the resource's start of day. We recommend using 00:00 because it aligns with Field Service's default Start of Day. However, you can set a custom Start of Day on Service Resource Availability work rules if the default doesn't make sense—for example, if your team typically works night shifts. To enforce a custom Start of Day, from the Field Service Admin app, click **Field Service Settings** > **Scheduling** and select **Set the hour that starts a new day based on the Availability rule(s)**. If the applied scheduling policy uses a custom Start of Day, set your service territory memberships to start and end at that time rather than at midnight.

#### **Edit or Delete Crew Membership**

Double-click a crew membership in the chart to edit its dates, make the resource the crew leader, or delete the membership.

#### SEE ALSO:

Set Up Crew Management Create Service Crews Considerations for Scheduling Service Crews View Service Crews on the Gantt

# Manage Field Service Appointments

Create, schedule, reschedule, and unschedule service appointments. Fix overlaps, group nearby appointments, and fill schedule gaps.

#### Create Service Appointments for Field Service

Service appointments represent field service visits to customers. While work orders describe the work to be performed. You can have multiple service appointments (visits) per work order, depending on the nature of the job. For example, if a customer orders the installation of multiple devices, each visit is a separate service appointment. The service appointment provides the scheduling and assignment details.

#### Schedule Service Appointments for Field Service

Schedule service appointments from the record feed or from the appointment list in the dispatcher console. You can also create scheduling dependencies between service appointments to organize larger jobs, or schedule an appointment by manually updating its status.

### Unschedule Field Service Appointments

Unschedule service appointments from the dispatcher console or a service appointment record.

#### Reschedule Service Appointments in Field Service

Reschedule service appointments manually or let Field Service do it for you. Review the use cases to gain a better understanding of how the tools differ and which tool best suits your needs.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Reshuffle Service Appointments in Field Service

Fit a service appointment into a full schedule by reshuffling appointments and scheduling higher priority appointments over appointments with a lower priority. Service appointments can move to a time slot within the same shift, to a different shift, or even to a different resource.

#### Manage Field Service Scheduling Overlaps

To fix scheduling overlaps in Field Service, where one appointment overlaps with another appointment or an absence, use any of several available methods.

### Fix Field Service Scheduling Overlaps

Fix overlaps that dispatchers made in the Gantt to reschedule appointments that overlap with other appointments or absences. Dispatchers can fix overlaps directly from the Gantt for each resource that has overlaps. You can fix overlaps automatically by enabling the feature in the Field Service Admin app. The Fix Overlaps feature from the Gantt isn't available when using Enhanced Scheduling and Optimization. Automatically fixing overlaps isn't available when Scheduling recipes are used.

#### Customize Fix Overlap Scheduling Settings

Customize how overlaps are fixed automatically in the Gantt. You can define how rescheduled appointments are assigned and the order in which to reschedule unscheduled appointments. You can also define what steps to take if a valid schedule isn't found.

#### Group Nearby Field Service Appointments

One way to minimize travel time or gaps between appointments in Field Service is to use the Group Nearby Appointments action on a service appointment. This feature unschedules appointments scheduled for later that day and replaces them with appointments that are close in location to the source appointment. The Group Nearby Appointments feature isn't available when using Enhanced Scheduling and Optimization.

#### Fill Schedule Gaps in Field Service

Field Service provides many tools to fill gaps in a service resource's schedule. One such tool is the Fill-In Schedule feature, which feature creates a list of appointments for a mobile worker and finds the optimal schedule.

#### Customize Field Service Appointment Chatter Settings

In Field Service, control whether custom Gantt Chatter posts, dispatch posts, and emergency posts are shared on service appointments or on service appointment parent records.

#### Dispatch Field Service Appointments

Dispatch scheduled service appointments to your mobile workers. You can dispatch appointments from the console, or set up jobs that automatically dispatch or drip feed the next appointments.

#### SEE ALSO:

Customize Appointment Booking Settings

# Create Service Appointments for Field Service

Service appointments represent field service visits to customers. While work orders describe the work to be performed. You can have multiple service appointments (visits) per work order, depending on the nature of the job. For example, if a customer orders the installation of multiple devices, each visit is a separate service appointment. The service appointment provides the scheduling and assignment details.

Service appointments can be added to work orders, work order line items, opportunities, leads, accounts, or assets. However, associating service appointments with work orders or work order line items allows you to use Field Service mobile and Field Service scheduling logic that's available only when a work order or work order line item is used.

You can create Service Appointments in any of these ways.

- Manually create service appointments by creating a work order with an associated work type. To generate a child service appointment when a work order or work order line item is created from the work type, make sure that Auto-Create Service Appointment is selected.
- Create service appointment records in bulk based on given intervals and criteria by using maintenance plans.
- Create preplanned work by using Data Loader to import records.
- Create service appointment records based on your business logic for a certain scenario or criteria by using automation tools, such as Flow, or programmatic processes such as an Apex Trigger and Apex Class.

You can create a Service Appointment record from the Service Appointments tab (by selecting **New Service Appointment**) or from the Service Appointments related list on a record (by clicking **New**), and then manually populate it. However, creating a service appointment without scheduling isn't recommended, as the appointment isn't accounted for in terms of capacity and utilization until it's scheduled. We recommend you create Work Order records and have service appointments automatically created by the system only when a scheduled visit to the customer is necessary. You can do so by using Get Candidates or Book Appointments on the Work Order page layout or by associating a Work Type to the Work Order with Auto-Create Service Appointment enabled.

Note: When creating an appointment, define any important SLAs or constraints that can impact the scheduling of the appointment. For example, define Skill Requirements on the work order to ensure that the job is assigned to a qualified service resource, define an Early Start and Due Date on the appointment to ensure the job is scheduled within the proper time-frame SLA. And, define an address that is properly geocoded to a valid geolocation to ensure travel time is accurately calculated when scheduling. All of these details determine whether the appointment can be scheduled, when the appointment can able to be scheduled, to which service resource, and other factors.

# 🕜 Note:

- In the Gantt, service appointments are labeled using their appointment number. To customize a service appointment's label, fill in the Gantt Label field on the appointment record.
- If an assignment is made during scheduling or optimization—Field Service managed package features—assigned resource records are automatically created.
- If an appointment has more than one assigned resource, only the first created assigned resource is recognized in scheduling and in the dispatcher console. However, if the appointment is assigned to a service resource of type Crew, assigned resource records are auto-created for the crew members, and the assignment details are displayed correctly in the dispatcher console.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create service appointments:

Create on service
 appointments

To create assigned resources:

 Edit on service appointments AND Read on service resources

To update or delete assigned resources:

 Edit on service appointments When the mobile worker completes the appointment, have them fill out the Actual Times section to indicate when the appointment started and ended. In addition, they can enter the minutes it took to travel to the appointment in the Actual Travel Time field on their assigned resource record. This information is helpful for auditing and auditing and reporting purposes after the work is completed. In addition, mobile workers can enter the minutes it took to travel to the appointment in the Actual Travel Time field on their assigned resource record.

### Guidelines for Creating Service Appointments for Field Service

A service appointment tracks field service work to be performed for a customer, and is typically associated with a work order or work order line item. Learn how to create and manage service appointments. A service appointment represents a visit with a timeframe for a specific type of work at a designated location. The service appointment is typically associated with a work order or work order line item, representing the broader job. Learn how to create and manage service appointments.

SEE ALSO:

Service Appointment Fields for Field Service

# Guidelines for Creating Service Appointments for Field Service

A service appointment tracks field service work to be performed for a customer, and is typically associated with a work order or work order line item. Learn how to create and manage service appointments. A service appointment represents a visit with a timeframe for a specific type of work at a designated location. The service appointment is typically associated with a work order or work order line item, representing the broader job. Learn how to create and manage service appointments.

#### **View Service Appointments**

View service appointments in the following places:

- Service Appointments tab
- Service Appointments related list on work orders, work order line items, or service resources
- Dispatcher console

#### **Create Service Appointments**

You can create service Appointments in several ways. We recommend creating service appointments by first creating a work order with an associated work type and then creating and scheduling the appointment by using Cat Candidates or Real. Appointments on the Way

and scheduling the appointment by using Get Candidates or Book Appointments on the Work Order page layout, or by associating a Work Type to the Work Order with Auto-Create Service Appointment selected.

Use Cases

I WANT TO	HOW DO I DO THIS?	PERSONA
Manually create service appointments, for example, create and schedule a visit for a customer directly from an inbound phone call.	Create a Work Order record representing the job to be performed for the customer. Associate this record with a Work Type and select Auto-Create Service Appointment to create a child service appointment when a work order or work order line item is created from the work type. You can then use Get Candidates or Book Appointments Visualforce actions available	<ul><li>Call center agent</li><li>Dispatcher</li></ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

I WANT TO	HOW DO I DO THIS?	PERSONA
	on the Work Order page layout to schedule the appointment.	
Create bulk Service Appointment records, for example, create unscheduled maintenance work.	Use maintenance plans to create service appointments based on given intervals and criteria. You can then use mass (bulk) schedule or optimization to schedule the service appointments.	<ul><li>Admin</li><li>Dispatcher</li></ul>
Create pre-planned work, for example, work coming from an external system that needs to be scheduled.	Use Data Loader to import records. Create service appointments using an Apex class that an external system can call through a web service so that service appointments can be created through integration. You can then use mass (bulk) schedule or optimization to schedule the service appointments. Or use Get Candidates or Book Appointments Visualforce actions available on the Work Order page layout to schedule each appointment individually.	<ul><li>Admin</li><li>Dispatcher</li></ul>
Create Service Appointment records based on a certain scenario or required criteria.	Use automation tools, such as Flow, or programmatic processes such as an Apex trigger and Apex class to create records based on your business logic.	• Admin

Note: On the Service Appointments related list on a service resource record, you can't create appointments, but you can assign the resource to existing appointments.

#### **Delete Service Appointments**

If an appointment is canceled, you can delete the appointment or change its status to Canceled. Deleting a parent record, like a work order, deletes its child service appointments.

#### Associate Service Appointments with Other Records

Service appointments always have a parent record, which can be a work order, work order line item, opportunity, account, or asset. The parent record tells you about the nature of the service appointment:

Service appointments associated with work orders and work order line items offer a more detailed view of the work being
performed. In addition, this association enables you to use more of the Field Service provided scheduling logic, such as skill
requirements, resource preferences, and other entities that are available only when a work order or work order line item is used.
We recommend you use the work order or work order line item as the parent record for a service appointment. If necessary,
associate assets and accounts to the work order or work order line item through related fields and lists, instead of making assets
and accounts the service appointment parent record. While work orders and work order line items let you enter general information
about a task, service appointments track scheduling and ownership. If you select Auto-Create Service Appointment on a work

type, a child service appointment is added to all work orders or work order line items that use the work type. In scheduling and optimization, service appointments are scheduled according to your settings.

#### SEE ALSO:

Service Appointment Fields for Field Service

# Schedule Service Appointments for Field Service

Schedule service appointments from the record feed or from the appointment list in the dispatcher console. You can also create scheduling dependencies between service appointments to organize larger jobs, or schedule an appointment by manually updating its status.

### Schedule Appointments from the Record Feed

In Field Service, use the Book Appointment or Candidates Chatter actions to schedule and reschedule service appointments for work orders, work order line items, accounts, assets, leads, and opportunities, or from a service appointment itself. To reflect different visits, you can schedule one or more service appointments for a record.

#### Schedule Appointments from the Dispatcher Console

You can schedule service appointments from the Field Service dispatcher console by using the mass schedule action or by dragging them onto the Gantt.

#### Schedule an Appointment Automatically

Schedule a Field Service appointment in a hurry with Auto Schedule—right from the appointment itself. Auto Schedule finds the best available slot based on your scheduling policy.

### Guidelines for Avoiding Apex CPU Timeouts in Field Service

Apex CPU timeout is a common limit that is sometimes reached during the Appointment Booking or Candidates actions. This timeout occurs when too many available candidates or too many scheduling slots are provided for appointment booking.

#### Complex Work in Field Service

To stay on top of complex projects and multistage work, create scheduling dependencies between related service appointments. Scheduling dependencies help you account for situations when technicians need to perform related service appointments in a certain order. For example, ensure that a particular appointment can't start until a related appointment is complete or that two appointments must start at the same time.

#### Book and Schedule Appointments by Using Priorities

Prioritize appointments to schedule them even if your calendar is full. This way, you can schedule important appointments over less urgent ones. When you're using Enhanced Scheduling and Optimization, and no time slot is available, appointments with lower or equal priorities can be unscheduled (dropped) and replaced by higher-priority appointments. When you're not using Enhanced Scheduling and Optimization, and no time slot is available, appointments entry appointments. When you're not using Enhanced scheduling and Optimization, and no time slot is available, appointments.

#### Schedule Emergency Appointments

In Field Service, swiftly schedule, dispatch, and track emergency appointments with the help of a real-time map view. The Emergency Chatter action on a service appointment shows a map view of your closest field resources so that you can dispatch work immediately.

### Schedule Appointments Without Travel

Optimize your mobile workers' schedules for increased productivity by marking service appointments as offsite when jobs can be done remotely, even if an address is specified. For example, remote technical assistance, filling out reports, or renewing health and safety certifications can be done from anywhere. No travel time is added to the schedule if a service appointment is marked as offsite or has no address, or if a resource absence has no address. Enhanced Scheduling and Optimization must be enabled.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Salesforce Field Service

### Update a Field Service Appointment's Status

You can schedule or unschedule an appointment by updating its status. An appointment's status can be updated from several places in Salesforce.

## SEE ALSO:

Create Service Appointments for Field Service Unschedule Field Service Appointments

Reschedule Service Appointments in Field Service

Customize Appointment Booking Settings

# Schedule Appointments from the Record Feed

In Field Service, use the Book Appointment or Candidates Chatter actions to schedule and reschedule service appointments for work orders, work order line items, accounts, assets, leads, and opportunities, or from a service appointment itself. To reflect different visits, you can schedule one or more service appointments for a record.



🜐 This is a Field Service managed package feature.

Note: For help scheduling emergency appointments, see Schedule Emergency Appointments.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

# USER PERMISSIONS

To schedule an appointment using the Book Appointment or Candidates action:One of these custom permission sets:

- Field Service Admin • Permissions
- **Field Service Agent** Permissions
- Field Service Dispatcher Permissions

To view the Change Scheduling Policy field on the Book Appointment action:

Policy Picker In • **Appointment Booking** custom permission

AND

Read permission on the Scheduling Policy object

To view the Change Scheduling Policy field on the Candidates action:

Policy Picker In Get • Candidates custom permission AND

Read permission on the Scheduling Policy object

Action	Used By	Options Provided
Book Appointment	Support agents or customers. For example: • Agents can use it to book an	Arrival windows, which are based on the default operating hours is selected in your appointment booking settings.
	<ul> <li>Agents can use it to book an appointment for a customer over the phone</li> <li>Customers can use it if the action is embedded in your Experience Builder site</li> </ul>	to an entitlement on the related work order, the options provided are based on those hours.
	Note: To ensure that	
	Experience Builder site users	r
	have sufficient access to the data required to perform	
	appointment booking, we	
	recommend using the	
	Appointment Booking Communities Lightning	
	component, and not the	
	standard Visualforce	
	component.	

Action	Used By	Options Provided
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Candidates	Typically, only support agents.	Appointment time slots, organized by service resource. The time slots are based purely on empty space in mobile worker schedules, not arrival windows, making this action ideal for appointments where no coordination is needed with the customer.

- **1.** Open the record that requires an appointment.
- 2. In the Chatter feed, select either **Book Appointment** or **Candidates** based on your needs. If the action isn't available, select the page layout and add the quick action. For appointment booking, we recommend that you add the action; don't add the AppointmentBookingVf Visualforce page using Lightning App Builder.

Note:

- Avoid putting the **Book Appointment**, **Candidates**, and **Emergency** chatter quick actions in Salesforce Classic Publisher and Salesforce Mobile and Lightning Experience as the first actions in your page layout to prevent triggering these actions every time a record is loaded.
- Adding global actions into flows using Lightning Web Components isn't supported.
- 3. If you're creating an appointment for a work order or work order line item, leave the work type as is. It's defined on the parent record and can't be updated from the Chatter action window.

The work type serves as a template that provides skill requirements, duration, and other data used in scheduling the work.

- 4. Optionally, update the address and service territory, which are typically inherited from the parent record.
  - Note: When an appointment isn't geocoded with a latitude and longitude, Book Appointment geocodes it and formats the address as follows.

```
Street number and Street name (the number is always first)
City, State, Zipcode
Country
```

- 5. To view time slots for yourself only, click **Assign to Me**. You see this option if you're associated with a service resource record and the default scheduling policy includes a Required Resources work rule.
- 6. If you clicked Book Appointment:
  - a. To change the earliest start permitted and due date, click Show more options.
  - **b.** To view a graded list of available arrival windows, click **Get Appointments**. The list considers all scheduling constraints, such as the current schedule and work rules, and is graded according to the service objectives. Depending on your appointment booking settings, arrival windows can be flagged as Ideal or Recommended or shown in yellow to indicate a prime window. To see how each window ranks against the scheduling policy's service objectives, click its information icon.
  - c. To view a wider range of service appointment dates, click Extend Dates.
  - d. To create the service appointment, select an arrival window. You can then view its details.
- 7. If you clicked Candidates:
  - a. Click Get Candidates to view a list of available service resources.
  - **b.** Click a resource's name to view their open time slots, which are scored 0–100 based on how well the slot matches the applied scheduling policy.
  - c. To schedule the appointment, select a time slot in a resource's list and click Schedule to [name].
- 8. To rerun the search using a different scheduling policy than the default policy, select a policy in the Change Scheduling Policy field.

Book Appointment Window

st	Воо	k Appointm	····	Candidates	Eme	rgency	New Tas	k Log	a Call	New Note	New Even
Ba	ick					00004!	522				
	Change	Scheduling	Policy:	In-day Cust	omer First	(Default)					
	SHOW ALL	GOLDEN SLOTS	8 FEB, FRI	9 FEB, SAT	10 FEB, SUN	11 FEB, MON	12 FEB, TUE	13 FEB, WED	14 FEB, THU	15 FEB, FRI	
	Golden S	lots					•				
	• 09	ay, February 8 :00 - 11:00	)								Ideal
		ay, February 8 :00 - 13:00									Ideal
		ay, February 8 :00 - 15:00									Ideal
	Friday, Fe	bruary 8th 20	19								
	<ol> <li>09</li> </ol>	:00 - 11:00	)								Ideal
	11	:00 - 13:00	)								Ideal
	13	:00 - 15:00	)								Ideal
	<b>U</b> 13	.00 - 15.00	/								

Candidates Window

0000	)4522					
Post	Book Appointment	Candidates	Emergency	New Task	Log a Call	More
Bac	ck	Schee	dule 000045	522		
Char	nge Scheduling Policy	In-day Customer F	irst (Default)			
	ent Schedule duled for Sean Richards	s on Fri, Feb 8, 2019 9	9:00 AM			
6	Sean Richards 1 Options, Starting Fri	, Feb 8, 2019 9:00 AM				*
	Name Sean Richards	Gantt Label -	Technician Ph -			
۲	Fri, Feb 8, 2019 9:00	) AM				100/100
۲	Naomi Morgan 1 Options, Starting Fri	, Feb 8, 2019 9:00 AM				
	Name Naomi Morgan	Gantt Label -	Technician Ph -			
0	Fri, Feb 8, 2019 9:00	) AM				74/100
T	Daniel Rogers 1 Options, Starting Fri	, Feb 8, 2019 9:00 AM				

### Note:

- Booking from objects other than work orders or work order line items creates a work order, and the service appointment is created for that work order. For instance, booking an appointment from an asset record creates a related work order and service appointment.
- Pinned service appointments can't be rescheduled using the Book Appointment, and Get Candidates scheduling actions.
- Choosing the same or adjacent appointment slots at the same time can create overlaps on the dispatch console. Service appointment overlaps can occur if there are long-running customizations. We recommend such customizations be asynchronous. Travel or lunch break overlaps can also occur. Contact your Salesforce rep to change the custom setting that checks for appointment changes during the entire day, and prevents travel overlaps. In this case, false positive errors can occur if there's no real overlap.
- Book Appointment ignores the arrival window defined on the service appointment so you can get different arrival window times. Get Candidates respects the arrival window on the service appointment if the scheduling policy includes a Match Time Rule for the arrival window fields (Scheduled Start and Scheduled End work rules).

#### SEE ALSO:

Service Appointment Fields for Field Service Set Up Sliding and Reshuffling for Scheduling and Appointment Booking Book and Schedule Appointments by Using Priorities Schedule Appointments from the Dispatcher Console

# Schedule Appointments from the Dispatcher Console

You can schedule service appointments from the Field Service dispatcher console by using the mass schedule action or by dragging them onto the Gantt.

## igoplus This is a Field Service managed package feature.

You can schedule an appointment from the dispatcher console in several ways, depending on what you're doing and how much control you have. When you use any scheduling tool, scheduling considers the work rules defined in the scheduling policy. You can select any scheduling policy in the top-left dropdown list to help you find the best schedule.

# Drag an Appointment from the Appointment List or the Gantt

Schedule an unscheduled appointment by dragging it from the appointment list into any service resource's row on the Gantt.

Reschedule a scheduled appointment by dragging it to a free time slot on the Gantt.

If the assignment causes a rule violation (for example, if the resource doesn't possess the required skill), the appointment is marked with a yellow triangle. Hover over the appointment to view its details and rule violations.

Customize the drag settings from the Field Service Admin app.

1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.

#### 2. Click Dispatcher Console UI.

- 3. In the Time intervals when dragging on Gantt field, enter the minutes segment. For example, if you enter 15, you can drag an appointment into slots starting at 0, 15, 30, and 45 minutes after the hour.
- 4. Save your changes.

# Schedule Appointments by Using the Scheduling Action

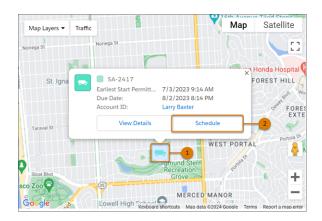
You can use the Schedule action in several ways.

- To schedule one or more appointments in the appointment list (mass schedule), select the appointments and click **Schedule** above the appointment list search field. The button doesn't show Reschedule if you select an appointment that's already scheduled. Appointments are scheduled or rescheduled in priority order. A progress bar appears in the bottom-right corner during the scheduling process. When scheduling is completed, click **View Service Appointments** to review the details.
- Click a service appointment in the appointment list to show a mini view of the appointment. At the bottom of the mini view, click **Schedule** or **Reschedule**. If no candidates are available, you can bypass the scheduling policy's rules by dragging an appointment or by selecting a different scheduling policy.
- Right-click a service appointment on the Gantt and select **Reschedule** to find a better time for your appointment.
- Schedule an appointment directly from the dispatcher console map. First, pop out the map by clicking *d* on the Map tab, and then click an appointment icon (1) to show its details. Click **Schedule** (2) to schedule the appointment.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



**Note:** When you're using Enhanced Scheduling and Optimization, if sliding or reshuffling is enabled, you can schedule critical appointments even when the Gantt seems to be full. Depending on the Sliding and Reshuffling option selected in Field Service Settings, you can use the Schedule action on an appointment to slide scheduled appointments to the left (earlier) or right (later) and make room for a new appointment. If you select **Sliding and Reshuffling**, the Schedule action can also move preexisting appointments to other days or to another resource to schedule the appointment. Also, if you select **Schedule over lower priority appointment** for an appointment, the Schedule action can drop a lower-priority appointment from the schedule.

#### SEE ALSO:

Working in the Field Service Dispatcher Console Appointment List Schedule Appointments from the Record Feed Set Up Sliding and Reshuffling for Scheduling and Appointment Booking Book and Schedule Appointments by Using Priorities

# Schedule an Appointment Automatically

Schedule a Field Service appointment in a hurry with Auto Schedule—right from the appointment itself. Auto Schedule finds the best available slot based on your scheduling policy.

# igoplus This is a Field Service managed package feature.

To grade available time slots, Auto Schedule uses rules and objectives in a scheduling policy. In the Field Service Admin app, specify the default policy in **Field Service Settings** > **Dispatcher Console UI** > **Gantt Configurations**. To override the default, add the Scheduling Policy Used field to the service appointment layout. Before you auto-schedule the appointment, select a scheduling policy in this field.

- 1. Customize the service appointment page layout, and add the Auto Schedule field. Optionally, add the Scheduling Policy Used field.
- 2. Open the service appointment that you want to schedule, and select **Auto Schedule**. Optionally, select a scheduling policy to use instead of the default policy.

3. Click Save.

If Auto Schedule is selected on a service appointment, wait until the appointment's location is geocoded before scheduling it. In the Field Service Admin app, under **Field Service Settings** > **Scheduling** > **General Logic**, select **Delay auto-scheduling until appointments are geocoded** and save your changes.

# 🕜 Note:

- The Delay auto-scheduling until appointments are geocoded setting doesn't apply to appointments without an address (such appointments are scheduled without delay). Auto Schedule uses the scheduling policy listed in the appointment's Scheduling Policy Used field. If no policy is listed, the default scheduling policy in your Appointment Booking settings is used.
- **Delay auto-scheduling until appointments are geocoded** works only if the Data Integration Rule for Service Appointment Address has **Bypass triggers** turned off.
- We recommend waiting for the Auto Schedule to complete before updating a service appointment, otherwise your update could trigger the Auto Schedule before the service appointment is geocoded.

Auto Schedule tries to find the best slot for the appointment. It's then deselected in the appointment record regardless of whether scheduling is successful.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To auto-schedule from a service appointment: One of these custom permission sets:

- FSL Admin Permissions
- FSL Agent Permissions
- FSL Dispatcher Permissions

# Guidelines for Avoiding Apex CPU Timeouts in Field Service

Apex CPU timeout is a common limit that is sometimes reached during the Appointment Booking or Candidates actions. This timeout occurs when too many available candidates or too many scheduling slots are provided for appointment booking.

## 🜐 This is a Field Service managed package feature.

The more scheduling slot options available, the more processing time is required to validate each option according to every work rule in the scheduling policy and to grade each option by each of the objectives in the scheduling policy.

When you call an Appointment Booking or Get Candidates action using the Apex API, the custom code before and after the API call can also cause this Apex CPU timeout. We recommend trying to optimize this code and avoid long processing time.

To prevent Apex CPU timeouts during Appointment Booking or Get Candidates actions:

- Enable Enhanced Scheduling and Optimization at least for the territories that get the Apex CPU timeout exception. Enhanced Scheduling and Optimization calculates the time slots in a service outside the Salesforce org where no CPU timeout limits apply.
- Filter out as many candidates as possible using more Database work rules in your scheduling policy. Database rules are applied at the SOQL query clause level. These rules immediately disqualify resources and query only the resources that you need, so performance isn't impacted. The database work rule types include:
  - Match Territory
  - Working Territories
  - Maximum Travel from Home
  - Extended Match
- Reduce the horizon of the Appointment Booking and Get Candidates operations. You can change the horizon per service appointment by decreasing the gap between the Due Date and the Earliest Start Time, or it can be changed for all your users in Field Service Settings under Scheduling in the General Logic tab. Select the maximum days to get candidates or book an appointment.
- For Appointment Booking, reduce the number of time slots in the operating hours used for appointment booking.
- Enable async logic for problematic service appointments by selecting **Use Async Logic** on the service appointment, available when you're not using Enhanced Scheduling and Optimization. Using async logic ensures the Appointment Booking calculation runs in a future job with more CPU time, though the duration to retrieve slots isn't guaranteed. Future jobs run when the platform decides to do so, such that these jobs can be held in the queue for some time. The slots aren't returned in the same transaction. The job creates an FSL operation object that helps get the results when you're using the OOTB FSL actions for Appointments Booking or Get Candidates. If you're using custom code for these actions, some development can be required to enable you to get the slots when using async logic.
- Enable Limit Apex Operations in Field Service Settings, available when you're not using Enhanced Scheduling and Optimization. Limiting Apex operations restricts processing time for the specific scheduling operation, terminating the process when the specified percentage of the timeout limits is reached. The outcome comprises results that have completed processing within the stipulated timeframe. The OOTB UI and API clearly indicate partial processing of results, including the number of service resources completed and the total count of resources involved.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Complex Work in Field Service

To stay on top of complex projects and multistage work, create scheduling dependencies between related service appointments. Scheduling dependencies help you account for situations when technicians need to perform related service appointments in a certain order. For example, ensure that a particular appointment can't start until a related appointment is complete or that two appointments must start at the same time.

## 🜐 This is a Field Service managed package feature.

Watch the video to see how to use scheduling dependencies to stay on top of related service appointments.

#### Watch a video

Get to know the common terms used in complex work.

#### **Scheduling Dependency**

Synonyms: Complex work, multistage work

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Dependencies are the relationships between service appointments that must be followed in order to meet your business needs. Dependencies cover scenarios where appointments happen in a certain order or must be assigned to the same person. You can set up dependencies that ensure appointments happen at the same time, consecutively, or consecutively and immediately one after another.

#### **Dependent appointments**

Synonyms: Group or set of dependent appointments; chain of appointments

Throughout the documentation, dependent appointments refers to the related appointments defined in the Scheduling Dependencies section of a service appointment detail page. It includes the related appointments and the type of dependencies.

### Dependency type

The logic that defines how two appointments are related. For example, Same Start appointments must begin at the same time. The dependency types are:

- Same Start—The appointments must start at the same time.
- Start After Finish—One appointment can't start until the other is complete. Optionally, assign both appointments to the same service resource.
- Start After Finish and Same Day—One appointment can't start until the other is complete. Schedule both appointments for the same day. Optionally, assign both appointments to the same service resource.
- Immediately Follow—Schedule the appointments back-to-back on the same day, and assign them to the same service resource.

#### Set Up Complex Work

Get ready to create scheduling dependencies, also known as complex, or multistage work. Update page layouts, activate dependency types, and turn on complex work for any service territories that aren't using Enhanced Scheduling and Optimization.

#### Create Complex Work

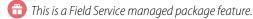
Model complicated realities with scheduling dependencies between appointments. Relate multiple service appointments so that scheduling and optimization can account for the dependencies. Each appointment's parent record must be a work order.

### Considerations and Limitations for Complex Work

In Field Service, scheduling dependencies help you accurately model work that happens in stages, also called multistage work, and other sets of related appointments. Before you create service appointment dependencies, review the considerations and limitations.

# Set Up Complex Work

Get ready to create scheduling dependencies, also known as complex, or multistage work. Update page layouts, activate dependency types, and turn on complex work for any service territories that aren't using Enhanced Scheduling and Optimization.



- 1. To show complex work features, customize the service appointment page layout.
  - a. In the layout editor, open the service appointment page layout.
  - **b.** Add a single-column section to the layout. Name it *Scheduling Dependencies* or something similar.
  - c. Select Visualforce Pages and drag the vf739\_ComplexWork page to the new section.
  - **d.** Click the wrench icon on the Visualforce page to show its properties. Set the height in pixels to *600*.
  - e. Ensure that these fields aren't on the service appointment page layout. These fields were used before complex work was available, and aren't needed. If these fields appear in their own section, remove the section.
    - Time Dependency
    - Same Resource
    - Same Day
    - Related Service
  - f. Save your changes.
- 2. Activate the picklist values for dependency types.
  - a. From the object management settings for appointment dependencies, go to Fields & Relationships.
  - **b.** Select the Dependency field. Activate the dependency values that you want to be available for complex work. Dependency types are:
    - Same Start
    - Start After Finish
    - Start After Finish And Same Day
    - Immediately Follow
- 3. From the object management settings for service appointments, go to Field Sets and click **Complex Work Lookup Fields** to define the lookup fields available for selection when users create dependencies between appointments. By default, the available lookup fields are Account and Parent Object.
- **4.** Enable complex work for service territories that aren't using Enhanced Scheduling and Optimization. If complex work isn't enabled, you can create relationships between appointments, but scheduling operations aren't supported. This step isn't required for service territories using Enhanced Scheduling and Optimization.
  - **a.** From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab.
  - **b.** Click Scheduling > General Logic.
  - c. Under Complex Work, select Enable complex work.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To customize page layouts:

Customize Application

To edit Field Service settings:

 Field Service Admin permission set

- **d.** If you want related service appointments to always be scheduled in the same scheduling operation, select **Use all-or-none scheduling for related appointments**. This setting prevents two service appointments with a dependency between them from being scheduled separately. It doesn't apply to scheduling dependencies with three or more appointments.
- 5. Optionally, to control which fields are shown in the search results, modify the Service Appointments List Columns field set.

# **Create Complex Work**

Model complicated realities with scheduling dependencies between appointments. Relate multiple service appointments so that scheduling and optimization can account for the dependencies. Each appointment's parent record must be a work order.

🜐 This is a Field Service managed package feature.

- 1. On a service appointment's detail page, find the Scheduling Dependencies section.
- 2. From the lookup filter, select an appointment that relates to the appointment that you're viewing. Service appointments with a status that falls within one of the status categories—Canceled, Complete, or Incomplete—aren't shown.
- **3.** Select a dependency type:

Same Start	The appointments must start at the same time.
Start After Finish	The appointment in the First Appointment field can't start until the appointment in the Second Appointment field is complete.
Start After Finish and Same Day	The appointment in the First Appointment field can't start until the appointment in the Second Appointment field is complete. Schedule both appointments for the same day.
Immediately Follow	Schedule the appointments back-to-back on the same day, and assign them to the same service resource.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create scheduling dependencies:

 Edit on service appointments

Note: For dependency types Start After Finish and Start After Finish and Same Day, you can also add a Same Resource dependency.

### 4. Click Create Dependency.

 To add another appointment to the dependency group, select two related appointments, one of which is in the dependency group. Select the dependency type and click Create Dependency.

The service appointment is added to the dependency diagram and the list of appointments.

### Example: Fix a Skylight

A customer reports a leaking skylight that has damaged a section of the ceiling. The support agent creates a work order to address the problem and adds two service appointments: one to fix the skylight (SA-003), and one to repair the ceiling (SA-004). The skylight must be fixed before the ceiling is repaired, so the agent creates a Start After Finish dependency between SA-004 and SA-003. That way, scheduling processes can make sure the ceiling repair appointment starts after the skylight is repaired.

The agent wants the same person to do both assignments, so they select **Assign appointments to the same service resource**. After the agent adds the dependency, it's visible in a diagram and listed in the Scheduling Dependencies section.

Add Depende				
service appoint	e schedulin ments. For intment ca complete.	ng dependencie: r example, ensu an't start until a Second Appoint	re that a related	This service appointment ha no scheduling dependencies
SA-0004	Q	SA-0003	Q	Learn More
Dependency Type	e		~	
Start After Finis	ih			
Assign appoint		e same service resou Dependency	urce	

But the technician can't fix the skylight alone. They need the right glass for the skylight. A second appointment, "Deliver skylight glass" (SA-005) must start at the same time as appointment SA-003 to fix the skylight. So the agent selects the two appointments and chooses the Same Start dependency type. After the agent adds the dependencies, all three appointments are visible in the diagram (1) and the two dependencies are listed in the Scheduling Dependencies section (2).

Add Dependencies				<b>CL 0000</b>
Let users create schedulin service appointments. For particular appointment ca appointment is complete	an't start until a related	-	lone	None
First Appointment	Second Appointment			
Q	٩		1	san
Dependency Type	~			Ļ
1 2 21			· ·	
Start After Finish	e same service resource			SA-0004 None
Assign appointments to the	e same service resource Dependency			
Assign appointments to the				
Assign appointments to the Create D	ependency			
<ul> <li>Assign appointments to the Create D</li> <li>SA-0005</li> </ul>	ependency			

You can now schedule the appointments. Appointments with dependencies can be scheduled in the usual ways—scheduling quick actions, the dispatcher console, and optimization—or by clicking **Schedule Appointments** in the Scheduling Dependencies section.

# Considerations and Limitations for Complex Work

In Field Service, scheduling dependencies help you accurately model work that happens in stages, also called multistage work, and other sets of related appointments. Before you create service appointment dependencies, review the considerations and limitations.

### 🜐 This is a Field Service managed package feature.

When you set up appointments with scheduling dependencies, known as complex work, keep these considerations and limitations in mind.

# **General Considerations**

- If a set of dependent appointments spans multiple service territories, you must select all territories in the optimization request for the appointments to be scheduled.
- To be considered for Same Resource dependencies when you're not using Enhanced Scheduling and Optimization, each service resource must have a single service territory membership. A chain of appointments in complex work can't span different service territory memberships.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

- Pinned service appointments aren't counted in services sent in an optimization request or the number of scheduled services.
- To view a service appointment's related appointments from the Gantt, right-click the appointment and select **Show related**.

## **General Limitations**

- Experience Cloud site dispatchers can access this feature only when using Enhanced Scheduling and Optimization.
- You can't assign capacity-based resources to appointments that are part of an appointment dependency group. Dispatchers can manually drag service appointments to capacity-based resources, but scheduling and optimization don't schedule those appointments. You can manually schedule the appointments.
- The combination of multiday scheduling and complex work isn't supported. If a multiday service appointment is part of a scheduling dependency, its scheduled end date isn't calculated when the appointment is scheduled.

# Complex Work for Service Territories Using Enhanced Scheduling and Optimization

- Scheduling and optimization processes use all-or-none logic to ensure that all appointments in a scheduling dependency are scheduled.
- If one service appointment in a complex work chain is pinned but unscheduled, for example, if it's canceled or waiting for parts, the entire chain can't be scheduled. Pinned and scheduled appointments within this chain remain scheduled.
- If you use the Same Resource dependency option, the assigned service resource must have a valid service territory membership in each territory where the work occurs.
- Service appointments can overlap on the Gantt in these cases.
  - If a dependent appointment is pinned, the scheduling logic looks for time on the Gantt to add the dependent appointments.
     Because the pinned appointment isn't flexible, it can cause overlaps, for example with travel times.
  - If a dependent appointment is pinned and overlapping with an appointment, break, or travel time, complex work doesn't try to schedule the other appointments in the dependency group. The overlap remains.
- Enhanced Scheduling and Optimization supports up to five service appointments in a dependency group. You can create a dependency group with more than five service appointments for dispatchers to manually schedule.
- When a service resource has primary and secondary service territory memberships within different time zones, the Same Day dependency is calculated according to the primary service territory's time zone. Therefore, the engine can schedule service appointments with Same Day dependencies that span over midnight of the secondary service territory's time zone.

- These fields associated with the Service Appointment object don't apply to Enhanced Scheduling and Optimization.
  - Time Dependency
  - Same Resource
  - Same Day
  - Related Service
- If both Enhanced Scheduling and Optimization and the Sliding and Reshuffling option are enabled:
  - When you try to schedule a complex work chain, other appointments can only slide to earlier or later in the day. They can't be reshuffled or dropped.
  - When you try to schedule a high-priority service appointment, scheduled complex work chains can't be reshuffled or dropped, even if they have a lower priority.

# Complex Work for Service Territories Not Using Enhanced Scheduling and Optimization

- Service territories without Enhanced Scheduling and Optimization use all-or-none logic only when you select **Use all-or-none** scheduling for related appointments.
- To be considered for Same Resource dependencies, each service resource must have a single service territory membership. A set of dependent appointments can't span different service territory memberships.
- You can create dependencies between more than two appointments, except for consecutive work. However, when you schedule the appointments, dependencies are enforced for only two appointments at a time, even if you select **Use all-or-none scheduling for related appointments**.
- For dependencies that include more than two service appointments, scheduling and optimization don't guarantee that all the dependent appointments are scheduled. For example, in a set of four dependent appointments, the first two appointments can be scheduled but not the third or fourth.
- Scheduling operations (such as Get Candidates, Book Appointment, or the Schedule action) don't necessarily consider all dependencies in a set of appointments. If some appointments aren't scheduled it can result in rule violations.
- If an appointment in a dependency group with three or more appointments is scheduled, when optimization runs it considers those appointments as pinned. Optimization doesn't schedule, reschedule, or unschedule those appointments.
- Complex work uses point-to-point predictive routing in optimization and uses the most optimistic street-level routing (SLR) travel time in platform scheduling.
- These fields associated with the Service Appointment object are supported only when the Enable complex work setting is disabled. When you're using complex work, we recommend that you enable this setting and use the Appointment Dependencies object.
  - Time Dependency
  - Same Resource
  - Same Day
  - Related Service

# Consecutive Work Considerations and Limitations

You can create consecutive work with the Immediately Follow dependency type. Keep in mind these considerations and limitations.

• Service territories using Enhanced Scheduling and Optimization can use the Immediately Follow dependency type to connect up to five service appointments. In territories that don't use Enhanced Scheduling and Optimization, you can create Immediately Follow dependencies for only two service appointments. You receive an error after adding a third appointment with this dependency type.

- For service territories that don't use Enhanced Scheduling and Optimization, scheduling and optimization doesn't support predictive travel, crews, resource efficiencies, reshuffle actions, fixed gaps, or multiday work with consecutive work appointments.
- Breaks aren't supported, except for service territories that use Enhanced Scheduling and Optimization. In that case, scheduling can insert a lunch break between consecutive appointments.
- If you reschedule consecutive appointments for service territories that don't use Enhanced Scheduling and Optimization, the scheduling logic doesn't consider the second appointment's original slot as an available slot.
- If the first appointment is scheduled successfully but not the second, scheduling and optimization doesn't unschedule the first appointment. This limitation applies in service territories that don't use Enhanced Scheduling and Optimization. In territories that use Enhanced Scheduling and Optimization, scheduling is all-or-none, so all or none of the consecutive appointments are scheduled.
- When you schedule a service appointment with an Immediately Follow dependency for service territories that don't use Enhanced Scheduling and Optimization, the second service appointment's properties are ignored except for Duration, Location, Scheduled Start, and Scheduled End. Instead, optimization uses the properties of the first service appointment in the complex work chain.
- When you manually schedule (drag) a service appointment with an Immediately Follow dependency for service territories that don't use Enhanced Scheduling and Optimization, the second service appointment is automatically scheduled, such that the appointments are back-to-back. When you unschedule a service appointment with an Immediately Follow dependency, the second service appointment is automatically unscheduled. For service territories that use Enhanced Scheduling and Optimization, all complex work is handled the same, regardless of the dependency type. When you manually schedule (drag) or unschedule a service appointment that is part of a complex work chain, it doesn't affect any of the other service appointments in the chain.
- When you're using Enhanced Scheduling and Optimization and a chain has a consecutive work dependency together with a dependency that requires additional resources, some candidates aren't always identified by the engine when you schedule service appointments through scheduling, get candidates, or appointment booking operations.

SEE ALSO:

Complex Work in Field Service Enable Multiday Field Service Appointments

# Book and Schedule Appointments by Using Priorities

Prioritize appointments to schedule them even if your calendar is full. This way, you can schedule important appointments over less urgent ones. When you're using Enhanced Scheduling and Optimization, and no time slot is available, appointments with lower or equal priorities can be unscheduled (dropped) and replaced by higher-priority appointments. When you're not using Enhanced Scheduling and Optimization, and no time slot is available, lower-priority appointments can overlap with higher-priority appointments.

🜐 This is a Field Service managed package feature.

This topic covers:

- How Priorities Work on page 464
- Set Up Priorities on page 465
- Scheduling Prioritized Appointments When Using Enhanced Scheduling and Optimization on page 466
- Scheduling Prioritized Appointments When Not Using Enhanced Scheduling and Optimization on page 466
- Considerations When Scheduling Using Priorities on page 466

# How Priorities Work

Field Service behavior differs depending on the optimization type you're using and the features you've enabled.

ENABLED FEATURES	RESULT	EXCEPTIONS	HOW IT WORKS
<ul> <li>With Enhanced Scheduling and Optimization:</li> <li>Sliding and Reshuffling on page 145</li> <li>Schedule over lower priority appointment</li> </ul>	<ul> <li>When scheduling appointments, the appointments with lower or equal priorities can be dropped from the Gantt.</li> <li>When appointment booking is used, you can be offered slots, that if booked, can drop lower-priority or equal-priority appointments from the Gantt.</li> </ul>	<ul> <li>A service appointment isn't dropped if it:</li> <li>Has a lower or equal priority And</li> <li>Is in a pinned status or is defined as keep scheduled</li> </ul>	<ul> <li>Slide a service resource's appointments on the Gantt.</li> <li>If there's no availability, reshuffle appointments to another day or to another resource.</li> <li>If there's still no availability, search for lower-priority or equal-priority appointments that can be dropped from the Gantt.</li> <li>If a solution wasn't found, the appointment isn't scheduled and no</li> </ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To set up scheduling priorities and customize the service appointment page:

• FSL Admin custom permission set

To schedule from the dispatcher console: One of these custom permission sets:

- FSL Admin Permissions
- FSL Agent Permissions
- FSL Dispatcher Permissions

ENABLED FEATURES	RESULT	EXCEPTIONS	HOW IT WORKS
			changes are made to the Gantt.
			If an appointment can be scheduled but the overall schedule is of a lower quality, based on your scheduling policy's objectives on page 152, the appointment won't be scheduled.
Without Enhanced Scheduling and Optimization: Schedule over lower priority appointment	When scheduling appointments or using get candidates, appointments with higher priorities can be booked over appointments with lower priorities, causing an overlap.	If a service appointment has a lower priority and is in a pinned status, it isn't dropped from the Gantt and a higher-priority appointment isn't booked over it.	Lower priority appointments are ignored, leading to possible overlaps.

## Set Up Priorities

If you have just a few urgent appointments, you can use priorities with scheduling actions, such as Get Candidates, Book Appointments, or Schedule. Identify what drives your priorities first. Then you're ready to configure Field Service so that scheduling actions can prioritize visits.

- **1.** Specify a priority field.
  - a. From the App Launcher, find and select Field Service Admin.
  - b. Click the Field Service Settings tab.
  - c. Under Scheduling, click General Logic.
  - **d.** Under Scheduling Priority, select a priority field. You can select one or more fields on service appointments, work orders, and work order line items.
  - e. Assign a fixed priority. For example, the managed package provides the Scheduling Priority field on parent work orders and work order line items. By default, Scheduling Priority values are 1 to 4, where 1 is Critical and 4 is Low.
  - **f.** Create a dynamic priority field by using a custom formula field. For example, create a formula that sets appointment priorities based on the difference between today's date and the due date.

Scheduling and optimization looks at the service appointment priority field first. If that field isn't defined or empty, the appointment's priority is derived from the field on the parent work order or work order line item.

**2.** Select a priority scale.

The default priority range is a 1 to 10 scale, where 1 is the highest priority and 10 is the lowest priority. The 1 to 10 scale works well for most priority cases, but we recommend using the 1 to 100 scale, especially if your use case requires a broad range of values. Go to

Field Service Settings > Scheduling > General Logic in the Field Service Admin app, and select the optional 1 to 100 scale.

Field Service supports only whole numbers such that decimal points are ignored when calculating priorities. For example, 3.94 is considered as 3. Any number above the priority range is considered as lowest priority.

3. Customize the service appointment page layout, and add the **Schedule over lower priority appointment** field. If you aren't using Enhanced Scheduling and Optimization and you enable this option, scheduling actions can schedule service appointments at the same time as lower-priority appointments that are already scheduled, creating an overlap. If a lower-priority service appointment is in a pinned status, other appointments aren't scheduled over it, and there's no overlap. If you're using Enhanced Scheduling and Optimization, enable Reshuffling and Sliding. Low-priority appointments are dropped instead of overlaps occuring.

## Scheduling Prioritized Appointments When Using Enhanced Scheduling and Optimization

- 1. Enable Sliding and Reshuffling on page 145.
- 2. Open the appointment and select Schedule over lower priority appointment.
- 3. Click Schedule, or Reschedule if the appointment is already scheduled, or if the appointment isn't scheduled, click Book Appointment.
- 4. If an appointment is dropped from the Gantt, schedule the appointment at a later time.

## Scheduling Prioritized Appointments When Not Using Enhanced Scheduling and Optimization

- 1. Open the appointment and select Schedule over lower priority appointment.
- 2. Click Schedule or Get Candidates.
- **3.** If a higher-priority appointments are scheduled over lower-priority appointments, use scheduling recipes or in-day optimization to resolve overlaps.
- Example: To schedule an urgent break-fix when the Gantt is full, create a work order and set its priority to 1. Open the related service appointment, and click Schedule over lower priority appointment. Then, in the dispatcher console, select the critical break-fix appointment from the appointment list and schedule the appointment. If scheduling succeeds, the lower-priority appointment is dropped from the Gantt so that the higher-priority appointment can be scheduled (added to the Gantt).

## Considerations When Scheduling Using Priorities

Before you use priorities to book or schedule appointments, review the considerations.

- If you're using Enhanced Scheduling and Optimization, when scheduling considers slots for the appointment, it ignores the Schedule over lower priority appointment field for already scheduled appointments. If you don't want appointments to be dropped, use the Keep Scheduled criteria. When you're not using Enhanced Scheduling and Optimization, scheduled appointments that have Schedule over lower priority appointment enabled, aren't scheduled with an overlap even if they are a lower priority than the appointment being scheduled.
- When you have many high-priority appointments to schedule, use In-Day or Global optimization. Optimization considers priority fields and reschedules lower priority appointments if possible. Optimization doesn't use the Schedule over lower priority appointment field. See Optimize Field Service Appointments Using Priorities.
- If a service appointment with priority 2 has a 30-minute travel time and you can schedule 2 appointments with priority 32 and a 5-minute travel time (assuming all service appointments have a duration of 15 minutes), the engine prefers the two low-priority appointments because their combined priority is higher. For an appointment to unschedule two or more appointments, it must have a priority that is higher than the sum of all other appointment priorities. For example, one service appointment with priority 2 is equivalent to Enhanced Scheduling and Optimization priority 99, and two service appointments with priority 32 are equivalent to priority 69 + 69 = 138. The engine sums the priority of the two service appointments, and because it's higher than the priority of the single high-priority service appointment, it schedules the two low-priority service appointments.
- If a higher-priority appointment overlaps with a lower-priority appointment, the appointment is ignored in travel calculations. This means that travel time from the last appointment or home base and travel time to the next appointment or home base is calculated using the location of the higher-priority appointment.

- If both Enhanced Scheduling and Optimization and the Sliding and Reshuffling are enabled:
  - When you try to schedule a complex work chain, other appointments can slide only to earlier or later in the day. The appointments can't be reshuffled or dropped.
  - When you try to schedule a multiday service appointment, it can slide only to earlier or later in the day. Multiday appointments can't be reshuffled or dropped.
  - When you try to schedule a high-priority service appointment, scheduled complex work chains can't be reshuffled or dropped, even if they have a lower priority.
  - When you try to schedule a high-priority service appointment, multiday service appointments can't be reshuffled or dropped, even if they have a lower priority.

#### SEE ALSO:

Set Up Sliding and Reshuffling for Scheduling and Appointment Booking Optimize Field Service Appointments Using Priorities Manage Field Service Scheduling Overlaps

## Schedule Emergency Appointments

In Field Service, swiftly schedule, dispatch, and track emergency appointments with the help of a real-time map view. The Emergency Chatter action on a service appointment shows a map view of your closest field resources so that you can dispatch work immediately.

🜐 This is a Field Service managed package feature.

## Schedule an Emergency Appointment

- From any standard or custom object record, click the **Emergency** action in the Chatter feed. If you don't see the action, ask your admin to add it to the page layout.
- Select a work type, address, and service territory, and click **Emergency Dispatch** to generate a list of available service resources and display a map of your team. Click a resource on the map to see:
  - Their route to the emergency service and ETA.
  - The data (breadcrumb) that their location is based on. The *Last known location validity* field in the emergency booking settings controls the location logic.
  - A **Dispatch** button, which assigns the appointment to them.
- If you're having trouble finding a candidate, select a different scheduling policy directly on the map or modify your emergency booking settings.
- If you want a candidate to complete their current appointment before heading to the emergency appointment, change the dispatcher setting on the map from "as soon as possible" to "after current Service Appointment". Changing this setting updates the candidates' ETA.



- Click **Candidates** to view a list of all candidates organized by ETA. Hover over a resource name in the list to see options to dispatch them or view them on the map.
- Quickly spot emergency appointments in the Gantt by looking for the lightning icon.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Customize Emergency Booking Settings

From the App Launcher, find and open the **Field Service Admin** app, and then click **Field Service Settings**. Then, click **Global Actions** > **Emergency Wizard**.

Setting Name	Description
Emergency scheduling policy	The default policy that is used to find resources to assign to an emergency appointment. We recommend using an Easy policy with softer rules to ensure that more candidates are returned.
Last known location validity	The number of minutes after which a data breadcrumb—like resource location or geolocation—is no longer valid. For example, if the breadcrumb validity is 20 minutes and the Last Known Location of resource X was last updated 30 minutes prior, the emergency dispatcher calculates the resource's ETA based on the location of the last appointment they completed, or (if no appointments were completed that day) their home base. The home base is the resource's service territory member address, or if not applicable, their service territory address.
ldeal availability grade Good availability grade	<ul><li>The grading of candidates, which is color-coded. In the breadcrumbs example:</li><li>Resources who can reach the appointment in less than 30</li></ul>
	<ul> <li>minutes are ideal candidates.</li> <li>Resource who can reach the appointment between 30 and 60 minutes are good candidates.</li> <li>Resources who can reach the appointment after 60 minutes are bad candidates.</li> </ul>
Emergency search timeframe	The amount of time you have to resolve the emergency, not counting the appointment duration. The <i>Earliest Start</i> <i>Permitted</i> on the appointment is set to the current time, and the <i>Due Date</i> is the current time + appointment duration + Emergency Search Timeframe. For example, if an appointment requires 1 hour of work and the Emergency Search Timeframe is 360 minutes (6 hours), the emergency wizard shows only resources who can travel to and complete the task in the next 7 hours.
Allow Chatter post	In an emergency appointment dispatch, the dispatcher is shown the option to make a custom Chatter post or not post at all. If this option isn't selected, no Chatter post is made.
Emergency Chatter Post Destination	Choose whether the Chatter post notifying the assigned resource about the appointment is added to the appointment's feed or its parent record's feed.
Pin After Dispatch	Pin the appointment after it is dispatched.

## Considerations and Limitations

Review these limitations and considerations.

- Emergency Dispatch uses the service resource's Last Known Location to calculate the appointment's travel time as long as it is within the Last known location validity time frame. Travel time to the appointment is calculated using Real-Time Travel (provided by Google) and the schedule is based on this travel time. After you dispatch an appointment the ETA is updated according to the last service appointment location, or according to the resource's home base (if no appointments are scheduled on that day before the Emergency appointment). Travel time is calculated using the travel time calculation preferences set in the Routing section of Field Service Settings (aerial, SLR, predictive travel, or point-to-point predictive routing).
- Emergency service appointments don't consider status transitions when their status is changed to any status in the Dispatched status category.
- The Emergency Chatter action doesn't support multiday service appointments, bundled service appointments, or service appointments with a scheduling dependency.
- The emergency wizard shows a maximum of 25 candidates.

#### SEE ALSO:

Customize Field Service Appointment Chatter Settings Service Appointment Fields for Field Service

# Schedule Appointments Without Travel

Optimize your mobile workers' schedules for increased productivity by marking service appointments as offsite when jobs can be done remotely, even if an address is specified. For example, remote technical assistance, filling out reports, or renewing health and safety certifications can be done from anywhere. No travel time is added to the schedule if a service appointment is marked as offsite or has no address, or if a resource absence has no address. Enhanced Scheduling and Optimization must be enabled.

#### 🜐 This is a Field Service managed package feature.

- 1. In Setup, go to Field Service Settings and make sure that Field Service Enhanced Scheduling and Optimization is enabled.
- 2. To mark an appointment as offsite, select **Offsite Appointment** on the service appointment record. For orgs created in Spring '23 and earlier you must add the Offsite Appointment field to the Service Appointment page layout.

## 🕜 Note:

- If the Service Resource Availability work rule is configured with Travel From Home or Travel To Home at the expense of work time, and the last appointment of the day is an offsite appointment, scheduling an appointment at any time of the day results in a resource availability rule violation. This rule violation occurs because the appointment's travel time is calculated after the offsite appointment.
- If there's no address on the service appointment or resource absence, or if the service appointment is marked as offsite, the travel time is updated based on the last known location. If the resource absence overlaps with the shift end, optimization uses the resource's home base location to calculate the travel time.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

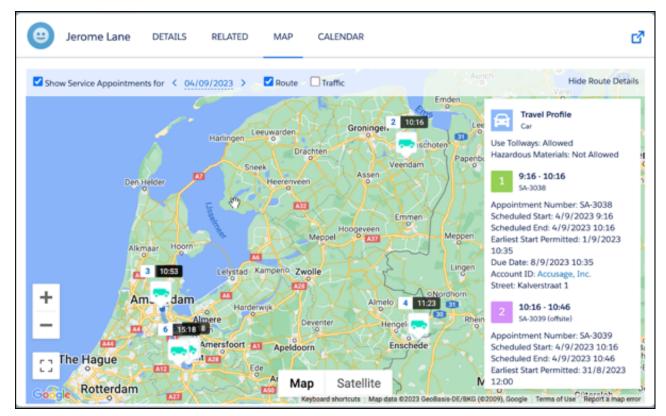
## USER PERMISSIONS

To mark an appointment as offsite:

 Edit on service appointment

AND

Edit on the Offsite Appointment field Example: Before you send out a technician to a remote location, you try to resolve the customer's issue by remote troubleshooting. Mark the appointment as offsite before booking the appointment so that no travel time is calculated for that appointment.



The service resource map view shows the two appointments on the right side of the map marked as offsite, as no travel is calculated to and from these appointments.

Do you want the technician to perform administrative tasks at the end of the day? Before scheduling the appointment, mark the appointment as offsite.

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To highlight the offsite appointments, consider using an icon by populating the Gantt Icon field on the appointment with a URL pointing to an image. If an offsite appointment is the last appointment of the day, travel to the homebase is calculated.

#### SEE ALSO:

Service Appointment Fields for Field Service

# Update a Field Service Appointment's Status

You can schedule or unschedule an appointment by updating its status. An appointment's status can be updated from several places in Salesforce.



🜐 This is a Field Service managed package feature.

## From the Gantt

In the Gantt, select one or more appointments whose status you want to change. To select multiple appointments, hold down Command or Control while clicking the appointments. Then, right-click your selection, hover over **Change status**, and select a new status.

## From a Service Appointment Record

Open a service appointment record or click **Details** on an appointment from the Gantt. From here, you can change the status in two ways:

- From the Feed tab, click the Change Status Chatter action and select a status. Only status values that are permitted in your service appointment life cycle settings are shown.
- Manually update the appointment's Status field. All status values are shown, but the status change works only if it follows your service appointment life cycle settings.

## From a Scheduled Job

The Auto Dispatch scheduled job allows the automatic dispatch of assigned appointments. It changes the status of the chosen appointments from Scheduled to Dispatched.

To modify this job, from the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings. Then, click Dispatch > Scheduled Jobs.

SEE ALSO:

Service Appointment Fields for Field Service Auto-Dispatch Service Resources

# **Unschedule Field Service Appointments**

Unschedule service appointments from the dispatcher console or a service appointment record.

🜐 This is a Field Service managed package feature.

When a service appointment is unscheduled, it's removed from the Gantt and its assigned resources are removed. Status transitions are ignored when you delete an assigned resource or unschedule service appointments from the Gantt. You can unschedule an appointment in the following ways.

- Delete the service appointment. •
- Delete the assigned resource record. •
- From a service appointment details page, edit the Status field to the value shown for New Service Appointment in the managed package Field Service Settings > Service Appointment > Service Appointment Life Cycle > SA Status.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- In the dispatcher console appointment list, select one or more appointments. In the mass actions menu, select **Unschedule**.
- In the Gantt, right-click an appointment and select **Unschedule**. To select multiple appointments, hold down Control or Command while clicking appointments. Unscheduling an appointment from the Gantt is the same as deleting the assigned resource record.
- From a service appointment details page, update the Status field to None.
  - Note: Deleting the assigned resource record associated with a service appointment, or unscheduling a service appointment from the Gantt causes the service appointment status to switch to the **None** default value shown for New Service Appointment in the managed package **Field Service Settings** > **Service Appointment** > **Service Appointment Life Cycle** > **SA Status**.

SEE ALSO:

Schedule Service Appointments for Field Service Fix Field Service Scheduling Overlaps

# Reschedule Service Appointments in Field Service

Reschedule service appointments manually or let Field Service do it for you. Review the use cases to gain a better understanding of how the tools differ and which tool best suits your needs.

🜐 This is a Field Service managed package feature.

You can reschedule a service appointment manually.

- Drag it to a free time slot on the Gantt.
- Select arrival windows by using Book Appointment.
- Select appointment scheduling options, organized by service resource by using Get Candidates.

You can let Field Service reschedule appointments for you.

- Move appointments around while prioritizing higher-priority appointments by using Reshuffle.
- Click **Reschedule** in the appointment list mini view. Appointments are rescheduled according to the selected scheduling policy.
- Reschedule multiple appointments (Schedule on Mass) in the appointment list by clicking Schedule. Appointments are rescheduled in order of priority.

Use Cases

Review which scheduling feature to use for each use case.

I WANT TO	WHAT STEPS DO I TAKE?	AVAILABLE FROM	PERSONA
Choose a new arrival window for a service appointment and I don't mind which resource is assigned.	Book appointment	Record feed API	Agent
Review all the scheduling options and choose the service resource to assign without changing any	Get Candidates	Record feed Dispatcher Console API	Agent Dispatcher

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To reschedule an appointment: One of these custom permission sets:

- FSL Admin Permissions
- FSL Agent Permissions
- FSL Dispatcher Permissions

I WANT TO	WHAT STEPS DO I TAKE?	AVAILABLE FROM	PERSONA
existing arrival windows.			
Fit an appointment into a full schedule, while making minimal schedule changes.	Reshuffle	Dispatcher Console API	Dispatcher
I need to quickly find another time or service resource for my appointment and I don't need to choose the window or resource.	Reschedule	Dispatcher Console	Dispatcher
I have many service appointments that I want to schedule simultaneously, and I don't mind which time or resource that is selected.	Schedule on Mass	Dispatcher Console	Dispatcher
I want to manually reschedule a scheduled appointment to a specific resource and time.	Drag	Dispatcher Console	Dispatcher

SEE ALSO:

Schedule Service Appointments for Field Service Optimize a Single Field Service Resource's Schedule Optimize Today's Field Service Schedule What's Available in ES&O

# Reshuffle Service Appointments in Field Service

Fit a service appointment into a full schedule by reshuffling appointments and scheduling higher priority appointments over appointments with a lower priority. Service appointments can move to a time slot within the same shift, to a different shift, or even to a different resource.

#### ${f eta}$ This is a Field Service managed package feature.

**Note:** When Enhanced Scheduling and Optimization is enabled, and reshuffling is defined, the reshuffling is done automatically when scheduling from the dispatcher console on page 452 or booking an appointment from the record feed on page 446.

Use Reshuffle to schedule or reschedule critical appointments even when the Gantt seems to be full. Appointments can move to another day or to another resource. Higher priority appointments take priority over lower priority appointments. In addition, if **Schedule over lower priority appointment** is selected for an appointment, a higher priority appointment can be scheduled on top of a lower priority appointment, creating an overlap.

- 1. To open the dispatcher console, from the App Launcher, find and open the Field Service app, and then click Field Service.
- 2. Find the appointment in the appointment list (or on the Gantt, if it's already scheduled).
- **3.** Right-click the appointment and select **Reshuffle**. This action can reschedule lower priority appointments and reschedule higher priority appointments (though not past their due date) and can cause overlaps in the schedule.

#### SEE ALSO:

Set Up Sliding and Reshuffling for Scheduling and Appointment Booking Book and Schedule Appointments by Using Priorities Reschedule Service Appointments in Field Service Schedule Service Appointments for Field Service

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

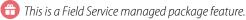
#### USER PERMISSIONS

To reschedule an appointment: One of these custom permission sets:

- FSL Admin Permissions
- FSL Agent Permissions
- FSL Dispatcher Permissions

# Manage Field Service Scheduling Overlaps

To fix scheduling overlaps in Field Service, where one appointment overlaps with another appointment or an absence, use any of several available methods.



## Fix Overlaps Features When Using Enhanced Scheduling and Optimization If you're using Enhanced Scheduling and Optimization, several fix overlaps features are available.

Fix Overlaps Features When Not Using Enhanced Scheduling and Optimization If you're not using Enhanced Scheduling and Optimization, several fix overlaps features are available.

#### Use Cases

Review which feature to use for each use case and whether the feature is available with Enhanced Scheduling and Optimization.

# Fix Overlaps Features When Using Enhanced Scheduling and Optimization

If you're using Enhanced Scheduling and Optimization, several fix overlaps features are available.

- Fix Schedule Overlaps Flow (Beta): Using Salesforce Flow, you can initiate a Resource Schedule Optimization request when an overlap is detected, based on event-driven criteria. The flow identifies and resolves overlaps that occur when a mobile worker finishes an appointment late on the day of service. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.
- Resource Schedule Optimization: Dispatchers can use this feature to reschedule appointments that overlap with other appointments or absences, for one service resource's schedule, on any given date. This feature can schedule additional relevant work and attempt to further optimize a resource's schedule in addition to fixing overlaps. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.
- In-Day Optimization and Global Optimization: When running global optimization or in-day optimization, overlaps are fixed regardless of the status of the Fix Overlaps setting in the scheduling policy. Optimization always attempts to fix overlaps unless service appointments are pinned. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.

# Fix Overlaps Features When Not Using Enhanced Scheduling and Optimization

If you're not using Enhanced Scheduling and Optimization, several fix overlaps features are available.

- Scheduling recipes: This feature provides several configurable, event-driven automations to trigger a Resource Schedule Optimization request. For example, you can create a scheduling recipe that triggers a Resource Schedule Optimization request when an appointment ends late and causes an overlap with another appointment. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.
- Fix overlaps in the Gantt: Dispatchers can use this feature to reschedule appointments that overlap with other appointments or absences, for one service resource's schedule. Overlapping appointments are rescheduled according to your configured settings. For example, choose whether unscheduled appointments are rescheduled in order of priority or keep the original schedule's order. If Field Service can't find a valid schedule for an appointment, you can define whether to put the appointment in jeopardy, unschedule

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To fix overlaps from the Dispatcher Console:

Fix Overlaps

it, or reshuffle other assignments. This feature doesn't schedule any additional work or optimize a resource's schedule. Fixing overlaps in the Gantt isn't available when scheduling recipes are used.

- Fix Overlaps in scheduling policies: If you select **Fix Overlaps** in a scheduling policy, service appointment overlaps are addressed during in-day or global optimization. Scheduling policies reschedule and fix service appointment overlaps for all resources in the optimized territories. Service appointments that overlap with resource absences are ignored. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.
- Resource Schedule Optimization: Dispatchers can use this feature to reschedule appointments that overlap with other appointments or absences, for one service resource's schedule, on any given day. This feature considers the service appointment's priority value, and it can also schedule additional relevant work and attempt to further optimize a resource's schedule in addition to fixing overlaps. If service appointments can't be scheduled due to a lack of availability, higher priority work and other objectives in the scheduling policy determine which service appointments to schedule and which to drop.

# Use Cases

Review which feature to use for each use case and whether the feature is available with Enhanced Scheduling and Optimization.

I WANT TO	WHAT STEPS DO I TAKE?	AVAILABLE WHEN USING ENHANCED SCHEDULING AND OPTIMIZATION	AVAILABLE WHEN NOT USING ENHANCED SCHEDULING AND OPTIMIZATION	PERSONA
Manually fix overlapping appointments directly from the Gantt, causing a minimum amount of changes to the schedule	Fix Overlaps from the Dispatcher Console		✓	Dispatcher
Reschedule appointments that overlap with other appointments or absences, for one service resource's schedule.	Resource Schedule Optimization	✓	✓	Dispatcher
Automatically detect and fix scheduling overlaps on the Gantt.	Fix Schedule Overlaps flow (Beta)	*		Admin
	Fix Overlaps Automatically		*	Admin
	Scheduling Recipes		✓	Admin
Fix overlaps while optimizing the schedule.	Overlaps are always fixed when using enhanced optimization (Global, In-day or Resource Scheduling Optimization).	~		Admin
	If you aren't using enhanced optimization, use the Fix Overlaps option		~	

I WANT TO	WHAT STEPS DO I TAKE?	AVAILABLE WHEN USING ENHANCED SCHEDULING AND OPTIMIZATION	AVAILABLE WHEN NOT USING ENHANCED SCHEDULING AND OPTIMIZATION	PERSONA
	in the scheduling policy.			
Resolve overlaps that occur when a mobile worker finishes an appointment late.	Fix Schedule Overlaps flow (Beta)	~		Admin
	Scheduling recipes		✓	
Resolve overlaps created by emergency appointments.	Resource Schedule Optimization	~	*	Admin
	Scheduling recipes		✓	

SEE ALSO:

- Fix Field Service Scheduling Overlaps from the Dispatcher Console
- Customize Fix Overlap Scheduling Settings
- Optimize Your Field Service Schedule
- Reschedule Service Appointments in Field Service
- Adopt and Implement Field Service Enhanced Scheduling and Optimization

# Fix Field Service Scheduling Overlaps

Fix overlaps that dispatchers made in the Gantt to reschedule appointments that overlap with other appointments or absences. Dispatchers can fix overlaps directly from the Gantt for each resource that has overlaps. You can fix overlaps automatically by enabling the feature in the Field Service Admin app. The Fix Overlaps feature from the Gantt isn't available when using Enhanced Scheduling and Optimization. Automatically fixing overlaps isn't available when Scheduling recipes are used.

🜐 This is a Field Service managed package feature.

If a service appointment overlaps with other appointments or absences, you can use several features to fix the overlaps. See Manage Field Service Scheduling Overlaps.

# Fix Overlaps Manually from the Dispatcher Console

Fix overlaps from the dispatcher console by clicking **Fix Overlaps** in the menu beside the service resource's name in the Gantt

# Fix Overlaps Automatically

 From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Then, click Scheduling > Dynamic Gantt.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To fix overlaps from the Dispatcher Console:

• Fix Overlaps

2. Under Fix Overlaps, enable Automatically fix overlaps when an appointment overlaps with another appointment or absence.

## Considerations

- Fix Overlaps respects the original order of scheduled appointments. The earliest appointment remains the earliest and the last remains last.
- Fix Overlaps reschedules appointments only within the given day. If the operation progresses to use the Reshuffle action, appointments can be rescheduled to another day.
- Fix Overlaps considers only service appointments in the **Scheduled** or **Dispatched** Status Category, except for the service appointment that you move causing the overlap, which can have any status.
- Fix Overlaps doesn't run on past service appointments.
- Fix Overlaps isn't supported for capacity-based resources.
- When Fix Overlaps unschedules and reschedules service appointments from the Gantt, it ignores the settings in the service appointment lifecycle.
- When a service appointment is scheduled by Fix Overlaps, the appointment's Schedule Mode is set to Automatic.
- Automated Scheduling (scheduling recipes) gives an optimized solution for Fix Overlaps scenarios. It allows you to run Resource Schedule Optimization for the day of overlap and fill in new appointments when appointments finish sooner than planned.
- Fix Overlaps doesn't reschedule or unschedule service appointments in pinned statuses (as configured for scheduling) or service appointments marked as pinned. If all of the overlapping service appointments have a pinned status, or their Pinned field is selected, then Fix Overlaps isn't triggered.

#### SEE ALSO:

Manage Field Service Optimization Reschedule Service Appointments in Field Service Manage Field Service Scheduling Overlaps Customize Fix Overlap Scheduling Settings

# Customize Fix Overlap Scheduling Settings

Customize how overlaps are fixed automatically in the Gantt. You can define how rescheduled appointments are assigned and the order in which to reschedule unscheduled appointments. You can also define what steps to take if a valid schedule isn't found.

#### 🜐 This is a Field Service managed package feature.

- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Then, click Scheduling > Dynamic Gantt.
- 2. Under Fix Overlaps, configure the following settings.

Setting	Description
When attempting to fix overlaps	• Schedule to original resource only: Assign rescheduled appointments only to the original assigned resource.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Setting	Description
	• Schedule to all resources: Consider all qualified service resources when rescheduling appointments.
After unscheduling services reschedule them by	Choose whether unscheduled appointments are rescheduled in order of priority or in the original schedule's order.
When unable to find a valid schedule for an appointment	• Leave on Gantt and set In-jeopardy: If an appointment can't be rescheduled without breaking work rules, leave the appointment in its original time slot with an In Jeopardy flag.
	• Unschedule the appointment(s): If an appointment can't be rescheduled without breaking work rules, unschedule the appointment and remove it from the Gantt.
	• Reshuffle other assignments: If an appointment can't be rescheduled without breaking work rules, use the Reshuffle action. This action reschedules appointments to favor high-priority appointments. To learn more, see Reshuffling Service Appointments in Field Service. If the Fix Overlaps feature is in use, the Reshuffle other assignments option is only partially supported for the setting: When unable to find a valid schedule for an appointment. If more than one appointment is dropped from the schedule during a Fix Overlaps operation, only one of the appointments is reshuffled.

SEE ALSO:

- Fix Field Service Scheduling Overlaps from the Dispatcher Console
- Manage Field Service Scheduling Overlaps
- Optimize Today's Field Service Schedule
- Reschedule Service Appointments in Field Service

# Group Nearby Field Service Appointments

One way to minimize travel time or gaps between appointments in Field Service is to use the Group Nearby Appointments action on a service appointment. This feature unschedules appointments scheduled for later that day and replaces them with appointments that are close in location to the source appointment. The Group Nearby Appointments feature isn't available when using Enhanced Scheduling and Optimization.

🜐 This is a Field Service managed package feature.

Enhanced Scheduling and Optimization uses newer and more powerful features, including, Resource Schedule Optimization, In-Day Optimization, and Appointment Bundler.

# Customize Appointment Grouping Settings

- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Then, click Scheduling > Dynamic Gantt.
- 2. Under Group Nearby Appointments, configure the following settings.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Setting	Description
Service Appointment candidate Boolean field	Select any standard or custom checkbox field, including formula fields. This field must be selected (set to True) for an appointment to be a candidate in appointment grouping.
Work Order candidate Boolean field	Select any standard or custom checkbox field, including formula fields. If a service appointment's parent record is a work order, this field must be selected (set to True) for the appointment to be a candidate in appointment grouping.
Work Order Line Item candidate Boolean field	Select any standard or custom checkbox field, including formula fields. If a service appointment's parent record is a work order line item, this field must be selected (set to True) for the appointment to be a candidate in appointment grouping.
Max appointments to schedule	When searching for nearby appointments, the scheduling engine ends its search after finding this many candidate appointments. The maximum is 50 appointments.
Max runtime (seconds)	The scheduling engine spends this many seconds searching for nearby service appointments. The maximum is 60 seconds. The search ends after either the max runtime or max appointments to schedule is reached.
When attempting to schedule the unscheduled service after the nearby services	<ul> <li>Schedule to original resource only: Assign rescheduled appointments only to the original assigned resource.</li> <li>Schedule to all resources: Consider all qualified service resources when rescheduling appointments.</li> </ul>
When unable to arrange schedule	<ul> <li>Leave on Gantt and set In-jeopardy: If an appointment can't be rescheduled without breaking work</li> </ul>

Setting	Description
	rules, leave the appointment in its original time slot with an In Jeopardy flag.
	• Unschedule the appointment(s): If an appointment can't be rescheduled without breaking work rules, unschedule the appointment and remove it from the Gantt.
	• Reshuffle other assignments: If an appointment can't be rescheduled without breaking work rules, use the Reshuffle action. This action reschedules appointments to favor high-priority appointments. To learn more, see Reschedule Service Appointments in Field Service.
Radius for nearby appointments	The radius around the originating service appointment, which determines the number of appointments affected by Group Nearby Appointments. The distance unit—kilometers or miles—is set on the Routing tab in the Scheduling section of Field Service Settings.

After customizing your appointment grouping settings, right-click an appointment on the Gantt and select Group Nearby.

## Considerations

- In order to run Group Nearby Appointments successfully, service appointments must have the same address as their parent work order.
- Group Nearby Appointments uses the parent work orders' latitude and longitude values.
- In Group Nearby Appointments, only unscheduled service appointments can be candidates.
- Group Nearby Appointments only schedules appointments within the given day, which is the first day on the Gantt.
- By default, the Is Fill In Candidate field on service appointments, work orders, and work order line items is selected. This means that all service appointments are considered as candidates when grouping appointments.
- When a service appointment is scheduled by Group Nearby Appointments, the appointment's Schedule Mode is set to **Automatic**.

#### SEE ALSO:

- Manage Field Service Optimization
  Reschedule Service Appointments in Field Service
  Set Up Field Service Appointment Bundling
  Manage Service Appointment Bundling in the Field Service Dispatcher Console
  Optimize Today's Field Service Schedule
- Optimize a Single Field Service Resource's Schedule

# Fill Schedule Gaps in Field Service

Field Service provides many tools to fill gaps in a service resource's schedule. One such tool is the Fill-In Schedule feature, which feature creates a list of appointments for a mobile worker and finds the optimal schedule.

- 🜐 This is a Field Service managed package feature.
  - **Note:** When you're using Enhanced Scheduling and Optimization, the Fill-In Schedule feature isn't available. However, newer and more powerful features are available. These features include Sliding, Resource Schedule Optimization (RSO), and In-Day Optimization.

# Customize Fill-In Schedule Settings

- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Then, click Scheduling > Dynamic Gantt.
- 2. Under Fill-In Schedule, configure the following settings.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Setting	Description
Service Appointment Candidate Boolean field	Select any standard or custom checkbox field, including formula fields. This field must be selected (set to True) for an appointment to be a candidate in fill-in scheduling.
Work Order Candidate Boolean field	Select any standard or custom checkbox field, including formula fields. If a service appointment's parent record is a work order, this field must be selected (set to True) for the appointment to be a candidate in fill-in scheduling.
Work Order Line Item Candidate Boolean field	Select any standard or custom checkbox field, including formula fields. If a service appointment's parent record is a work order line item, this field must be selected (set to True) for the appointment to be a candidate in fill-in scheduling.
Order candidate appointments by	<ul> <li>Priority: Sort candidates based on their priority field, which is set in Scheduling &gt; General Logic . Distance is a secondary consideration.</li> <li>Distance: Sort candidates based on their proximity to the previous appointment, or if it's the first appointment of the day, on their proximity to the mobile worker's home base. After an appointment is scheduled, its location is used to calculate distance. Priority is a secondary consideration.</li> </ul>
Max appointments to schedule	When searching for nearby appointments, the scheduling engine ends its search after finding this many candidate appointments. The maximum is 50 appointments.
Max runtime (seconds)	The scheduling engine spends this many seconds searching for nearby service appointments. The maximum is 60 seconds. The search ends after either the max runtime or max appointments to schedule be reached.

# Considerations

- Fill-In Schedule only schedules appointments for the given day, which is the first day shown on the Gantt.
- By default, the Is Fill In Candidate field on service appointments, work orders, and work order line items is selected. This means that all service appointments are considered as candidates when filling in a schedule.

You might want to limit which appointments are considered as candidates. For example, perhaps repair appointments require a phone booking before a mobile worker is sent to the site. To limit candidate appointments, try one of the following approaches.

- Using Process Builder or an Apex trigger, set the value of the Is Fill In Candidate field to False if specified criteria aren't met.
- Create a checkbox formula field that evaluates whether a record is a candidate. Then, change the three settings that control which fields are evaluated when searching for candidates so that your custom field is considered instead of Is Fill In Candidate.
- If candidate appointments are sorted by distance, appointments without a geolocation are sorted last.
- Only unscheduled appointments or appointments that are scheduled on a future date are considered as candidates.
- When a service appointment is scheduled by Fill-In Schedule, the appointment's Schedule Mode is set to Automatic.

#### SEE ALSO:

Manage Field Service Optimization Reschedule Service Appointments in Field Service Enable Service Appointment Sliding Optimize Today's Field Service Schedule Optimize a Single Field Service Resource's Schedule

# Customize Field Service Appointment Chatter Settings

In Field Service, control whether custom Gantt Chatter posts, dispatch posts, and emergency posts are shared on service appointments or on service appointment parent records.

#### This is a Field Service managed package feature.

The Field Service mobile app's Feed tab is supported for work orders and work order line items, but not for service appointments. This means that app users can't see posts on a service appointment's feed unless they know to navigate to the appointment from its associated work order. Posting Chatter posts to the parent record's feed boosts their visibility for mobile app users.

# Customize Dispatch Chatter Settings

When an appointment's status changes to Dispatched, the assigned resource is notified in a Chatter post. Control where these messages are posted.

- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatch > Scheduled Jobs.
- 3. In the Dispatch Chatter Post Destination field, select Service Appointment Feed (the default option) or Parent Record Feed.
- 4. Save your changes.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Customize Emergency Chatter Settings

When a service resource is assigned to an emergency service appointment, they're notified in a Chatter post. Control where these messages are posted.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Global Actions > Emergency Wizard.
- 3. In the Emergency Chatter Post Destination field, select Service Appointment Feed (the default option) or Parent Record Feed.
- 4. Save your changes.

# Customize Gantt Chatter Settings

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. Control where these messages are posted.

Note: To access Chatter from the Gantt, feed tracking must be enabled for the Service Appointment object. See Customize Chatter Feed Tracking.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatcher Console UI.
- 3. In the Gantt Chatter Post Destination field, select Service Appointment Feed (the default option) or Parent Record Feed.
- 4. Save your changes.

Note: To turn on in-app notifications for mobile app and Lightning Experience users, see Enable Field Service.

SEE ALSO:

Chatter in the Field Service Mobile App Schedule Emergency Appointments

# **Dispatch Field Service Appointments**

Dispatch scheduled service appointments to your mobile workers. You can dispatch appointments from the console, or set up jobs that automatically dispatch or drip feed the next appointments.

#### Auto-Dispatch Service Resources

Set up scheduled jobs that dispatch your resources auto-magically in Field Service.

#### Drip Feed Field Service Appointments

Dispatch appointments to your mobile workers at a steady pace. When your schedule changes frequently, drip feed helps to prevent confusion because it waits to dispatch another appointment until the current one is complete.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Auto-Dispatch Service Resources

Set up scheduled jobs that dispatch your resources auto-magically in Field Service.

- This is a Field Service managed package feature.
- From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatch.
- **3.** Optionally, click **Drip Feed** and set up drip feed dispatching. Drip feed waits and dispatches another appointment after the current appointment is complete.
- 4. Click Scheduled Jobs.
  - **a.** Select the option to mention assigned resources when they're dispatched for an appointment. This option isn't supported when dispatching a service appointment using an automated process user.
  - **b.** Select the Chatter feed where the mention should appear.
  - c. Edit the provided Auto Dispatch job, or create one.
  - **d.** Select territories that the job should use in dispatching service resources to appointments. The job dispatches resources based on service territory memberships, not territories of service appointments. A job considers primary and relocation service territory memberships.
  - e. Create a schedule when the job runs.
  - f. Set filter criteria that selects which service appointments to consider.
  - g. Set a job horizon; that is, the number of days in advance to dispatch.
  - Enter a username that's notified when the job runs.
     Field Service replaces this username with the corresponding user's email.
  - i. Click Save.
- 5. Optionally, select the job and click **Run now**.

When the job runs, it changes the status of the dispatched appointments from Scheduled to Dispatched. If you customize statuses for the service appointment lifecycle, the job changes status from the Service Appointment is tentatively scheduled setting to the status for the Service appointment is sent to its resource setting.

Example: Create a job that runs daily at 6AM and dispatches resources in Los Angeles for appointments that are In Jeopardy. The job dispatches resources with a primary or relocation service territory membership of Los Angeles for the selected In Jeopardy appointments.

SEE ALSO:

Drip Feed Field Service Appointments Customize the Field Service Appointment Life Cycle **EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To set up a job for dispatching:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher
   Permissions

# Drip Feed Field Service Appointments

Dispatch appointments to your mobile workers at a steady pace. When your schedule changes frequently, drip feed helps to prevent confusion because it waits to dispatch another appointment until the current one is complete.

🜐 This is a Field Service managed package feature.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatch.
- 3. Click Drip Feed and turn on drip feed dispatching.
  - Note: For drip feed dispatching, the service appointment can be in any status except for Completed, Cannot Complete, or Canceled. And, the status must allow the transition to the status set in Field Service Settings for the Service Appointment is sent to its resource setting.
- 4. Set the default number of appointments to drip feed.
  - Note: When you want a service territory to use a different drip feed rate, set the value in a field on that territory. A drip feed setting on a service territory overrides the default value.

For example, if the value is set to two, drip feed tries to maintain two appointments in each worker's queue. When the first appointment completes, drip feed dispatches another. Drip feed is triggered to dispatch another appointment only if a Dispatched or In-Progress appointment in the queue is Canceled, Completed, or Cannot Complete.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To set up drip feed dispatching: One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

5. Click Scheduled Jobs, and create a job that dispatches appointments using your drip feed settings. All scheduled jobs respect drip feed settings and don't dispatch more appointments if doing so exceeds the drip feed value. If you disable drip feed, edit scheduled jobs so that dispatching works the way you want.

#### SEE ALSO:

Auto-Dispatch Service Resources

# Manage Service Appointment Bundling in the Field Service Dispatcher Console

Service appointment bundling lets you group multiple service appointments that make sense to be performed together and to define them as one unit, called a bundle. For example, you can bundle several visits at the same customer location or utility meter readings—or package deliveries—at an apartment complex. By creating and scheduling a bundle, you can make sure the component appointments, called bundle members, are scheduled, rescheduled, and executed together as one unit.

Learn how to manage bundles from the dispatcher console or how to Set Up Automatic Bundling.

#### Create a Field Service Bundle Manually

Create a bundle manually in the Field Service Dispatcher Console.

Schedule a Field Service Bundle

After you bundle service appointments, then schedule the bundle appointment to a service resource.

#### Add Members to a Field Service Bundle

After bundling appointments together, you can still add appointments as bundle members to a bundle from the Field Service dispatcher console.

#### View or Modify a Field Service Bundle

To view, remove, or modify appointments that are members of a bundle appointment, access the details of a bundle from the appointment list in the Field Service dispatcher console.

Unbundle a Field Service Appointment Bundle

After bundling appointments together, you can unbundle the appointments so that each appointment can be scheduled separately.

# Create a Field Service Bundle Manually

Create a bundle manually in the Field Service Dispatcher Console.

1. In the appointment list, select up to 200 service appointments that you want to bundle together. Make sure to select only service appointments that aren't already in a bundle.

The service appointments must be on the same day, can't have any scheduling dependencies and can't be pinned. See Appointment Bundling Limitations.



**Note:** To verify that you're selecting only service appointments that aren't in a bundle, apply the Exclude Bundle Members filter.

2. From the global actions list, select Bundle.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## **EDITIONS**

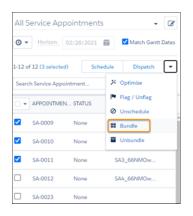
Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **USER PERMISSIONS**

To manage bundles:

• Field Service Dispatcher



3. In the Bundle Appointments window, select Create bundle and select a bundle policy.

11	iervice Appoints	nents							1
	SA Number 4	Duration in Minutes	Address	Early Start	Due Date	Work Type	Account	Required Skills	
2	SA-0202	60		11/25/2022 4:18 AM	2/25/2023 4:18 AM				
	to Rundle	Add to Politic	a Dunda						
_	te Bundle	Add to Existin	ng Bundle						,
_	*Bundle Policy		1						
_			1						

- 4. Save the bundle. The bundle is created only if all the service appointments comply with the configuration settings. If you receive an error for any service appointment, remove it or change its details and try again.
- 5. To make the bundle eligible for multiday scheduling, select IsMultiday in the bundle service appointment.

When a bundle is created:

• Appointment list—The new bundle service appointment appears in the appointment list.

**I**Indicates that the appointment is a bundle service appointment. When the bundle is scheduled, the icon also appears on the Gantt.

- Indicates that the appointment is a bundle member service appointment.
- Gantt—If all the service appointments in the bundle are scheduled, assigned to the same resource, and on the same day, the bundle is scheduled on the Gantt. If not, the bundle must be scheduled.
- Bundle tab of the bundle service appointment's details window—If an Appointment Bundle Sort Policy is defined, the service appointments are sorted according to the policy. If an Appointment Bundle Sort Policy isn't defined, the service appointments are sorted according to their due date in ascending order.
- Service Appointments tab—Shows the bundle information related to each bundle service appointment and bundle member service appointment. This information can't be edited.

•			All 🔻 🔍 Search		
Field Service	Home Reports 🗸	Field Service Acco	unts 🗸 Work Orders 🗸	Service Appointments $$	Service Resources 🗸
Service Appointment SA-0015	7 A 9400 - 700617	/////sz/11/- Z		- Dilliger - TEXS-2713C	
Owner	Account	Parent Record 00000015	Work Type Work Type_hd6K66LJSrDkjQT	Status None	Arrival Window Start 11/23/2021 8:00 AM
Related Details	Insights				
> General Information					
> Scheduled Times					
> Actual Times					
> System Information					
✓ Bundler Information					
Related Bundle SA-0025				Manually Bundled	
Bundle Member				Bundle	

The Bundle Information fields can't be selected to display in a list view. See Appointment Bundling Limitations

# Schedule a Field Service Bundle

After you bundle service appointments, then schedule the bundle appointment to a service resource.

You can schedule bundle appointments by using any standard scheduling method, such as drag-and-drop scheduling from the dispatcher console Gantt, schedule actions, Get Candidates, Appointment Booking, or optimization. You can't schedule individual bundle member service appointments. Instead, you schedule the bundle appointment itself. This is the job that gets scheduled to a resource, with the bundle member service appointments as related entities.

Use the Exclude Bundle Members filter to view only bundle service appointments on the dispatcher console Gantt. Filtering lets you focus on scheduling bundle appointments without being distracted by bundle member appointments.

Note: You can create custom filters according to your organization's needs. If you want to create custom filters related to bundles, ask your Salesforce admin to add the Bundle and Bundle Member fields to the Field Sets on the Service Appointment object. You can then use these fields in criteria for custom filter views with the dispatcher console.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To manage bundles:

• Field Service Dispatcher

# Add Members to a Field Service Bundle

After bundling appointments together, you can still add appointments as bundle members to a bundle from the Field Service dispatcher console.

- 1. To go to the Field Service dispatcher console, click the **Field Service** tab.
- 2. In the appointment list or on the Gantt, select one or more service appointments that you want to add to a bundle.

The service appointments must be on the same day, can't have any scheduling dependencies, and can't be pinned. See Appointment Bundling Limitations.

- **3.** From the global actions in the appointment list, select **Bundle**. Or, if you're selecting appointments on the Gantt, right-click the appointments and select **Bundle**.
- In the Bundle Appointments window, select Add to existing bundle and then select a bundle.
   If the selected bundle is pinned, you can't add bundle members to it.

5 5	Service Appointn	nents							
~	SA Number ↓	Duration in Minutes	Address	Early Start	Due Date	Work Type	Account	Required Skills	s
~	SA-0053	360		8/29/2023 9:33 PM	9/28/2023 9:31 PM	WorkType E	Salesforce	Fix	
~	SA-0055	360		8/29/2023 9:35 PM	9/28/2023 9:31 PM	WorkType	Salesforce	Check	
~	SA-0057	360		8/29/2023 9:37 PM	9/28/2023 9:31 PM	WorkType	Salesforce	Check	
~	SA-0063	360		8/29/2023 9:43 PM	9/28/2023 9:31 PM	WorkType	Salesforce	Maintenance	
~	SA-0065	360		8/29/2023 9:45 PM	9/28/2023 9:31 PM	WorkType E	Salesforce	Destroy	
rea	te Bundle	Add to Existin	ng Bundle	_					
S	earch bundle se	rvice appointments	Search	Clear					
	SA Number ↓	Duration in Minutes	Address	Early Start	Due Date	Work Type	Account	Required Skills	
0	SA-0101	360		8/29/2023 9:31 PM	9/28/2023 9:31 PM			Maintenance	

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To manage bundles:

• Field Service Dispatcher

#### 5. Save the bundle.

If the bundle service appointment and members are already scheduled, adding a bundle member unschedules the bundle. This is because the backend bundling logic needs to consider new variables with the additional members, such as added duration, skill requirements, or other factors. When you reschedule the bundle appointment, the backend logic recalculates the bundle service appointment attributes based on configured bundle policies, aggregation policies, and more.

# View or Modify a Field Service Bundle

To view, remove, or modify appointments that are members of a bundle appointment, access the details of a bundle from the appointment list in the Field Service dispatcher console.

- 1. To go to the Field Service dispatcher console, click the Field Service tab.
- **2.** To identify bundle appointments on the Gantt, look for a package icon near the appointment in the appointment list or on resource schedules.
- 3. From the appointment list or the Gantt, select a service appointment, and click Edit.
- 4. Open the **BUNDLE** tab.

If this service appointment is a bundle appointment, the BUNDLE tab lists all the bundle member service appointments.

A-0211	SERVICE AF	PPOINTMENT BUNDLE	WORK ORDER RELAT	TED		
Bundle	Members					Remove Members Refresh
	ACTION	APPOINTMENT NUMBER	DURATION IN MINUTES	WORK TYPE	ACCOUNT	STREET CITY REQUIRED SKILLS
1	Edit   Remove	SA-0082	3.00	WorkType_wxTkUOaStPfOsBS		
2	Edit   Remove	SA-0083	3.00	WorkType_wxTkUOaStPfOsBS		
3	Edit   Remove	SA-0084	3.00	WorkType_wxTkUOaStPfOsBS		
4	Edit   Remove	SA-0085	3.00	WorkType_wxTkUOaStPfOsBS		
5	Edit   Remove	SA-0086	3.00	WorkType_wxTkUOaStPfOsBS		
6	Edit   Remove	SA-0087	3.00	WorkType_wxTkUOaStPfOsBS		

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **USER PERMISSIONS**

To manage bundles:

Field Service Dispatcher

If this service appointment is a bundle member, the BUNDLE tab shows the details of the bundle service appointment and lists the additional bundle member service appointments.

-0001	SERVICE AP	POINTMENT	BUNDLE	WORK ORDER	RELATED					
										Refresh
Ƴ Bu	ndle									
	Appointment Nu	mber SA-0298				Duration in Minutes	240.00			
		Street				City				
	Earliest Start Per	mitted 6/17/20	21 10:00 AM			Due Date	7/6/2021 6:0	0 PM		
	Wor	k Type				Account				
Additio	onal Bundle N	lembers								
Additio	ACTION	APPOINTMEN	T NUMBER	DURATION IN MINU	ITES WO	RK TYPE	ACCOUNT	STREET	CITY	Remove Members
			T NUMBER	DURATION IN MINU 120.00		RK TYPE rkType_cjDMTJS7FLxphPq	ACCOUNT	STREET	CITY	

#### 5. To change the details, click Edit.

You can only schedule a bundle service appointment, not a bundle member service appointment. Therefore, in the SERVICE APPOINTMENT tab of a bundle member service appointment, you can't edit the start and end times or change the status to Scheduled.

6. To remove a bundle member, click **Remove**, or select multiple bundle members and click **Remove Members**.

If the bundle is pinned, you can't remove bundle members.

If you need to change bundle member service appointments, we recommend that you unbundle the Bundle appointment, edit the service appointments that were bundle members, and then rebundle the appointments. Bundling again allows backend logic and calculations to rerun so that the Bundle appointment is created with the correct duration and skill requirements, defined by appointment bundle aggregations.

Bundle members in the Canceled status and bundle members with scheduling dependencies are automatically removed from the bundle. If you want the status of the removed bundle members to remain Canceled, in the Appointment Bundle Config, take both of these actions:

- Bundle Statuses to Propagate—If the list is empty, leave it empty. If statuses are already in the list, add the Canceled status.
- Bundle Member Statuses not to be Propagated—Add the Canceled status to the list.

SEE ALSO:

Create an Appointment Bundle Config

# Unbundle a Field Service Appointment Bundle

After bundling appointments together, you can unbundle the appointments so that each appointment can be scheduled separately.

- 1. To go to the Field Service dispatcher console, click the Field Service tab.
- 2. In the appointment list or on the Gantt, select one or more bundle service appointments.
- 3. From the global actions, select Unbundle.
- Note: When a bundle appointment is scheduled or dispatched to a service resource, you don't need to, and we don't recommend that you unbundle the appointment for the service resource to see or update status details or other information for each bundle member appointment. Instead, the service resource can manage bundled service appointments on the Field Service Mobile App.

When you unbundle a bundle, all bundle member service appointments become regular service appointments and can be scheduled individually.

You can't unbundle pinned bundles. To unbundle a pinned bundle, first unpin it.

# Results of Unbundling a Bundle

When you unbundle a bundle, pay attention to the following behavior.

- The bundle service appointment is deleted.
- The bundle members appear as individual service appointments in the appointment list.
- If the bundle is scheduled, the bundle members remain on the Gantt as individual service appointments.
- If the bundle is scheduled and an appointment bundle sort policy of type Sort Within a Bundle is defined, the service appointments are scheduled according to the policy. If a policy of this type isn't defined, the service appointments are scheduled according to their due date in ascending order.
- If the bundle is scheduled, and an appointment bundle aggregation duration downscale policy is defined, each service appointment in the bundle gets its slot on the Gantt according to the following formula: (original bundle member duration ÷ original total duration of all the bundle members) × duration of the bundle after the downscale.

For example:

- 1. Three 60-minute service appointments were bundled.
- 2. According to the appointment aggregation duration downscale policy used in the bundle policy chosen when you bundled the appointments, the duration of the bundle members from the second bundle member was reduced by 10% to 54 minutes each. We now have a bundle with a duration of 168 minutes. The downscaled duration is visible only in the bundle's duration, not in the bundle members' duration.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To manage bundles:

• Field Service Dispatcher

- 3. The bundle was scheduled.
- 4. The bundle was unbundled.
- 5. The three service appointments remain on the Gantt at the scheduled time with 56 minutes each according to this calculation:  $(60 \div 180) \times 168 = 56$ .

# Manage Your Field Service Inventory

Stay on top of the movement of inventory in your field service operation. Learn how to request and transfer products, track consumption, and process customer returns.

#### Common Field Service Inventory Management Tasks

Learn how to perform everyday tasks in field service inventory management.

#### Track Required Inventory in Field Service

If a work order needs to be completed by a carpenter with a hand saw, don't assign it to an electrician with a voltmeter! Add *products required* to work types, work orders, and work order line items to ensure that the assigned service resource arrives with the right equipment.

#### Request Inventory in Field Service

When your stock gets low or you need a part for a particular work order, create a *product request*. Product requests can be associated with work orders, work order line items, cases, and accounts. You can specify when and where the parts are needed, and divide the request into line items that each represent a needed part.

#### Transfer Inventory in Field Service

To fulfill a product request, create a product transfer. Product transfers track the movement of inventory from one field service location to another. The inventory numbers at your storage locations update automatically to reflect transfers.

#### Track Inventory Consumption in Field Service

Create *products consumed* to track the use or consumption of items from your inventory.

#### Track Inventory Shipments in Field Service

To track product items while they're in transit between locations, create shipments. Shipments contain information about the products on board, the shipping carrier, and the expected delivery date.

#### Track Customer Returns in Field Service

Create return orders to facilitate the return and repair of items that were sold to customers or supplied to field service workers.

SEE ALSO:

Set Up Your Field Service Inventory

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Common Field Service Inventory Management Tasks

Learn how to perform everyday tasks in field service inventory management.

For more detailed step-by-step instructions, refer to the provided links.

I Want To	How To Do It	Example
Track the quantity of a particular product stored at a particular location	Create a product item record associated with the product and the location, and specify the quantity stored there. Helpful links: • Create Product Items to Represent Inventory	To track the number of wheelbarrows stored at Warehouse B, create a product item whose Location is Warehouse B and Product is Wheelbarrow.
Find out what's in a particular location's inventory	<ul> <li>Look at the Product Items related list on the location record.</li> <li>Helpful links:</li> <li>Create Inventory Locations for Field Service</li> </ul>	To find out what is stored in Warehouse A, look at the Product Items related list on the Warehouse A location record.
Find out the quantity of a particular part across all inventory locations	<ul> <li>Look at the Product Items related list on the product record.</li> <li>Helpful links:</li> <li>Create Product Items to Represent Inventory</li> </ul>	To learn the number of wheelbarrows in your inventory and their locations, look at the Product Items related list on the Wheelbarrow product record.
Review changes to the stock of a particular product at a particular location	Look at the Product Item Transactions related list on the product item. Helpful links: • Guidelines for Transferring Inventory	To review the use, transfer, and restock of extra-large bolts at Warehouse C, look at the Product Item Transactions related list on the product item whose Product is Extra-Large Bolt and Location is Warehouse C.
Specify that a certain part is needed to complete a work order	Create a record in the Products Required related list on the work order. Helpful links: • Track Required Inventory in Field Service	To let the assigned technicians know that they need a forklift to complete work order #00046982, create a product required for the Forklift product on the work order.
Request more parts from another inventory location when my stock gets low	Create a product request to indicate what's needed. Create a product request line item for each product requested. Helpful links:	To request a restocking of 20 boxes of nails and 10 hammers for your service vehicle, Van A, create a product request for the Van A location. Include

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

I Want To	How To Do It	Example
	Request Inventory in Field Service	one product request line item for the nails, and another for the hammers.
Transfer parts between inventory locations	<ol> <li>Create a product transfer. Make sure to specify the quantity, source location, destination location, and source product item (which represents the stock that the items are being transferred from).</li> <li>Create a shipment to track the transfer's shipping details.</li> <li>Mark the product transfer received when the items arrive.</li> <li>Helpful links:         <ul> <li>Transfer Inventory in Field Service</li> <li>Guidelines for Transferring Inventory</li> </ul> </li> </ol>	<ul> <li>To transfer 25 tires from Warehouse A to Warehouse B, create a product transfer with these settings:</li> <li>Source Location: Warehouse A</li> <li>Source Product Item: Warehouse A Tires</li> <li>Destination Location: Warehouse B</li> <li>Quantity: 25</li> <li>Quantity Unit of Measure: Each</li> <li>Create a shipment to track the shipping details for the tire transfer.</li> <li>Select <b>Received</b> on the product transfer when the tires arrive at Warehouse B.</li> </ul>
Transfer parts from an outside vendor to an inventory location	<ol> <li>Create a product request, listing the outside vendor as the account.</li> <li>Create a product transfer. Make sure to specify the quantity, destination location, and product.</li> <li>Create a shipment to track the transfer's shipping details.</li> <li>Mark the product transfer received when the items arrive.</li> <li>Helpful links:         <ul> <li>Request Inventory in Field Service</li> <li>Transfer Inventory in Field Service</li> <li>Guidelines for Transferring Inventory</li> </ul> </li> </ol>	<ul> <li>To transfer 20 safety glasses from your safety equipment provider to Service Van A, create a product request that lists your outside vendor as the Account. Then, create a product transfer with these settings:</li> <li>Product: Safety Glasses</li> <li>Destination Location: Service Van A</li> <li>Quantity: 20</li> <li>Quantity Unit of Measure: Each</li> <li>Because the items are coming from outside of your inventory, leave the Source Location and Source</li> <li>Product Item blank.</li> <li>Create a shipment to track the shipping details for the glasses transfer.</li> <li>Select <b>Received</b> on the product transfer when the glasses arrive at Service Van A.</li> </ul>
Indicate that parts from your inventory were consumed while completing a work order	Create a product consumed record on the related work order. Helpful links: • Track Inventory Consumption in Field Service • Guidelines for Consuming Inventory	<ul> <li>You used 15 bolts from your service van, Service Van A, to complete work order #00046982. To track the consumption, create a product consumed record on the work order with these settings:</li> <li>Product Item: Service Van A Bolts</li> <li>Quantity Consumed: 15</li> <li>The product item quantity is automatically reduced by 15 to reflect that the bolts are no longer in stock.</li> </ul>

I Want To	How To Do It	Example
Track the return of a customer product	<ul> <li>Create a return order that lists the related case, order, or product.</li> <li>Helpful links:</li> <li>Track Customer Returns in Field Service</li> <li>Guidelines for Tracking Customer Returns</li> </ul>	A customer creates a case from the customer site to return a glass door. To track the return, create a return order which lists the related Order. Add a return order line item that lists the corresponding Order Product for the glass door. Create a product transfer to track the return of the product to the warehouse. Upon its arrival, increase the quantity on the glass door product item by 1.
Track the repair of a customer product	<ol> <li>Create a work order to repair the product.</li> <li>Create a return order that tracks the return of the product to the repair workshop.</li> <li>When the product is repaired, create a product transfer to track the return of the product back to the customer.</li> <li>Helpful links:         <ul> <li>Track Customer Returns in Field Service</li> <li>Guidelines for Tracking Customer Returns</li> </ul> </li> </ol>	A customer calls your company to request a repair of their front gate. Create a work order, and then create an associated return order that tracks the return of the gate to the workshop. After the gate is repaired, mark the work order complete. Create a product transfer to track the return of the gate from the workshop to the customer.
Track the return of unused inventory from my stock back to the warehouse	<ul> <li>Create a return order that lists the unused inventory in the Product or Product Item field.</li> <li>Helpful links:</li> <li>Track Customer Returns in Field Service</li> <li>Guidelines for Tracking Customer Returns</li> </ul>	To prepare for an on-site installation appointment, create a product request for three motors. Upon arriving at the site, you learn that only two motors are needed. To return the unwanted motor to the main warehouse, create a return order with one line item that lists the motor in the Product field. After the motor is returned to the warehouse, increase the quantity of the motor product item by 1.

# Track Required Inventory in Field Service

If a work order needs to be completed by a carpenter with a hand saw, don't assign it to an electrician with a voltmeter! Add *products required* to work types, work orders, and work order line items to ensure that the assigned service resource arrives with the right equipment.

Adding required products to work types saves you time and keeps your business processes consistent. Work orders and work order line items inherit their work type's required products.

For example, if all light bulb replacement jobs require a ladder and a light bulb, add the ladder and light bulb as required products to your Light Bulb Replacement work type. When it's time to create a work order for a customer's light bulb replacement, applying that work type to the work order adds the required products.

Here's how to add a required product to a work order, work order line item, or work type.

- 1. Navigate to the record that needs required products.
- 2. In the Products Required related list, click New.
- 3. Use the lookup field to select a product.
- **4.** Enter the quantity required.
- 5. Select a quantity unit of measure.
- 6. Click Save.

#### SEE ALSO:

Product Item and Inventory Fields Guidelines for Creating Work Types for Field Service Add Required Skills to Work Orders or Work Types for Field Service

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To view products required:

Read on the parent object (work orders or work types) AND Read on products

To create, update, or delete products required on work orders or work order line items:

• Edit on work orders AND Read on products

To create, update, or delete products required on work types:

• Edit on work types AND Read on products

# **Request Inventory in Field Service**

When your stock gets low or you need a part for a particular work order, create a *product request*. Product requests can be associated with work orders, work order line items, cases, and accounts. You can specify when and where the parts are needed, and divide the request into line items that each represent a needed part.

Mobile workers can create product requests when they find defective parts in their vehicles or their stock has run out. Dispatchers or service managers can create product requests on behalf of their mobile workers if they see their stock getting low. And schedulers can create product requests when they schedule work orders that require parts which aren't normally found in a worker's vehicle stock.

- 1. From the Product Requests tab or the Product Requests related list on a work order or work order line item, click **New**.
- 2. If the request is being made for a particular job, select the related work order or work order line item.
- 3. Optionally, select the related account or case.
- 4. Enter the destination location, which is where the parts are needed.
  - Note: Service vehicles can also be locations. Mobile locations like vehicles have **Mobile Location** selected on their detail page.
- 5. Enter the address where the parts should be shipped; for example, the mailing address of the warehouse that is requesting them.
- 6. Select a shipment speed, and enter the Need By Date.
- 7. If the parts are being transferred from another location such as a warehouse, enter the source location.
- 8. Add a description.
- **9.** Assign the product request a status:

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#### USER PERMISSIONS

To create product requests:

Create on product
 requests

To view product request line items:

 Read on product requests

To create, update, or delete product request line items:

Edit on product requests

Draft	Finalizing the product request details.
Submitted	The product request is ready for processing.
Received	The department in charge of fulfilling the request is working on it.

- **10.** Save your changes.
- 11. Create one product request line item for each product needed.
  - a. From the Product Request Line Items related list, click New.
  - **b.** Select the product that is needed, and enter a quantity and unit of measure. These values are inherited from the Quantity Unit of Measure field on products.
  - **c.** Fill in the rest of the fields as needed. The parent product request's shipping and related record information is auto-populated on its line items.
  - **d.** Save your changes.

The product request now appears in the Product Requests related list on the related work order or work order line item. You can also view and sort line items from all product requests from the Product Request Line Items tab in Salesforce.

#### SEE ALSO:

Product Request and Transfer Fields Set Up Product Requests in the Field Service Mobile App

# Transfer Inventory in Field Service

To fulfill a product request, create a product transfer. Product transfers track the movement of inventory from one field service location to another. The inventory numbers at your storage locations update automatically to reflect transfers.



Create one product transfer for each product request line item so that you can track the status of each part. The Product Transfers related list on a product request shows all product transfers associated with the request's line items. Product request line items have their own Product Transfers related list.

Typically, you create product transfers in response to a product request. You also can create a series of product transfers to track the initial stocking of a new mobile worker's service vehicle.

- 1. From the Product Transfers tab or the Product Transfers related list on a product request, product request line item, product item, location, or shipment, click **New**.
- 2. Enter a source product item or product.

If you're transferring the parts from a location within your inventory such as a warehouse, enter a source product item. The source product item shows where the parts are being transferred from and updates the quantity at the source location. For example, to transfer five hammers from Warehouse A to Warehouse B, select the product item record that tracks the hammers stored at Warehouse A.

If you're transferring products from outside your inventory, such as from a manufacturer, enter a product name.

- **3.** Enter the quantity to transfer and the Quantity Unit of Measure. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
- 4. If it's not already populated, enter the related product request line item.

Note: Set the status of the related product request line item to Received to indicate that the request is being processed.

- 5. Use the lookup field to select the shipment that includes the product items' transfer.
- 6. Enter the destination, and if applicable, the source location.
- 7. Enter the expected pickup date.
- 8. Add a description.
- **9.** After the transferred parts are received, select **Received** and update these fields: **Received By**, **Quantity Received**, and **Status**. After you mark a product transfer received, you can't undo it.
- **10.** Save your changes.

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#### USER PERMISSIONS

To create product transfers:

 Create on product transfers

To mark product transfers received:

• Edit on product items

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When a product transfer is marked received, several records are updated or created to keep your inventory numbers accurate. To learn more, see Guidelines for Transferring Inventory.

#### Transfer Serialized Inventory

Transfer serialized products to optimize inventory costs and ensure technicians have the right parts for their work.

#### Inventory Transfers in the Mobile App

With a few taps, mobile workers can update product transfers in the app. Before you can use product requests to transfer inventory, make sure that service resources can access and receive product transfers in the Field Service mobile app. Product transfers track the movement of inventory from one field service location to another.

#### Guidelines for Transferring Inventory

Product transfers track inventory movement between locations in field service. Learn how manage inventories with product transfers, and how product transfers interact with other inventory management records.

#### SEE ALSO:

Product Request and Transfer Fields

## **Transfer Serialized Inventory**

## USER PERMISSIONS

To customize page layouts:	Customize Application	Available in: both Salesforce
To view and create product transfers:	Read and create on product transfers	Classic (not available in all orgs) and Lightning
To create product transfers for products that		Experience
support serial numbers:		The Field Service core
To send product transfers for products that support serial numbers:	Read on product items AND Read on serialized products	features, managed package, and mobile app
support sendi numbers:	senalized products	are available in Enterprise,
To receive product transfers for products that	•	Unlimited, and Developer
support serial numbers:	serialized products	Editions.
To mark product transfers received:	Edit on product items	

Transfer serialized products to optimize inventory costs and ensure technicians have the right parts for their work.

- 1. Create and send a product transfer.
  - a. From the App Launcher, open Product Transfers and click New.
  - b. Enter the Product Name, Quantity Sent, Source Location, and Destination Location.
  - c. To select the Source Product Item, enter an exact or partial serial number. If you enter a partial number and press Enter, the Product Item Results page displays. Use the Search to enter an exact or partial serial number (SP-XX) or search by Product Item Results Search. You can page through up to 50 results at a time. A maximum of 2,000 results are returned.
  - Click Save and the product transfer is saved. You're prompted to add serialized products. If the product item is unavailable at the source location, no serialized products are displayed. To add serialized products to the product transfer later, click Cancel. To add serialized products later, on the Product Transfers page, select Edit on the product transfer that you want to update.
  - e. Select the serialized products that you want to send in the product transfer.

- **f.** To send the product transfer, click **Add**. When the product transfer is sent, a serialized product transaction with a transaction type of Sent is created for each serialized product to track its status change.
- 2. Receive the product transfer.
  - a. From the Product Transfer details page, click Receive Transfer.
  - **b.** If the item is a Receive Only Product, on the Receive Product Transfer page select the serialized products that you want to receive and click **Next**.
  - c. If the item is a Receive Only Product, on the Receive Product Transfer page, select the serialized products that you want to receive, and click Next.
  - **d.** Update the Quantity Received and select Received. A serialized product transaction with the applicable transaction type is created for each serialized product to track its status change.
  - e. Save your work.

#### Manage Serialized Inventory V2

With serialized products, you can create product transfers to track the movement of serialized inventory. You can create one product item record per item to record each item's serial number on the product item record, and then track the item's movement.

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With serialized products, you can create product transfers to track the movement of serialized inventory. You can create one product item record per item to record each item's serial number on the product item record, and then track the item's movement.

Watch the video to see how to use serialized products to track transfers and products consumed.

Watch a video

#### **Transfer Serialized Products**

The following is the process for transferring serialized products:

1. Create serialized inventory.

Create the product that is serialized and the serialized product. Create the product item with the product name and location. Add the serialized items for the products at the location.

2. Create and send the product transfer.

Create a product transfer and add the serialized products, quantity you want to send, as well as the source and destination. If the Transfer Record Mode on the product is set to Send and Receive, select the inventory that you want to send. When the product transfer is sent, a serialized product transaction with a transaction type of Sent is created for each serialized product to track its status change. A product transfer state is automatically created for each serialized product.

**3.** Receive a product transfer.

To receive the inventory from a product transfer, create a product transfer state. On the product transfer, update the Quantity Received and select Received. After the product transfer is received, a serialized product transaction with a transaction type of Received is created for each serialized product to track its status change. The product item of the transferred serialized product is updated from source location to destination location. The Quantity on Hand on the source product item and destination product item are updated accordingly. If there's an existing destination product item of the given product and location, no new product item is created, and the Quantity on Hand is updated. If there's no existing destination product item, a new product item is created. For the source and

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

destination product items, a product item transaction record is created. The record shows the quantity of items moved from the source to the destination.

#### Guidelines for Serialized Inventory V2

- Before you can send or receive serialized products in a product transfer, the serialized product with the serial number must exist as a serialized product.
- Only locations that use the Inventory Location option can be associated with product items.
- You can only mark a product transfer as received if the product transfer's Quantity Sent and Quantity Received are equal.
- You can only transfer multiple serialized products (together in one transfer) if they're all of the same product that is serialized. A product that is serialized is a product whose inventory consists of serialized products. A serialized product is the inventory that has an assigned serial number.
- You can manage serialized inventory V1 and V2 if both are turned on for your org. However, you can't combine V1 and V2 serialized inventory in the same product transfer or product consumed transaction.

#### Product Item Results Search

When adding a source product item to a product transfer, you can search for product items based on these fields:

- Name
- Product Code
- Description
- Stock Keeping Unit
- Make Name
- Model Name
- Vehicle Trim Level
- Version Name
- Harmonized System Code
- Harmonized Tariff Sched Code
- Manufacturer Name
- Manufacturer Part Number
- Product Line Code
- Product Category Code
- Universal Product Code

#### Common Terms

The following is a list of terms that apply to the transfer and consumption of serialized products:

- *Product* (object): a product that your organization sells.
- *Product Item* (object): the stock of a particular product at a particular location in field service, such as all bolts stored in your main warehouse.
- *Product Transfer State* (object): an action taken to associate a serialized product to a product transfer and indicate the action done to the serialized product. The new state as a result of the action.
- *Product Item Transaction* (object): an action taken on a product item in field service. Product item transactions are auto-generated records that help you track when a product item is replenished, consumed, or adjusted.

- Serialized Product (object): a product that is serialized. Each serialized product has a serial number.
- Serialized Product Transaction (object): an action taken on a serialized product. Serialized product transactions are auto-generated records that help you track the status change for a serialized product.
- *Product Consumed* (object): an item from your inventory that was used to complete a work order or work order line item in field service.
- *Product Consumed State* (object): the new state of the serialized product after it's consumed.

#### Serialized Product Status

When the serialized product status is updated, a serialized product transaction is created. The following table shows the valid serialized product status changes, and the serialized product transaction type for the corresponding serialized product transaction record.

Original Serialized Products Status	New Serialized Products Status	Serialized Product Transaction Type
Available or NULL	Consumed	Consumed
Available or NULL	Damaged	Damaged
Available or NULL	Lost	Lost
Available or NULL	Available	Received
Available or NULL	Sent	Sent
Damaged	Lost	Lost
Damaged	Available	Repaired
Damaged	Sent	Sent
Lost	Available	Found
Sent	Lost	Lost
Sent	Available	Received
Sent	Damaged	Received
N/A	All valid non-null status	Replenished

Note: When a product transfer is marked as Sent, the status of the serialized product is always updated to Sent, even if the transfer contains a damaged item. If necessary, you can manually mark an item as Damaged without a product transfer.

### Inventory Transfers in the Mobile App

With a few taps, mobile workers can update product transfers in the app. Before you can use product requests to transfer inventory, make sure that service resources can access and receive product transfers in the Field Service mobile app. Product transfers track the movement of inventory from one field service location to another.

User Permissions Needed		
To customize page layouts:	Customize Application	
To view and create product transfers: To create product transfers for products that support serial numbers:	Read and create on product transfers	
To send product transfers for products that support serial numbers:	Read on product items AND Read on serialized products	
To receive product transfers for products that support serial numbers:	Read on product items AND Read on serialized products	
To mark product transfers received:	Edit on product items	

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Check that Salesforce is configured to use product transfers in the mobile app. Then get started receiving product transfers so that you can track inventory.

Note: To show product transfers in the mobile app, edit the Location page layouts assigned to mobile users. Add the Product Transfers Destination related list. After you add the related list, product transfers are shown in the Inventory tab in the mobile app. Make sure that users have permission to view product transfers.

Product transfers are shown only if the destination location of the product transfer is the location linked to the service resource. Child locations, for example multiple locations, aren't supported.

1. In the mobile app, go to Inventory and locate the Product Transfers section. If you don't see product transfers, check the page layouts assigned to mobile users.

On Android, the Product Transfers tab is shown only if a location is linked to the location of the service resource.

- 2. For each product transfer that you want to update, tap Scan or Receive.
- 3. Select the quantity of products received, and save your changes.

After you save the changes, received product transfers appear in the Received Product Transfers section of the Product Transfers page. This action can't be undone.

When a product transfer is marked received, several records are updated or created to keep your inventory numbers accurate. To learn more, see Guidelines for Transferring Inventory.

### Guidelines for Transferring Inventory

Product transfers track inventory movement between locations in field service. Learn how manage inventories with product transfers, and how product transfers interact with other inventory management records.

### Associate Product Transfers with Product Requests

Typically, you create product transfers in response to a product request. You also can create a series of product transfers to track the initial stocking of a new mobile worker's service vehicle.

If a product transfer is fulfilling a product request, create one product transfer for each product request line item so that you can track the status of each part. The Product Transfers related list shows all product transfers associated with the request's line items. And, product request line items have their own Product Transfers related list.

### Associate Product Transfers with Shipments

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To monitor inventory movement, create shipments and link them to product transfers. Shipments contain information about the products on board, the shipping carrier, and the expected delivery date.

For example, you create a product request for 50 hammers and 40 boxes of nails at Warehouse C. The product request has two line items: one for hammers, and one for nails. To fulfill the request, your inventory manager creates two product transfers—one for each line item—that indicate that the hammers and nails are to be transferred from Warehouse B. The manager creates a shipment to track the transfer and then enters it in the Shipment field on both product transfers. The product request shows the related product transfers.

You can associate a shipment with multiple product transfers in the Product Transfers related list. A shipment's product transfers can each be related to different product request line items from one or more product requests.

### Update or Delete Product Transfers

If a product transfer isn't marked received, you can edit it normally. You can't update received transfers, but you can delete them. When you delete a transfer:

- The Quantity on Hand of the source and destination product items reverts to the pretransfer quantity.
- Product item transactions with a transaction type of Adjusted are added to the source and destination product items.

### Transfer Serialized Inventory

For higher-value inventory such as computers, you can create one product item record per item so that you can record each item's serial number on the product item record and then track the item's movement.

Product transfers for serialized product items is in beta and is permitted only if you enroll in the beta program. When a product transfer for a serialized product item is marked received, the product item's location automatically updates to reflect the transfer. This functionality has these limitations:

- The Location field on serialized product items can't be updated manually.
- When a product transfer associated with a serialized product item is marked received, no product item transaction is created.
- Partial transfers of serialized product items aren't permitted. A product transfer whose source product item is serialized can be marked received only if the product transfer's Quantity Sent and Quantity Received are equal to the product item's Quantity On Hand.

### Mark Product Transfers Received

Selecting **Received** on a product transfer indicates that the items were added to the inventory at their destination. Marking a product transfer prompts these actions.

- **Product items are updated or created.** Product items track the quantity of a particular product at a particular location. For example, a product item can represent all the hammers at Warehouse A. When a product is transferred from one location to another, the quantity at the source location decreases to reflect the transfer.
  - If there's a product item for the transferred products that are stored at the destination, the quantity increases to reflect the transfer.
  - The first time that a product is stored at the location, a product item is automatically created that reflects the quantity transferred there.

For example, if Service Van B never contained hammers, there's no hammer product item record at Service Van B. When hammers are transferred to Service Van B, a product item is created that shows the number of hammers transferred.

- **Product item transactions are created.** When you mark a transfer received, a product item transaction with a type of Transferred is created to represent the increase in stock at the destination. If a source location or source product item is specified, a second transaction is created to represent the decrease of stock at the source. The first transaction's quantity is positive because stock is added; the second transaction's quantity is negative. These transactions appear in the Product Item Transactions related list on the related product transfer, source product item, and destination product item so that you can quickly review past transactions at your inventory locations.
- Example: Warehouse A has 100 hammers in stock. Your new mobile worker, Jessica, has her service van, and you created a location to represent the van in Salesforce. You create a product transfer to track the transfer of five hammers from Warehouse A to Jessica's van. Because Jessica's van contains no hammers, selecting Received on the transfer causes these events.
  - The quantity on the existing product item for hammers stored at Warehouse A decreases from 100 to 95
  - A second product item is created that has these settings:
    - Product: Hammer
    - Quantity: 5
    - Location: Jessica's Van
  - A product item transaction is created for the hammer product item with a transaction type of Transferred and a quantity of 5.

#### SEE ALSO:

Product Request and Transfer Fields

# Track Inventory Consumption in Field Service

Create products consumed to track the use or consumption of items from your inventory.

When an item leaves your inventory because it was used during a field service appointment, create a product consumed record so your inventory numbers are adjusted accordingly. You can add products consumed to work orders or work order line items. Track product consumption at the line item level if you want to know which products were used for each line item's tasks.

- 1. In the Products Consumed related list on a work order or work order line item, click New.
- 2. If applicable, enter a work order line item. The work order is auto-populated.
- **3.** In the Product Item field, select the product item where the part originated. For example, if 10 bolts that were stored in Warehouse B were used to complete the work order, select the product item that represents all bolts stored in Warehouse B.
- 4. Enter the quantity consumed.
- 5. To link the consumed product to a price book entry, select a price book entry and enter the unit price.

Note: To create a product consumed that lists a price book entry, you need "Use" sharing access to price books.

- **6.** Add context in the Description field.
- 7. Save your changes.
  - Note: After a product item is consumed, track it as an asset (an installed or purchased product) and add product details like a serial number.

#### Guidelines for Consuming Inventory

When inventory is consumed as part of a work order, logging the consumption kicks off several behind-the-scenes changes. Learn how product consumption fits into your field service operation.

#### Consume Serialized Inventory

When an item is used during a field service appointment, create a product consumed record to adjust your inventory numbers accordingly. You can add products consumed to work orders or work order line items. You can also track product consumption at the line item level to know which products were used for each line item's tasks.

SEE ALSO:

Product Item and Inventory Fields

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#### USER PERMISSIONS

To view products consumed:

Read on work orders

To create or delete products consumed:

 Edit on work orders AND Read on product items

To update products consumed:

• Edit on work orders

### Guidelines for Consuming Inventory

When inventory is consumed as part of a work order, logging the consumption kicks off several behind-the-scenes changes. Learn how product consumption fits into your field service operation.

### Track Product Consumption

When a mobile worker uses a product during a field visit, they can create a product consumed record from the Products Consumed related list on the related work order or work order line item. For example, a work order can have one product consumed record representing the consumption of 10 bolts, and another representing the consumption of two batteries. Products consumed are typically associated with a *product item* that represents where the item was stored before use.

### Why to Track Product Consumption

Track product consumption so you know when and why items from your inventory are used and when your stock is running low. When you create a product consumed record on a work order or work order line item, the quantity listed on the related product item updates to reflect the consumption.

For example, suppose you have a product item representing the bolts stored in your service van. You use 10 bolts to complete a work order, so you create a product consumed record on the work order to track the consumed bolts. Creating the product consumed reduces the quantity of the product item representing bolts in your van by 10.

Note: If you want to track product consumption but don't need to track the movement of inventory between locations, you can skip creating locations and product items. Instead, complete the Price Book Entry field on product consumed records to indicate which product was consumed. However, this approach offers a limited view of your inventory.

### Viewing Updates to Product Consumed Records

Product item transactions are auto-generated records that summarize changes made to product items in your org. They appear in the Product Item Transactions related list on related records. Most actions on products consumed create a product item transaction.

- **Creating a product consumed:** A product item transaction is created on the product item with a type of Consumed and a negative quantity equal to the quantity consumed. Because access to product item transactions is determined by product item access, you need permission to view product items before you can create products consumed.
- **Changing the quantity on a product consumed**: You may need to change the quantity on a product consumed to indicate that fewer or more items were consumed. In this case, a product item transaction is created with a type of Adjusted and a negative quantity equal to the additional quantity consumed. For example, if a mobile worker updates a product consumed to indicate that two more bolts were used, the new product item transaction's quantity would be -2.
- **Deleting a product consumed**: Deleting a product consumed is considered an adjustment. A product item transaction of type Adjusted is created with a positive quantity equal to the quantity consumed.

SEE ALSO:

Product Item and Inventory Fields

**EDITIONS** 

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### **Consume Serialized Inventory**

When an item is used during a field service appointment, create a product consumed record to adjust your inventory numbers accordingly. You can add products consumed to work orders or work order line items. You can also track product consumption at the line item level to know which products were used for each line item's tasks.

User Permissions Needed		
To view products consumed:	Read on work orders	
To create or delete products consumed:	Edit on work orders AND Read on product items	
To create products consumed for products that support serial numbers:	Create on products consumed	
To update products consumed:	Edit on work orders	
To consume products for products that support serial numbers:	Edit on work orders AND Read on product items AND Read on serialized products	

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Use your organization's best practices to define a process for associating an asset with the consumed serialized product.

- **1.** Create a product consumed.
  - **a.** Open the work order.
  - **b.** On the Related tab, go to Products Consumed and click **New**.
  - c. If applicable, enter a work order line item. The work order is auto-populated.
  - d. Select the serialized Product Item.
  - e. Enter 0.00 for the Quantity Consumed.
  - f. Add context in the **Description** field.
  - g. Click Save.
- 2. Set the product consumed state.
  - a. Go to the work order's Related list.
  - **b.** Select the product consumed.
  - c. Go to the product consumed Related list.
  - d. On Product Consumed State, select New.
  - e. Use the lookup field to select a Serialized Product.
  - f. For the **Consumed State**, select Consumed or Withdrawn indicates that the product was previously dispatched but taken out of circulation for repair.
  - g. Click Save.
  - **h.** Repeat the steps for all serialized products included in the product consumed.
- **3.** Consume the product.
  - a. Edit the Product Consumed.
  - b. Select Consumed.

- c. Enter the Quantity Consumed.
- d. Click Save.

# Track Inventory Shipments in Field Service

To track product items while they're in transit between locations, create shipments. Shipments contain information about the products on board, the shipping carrier, and the expected delivery date.

Link shipments to product transfers so your team always knows the status of part transfers. While shipments are an optional feature, they help you stay informed about the coming and going of items in your inventory.

- 1. From the Shipments tab, click New.
- 2. In the General Information section, add details about the shipment's origin and destination. If applicable, select the field service locations where the shipment departs or arrives.
- 3. In the Tracking Information section, add details about the shipping provider and delivery date.
- 4. Add a description explaining what is being shipped.
- 5. Save your changes.
- **6.** From the Product Transfers related list, create product transfers to track the movement of product items that were included in the shipment.

SEE ALSO:

Product Request and Transfer Fields Guidelines for Transferring Inventory

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### USER PERMISSIONS

To create shipments:

Create on shipments

# Track Customer Returns in Field Service

Create *return orders* to facilitate the return and repair of items that were sold to customers or supplied to field service workers.

- 1. From the Return Orders tab or the Return Orders related list on a record, click **New**.
- 2. Enter an account and contact associated with the return order.
- **3.** Enter an associated product request. For example, if a mobile worker is returning an unused item, select the related product request that the product was intended to fulfill.
- 4. In the Returned By field, select the user returning the items.
- **5.** Enter a source and destination location, if applicable. For example, if the return order tracks the return of products from a customer's facility to your main warehouse, select the warehouse as your destination location.
- **6.** Enter a shipment type, address, and the date the returned products are expected to arrive at the destination location. The Ship From Address represents the location of the items at the start of the return or repair. For example, if a customer is returning an item, enter the customer's address.
- 7. Add notes or context about the return in the Description field.
- 8. Save your changes.
- 9. In the Return Order Line Items related list, add a line item for each product being returned.
  - a. Click New.
  - **b.** To represent the items being returned, fill out one of more of the following fields: Asset, Order Product, Product Item, and Product Request Line Item.

Note: If you enter a product item, select the product item associated with the source location of the returned items.

- c. Enter a quantity and unit of measure. If a product or product item is selected, the unit of measure is autopopulated.
- **d.** Select a reason for the return.
- e. In the Processing Plan field, indicate what should happen to the returned item.
- f. In the Repayment Method field, indicate how the owner should be reimbursed for the return. If the return order is tracking the return of items from van stock to an inventory location, you'll probably leave this field blank.
- g. If needed, update the source and destination location. These are inherited from the return order, but can be updated.
- h. Add notes or context about the returned items in the Description field.
- i. Save your changes.

#### Guidelines for Tracking Customer Returns

Learn about common return scenarios and how to log them in Field Service. Use return orders to track customer returns, customer repairs, or inventory returning from a mobile worker's van stock to a warehouse or supplier.

SEE ALSO:

Return Order Fields

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create return orders:

Create on return orders

To view return order line items:

• Read on return orders

To create, update, or delete return order line items:

• Edit on return orders

### Guidelines for Tracking Customer Returns

Learn about common return scenarios and how to log them in Field Service. Use return orders to track customer returns, customer repairs, or inventory returning from a mobile worker's van stock to a warehouse or supplier.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce mobile app, the Field Service mobile app for Android and iOS, and Experience Cloud sites built using Salesforce Tabs + Visualforce. Customers can initiate a return from a site, or agents can create return orders in response to a customer call or mobile worker request.

### Create Return Orders

Create return orders from the Return Orders tab or the Return Orders related list on accounts, contacts, product requests, cases, orders, or locations.

You can associate return orders with product requests, cases, accounts, contacts, orders, work orders, and more. This versatility lets you use return orders to track a wide range of return scenarios. It's up

to you to decide how return orders fit into your field service processes. For example, to minimize processing time, don't associate return orders with product transfers.

When you create a return order, add return order line items to track the specific items being returned or repaired. Each line item must list one or more of the following: product, product item, asset, product request line item, and order product. If you select more than one of these fields on a return order line item, make sure they all link to the same product.

### Common Return Order Scenarios

#### **Customer Returns**

When a customer wants to return a product, create a return order. Follow these guidelines.

- On the return order:
  - If a customer case was created to address the return, select it in the Case field.
  - In the Source Location field, select the customer's site where the product is located at the start of the return. You may need to leave this field blank if the customer's site isn't tracked as a location in Salesforce.
  - In the Destination Location field, select the inventory location where the item is returned for restocking, or the workshop where the item is salvaged or discarded.
  - In the Ship From address, enter the customer's address where the product is at the start of the return.
- On the return order line item:
  - To represent the items being returned, fill out one or more of the following fields: product, product item, product request line item, and order product. For customer returns, you'll likely use the Asset or Order Product fields.

For example, a customer of a hypothetical robotic arms company, Rockin' Robotics, purchased a small hydraulic arm by mistake. To return it, they create a case from the customer site. The assigned agent creates a return order for the customer which lists the related order and order product. The agent then creates a product transfer to track the return of the arm to the warehouse. Upon its arrival, the on-site worker updates the quantity on the appropriate product item to indicate that the warehouse has gained a small hydraulic arm.

#### **Customer Repairs**

When a customer wants their product repaired or retrofitted, use a return order to track the repair and return of the product. Follow these guidelines.

• On the return order:

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- Link the return order to related work orders in the Work Orders or Work Order Line Items related lists. Most repairs involve a work order that was created for the customer.
- If a customer case was created to address the repair, select it in the Case field
- In the Source Location field, select the customer's site where the product is at the start of the return. You may leave this field blank if the customer's site isn't tracked as a location in Salesforce.
- In the Ship From address, enter the customer's address where the product is at the start of the return.
- In the Destination Location field, select the workshop where the product is repaired. You can use product transfers to track the movement of the product to and from the workshop.
- On the return order line items:
  - In the Repayment Method field, if the item will be returned to the customer after repair, select Return.
  - To represent the items being repaired, fill out one or more of the following fields: product, product item, product request line item, and order product. For customer repairs, you'll likely use the Asset or Order Product fields.

For example, a Rockin' Robotics customer wants their eight-year-old hydraulic arm retrofitted to use the most current technology. They call Rockin' Robotics and the support agent creates a work order to have the arm retrofitted. The agent then associates the work order with a return order that tracks the return of the arm to the Rockin' Robotics Workshop. After the arm is retrofitted, the work order is marked complete and a product transfer is created to track the return of the arm from the workshop to the satisfied customer.

#### Mobile Worker Returns

When a product is requested for a field service job but ends up going unused for any reason, use a return order to track the return of the product to the supplier or an inventory location. Follow these guidelines:

- On the return order
  - In the Product Request field, select the product request that the product was intended to fulfill. You can also associate the return order line items with the product request's line items.
  - In the Account field, select the account that the product was intended for.
  - In the Source Location field, select the product's location at the time of the creation of the return order. For example, a mobile worker's service vehicle.
  - In the Destination Location field, select the product's intended destination. For example, an inventory location such as a warehouse, or a supplier's site.
  - In the Ship From address, enter the starting address of the return.
- On the return order line items
  - If the return order lists a product request, select the relevant product request line item in the Product Request Line Item field.
  - If the return doesn't involve reimbursement (which is likely), set the Repayment Method to None.
  - In the Processing Plan field, select Restock if the item is returning to your inventory.
  - To represent the items being returned, fill out one or more of the following fields: product, product item, product request line item, and order product. For mobile worker returns, you'll likely use the Product Request Line Item, Product, or Product Item fields. If you select a product item, choose the product item that is associated with the product's source location.
- If needed, create an associated product transfer to track the transfer of the product from its current location back to your inventory.

For example, to prepare for an on-site installation appointment, a Rockin' Robotics mobile worker creates a product request for three large hydraulic arms. Upon arriving at the site, the worker learns that only two arms are needed. To return the unwanted arm to the main warehouse, the worker creates a return order with one line item that lists the arm in the Product field. After the arm is returned to the warehouse, the warehouse product item can be updated to reflect the change in inventory numbers.

Ø

**Note:** While you can track the return of products to your inventory using only a product transfer, return orders let you add information about why the product is being returned.

#### SEE ALSO:

Return Order Fields Report on Field Service

# Manage Product Service Campaigns in Field Service

Track and manage a product recall, manual firmware upgrade, safety or compliance audit, end-of-life communication, or similar product update.

Managing a product service campaign involves these steps.

- Create a product service campaign.
- Identify the assets affected and creating a product service campaign item for each asset. For product service campaigns with several tasks to complete, consider creating a work type.
- Create work orders and work order line items, return orders and return old line items, or a combination of both to complete the campaign tasks.

#### **Create a Product Service Campaign**

- Navigate to Product Service Campaign and click **New**.
- Enter the details of the product service campaign.
- Save the record.

#### Add Product Service Campaign Items

- Navigate to the Product Service Campaign, and from the Product Service Campaign Items related list and click New.
- Enter the details of the product service campaign item.
- Save the record.

**Note:** Where there are many assets for the product subject to the product service campaign, create the product service campaign items using Data Loader.

#### Add Work Orders and Return Orders

- Navigate to either Product Service Campaign or Product Service Campaign Items, and from the Work Orders and Return Orders or Work Order Line Items and Return Order Line Items related list, click **New**.
- Enter the details of the work order and return order or work order line items and return order line items.
- Save the record.

#### SEE ALSO:

Set Up Product Service Campaigns in Field Service

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Manage Field Service Reports

Create service reports for work orders, work order line items, or service appointments and email them directly to customers. Use standard templates, or create variations of your own.

You can use either Service Reports or Document Builder to create service documents, but only one of these features can be enabled and in use at a time. If you enable Document Builder, the Service Report button is hidden for users. You can continue to use Service Reports, but we suggest adopting Document Builder to get the most out of your service document experience.

**Note:** Service report PDFs don't support right-to-left text layout. For more information, see Right-to-Left (RTL) Language Support.

#### Create Field Service Report Templates

In Field Service, a service report summarizes a work order or service appointment in a PDF that your customers and team members can sign. To control what appears in your service reports, create service report templates.

#### Create Field Service Customer Reports

In Field Service, create service reports to give your customers summaries of the work that your field service team performed.

#### Document Builder

Document Builder is the Salesforce Field Service solution for creating richly formatted and branded PDF service documents for your business needs.

SEE ALSO:

Service Report Fields

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# **Create Field Service Report Templates**

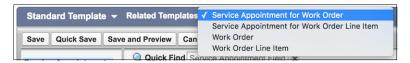
In Field Service, a service report summarizes a work order or service appointment in a PDF that your customers and team members can sign. To control what appears in your service reports, create service report templates.

Users generate a service report for a record by clicking **Create Service Report** on a record. A record's service reports appear in the Service Report related list. If you choose not to specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template. The same is true for work order line items.

Note: To avoid errors when service reports are generated, don't deactivate the default service report template.

There's an issue with service report templates when they're saved in IE: the header can overlap the body in reports generated from these templates. Use Chrome or Firefox to save service report templates instead.

- 1. If you want your team to collect signatures on service reports using the Field Service mobile app, create picklist values for the Signature Type field on digital signatures. Signature types represent the role of the person signing a report.
  - **a.** Navigate to the Setup page.
  - **b.** In Salesforce Classic, from Setup, enter *Digital Signatures* in the Quick Find box, then select **Fields** under Digital Signatures.
  - c. In Lightning Experience, go to Digital Signature in the Object Manager, then click **Fields** and **Relationships**.
  - d. Click Signature Type.
  - e. From the Signature Type Picklist Values related list, add up to 1,000 values. For tips on creating signature types, see Field Service Guidelines for Using Signatures on Service Reports.
- 2. Add the Create Service Report button to page layouts for the following objects:
  - Work orders
  - Work order line items
  - Service appointments
- **3.** Create a service report template.
  - **a.** From Setup, enter *Service Report* in the Quick Find box, then click **Service Report Templates** under Field Service.
  - **b.** Click **New**, or click **Edit** next to a report template you'd like to adjust. You already have one active template named Standard.
  - c. If you're creating a template, select an existing template as its base and give it a name.
  - **d.** In the Related Templates dropdown menu, at the top of the template editor, select a subtemplate.



Each template comes with four subtemplates, which enables service reports for multiple record types:

• Service Appointment for Work Order

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To edit page layouts and picklist values:

Customize Application

To create service report templates:

 Modify All Data, Customize Application, and View Setup and Configuration

- Service Appointment for Work Order Line Item
- Work Order
- Work Order Line Item

The Related Templates field shows the subtemplate that you're editing. We recommend customizing all four subtemplates so you're confident that your service reports contain the right information.

- e. Drag fields, sections, and related lists onto your layout.
- f. Click Save.
  - Note: When you preview the report template, it shows the System Administrator profile view. The data shown is simulated, except for images and rich text. If the person creating the service report doesn't have Read permission on objects or fields in the service report template, those fields don't appear on the report they create.
- g. (Recommended) Select another subtemplate in the Related Templates field, and customize its layout. Repeat until you've reviewed the layout of all four subtemplates.
- h. Click Activate next to the template name on the Service Report Templates home page.

#### Field Service Guidelines for Creating Service Report Templates

Service report templates in Field Service determine the type and order of data in service reports. Learn how to customize your service report templates to suit your needs.

#### Field Service Guidelines for Using Signatures on Service Reports

Field service workers can capture signatures from customers and partners on service reports. On the service report template, you define the number and type of signatures allowed.

SEE ALSO:

Service Report Fields

### Field Service Guidelines for Creating Service Report Templates

Service report templates in Field Service determine the type and order of data in service reports. Learn how to customize your service report templates to suit your needs.

#### Adding Fields

Service reports can contain fields from multiple objects. To add a field, select the object in the top-left section of the editor, then locate and drag the field onto your layout.

Use the Section element to organize fields on your layout. Your template comes with several default sections, which you can modify, rename, or delete. Click the wrench icon in a section to change the number of columns, edit or hide the title, and more.

#### Adding Related Lists

To add a related list to your template, drag the List element onto the layout. Enter a title, select the object, and select fields to display in the related list.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### **Filter a Related List**

To hide unwanted records from a related list on generated service reports, create a filter. For example, filter the Work Order Line Items related list on work order service reports so it only shows completed line items.

Related list filters on service report templates work just like regular list view filters. You can create up to five filters per related list.

- 1. From the service report template editor, check the Related Templates field to make sure that you're editing the desired sub-template.
- 2. On the related list you want to filter, click the wrench icon and select the Filters tab.
- 3. To define the filter, select a checkbox or picklist field, and choose an operator.
- **4.** To select one or more values click the lookup icon, or enter values manually, separated by commas. Only records that list a selected value in the filter field appear in service reports that use the template. (Deactivated picklist values don't appear in the lookup, but you can enter them manually.)
- 5. Click OK and save your changes. The filter you created is reflected in service reports that use your template.

#### Note:

- The Status field on contract line items isn't available for filtering.
- The Filters tab isn't available in Internet Explorer 8.
- If the user generating the service report doesn't have access to a field used to filter the related list, the filtering doesn't occur.

#### Sort a Related List

To customize the order of records in a related list, sort the list by any number or date field. For example, order the records in the Work Order Line Items related list from earliest to latest completion date.

- 1. From the service report template editor, check the Related Templates field to make sure that you're editing the desired sub-template.
- 2. On the related list you want to filter, click the wrench icon and select the Sorting tab.
- 3. Select a field to sort by, and choose ascending or descending order.
- 4. Click OK and save your changes. The sorting logic you added is reflected in service reports that use your template.

Note: If the user generating the service report doesn't have access to the field used to sort the related list, the sorting doesn't occur.

#### Adding Signatures

To let mobile workers collect signatures on a service report, drag the Signature element onto your layout. You can add up to 20 signature blocks to a sub-template. Every signature block needs a different signature type. To learn more about signatures, see Field Service Guidelines for Using Signatures on Service Reports.

#### Adding Other Design Elements

- To add your company logo to service reports, drag the Text/Image Field element onto the layout and upload your logo. A 220-px wide logo is optimal, wider images are cropped. If the uploaded logo is wider than 220 px, resize the image by dragging its sizing hands in the Text/Image Field element. Images can be added to the header, footer, and body of a service report template.
- To customize the footer and add page numbers, click the wrench icon in the footer section. For example, add the Work Order Number field.

• To add space between fields or sections in the template, use the Blank Space field. Each Blank Space field adds 5 pixels of vertical space to the report PDF.

#### SEE ALSO:

Service Report Fields Apex Trigger: Send Email when Service Report is Created Customer Signatures on Service Reports with a Flow

### Field Service Guidelines for Using Signatures on Service Reports

Field service workers can capture signatures from customers and partners on service reports. On the service report template, you define the number and type of signatures allowed.

### Set Up Signature Types

The Signature Type field specifies the role of the person signing a service report. The type ensures that the right person signs your service reports.

For example, when your company performs preventive maintenance, you want both the customer and the mobile worker to sign the final service report. The signatures confirm that both parties agree on the work that was completed.

Your org comes with one signature type called Default. A service report template can contain only one signature per type. If you want to collect more than one signature on a service report, you can add more signature types. In Setup, edit the Signature Type picklist field on the Digital Signature object. Create at least one value for each role that can sign a service report. For example, Technician,

Customer, Supervisor, and Supplier. If you expect multiple people in one role—for example, all mobile workers who are at the appointment—to sign a service report, create numbered types: Technician 1, Technician 2, and so forth.

**Note**: You can create up to 1,000 signature types. You can't delete a signature type, but you can deactivate it. When a signature type is deactivated, it can't be added to a new service report template. However, the signature type still appears in the service report templates that include it.

### Add Signature Blocks to Service Report Templates

A signature block on a service report template contains one signature.

To add a signature block to a service report template, navigate to the Service Report Templates page in Setup. Open a service report template and drag the Signature element to the template layout. Modify the signature block's settings as needed. The Type field is required. Make sure to add the Signature field, which designates the signature space. You can change the title to reflect who is signing, or hide the title and field labels.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Signature Properties		×
Title	Technician Signature	0
Field Labels	Hide Field Labels	
Field Alignment	• 🔳 🔹	
Туре	Technician	
Columns		
Select and arrange the fields t field labels on the PDF report.	that appear in the signature section. You can opt to hide	the
Available Fields	Add Signature Signature Signature Date Place Type Dov	
	OK Cancel	

You can add up to 20 signature blocks to a service report template. Because each signature block must use a different signature type, you can't drag extra signature blocks onto a template until you've created corresponding Signature Type values. Double-click a signature block's title to view its settings.



Note: Signature blocks can't use multiple columns.

#### Capture Signatures for Service Reports

Signatures are captured from the Field Service mobile app. A captured signature isn't reused in a future version of the report.

For example, a mobile worker generates a service report for an appointment, and the customer signs it. The mobile worker then updates the service notes to add a recommendation. When the mobile worker regenerates the service report, the customer's signature doesn't appear on the new report.

If you want to reuse signatures across all service report versions, contact Salesforce.

Note: Signature capture and signature reuse are provided strictly on an "As-Is" basis. Customers are solely responsible for ensuring that the use of signature capture and signature reuse complies with applicable laws.

#### Find Signed Service Reports

To easily find the service reports that contain signatures, add the Signed checkbox to the Service Reports related list on work orders, work order line items, or service appointments. If a service report contains one or more signatures, this checkbox is automatically selected.

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**Note:** After the service report is created, the signatures collected during the service event are deleted. See Create Field Service Customer Reports on page 521 for more details.

#### SEE ALSO:

Service Report Fields

# Create Field Service Customer Reports

In Field Service, create service reports to give your customers summaries of the work that your field service team performed.

#### Note:

- You can generate service reports from work orders, work order line items, and service appointments.
- To create a service report in the Field Service mobile app, navigate to a service appointment, work order, or work order line item. Tap the action icon, then tap **Create Service Report**.
- You can't generate service reports in the Salesforce1 mobile app or the Salesforce Mobile Web Experience.
- See Quote Template and PDF Limitations and Visualforce PDF Rendering Considerations and Limitation for information on the limitations that apply to service report PDFs.
- See Considerations for Adding Images to Quote Templates for information on limitations that apply to images added to service reports.
- 1. From a work order, work order line item, or service appointment, in the action dropdown menu select **Create Service Report**.
  - Note: If you don't see this action, ask your Salesforce admin to add it to the page layout. Service reports can't be created for service appointments whose parent record is an account, asset, lead, or opportunity.
- 2. Use the lookup to find the template that you want to use.
- 3. Click Create PDF.

The service report preview appears.

4. To save the service report to the record, click **Create Service Report**. To save the report to the record and send a copy to the customer, click **Create and Send Service Report**. Then fill out the email fields, and click **Send**.

The service report is saved in the Service Reports related list on the record.



**Note:** After the service report is created, the signatures collected during the service event are deleted. Use the saved service report to provide a proof of signature.

A service report is translated in the language selected in the Service Report Language field on the associated work order. If that field is blank, the report uses the default language of the person generating the report. To add languages, from Setup, in the Quick Find box, enter *Translation Language Settings*, and select it. Click **Edit** next to the desired language, then click **Active**. To add a user as a translator for the language, select them from the available list and click **Add**, then save your changes.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create service reports:

- Edit on the parent object (work orders, work order line items, or service appointments)
- To email a service report:
- View on the parent object AND Send Email

Note: If you don't have Read permission on an object or field in the service report template, it doesn't appear in the service report that you create.

#### SEE ALSO:

Service Report Fields Create Service Reports in the Field Service Mobile App Field Service Guidelines for Using Signatures on Service Reports Customer Signatures on Service Reports with a Flow

## **Document Builder**

Document Builder is the Salesforce Field Service solution for creating richly formatted and branded PDF service documents for your business needs.



**Note:** Document Builder isn't available for Government Cloud users.

Document Builder makes it easy to build service document templates.

- The Template Builder makes it easy to build service document templates.
  - Clone standard service document templates to reflect your company's business practices.
  - Drag seven standard components into the builder: Grid, Image, Image Gallery, Page Numbers, Related Record Table, Rich Text, and Signature.
  - Show relevant information about a record, and its parent or grandparent records by using the field component.
  - Address your specific use cases by building custom LWCs.
- An enhanced service document experience helps you communicate the details of the work performed to serve your customers.
  - View service documents and collect signatures on the Field Service mobile app.
  - Preview printable documents on mobile or desktop.
  - Generate PDFs on mobile or desktop

You can enable both Document Builder and Service Reports for your company, but you can assign only one feature, Service Reports or Document Builder, to each user. When you give a user the permission to use Document Builder, the Service Report button is hidden for them and they can't access Service Report features or templates. You can continue to use Service Reports, but we suggest adopting Document Builder to build more branded, customized, and dynamic service documents.

#### Set Up Document Builder: Licensing and Enablement

Learn how to set up Document Builder and start creating service documents.

Give Users Access to Document Builder

Assign users the standard permission sets for Document Builder, so they can create service document PDFs.

Assign Document Builder to Dispatchers and Mobile Workers

Assign Document Builder to users who have been assigned the Field Service Dispatcher or Field Service Mobile permission set license.

#### Create a Service Document Template

Create a service document template with Document Builder.

**EDITIONS** 

Available in: Lightning Experience.

#### Generate Service Document PDFs on the Desktop Site

With Document Builder, you can generate PDFs from the desktop site and mobile app. This topic walks you through the process for the desktop site.

#### Generate Service Document PDFs on the Mobile App

With Document Builder, you can generate PDFs from the desktop site and mobile app. This topic walks you through the process for the Field Service mobile app.

#### Translate Service Documents in Document Builder

With Document Builder, translate service documents into any language supported by the Salesforce platform. Specify different languages for different records to translate the document to the preferred language of individual customers.

### Set Up Document Builder: Licensing and Enablement

Learn how to set up Document Builder and start creating service documents.

Document Builder is the Field Service solution for service documents. You can enable both Document Builder and Service Reports for your company, but you can assign only one feature, Service Reports or Document Builder, to each user. When you give a user the permission to use Document Builder, the Service Report button is hidden for them and they can't access Service Report features or templates

- 1. From Setup, in the Quick Find box, enter and select Field Service Settings.
- 2. Select Enable Document Builder.

A notification informs you that Salesforce is registering your org. A few minutes later an email notification lets you know whether you're registered. After you're registered, you can start creating service document templates. Only Salesforce admins, with access to the Setup menu, can access the builder experience and build service document templates.

SEE ALSO:

Give Users Access to Document Builder

**EDITIONS** 

Available in: Lightning Experience.

SETUP

### Give Users Access to Document Builder

Assign users the standard permission sets for Document Builder, so they can create service document PDFs.

- 1. From Setup, in the Quick Find box, enter *Users*, and then select **Permission Sets**.
- 2. Select Field Service Document Builder Dispatcher, Field Service Document Builder Mobile, or Field Service Document Builder Standard for permission sets to assign to Field Service technicians, dispatchers, and admins.

EDITIONS

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To assign permission sets:

Manage Users

To create service documents with Document Builder:

• Field Service Document Builder Dispatcher, Field Service Document Builder Mobile, OR Field Service Document Builder Standard permission sets

Permission Sets				
Pe	ermissio	on Sets		
On th	his page you	can create, view, and manage permission sets.		
All	I 🗸 Edit I Del	ate I Create New View		
N	ew 🖸		A   B   C   D   E	F   G   H   I   J   K   L   M   N
	Action	Permission Set Label †	Description	License
	Clone	C360 High Scale Flow Integration User	Allows integration user to access features specific to C360 High Scale Flow	Cloud Integration Liser
	Clone	Field Service Document Builder Dispatcher	Gives dispatchers access to create Service Documents in the desktop application an	Field Service Dispatcher
	Clone	Field Service Document Builder Mobile	Gives mobile workforce access to create service documents in the mobile application	Field Service Mobile
C	Clone	Field Service Document Builder Standard	Gives back office Field Service users access to create service documents in the des	Field Service Standard
d.	Del I Cione	Field Service Integration	Permissions to access data peeded for ontimization, automatic scheduling, and servi	
	Del Cione	Field Service Mobile LSDK		
	Clone	FieldServiceMobileStandardPermSet	Give your mobile workforce access to the Field Service mobile app. Set them up with	Field Service Mobile
	Clone	Salesforce Apex Guru	Gives Apex Guru access to analyze code for anti patterns.	Cloud Integration User
	Clone	Salesforce CMS Integration Admin	Gives the admin data access and the permissions to integrate Salesforce CMS with $\ldots$	Cloud Integration User
	Clone	SeaS Indexing C2C User Perm	Allows the user to access entities indexed by SeaS indexing pipeline.	Cloud Integration User
	Clone	Trust Card Manager	Lets users create, read, edit, and delete trust measures for their location's trust card. $\ldots$	Trust Card Manager
	Clone	Your Account App Admin User	Manage your Salesforce subscriptions with the Your Account app.	Your Account App

3. To assign the permission sets to users, select Manage Assignments.

Users who have been assigned these permission sets no longer have access to Service Reports, and the Create Service Report button no longer appears for them.

#### SEE ALSO:

Assign Document Builder to Dispatchers and Mobile Workers

### Assign Document Builder to Dispatchers and Mobile Workers

Assign Document Builder to users who have been assigned the Field Service Dispatcher or Field Service Mobile permission set license.

- **Note:** Document Builder isn't available for Contractor and Contractor+ Licenses.
- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Create a permission set.
- **3.** Give it a name, for example, Field Service Document Builder.
- 4. Leave the License picklist field blank, and then save your changes.
- 5. Scroll down to the System section and click System Permissions.
- 6. Click Edit, and then select Document Builder and Access Lightning Web Components for Field Service Mobile. Save your changes.
- 7. To assign this permission set to users, click Manage Assignments.

#### **EDITIONS**

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create service documents with Document Builder on the desktop site or the mobile app:

 Field Service Dispatcher permission set license
 OR

> Field Service Mobile permission set license

To assign a permission set to mobile workers and dispatchers:

• Manage Profiles and Permission Sets

To create a permission set:

• Manage Users

### Create a Service Document Template

Create a service document template with Document Builder.

Create a service document template from Work Order, Work Order Line Item, and Service Appointment.

- From a desktop browser, you can create PDFs from Work Order, Work Order Line Item, and Service Appointment.
- From the Field Service mobile app, you can generate PDFs from Work Order, Work Order Line Item, and Service Appointment on both Android and iOS.
- 1. From Setup, in the Quick Find box, enter *Document Builder*, and then select **Document Builder**.
- 2. To create a template, click New Template.
- **3.** To indicate the type of service document you're creating, for example, Service Appointment Debrief, add a label.
- 4. Select any object from the dropdown list: Work Order, Work Order Line Item, or Service Appointment. Your selection dictates which object the template is created from and which fields and related lists appear in Document Builder. Click Next.
  - Note: If you don't set the Service Document Template field from Work Order, Work Order Line Item, or Service Appointment, the document template can also be derived from one of the three corresponding Document Template fields on Work Type.

# 5. Choose between a blank template and a standard default template. Using a standard template gives you a starting point with added fields and related lists.

Now you're ready to start building your service document.

#### Template Builder

Build service document templates in Document Builder with the template builder.

Document Builder Standard Components

Here's a list of standard components available for Document Builder, with descriptions.

Activate a Service Document Template

To create service documents and PDFs with Document Builder, activate a template.

Setting the Service Document Template Field

You can find the standard field Service Document template in the three objects: Work Order, Work Order Line Item, and Service Appointment. This field points to the template ID, which sets the template for each service document. This topic covers how to find the template ID and how to populate the Service Document Template field.

#### Template Builder

Build service document templates in Document Builder with the template builder.

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **EDITIONS**

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **EDITIONS**

**User Permissions Needed** 

To create a	Document
service	Builder
document	
template:	

When you first open a template in Document Builder, you see the template builder, which shows the canvas, components and fields panel, and document settings panel.

#### The Canvas

The canvas represents your service document. To design your service document, drag standard LWCs and custom LWCs onto the canvas. If you add any fields or components to the header or footer, they repeat on every page of your document.

← 🔲 Document Builder 📑 Templates ∨	Service Appointmen	t Debrief		? Help
5 C X II II	To View 🔻 C <sup>4</sup>	₹©	Activation	Save
Components Fields			Document Settings	
Q Search		Add components to your handler here. The handler appears on every page of the document,	Label     Service Appointment Debrief	
✓ Standard (4)		Add components to your cansus them.	•Name	
Grid # Page Numbers		Add components to your fuster here. The fuster appears on every page of the document.	Service_Appointment_Debrief	
<ul> <li>Related Record Table</li> <li>Signature</li> </ul>			Service Document	
√ Custom (0)			Object ServiceAppointment	
No components available.			Template	
✓ Custom - Managed (0)			Blank Template	Change
No components available.			Description	
			• Page Size	ł
Get more on the AppExchange			Letter	×

When you're designing your header and footer, you can get an error message if you add too much content. What qualifies as too much content depends on the formatting and orientation of your document and the size of the components you're trying to add. If you're having trouble, check that your headers and footers are sized properly. For example, delete fields and components that make the header or footer longer than a page.

#### **Document Settings**

To access the document settings, click outside the header, body, and footer sections of the canvas. Use the document settings panel to add a document description, determine which fields and components are visible, remove headers and footers, and alter the document format.

#### Components and Fields

Drag components and fields from the left panel onto the canvas to easily build document templates. Standard components for Document Builder include Grid, Page Numbers, Related Record Table, Signature, Image, Image Gallery, and Rich Text.

You can drag two types of fields onto the canvas from the field component on the left panel: fields from the template object and spanning fields from the parent of the template object.

When a field is added to the canvas, use the component settings panel on the right to configure the field visibility. For example, you can choose to show a Related Record Table for a work order and its child work order line item only if the work order's work type is Break-Fix.

Lookup fields don't appear on service document templates when dragged onto the canvas. To get the lookup field to show up, search for the lookup field and its associated name. Click in the Search field. Then, drag the Name field onto the canvas.

When you're done building your template, you're ready to save and activate it. You can access saved templates from the Document Builder page in Setup.

SEE ALSO:

Activate a Service Document Template Setting the Service Document Template Field

### Document Builder Standard Components

Here's a list of standard components available for Document Builder, with descriptions.

Document Builder has these standard components. Set the conditional visibility of all components and choose to show them only under specific criteria. For example, if the parent record is Work Order, and the related object is Work Order Line Item, you can choose to show a related record table only if the work order's work type is Break-Fix.

Component	Details
Grid	The grid divides the canvas into columns. To divide each section into multiple columns and control the width of each column, add the Grid component to the header, body, or footer. To use, drag the Grid component onto the canvas. After you do, you see the Grid settings in the Document Settings menu on the right. Here you can change the number of columns (up to 12), the width of each column, and the space padding between the columns.
	If you set the conditional visibility rules to hide the grid, the grid and all fields within the grid are hidden. If the grid is visible, you can still set conditional visibility rules for individual fields within the grid. If you have a conditional visibility rule to hide a field within a grid, it's hidden.
Page Break	Page breaks control the pagination of your service document and organize your content into sections.
Page Numbers	When added to the header or footer, repeats on all pages of the document. After you add it to the canvas, the Document Settings menu shows the Page Numbers Settings, where you can change the format and alignment.
Related Record Table	Related record tables show records from child objects related to the service document's template object. For example, if the template object is Work Order, the related record table shows records from the Work Order related objects, such as Work Order Line Items, Products Consumed, Expenses, and Time Sheet Entries. When the Related Record Table component is added to the canvas, you can use the component settings panel on the right to configure table details, including:
	• Parent record: This field defaults to the Template object, for example, Service Appointment.

#### **EDITIONS**

Available in: Lightning Experience.

Component	Details		
	<ul> <li>Related entity: This field lets you select which child object's record you want to show in the table.</li> <li>Related record fields: Add a maximum of 10 related record fields (columns) to the table.</li> <li>Show related records table when the list is empty: This setting is deselected by default and hides related lists that have no records. When the setting is selected, related lists that have no records are shown with only the column headers and no records.</li> <li>Set equal width for columns: By default, column widths are set based on the size of the field label. (Fields with larger labels appear with wider column widths). When the setting is selected, the column widths are evenly distributed across all fields.</li> <li>Sort field and sort order: Sort records within the related list. Use these fields to specify which field to use to determine sort order and whether sorting occurs in ascending or descending order.</li> </ul>		
Signature	The signature component captures signatures from customers, partners, and mobile workers on service documents. Define the number of signatures needed by adding signature components to the canvas. Reorder, include, or exclude these fields by specifying settings in the document settings panel. Because these fields are standard fields on a standard object, they're translated in the user's language. You can customize the labels related to the Digital Signature object and rename them to suit your branding and business needs. If you don't change the labels of the object or fields, Salesforce translates the label values for you. If you change labels, or if you want to modify the standard translation provided by Salesforce, you can translate those new labels.		
lmage	Embeds images into your service document. Add images to your image library. Then, from the document settings panel, select your image, and then use the canvas to add image descriptions and include alt text for accessibility. Images must adhere to the Salesforce guidelines for file size, found in Salesforce CRM Content Limits.		
Image Gallery	The image gallery shows all images associated with the object from which you create your service document. All images added as files to the template object are shown in this component. While you can dictate the number of images to show per row, you can't modify the total number of images. Images in a row have the same size and resolution. You can include captions for each image.		
Rich Text	Add custom text with styling and formatting to your documents. To represent information such as help text, section headers, and disclaimers, add custom labels. Custom labels are translatable, so using this setting in a rich text component lets you translate the content without having to build multiple templates for each language your company supports. To personalize your service documents, use embedded expressions in rich text components. Drag a rich text component onto the canvas. Optionally, add static text to give context for the embedded field. To embed the field into the rich text component use the following syntax: { !Record.fieldname } or { !Record.Objectname.fieldname }. For example, to embed a phone number for an account, the syntax is { !Record.Account.phone }. Save the template, and then test it on the document preview. Long text and picklists aren't supported for embedded expressions in rich text.		

### Activate a Service Document Template

To create service documents and PDFs with Document Builder, activate a template.

- 1. In Document Builder, after you've built your first template for a work order, work order line item, or service appointment, click **Save**.
- 2. Activate the template. If you've saved the template and dismissed the activation window, you can get to it by clicking **Activation**.
- 3. Click Assign and save your work.

Your template is assigned as the default. Assigning a different template as the default overrides prior default template assignments. Only one default template per object can exist at a time.

Note: You can control which template is used to generate a service document, but you can have only one active default template per object. This template is used if you don't specify any other template in the Service Document Template field or in the Work Type. To assign a record-specific template, enter the template ID in the Service Document Template field on that record.

### Setting the Service Document Template Field

You can find the standard field Service Document template in the three objects: Work Order, Work Order Line Item, and Service Appointment. This field points to the template ID, which sets the template for each service document. This topic covers how to find the template ID and how to populate the Service Document Template field.

#### Find the Template ID

To get the template ID, open or create a template in Document Builder. You can find the template ID in the URL, after &id=.

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<b>a</b> :	🗃 Salesforce 🗭 qleogez-Itm93av.l 🧕 STMFA_NA44_AC 🗎 Customer Facing 🗎 court 🗎 Salesforce Related 🗼 ImageDownloadC 🚞 Communication 🗎 W3C 🗎 Javascript				
÷	T Document Builder	🖺 Templates 🗸	workorder_Nishitha		
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If the field value is set, that template is used. If the field is empty, then the org default template is used. If the field is empty, you haven't set a default, and you don't have any templates, you receive an error message.

If you don't set the Service Document Template from Work Order, Work Order Line Item, or Service Appointment, the document template can also be derived from one of the three corresponding Document Template fields on Work Type.

#### **EDITIONS**

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **EDITIONS**

#### **User Permissions Needed**

To activate Document service Builder document templates:

#### **EDITIONS**

Available in: Lightning Experience.

#### Populate the Service Document Template Field

Populate the Service Document Template field using an Apex trigger, building a flow, or doing a combination of both.

 Apex Trigger: You can use an Apex trigger to perform custom actions, such as insertions, updates, or deletions, before or after events to records in Salesforce. The Apex trigger populates the Service Document field upon creating, reading, updating, or deleting any related records. Here's a sample Apex trigger:

```
// Timing options:
// before insert/update/delete
// after insert/update/delete/undelete
// Simple example trigger
trigger PopulateServicedocument on WorkOrder(before insert) {
    for(WorkOrder wo : Trigger.New) {
        if (wo.Status == "value") {
            wo.ServiceDocumentTemplate = 'OMO...';
        }
        // ...
    }
}
```

• Flow Builder: Build flows that collect data and perform actions. You can build screen flows that launch after certain criteria are met, guiding users to set fields. Or, build flows that automatically run in the background, using Autolaunched Flow, with no trigger. Flow Builder also lets you run Apex code, including Apex triggers, so play around to see what works best for your document building needs.

### Generate Service Document PDFs on the Desktop Site

With Document Builder, you can generate PDFs from the desktop site and mobile app. This topic walks you through the process for the desktop site.

Before generating PDFs from the desktop site, add the Create Service Document button to Work Order, Work Order Line Item, and Service Appointment page layouts.

You must grant all users who generate PDFs access to the ServiceReportLanguage field on the Work Order object. You can grant access to this field by enabling Field Level Security settings. See Field Permissions.

- 1. Go to a work order, work order line item, or service appointment. To demonstrate, we're using a work order.
- 2. Click Create Service Document.

If you've entered a value in the service document's template field, you land on the corresponding template. Otherwise, if you set a default, but no Service Document Template ID for the record or for the associated Work Type, the default template loads.

- **3.** Click **Create PDF**. You get a popup message signaling that your request is queued. When your PDF is ready, you get a notification under the Global Notifications bell.
- **4.** To access the PDFs you create, including an archive of your PDFs, navigate to the work order and click the Related tab. Then scroll down to Service Reports.

#### **EDITIONS**

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions

#### **USER PERMISSIONS**

To generate service document PDFs:

Document Builder

5. To view your PDF, click a service report name in the list view.

#### SEE ALSO:

Generate Service Document PDFs on the Mobile App

### Generate Service Document PDFs on the Mobile App

With Document Builder, you can generate PDFs from the desktop site and mobile app. This topic walks you through the process for the Field Service mobile app.

To use Document Builder on the Field Service mobile app, you must add the Service Report related list to the Service Appointment page layout assigned to your mobile user's profile. You must also create default templates for Work Order, Service Appointment, and Work Order Line Item.

You must grant all users who generate PDFs access to the ServiceReportLanguage field on the Work Order object. You can grant access to this field by enabling Field Level Security settings. See Field Permissions.

Before generating service document PDFs on the Field Service mobile app, enable push notifications on your device. Document Builder uses push notifications to let you know your PDF is ready and error messages let you know when something's gone wrong.

- **1.** Go to a work order, work order line item, or service appointment. Here, we demonstrate with a work order.
- Click the Actions launcher, and then Create Service Document You're redirected to a preview of the Work Summary template, which shows the customer details and work completed and prompts you to collect a signature from the customer.
- **3.** Collect the required customer signature by having them type and sign their name.
- **4.** If you can't collect the signature, click **Can't Collect Signature** and provide a reason. For example, you can record that the representative wasn't present.
- Click Save, and then click Generate Document on the following window.
   A popup notifies you when the document generation is complete. If you don't see a popup and the process taking a long time, pull down to refresh the page. If you're offline, your document is added to a queue.
- 6. Click the notification, which takes you back to the Field Service mobile app, where you can see the final PDF of the work summary. This PDF is accessible from the overview tab on the given work order.
  If you haven't set a field value or default template, mobile workers can't generate a document. When they click New Service Document, they get an error message.

SEE ALSO:

Generate Service Document PDFs on the Desktop Site

#### EDITIONS

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create service document PDFs on the mobile app:

• Field Service permission set license for mobile AND Document Builder

### Translate Service Documents in Document Builder

With Document Builder, translate service documents into any language supported by the Salesforce platform. Specify different languages for different records to translate the document to the preferred language of individual customers.

- 1. From Setup, enter *Translation Workbench* in the Quick Find box, and then select **Translation Language Settings**.
- 2. Enable Translation Workbench
- 3. To add a language, select Add.
- **4.** Select the languages you want to support for each user from the dropdown list and identify which users you want to be able to translate using those languages.
- 5. From the Object Manager in Setup, select Work Order.
  - Note: Languages are set on work orders only. All service appointments under a work order are translated into the same language.
- **6.** In the Page Layouts section, add the Service Report Language field. The languages you chose in Translation Workbench are shown in the Service Report Language field's dropdown list.
- 7. When generating a service document with Document Builder, select your preferred language from the Service Report Language field.

To test service document translation, generate a service document from the work order or a child service appointment. When you preview the PDF, the service document is translated into the language you selected.

SEE ALSO:

Generate Service Document PDFs on the Desktop Site Generate Service Document PDFs on the Mobile App

# Manage Field Service Outcome-Based Contracts

With Outcome-Based Contracts, service providers can provide their customers with an easy way to assess the compliance of a service contract by letting them track and measure service outcomes. Compliant service contracts ensure high quality of service and customer success.

Outcome-based contracts are result-based and focus on the outputs, quality, and outcomes of a provided service.

Service providers can provide their customers with measurable business KPIs to track and assess the quality of service they're getting.

For example, letting customers track the charging speed of an electric vehicle ensures the on-time replacement of its battery.

Tying the quality of service to the achievement of specific, measurable performance standards and requirements also helps customers to better evaluate payment, contract extensions, or contract renewals.

You can evaluate the compliance of a service contract by creating contract line outcomes that capture data in an automated process that runs according to the criteria, frequency, and calculation method that you define.

#### **EDITIONS**

Available in: Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To create service documents with Document Builder:

• Field Service Document Builder Dispatcher, Field Service Document Builder Mobile, OR Field Service Document Builder Standard permission sets

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

When a service contract starts, the automated process records data and evaluates the compliance of the contract. The results that show whether the contract is compliant appear in the Compliance Status field of the contract line outcome.

#### Set Up Outcome-Based Contracts

Assign users permissions to manage contract line outcomes for Outcome-Based Contracts and create recordset filter criteria that allow you to define the criteria to evaluate contract compliance.

#### Create Contract Line Outcomes for Outcome-Based Contracts

Create and monitor contract line outcomes for Outcome-Based Contracts to easily evaluate the compliance of service contracts.

### Set Up Outcome-Based Contracts

Assign users permissions to manage contract line outcomes for Outcome-Based Contracts and create recordset filter criteria that allow you to define the criteria to evaluate contract compliance.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### Assign User Permissions

Give users access to Outcome-Based Contracts.

- 1. Assign users basic access permissions to create and manage contract line outcomes.
  - a. From Setup, in the Quick Find box, enter Users, and then select Profiles.
  - b. Select the relevant profile, and then click Edit.
  - c. In Standard Object Permissions, enable basic access permissions for contract line outcomes.
- 2. Set the field-level security of the Service Contract and Recordset Filter Criteria fields on the Contract Line Outcome object.
  - **a.** From the object management settings for contract line outcomes, go to Fields and Relationships.
  - b. For both fields, click Set Field-Level Security and make the field-level security visible for the relevant profiles.

#### USER PERMISSIONS

To enable permissions:

 Manage Profiles and Permission Sets

To edit field-level security for fields:

Customize Application

### Create Recordset Filter Criteria

Create recordset filter criteria for contract line outcomes. Recordset filter criteria allow you to define the criteria to evaluate contract compliance.

- 1. From the App Launcher, find and select **Recordset Filter Criteria**.
- 2. Click New.
- 3. Enter a name and a description.
- 4. For Source Object, select Contract Line Outcome.
- 5. For Filtered Object, select Asset.
- 6. Select Active.
- 7. In the Conditions section, select the relevant option for when the recordset filter criteria is valid.
- 8. Add filter conditions.
  - a. For Criteria Field, select a numeric asset field or asset attribute.
  - **b.** Select the operator and the value to match on.
- 9. Save the recordset filter criteria.

# Create Contract Line Outcomes for Outcome-Based Contracts

#### **USER PERMISSIONS**

To create contract line outcomes:	Create on Contract Line Outcome
To edit contract line outcomes:	Edit on Contract Line Outcome
To delete contract line outcomes:	Delete on Contract Line Outcome
To view contract line outcomes:	View on Contract Line Outcome
To view contract line outcome data records:	View on Contract Line Outcome
To delete contract line outcome data records:	Delete on Contract Line Outcome

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Create and monitor contract line outcomes for Outcome-Based Contracts to easily evaluate the compliance of service contracts.

- 1. From the App Launcher, find and select **Contract Line Outcomes**.
- 2. Click New.
- **3.** Enter a name and a description.
- 4. Select the contract line item associated with the contract line outcome.
- 5. Select the data capturing duration. Then, select the capture frequency and the calculation method. Data capturing runs according to the frequency and calculation method you select.

#### Note:

• The contract line outcome's start date can't be before the contract line item's start date or after the contract line item's end date.

#### USER PERMISSIONS

To view, create, and update recordset filter criteria:

• View, create, and edit on Asset, Contract Line Outcome, Recordset Filter Criteria, and Recordset Filter Criteria Rule AND Delete on Recordset Filter Criteria Rule

- The contract line outcome's start date must be in the present or in the future.
- The contract line outcome's end date can't be on or after the contract line item's end date.
- 6. Select a recordset filter criteria. The recordset filter criteria allows you to define the criteria to evaluate contract compliance.
- 7. Save the contract line outcome.
- 8. In the Contract Line Outcomes list view, you can edit or delete a contract line outcome.

You can edit these fields only if the contract line outcome's start date hasn't passed and if no contract line outcome data records are associated with it.

- Recordset Filter Criteria
- Start Date
- End Date
- Capture Frequency
- Calculation Method

Note: Deleting a contract line outcome deletes all the contract line outcome data records associated with it.

You can view the details of a contract line outcome to check the compliance of your service contract. The contract line outcome's automated process performs data capturing according to the criteria, frequency, and calculation method that you define. It then evaluates the compliance of the service contract. The Compliance Status field indicates whether the contract is compliant. After data capturing is complete, the next data capture date is shown according to the capture frequency that you define.

Contract line outcome data records are created as part of the contract line outcome's automated process of data capturing. These records include the captured data information and the calculation value for a specific data capture run on a specific date.

Note: You can delete a contract line outcome data record only if the associated contract line outcome's end date has passed.

# Manage Field Service Optimization

Use schedule optimization to create an optimal schedule and help comply with service-level agreements while minimizing travel time, overtime, costs, and no-shows.

 ${ferminstarrow}$  This is a Field Service managed package feature.

#### Manage Scheduled Jobs in Field Service

Optimize your team's Field Service schedule for one or more service territories across a specified range of days. You can configure the optimization to run automatically, for example, every night or several times a day, or run it as needed.

#### Optimize Your Schedule from the Field Service Dispatcher Console

Optimize your team's Field Service schedule by running optimization directly from the dispatcher console for one or more territories. Use optimization to handle last-minute changes to your schedule. Manual optimization is ideal for handling cancellations, appointments that got dropped from the Gantt and need to be rescheduled, and high-priority last-minute

appointments. It's especially useful when selecting a scheduling policy that uses in-day optimization, which can optimize your schedule in as little as 5 minutes.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### Salesforce Field Service

### Optimize Today's Field Service Schedule

Dispatchers can navigate last-minute schedule changes by rapidly optimizing their team's schedule for one or more service territories on the day of service by manually running the optimization from the dispatcher console. You can also run in-day optimization automatically several times a day using scheduled jobs, or run jobs manually, as needed.

#### Optimize a Single Field Service Resource's Schedule

In Field Service, when last-minute developments occur like canceled jobs, lateness, or emergencies, optimize an individual service resource's schedule to design the best schedule for them.

#### **Optimization Horizon**

Specify a time period for your Field Service optimization requests to focus optimization processing on the required dataset.

### Monitor Field Service Schedule Optimization Requests

Keep an eye on all Field Service schedule optimization requests from the Gantt or the Optimization Requests custom tab.

### Field Service Enhanced Scheduling and Optimization Error Messages

Error messages indicate that something is blocking the operation or automation of scheduling and optimization services. Errors can occur due to operational issues, invalid data, logic configuration, or incorrect setup.

### Gain Visibility into Optimizations with Field Service Optimization Insights

In Field Service, learn at a glance if a global or in-day optimization reduces travel time or improves utilization. As you refine a scheduling policy, view a snapshot of optimization results and KPI changes.

### Get Information on Optimization with Field Service Optimization Center

Optimization Center is where you can find all features related to monitoring Field Service activities and troubleshooting issues. It gives you visibility into how Field Service is used and how it affects your business.

### Explore Metrics in Field Service Optimization Hub

View Optimization Hub to learn what improvements optimization made to the scheduling of service appointments across multiple territories and how to get the best results from optimization.

#### Get Recommendations with Field Service Appointment Insights (Beta)

Learn how Appointment Insights can help you improve the scheduling of service appointments. Appointment Insights helps you understand why a service appointment can't be scheduled and which work rules are preventing its scheduling.

# SEE ALSO:

Get Ready for Scheduling and Optimization Adopt and Implement Field Service Enhanced Scheduling and Optimization Work in the Field Service Dispatcher Console

# Manage Scheduled Jobs in Field Service

Optimize your team's Field Service schedule for one or more service territories across a specified range of days. You can configure the optimization to run automatically, for example, every night or several times a day, or run it as needed.



💼 This is a Field Service managed package feature.

### Manage Scheduled Jobs When Using Enhanced Scheduling and Optimization To automatically run optimization jobs regularly, you can set up scheduled jobs.

Scheduled Jobs Operation

The scheduled jobs parameters determine the scope of data included in the optimization request, such as which service resources and service appointments are included in the request, and the optimization horizon. The optimization horizon is the range of days is considered as available for scheduling.

Manage Scheduled Jobs When Not Using Enhanced Scheduling and Optimization To automatically run optimization jobs regularly, you can set up scheduled jobs.

# Manage Scheduled Jobs When Using Enhanced Scheduling and Optimization

To automatically run optimization jobs regularly, you can set up scheduled jobs.

- 1. Optionally, exclude service appointments with certain statuses from being changed during schedule optimization by defining criteria to pin them in place.
  - a. From the App Launcher, find and open Field Service Admin, and then click Field Service Settings.
  - b. Under Optimization, click Logic.
  - c. Scroll to Global Optimization and from Pin Criteria select the service appointment statuses to exclude from schedule optimization.
  - d. Save your changes. The settings apply to optimizations that dispatchers run manually or in a scheduled job.
- 2. Optionally, define a default value to show in the Keep Scheduled Criteria field in the Scheduled Jobs tab and in the Optimize window in the dispatcher console. This field prevents service appointments with certain values from being dropped from the schedule during optimization, but it enables them to be moved to a different time slot or resource.

Note: If a service appointment matches the criteria you define but violates a rule, it's pinned and isn't optimized. 

- a. From the App Launcher, find and open Field Service Admin, and then click Field Service Settings.
- b. Under Optimization, click Logic.
- c. Scroll to Global Optimization and from Keep Scheduled Criteria, select the service appointment value to show by default.
- d. Save your changes. The settings apply to optimizations that dispatchers run manually or in a scheduled job.
- 3. Open the Scheduled Jobs tab.
- 4. Click New Job.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

# **USER PERMISSIONS**

To optimize from the dispatcher console:One of these custom permission sets:

- **FSL** Admin Permissions
- FSL Dispatcher Permissions

To create a scheduled job:

FSL Admin Permissions custom permission set

- 5. Give the job a unique name, and for Automator Type, select Enhanced Optimization.
- 6. In the General tab:
  - a. Add up to 10 time periods, within 30 days.

From Day is the first day of data that is fetched. To Day is the last day of data that is fetched. Day 0 refers to today from 00:00 to 11:59 PM, according to the user's time zone. If you enter overlapping days, the data is loaded twice resulting in possible errors.

For example, if you define a value of 0 for From Day and To Day on the General tab, and define a recurring job on the Schedule tab to run each day at 6:00 PM, an optimization request is created and runs each day at 6:00 PM. The optimization horizon is 24 hours, from midnight the day the request is triggered to midnight the next day. You can also configure multiple time periods by using the + icon. For example, you can have From Day 0 to Day 6 and then select the + icon to add another period From day 7 to day 14. This configuration lets you optimize a two-week period in one optimization job but with two separate optimization requests.

Specifying multiple time periods in the same job lets you set up one job for multiple optimization horizons instead of setting up separate jobs for each horizon. Each time period generates its own optimization request and runs in parallel. The time periods also allow you to create a job that optimizes future dates.

Note: You can't define overlapping time periods if Enable optimization overlaps prevention is enabled in Field Service Settings (enabled by default).

For Example, if all service appointments have arrival windows, set up time periods for individual days. The arrival windows force the service appointments to be scheduled on a specific day, and they can't be scheduled by another optimization request running for a different time period. That way, the optimization focuses only on relevant options and results in a more optimized schedule.

If your optimization horizon includes more appointments than the allowed amount per optimization request, split the job into time periods. That way, each optimization request is within the limit.

- **b.** Select a scheduling policy. This scheduling policy is applied to the entire scheduled job unless you specify scheduling policies for individual territory groups in the Territory tab.
- c. To specify the type of appointments that are optimized, select a filter. Only appointments that meet the criteria are optimized.
- **d.** In Email Recipient Username, enter the username, and then select from the list. The field shows the email address. Use an email address where you want optimization job failure messages to be sent.
- 7. In the Territory tab:
  - **a.** Search for and select up to 200 service territories and create a group. Only active service territories with Enhanced Scheduling and Optimization enabled are available for selection.
  - b. Create up to 50 groups.
  - c. Select a scheduling policy for each group.

Note: Each optimization request includes all the service territories in the group for each time period defined in the General tab. For example, if you have three time periods and five groups, 15 optimization requests run.

- 8. In the Schedule tab:
  - **a.** Select the frequency.
  - **b.** If this job is a recurring job, enter the details.
- 9. If your optimization job is ready to run, activate the job.
- **10.** Save your changes.
- **11.** To run the job immediately without waiting for the scheduled time, click **Run Now**.

# Scheduled Jobs Operation

The scheduled jobs parameters determine the scope of data included in the optimization request, such as which service resources and service appointments are included in the request, and the optimization horizon. The optimization horizon is the range of days is considered as available for scheduling.

The horizon of an optimization request is always in full calendar days (00:00-23:59), and is determined by the From Day and To Day fields in the General tab, where day 0 is today, day 1 is tomorrow, and so on.

The horizon days are in the timezone of the user who creates the scheduled job not the timezone of the optimized service territories.

Service resources are included in the optimization request if they have an active service territory membership (primary, secondary, or relocation) in one of the territories included in the optimization request territory group (Territory tab). The service resource territory membership start and end dates must overlap with the optimization horizon.

Service appointments are included in the optimization request if:

- Their territory is included in the optimization request territory group (Territory tab).
- Their Earliest Start Permitted and Due Date overlap with the optimization horizon. If the Arrival Window Start and Arrival Window End fields are populated, these values are used instead of Earliest Start Permitted and Due Date.
- They match the filter criteria defined in Filter by Criteria.

Or

• They are already assigned to one of the service resources in the optimization request, within the optimization request horizon.

**Example**: Consider this scheduled job configuration:

From Day = 0

To Day = 3

Filter by Criteria = None

Territory group = Los Angeles, San Francisco

An optimization job is scheduled to start every night at 2:00 AM in the Los Angeles timezone (Pacific Daylight Time).

When the jobs starts at 2:00 AM on January 20 (the night between January 19 and January 20), the optimization request includes:

- Service resources with Los Angeles or San Francisco service territory memberships, Start Date earlier that January 24, and End Date earlier or equal to January 20 (time part of the date fields is ignored).
- Service appointments with:
  - Territory Los Angeles or San Francisco
  - Arrival Window Start or Earliest Start Permitted before Jan 24, 00:00 AND
  - Arrival Window End and Due Date after Jan 20, 00:00
  - Or
  - Assigned Resource is one of the collected service resources in the optimization request, and the Scheduled Start is between Jan 20, 00:00 PM and Jan 23, 11:59 PM.

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# Considerations

- The optimization requests that run for each group within each time period are counted toward the schedule optimization request limits detailed in Schedule Optimization Request Limits on page 11. The entire scheduled job is counted as one job toward the limitation detailed in Platform Limits Affecting Field Service, regardless of the number of groups in the job. If you set up a recurring schedule that runs every x minutes, multiple scheduled jobs are created accordingly. For example, if you set it up to recur every 15 minutes, this is counted as 4 scheduled jobs. Setting up groups with scheduling policies helps you avoid reaching your org limits.
- For enhanced scheduled jobs, you can't define overlapping time periods if Enable optimization overlaps prevention is enabled in Field Service Settings (enabled by default).
- Optimization applies only to service appointments whose parent appointment is a work order or work order line item.
- Global optimization attempts to reschedule appointments that have rule violations. If it doesn't manage to reschedule them, the appointments remain unscheduled.
- Global and In-day optimization validate that for already scheduled service appointments, the Scheduled End Scheduled Start time = Duration, while taking resource efficiency into consideration. Service appointments that violate this validation are unscheduled.
- The same service appointments can appear in multiple optimization requests, possibly resulting in incorrect results.
- If you edit the name of the job, the groups are deleted. To avoid this issue, before editing the name, refresh your browser.

# Manage Scheduled Jobs When Not Using Enhanced Scheduling and Optimization

To automatically run optimization jobs regularly, you can set up scheduled jobs.

- 1. Optionally, exclude service appointments with certain statuses from being changed during schedule optimization.
  - a. From the App Launcher, find and select Field Service Admin, and then click Field Service Settings.
  - **b.** Under Optimization, click **Logic**.
  - c. Under Global Optimization, select the service appointment statuses to exclude from schedule optimization.
  - **d.** Save your changes. The settings apply to optimizations that you run manually or in a scheduled job.
- 2. Open the Scheduled Jobs tab.
- 3. Click New Job.
- 4. Give the job a unique name, and for Automator Type, select Optimization.
- 5. Enter the optimization job's details.
  - **a.** Select the territories to optimize. We recommend including no more than 100 territories in a job.

- b. (Optional) If you selected multiple territories, select Optimize in stages underneath the territory list. In the Territories Per Stage field, enter the number of territories to optimize at a time. These settings help you stay within the scheduled jobs queue maximum of 100 items, and don't affect optimization time. We recommend keeping this number low to avoid reaching optimization limits.
- c. For the time horizon, enter the number of days to optimize.
- **d.** To specify the type of appointments that are optimized, select a filter. Only appointments that meet the criteria are optimized.
- e. Select a scheduling policy to guide the optimization.
- f. Enter an email address where you want optimization job failure messages to be sent.
- g. Select the frequency and schedule.
- **h.** If your optimization job is ready to run, activate the job.
- i. To run the job immediately without waiting for the scheduled time, click Run Now.
- j. Save your changes.

- Optimization	Run now
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Melbourne     New Jersey     New Jersey East     Paris	Specific Hour Recurring Hour Hour Minute 22 0
Time Horizon in days	The scheduled jobs configured here will be saved with the Europe/Dublin time zone to match your settings. (They currently use the Europe/Dublin time zone.)
Filter by criteria	
Scheduling Policy Customer First	

Considerations:

- Optimization applies only to service appointments whose parent appointment is a work order or work order line item. Only active territories included in the scheduled optimization job are optimized.
- Global optimization doesn't reschedule appointments that have rule violations. Unschedule those appointments and reschedule them.
- Global and In-day optimization validate that for already scheduled service appointments, the Scheduled End Scheduled Start time = Duration, while taking resource efficiency into consideration. Service appointments that violate this validation are unscheduled.
- Emails are sent only when optimization jobs fail to initiate. If the optimization job succeeds or fails in a later stage, an email isn't sent.

Considerations for Optimization Run Time:

Optimization run time corresponds to the thoroughness of a scheduled optimization job. The higher the run time, the closer you get to an optimal schedule.

To set your preferred optimization run time, from the App Launcher, find and open the **Field Service Admin** app. Click **Field Service Settings** > **Optimization** > **Logic**. In the **Optimization run time per service appointment** field, select **Low**, **Medium**, or **High**, and save your changes. You can decide to change your run time before a particular optimization job. For better-quality results, use **High**. For quicker results, use **Low**. In many cases, Low is enough to produce a satisfactory schedule. Regardless of your run time setting, run time never exceeds two hours. The run time ratio for Low:Medium:High is 1:2:3, so High-level optimization takes three times as long as Low-level optimization.

Longer run times can be beneficial in the following scenarios.

- Many candidates per service appointment—Service resources are considered candidates for a service appointment if they comply
  with the applied scheduling policy's work rules. For example, a scheduling policy can require candidates to be working in the relevant
  service territory in the required time, to have the required skills, and to have a home base that is within the maximum travel range
  from the service appointment. If a service appointment has many candidates, a longer run time allows the optimizer to consider
  more scheduling options.
- Service resources start their day from a centralized service depot—When many service resources start from the same place and could potentially be routed to the same appointments, more run time helps the optimizer determine the optimal routes.
- Service appointments have the same priority—Higher-priority service appointments serve as anchors during optimization and narrow down scheduling options. When all, or most, service appointments have the same priority, more time is needed to determine the optimal routes.
- Complex work A complex work chain is a chain of related service appointments. The dependency could be the chronological order of the service appointments, or that they have to be done by the same service resource. Complex work requires more computation time. If complex work is common, consider allowing more run time.
- Street-Level Routing (SLR)—Aerial travel times require a quick arithmetic calculation. For SLR, the optimizer requires additional time to fetch travel times from a GIS server. However, as optimization continues to be used, Field Service learns your service territories' SLR travel times and grows more efficient. When optimizing a new service territory, a longer run time is recommended.
- Note: If optimization runs longer than your org's session timeout value, it gets stuck in the In Progress status. The optimization job fails, resulting in an error when it tries to deliver the results to your Salesforce org.

To avoid failed optimizations, increase your session timeout value to at least 2 hours, or select a quicker optimization run time.

#### SEE ALSO:

- Field Service Limits and Limitations
- Optimize a Single Resource's Schedule
- Monitor Optimization Requests
- Optimize Your Schedule from the Field Service Dispatcher Console
- Prevent Overlapping Field Service Optimization Requests

# Optimize Your Schedule from the Field Service Dispatcher Console

Optimize your team's Field Service schedule by running optimization directly from the dispatcher console for one or more territories. Use optimization to handle last-minute changes to your schedule. Manual optimization is ideal for handling cancellations, appointments that got dropped from the Gantt and need to be rescheduled, and high-priority last-minute appointments. It's especially useful when selecting a scheduling policy that uses in-day optimization, which can optimize your schedule in as little as 5 minutes.

🜐 This is a Field Service managed package feature.

1. On the appointment list's action menu, select **Optimize**.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To optimize from the dispatcher console:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

To use the Keep Schedule Criteria field in the dispatcher console:

• FSL Keep Scheduled Criteria

O

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<ul> <li>Only unscheduled</li> <li>Scheduled and unscheduled</li> <li>Scheduling Policy</li> </ul>	
Soft Boundaries	•
Appointment Optimization Criteria 🚯	
Same Day	-
Keep Scheduled Criteria (Beta) 🚯	
Emergency	•

- 2. Select the service territories. You see only territories that are selected in the dispatcher console.
- 3. Select the start and end dates of the horizon you want to optimize. The default is the horizon shown in the dispatcher console. To avoid scheduling conflicts, it's recommended to run optimizations for the current day, and at the most for two days.

#### Salesforce Field Service

- 4. Select whether you want to optimize only appointments that aren't scheduled or both scheduled and unscheduled appointments. When you select only unscheduled appointments, appointments that are already scheduled are pinned.
- **5.** Select a scheduling policy.

Note: It's recommended to select a policy that uses in-day optimization as it takes a maximum of 5 minutes, while other policies run for several hours.

- **6.** To specify the type of appointments to optimize, select optimization criteria. Only appointments that meet the criteria are optimized. For example, you can optimize only those appointments defined as In Jeopardy or Emergency.
- 7. If you're using Enhanced Scheduling Optimization and have permission, define the criteria to keep appointments scheduled during optimization. For example, you can ensure that critical appointments with customer commitments are optimized but are never removed from the Gantt. These appointments can move to a different time slot or resource but remain scheduled.

🕜 Note: If a service appointment matches the criteria you define, but it violates a rule, it's pinned and isn't optimized.

8. Click Optimize. The Gantt is shaded in green and is locked during optimization.

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SEE ALSO:

Manage Scheduled Jobs in Field Service

Manage Scheduled Jobs in Field Service

Create and Manage Field Service Scheduling Policies

Optimize a Single Field Service Resource's Schedule

# Optimize Today's Field Service Schedule

Dispatchers can navigate last-minute schedule changes by rapidly optimizing their team's schedule for one or more service territories on the day of service by manually running the optimization from the dispatcher console. You can also run in-day optimization automatically several times a day using scheduled jobs, or run jobs manually, as needed.

# 🜐 This is a Field Service managed package feature.

Schedule optimization in Field Service comes in a few different flavors. While *global optimization* is the most powerful and thorough option, it can take several hours to complete. *In-day optimization* is ideal for handling in-day schedule changes such as last-minute appointments that must be handled immediately or cancellations leading to gaps in the schedule. It runs for up to 5 minutes for Enhanced Scheduling and Optimization, and up to 10 minutes if you're not using Enhanced Scheduling and Optimization, making it efficient for meeting on-demand schedule changes. You can use in-day optimization to optimize multiple days of the schedule, but it's best suited for addressing last-minute issues by running on the current day's appointments or at most over 2 days.

If you're not using Enhanced Scheduling and Optimization, in-day optimization is available only if optimization is turned on.

- Create a scheduling policy from Guided Setup or by clicking New from the Scheduling Policies tab. To open Guided Setup, from the App Launcher, find and open the Field Service Admin app. Click Field Service Settings > Go to Guided Setup > Customize Scheduling Policies.
- 2. To configure a scheduling policy to use in-day optimization rather than the default global optimization, select **In-Day Optimization** on the policy. You may need to add this field to the scheduling policy page layout.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# USER PERMISSIONS

To configure scheduling policies:

 Custom permission set: FSL Admin Permissions

To run in-day optimization: One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

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- **3.** If you selected In-Day Optimization, we recommend adding "In-Day" to the name of this policy for easy identification when creating jobs or running optimizations from the dispatcher console.
- **4.** Save the policy.
- 5. Optionally, exclude service appointments with certain statuses from being changed during schedule optimization by defining criteria to pin them in place.

- a. From the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings > Optimization > Logic.
- b. Scroll to In-Day Optimization, and from Pin Criteria, select the service appointment statuses to exclude from schedule optimization.
- **c.** Save your changes.

The settings apply to optimizations that dispatchers run manually or in a scheduled job.

- 6. Optionally, define a default value to show in the Keep Scheduled Criteria field in the Scheduled Jobs tab and in the Optimize window in the dispatcher console. This field prevents service appointments with certain values from being dropped from the schedule during optimization, but it enables them to be moved to a different time slot or resource.
  - a. From the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings.
  - b. Under Optimization, click Logic.
  - c. Scroll to In-Day Optimization, and from Keep Scheduled Criteria, select the service appointment value to show by default.
  - **d.** Save your changes.

The settings apply to optimizations that dispatchers run manually or in a scheduled job.

Note: If a service appointment matches the criteria you define but violates a rule, it's pinned and isn't optimized.

- 7. Apply the in-day policy to scheduled jobs and define that job to run several times a day.
- **8.** Let your dispatchers know that the optimization job can result in changes to the schedule if a more optimal schedule is created as a result of running the job. And remind them that they can select the in-day policy from the Optimize window in the dispatcher console.

SEE ALSO:

Optimize Your Schedule from the Field Service Dispatcher Console Manage Scheduled Jobs in Field Service

# Optimize a Single Field Service Resource's Schedule

In Field Service, when last-minute developments occur like canceled jobs, lateness, or emergencies, optimize an individual service resource's schedule to design the best schedule for them.



📅 This is a Field Service managed package feature.

- 1. Optionally, exclude service appointments with certain statuses from being changed during resource schedule optimization.
  - a. From the App Launcher, find and open the Field Service Admin app, and then click Field Service Settings > Optimization > Logic.
  - b. Scroll to Resource Schedule Optimization and from Pin Criteria select service appointment statuses to exclude from resource schedule optimization.

Service appointments with a selected status aren't scheduled, unscheduled, or rescheduled during resource schedule optimization. We recommend leaving the Dispatch status deselected so dispatched work can be moved if a previous job runs late or emergency work is needed.

- 2. Optimize any service resource's schedule.
  - a. From the dispatcher console, click the action menu of the resource whose schedule you want to optimize.
  - b. Click Resource Schedule Optimization.
  - c. Define the scope of your optimization. Service appointments are scheduled only within the dates you select, but candidate service appointments can come from outside the time frame.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

# **USER PERMISSIONS**

To see Resource Schedule Optimization on the Gantt:

**Resource Schedule** Optimization custom permission

Note: Resource Schedule Optimization loads all unscheduled service appointments meeting the time criteria, regardless of the service resource's service territory memberships. This means that unscheduled appointments from all service territories are loaded based on the time criteria, which can exceed the maximum allowed number of service appointments per optimization request (5,000). To avoid reaching this limit, filter your service appointments based on additional criteria.

- d. If you select Only optimize unscheduled appointments, only unscheduled service appointments are considered, and all scheduled service appointments are pinned (unmovable). If the setting is deselected, all service appointments within the time frame that meet the criteria are considered during optimization.
- e. To optimize your schedule based on rules and objectives defined by your company, select a scheduling policy. If no scheduling policy is provided, resource schedule optimization fails.
- f. Select which category of service appointments are considered as candidates to be scheduled in the optimization process.
- g. In Keep these appointments scheduled, select which service appointments must remain on the schedule during resource schedule optimization. Keep in mind that resource schedule optimization fails if more than 50 appointments must remain scheduled. The optimization can move and reschedule the kept appointments. If the resulting schedule doesn't include all the service appointments marked to keep scheduled, resource schedule optimization fails. To optimize, give these appointments a much higher priority than the other appointments or try to run optimization on more days.
- h. Select whether only service appointments scheduled to the resource are considered in the optimization process. If you don't select the checkbox, unscheduled service appointments, appointments scheduled to the resource, and appointments scheduled to other resources are considered during optimization. When using Enhanced Scheduling and Optimization, if you select to only schedule appointments to the resource, both unscheduled service appointments and appointments scheduled to the resource are considered. When not using Enhanced Scheduling and Optimization, only service appointments scheduled to the resource are considered, such that this checkbox overrides Only optimize unscheduled appointments.

#### i. Click Optimize.

You can also set up scheduling preferences to automatically run resource schedule optimization in response to common scheduling events, like appointment overlaps or cancellations. To learn how, see Create Scheduling Recipes for Common Events.

# 🕜 Note:

- Complex work information that's not fully available in the optimization data is considered excluded from resource schedule optimization. For example, a partial chain of a scheduling dependency is excluded.
- Resource schedule optimizations can't run in parallel for the same service resource on the same time interval.
- You can't run resource schedule optimization on capacity-based resources.

#### SEE ALSO:

Manage Scheduled Jobs When Not Using Enhanced Scheduling and Optimization Monitor Field Service Schedule Optimization Requests Optimize Your Schedule from the Field Service Dispatcher Console

# **Optimization Horizon**

Specify a time period for your Field Service optimization requests to focus optimization processing on the required dataset.

The optimization horizon defines the time period of data sent to the engine to be optimized as well as the time period in which appointments can be scheduled. The data consists of the service resources active during that time, operating hours, shifts, service appointments, and any other data that must be considered when building a schedule. An optimization horizon is specified in any of these scheduling services.

- Global or In-day optimization from the dispatcher console
- Resource Schedule Optimization
- Optimization of scheduled jobs
- Optimization methods in the OAAS class

Consider these two aspects when understanding which service appointments are sent to optimization within the optimization horizon:

### Total Set of Service Appointments Sent to Optimizer

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The optimizer needs information on the service appointments that can affect scheduling decisions, including appointments that can't be optimized, such as pinned service appointments and service appointments not meeting filter criteria. For example, service appointments in a Completed status are sent to optimization, even though the optimization engine can't move these appointments. The engine still needs information about the Completed service appointment to create a schedule around it.

Knowing the total number of service appointments sent to optimization in an optimization request is important to estimate any impact on optimization limits. See Field Service Limits and Limitations. The criteria of service appointments sent to optimization can be defined as:

- Service Appointments that aren't assigned to a service resource:
  - Earliest Start Permitted < Optimization Horizon End + 24 hours AND
  - Due Date > Optimization Horizon Start 24 hours
- Service Appointments that are assigned to a service resource:

- Scheduled Start < Optimization Horizon End + 24 hours AND
- Scheduled End > Optimization Horizon Start 24 hours

Note: To enhance scheduling efficiency, the optimization engine includes service appointments up to 24 hours before or after the specified optimization horizon. This ensures that the engine considers nearby appointments that can influence the schedule, for example, service appointments with complex work dependencies. The optimization request doesn't modify service appointments outside the horizon.

### Service Appointments That Can Be Optimized

The criteria for service appointments eligible to be optimized are defined as:

Service appointments that aren't assigned to a service resource:

- Without an arrival window:
  - Earliest Start Permitted < Optimization Horizon End AND
  - Due Date > Optimization Horizon Start
- With an arrival window:
  - Earliest Start Permitted < Optimization Horizon End AND
  - Due Date > Optimization Horizon Start AND
  - Arrival Window Start < Optimization Horizon End AND
  - Arrival Window Start > Optimization Horizon Start

Service appointments that are assigned to a service resource:

- Scheduled Start < Optimization Horizon End AND
- Scheduled End > Optimization Horizon Start

Some considerations for service appointments that can be optimized.

- Service appointments classified as pinned and service appointments that don't meet filter criteria aren't optimizable.
- Service appointments included in the dataset but not in the list of service territories to be optimized can't be optimized.
- When you're not using Enhanced Scheduling and Optimization, rule-violating service appointments can't be optimized. When you're using Enhanced Scheduling and Optimization, the engine can find an acceptable schedule for rule-violating service appointments or drop these appointments from the schedule.
- Service appointments defined with Keep Scheduled Criteria can be optimized, but the optimization request can't unschedule these appointments.

Note: Administrators can decide to allow or abort overlapping optimization horizons through configuration. See Manage Optimization Conflicts.

### SEE ALSO:

Field Service Limits and Limitations Manage Scheduled Jobs in Field Service Optimize Today's Field Service Schedule Optimize a Single Field Service Resource's Schedule Keep Important Appointments Scheduled During Optimization (Beta) OAAS Class

# Monitor Field Service Schedule Optimization Requests

Keep an eye on all Field Service schedule optimization requests from the Gantt or the Optimization Requests custom tab.



📅 This is a Field Service managed package feature.

#### From the Optimization Requests tab

Create a custom tab for the Optimization Request object, and customize the list view to show useful fields like Status, Start, Finish, and Failure Reason. Click any request to view its details.

Note: Add the Failure Details field and Notes and Attachments related list to the optimization request page layout. These page elements give you a fuller view of the request.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise. Unlimited, and Developer Editions.

### **USER PERMISSIONS**

To cancel optimization requests:

Abort Optimization Request custom permission

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Click an optimization request to show more information about the request, including who created, owns, and modified the request, the scheduling policy, the criteria defined to keep appointments scheduled during optimization, the number of objects to schedule, and the actual number of objects scheduled. For example, service managers can easily identify the user who initiated the global, in-day, or resource schedule optimization request or who configured the scheduled job. The Owner field in the optimization request shows the user's name, providing insights into scheduling and optimization actions. This functionality facilitates system tracking, troubleshooting, and traceability.

#### From the Gantt

Click the lightbulb icon at the top of the Gantt to view the status of recent optimization requests. When a global optimization request is in progress, you can see a percentage-based progress bar and the option to cancel the request.

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In-day optimization progress appears below the Gantt's time axis.

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es	<b>T</b> •		Mon, N	larch 1	8, 201	.9					
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A percentage-based progress bar isn't available for resource schedule optimization requests, but the resource's row in the Gantt changes color to indicate that optimization is in progress.

- San Francisco	Utilization: 8% America/Los_Angeles - Thu, Mar 21, 2019 11:11 AM
Janice Gonzales Expert	
Louise Martin     Installer	
Ralph Clark     Installer	Resource Schedule Optimization

#### Why did my request fail?

Salesforce sometimes cancels optimization requests to protect the integrity of your schedule. Here are the most common reasons a request fails.

- If a request stays in the same status for longer than the configured limit, it's canceled. The limit varies depending on the status and the type of optimization.
- If optimization runs longer than your org's session timeout value, it gets stuck in the "In Progress" status. The optimization job fails, resulting in an error when it tries to deliver the results to your Salesforce org.

To avoid failed optimizations, increase your session timeout value to at least 2 hours, or select a quicker optimization run time.

• Scheduled optimization jobs can generate one or more JSON files. The request fails if a JSON file contains more than 6 million characters.

To check whether an optimization job exceeded this limit, go to the Optimization Requests tab. Open the request associated with the failed job, and click the value in the Optimization Data field. In the Notes and Attachments related list, open each JSON file and check its character total.

If the Optimization Data field is empty, check the Error field for details. If the Error field is empty, contact Salesforce to learn more about the failure.

- If simultaneous conflicting updates are made to the schedule while a request is open, the request is canceled. For example, this can happen when you add or update appointments or resource absences that fall into the date range and service territory being optimized.
- Resource schedule optimization fails if more than 50 service appointments are required to remain scheduled during the optimization. To change which appointments must remain scheduled, select a different category in **Keep these appointments scheduled** when you run the optimization. For example, if In Jeopardy is selected and more than 50 appointments are in jeopardy for the selected time period, the request fails.

To review limits and limitations related to schedule optimization, see Field Service Limits and Limitations.

### SEE ALSO:

Manage Scheduled Jobs in Field Service

Optimize a Single Field Service Resource's Schedule

# Field Service Enhanced Scheduling and Optimization Error Messages

Error messages indicate that something is blocking the operation or automation of scheduling and optimization services. Errors can occur due to operational issues, invalid data, logic configuration, or incorrect setup.

# 🜐 This is a Field Service managed package feature.

Identify enhanced scheduling and optimization issues and their root cause with detailed error messages that provide insight into the underlying causes of the issue and promote self-sufficient troubleshooting. The error messages include relevant entity IDs, when applicable, and provide actionable guidance. This information aids service managers, implementers, and administrators in resolving problems efficiently.

The table shows common errors that occur during scheduling and optimization operations.

- Error label: Represents the error code for monitoring and statistical purposes.
- Error message: Includes text displayed in the user interface, logs, or activity reports (depending on the specific operation). The message provides specific error details, including relevant entity IDs about the occurrence of the error.
- Potential resolution: Suggests steps to mitigate the issue and prevent error recurrence. You can then adjust configurations or rectify data to resolve the issue.

Note: Activity Reports provides information about all scheduling and optimization requests that you initiate. You can generate an activity report for a specific request type, such as Global Optimization. If the request fails, the relevant error label shows in the report output. This helps you easily identify and resolve the issue. See Review the History of Scheduling and Optimization Requests with Activity Reports (Beta).

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Error Label	Error Message	Potential Resolution
Action_Not_Allowed_More_Than_One_Absence_Update_That_Involves_MDT	We couldn't [action type: delete, insert, update] resource absence because it affects more than one multiday service appointment: [SAID1, SAID2]. Make sure that your optimization request includes only one multiday service appointment and try again.	<ul> <li>A resource absence can't be created or modified if it overlaps with multiple multiday service appointments.</li> <li>To fix this:</li> <li>Make sure that there is only one multiday service appointment in the optimization request. Schedule the multiday work manually and then pin it.</li> <li>Schedule the multiday work manually and then pin it.</li> </ul>
Canceled_SAs_Are_Not_Allowed_In_A_MST_Chain	Can't schedule a complex work chain [SA ID1, SA ID2, SA ID3,] that includes canceled service appointments. Remove the dependency from service appointment [SA ID] and try again.	A complex work chain must be scheduled in its entirety to maintain all service appointments together according to their dependencies. Partial scheduling of the complex work chain isn't supported. The complex work chain is scheduled as a whole, or not at all.
		When a service appointment is canceled, it can't be assigned to a service resource to ensure the resource's availability for other valid appointments. If any service appointment within the complex work chain can't be scheduled, such as when it's canceled, the entire chain can't be scheduled.
		<ul> <li>To fix this:</li> <li>Remove the canceled service appointment from the complex work chain by ensuring it has no dependencies on other service appointments, and that other appointments in the chain aren't dependent on it.</li> <li>If necessary, update the status of the canceled</li> </ul>

Error Label	Error Message	Potential Resolution
		service appointment based on the configured appointment status flow.
		The service appointments within the complex work chain can still be manually scheduled and pinned. If you manually schedule these appointments, the appointments are flagged as rule-violating and removed by the scheduling and optimization processes, unless they're pinned or included in the Keep Scheduled criteria.
Cannot_check_rule_validations_for_unscheduled_appointments	Can't check rule validations for service appointments that aren't scheduled: [SA ID1, SA ID2,]. Fix the issue and try again.	Unscheduled service appointments aren't subject to scheduling rules compliance. To fix this, schedule the service appointments and then check rules, or avoid checking rules at this time.
Cannot_found_the_invoked_Service_Appointment	We couldn't find the invoked service appointment [invoked SA Id]. Fix the issue and try again.	To fix this, verify the validity of the service appointment. If the problem persists, contact Salesforce support to open a case.
Cannot_Query_TimeZone_For_OH	We couldn't query the time zone information for Operating Hours [OHID] because you don't have the required permissions. Ask your Salesforce admin for help.	You don't have permission to access the operating hour's time zone. To fix this, ask your Salesforce admin to grant you access to query operating hours.
Conflicting_Working_Territories	There are conflicting Working Territories work rules in your [Policy Name] scheduling policy. Review and update the scheduling policy and try again.	<ul> <li>The scheduling policy has conflicting Working Territories work rules. This conflict can be due to:</li> <li>How the fields in the Working Territories work rules are defined.</li> </ul>

Error Label	Error Message	Potential Resolution
		• Overlapping criteria that the Working Territories work rules apply to.
		To fix this, review the Working Territories rules in the scheduling policy and update the rule definitions accordingly.
Cycles_Are_Not_Allowed_In_A_MST_Chain	We couldn't perform the [requestType] request because you can't have circular dependencies between service appointments that are part of a complex work chain. Fix the dependencies and try again: [taskIDs]	Complex work chains can't have circular dependencies within the chain such that the service appointment dependencies in the chain create a loop. For example, you can't have service appointment SA1 with the Same Start dependency on service appointment SA2, while at the same time service appointment SA2 has a Start After Finish dependency with service appointment SA1. Or, service appointment SA1. Or, service appointment SA1 has a Start After Finish dependency on service appointment SA2, while service appointment SA2 has a Start After Finish dependency on service appointment SA1. To fix this, remove invalid dependencies from service appointments in the complex work chain.
Enhanced_Match_No_Linking_Object	We couldn't perform the [ReqType] request because the Extended Match work rule [ruleID] isn't configured correctly. Add the Linking Object and try again.	The Extended Match work rule functionality is based on linking two objects via a junction object. See Work Rule Type: Extended Match. To fix this, open the work rule settings for the Extended Match work rule identified in the error. Make sure that the Linking Object and Linking Object Reference fields are set with the correct values.

Error Label	Error Message	Potential Resolution
External_Identifier_is_missing	We couldn't find an external identifier in the optimization request. Add an external identifier. Or, ask your Salesforce admin for help and provide the transaction ID: [txID]	An external reference ID is the transaction ID that is used internally. To fix this, review your customizations and check that each API call for optimization request has the external identifier set. Refresh and try again, or contact your Salesforce support to open a case.
Infeasible_SA_Partially_Overlaps_With_Out_Of_Domain_Complex_Work_SA	We couldn't perform the request because service appointment [service ld] [starts/ends] outside of the horizon and partially overlaps with a service appointment that has dependencies and is outside of the horizon. Fix the issue and try again.	<ul> <li>The service appointment overlaps with another service appointment that's part of a complex work chain.</li> <li>To fix this:</li> <li>Identify where the service appointment overlaps with a service appointment that's part of a complex work chain, and reschedule the service appointment manually so that it doesn't overlap with it. We recommend scheduling the service appointment to a non-rule-violating position.</li> <li>Unschedule the service appointment and then reschedule it using a scheduling operation.</li> <li>Unschedule the whole complex work chain and reschedule it.</li> </ul>
INVALID_FIELD	We couldn't optimize the schedule because the platform integration user is missing the required permissions. Ask your Salesforce admin for help.	The platform integration user (PIU) doesn't have the required access permission. To fix this, make sure that the PIU has the required access permissions. Or, ask your Salesforce admin for help.

Error Label	Error Message	Potential Resolution
Json_Exceeds_Heap_Size_Limit	We couldn't schedule or optimize the service appointments because you reached the data loading limit. Reduce the number of service resources or service appointments in your request. Or, ask your Salesforce admin for help.	To fix this, reduce the number of
KeepApptScheduledFieldInvalidField	<field name=""> doesn't exist or isn't a boolean field. Enter a valid service appointment boolean field name.</field>	The Keep Scheduled functionality is based on a boolean field criteria. See Manage Scheduled Jobs in Field Service. The selected field name doesn't exist or isn't a boolean. To fix this, open the scheduling service setting and make sure the field selected for keeping appointments scheduled is valid, spelled correctly, and boolean. Save your setting changes and try again.
Missing_Default_Scheduling_Policy	We couldn't perform the [requestType] request because there's no default scheduling policy set for the Dispatcher Console UI in Field Service Settings. Ask your Salesforce admin to define the default scheduling policy and try again.	actions triggered for the dispatcher console can't be performed without a default scheduling policy defined for the dispatcher console UI.
Missing_Gap_Rule_For_STMS	We couldn't find the Resource Availability work rule in the [Policy Name] scheduling policy for service territory	Every scheduling and optimization operation requires a scheduling policy that defines the scheduling rules and

Error Label	Error Message	Potential Resolution
	member [stmld]. Add the work rule and try again.	objectives. Every scheduling policy must include a Resource Availability work rule to define the resource's working hours and breaks.
		To fix this:
		<ul> <li>Open the scheduling policy indicated in the error message, and make sure a Resource Availability work rule is included. If you already have a relevant Resource Availability work rule, you can select it, or you can create a Resource Availability work rule and add it to the scheduling policy.</li> <li>Make sure that the Resource Availability work rule criteria include the relevant service resources for this policy.</li> </ul>
Missing_object_permissions	We couldn't [action type] the Service Appointment because you don't have permissions for the Service Appointment object. Ask your Salesforce admin for help.	You don't have the relevant permissions to perform the action on the specified object. To fix this, ask your Salesforce admin to assign the relevant permission to the specified object type for users triggering the optimization services on those objects.
Missing_Schedule_Result	We couldn't schedule service appointment [SA ID] because something went wrong in the scheduling process resulting in an empty schedule. Contact your Salesforce admin for help.	The system returned an empty optimization result. To fix this, refresh and try again, or contact your Salesforce support to open a case.
Missing_Scheduling_Policy	We couldn't perform the {request type} request because scheduling policy [scheduling policy ID] doesn't exist. Make sure that the provided policy ID is valid, or set a default policy	Every scheduling action requires a scheduling policy. The scheduling policy sent as part of the scheduling operation couldn't be found. This can happen if the scheduling policy

Error Label	Error Message	Potential Resolution
	in the Dispatcher Console UI in Field Service Settings.	is deleted. Scheduling actions triggered for the dispatcher console can't be performed without a default scheduling policy defined for the dispatcher console UI.
		To fix this, ask your Salesforce admin to define the default scheduling policy.
MST_Chain_Must_Contains_No_More_Than_X_Tasks	We couldn't perform the [requestType] request because service appointment [taskld] is part of a complex work chain that includes more than [X- parameter] service appointments. Drag the service appointment to schedule it.	<ul> <li>A complex work chain can have a maximum of 5 service appointments in the chain, otherwise it can't be scheduled.</li> <li>To fix this:</li> <li>Schedule the long complex work chain manually and then pin it.</li> <li>Split the long complex work chain into 2 shorter complex work chains.</li> </ul>
NoCandidates	We couldn't get candidates for the service appointment because there aren't any service resources that match the requirements. Fix the issue and try again.	<ul> <li>To find candidates, you need a service resource that's located in the area, has the relevant skills and availability, and complies with any relevant work rules set.</li> <li>To fix this:</li> <li>Make sure you have service resources in the area with the relevant service territory assigned as primary or secondary during the appointment's time frame.</li> <li>Make sure there are service resources that comply with all the set work rules.</li> <li>Make sure you have service resources with relevant availability during the appointment window time.</li> </ul>

Error Label	Error Message	Potential Resolution
No_Operating_Hours_specified_in_request	We couldn't find operating hours in the [request Type] request. Add operating hours and try again.	Scheduling and optimization services require operating hours data. To fix this, check that all service resources have operating hours
No_Primary_Or_Relocation_STMs	We couldn't perform the [request type] request because service resource [resource ID] doesn't have primary or relocation service territory memberships between [StartDate] and [EndDate]. Define the service territory memberships for this time period and try again.	Service resources must have a primary service territory or a relocation service territory assigned to them whenever work is scheduled. To fix this, make sure that the service resource has an assigned primary service territory or relocation service territory within the specified date range. We recommend that you check that the service resource always has primary or relocation service territory membership
No_Timeslots_in_AB_Operating_Hours	We couldn't find any time slots for service appointment [SA ID] within the default operating hours [OH ID]. Define the time slots and try again.	<ul> <li>This error indicates that there's no overlap between when the relevant service resources are available to handle this service appointment, and when the service appointment can be scheduled in terms of available time slots.</li> <li>To fix this, make sure that there's an overlap between the service resource availability and when the service appointment can be scheduled.</li> <li>Review the operating hours for the relevant service resource candidates (candidates with matching)</li> </ul>
		<ul> <li>skills and service territory memberships).</li> <li>Make sure the time slots overlap (coincide) with the relevant service resources' operating hours. If there's no</li> </ul>

Error Label	Error Message	Potential Resolution
		<ul> <li>overlap, update the operating hours accordingly.</li> <li>Update the relevant service resources' operating hours to overlap with the time slots.</li> </ul>
Not_Valid_C2C_Token	We couldn't perform the [request type] request because there isn't a valid C2C token. Ask your Salesforce admin for help.	To fix this, refresh and try again. Or, ask your Salesforce admin for help.
O2_Is_Not_Enabled_Error_Message	We couldn't perform the [Request type] request because Enhanced Scheduling and Optimization isn't enabled. Ask your Salesforce admin for help.	Enhanced Scheduling and Optimization isn't enabled. To fix this, see Enable Enhanced Scheduling and Optimization.
O2_Rest_Utils_C2C_Error_Finish	Contact your Salesforce admin and provide them with this error: <error message=""></error>	An internal error occurred. To fix this, we recommend that you try to trigger the action again or contact your Salesforce support to open a case.
O2_Rest_Utils_C2C_Error_Title	Looks like there's a problem accessing the optimization service.	An internal error occurred. To fix this, we recommend that you try to trigger the action again or contact your Salesforce support to open a case.
O2_Rest_Utils_Callout_Error_Title	Schedule optimization incomplete.	An internal error occurred. To fix this, we recommend that you try to trigger the action again or contact your Salesforce support to open a case.
O2_Rest_Utils_Error_Operation_Called_Twice	Can't call the same service more than once in the same transaction. Service type: [requestType]. Include this service type only once and try again.	To avoid concurrency issues, you can't trigger the same service on the same data more than once at any time To fix this, make sure only one transaction is triggered at a time. To identify who triggered an operation, ask your Salesforce

Error Label	Error Message	Potential Resolution
		admin to look at the Activity Report.
Optimization_Request_Limit_Services	We couldn't optimize the schedule because you reached the limit of service appointments per optimization request (request ID). Reduce the number of service appointments and try again, or ask your Salesforce admin for help.	<ul> <li>The optimization request exceeded the 5000 service appointment limit.</li> <li>To fix this:</li> <li>Reduce the number of service territories in the optimization request.</li> <li>Reduce the optimization request horizon, or, if your whole dataset must be optimized, split the request into 2 optimization requests.</li> </ul>
Optimization_Request_Limit_Territories	We couldn't optimize the schedule because you reached the limit of service territories per optimization request (request ID). Reduce the number of territories and try again, or ask your Salesforce admin for help.	The maximum number of service territories optimized in a request is 100. The optimization request exceeded this limit. To fix this, reduce the number of service territories in the optimization request. Or, if your whole dataset needs to be optimized, split the request into 2 optimization requests. We recommended that you review Manage Scheduled Jobs When Using Enhanced Scheduling and Optimization to learn more.
Overlapping_Absences_Error_Details	Can't have overlapping breaks in your optimization horizon. Remove the overlaps for resource [Resource ID] during [Date range], and try again.	Breaks can't overlap. To fix this, review the service resource's breaks within the horizon and identify the ones that overlap. Change the breaks so that they don't overlap.
Overlapping_Shifts_Exception_Details	We couldn't optimize the schedule because the travel time from the shift that ends at [firstShiftEnd] overlaps with the next shift that starts at [secondShiftStart] for service	A shift (including the job and travel time, or resource absence) can't overlap with the next shift's job or travel time, or resource absence.

Error Label	Error Message	Potential Resolution
	resource [invalidResourceld]. Shift times include the travel time to and from home at the expense of the service resource. Fix the issue and try again.	<ul> <li>To fix this:</li> <li>Make sure that the addresses on the shifts and the home base are well defined without typos or mistakes.</li> <li>Make sure that the addresses on the shifts and the homebase were geocoded properly and are valid coordinates (latitude and longitude).</li> <li>Change the location of the shift to be closer to the service resource's home base.</li> <li>Relocate the service resource to a location closer to the shift location.</li> <li>Change the service resource's home base if relevant.</li> </ul>
Overtime_Not_At_End_Of_Day_Error_Details	Can't have extended time slots that aren't at the end of the working day. Fix the time slots for resource [Resource ID] on [Date], and try again.	The system supports overtime hours only at the end of the service resource's working hours. To fix this, update the overtime hours to be at the end of the shift during the optimized horizon.
Part_Of_Mst_Chain_Is_Infeasible	We couldn't schedule the complex work chain because service resource [ResID] has appointments scheduled on [DateTimeID] that are pinned and outside of the resource's working hours: [SA ID1, SA ID2,]. Fix the issue and try again.	<ul> <li>The system can't move Pinned service appointments.</li> <li>A service appointment can be pinned in 2 ways:</li> <li>Each service appointment has a Pinned field. If this field is selected, the specific service appointment can't be updated during optimization and it stays in its place.</li> <li>Implementers can define specific statuses as pinned statuses. All service</li> </ul>

Error Label	Error Message	Potential Resolution
		appointments in these pinned statuses are treated as pinned and can't be moved.
		To fix this:
		• Review the resource specified on the date indicated and identify the service appointment that is a part of the complex work chain and pinned outside of working hours.
		• Unpin the service appointment and move it manually to be within working hours (you can then pin it again).
Pinned_And_Overlapping_Task_In_MST_Chain	We couldn't schedule service appointment [invoked SA ID] because it's part of a complex work chain that includes a pinned and overlapping service appointment: [pinned and overlapping SAIDs]. Unpin the appointment or fix the overlap, and try again.	<ul> <li>When you reschedule a service appointment that's part of a complex work chain, the whole chain is affected due to dependencies between the chained service appointments. The service appointment can't be scheduled because it's part of a complex work chain that includes a pinned service appointment, travel time, or resource absence.</li> <li>To fix this:</li> <li>Unpin the pinned service appointment.</li> <li>Manually schedule the service appointment.</li> </ul>
Recurring_SA_Frequency_Outside_The_Range	We couldn't schedule recurring service appointments because the frequency is set to [Frequency Value], which is outside of the [lower range limit] - [upper range limit]) range required for the [Frequency Type:	Recurring visits are a sequence of visits with the same features that require a repeating shift pattern. To ensure scheduling as expected, the frequency of the recurrence pattern must correlate with the frequency range for the frequency type

Error Label	Error Message	Potential Resolution
	Weekly/Monthly/Yearly] frequency. Set the frequency correctly and try again.	(Weekly, Monthly, or Yearly). The request includes a frequency and a range that don't match.
		To fix this, update the frequency to match the range required for the frequency type.
Recurring_SA_Not_Weekly_Frequency	We couldn't schedule recurring service appointments because only the weekly frequency is supported in the recurrence pattern definition. Set the recurrence to Weekly and try again.	Recurring visits are a sequence of visits with the same features that require a repeating shift pattern. The defined recurrence pattern definition supports a weekly frequency. The request includes a frequency that isn't weekly. To fix this, change the recurrence frequency to Weekly.
Recurring_SA_Number_Of_Days_Is_Smaller	We couldn't schedule recurring service appointments because the number of planned visits is set to [Num_Visits value], which is lower than the required weekly frequency [frequency value]. Set the values correctly and try again.	<ul> <li>Recurring visits are a sequence of visits with the same features that require a repeating shift pattern. To ensure scheduling as expected, the frequency of the recurrence pattern must correlate with the number of visits (days). The number of days is less than the required frequency selected such that the frequency and the number of days in the request don't match.</li> <li>To fix this:</li> <li>Update the number of visits to match the frequency to match the number of visits.</li> </ul>
Recurring_SA_Visit_Number_Less_Then_2	We couldn't schedule recurring service appointments because the number of visits in the recurrence pattern is set to [Number={0,1}], which is used for non-recurring visits. Set the value to a number greater than 2 and try again.	Recurring visits are a sequence of visits with the same features that require a repeating shift pattern. When the number of visits in the recurrence pattern is set below 2, the service appointments are considered standard non-recurring visits and there's no recurrence pattern.

Error Label	Error Message	Potential Resolution
		<ul> <li>To fix this:</li> <li>Update the number of visit: to 2 or more.</li> <li>If this request is for a single visit, use the standard scheduling method for non-recurring visits (standard service appointments).</li> </ul>
RequestTimedOut	Your [Request type] request has timed out. Ask your Salesforce admin for help and provide the transaction ID: [txID]	Some request types have a timeout defined in the system. To investigate the timeout reason, contact your Salesforce admin and provide the transaction ID. Or, try to trigger the action again to be sure the error wasn't a result of a momentary extreme load.
Resource_based_request_domain_limit_exceeded	We couldn't reschedule the service appointment to the selected date because you reached the data loading limit. To schedule the appointment to a significantly later date, first unschedule the appointment and then schedule it to the required date.	When rescheduling a service appointment, the current and new schedule horizons are considered. The combination of these horizons can create a request with a data horizon that exceeds the allowed limit. To fix this, unschedule the service appointment and then reschedule it to the relevant date. This reduces the data loading of the original schedule
RFC_NoAccess	We couldn't perform the request because you don't have access to the selected criteria field in recordset filter criteria rule [rule ID]. Ask your Salesforce admin for help.	Recordset filter criteria is used fo designated work. You don't have access permissions to the required recordset filter criteria field. To fix this, provide access to the criteria field specified in the recordset filter criteria rules. Or, ask your Salesforce admin for help.

Error Label	Error Message	Potential Resolution
Secondary_Bad_Config_No_Primary_Resource	We couldn't find a primary or relocation service territory membership for service resource [resource ID]. This resource has one or more secondary service territory memberships. Define the missing service territory membership and try again.	Service resources must have an assigned primary or relocation service territory if they have an assigned secondary service territory. To fix this, assign a primary or relocation service territory to the resource.
Secondary_Bad_Stm_No_Start_Resource	We couldn't find a start date for one or more service territories that service resource [resource ID] is a member of. For example, service territory [Territory ID]. Add a start date and try again.	Each service resource allocated to a service territory must be assigned with the start date of allocation for this territory. If not, the system can't identify when it can allocate jobs for the service resource in this territory.
		<ul> <li>To fix this:</li> <li>Review the specified resource territory allocations for primary, secondary, and relocation territories.</li> <li>Make sure every allocation has a start date.</li> </ul>
Service_Based_Bad_Request	We couldn't find details for service appointment [SA ID] in the [request Type] request type. Add the details and try again.	To fix this, verify the validity of the service appointment. If the problem persists, contact Salesforce support to open a case.
Service_Based_Bad_Request_Api	We couldn't find the ServiceID parameter in the input of the [request Type] request. Add the parameter and try again.	We recommend that you try to trigger the action again. If the problem persists, contact Salesforce support to open a case.
Service_Territory_Members_With_Different_TZ_For_Resource	We couldn't schedule one or more appointments because at least one of the service resources has multiple time zones. Adjust the service territory membership for service resource [Resource ID], and try again.	Review the service resource's primary, secondary, and relocation service territory memberships, and make sure that at any given time, all territories that the service resource is assigned to are within the same time zone.

Error Label	Error Message	Potential Resolution
Service_Territory_object_has_insufficient_privileges	You don't have access to the Service Territory object. Ask your Salesforce admin for help.	To fix this, assign the relevant access permission to the service territories for users triggering the optimization services on those territories.
Trigger_Mixed_Optimizer_Per_Service_Error	We couldn't perform the request because the service appointments' territories aren't all using the same optimization engine. The service territories of appointment [SAID1] are using Enhanced Scheduling and Optimization, but the service territories of appointment [SAID2] aren't using Enhanced Scheduling and Optimization. Enable Enhanced Scheduling and Optimization for all service territories in Field Service Settings, or update the service territories individually, and try again.	<ul> <li>When enabling Enhanced</li> <li>Scheduling and Optimization by territory, all service appointments in a request must be allocated to territories that are all handled by the same optimization engine.</li> <li>To fix this:</li> <li>Make sure that all service appointment territories in the request are using the same engine.</li> <li>Revise the group of service territories that are optimized together to avoid using different engines.</li> </ul>
Trigger_Mixed_Optimizer_Per_Service_Territory_Error	We couldn't perform the request because the service appointment's territories aren't all using the same optimization engine. These service territories are using Enhanced Scheduling and Optimization: [ESO territoryID1, ESO territoryID2]. These service territories aren't using Enhanced Scheduling and Optimization: [territoryID1, territoryID2]. Update the service territories and try again.	<ul> <li>The service appointment's territories must all use the same optimization engine.</li> <li>To fix this:</li> <li>Review what engine the service territories are using (if enabled for Enhanced Scheduling and Optimization or not) and then use separate optimization requests for the territories accordingly.</li> <li>Use the same optimization engine for all of the service territories.</li> </ul>
Trigger_Mixed_Optimizer_Per_STM_Error	We couldn't perform the request because the service resource is a member of territories that aren't all using the same optimization engine.	When enabling Enhanced Scheduling and Optimization by territory, all service resources must be allocated to territories

Error Label	Error Message	Potential Resolution
	Update the service territories and try again.	that are all handled by the same optimization engine.
		To fix this, make sure that every service resource's primary, secondary, and relocation territories are using the same optimization engine.
Trigger_Service_Pinned_Or_Pinned_Status_Error	Can't reschedule pinned appointments [SA ID1, SA ID2,]. To reschedule a pinned appointment, unpin it or select a status that isn't pinned.	<ul> <li>The system can't move Pinned service appointments.</li> <li>A service appointment can be pinned in 2 ways:</li> <li>Each service appointment has a boolean out-of-the-box Pinned field If this field is selected, the specific service appointment can't be updated during optimization and it stays in its place.</li> <li>Implementers can define specific statuses as pinned statuses are treated as pinned and can't be moved.</li> <li>To fix this, review the service appointments listed in the error message:</li> <li>For every service appointment, validate whether its Pinned field is selected (deselect to unpin)</li> <li>For every service appointment that has the Pinned field deselected, review its status. If the appointment's statuses setting, transition to a different status.</li> </ul>

Error Label	Error Message	Potential Resolution
Unsupported_Request_Type_for_this_flow	The [request Type] request type isn't supported. Use global optimization, resource schedule optimization, or in-day optimization instead.	To fix this, review the request to check if you have any customizations calling this request through the API, and validate that the request type is global optimization, resource schedule optimization, or in-day optimization.

# Gain Visibility into Optimizations with Field Service Optimization Insights

In Field Service, learn at a glance if a global or in-day optimization reduces travel time or improves utilization. As you refine a scheduling policy, view a snapshot of optimization results and KPI changes.

🜐 This is a Field Service managed package feature.

Insights are available for global and in-day optimization requests that complete successfully. They aren't supported for resource schedule optimization.

- Note: Optimization Insights is not available when using Enhanced Scheduling and Optimization.
- 1. In Field Service Settings > Optimization, enable Optimization Insights.
  - Note: Make sure that the Optimization Profile has access to the OAASRestInsights and OAASRestHealthCheck Apex classes.
- 2. Edit an optimization request page in Lightning App Builder.
- 3. From the custom managed package components, add the optimization insights components.
- 4. Save your changes, and activate the page if necessary.
- 5. Submit a global or in-day optimization.

If the optimization completes successfully, insights appear on the optimization request.

There are four optimization insights components: summary (1), metrics (2), key performance indicators (3), and health check (4).

# EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

# USER PERMISSIONS

To create and edit Lightning pages:

Customize Application

To add components to optimization request pages:One of these custom permission sets:

- FSL Admin Permissions
- FSL Dispatcher Permissions

Contentantion Resources 11/14/2020,					East	Dele	te Cione	Change Owner	Printable View
Metrics						ור	🔲 Summa	Ŋ	
• Scheduled Duration @	165h Om Capacity 💿		0 Optimizable <b>0</b>		2		Status Completed Horizon 11/12/20, 12	:00 AM - 11/14/2	1 0, 12:00 AM
0 Scheduled Ø						I	Service Territorie Pago_Pago, Is Time Per Appoin	rael	
Territory Name O	ptimizable Appointments	Capacity	Resources	Capacity Based	Crews		Low		
Israel 0		80h 0m	4	0	1	ш	Filter By Boolean		
Pago_Pago 0		85h 0m	6	0	0		Emergency		
Totais 0		165h 0m	10	0	1		Scheduling Polic Customer First	y t	
						21	Work Rules		
Key Performance Select territories to Includ Includ Pago_Page V Totals	ie In KPI totals.				3		availability Resource Availa Required Servic Match Skills Match Territory Active Resource Objectives	ibility Servic te Resource Sched Sched Due D	e Appointment VIs e Crew Resources uled Start uled End ate t Start Permitted
KPI				Before	After	ш	***		14.105 1000
Average Travel per App	ointment Without Homebase						***	2.2%	10.10 0.00
Average Travel per App	ointment with Homebase							gineer (Weight: 4)	
Total Scheduled Appol	intments			0	0		Asap (Weigh Minimize Tri		
Total Travel with Home	ibase							ionity (Weight: 1)	
Total Travel Without H	omebase					ш		and configuration	
Total Duration Schedu	led								
Utilization				0%	0%		😏 Health 🛛	Check	÷ 0
Utilization Wrench O				0%	0%	I		3 <sub>of 12</sub> Issues to revier	. 4
V Israel									-
KPI				Before	After		> Service Ten	ritory Membership	Starts or Ends 🛛 👻
	ointment Without Homebase						within Ope	rating Hours	
	ointment with Homebase						5 occurrences o	f this issue	
Total Scheduled Appol					0				
Total Travel with Home							<ul> <li>Secondary of Resource</li> </ul>	Territory Members s's Primary Territor	hlp Is Outside v Membership
Total Travel Without H Total Duration Schedu							Status	Fallert	
Utilization	44			0%	0%		Category	STM Validation	
Utilization Wrench O					0%			Change the time s secondary service	pans for primary or territory
✓ Pago_Pago						1	1 occurrences o	membership.	
KPI				Before	After				
Average Travel per App	cointment Without Homebase						Availability	Rule Start of Day 0	loesn't Allgn
Average Travel per App	ointment with Homebase						<ul> <li>with Servic</li> </ul>	e Territory Membe	rship
Total Scheduled Appol	intments			0	0		Status	Falled	
Total Travel with Home							Category	Availability Rule Va	
Total Travel Without H							Recommended Action	Align start times in service territory m	work rules and
Total Duration Schedu	led								and a star
Utilization					0%		9 occurrences o	f this issue	
Utilization Wrench O				0%	0%	IL.			

The summary component shows details about the optimization request, such as status, horizon, and territories. It displays the Time per Appointment from Field Service optimization settings, and lists Boolean filters that selected appointments in the request. As you refine a scheduling policy, the summary gives you a point-in-time snapshot of the policy, including the work rules and weighted service objectives, that produced the insights.

Note: Some details are only available for global optimization requests.

Metrics provide an overview of scheduling information, such as how many appointments were scheduled from the pool of optimizable appointments. Optimizable appointments are unpinned and can be moved.

The KPI component displays key performance indicators by territory before and after the optimization.

КРІ	How the KPI is Calculated
Average Travel per Appointment with Homebase	Total estimated travel time, including travel from and to the resource's home base, divided by the count of scheduled service appointments.
Average Travel per Appointment without Homebase	Total estimated travel time, excluding travel from and to the resource's home base, divided by the count of scheduled service appointments.
Total Travel with Homebase	Total estimated travel, including travel from and to the resource's home base, for all scheduled service appointments.
Total Travel without Homebase	Total estimated travel, excluding travel from and to the resource's home base, for all scheduled service appointments
Total Scheduled Appointments	Count of scheduled service appointments.
Total Duration Scheduled	Total duration for the scheduled service appointments.
Utilization	Total duration and travel time for the scheduled appointments, divided by overall resource capacity. To learn how we calculate capacity, see Considerations.

KPI	How the KPI is Calculated
	Total duration for the scheduled service appointments, divided by the overall resource capacity. Utilization wrench represents total direct labor. To learn how we calculate capacity, see Considerations.

The Health Check component summarizes the results of a suite of tests and validates your data. For example, the tests check if the appointment exceeds the available time to complete or whether the required resource has the necessary skills. Before you drill down into your KPIs, make sure that all the tests passed successfully.

- For Utilization and Utilization Wrench KPIs, capacity is the total available work time from shifts and operating hours in primary territory memberships, including overtime. We subtract breaks, absences, and crew allocations; we also add or subtract availability from relocations.
  - Note: We subtract absences only if the entire absence of a resource is included in the time period of that resource's service territory membership record.
- For the Total Duration Scheduled KPI, we subtract appointments' Scheduled Start times from Scheduled End times. For multiday appointments, we include them in the total if the appointments are completely within the horizon; for those appointments, we add the Duration fields.
- In metrics, the resource count excludes capacity-based resources and partial or full crew assignments that occur during the horizon.
- The components list metrics and KPIs by territory. For resources with secondary territory memberships, there are some nuances for allocating time to territories. For example, we allocate travel time to the territory referenced in a service appointment. We also allocate scheduled duration based on an assigned resource's primary service territory membership.
- Optimization insights only support service appointments that have territories. Service appointments without a territory don't affect metrics and KPIs.

# Get Information on Optimization with Field Service Optimization Center

Optimization Center is where you can find all features related to monitoring Field Service activities and troubleshooting issues. It gives you visibility into how Field Service is used and how it affects your business.

#### 🜐 This is a Field Service managed package feature.

If your Salesforce org was created before Summer '24, configure Optimization Center to show in your org.

- 1. Add the Optimization Center tab to the Field Service app.
  - a. From Setup, in the Quick Find box, enter App Manager, and then select App Manager.
  - **b.** From the Actions menu of the Field Service app, click **Edit**.
  - c. In Choose the Tabs, select the Optimization Center tab from the Available Tabs list, and then click **Save**.
- 2. Enable user permissions for the System Administrator profile.
  - a. From Setup, in the Quick Find box, enter Users, and then select Profiles.
  - b. Select the System Administrator profile, and then click Edit.
  - c. In Tab Settings, under Custom Tab Settings, select **Default On** for Optimization Center, and then click **Save**.

#### Test Your Field Service Configuration with Health Check

Use the Field Service Health Check to run a suite of automated tests on your Field Service settings and configuration data. When Health Check identifies a problem, you get on-the-spot recommendations to align your Field Service configuration with our best practices.

Review the History of Scheduling and Optimization Requests with Activity Reports (Beta) Get information on scheduling and optimization requests that you run.

#### Access Optimization Request Files (Beta)

Retrieve the request and response files of your optimization requests.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To edit the Field Service app:

• Field Service Admin permission set

To enable permissions:

• Manage Profiles and Permission Sets

## Test Your Field Service Configuration with Health Check

Use the Field Service Health Check to run a suite of automated tests on your Field Service settings and configuration data. When Health Check identifies a problem, you get on-the-spot recommendations to align your Field Service configuration with our best practices.

#### 🜐 This is a Field Service managed package feature.

To get the most useful results from Health Check, complete setting up Field Service.

You can run two types of validations with the Field Service Health Check: general and horizon based.

- A general validation checks your org for incorrect configurations, such as out-of-date permission sets or incomplete scheduling policies.
- A horizon-based validation checks the service appointments, resources, and territory memberships for a given time frame and service territory. It makes sure that these records don't have any issues that could result in scheduling errors.

For both types of validations, results are grouped as Passed, Failed: Warning, or Failed: Critical. A Failed: Critical result can cause immediate performance degradations or system malfunction. A Failed: Warning result can impact performance or indicate a configuration that goes against our best practices.

- 1. From the App Launcher, find and select **Optimization Center**. Then click **Health Check**.
- 2. Run Health Check on your Field Service configuration.
  - a. Under General Validations, click **Run Tests** to view the results of the Field Service Health Check run.

Compa Gen Test Total	general settings and c number of tests: 10	rizon Based Validation:		ərmar	ice. Learn more about the tests.				
R.	ffresh Results Result↑ ∽	Coccurrences V	d: Critical		Failed: Warning 1 Issue Description	C	Passed 6	~	Actions
				~		~		~	
$\oslash$	Failed: Critical	7	Permissions Set Validation		Permission Sets are Out of Date		Update your permission sets.		Ψ.
$\oslash$	Failed: Critical	1	Scheduling Policy		Scheduling Policy with Insufficient Work Rules		Add more work rules to your scheduling poli	icy.	•
$\oslash$	Failed: Critical	1	Street Level Routing		Street-Level Routing (SLR) Isn't Registered		Register the SLR service.		•
▲	Failed: Warning	1	Optimization		Optimization isn't active		Activate schedule optimization		•
$\checkmark$	Passed	0	Field Service Settings		'None'/'Scheduled' status categories are set as 'Pinned Status'		Unpin 'None' and 'Scheduled' statuses.		•

**b.** Under Horizon Based Validations, enter information for the scheduling horizon that you want to check, and then click **Run Tests**. Horizon-Based Validations can take a while to finish running.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **USER PERMISSIONS**

To run Field Service Health Check:

• Salesforce Field Service Admin Permissions

General Validations Horizon Ba	sed Validations	
lorizon-based tests validate settin	gs and configuration within a specific timeframe to h	nelo troubleshoot performance issues
Horizon Start	* Horizon End	
01-Aug-2019	15-Aug-2019	
Search for the needed Service Te San Francisco X S Los An Include Service Appointments with Scheduling Policy	geles ×	
Customer First		\$
ïlter services by		
None		\$

- For Horizon Start and Horizon End, select the date range to validate.
- For Service Territories, select at least one territory. You can also choose whether to validate service appointments that aren't assigned to a territory.

Note: Select only service territories that are using Enhanced Scheduling and Optimization or only service territories that aren't using Enhanced Scheduling and Optimization.

- Select a scheduling policy to validate your configuration against.
- Optionally, select a filter. For example, validate only pinned appointments. You can filter validations using only boolean fields.
- **3.** View your results.
  - **a.** To filter the results according to their status group, click the relevant group icon.
  - **b.** If you make changes to your configuration, click **Refresh Results**.
  - c. To get more information on failed tests, select **More Info** in the Actions dropdown menu.

# Review the History of Scheduling and Optimization Requests with Activity Reports (Beta)

Get information on scheduling and optimization requests that you run.



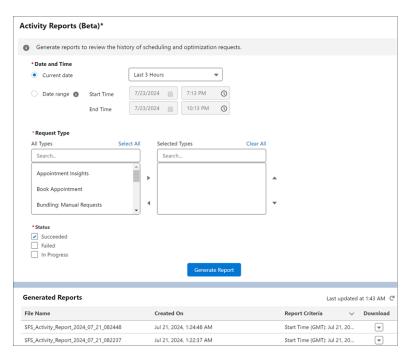
🜐 This is a Field Service managed package feature.

Note: Activity Reports is a pilot or beta service that is subject to the Beta Services Terms at Agreements - Salesforce.com or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the Product Terms Directory. Use of this pilot or beta service is at the Customer's sole discretion.

Activity Reports lets Salesforce admins easily monitor the activities and processes that they initiate in their Salesforce org. It provides information in one location about all your scheduling and optimization requests and shows you their status to help you identify issues and resolve them quickly.

With Activity Reports, you can generate a report for specific request types and easily identify whether they succeeded or failed. For example, generate a report on a Global Optimization request that failed. The report output details the reasons for the failure, allowing you to take action and troubleshoot the issue quickly.

Note: Activity Reports is available only when you're using Enhanced Scheduling and Optimization.



#### Set Up Activity Reports (Beta)

Configure your Activity Reports settings and learn about its limitations and considerations.

#### Generate Activity Reports (Beta)

Generate activity reports for specific request types to view information related to their status. You can generate a report for a request type that succeeded, failed, or both.

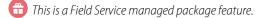
## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

## Set Up Activity Reports (Beta)

Configure your Activity Reports settings and learn about its limitations and considerations.



**EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## Configure Activity Reports

Assign user permissions and enable Activity Reports.

- 1. Assign users these permission sets. See Assign Field Service Permissions.
  - Field Service Admin permissions
  - Field Service Integration permissions
- 2. Enable Activity Reports.
  - a. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab.
  - b. Click Scheduling > General Logic and enable Generate activity reports and retrieve optimization request files.

#### Activity Reports Limitations and Considerations

Review the limitations and considerations of Activity Reports.

- Activity Reports applies only to Enhanced Scheduling and Optimization and to these scheduling and optimization request types.
  - Drag and Drop
  - Get Candidates
  - Book Appointment
  - Schedule
  - Resource Schedule Optimization
  - Global Optimization
  - In Day Optimization
  - Fix Schedule Overlaps
  - Bundling: Manual Requests

#### license:

Manage Users

USER PERMISSIONS

To configure Activity Reports:

To assign a permission set

 Field Service Admin permission set AND Field Service Integration permission set

- Appointment Insights
- Activity Reports doesn't support Government Cloud environments.
- The activity reports' output shows delayed information related to scheduling and optimization requests of up to 1 hour.
- Scheduling and optimization requests that are in progress when you generate an activity report are included in the report's output but with partial information only. To show all information related to a certain request, generate another report after the request is completed.
- When you enter an activity report's criteria and select a date range that's in the future, an error message shows. If you don't change the date range, the message continues to appear even after the date range is no longer in the future. When you refresh the browser, the error message disappears.

#### SEE ALSO:

Field Service Scheduling and Optimization Services

## Generate Activity Reports (Beta)

Generate activity reports for specific request types to view information related to their status. You can generate a report for a request type that succeeded, failed, or both.

This is a Field Service managed package feature.

To generate an activity report, enter the report criteria to help you get the most relevant information related to scheduling and optimization requests that you ran and to identify related issues quickly.

- 1. From the App Launcher, find and select **Optimization Center**. Then, click **Activity Reports**.
- 2. For Date and Time, select the number of relative hours for the current date, or select a date range within the last 30 days and a time period of up to 24 hours.
- 3. Select the required request types and the relevant status.
- **4.** Click **Generate Report**. The report can take a while to generate. When it's ready, it appears in the Generated Reports section.
- 5. To view the report, in the Generated Reports section, click **Download** from the Actions menu of the file. The report downloads in a CSV file format.

When you review the report output, pay attention to this information.

- The Start Time (UTC), End Time (UTC), and Duration (in milliseconds) columns refer only to the start time, end time, and duration of a scheduling and optimization request that Field Service initiated. External processes such as data integration that is initiated before the request runs or triggers that are initiated after the request runs aren't included.
- The Object ID column shows the ID of the object associated with a specific scheduling and optimization request. For example, the ID of a service appointment related to a Schedule request.
- The Optimization Request ID column shows the ID of the optimization request associated with the Resource Schedule Optimization, Global Optimization, and In Day Optimization request types. You can use the ID to retrieve the request and response files of the optimization request. See Access Optimization Request Files on page 581.

### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To generate activity reports:

- Field Service Admin permission set AND Field Service Integration permission set
- The transaction ID column shows the transaction ID that's automatically generated for the scheduling and optimization request.
- The Error Label column shows the error code of errors that occurred during a scheduling and optimization request run. See Field Service Enhanced Scheduling and Optimization Error Messages.

• The Secondary Operations column indicates whether a scheduling and optimization request triggered secondary operations such as sliding that affect other service appointments. If such operations were triggered, the Details column shows the information related to these operations. The Secondary Operations column shows no information if a scheduling and optimization request fails and in cases related to Appointment Bundling request types.

## Access Optimization Request Files (Beta)

Retrieve the request and response files of your optimization requests.

- 🜐 This is a Field Service managed package feature.
- Note: Optimizatin Request Files is a pilot or beta service that is subject to the Beta Services Terms at Agreements - Salesforce.com or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the Product Terms Directory. Use of this pilot or beta service is at the Customer's sole discretion.

Optimization Request Files lets Salesforce admins quickly retrieve the request and response files of an optimization request. Review the files in a JSON file format to find out what happened to a specific request and to quickly resolve related issues.

Note: Optimization Request Files is available only when you're using Enhanced Scheduling and Optimization.

<b>Optimization Request Files</b>		
Retrieve the request and response files of an optimization	tion request.	
Optimization Request ID		
You can find the Optimization Request ID in the activity report.		
Optimization Request ID		
Enter ID		
	Retrieve Files	
Generated Files		
File Name	Created On	
Response_a0UOv000002OjcLMAS.json	Jun 20, 2024, 7:13:13 AM	
Request_a0UOv000002OjcLMAS.json	Jun 20, 2024, 7:13:11 AM	¥

#### Set Up Optimization Request Files (Beta)

Configure your Optimization Request Files settings.

Retrieve Optimization Request Files (Beta)

Get the request and response files of an optimization request to help you troubleshoot issues.

Optimization Request Files Output (Beta)

Review the information shown in the request and response files.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Set Up Optimization Request Files (Beta)

Configure your Optimization Request Files settings.

- 🜐 This is a Field Service managed package feature.
  - Note: Optimization Request Files doesn't support Government Cloud environments.
- 1. Assign users these permission sets. See Assign Field Service Permissions.
  - Field Service Admin permissions
  - Field Service Integration permissions
- 2. Enable Optimization Request Files.
  - a. From the App Launcher, find and open the **Field Service Admin** app, and then click the **Field Service Settings** tab.
  - **b.** Click **Scheduling** > **General Logic** and enable **Generate activity reports and retrieve optimization request files**.

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### USER PERMISSIONS

To configure Optimization Request Files:

• Field Service Admin permission set AND Field Service Integration permission set

## **Retrieve Optimization Request Files (Beta)**

Get the request and response files of an optimization request to help you troubleshoot issues.



- (
   This is a Field Service managed package feature.
- 1. From the App Launcher, find and select **Optimization Center**. Then, click **Optimization Request Files**.
- 2. Enter the optimization request ID. You can find the ID in the activity report. See Generate Activity Reports on page 580.
- 3. Click Retrieve Files. The files are added to the Generated Files section.
- 4. To view the files, in the Generated Files section, click **Download** from the Actions menu of the file. The files download in a JSON file format.

## **Optimization Request Files Output (Beta)**

Review the information shown in the request and response files.

🜐 This is a Field Service managed package feature.

Section Name	Туре	Description
Request File		
services	Array	The service appointment records related to the request.
mswServicesIds	Array	The IDs of the service appointments that are part of the complex work chain related to the request. This array is a subset of the services array.



Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### USER PERMISSIONS

To retrieve optimization request files:

Field Service Admin • permission set AND Field Service Integration permission set

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

Section Name	Туре	Description
timeDependencies	Array	The time dependencies associated with the complex work chain related to the request.
workOrders	Array	The work order records related to the request.
workOrderLineItems	Array	The work order line item records related to the request.
SchedulingPolicy	Object	The scheduling policy associated with the request.
workRules	Array	The work rule records associated with the scheduling policy related to the request.
objectives	Array	The objective records associated with the scheduling policy related to the request.
resources	Array	The service resource records related to the request.
capacities	Array	The capacity records associated with the capacity-based service resources related to the request.
breaks	Array	The lunch breaks associated with service resources within the horizon dates of the request.
nonAvailabilities	Array	The resource absence records of type Non Availability related to the request.
territories	Array	The service territory records related to the request.
relocations	Array	The service territories associated with the service resources related to the request who have a relocation membership.
secondaryTerritories	Array	The service territories associated with the service resources related to the request who have a secondary membership.
calendarDays	Array	The time slots associated with the operating hours related to the request.
recordTypes	Array	The record types related to the request.
DesignatedRFCCriteria	Object	The key and value pairs related to the request. The key represents the ID of the Recordset Filter Criteria object and the values represent the IDs of the service appointment records.

Section Name	Туре	Description
operatingHours	Array	The operating hour records related to the request.
operatingHoursHolidays	Array	The operating hour holiday records related to the request.
travelModes	Array	The travel mode records related to the request.
outOfDomainServices	Array	The service appointments that aren't within the horizon dates of the request and that are part of a complex work chain that's within the horizon dates of the request.
outOfDomainResources	Array	The service resources who are assigned to service appointments that are part of a complex work chain and that aren't within the horizon dates of the request.
CapacityLimitConsumptions	Array	The capacity consumption details associated with each service territory related to the request.
Skills	Array	The skill records related to the request.
LogicSettings	Object	The custom setting of the logic settings record associated with the request.
OptimizationSettings	Object	The custom setting of the optimization settings record associated with the request.
SupportHelper	Object	This section doesn't apply to Enhanced Scheduling and Optimization.
GeocodeSettings	Object	The custom setting of the geocode settings record associated with the request.
Response File		
serviceAppointments	Array	The service appointments that Enhanced Scheduling and Optimization updated.
assignedResourcesToUpsert	Array	The assigned service resources that Enhanced Scheduling and Optimization created or updated.
assignedResourcesToDelete	Array	The assigned service resources that Enhanced Scheduling and Optimization deleted.
lunchBreaksToUpsert	Array	The lunch breaks that Enhanced Scheduling and Optimization created or updated.

Section Name	Туре	Description
lunchBreaksToDelete	Array	The lunch breaks that Enhanced Scheduling and Optimization deleted.
resourceAbsencesToUpsert	Array	The resource absences of type Non Availability that Enhanced Scheduling and Optimization created or updated their travel time.
resourceAbsencesToDelete	Array	The resource absences of type Non Availability that Enhanced Scheduling and Optimization deleted their travel time.
unscheduledServiceAppointments	Array	The service appointments that Enhanced Scheduling and Optimization unscheduled and the reason why they were unscheduled.

# Explore Metrics in Field Service Optimization Hub

View Optimization Hub to learn what improvements optimization made to the scheduling of service appointments across multiple territories and how to get the best results from optimization.

🜐 This is a Field Service managed package feature.

Note: Optimization Hub is available only when you're using Enhanced Scheduling and Optimization. When it's enabled, a rich set of metrics for evaluating the optimization process is added automatically.

Watch the video to see how to use the Optimization Hub dashboard to gain insights into how scheduling optimization improves your business metrics.

#### Watch a video

Optimization Hub is a centralized dashboard where operation managers and business analysts can view and track all optimization information related to an optimization request. It gives you visibility into how scheduling optimization affects your business.

Optimization Hub updates the scheduling results after every optimization run and gives you a comprehensive comparison of different metrics before and after optimization and across multiple territories. It shows you what improvements optimization has made, and it provides guidance on

how to get more out of your optimization settings. By adjusting your scheduling policy and prioritizing your business objectives, you can get even better scheduling results compared to your last optimization run.

Optimization Hub considers only the service appointments that have territories. Service appointments without a territory don't affect metrics and key performance indicators.

Optimization Hub includes information relevant to scheduling, service resources, and the scheduling policy. For example, it tracks the improvement of travel time, service resource utilization, and response time.

### **EDITIONS**

#### Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

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#### Set Up Optimization Hub

Configure your Optimization Hub settings and learn about the limitations of Optimization Hub.

#### Access Optimization Hub

View Optimization Hub to get a snapshot of different metrics before and after optimization and across multiple territories.

## Set Up Optimization Hub

Configure your Optimization Hub settings and learn about the limitations of Optimization Hub.

- 💼 This is a Field Service managed package feature.
- Note: Optimization Hub is available only when you're using Enhanced Scheduling and Optimization.
- Configure Optimization Hub

Add the Optimization Hub Lightning web component to the optimization request record page.

• Limitations for Optimization Hub

All Enhanced Scheduling and Optimization limitations apply to Optimization Hub.

## **Configure Optimization Hub**

Add the Optimization Hub Lightning web component to the optimization request record page.

- 1. From the object management settings for optimization requests, go to Lightning Record Pages.
- 2. Select the Lightning record page that you want to add the Optimization Hub component to, and then click **Edit**.
- In Lightning App Builder, drag the Optimization Hub component onto the canvas.
   For an optimal view, use the Header and One Region template as the layout for Optimization Hub. See Lightning Page Templates.
- 4. If Optimization Insights is configured and added to the layout, remove it from the canvas.

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### **USER PERMISSIONS**

To configure Optimization Hub:

Customize Application

5. Save your work and activate the Lightning record page.

## Limitations for Optimization Hub

All Enhanced Scheduling and Optimization limitations apply to Optimization Hub.

- You can use Optimization Hub regardless of the territory match criteria. However, the derived key performance indicators are • calculated only for service resources who are primary or relocation members of the appointment's service territory.
- Optimization Hub is available only for global and in-day optimization requests. •
- If the service resource has multiple service territory memberships, Optimization Hub calculates KPIs by using the service resource's primary service territory to prevent counting service territories twice.

#### SEE ALSO:

Get Ready for Field Service Scheduling and Optimization Enable Enhanced Scheduling and Optimization Limits and Limitations for Enhanced Scheduling and Optimization Activate Lightning Experience Record Pages

## Access Optimization Hub

View Optimization Hub to get a snapshot of different metrics before and after optimization and across multiple territories.

🜐 This is a Field Service managed package feature.

- Note: Optimization Hub is available only when you're using Enhanced Scheduling and Optimization.
- 1. From the App Launcher, find and select Optimization Requests.
- 2. On the Optimization Requests list view, click the optimization request record.
- 3. In Optimization Hub, click the filter icon to select the service territories that Optimization Hub shows information for.
- 4. To gather information related to the optimization request, navigate through the Optimization Hub tabs.

Optimization Hub includes four tabs that show information related to scheduling, service resources, and the scheduling policy.

- Home tab—Shows a high-level overview of the metrics trade-off and the key areas to focus • on. It shows you a comparison of the metrics before and after optimization and how they impact each other. For example, improving the average response time can increase the average travel time for service appointments. It gives you a granular understanding of what happened after an optimization run and what areas of focus can be relevant to improve the scheduling results. You can filter the service territories that are included in the comparison.
- Schedule tab—Shows you a comparison of service appointments, travel times, and break-related metrics before and after optimization. For example, in the Total Travel Time card, the total time is broken down according to the travel time from the resource's home base, between appointments, and back to home base.

Note: For maximum accuracy, travel time values are provided in seconds and are then rounded up, which is different from in the Gantt, where the time unit is minutes.

#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

### **USER PERMISSIONS**

To view Optimization Hub:

Read on Field Service objects

- Resources Tab—Includes cards that compare metrics related to service resource types, workloads, availability, and utilization before and after optimization. For example, the Utilization card shows you the service resources' actual work time out of their available work time, before and after optimization. You can filter which factors optimization considers when calculating a service resource's utilization. When all factors are considered, utilization is calculated using the following formula: (Scheduled Duration + Non-Availability + Lunch Breaks + Travel From Home Base + Travel Between Appointments + Travel To Home Base) ÷ (Overtime Availability + Normal Availability).
- Policy Tab—Shows you how optimization performed compared to your scheduling policy and service objectives. For example, the Service Objectives card shows you the service objectives of the scheduling policy.

#### SEE ALSO:

View Field Service Resource Utilization

# Get Recommendations with Field Service Appointment Insights (Beta)

Learn how Appointment Insights can help you improve the scheduling of service appointments. Appointment Insights helps you understand why a service appointment can't be scheduled and which work rules are preventing its scheduling.

#### 🜐 This is a Field Service managed package feature.

- Note: This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at Agreements and Terms.
- Note: Appointment Insights is available only when you're using Enhanced Scheduling and Optimization.

Appointment Insights helps admins and dispatchers understand why a service appointment can't be scheduled and what changes they can make to the scheduling policy's work rules in order to qualify time slots and candidates for scheduling.

Appointment Insights checks for candidates within a 200-kilometer or 124-mile radius of the service appointment's location or within a distance of 1.5 times the maximum travel distance defined in the scheduling policy, whichever is greater. It then applies relaxation strategies that check what changes you can make to a scheduling policy. Based on the output, it suggests what changes to make to qualify additional time slots and candidates for scheduling.

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

By revealing the work rules that limit the scheduling options and following the recommended actions, admins and dispatchers can adjust the automatic scheduling and qualify more time slots and candidates for a certain service appointment.

Appointment Insights appears on a service appointment record. It shows the work rules that prevent the scheduling of the service appointment and the recommended actions to relax those rules. It also shows potential time slots within the service appointment's horizon dates that can become available for scheduling.

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#### Set Up Appointment Insights (Beta)

Configure your Appointment Insights settings.

#### Run Appointment Insights (Beta)

Run Appointment Insights to view the work rules that limit the scheduling options of a service appointment and to follow the recommended actions to relax those rules. You can also view potential time slots within the service appointment's horizon dates that can become available for scheduling.

#### Appointment Insights Work Rules (Beta)

Review the work rules that Appointment Insights refers to.

# Set Up Appointment Insights (Beta)

Configure your Appointment Insights settings.

🜐 This is a Field Service managed package feature.



Note: All Enhanced Scheduling and Optimization limitations apply to Appointment Insights.

Before you configure Appointment Insights, make sure that you meet these requirements.

- All Enhanced Scheduling and Optimization requirements are met.
- Enhanced Scheduling and Optimization is enabled.
- For Appointment Insights to evaluate scheduling options, make sure that your service appointments are associated with service territories.
- 1. Assign users these permission sets. See Assign Field Service Permissions.
  - FSL Admin Permissions
  - FSL Dispatcher Permissions
- 2. Add the Appointment Insights Lightning web component to the service appointment record page.
  - a. From the object management settings for service appointments, go to Lightning Record Pages.
  - b. Select the Lightning record page that you want to add the Appointment Insights component to, and then click Edit.
  - c. In the Tabs component properties, add a tab and name it Appointment Insights. See Add and Customize Tabs.
  - d. To add the Appointment Insights component to a tab, in Lightning App Builder, select the tab on the canvas and then drop the component directly below it.
    - Note: Add an Appointment Insights tab as described in this step. However, you can also drag the component to any location on the Lightning record page.
  - e. Save your work and activate the Lightning record page.

#### SEE ALSO:

- Get Ready for Field Service Scheduling and Optimization
- Enable Enhanced Scheduling and Optimization
- Limits and Limitations for Enhanced Scheduling and Optimization
- Manage Field Service Permissions
- Create Field Service Permission Sets
- Activate Lightning Experience Record Pages

## **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## **USER PERMISSIONS**

To assign a permission set license:

Manage Users

To configure Appointment Insights:

**Customize Application** 

## Run Appointment Insights (Beta)

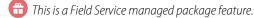
Run Appointment Insights to view the work rules that limit the scheduling options of a service appointment and to follow the recommended actions to relax those rules. You can also view potential time slots within the service appointment's horizon dates that can become available for scheduling.

- 🜐 This is a Field Service managed package feature.
- 1. From the App Launcher, find and select Service Appointments.
- 2. On the Service Appointments list view, click the service appointment record and then click the **Appointment Insights** tab.
- 3. For Scheduling Policy, select a policy to check.
- 4. To view the information, click Run.
- **5.** In the Rule Violations and Recommendations section, qualify time slots and candidates for scheduling by taking one of these actions.
  - To view time slots that can become available for scheduling if you relax a work rule, click Show Slots. The potential slots for that work rule are highlighted in the Potential Slots section.
  - To open the work rule record, click **Open Rule**. From the work rule record, you can modify the work rule's settings to qualify more time slots for scheduling.
  - To open a relevant help article, click **Tell Me More**. In some cases, you must change the
    resource's territory membership, availability, skills, and more to qualify more time slots for
    scheduling. The articles explain how to make these changes and the impact they can have
    on the service appointment's scheduling.

6. In the Potential Slots section, hover over a time slot to see the work rules that prevent the scheduling of the slot and the number of candidates that can become available when you relax the work rules. This section shows fixed 4-hour time slots across the day.

# Appointment Insights Work Rules (Beta)

Review the work rules that Appointment Insights refers to.



Work Rule	Rule Violation	Recommendation			
Extended Match	A violation occurs when there are no available candidates who meet the criteria of the Extended Match rule.	Verify that you have one or more candidates that match the service appointment's required values based on the criteria of the Extended Match rule.			

**EDITIONS** 

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

## USER PERMISSIONS

To view Appointment Insights:

Read on Field Service objects

## EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Work Rule	Rule Violation	Recommendation			
Match Boolean Custom Rule	A violation occurs when there are no available candidates who meet the criteria of the Match Boolean custom work rule.	Verify that the Match Boolean custom rule is defined correctly. If possible, remove this rule.			
Match Fields Custom Rule	A violation occurs when there are no available candidates who meet the criteria of the Match Fields custom work rule.	Verify that the Match Fields custom rule is defined correctly. If possible, remove this rule.			
Match Skills	A violation occurs when there are no available candidates who possess the required skills and skill level listed on the service appointment's parent Skill Requirement record.	Verify that the service appointment's parent Skill Requirement record lists the correct required skills and skill level, and ensure that your service resources' assigned skills and skill levels are up to date. If there are still no available candidates, train your service resources to meet the required skills or skill level.			
Match Territory	A violation occurs when there are no available candidates who are Primary or Relocation members of the service appointment's service territory.	After Appointment Insights verifies that candidates in neighboring territories are available, remove the Match Territory work rule from your scheduling policy, and add the Maximum Travel from Home rule instead.			
Match Time	A violation occurs when there are no available candidates who meet the criteria of the Match Time rule. For example, no candidates can complete the service appointment before the due date or there are no candidates because the service appointment's dates are in the past.	<ul> <li>Verify that the standard match rule or other configuration is defined correctly.</li> <li>Earliest Start Permitted: Ensures that a service appointment's Scheduled Start is equal to or later than the Earliest Start Permitted (this work rule is included in every standard scheduling policy).</li> <li>Due Date: Ensures a service appointment's Scheduled End is equal to or earlier than the Due Date (this work rule is included in every standard scheduled End is equal to or earlier than the Due Date (this work rule is included in every standard scheduling policy).</li> <li>Scheduled Start: Ensures that a service appointment's Scheduled Start is equal to or later than the Arrival Window Start.</li> <li>Scheduled End: Ensures that a service appointment's Scheduled Start is equal to or earlier than the Arrival Window Start.</li> <li>Scheduled End: Ensures that a service appointment's Scheduled Start is equal to or earlier than the Arrival Window Start.</li> </ul>			
Maximum Travel from Home	A violation occurs when there are no available candidates whose home base is within the rule's defined distance or travel time to the service appointment's location.	Extend the rule's travel time to allow for travel of up to a 200-kilometer or 124-mile radius from the service appointment's location or a distance of 1.5 times the			

Work Rule	Rule Violation	Recommendation
		maximum travel distance defined in the scheduling policy, whichever is greater.
Service Resource Availability	A violation occurs when there are no available candidates because all of them are already assigned to service appointments.	Verify that there are available candidates with a service territory membership in the service appointment's service territory by unscheduling low-priority service appointments or resource absences. Or, assign more service resources to the service territory.
		Note: To determine availability, Appointment Insights checks for the total remaining available time of each service resource on the Gantt against the duration of the service appointment.
Working Territories	A violation occurs when there are no available candidates who work in the service appointment's service territory (Primary or Secondary members).	After Appointment Insights verifies that candidates in neighboring territories are available, make sure that you have one or more candidates with a service territory membership in the service appointment's service territory within the relevant time frame.

# Work in the Field Service Dispatcher Console

The Field Service dispatcher console is the main working space for dispatchers. It features a dynamic map and a highly customizable Gantt chart showing upcoming appointments, active team members, and more.

### This is a Field Service managed package feature.

To reach the dispatcher console, from the App Launcher, find and open the Field Service app, and then click the **Field Service** tab.

The dispatcher console is supported on desktop only. For the best dispatcher console experience, we recommend using a screen resolution of 1920 x 1080 pixels, or a minimum of 1366 x 768 pixels, at 100% zoom. User idle time is monitored to reduce unnecessary Gantt refreshes and improve computer performance. If you haven't actively interacted with the dispatcher console for 120 minutes, a message is displayed for you to reload the page to continue.

#### Customize the Field Service Dispatcher Console

Make the dispatcher console work for you! Adjust the time frame and contents of the appointment list and Gantt, customize each section's layout, create custom actions for dispatchers, and create custom appointment list filters.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Working in the Field Service Dispatcher Console Appointment List

Use the service appointment list on the left side of the Field Service dispatcher console to filter, sort, and search appointments within the list. You can also perform actions on selected appointments.

#### Work in the Field Service Dispatcher Console Gantt

The Gantt is on the right side of the dispatcher console and contains the resource list, the schedule view, and additional features. User idle time is monitored to reduce unnecessary Gantt refreshes and improve computer performance. Stepped away from the dispatcher console? If you've been inactive the Gantt session times out, reload the page when you return to continue.

#### Working in the Field Service Dispatcher Console Map

The dispatcher console map gives dispatchers a dynamic bird's-eye view of their mobile workforce. Learn how to customize the map view and draw territories directly on the map.

#### Use Einstein Copilot in the Dispatcher Console

Use Copilot to get a daily overview of service appointments that require immediate attention, such as appointments with rule violations, overlaps, SLA risks, or emergencies. Each category that appears in the summary is converted into a filter in the appointment list, so it's easy for you to resolve these issues immediately. You can also use Copilot to quickly find service appointments and take immediate action, when planning schedules or addressing schedule changes. Copilot can convert your search criteria into filters that you can access from the appointment list.

#### SEE ALSO:

Trailhead: Dispatcher Console for Admins Trailhead: Field Service Dispatcher Console for Dispatchers Field Service Permission Set Licenses Monitor Field Service Schedule Optimization Requests

# Customize the Field Service Dispatcher Console

Make the dispatcher console work for you! Adjust the time frame and contents of the appointment list and Gantt, customize each section's layout, create custom actions for dispatchers, and create custom appointment list filters.

💼 This is a Field Service managed package feature.

#### Control Which Field Service Appointments Appear in the Dispatcher Console

Dispatchers can view and filter service appointments in the appointment list and in the Gantt chart. Learn how to control which appointments appear in these sections of the dispatcher console.

#### Customize the Dispatcher Console with Field Sets

Use field sets to control which fields appear in different sections of the Field Service dispatcher console. For example, choose which fields appear as columns in the appointment list.

#### Create Custom Actions for the Field Service Dispatcher Console

Put the right actions at your dispatchers' fingertips by adding custom actions to the dispatcher console. Custom actions can either call an Apex class or open a Visualforce page, and can be run on records in several areas of the dispatcher console. To keep the dispatcher console tidy, actions are shown in dropdown action lists with icons.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

#### Create Custom Appointment List Filters

Create custom filters in Field Service to control which appointments appear in the dispatcher console service appointment list. Base your filters on service appointment fields and add custom logic. Dispatchers can create private filters or share them with others.

#### Create Custom Appointment Icons

Add custom icons to service appointments on the Field Service Gantt, map, and appointment list so dispatchers can quickly identify appointment characteristics. For example, use a custom icon to indicate that an appointment is for a VIP or first-time customer.

#### SEE ALSO:

*Trailhead*: Supercharge Field Service Working in the Field Service Dispatcher Console Appointment List Work in the Field Service Dispatcher Console Gantt Working in the Field Service Dispatcher Console Map

## Control Which Field Service Appointments Appear in the Dispatcher Console

Dispatchers can view and filter service appointments in the appointment list and in the Gantt chart. Learn how to control which appointments appear in these sections of the dispatcher console.

 $\stackrel{\textcircled{}_{}_{}_{}}{\oplus}$  This is a Field Service managed package feature.

## Control the Time Frame

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Policy: Customer First 👻 🔯	GANTT MAP			🔇 7h 0m 🛱 0h 0m 🔮 0/1 🔺 0 🗍
All Service Appointments 🔹 🗸	Search resources	▼ • 1 Mon,	September 4, 2023 - Wed, September 6, 2023	3 < Today >
Horizon: 09/06/2023  Match Gantt Dates	<b>6</b> ⊘ 3h 0m ▼	MON, SEPTEMBER 4, 2023, WEEK 36	TUE, SEPTEMBER 5, 2023, WEEK 36           M         12 AM         4 AM         8 AM         12 PM         4 PM         8	WED, SEPTEMBER 6, 2023, WEEK 36         In-Day           PM         12 AM         4 AM         8 AM         12 PM         4 PM         Daily         2
1-1 of 1 (0 selected) Schedule Dispatch 👻	- Los Angeles	Utilization: 4%		Pacific Daylight Time - Wed, Sep 27, 2 2 Days
Search Service Appointment Q	Andy James Field Supervisor	😌 Installation Team A Crew Member	😌 Installation Team A Crew Member	Installation Team A Crew Member 3 Days
→ APPOINTMEN STATUS EARLIEST START PERM	Electrical Team			Weekly 2 Weeks
SA-2473 Scheduled 9/4/2023 1:28 AM	Installation Team A Service Crew			Utilization
	James Clifton	🕀 Installation Team B Crew Member		Long-Term
	Janet Jones	Installation Team A Crew Member	Installation Team B Crew Member	Installation Team B Crew Member
	Installation Expert Im Matthews Repair Expert	SA-2473		

These settings control the Gantt time frame.

- Gantt filter (1):
  - On the Hours tab, choose which hours of the day are shown on the Gantt, and adjust settings for the Long-Term view.
  - On the Utilization tab, specify how many days are shown when the Utilization view is applied.

- Gantt resolution dropdown (2): Select how many days to show on the Gantt at once. Customize the Utilization view from the Gantt filter's Utilization tab, and the Long-Term view from the Gantt filter's Hours tab. You need the Longterm View custom permission to select the Long-Term view.
- Date and calendar toggles (3): Toggle between days and months.

These settings control the appointment list time frame.

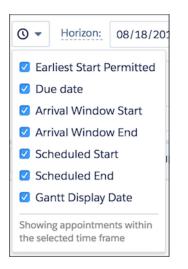
- Horizon date (4): The appointment list only lists appointments with a date field that falls before the horizon.
- Match Gantt Dates field (5): If you select **Match Gantt Dates**, the horizon date updates to show the last day of the horizon shown on the Gantt.
- Standard list view filter (6): To apply a standard filter, click the gear icon and select **Dispatch Console Settings**. Under Scheduling Window Length, define the number of days shown before the horizon date. The appointment list only lists appointments with a date field that falls in that span of days before the horizon date.

Dispatch Consc	ble Settings
Filter Resources After Running 'Get Candidates' Display only the service resources that are available for the service appointment	Filter resources
Scheduling Window Length Number of days shown before the selected scheduling horizor in the appointment list	14
Service Appointments Per Page Set the maximum number of service appointments that appear on one page	75 🔹
Gantt Row Height Set the height of a row in the Gantt	Medium
Filter by Duration Type Display only capacity-based resources that have the selected duration type	Daily 👻
Set Default Gantt View to Today	Set view to today
	Save

• Custom list view filter (7): To apply a custom filter, click the Manage Filters icon and select **New**. Under Date Selection, define the number of days shown before and after the horizon date. The horizon date and the custom filter settings control the appointment list time frame. Custom filters let you specify the number of days before and after the horizon, and that time frame is used to define which appointments are shown.

		Filter Ed	litor		
Details					
Name					
Enter name					
Description					
Enter a filter description					
Characters left: 255					
Date Selection					
	(		(		
<ul> <li>Show appointments</li> </ul>	3	days before the horizon date and	3	days past it	
O Show only appointme	ents sho	wn on the Gantt			
Additional Criteria					

• Date field dropdown menu (8): The menu controls which appointments are visible in the appointment list. If the value of any of the selected date fields on an appointment falls within the specified time frame, the appointment appears in the appointment list.



If an appointment's dates for any selected fields among the first six don't fall within the Gantt time frame, use the Gantt Display Date to show the appointment on the Gantt. When a service appointment's Gantt Display Date falls within the Gantt time frame, the appointment is visible on the Gantt. For example, if a maintenance appointment must be completed within the next six months, you want to see it on the Gantt every day as a reminder.

The number of service appointments that are loaded to the Gantt depends, for example, on the Dispatch Console Settings. You can change these settings to load service appointments related to the territory. While loading service appointments you can get an error that the scheduling horizon is too long. To avoid this issue:

- Reduce the Scheduling Window Length.
- Remove service appointments that aren't associated with a territory.
- Reduce the list of service territories.
- When creating a custom filter in the dispatcher console, make sure to add appropriate filters to the list view. In the Data Selection section of the Filter Editor, reduce the data range for showing appointments (select fewer days before and after the horizon date).

Note: Using Salesforce's Platform automation capabilities, set up a process to automatically configure an important appointment's Gantt Display Date to today's date, updated daily.

In addition, several types of filters let you refine which appointments are shown in the dispatcher console:

- The appointment list search, which filters the list to show only appointments that match your search criteria
- The resource list search in the Gantt, which filters the resource list to show only service resources that match your search criteria
- The Resources and Skills tabs in the Gantt filter, which filter the resource list to show only service resources that match your criteria
- The territory filter, reached from the map icon in the appointment list (6), which filters the Gantt and appointment list according to your criteria
- Any custom appointment list filters in place

To reduce loading time and to get more accurate results, enable the new filter appointments setting. The setting allows efficient filtering of the service appointment list in the dispatcher console when you're working with large datasets. In the Field Service Admin app, click

the Field Service Settings tab and select Dispatcher Console UI. Then, enable the Use advanced filtering for the service appointment list setting under Gantt Configurations. This setting is available only when the Enable Custom Filters setting is turned on.

#### SEE ALSO:

Gantt Keyboard Shortcuts Working in the Field Service Dispatcher Console Appointment List Work in the Field Service Dispatcher Console Gantt Create Custom Appointment List Filters

## Customize the Dispatcher Console with Field Sets

Use field sets to control which fields appear in different sections of the Field Service dispatcher console. For example, choose which fields appear as columns in the appointment list.

🜐 This is a Field Service managed package feature.

To manage a field set, from the Object Manager, find the object whose field set you want to edit—for example, *Service Resource*. Then, click **Field Sets**.

Field sets support the following field types: Number, Text, Date, Date/Time, Currency, and Reference (lookup fields). The Field Service managed package also provides additional field sets not included in this article.

Only fields related to the object that you're editing are shown in the dispatcher console. For example, if you're editing the Service Appointment object, only service appointment fields are shown. Fields related to a service appointment's account aren't shown.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Service Appointment Field Sets

Field Set	Description	Location in Dispatcher Console
Capacity Service Columns	Controls the columns on the dialog screen shown when a user double-clicks a capacity record on the Gantt. This field set supports up to 9 fields.	
Complex Work Lookup Fields	Controls which lookup fields are available for selecting	

Field Set	Description	Location in Dispatche	er Console				
	service appointments when users create dependencies.	Complex Work Scheduling					
		Adduction period and compensation of the second se	1 2023 5:54 AM 1 2023 5:55 AM 1 2023 5:55 AM 1 2023 5:55 AM 1 2023 9:14 AM 1 2023 9:14 AM		M		
Crew Management	Controls which fields are shown when a user	SA-0070 DETAILS					
	double-clicks a service appointment from the Crew	SA-0070 DETAILS					
	Schedule row in the Crew	Scheduled Start 31/07/	/2019 16:00		Subject	Roof Rep	pair
	Management Gantt.	Scheduled End 31/07/	2019 17:00		Status	Schedule	ed
			/2019 01:00		Work Type Gantt Label		
		Duration 1.00 Duration Type Hours		Pa	arent Record	ABC Lab	s
			States		Account		-
		State Califor	rnia		In Jeopardy		
		City San F In Jeopardy Reason	rancisco		Street	415 Miss	ion Street
Crew Management Tooltip	Controls which fields are shown when a user hovers over an appointment in the Crew Management Gantt.	- San Francisco - 😁 SF Roof Repair Cre	ew (Crew Size: 3)				
	Note: Lookup fields	Crew Schedule					
	and fields without values aren't displayed.	Janice Gonzales Expert	SCM-0001 SA-0	065			
	The Required Skills	Ralph Clark	SCM-0002 Mini	imum Size	Recommende	ed Size	Currently Assigned
	field is always shown.	Louise Martin		-	Undefin		3
		Anadilet	Scheo	red Skills: Appo luled Start: Wed luled End: Wed Date: Wednesda	dnesday, July nesday, July 3	31, 2019 31, 2019 :	9:00 AM 10:00 AM

Field Set	Description	Location in Dispatcher Console
Designated Work Fields	Controls which fields are available when a user is creating a designated time slot from the time slots editor Visualforce page on the operating hours record.	0:00       1:00       2:00       3:00       4:00       5:00       6:00       7:00       8:00       9:00       10:0011:0012:0013:0014:0015:0016:0017:0018:0019:0020:0021:0022:0023:00         Monday       Image: Constraint of the constra
Gantt Filter	Controls the Additional Criteria fields shown when creating a custom Gantt filter.	Filter Editor     Additional Criteria   Field   0   Field   0   0   Make this filter available for all users   Filter Editor   Value   Value   equals ÷   rue   •   •   •   •   •   •   •     •   Save
Service Appointment Expanded	Controls the mini layout displayed when the user clicks an appointment in the appointment list. The mini layout supports up to 12 fields.	APPOINTMEN STATUS       EARLIEST START PERM         SA-0070       Scheduled       7/31/2019 4:00 PM         Account ID       Parent Record Type         -       Account         Due Date       Parent Record ID         8/1/2019 1:00 AM       ABC Labs         Image: Flag       Image: Reschedule         Image: Candidates       Image: Candidates

Field Set	Description	Location in Dispatcher Console
Appointment as column List Columns appointre complex lookup fi that the includes Addition supporte performation	Controls the fields that appear as columns in the appointment list and in the complex work dependencies lookup filter. We recommend	All Service Appointments     ▼       O ▼     Horizon:     03/30/2020 📾 Match Gantt Dates
	that the appointment list includes up to six columns. Additional columns are supported but can affect the performance of the dispatcher	1-75 of 154 (0 selected)     Schedule     Dispatch       Search Service Appointment
	console. The number of columns shown depends on the screen resolution. You can	APPOINTMEN STATUS EARLIEST START PERM WORK TYPE ID STATUS ICON
	include Gantt or custom icon fields in columns.	SA-18877 In Progress 3/30/2020 5:54 AM QA Testing 🏲
	Note: Custom appointment list filters	SA-18880 Scheduled 3/30/2020 9:14 AM Maintenance 🏲
	include appointment list column settings. If	SA-18881 Scheduled 3/30/2020 9:14 AM Maintenance 🏲
such a filter is applied it overrides this field set.	it overrides this field	Complex Work Scheduling         Add Dependencies         Select a Service Appointment         Showing related appointments by       Account       AND       All       Search       Add Current         APPOINTMENT NUMBER       STATUS       EARLIEST START PERMITTED       WORK TYPE         SA-2367       Scheduled       3 Jul 2023 5:54 AM         SA-2380       Scheduled       3 Jul 2023 5:55 AM         SA-2397       Scheduled       3 Jul 2023 5:55 AM         SA-2438       Scheduled       3 Jul 2023 9:14 AM         SA-2465       Scheduled       3 Jul 2023 9:14 AM         SA-0265       Scheduled       8 Mar 2017 5:55 AM
Service Appointment List Preview	Controls the fields that appear when a user hovers on the appointment information icon.	All Service Appointments       Image: Search resources         In Figure 3       Image: Search Service Appointment         Image: Search Service Appointment       Image: Search Service Appointment         Image: Appointment       Image: Appointment Service Appointment         Image: Appointment       Image: Appointment Service

Field Set	Description	Location	in Di	spatc	her Con	sole							
Service Appointment				Op	timize								
Optimization Optimization Criteria field in Criteria the Optimize window.			Service	Territories	0								
Chitena	the optimize window.		Selec					•					
		Start D	ate 3, 2024		End Dat	te 3, 2024							
			○ On ● Sch	ly unsched neduled ar	appointments uled d unscheduled		-						
				iling Policy Boundaries				•					
			Appoin		imization Criter	a		•					
			Keep Se	cheduled (	Criteria (Beta)	•							
				gency				•					
									Optimize				
Service Appointment	Controls the fields displayed on the tooltip when a user	Week	•	<b>苗</b> ▼	Jul 29, 20	19 - Au	ıg 4, 20	)19	00:00 👻	00:00	• 🗸		day ►
Resource	hovers over an appointment	Mond	ay, 29 Jul 2	019 Tues	iay, 30 Jul 2019	Wednesd	day, 31 Ju	I Thursday, 1 Aug	Friday, 2 Aug 2	)19 Satur	rday, 3 Aug	Sunday, 4	Aug 2019
Calendar													
Tooltip	on the service resource.	16:15		_									
τοοπρ	on the service resource.	16:15 16:30 16:45											
τοοπρ	on the service resource.	16:30 16:45 17:00				5:00 PM		1					
ισοπρ	on the service resource.	16:30 16:45				<u>SA-</u> 0065 •	<u>SA-</u> 0069 •						
τοσιάρ	on the service resource.	16:30 16:45 17:00 17:15				SA-	SA-	2					
Τοσιαρ	on the service resource.	16:30 16:45 17:00 17:15 17:30 17:45 18:00				<u>SA-</u> 0065 • 07/31/2 019 6:00 PM	SA- 0069 • 07/31/2 019 6:00 F						
Τοσιαρ	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15				<u>SA-</u> 0065 • 07/31/2 019 6:00 PM <u>SA-</u> 0066 •	SA- 0069 • 07/31/2 019 6:00 F <u>SA-</u> 0067	<b>SA-0069</b> 5:00 PM - 6:00 PM					
Τοσιαρ	on the service resource.	16:30 16:45 17:00 17:15 17:30 17:45 18:00				<u>SA-</u> 0065 • 07/31/2 019 6:00 PM <u>SA-</u>	<u>SA-</u> 0069 • 07/31/2 019 6:00 F <u>SA-</u> 0067 07/31	<b>SA-0069</b> 5:00 PM - 6:00 PM	SA-0069				
Τοσιαρ	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15           18:30           18:45           19:00				<u>SA-</u> 0065 • 07/31/2 019 6:00 PM <u>SA-</u> 0066 • 07/31/2 019 7:00 PM	SA- 0069 • 07/31/2 019 6:00 F SA- 0067 07/31 015 - 8:00	SA-0069 5:00 PM - 6:00 PM Appointment Number Scheduled Start	07/31/2019 5:00				
Τοσιαρ	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15           18:30           18:45           19:00           19:15				<u>SA-</u> 0065 • 07/31/2 019 6:00 PM <u>SA-</u> 0066 • 07/31/2 019 7:00 PM	SA- 0069 • 07/31/2 019 6:00 F SA- 0067 07/31 019 - 8:00 068 •	SA-0069 5:00 PM - 6:00 PM Appointment Number Scheduled Start Scheduled End					
Toolup	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15           18:30           18:45           19:00           19:15           19:30				SA- 0065 •           07/31/2           019           6:00 PM           SA- 0066 •           07/31/2           019           7:00 PM           SA-0           07/31/2           019	SA- 0069 • 07/31/2 019 6:00 F <u>SA- 0067</u> 07/31 019 - 8:00 068 • 019 7:0 7/31/20	SA-0069 5:00 PM - 6:00 PM Appointment Number Scheduled Start Scheduled End Earliest Start Permitted	07/31/2019 5:00 07/31/2019 6:00 07/31/2019 4:00	PM			
Τοσιαρ	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15           18:30           18:45           19:00           19:15           19:30           19:45				SA- 0065           07/31/2 019           6:00 PM           SA- 07/31/2 019           7:00 PM           SA-0 07/31/2 PM • 07 8:00	SA- 0069 • 07/31/2 019 6:00 F SA- 0067 07/31 015 - 8:00 068 • 019 7:0 7/31/20 0 PM	SA-0069 5:00 PM - 6:00 PM Appointment Number Scheduled Start Scheduled End Earliest Start Permitted	07/31/2019 5:00 07/31/2019 6:00	PM			
Τοσιαρ	on the service resource.	16:30           16:45           17:00           17:15           17:30           17:45           18:00           18:15           18:30           18:45           19:00           19:15           19:30				SA:           0065 *           07/31/2           019           6:00 PM           SA:           0066 *           07/31/2           019           7:00 PM           SA:0           07/31/2           019           7:00 PM           SA:0           07/31/2           PM • 07           8:00	SA- 0069 • 07/31/2 019 6:00 F SA- 0067 07/31 015 - 8:00 068 • 019 7:0 7/31/20 0 PM	SA-0069 5:00 PM - 6:00 PM Appointment Number Scheduled Start Scheduled End Earliest Start Permitted	07/31/2019 5:00 07/31/2019 6:00 07/31/2019 4:00	PM			

Field Set	Description	Loca	tion in C	Disp	atcher Co	nsole					
Service Appt	Controls the fields displayed	Week V 🛱 VJul 29, 2019 - Aug 4, 2019 00:00 V 00:00 V V 4 Today >									
Resource on appointments on the					- Jul 29, 1	.019 - Aug 4, 201		00:00 • 00:00 • •			
Calendar	service resource calendar		Monday, 29	Jul 2019	Tuesday, 30 Jul 2	019 Wednesday, 31 Jul	Thursday, 1 Aug	Friday, 2 Aug 2019	Saturday, 3 Aug	Sunday, 4 Aug 2	019
Display	Visualforce page.	15:15									
		15:30									
		15:45									
		16:00				4:00 PM - 5:00 PM					
		16:15				SA-0070 • 07/31/2019 4:00					
		16:30				PM • 07/31/2019	]				
		16:45				5:00 PM					
		17:00 17:15									
		17:15									
		17:45									
		18:00									
		18:15									
		18:30									
		18:45									
		19:00									
		19:15									
		19:30									
		19:45									
		20:00									_
Service Info	Controls the layout of the										
Window Map	dialog screen displayed when	GAN	тт	MAP	☑ 🖇						
window iviap								Street Plaza			
	the user double-clicks an	Map Layers   Traffic Map Satellite									
	appointment on the map.				E	ter a location					:
			Market S	St & Ba	ttery St	HI lan				St	Ŀ
		0	Battery St				Stemon St			Mission St	
		<b>•</b>	try S		7,0,		The second			P. cale St	
		НО	94		I St St						
					Market St & 1st S			A-0070		×	
			25				Sche	duled Start: 7/3	31/2019 4:00 PM		1
			MarketSt			2	Earlie		31/2019 5:00 PM 31/2019 4:00 PM		
					wensol	AS AS	Soul Due	Date: 8/:	1/2019 1:00 AM		
		st			Ste	*	Stree	t: 41	5 Mission Street		
					Y///	253	V	iew Details Resc	chedule Dispat	ch	
					onst	Jessie		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		В	
				Stevens	C.	1// 1/	R Nissi	on <sup>3</sup>			Ð
				//	Forter St Ins	eral Deposit Irance Corporation	Miss				
			Consulate				Ist St				
					Jessiest						

Field Set	Description	Location in Dispatcher Console
Service Lightbox	Controls the layout of the dialog screen displayed when the user double-clicks an appointment on the Gantt.	SA-0070 SERVICE APPOINTMENT MAP ACCOUNT           Details         Feed
		Service Appointment Info
		Status Scheduled Service Territory San Francisco
		Account Parent Record Type Account
		Contact Parent Record ABC Labs
		Gantt Label Parent Record Status Category
		Subject Roof Repair Description
		Emergency
Service Lightbox	Controls which fields are displayed under Address	SA-0070 SERVICE APPOINTMENT MAP ACCOUNT
Address	when a user double-clicks a	
, (a, a, e,	service appointment in the	Details Feed
	Gantt.	Arrival Window End Actual Start Actual End
	Ganti.	Actual start Actual Eno Duration in Minutes 60.00 Actual Duration (Minutes)
		✓ Address
		Street     415 Mission Street     City     San Francisco       State     California     Zip     94105
		Country United States
		Edit Refresh
Consise	Cantuala unhigh fial da ana	
Service Lightbox Time		SA-0065 SERVICE APPOINTMENT ACCOUNT
	when a user double-clicks a service appointment in the	Details Feed
		✓ Date & Time
	Gantt.	Earliest Start Permitted 31/07/2019 17:00 Due Date 31/07/2019 21:40
		Scheduled Start 31/07/201917:00 Scheduled End 31/07/201918:00
		Arrivel Window Start Arrivel Window End
		Actual Start Actual End Duration in Minutes 60.00 Actual Duration (Minutes)
		✓ Address
		Street City
		State Zip

Field Set	Description	Location in Dispatcher Console
Service Tooltip Gantt	Controls the tooltip layout shown when hovering over an appointment on the Gantt. This field set supports up to 10 fields.	SA-0070 (Scheduled)       S         Status: Scheduled       /Los_Angeles - Tue, Jul 30, 2         Earliest Start Permitted: Wed, Jul 31, 2019 4:00 PM       /Los_Angeles - Tue, Jul 30, 2         Due Date: Thu, Aug 1, 2019 1:00 AM       Parent Record ID: ABC Labs         Street: 415 Mission Street       City: San Francisco         Start       Wed, Jul 31, 2019 4:00 PM         Finish       Wed, Jul 31, 2019 5:00 PM         Local start       Wed, Jul 31, 2019 8:00 AM         Local finish       Wed, Jul 31, 2019 9:00 AM

## Service Resource Field Sets

Field Set	Description	Placem	ent in Disp	atcher Con	sole		
Crew Management Resource Lightbox	Controls the fields shown when a user double-clicks a service resource in the Crew Management Gantt.	Janice Gonzales           Name         Janice Gonzales         User         Janice Gonzales           Gantt Label         Expert         Skills					
		Action	Name	Start Date	Skill	End Date	Skill Level Resource Skill Numbe
		Edit   Del	Connect to Electric Grid	al 06/09/2018 08:53	Connect_to_Electr	ical_Grid	1.00 <u>SRS-03</u>
		Edit   Del	SP Installation	06/09/2018 08:53	SPInstallation		2.00 <u>SRS-04</u>
		Edit   Del	SP Maintenance	06/09/2018 08:53	SPMaintenance		2.00 <u>SRS-05</u>
		Edit   Del	SP Repair	06/09/2018 08:53	SPRepair		1.00 <u>SRS-06</u>
		Edit   Del	Emergency	06/09/2018 16:08	Emergency		SRS-24
		😁 Serv	ice Crews				
		Action	Name 5	ervice Crew	Leader	Start Date	End Date
		Edit   Del	SCM-0001 5	F Roof Repair Crew	1	29/07/2019 08:00	31/08/2019 08:00

Field Set	Description	Placement in Dispatcher Console
Emergency Fields	Controls the fields displayed for a service resource in the Emergency Chatter action.	Image: control in the standard in t
Candidates when expanding a re	Controls the fields shown when expanding a resource row on the Candidates Chatter action.	SA-0070       SERVICE APPOINTMENT       MAP       ACCOUNT         Details       Feed         Current Schedule       Scheduled for SF Roof Repair Crew on Wed, Jul 31, 2019 8:00 AM         SF Roof Repair Crew       *         1 Options, Starting Wed, Jul 31, 2019 8:00 AM       *         Name       Gantt Label       Capacity-Based         SF Roof Repair Cr       SF Roof Repair Cr       false
		<ul> <li>Wed, Jul 31, 2019 8:00 AM</li> <li>100/100</li> </ul>

Field Set	Description	Placement in Dispatcher Console
Resource Gantt Filter	<ul> <li>Controls the available fields in Gantt Resource Filters. The fields are shown in these sections:</li> <li>Sort by</li> <li>Checkbox filters (if the field is of type Checkbox)</li> <li>One of the following properties picklist (if the field is of type Picklist)</li> </ul>	▲ Search resources       ▼       July 31, 2019          ▲ Search resources       ▼       July 31, 2019          ▲ Merica       →       →       →       →         ▲ HOURS RESOURCES SKILLS UTILIZATION PALETTES       14:0C15:0C         → San Francisco       Sort by: Name       ↓ ↓ ↓       ↓       ↓         ④ Janice Gonzales       Select a field to start filtering       ▲       ▲         ④ Louise Martin       Show working resources only       ②       ▲       Member         ④ Louise Martin       Show working resources only       ②       ▲       Member         ③ Ralph Clark       Capacity-Based       Active       Member         ▲ Installer       ○       Capacity-Based       Active       Member         ④ SF Roof Repair Crew       And one of the following properties:       Resource Type       ▲       America/         ③ Showroom Staff       Agent       Asset       None       3       America/         ④ Jane Austin       Agent       Asset       None       3       America/
Resource Lightbox	Controls the layout of the dialog screen displayed when the user double-clicks a service resource in the Gantt.	image: space of the system

# Gantt Lightbox

Field Set	Description	Placement in Dispatcher Console
Account	Controls the layout of the dialog screen displayed when a user double-clicks an appointment on the Gantt and clicks the Account tab.	SA-0069 SERVICE APPOINTMENT ACCOUNT
Work Order	Controls the layout of the dialog screen displayed when the user double-clicks an appointment on the Gantt, and then clicks the Work Order tab. Applies only to service appointments whose parent record is a work order.	SA-0074     SERVICE APPOINTMENT     WORK ORDER     RELATED     MAP     ACCOUNT       Details     Feed       V Work Order       Service Territory     San Francisco     Status     New       Account     ABC Labs     Work Type     Connect to Electrical Grid       Subject     Parent Work Order       Asset     Solar Panel System 4000     Case       Contact     Priority     Medium       Description     Line Items     0       Street     415 Mission Street     City     San Francisco       State     California     zip     94105
Work Order Line Item	Controls the layout of the dialog screen displayed when the user double-clicks an appointment on the Gantt, and then clicks the WOLI tab. Applies only to service appointments whose parent record is a work order line item.	SA-0075       SERVICE APPOINTMENT       WOLI       RELATED       MAP       ACCOUNT         Details       Feed

# Resource Absence Field Sets

iday, 2 Aug 20	00:00
iday, 2 Aug 20	
	19 Saturda
Louise Mart	in
02/08/201	9 14:00

Field Set	Description	Placer	ment in D	ispatch	er Console				
Resource Absence Resource Calendar	Controls the fields displayed on absences on	Weel	k 🔻	<b>=</b> -	Jul 29, 20	19 - Aug 4, 201	9	00:00 -	• 00:00
			Monday, 29 J	ul 2019 Tu	esday, 30 Jul 2019	Wednesday, 31 Jul	Thursday, 1 Aug	Friday, 2 Aug 20	19 Saturday,
	the service	()			RA-0030				
	resource	10:45							
	calendar	11:00							
	Visualforce page.	11:15							
		11:30							
		11:45							
		12:00						🕿 12:00 PM - 2:	
		12:15						RA-0031 • 08/02/2019 12:0	0
		12:30						PM • 08/02/201	
		12:45						2:00 PM	
		13:00							
		13:15							
		13:30							
		13:45							

#### SEE ALSO:

Color-Code the Gantt

# Create Custom Actions for the Field Service Dispatcher Console

Put the right actions at your dispatchers' fingertips by adding custom actions to the dispatcher console. Custom actions can either call an Apex class or open a Visualforce page, and can be run on records in several areas of the dispatcher console. To keep the dispatcher console tidy, actions are shown in dropdown action lists with icons.

🜐 This is a Field Service managed package feature.

You can add custom actions to several areas in the dispatcher console:

- Individual or multiple appointments in the appointment list
- Individual or multiple appointments in the Gantt
- Individual service resources or resource absences in the Gantt
- Polygons on the map (the action runs on the appointments within a polygon)

For example, create an action that does one of the following things:

- Calls an Apex class that reassigns all selected service appointments to a different service resource
- Opens a Visualforce page where the dispatcher can update the Earliest Start Permitted on all appointments within a polygon—for example, if the polygon represents a flood in the service territory
- 1. Decide what you want your action to do and where it appears on the Gantt.
- 2. Create an Apex class or Visualforce page to connect to an action.

Apex classes or Visualforce pages intended for custom dispatcher console actions must be configured a certain way. For details, see Code Samples: Custom Dispatcher Console Actions.

- **3.** Create and assign a custom permission to limit who sees the action, or select an existing permission to use.
- From the App Launcher, find and open the Field Service Admin app. Click the Field Service Settings tab, and then click Dispatcher Console UI > Custom Actions.
- **5.** In the left-hand column, select an action category to define the location and breadth of the action.
- 6. Click New Action and enter your details.
  - Label in Dispatcher Console: Enter the action label that dispatchers see in the dispatcher console.
  - Action Type: Select Apex Class or Visualforce.
  - **Apex Class**: If you selected Apex Class as the type, select the Apex class that you want the action to call.
  - Visualforce Page: If you selected Visualforce as the type, select the Visualforce page that you want the action to open.
  - **Required Custom Permission**: Select the custom permission that users must have to see the action.
  - **Icon**: Select an icon to display next to the action label.
- 7. Click Save.
- 8. Optionally, reorder the actions in the action category you selected. Custom actions appear in this order in an action list after standard actions.

When you create or edit a custom action, the Gantt must be refreshed for the changes to take effect.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **USER PERMISSIONS**

To define, edit, delete, set security, set version settings, and run tests for Apex classes:

Author Apex

To create and edit Visualforce pages:

Customize Application

To create custom permissions:

 Manage Custom Permissions

To add custom actions to the dispatcher console:

 FSL Admin permission set

# Create Custom Appointment List Filters

USER PERMISSIONS		EDITIONS		
To configure the Field Service managed package:	Customize Application	Available in: both Salesforce Classic (not available in all		
To assign a permission set license:	Manage Users	orgs) and Lightning Experience		
To create a permission set:	Manage Profiles and Permission Sets	The Field Service core		
To create, edit, and delete custom filters:	Field Service Dispatcher or Field Service Admin custom permission sets AND Create Filter custom permission	features, managed package, and mobile app are available in <b>Enterprise</b> , <b>Unlimited</b> , and <b>Developer</b> Editions.		
To share personal custom filters and edit and hide public custom filters:	Field Service Dispatcher or Field Service Admin custom permission sets AND Create Filter custom permission AND Publish Filter custom permission			

Create custom filters in Field Service to control which appointments appear in the dispatcher console service appointment list. Base your filters on service appointment fields and add custom logic. Dispatchers can create private filters or share them with others.

### 🜐 This is a Field Service managed package feature.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab. Click Dispatcher Console UI and select Enable Custom Filters.
  - Note: The custom filters feature replaces the appointment list's original custom list view functionality. Enabling custom filters removes any existing custom list views.
- 2. To open the dispatcher console, from the App Launcher, find and open the Field Service app.
- 3. To the right of the filter dropdown menu, click the Manage Filters icon and select New.
- 4. Add a filter name and description.
- 5. Choose whether the filter displays appointments based on the number of days before and after the horizon date, or appointments currently shown on the Gantt (similar to the Gantt standard filter).

Note: The horizon date related to the selected date properties and the Earliest Start Permitted, Due Date, Arrival Window Start, Arrival Window End, Scheduled Start, and Scheduled End fields.

- Standard filters let you set the scheduling window limit and the number of days up to and including the selected horizon date. The default value is 14 days.
- Custom filters let you specify how many days to display before and after the horizon date.
- **6.** Add criteria to your filter.



- 7. To filter appointments that are causing rule violations, add the Rule Violations criteria to your filter. To exclude rule violators, add Rule Violations Equals False. To include rule violators, add Rule Violations Equals True.
- 8. Adjust filter logic.

🕜 Note: To dynamically consider date and time fields, use formula fields. For example, Due date in 2 days Equals True.

9. Under Fields to Display, select fields to show in the appointment list when the filter is applied.

#### **10.** To publish or share your filter, select **Make this filter available for all users**.

When a custom filter is made public, it's shared with the All Internal Users public group.

- 11. Click Save. The filter is created and the appointments are displayed. The filter appears in the filter list in the Custom Filters section.
- 12. To edit a selected filter, click the Manage Filters icon and select Edit.
- 13. To hide a public custom filter, click the Manage Filters icon and select Hide.

🖌 Note: Admins can expose hidden filters by editing the custom filter record itself and setting Hidden to false.

#### Considerations

- The maximum number of days before and after the horizon date is 30 days.
- To avoid performance issues, we recommend keeping the number of fields on the Gantt Filter page layout below 15.
- All users have access to the standard filters provided with the managed package, but you can hide them. Remove the appropriate custom permission from the user profile or assigned permission set. The All Service Appointments list can't be hidden and is always available in the dispatcher console service appointment list.
- If only certain users need access to a custom filter, share the custom filter record with the public group or users. For example, if only
  San Francisco dispatchers need access to the "Bay Area Emergency Work" custom filter, create a private custom filter. Then, share
  "Bay Area Emergency Work" with the San Francisco public group using standard sharing.

SEE ALSO:

Filter the Gantt in Field Service Filter the Field Service Gantt by Service Territory

# Create Custom Appointment Icons

Add custom icons to service appointments on the Field Service Gantt, map, and appointment list so dispatchers can quickly identify appointment characteristics. For example, use a custom icon to indicate that an appointment is for a VIP or first-time customer.

### 🜐 This is a Field Service managed package feature.

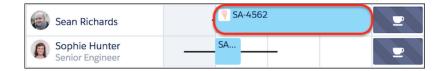
The Gantt is chock-full of information. Icons are a great way to share information without cluttering your screen. While icons are set at the individual appointment level, you can set up triggers to populate the Gantt Icon field on appointments of a certain type.

- 1. Add the Gantt Icon field to service appointment page layouts.
- 2. Navigate to the service appointment that needs the icon.
- **3.** In the Gantt Icon field, enter an icon URL. The URL must end in an image suffix, such as .png or .gif. We scale the image to 16 x 16 pixels, so square images look best.
- **4.** Save your changes. Dispatchers can see the icon on the appointment in the Gantt and the dispatcher console map. Images with a transparent background appear with a white background.

In the appointment list, you can also include columns that show Gantt or custom icons. For example, set up a formula field that selects an icon image. Add the fields to show in the Service Appointment List Columns field set.

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 into 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



# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create a custom Gantt icon: One of the following:

- Custom permission set: FSL Admin Permissions
- Custom permission set: FSL Dispatcher Permissions
- Read and Edit on service appointments

SEE ALSO:

Customize the Dispatcher Console with Field Sets

# Working in the Field Service Dispatcher Console Appointment List

Use the service appointment list on the left side of the Field Service dispatcher console to filter, sort, and search appointments within the list. You can also perform actions on selected appointments.

### igoplus This is a Field Service managed package feature.

The service appointment list shows the appointments associated with the service territories you loaded to the Gantt or the appointments assigned to service resources within these service territories.

From within the appointment list, you can:

- View the scheduling policy that's currently applied, and apply a new one
- Select the date fields that are considered when filtering appointments to show on the Gantt
- Customize the Gantt's time frame by adjusting its horizon or opting to make the appointment list match the Gantt's date range
- Schedule and dispatch service appointments
- Optimize your schedule
- Flag and unflag appointments
- Filter the appointment list based on a search query or appointment status
- Filter the appointment list by service territory
- Show icons and appointment details to communicate information quickly
- Customize the dispatcher console settings by clicking the gear icon in the top right-hand corner of the list

# Search the Appointment List

To search within the appointment list, enter two or more characters in the search field. Separate multiple keywords with a comma, which applies an OR condition to the search.

When you enter a query, the list updates to show only service appointments with at least one matching property. If no appointments match your query, click **Search All Records** in the body of the list to search all appointments in your org. From the resulting list of appointments, you can force-add an appointment to the list that doesn't match the Gantt loading criteria. The **Search All Records** action only supports search queries of a complete service appointment number or record ID.

These service appointment fields are scanned in searches:

- Service Appointment Number
- Gantt Label
- Account Name
- Assigned Resource Name
- Service Appointment ID
- Service Territory Name
- SA Status
- Fields in the Service Appointments List Columns field set that is of the following types: text, text area, lookup name, and picklist

# Filter the Appointment List

Filters, similar to list views, control which service appointments appear in the appointment list. The list is also filtered based on the horizon, selected date fields, and search values.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Apply a filter by selecting one from the filter dropdown menu in the appointment list (1). Select appointments using different filters. Click the link to see the selected list (2)

Note: The appointment list shows Field Service filters in the Standard Filters section, and custom filters that you've created in the Custom Filters section. If Copilot is enabled, you will also see two additional sections, Copilot Summaries and My Copilot Searches. See Using Einstein Copilot in the Dispatcher Console.

Policy: Customer First	1 8 *	
All Service Appointments	• 7	
Image: Morizon:         03/30/2020         Image: Match Gantt Dates		
1-75 of 940 (16 selected) - 2	Schedule Dispatch 👻	
Search Service Appointment	Q	

You can choose from the following filters in the Standard Filters section of the list. The custom permissions assigned to the user determine the visibility of each filter. When the filtering criteria are based on Status, the filters consider the status category, which maps all standard and custom status values to categories corresponding to the default status values. Conditions have an OR statement between them.

Filter Name	Definition
All Service Appointments	All service appointments.
Canceled	Service appointments whose status category is Canceled.
Contractors	Service appointments that are scheduled to capacity-based resources.
Crews	Service appointments whose parent work order or work order line item has the Minimum Crew Size field set.
Exclude Bundle Members	Service appointments that represent a bundle or aren't part of a bundle.
Flagged	Service appointments that the user marked as flagged. Flags aren't saved when the dispatcher console is reloaded.
Gantt	Service appointments that are currently shown on the Gantt, which means they have one or more assigned resources and fall within the defined time frame.
In Jeopardy	Service appointments that are marked In Jeopardy and aren't canceled.
Recently Used	Service appointments that were recently interacted with via scheduling, dragging, Chatter posts, status changes, the Get Candidates action, the Show on Gantt action, and the Open Details action. Recent service appointments aren't saved when the dispatcher console is reloaded.
Rules Violating	Service appointments that have rule violations and aren't canceled.

Filter Name	Definition		
Scheduled	Service appointments with an assigned resource.		
Selected	Service appointments that the user selected in the appointment list. Selections aren't saved when the dispatcher console is reloaded.		
To Do	Service appointments that are awaiting an action from the dispatcher. It includes appointments that match one of these criteria.		
	• The status category is None.		
	• The appointment has rule violations.		
	• The appointment is In Jeopardy and isn't Canceled or Completed.		
Unscheduled	Service appointments that don't have an assigned resource and aren't canceled.		

### Note:

- Create custom filters for the appointment list.
- To filter the appointment list by territory, click the gear icon in the appointment list and select Territory filtering.

# **Mass-Edit Appointments**

To modify multiple appointments in the appointment list, select the desired appointments. Then, open the Actions menu and select an action:

Action	Definition
Schedule	Execute an automatic scheduling process for the selected appointments.
Dispatch	Dispatch the selected appointments.
Flag / Unflag	Add or remove a flag for the selected appointments. You can use the flag for filtering later.
Check Rules	Initiate a rule validation check for the selected appointments.
Unschedule	Unschedule the selected appointments, or define the relevant time range and service territories of the appointments that must be unscheduled.
Optimize	Optimize the selected appointments. You're given the option to select a scheduling policy and filter the selected appointments before running the optimization.

To customize the list of actions, from the App Launcher, find, and open the **Field Service Admin** app. Click **Field Service Settings** > **Dispatcher Console UI** > **Gantt Configurations**, and scroll to the section where you can reorder, add, or remove actions.

Note: To limit dispatchers' mass-edit options, remove the Bulk Dispatch, Bulk Optimize, Bulk Schedule, or Bulk Unschedule custom permissions from their user profiles.

If you create custom dispatcher console actions in the Service List category, those actions appear below the built-in actions in the action list.

# Customize the Appointment List

Field sets control the fields and field order of the appointment list layout. For help, see Customize the Dispatcher Console with Field Sets.

To use background shading in the appointment list, click the gear icon in the top-right corner and select **Dispatch Console Settings**. In the Appointment List Color-Coding field, select an option:

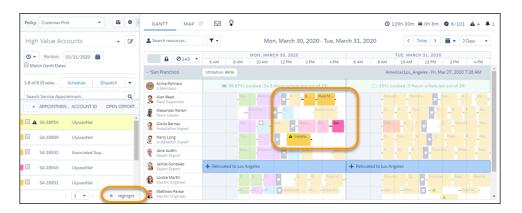
Color-Coding Setting	Definition
Default	Apply a white background to appointments in the list
Full Shading	Apply a flat background color
Horizontal Gradient	Apply a gradient background color

🕜 Note:

- By default, 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 default color scheme.
- Regardless of the appointment list color-coding setting, appointments with rule violations are highlighted in the appointment list in yellow and in-jeopardy appointments are highlighted in red.

# Highlight Filtered Appointments on the Gantt

Quickly spot the appointments shown in the appointment list on the Gantt. Select an appointment list filter or enter a search term, and then click **Highlight** in the appointment list. All appointments and absences not shown in the list appear faded on the Gantt. Click the X icon to remove the highlighting.



SEE ALSO:

How are Status Categories Used?

# Work in the Field Service Dispatcher Console Gantt

The Gantt is on the right side of the dispatcher console and contains the resource list, the schedule view, and additional features. User idle time is monitored to reduce unnecessary Gantt refreshes and improve computer performance. Stepped away from the dispatcher console? If you've been inactive the Gantt session times out, reload the page when you return to continue.



🜐 This is a Field Service managed package feature.

Note: The Gantt shows information from the past four years to the current date and shows four years from the current date into the future.

#### Filter the Gantt in Field Service

Customize the Gantt's contents by filtering it based on service resource settings, skills, utilization, hours, and other features.

#### Filter the Field Service Gantt by Service Territory

The Gantt territory filter controls which appointments are shown in the Gantt and appointment list. In a field service operation with numerous service territories, the faster you can control which territories are shown, the better!

#### Gantt Keyboard Shortcuts

Use keyboard shortcuts to work faster in the Field Service dispatcher console.

#### View Field Service Resource Utilization

To make smarter scheduling and hiring decisions, view your service resources' individual utilization percentages. You can see each resource's utilization percentage for a particular day or over multiple days, and sort resources in the Gantt by utilization.

#### Color-Code the Gantt

Help dispatchers compare service appointments in the Field Service dispatcher console Gantt and map by creating custom color palettes based on a service appointment field. For example, create a palette that displays appointments in a custom color spectrum based on the proximity of the due date.

#### View Service Crews on the Gantt

Control how service crews are displayed on the Gantt in the Field Service dispatcher console.

#### Work with Resource Absences

To make it easier for you to work with resource absences, create and edit resource absences directly on the Gantt, view overlapping absences scheduled to the same resource, hide unapproved absences on the Gantt and show resource absences on the dispatcher console map.

#### View Appointment KPIs on the Gantt

Assess the health of your Field Service operation at a glance with the help of the Gantt KPI (Key Performance Indicator) bar.

#### Check Rule Violations on the Field Service Gantt

Rule violations occur when a service appointment doesn't follow predefined scheduling rules. Examples of rule violations include travel time conflicts and appointments that aren't scheduled between their Earliest Start Permitted and Due Date.

#### Turn On Field Service Gantt Live Updates

Choose how to trigger Gantt live updates so that dispatchers don't have to rely on timed updates. To get enhanced live update capabilities, choose to work with Enhanced Live Updates.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Filter the Gantt in Field Service

Customize the Gantt's contents by filtering it based on service resource settings, skills, utilization, hours, and other features.

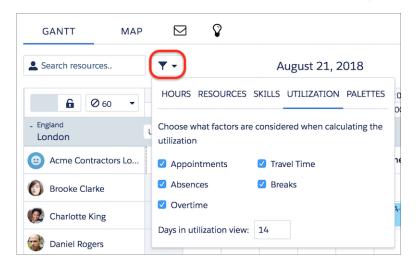
#### 🜐 This is a Field Service managed package feature.

To open your filter settings, click the filter icon in the top left-hand corner of the Gantt. By default, the Gantt is sorted by service resource name.

To search for resources within the resource list, enter two or more characters in the search field. Separate multiple keywords with a comma, which applies an OR condition to the search.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience



Filter Tab	Description
Hours	Select a range of hours to show. The date resolution determines the Gantt time interval and how available hours appear. For example, when you select a date resolution of 3 Days, the Gantt shows resource availability across 4-hour intervals; it displays intervals with full or partial availability within filtered hours. For In-Day, the Gantt shows half-hour intervals and ignores the filter for which hours to show.
	In 3 Days, Weekly, and 2 Weeks date resolutions, you can turn on the option to show a horizontal scrollbar. Scrolling enables you to see all the relevant resource availability information also in lower date resolutions.
	You can turn on options to display or highlight weekends. For views that are less than weekly, the Gantt always shows weekend days. When you turn on the option to show weekends, the Gantt displays weekend days for date resolutions of weekly or longer.
	A setting In <b>Field Service Settings</b> > <b>Dispatcher Console UI</b> lets you configure Sunday or Monday as the start of the week.
	At the bottom of the tab, you can customize the Long-Term view:

Filter Tab	Description				
	<ul> <li>Choose whether to show only multiday appointments</li> <li>Enter the number of months to display (up to 6)</li> <li>Hide appointments and absences under a certain length</li> <li>(To reach the long-term view, select <b>Long-Term</b> in the top-right corner of the Gantt. You need the Longterm View custom permission to access it.)</li> </ul>				
Resources	Specify which service resources are shown and in what order. Select <b>Show working resources only</b> in the filter box to show only resources that are available to be assigned to appointments on the dates shown on the Gantt. To add more filterable fields to the Resources tab, update the Resource Gantt Filter field set.				
Skills	Select skills that resources must possess to be shown on the Gantt. Change the Filter Logic to OR to display resources with one or more of the selected skills. When the Gantt's resource skill filter runs, it preloads 50 skills and shows them as filter options based on the available skills of the currently loaded resources. You can search for more skills using the skills search bar and apply them as filter options. The last applied filter is saved until the next time you change it.				
Utilization	Select the factors that are considered when calculating resource utilization, and control the days shown in the utilization view. (To reach the utilization view, select <b>Utilization</b> in the top-right corner of the Gantt.)				
Palettes	Create, manage, and apply palettes to color-code service appointments on the Gantt and map. Click the icon in the top-right corner to open the palette editor.				

### SEE ALSO:

View Field Service Resource Utilization Color-Code the Gantt Gantt Keyboard Shortcuts

# Filter the Field Service Gantt by Service Territory

The Gantt territory filter controls which appointments are shown in the Gantt and appointment list. In a field service operation with numerous service territories, the faster you can control which territories are shown, the better!

# $\bigcirc$ This is a Field Service managed package feature.

To filter the Gantt by service territory, click the territory filtering icon at the top of the appointment list.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Delicu	Customer First	_		a
Policy.	Customer First		<u> </u>	**

Then, select territories whose service resources and service appointments you want to see.

- Optionally, select **Show service appointments not associated with a territory**. These appointments can then be scheduled within any of the selected service territories.
- If your organization contains many territories, click the star next to a frequently used service territory to add it to your favorites. Click the Favorites tab to view your favorites.
- Hover over a territory and click **Switch** to deselect all territories and select only that territory.
- Click Save to apply the filter and return to the appointment list.
- Note: Service territories without assigned resources are shown on the appointment list but not on the Gantt. If you have access to 2,000 or more service territories, the service territories list shows only selected territories. Use the search bar to find territories that aren't selected.

### View Secondary Service Territory Memberships on the Gantt

If service resources are assigned to more than one territory, you can choose to show secondary service territory memberships on the Gantt.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatcher Console UI > Gantt Configurations.
- 3. Select Show secondary Service Territory Members on Gantt chart, and save your changes.
- 4. From Setup, enter *Permission Sets* in the Quick Find box. Select **Permission Sets** under Users.
- 5. Click Field Service Dispatcher Permissions.
- 6. In the Apps section, click **Custom Permissions**.
- 7. Click Edit.
- 8. Add the FSL.View Resource on secondary STM custom permission to the Field Service Dispatcher permission set.
- 9. Click Save.

If you show secondary territory memberships on the Gantt, keep these considerations in mind.

- When the Candidates action is used, secondary territory members are flagged with a green icon.
- When service appointments are dragged onto the Gantt, the time slots are filled on both of the service resource's rows.
- Territory utilization calculation doesn't consider secondary territory members.
- When Gantt visibility is back on time zones, only secondary territory memberships with the same time zone are visible. If the primary territory is filtered out, the secondary territory memberships are still visible.

SEE ALSO:

Create and Manage Map Polygons

# Gantt Keyboard Shortcuts

Use keyboard shortcuts to work faster in the Field Service dispatcher console.

Command	Description	Keyboard Shortcut				
Flag or unflag a service appointment	Flagged appointments appear with a flag icon on the Gantt.	Select service appointment, then F				
Open parent work order or work order line item record	Opens the record in the Work Orders tab, outside of the Gantt.	Select service appointment then W				
Open service appointment record	Opens the record in the Service Appointments tab, outside of the Gantt.	Select service appointment, then S				
Open service appointment details	Opens a lightbox over the Gantt with tabs containing details about the appointment and its parent record, related records, map, and more.	Select service appointment, then Enter				
Close service appointment lightbox	Closes the lightbox.	Esc				
Move a scheduled service appointment to a new spot in the schedule, allowing for travel time	You can drag an appointment to a different spot in its assigned resource's schedule or to another resource's row to reassign it. When an appointment is dragged, it snaps to the closest valid time slot based on your Gantt drag jump setting and on the calculated travel time between adjacent appointments or absences. Configure your drag jump setting in the Field Service Admin app (Field Service Settings > Dispatcher Console UI).	Windows: Select service appointment+Ctrl+drag macOS: Select service appointment+Cmd+drag				
Show today on the Gantt	If the Gantt is configured to show multiple days, today is the first day shown.	Т				
Switch to In Day view	Changes the Gantt resolution to In Day.	0 (zero)				
Switch to Daily view	Changes the Gantt resolution to Daily.	1				

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Command	Description	Keyboard Shortcut
Switch to 2 Days view	Changes the Gantt resolution to 2 Days.	2
Switch to 3 Days view	Changes the Gantt resolution to 3 Days.	3
Switch to Weekly view	Changes the Gantt resolution to Weekly.	7
Switch to Multiday view	Changes the Gantt resolution to Multiday.	Μ
Switch to Utilization view	Changes the Gantt resolution to Utilization.	U
Scroll one day back	For example, if you're viewing the August 6 schedule, this shortcut switches the Gantt to August 5.	Left Arrow
Scroll one day forward	For example, if you're viewing the August 6 schedule, this shortcut switches the Gantt to August 7.	Right Arrow
Scroll one time period back	For example, if you're in the Weekly view, this shortcut switches the Gantt to the previous week.	Shift+Left Arrow
Scroll one time period forward	For example, if you're in the 2 Days view, this shortcut switches the Gantt to the next two days.	Shift+Right Arrow
Scroll up in schedule	Scrolls up one row in the Gantt without changing the dates shown.	Up Arrow
Scroll down in schedule	Scrolls down one row in the Gantt without changing the dates shown.	Down Arrow

# View Field Service Resource Utilization

To make smarter scheduling and hiring decisions, view your service resources' individual utilization percentages. You can see each resource's utilization percentage for a particular day or over multiple days, and sort resources in the Gantt by utilization.

🜐 This is a Field Service managed package feature.

A service resource's utilization is calculated by comparing their total operating hours to the number of hours they're scheduled to work. Utilization is calculated only for non-capacity-based service resources.

# Calculate Utilization

To determine which factors are considered when calculating a resource's utilization, click the Gantt filter icon and click the **Utilization** tab. Deselect factors that you don't want to be used in the calculation.

When all factors are selected, utilization is calculated using the following equation: (Service Appointments + Absences + Breaks + Travel Time) / (Overtime Hours + \*Normal Hours\*)

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- SA = Scheduled service appointments
- Absences = Resource absences of type Absence
- Breaks = Resource absences of type Break
- Overtime Hours = Time slots of type Extended in the resource's operating hours for its primary service territory
- Normal Hours = Time slots of type Normal in the resource's operating hours for its primary service territory

For example, if a resource's operating hours add up to 20 hours per week and they're scheduled to work 10 hours in a particular week, their average utilization for the week is 50%.

# View Utilization on the Gantt

The Gantt provides a bird's-eye view of your team's utilization percentages. To turn on the utilization view, select **Utilization** in the Gantt resolution field in the top-right corner.

GANTT MAP		© 56h 30m 🖨 0h 29m 🔮 0/34 🛕 0 🌻
Search resources	▼ • Wed, July 18, 2018 - Thu, July	19, 2018 < Today > 🛱 🕶 Utilization 👻
<b>∂</b> Ø 125 ▼	HOURS RESOURCES SKILLS UTILIZATI PALETTES	19
- England London	Choose what factors are considered when calculating the utilization	109%
Vipers Average: 56% 2	Appointments I Travel Time Absences	112%
Sophie Hunter Average: 56%	Breaks Overtime Days in utilization view: 2	111%
Sean Richards Average: 76%	44%	108%
Ruby campbell Average: 57%		115%
Diamondbacks Average: 53%		105%
Daniel Rogers Average: 56%		111%
Charlotte King Average: 51%		102%

From the utilization resource view, you can:

- View each resource's average utilization over the days in the utilization view
- View a resource's utilization for a particular day
- Click an event name to view its details
- Flag service appointments
- Click the date on the vertical axis to switch to the date's daily view

Note: Resource absence duration (in a day) longer than the overall working day capacity is shown as 100% utilization.

Here's how to customize the utilization display settings.

#### Change the number of days in the utilization view

The utilization view can show 1–31 days. To switch from the default of 31 days, click the Gantt filter icon, then click **Utilization** and enter your preferred number of days (1). Each resource's Average Utilization (2), shown beneath their name in the resource list, is an average of their daily utilization percentage across the days shown in the utilization view.

#### Sort the resource list by average utilization

Sorting resources by their average utilization helps you identify which resources need more or fewer appointments. Click the Gantt filter icon, then click **Resources**. In the Sort by field, select **Average Utilization**.

#### Customize the utilization-based color code

Resources in the resource list are shown in green, yellow, or red depending on their utilization percentage. To define the limits for these three colors, from the App Launcher, find and open the **Field Service Admin** app. Click **Field Service Settings** > **Dispatcher Console UI** > **Gantt Configurations**. Under **Utilization Views**, enter the number of hours that indicate High Utilization (default: 150), Medium Utilization (default: 100), and Extensive Travel (default: 33). In the utilization view:

- Resources whose schedules are below Medium Utilization appear in green.
- Resources whose schedules are between High and Medium Utilization appear in yellow.
- Resources whose schedules are above High Utilization appear in red.
- Resources whose percentage of travel is larger than the value you specify are considered Extensive Travel candidates, and appear with an automobile icon.

#### Show each territory's average daily utilization

Control when utilization information is shown for territories on the Gantt. From the App Launcher, find and open the **Field Service Admin** app, and then click **Field Service Settings** > **Dispatcher Console UI** > **Gantt Configurations**. Select **Show utilization on the Gantt** to show each territory's average daily utilization on the Gantt for all Gantt resolutions. If this option isn't selected, utilization information is shown only when the Gantt resolution is set to Utilization.

If a service resource is capacity-based with a defined capacity, their utilization percentage isn't shown in the Gantt. However, their row in the Gantt displays an icon that shows how close they're to reaching their capacity.

A 0125 -		TUE, OCTOBER 10, 2017									
	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM
- Melbourne	Utilization	0%					Aust	ralia/Sydne	ey - Wed, A	ug 8, 2018	3:28 PM
Australian Resources     3rd Party		40% boo	oked (8 Ho	urs schedu	led out of	20)	□ 7.5	5% booke	d (1.5 Hou	rs schedule	ed out
Simon Dwan     Engineer											

#### SEE ALSO:

Fill Schedule Gaps in Field Service Set Custom Permissions for Field Service

# Color-Code the Gantt

Help dispatchers compare service appointments in the Field Service dispatcher console Gantt and map by creating custom color palettes based on a service appointment field. For example, create a palette that displays appointments in a custom color spectrum based on the proximity of the due date.

### This is a Field Service managed package feature.

You can base a palette on any service appointment field of the following types: checkbox, picklist, date, date-time, number, percent, or currency. Use the Due Date Approaching palette to color-code appointments based on how close they are to the due date. Create and manage palettes directly from the Gantt.

- 1. From the App Launcher, find and open the **Field Service** app. Click the **Field Service** tab to open the dispatcher console.
- 2. Click the filter icon at the top of the Gantt, and then click the **Palettes** tab.
- 3. Click the icon in the top-right corner to open the palette editor, and click **New Palette**.
- 4. Enter a name and description.
- 5. Select which service appointment field to base the palette on.
- 6. Define the color spectrum. We recommend creating a high-contrast spectrum. For picklist fields, assign a color to each picklist value. For checkbox fields, select two colors signifying checked and unchecked. For numeric or date-based fields, choose how many colors to use, a minimum and maximum color, a color if no value is specified, and a corresponding minimum and maximum value. The palette editor then creates a spectrum for you.
- 7. Select Active to make the palette available to dispatchers.
- 8. Save your palette.
- 9. Apply a palette from the Palettes tab in the Gantt filter.
  - **a.** Select a palette in the dropdown list, and click **Apply Palette**. The list shows up to 10 active palettes in the org in alphabetical order. Applying a palette changes the background color of appointments on the Gantt and adds an appropriately colored horizontal bar above appointments on the map.
  - b. After a palette is applied, you can click Use Default Palette to return to the default color scheme.

The default color scheme—used when no palette is applied—color-codes appointments by status. You can't update the default color scheme or replace it with a custom palette. When you reload the Gantt or change which service appointments are shown in the appointment list, the last palette that you used is applied.

The Gantt Color field on service appointments and service crews overrides the default color scheme. If you don't like the default color scheme, create a process in Process Builder that populates the Gantt Color field based on your preferred service appointment field.

Users with the Gantt Palettes View permission can see all palettes created in your org. To control palette access, set sharing on the Gantt Palette object to Private. Then, use sharing rules to share each palette with the appropriate users.

**Note:** Create multiple palettes to address different scheduling questions. For example, use custom fields to create palettes that do the following:

- Highlight appointments for VIP customers
- Color-code appointments based on service cost

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To create, edit, and delete Gantt palettes:

Gantt Palettes Edit
 custom permission

To view the Palettes tab in the Gantt and apply a palette:

• Gantt Palettes View custom permission

• Color-code appointments based on the priority level of their parent work order

SEE ALSO:

Gantt Keyboard Shortcuts Customize the Dispatcher Console with Field Sets

# View Service Crews on the Gantt

Control how service crews are displayed on the Gantt in the Field Service dispatcher console.

🜐 This is a Field Service managed package feature.

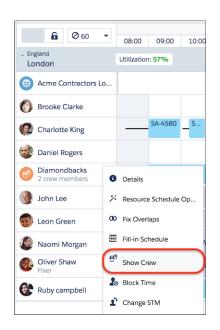
# Show One Crew

In the resource list, click **Show Crew** on a service resource of type Crew to leave only the Crew and its members on the Gantt and hide other resources. Click **Hide Crew View** to return to the regular display.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

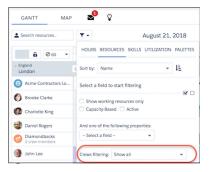
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



The Gantt displays each service crew member's Gantt Label value. If the field is blank on a service crew member record, it defaults to the service crew name + "Crew Member." For example, Alpha Team Crew Member.

## Show or Hide Crews

To customize the way crews are shown on the Gantt, click the Gantt filter icon. Click the **Resources** tab, and then select one of the following values in the Crews filtering field.



- Show all: Do not filter based on crew properties.
- Hide Service Crew Members: Show only service resources of type Crew and service resources of type Technician who are not allocated to crews in the time frame open on the Gantt.
- Show Crews and their Service Crew Members: Show only service resources of type Crew and service resources of type Technician who are allocated to those crews in the time frame open on the Gantt.
- Show only Crews: Show only service resources of type Crew.
- Hide Crews and Service Crew Members: Show only service resources of type Technician that are not allocated to a crew in the time frame open on the Gantt.

# Customize Crew Color

Optionally, display a service crew in a particular color on the Gantt by entering a hex code in the Gantt Color field on the crew. For example, set the Gantt color to green (#008000) for all service crews that use a company vehicle. Crews without a defined Gantt color appear in purple.

Here, we've entered #ff0000 in the Gantt Color field for the Vipers crew, and haven't specified a color for the Diamondbacks crew.

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### SEE ALSO:

- Considerations for Scheduling Service Crews
- Create Service Crews
- Service Crew Fields
- Set Up Crew Management
- Manage Field Service Crew Membership

# Work with Resource Absences

To make it easier for you to work with resource absences, create and edit resource absences directly on the Gantt, view overlapping absences scheduled to the same resource, hide unapproved absences on the Gantt and show resource absences on the dispatcher console map.



 $\stackrel{ }{ au}$  This is a Field Service managed package feature.

# Add Resource Absences on the Gantt

Create resource absences for service resources on the Gantt.

1. Click the absence creator icon located above the resource list and enter the absence details.

Add Absence Define an absence, and then d resources on the Gantt.	lrag it to one of the service
Duration 3 Hours 0	Minutes
Туре	Label
Vacation 💌	Vaca

🕜 Note: The maximum duration that you can enter is 336 hours and 59 minutes. If you want the absence to be longer, create it from the Absences related list in the service resource record, use the Adjust Duration action to extend its duration, or edit the duration from the Gantt.

2. Drag the absence to one of the service resources on the Gantt.

## Edit Resource Absences on the Gantt

Modify resource absences for service resources on the Gantt with one or more of these options.

1. Double-click a resource absence on the Gantt and then click Edit in the Details window to modify its details.

A: RA-1722 DETAIL	5			Ľ
				Edit Refresh
Absence Number	RA-1722	Resource	Alan Reed	
Туре	Medical	Gantt Label		
Start Time	7/3/2023, 4:00 PM	End Time	7/3/2023, 5:28 PM	
Estimated Travel Time	0	Estimated Travel Time From	0	
		Edit Refresh		

- 2. Drag a resource absence on the Gantt from one service resource to another to reassign the absence.
- 3. Right-click a resource absence on the Gantt and select Adjust Duration to extend or shorten its duration.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

### **USER PERMISSIONS**

To customize the Field Service managed package:

- **Customize Application**
- To create resource absences on the Gantt:
- Create Absences from Gantt custom permission

To edit the duration of a resource absence on the Gantt:

Gantt - Enable Adjusting Duration custom permission

# View Overlappinng Resource Absences on the Gantt

Define the height of overlapping resource absences shown on the Gantt to easily identify resource absences.

- 1. Click Dispatch Console Settings.
- 2. Select the height in Absence Overlap Height.

Dispatch Conso	le Settings	
Gantt Row Height Set the height of a row in the Gantt	Medium 👻	•
Filter by Duration Type Display only capacity-based resources that have the selected duration type	Daily	
Set Default Gantt View to Today Display the Gantt starting from today's date. By default, it shows the last visited date.	Set view to today	- 1
Default Sidebar View Choose what appears in the sidebar when the dispatcher console loads	Appointment List	
Appointment List Color-Coding Customize the background shading of appointments in the list	Default 👻	
Absence Overlap Height Set the height of overlapping resource absences on the Gantt	Partial 👻	) į
		Save

If you select **Partial**, the overlapping absences appear one on top of the other. If you select **Full**, only one absence is visible and additional absences are hidden behind it.

### Hide Unapproved Absences on the Gantt

When approval confirmation is enabled, only approved absences can block a mobile worker's availability and appear on the Gantt. Unapproved absences aren't considered in scheduling or shown on the Gantt.

Mote: If the Multiday view is selected, resource absences don't appear on the Gantt.

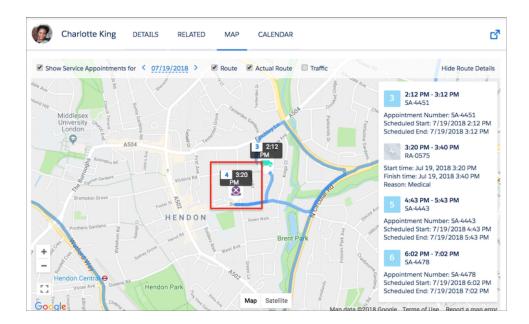
- 1. Create an approval process for absences that checks the FSL\_\_Approved\_\_c field.
- 2. To avoid confusion, approve all existing absences.
- 3. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 4. Click Scheduling > General Logic and select Activate approval confirmation on resource absences.
- 5. Save your changes.

### Show Resource Absences on the Map

Absences are shown on the dispatcher console map with a purple icon and the planned route to and from the absence address. If this option isn't selected, absence length is added to the travel time of adjacent service appointments, which can be confusing for dispatchers.

Note: A resource absence must be properly geocoded by data integration rules—meaning it needs a latitude and longitude—to appear on the map.

- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatcher Console UI > Gantt Configurations and select Show absences on resource map.
- 3. Save your changes.



#### SEE ALSO:

Create Service Resource Absences for Field Service

- View a Field Service Resource's Calendar
- Work Rule Type: Service Resource Availability
- Service Resource Fields for Field Service

# View Appointment KPIs on the Gantt

Assess the health of your Field Service operation at a glance with the help of the Gantt KPI (Key Performance Indicator) bar.

🜐 This is a Field Service managed package feature.

The KPI bar includes five indicators and can be found in the top-right corner of the Gantt.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

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The indicators are, from left to right:

• Total scheduled time (workload) of all loaded service territories

- Average travel time per service appointment of all service appointments shown on the Gantt •
- Number of completed service appointments out of all service appointments shown on the Gantt
- Number of service appointments on the Gantt with rule violations •
- Number of service appointments on the Gantt that are In Jeopardy •

# Check Rule Violations on the Field Service Gantt

Rule violations occur when a service appointment doesn't follow predefined scheduling rules. Examples of rule violations include travel time conflicts and appointments that aren't scheduled between their Earliest Start Permitted and Due Date.

(f) This is a Field Service managed package feature.

Right-click one or more appointments on the Gantt chart or list and click Check Rules to manually check rule violations for selected service appointments. To manually check rules on demand for all loaded services on the Gantt, click **Check Rules** next to the scheduling policy.

The scheduling policy selected at the top of the appointment list controls which rules are applied. If a rule violation occurs, the service appointment appears on the Gantt with a yellow triangle. Hover over the appointment to view its details and violated rules.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

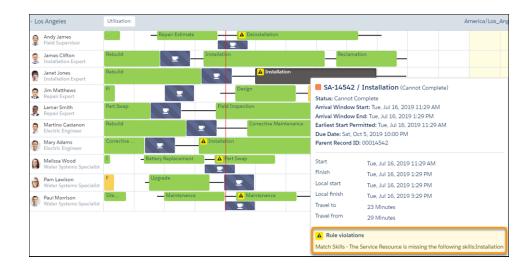
### **USER PERMISSIONS**

To enable dispatchers to check rules manually:

- Custom permission sets:
  - **Field Service** Dispatcher Permissions
  - Field Service **Dispatcher License**

Custom permissions:

- **Enable Check Rules** • - All Services
- Gantt and List -**Enable Check Rules**
- Gantt and List -**Enable Bulk Check** Rule



When optimizing your team's or a service resource's schedule, appointments with rule violations remain pinned. With Enhanced Scheduling and Optimization, the optimization engine tries to fix rule violations to improve the schedule by rescheduling or unscheduling rule violating appointments. To keep these appointments scheduled as is on the Gantt, the service appointments must first be pinned or in a pinned status.

Use the Check Rules feature to bulk-validate service appointments on the Gantt against your scheduling policy work rules and display rule violations. This feature is applicable only if your Rule Validation Frequency field in Field Service Settings isn't set to Always. Always is the default setting for Salesforce orgs created before Summer '21, where rules are checked for violations on all scheduled services after every operation.

When you click the Check Rules button next to the scheduling policy, the system validates up to 6,000 service appointments on the Gantt against your work rules and checks for violations. If you receive a notification that not all appointments were validated against your policy rules, try to load fewer service appointments by shortening the horizon or viewing fewer service territories. Then perform the check again to ensure all appointments are validated.

Note: When a bulk check rules operation is run, the service appointment records on the dispatcher console Gantt are checked for rule violations in batches. Each batch size is the lesser of 200 appointments or the number of appointments assigned to the first 40 resources loaded on the Gantt (sorted by record ID in ascending order) within the next 7 days of the scheduling horizon. The system processes up to 30 batches of service appointments during each check rules operation. The maximum number of appointments that can be validated against work rules in one check rules operation is calculated as 200 records per batch  $\times$  30 batches = 6,000 records. However, if fewer service appointments are found for the first 40 resources across the first 7 days of the Gantt horizon (for example, 100), that number is used for the batches. This option results in fewer records processed (100 records per batch  $\times$  30 batches = 3,000 records).

Note: Too many work rules in a scheduling policy can result in an Apex CPU timeout when checking rules for a large number of service appointments. If you experience a timeout when checking rules, try removing some work rules, or check rules for fewer service appointments.

When automatic scheduling is used—with the Schedule or Candidates action—rule violations don't occur. Field Service automatically formulates schedules that don't violate rules, so rule violations occur only as a result of manual scheduling.

SEE ALSO:

Set Custom Permissions for Field Service Manage Rule Validation Checks

# Turn On Field Service Gantt Live Updates

Choose how to trigger Gantt live updates so that dispatchers don't have to rely on timed updates. To get enhanced live update capabilities, choose to work with Enhanced Live Updates.

🜐 This is a Field Service managed package feature.

# Get Improved Real-Time Updates with Enhanced Live Updates (Beta)

Choose to have the Gantt auto-refresh with Enhanced Live Updates to experience better performance and get faster real-time updates. This feature's enhanced capabilities let you handle large datasets efficiently, experience a stable environment, and effectively manage time-sensitive and critical tasks. Enhanced Live Updates is available to Experience Cloud site users.

- Note: Enhanced Live Updates is a pilot or beta service that is subject to the Beta Services Terms at Agreements - Salesforce.com or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the Product Terms Directory. Use of this pilot or beta service is at the Customer's sole discretion.
- From the App Launcher, find and select the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatcher Console UI > Updating the Gantt.
- 3. Under Enhanced Live Updates, click **Enable**. When you enable Enhanced Live Updates, these prerequisites are checked and automatically adjusted.
  - Field Service Integration setting is enabled
  - Remote site is activated
  - Field Service Integration permission set is up-to-date
- 4. If Enhanced Live Updates doesn't have read access to all fields in the service appointment's field sets, it doesn't provide updates. Click **Update Permissions** to update the Field Service Integration permission to include read access for those fields.
- 5. Save your changes.

You can use timed updates instead of live updates to set the Gantt's refresh frequency. On the same Updating the Gantt page, under Timed Updates, enter the number of seconds between Gantt refreshes. The minimum frequency is 10 seconds.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To configure the Field Service managed package:

Customize Application

To enable Enhanced Live Updates:

• Field Service Admin permission set

# Auto-Refresh the Gantt with Live Updates

Choose to have the Gantt auto-refresh with Live Updates. Live Updates relies on the Salesforce Streaming API.

- 1. Update sharing settings so that dispatchers receive notifications only about the data they have access to.
  - a. From the App Launcher, find and select the **Field Service Admin** app, and then click the **Field Service Settings** tab.
  - **b.** Click **Dispatcher Console UI** > **Updating the Gantt**.
  - **c.** Under Live Updates, check that each object's sharing setting is Private. If not, update the object's sharing setting to Private in Salesforce Setup.
- 2. On the same Updating the Gantt page, click **Update push topics**. Push topics are used to send event notifications on specified objects, fields, and criteria. Field Service creates push topics for these objects.
  - Service resource
  - Resource absence
  - Service appointment
  - Assigned resource
  - Service resource capacity
  - Field Service operation
  - Optimization request
- 3. Select Gantt updates are enabled org wide.
- 4. Select Allow admins to use Gantt updates.
- 5. Save your changes.

Gantt Live Updates has these limitations.

- Dispatchers without the Streaming API custom permission get timed updates on the Gantt, as defined in your settings.
- Live updates aren't available to Experience Cloud site users.
- Gantt Live Update access isn't automatically available to all admins, and too many live update requests can cause the Gantt to crash.
- Gantt Live Updates are subject to org limits for event delivery and PushTopic Streaming Allocations.
- If the service appointments were recently updated, field values on service appointments that appear on the Gantt also get their latest value. Because formula fields don't trigger updates to the record, formula fields never trigger the push updates to that service appointment.

To configure the Field Service managed package:

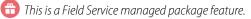
Customize Application

To view live updates on the Gantt:

• Streaming API custom permission

# Working in the Field Service Dispatcher Console Map

The dispatcher console map gives dispatchers a dynamic bird's-eye view of their mobile workforce. Learn how to customize the map view and draw territories directly on the map.



### Customize the Field Service Dispatcher Console Map

Control the information shown on the dispatcher console map. By default, the map shows markers for all service resources whose appointments are loaded in the Gantt or appointment list.

### Enable Map Polygons in Field Service

Set up and configure map polygons so you can draw your own territories directly on the map.

#### Create and Manage Map Polygons

Draw your own Field Service territories directly on the map, then link them to your service territories. Polygons make it easy to mass-update all appointments within a specific geographic area.

### Import Service Territory Polygons in KML

Map polygons represent the physical boundaries of a service territory in Field Service. While you can draw a polygon on the dispatcher console map, you can also import one in KML (Keyhole Markup Language). For example, cities may provide public KML files so you can create service territories whose boundaries correspond exactly to the city borders.

#### SEE ALSO:

View a Field Service Resource's Daily Travel Route Set Up Routing for Travel Time Calculations

# Customize the Field Service Dispatcher Console Map

Control the information shown on the dispatcher console map. By default, the map shows markers for all service resources whose appointments are loaded in the Gantt or appointment list.

🜐 This is a Field Service managed package feature.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

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	SA-0009	Scheduled	10/3/2018 4:53 AM	CENTRAL L ark 100	Ū
	SA-0013	Scheduled	10/3/2018 4:53 AM	struktorty server wood	Monterey P
	SA-0008	Scheduled	10/3/2018 4:53 AM	MID CITY DOWNTOWN	
	SA-0026	Scheduled	10/3/2018 4:53 AM		
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	SA-0011	Scheduled	10/3/2018 4:53 AM	Recreation Area 39	51-
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To navigate to the dispatcher console map, from the App Launcher, find and open the **Field Service** app, and then click **Field Service**. Then, click the **Map** tab. To pop out the map and drag it anywhere within the dispatcher console, hover over the Map tab from the Gantt and click  $rac{2}{2}$ .

If you can't see the map, ask your admin to enable sending geolocation and map data to Google and Apple from Field Service Settings in Setup.

Note: The dispatcher console map can appear different than the map displayed on service territory member detail pages because of a difference in geocoding granularity. As a rule, the dispatcher console map is more accurate.

By default, the map center is Los Angeles. This default can't be changed.

## Choose What Information is Shown

Click Map Layers, which opens on the Markers tab. Select the information to display for selected service resources:

- Live Positions: When a service resource updates a service appointment's status from their mobile device, their coordinates are automatically recorded. Live Position shows the latest coordinates saved in the system.
- Homebase: The selected service resource's home base, set on their detail page.
- Service Appointments: All service appointments that are assigned to the selected service resource and shown in the appointment list.
- Service Territories: The resource's service territories.

### Choose Which Service Resources are Shown

Click **Map Layers**, then click the Service Resources tab. Use the search to select one or more service resources whose information you want displayed on the map.

## **Display Report Data**

Click **Map Layers**, then click the Reports tab. Select reports containing geolocation fields that you want to be displayed on the map. This way, you can view location-based standard or custom objects as separate map layers.

Only tabular reports in the Field Service Reports folder appear in the Reports tab. By default, the markers' icons on the map are styled as the object type in the first column in the report. Up to 10 additional columns are visible inside the marker's info window.

Up to 500 total report markers can be displayed on the Gantt map at one time. If a report has more than 500 markers, consider adding more filters.

# Manage Map Polygons

Click **Map Layers**, then click the Polygons tab. Choose which polygons are displayed, customize their color-coding, and create polygons. You can also create and manage polygons from the Map Polygons tab in your Salesforce environment.

# **View Traffic Conditions**

Click **Traffic** at the top of the map to show traffic conditions.

### Customize Icons and Colors for Reports

Give your reports contrast on the Gantt map by customizing their icons and colors. You can map any tabular report that has geolocation fields.

SEE ALSO:

Customize Icons and Colors for Reports

# Customize Icons and Colors for Reports

Give your reports contrast on the Gantt map by customizing their icons and colors. You can map any tabular report that has geolocation fields.

- $\bigcirc$  This is a Field Service managed package feature.
- 1. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 2. Click Dispatcher Console UI > Map. Under Report Styles, select a report.
- 3. Select a color and an icon for the report, then click Add Report.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To configure the Field Service managed package:

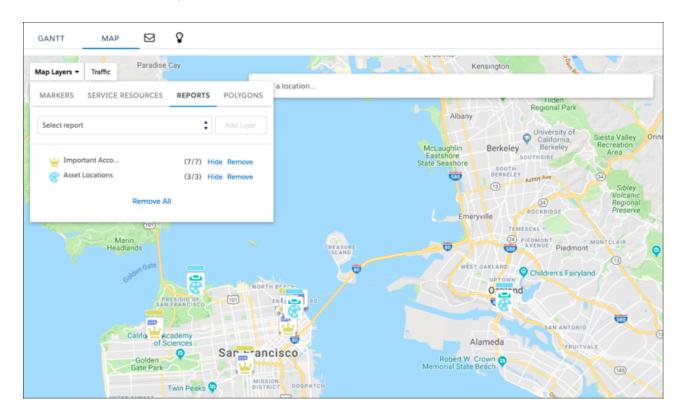
Customize Application

To customize icons and colors for reports:

 Custom permission set: FSL Admin Permissions

Report	Enterprise Accounts	•	83	A	dd R	epor	t			
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- 4. Click Save.
- 5. From the App Launcher, find and open the Field Service app. To open the dispatcher console, click the Field Service tab.
- 6. Click Map > Map Layers > Reports.
- 7. Select a report and click **Add Layer**.



If you decide not to use customized icons and colors for your reports, they are mapped using the default style for that object type.

# Enable Map Polygons in Field Service

Set up and configure map polygons so you can draw your own territories directly on the map.

- 🜐 This is a Field Service managed package feature.
- 1. From Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets** under Users.
- 2. Click Field Service Dispatcher Permissions.
- 3. In the Apps section, click Custom Permissions.
- 4. Click Edit.
- 5. Add the following available custom permissions to the enabled custom permissions.
  - FSL.Polygons create\update
  - FSL.Polygons view
- 6. Click Save.
  - Note: To give access to a selection of your users, create custom permission sets and assign these permissions to those users.
- 7. Create a tab for the Map Polygon custom object.
- 8. From the App Launcher, find and open the Field Service Admin app, and then click the Field Service Settings tab.
- 9. Click Service Appointment Life Cycle > Creation.
- 10. Select Use polygons to assign service territories.
- 11. Set the territory classification policy to Highest.

When there are parent-child relationships between service territories (for example, San Francisco and California), the service appointment is assigned to the highest territory in the hierarchy (California). Select **Lower** if you want appointments to be assigned to the lowest territory (San Francisco). Service appointments are never assigned to middle-tier territories.

If you selected **Use polygons to assign service territories** and you also selected **Delay Auto-Scheduling until Appointments are Geocoded** under **Field Service Settings** > **Scheduling** > **General Logic**, the territory classification starts only after the data integration rule for service appointments updates the geolocation information.

SEE ALSO:

Schedule an Appointment Automatically Manage Data Integration Rules for Field Service **EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### USER PERMISSIONS

To configure the Field Service managed package:

Customize Application

# Create and Manage Map Polygons

Draw your own Field Service territories directly on the map, then link them to your service territories. Polygons make it easy to mass-update all appointments within a specific geographic area.

 $\oplus$  This is a Field Service managed package feature.

# Create and Update Polygons

After map polygons are enabled, you can draw polygons straight on the dispatcher console map or import them in KML (Keyhole Markup Language) format.

- 1. To open the dispatcher console, from the App Launcher, find and open the **Field Service** app, and then click **Field Service**.
- 2. Click the Map tab, and then click Map Layers.
- 3. Select Polygons.
- 4. Click New.
- 5. Name your polygon and select a color.
- 6. Select a service territory.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

- Note: The service territory field is used during appointment scheduling. When a new service appointment is created, the Service Territory field auto-populates based on the appointment's address. When a service appointment address changes and its Service Territory field is empty, the address is matched to a polygon and that polygon's territory.
- 7. Draw your polygon on the map.
- 8. Click Save.

To import a polygon in KML—for example, a public KML file for a county or city—click the Map Polygons custom object tab in Salesforce, and then click **New**. Add a name, color, description, and service territory. In the KML Details field, add your KML text.

Update polygons from the Map Polygons tab or the Polygons map layer. Edit your polygons by dragging them to a new location on the map. You can also reshape them, rename them, or assign a different color or territory to them.

## Take Mass Actions on Polygons

From the dispatcher console map view, you can mass-edit all service appointments within a polygon. Right-click a polygon and select one of the following actions.

- Schedule / Unschedule / Dispatch: Schedule, unschedule, or dispatch all service appointments within the polygon in the current view.
- In Jeopardy: Set the In Jeopardy field to True for every service appointment within the polygon.
- Delete Polygon: Delete the polygon.
- **Cut Intersections:** Select a polygon and cut its intersections with other polygons. Select multiple polygons, then click **Go** to trim the polygons so they no longer intersect.

Note: To add to the actions list on polygons, create custom actions. For details, see Create Custom Actions for the Field Service Dispatcher Console.

## Limits and Considerations

• A polygon can contain up to 3,200 coordinates.

- If you load more than 200 polygons to the dispatcher console, you may experience performance issues. To avoid these issues, set the sharing of the Map Polygon object to Private and use sharing to expose only the relevant polygons to dispatchers.
- If a service appointment's geolocation matches more than one polygon, the appointment is assigned to either the highest or lowest-level territory in the hierarchy depending on your settings.
- When creating polygons, don't create overlaps unless there are parent-child relationships between the corresponding service territories (for instance, San Francisco and California). Service appointments are never assigned to middle-tier territories.
- If two or more polygons overlap and there's no hierarchy in place, service appointments are assigned to the first polygon that was created.
- When updating polygons, you can move a polygon to a different location on the map or adjust its vertices to change the polygon's shape. You can't delete individual vertices. Instead, you must delete the entire polygon and create another one.

## Import Service Territory Polygons in KML

Map polygons represent the physical boundaries of a service territory in Field Service. While you can draw a polygon on the dispatcher console map, you can also import one in KML (Keyhole Markup Language). For example, cities may provide public KML files so you can create service territories whose boundaries correspond exactly to the city borders.

#### 🜐 This is a Field Service managed package feature.

To import a polygon in KML, click the Map Polygons custom object tab in Salesforce and click **New**. Add a name, color, description, and service territory. In the KML Details field, add your KML text. Make sure that each set of coordinates has its own line.

#### Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<kml xmlns="http://www.opengis.net/kml/2.2">
<Style id="myPolygonStyle">
<LineStyle>
<width>1</width>
</LineStyle>
<PolyStyle>
<color>8047A043</color>
</PolyStyle>
</Style>
<Placemark>
<name>myPolygon</name>
<styleUrl>#myPolygonStyle</styleUrl>
<Polygon>
<outerBoundaryIs>
<LinearRing>
<coordinates>-122.44257817993167,37.80710430993863,0
-122.4278153015137,37.804391739106606,0
-122.4113358093262,37.80737556154185,0
-122.40412603149417,37.80629054915071,0
-122.38867650756839,37.78974213500372,0
-122.38764653930667,37.74821914921608,0
-122.45390783081058,37.74523293816564,0
-122.4604309631348,37.78865686357955,0
-122.44257817993167,37.80710430993863,0</coordinates>
</LinearRing>
```

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

```
</outerBoundaryIs>
</Polygon>
</Placemark>
</kml>
```

## Use Einstein Copilot in the Dispatcher Console

Use Copilot to get a daily overview of service appointments that require immediate attention, such as appointments with rule violations, overlaps, SLA risks, or emergencies. Each category that appears in the summary is converted into a filter in the appointment list, so it's easy for you to resolve these issues immediately. You can also use Copilot to quickly find service appointments and take immediate action, when planning schedules or addressing schedule changes. Copilot can convert your search criteria into filters that you can access from the appointment list.

🜐 This is a Field Service managed package feature.

#### Get a Daily Summary

Copilot enables you to get an immediate overview of all of the critical service appointments that require your attention. The summary includes unscheduled appointments due today, emergencies, and in-jeopardy appointments. When Enhanced Scheduling and Optimization is enabled, the overview also includes appointments with rule violations and overlapping appointments.

#### Search for Appointments and Create Filters

Use Copilot to search for any service appointment by using natural language rather than searching from the appointment list. Ask Copilot to create filters in the appointment list based on your search criteria. Access these filters from the My Copilot Searches section of the filter list.

#### Interacting with Einstein Copilot in the Dispatcher Console

Einstein Copilot allows you to interact with it by using natural language phrases. You can use it to generate a summary of your schedule, or you can use it to search for service appointments and create a filter based on your search criteria.

#### Customize Summary Categories for Einstein Copilot Field Service Actions

Salesforce admins can customize the categories that are shown in the dispatcher copilot summary to include additional categories. The categories that appear in the summary are based on a dashboard and reports. To create different categories, create a dashboard and reports.

SEE ALSO:

Einstein for Field Service

## Get a Daily Summary

Copilot enables you to get an immediate overview of all of the critical service appointments that require your attention. The summary includes unscheduled appointments due today, emergencies, and in-jeopardy appointments. When Enhanced Scheduling and Optimization is enabled, the overview also includes appointments with rule violations and overlapping appointments.

### **EDITIONS**

Einstein generative AI is available in Lightning Experience. Setup for Einstein generative AI is available in Lightning Experience.

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions. Einstein for Field Service features are available in **Einstein 1 Field Service** Edition.

To purchase Einstein 1 Field Service, contact your Salesforce account executive.

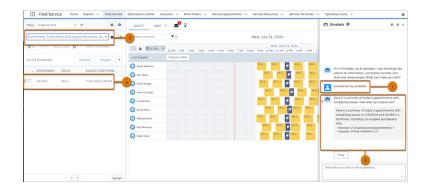
#### USER PERMISSIONS

To use Field Service Scheduling Summary and Create Filter actions:

Access Field Service
 Copilot Actions

In addition to displaying the overview, Copilot creates filters for you. You can access these filters from the My Copilot Summaries section of the filter list to take immediate action.

- To use Einstein Copilot in the Dispatcher Console, ask Copilot to create a schedule summary by using a phrase such as "Summarize my schedule" (1). For more suggestions see Interacting with the Einstein Copilot in the Dispatcher Console on page 651.
   Copilot shows the summary (2) for each category. Copilot also creates filters for each category in the filters list (3). You can use the tooltip to view a description of each filter.
- 2. To show the appointments in the appointment list, select one of the filters (4).



Note: If you ask copilot for a schedule summary, you get a summary for all territories visible in the Gantt. If you ask for a schedule summary for all territories, you get a summary for all territories you have access to.

## Search for Appointments and Create Filters

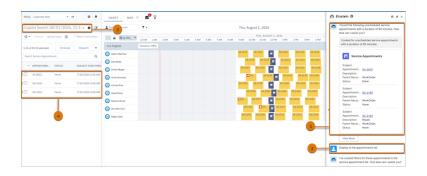
Use Copilot to search for any service appointment by using natural language rather than searching from the appointment list. Ask Copilot to create filters in the appointment list based on your search criteria. Access these filters from the My Copilot Searches section of the filter list.

1. To use Einstein Copilot in the Dispatcher Console, ask Copilot to search for appointments. For example, "Show me unscheduled appointments that are due today."

Copilot shows a list of appointments that match your search criteria (1). Copilot also creates filters for each category in the filters list (3). You can use the tooltip to view a description of each filter.

2. Ask Copilot to create a filter for you by using a phrase such as "Create a filter" (2). For more suggestions see Interacting with the Einstein Copilot in the Dispatcher Console on page 651.

The filter appears in the filter list (3), and your appointments are shown in the appointments list (4), enabling you to take appropriate action.





Note: You can access the filter again from the My Copilot Searches section in the filters list, according to the date and time you created the filter. To see details about your search, hover over the tooltip.

## Get a Daily Summary

Copilot enables you to get an immediate overview of all of the critical service appointments that require your attention. The summary includes unscheduled appointments due today, emergencies, and in-jeopardy appointments. When Enhanced Scheduling and Optimization is enabled, the overview also includes appointments with rule violations and overlapping appointments.

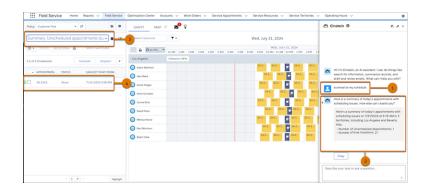


(This is a Field Service managed package feature.

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2. To show the appointments in the appointment list, select one of the filters (4).



Note: If you ask copilot for a schedule summary, you get a summary for all territories visible in the Gantt. If you ask for a schedule summary for all territories, you get a summary for all territories you have access to.

#### Considerations and Limitations for Getting a Daily Summary

Get familiar with tips, tricks, and potential pitfalls before you use the dispatcher agent to get a daily summary of your scheduling issues.

#### **EDITIONS**

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#### USER PERMISSIONS

To use Field Service Scheduling Summary and Create Filter actions:

Access Field Service **Copilot Actions** 

## Considerations and Limitations for Getting a Daily Summary

Get familiar with tips, tricks, and potential pitfalls before you use the dispatcher agent to get a daily summary of your scheduling issues.

### Considerations

- If you ask copilot for a schedule summary, you get a summary for all territories visible in the Gantt. If you ask for a schedule summary for all territories, you get a summary for all territories you have access to.
- If more than one Gantt is open, and you ask copilot for a schedule summary, you get a summary based on the territories in the last Gantt you opened.
- When you ask for a schedule summary, the summary includes appointments for territories visible in the current Gantt only. For example, John Smith has appointments in Western New York and Central New York, but you're Gantt shows Western New York only. When you ask for a schedule summary, you see a summary for appointments in Western New York only.
- To get a schedule summary that containsspecific criteria, you must first search for the appointments and only then ask to summarize the results. For example, to get a summary of scheduling issues for all territories containing the word New, you first need to search for the appointments. For example, type *Find me appointments for territories containing New*, and after you see the appointments you can ask for a summary by typing *Create a schedule summary for these appointments*.

#### Limitations

- The number of rule violations and overlaps is based on up to 4,000 records.
- If the Gantt is closed, the summary is created but the filters aren't.
- You can't customize the categories named Appointments with Rule Violations and Overlapping Appointments.

#### **EDITIONS**

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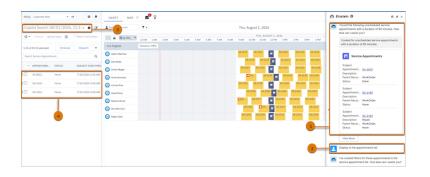
To purchase Einstein 1 Field Service, contact your Salesforce account executive.

## Search for Appointments and Create Filters

Use Copilot to search for any service appointment by using natural language rather than searching from the appointment list. Ask Copilot to create filters in the appointment list based on your search criteria. Access these filters from the My Copilot Searches section of the filter list.

#### 🜐 This is a Field Service managed package feature.

- To use Einstein Copilot in the Dispatcher Console, ask Copilot to search for appointments. For example, "Show me unscheduled appointments that are due today." Copilot shows a list of appointments that match your search criteria (1). Copilot also creates filters for each category in the filters list (3). You can use the tooltip to view a description of each filter.
- Ask Copilot to create a filter for you by using a phrase such as "Create a filter" (2). For more suggestions see Interacting with the Einstein Copilot in the Dispatcher Console on page 651. The filter appears in the filter list (3), and your appointments are shown in the appointments list (4), enabling you to take appropriate action.



**Note:** You can access the filter again from the My Copilot Searches section in the filters list, according to the date and time you created the filter. To see details about your search, hover over the tooltip.

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To purchase Einstein 1 Field Service, contact your Salesforce account executive.

### USER PERMISSIONS

To use Field Service Scheduling Summary and Create Filter actions:

Access Field Service
 Copilot Actions

## Interacting with Einstein Copilot in the Dispatcher Console

Einstein Copilot allows you to interact with it by using natural language phrases. You can use it to generate a summary of your schedule, or you can use it to search for service appointments and create a filter based on your search criteria.

This is a Field Service managed package feature.

## Terminology for Interacting with Einstein Copilot

Get a Schedule Summary	Create a Filter from Your Copilot Search
Summarize my schedule	Display in the appointments list
Summarize the schedule for today	Display these appointments in the list
Summarize my schedule issues	Display these in the appointments list
Summarize scheduling issues	Display them in the appointments list
Create a gantt summary	Display these appointments in the gantt list
Create a schedule overview	Display in list
Create a schedule summary	Display appointments in list
Create a scheduling issues summary	Display these in the list
Show me the schedule summary	Display them in the list
Show me the Gantt summary	Display results in the appointments list
Show me my schedule issues for today	Display appointments in gantt list
Show me the schedule issues for today	Display in the appointment list
Show me today's scheduling issues	Display these in the appointment list
Show me my scheduling issues for today	Display them in the appointment list
Summarize my schedule for territories X and Y (territory names)	Display the results in the appointment list
Summarize my schedule issues for territories X, Y or for X, Y (territory names)	Create a filter
Summarize my schedule issues for territories X, Y or for X, Y (territory names)	Create a filter for these appointments
Create a Gantt summary for territories X, Y or for X, Y (territory names)	Create a filter for this search
Show me the schedule summary for territories X, Y or for X, Y (territory names)	Create appointment list filter
Summarize the gantt	Create an appointment list for them
Generate a schedule summary	Show these appointments in the list

### EDITIONS

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### USER PERMISSIONS

To use Field Service Scheduling Summary and Create Filter actions:

Access Field Service
 Copilot Actions

Generate a schedule summary for territories X, Y (territories names) Move to the appointment list

Display a summary of today's scheduling issues

Move them to the gantt list

## Customize Summary Categories for Einstein Copilot Field Service Actions

Salesforce admins can customize the categories that are shown in the dispatcher copilot summary to include additional categories. The categories that appear in the summary are based on a dashboard and reports. To create different categories, create a dashboard and reports.

🜐 This is a Field Service managed package feature.

The standard summary categories provided by the dispatcher copilot are:

- Unscheduled appointments due today
- Emergencies
- In-jeopardy appointments

When Enhanced Scheduling and Optimization is enabled, the summary also includes:

- Appointments with rule violations
- Overlapping appointments

However, reports don't generate these categories, and you can't customize or remove categories.

- 1. Build a report based on the available service appointment fields.
- 2. Build a dashboard and add the reports you created.
- 3. Save the dashboard in the Field Service Copilot Dashboards folder.
- 4. From the App Launcher, find and select Field Service Admin.
- 5. From the Field Service Settings tab, select **Dispatcher Console UI**.
- 6. Open the COPILOT tab.
- 7. From the Dashboard list, select the dashboard you created.
- 8. Click Save.

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To purchase Einstein 1 Field Service, contact your Salesforce account executive.

#### USER PERMISSIONS

To use Field Service Scheduling Summary and Create Filter actions:

 Access Field Service Copilot Actions

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Auto Mention				
- Sharing				
Automated Scheduling				
Health Check				

Considerations:

- When defining reports, don't define a date.
- Due to performance issues, use selective report conditions and avoid conditions such as NOT IN or NOT EQUAL TO. See Write Efficient Queries in Trailhead for more information.
- These report and dashboard limitations apply to the dashboards and reports you create.

# Field Service Object Fields

Learn about the fields available on Field Service standard objects.

Note: If you have your own field service terminology, remember that you can rename an object's tab and labels. In Setup, select **Rename Tabs and Labels**, and enter your own term for the object you'd like to rename.

#### Field Service Objects

When you enable Field Service, you gain access to a suite of standard Salesforce objects. The Field Service managed package also includes custom objects that support its scheduling and optimization features.

Appointment Bundle Aggregation Duration Downscale Fields

Appointment Bundle Aggregation Duration Downscales have the following fields.

Appointment Bundle Aggregation Policy Fields

Appointment Bundle Aggregation Policies have the following fields.

#### Appointment Bundle Config Fields

Appointment Bundle Configs have the following fields.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### Appointment Bundle Policy Fields

Appointment Bundle Policies have the following fields.

Appointment Bundle Policy Service Territory Fields

Appointment Bundle Policy Service Territories have the following fields.

Appointment Bundle Propagation Policy Fields

Appointment Bundle Propagation Policies have the following fields.

Appointment Bundle Restriction Policy Fields

Appointment Bundle Restriction Policies have the following fields.

#### Appointment Bundle Sort Policy Fields

Appointment Bundle Sort Policies have the following fields.

#### Asset Downtime Period Fields

Asset downtime represents a period during which an asset isn't able to perform as expected. Downtime periods include planned activities, such as maintenance, and unplanned events, such as mechanical breakdown. Asset Downtime Periods have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Expense Fields for Field Service

Expenses let your service resources track costs and associate them to work orders.

#### Geolocation-Based Action Fields

Geolocation-Based Actions have the following fields.

#### Job Profile Fields for Field Service

Job profiles have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Linked Article Fields

A linked article is a Knowledge article that is attached to a work order, work order line item, or work type. Linked articles have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Location Fields for Field Service

Locations, addresses, and associated locations have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Maintenance Plan Fields

Maintenance plans, maintenance assets, and maintenance work rules have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Operating Hours Fields for Field Service

Operating hours and time slots have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Product Request and Transfer Fields

Product requests, product request line items, product transfers, and shipments have these fields. Some fields aren't visible or editable depending on your page layout and field-level security settings.

#### Product Item and Inventory Fields

Product items, product item transactions, products required, and products consumed have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Product Service Campaign Fields

Product service campaigns and product service campaigns line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Return Order Fields

Return orders and return order line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Recordset Filter Criteria Fields

Recordset filter criteria and recordset filter criteria rules have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Serialized Products and Serialized Products Transactions Fields

Review the Serialized Products and Serialized Products Transactions fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Service Appointment Fields for Field Service

Service appointments have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Service Crew Fields

Service crews and service crew members have the following fields. Depending on your page layout and field-level security settings, you may not be able to view or update some of them.

#### Service Report Fields

Service reports and digital signatures on service reports have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Service Resource Fields for Field Service

Service resources, resource absences, resource capacity records, assigned resources, and resource preferences have these fields. Sometimes certain fields aren't visible or editable depending on your page layout and field-level security settings.

#### Service Territory Fields for Field Service

Service territories, service territory members, and service territory locations have these fields. Sometimes fields aren't visible or editable depending on your page layout and field-level security settings.

#### Shift Fields for Field Service

Shifts have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Shift Pattern Fields

Shift patterns and shift pattern entries have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Shift Template Fields

Shift templates have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Skill Fields for Field Service

Skills represent certifications and areas of expertise in your field service workforce. Skills, service resource skills, and skill requirements have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Time Sheet Fields

Time sheets and time sheet entries have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### Travel Mode Fields

Travel Modes have the following fields.

#### Warranty Fields

Warranty terms, product warranty terms, and asset warranties have the following fields. Your page layout and field-level security settings can hide some fields and prevent you from editing others.

#### Work Order Fields for Field Service

Work orders have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Work Order Line Item Fields for Field Service

Work order line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

#### Work Type Fields for Field Service

Work types have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

#### SEE ALSO:

Set Up Field Service Field Service Developer Guide

## **Field Service Objects**

When you enable Field Service, you gain access to a suite of standard Salesforce objects. The Field Service managed package also includes custom objects that support its scheduling and optimization features.

Note: This list doesn't include sharing, feed, or history objects.

## **Standard Objects**

Object Name	Definition	Tab in Salesforce?
Address	An address associated with a location.	
App Extension	A link between the Field Service mobile app and other mobile apps.	
Appointment Bundle Aggregation Duration Downscale	Sums the duration of the bundle members, reduced by a predefined percentage.	
Appointment Bundle Aggregation Policy	Policy that defines how the property values of the bundle members are aggregated and assigned to the bundle.	
Appointment Bundle Config	General parameters that define the behavior of the bundle.	~
Appointment Bundle Policy	Policy that defines how the bundling of service appointments is handled.	~

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Definition	Tab in Salesforce?
A link between the Bundle Policy and the Service Territory.	
Policy that defines which property values are inherited from the bundle to the bundle members or are assigned as constant values in the bundle members.	
Policy that defines the restrictions that are considered while forming a bundle.	
Policy that defines the properties by which the bundle members are sorted within the bundle. Can also be used in the automated mode for determining the selection order of the bundle members.	
A service resource that is assigned to a service appointment.	
A location linked to a specific account.	
A downtime period associated with an asset.	
A warranty term associated with an asset.	
A captured signature from a field service customer or mobile worker.	
An expense such as tools or travel costs linked to a work order.	
A report that summarizes expenses.	
An expense that's included in an expense report.	
A collection of settings related to the Field Service mobile app.	
A set of skills used to match service resources to shifts.	~
A knowledge article version that is attached to a work order, work order line item, or work type.	
A warehouse, site, van, or plant, usually where inventory is stored or used.	~
An asset associated with a particular maintenance plan. The plan's work orders list the asset associated with it.	
A plan for preventive maintenance on assets. Work orders are generated for all maintenance visits.	~
A reoccurring maintenance item.	
The assignment of a field service mobile settings configuration to a user profile.	
Field service hours that you can define for service territories, service territory members, and accounts.	~
A product from your inventory that was used to complete a work order or work order line item.	
	<ul> <li>A link between the Bundle Policy and the Service Territory.</li> <li>Policy that defines which property values are inherited from the bundle to the bundle members or are assigned as constant values in the bundle members.</li> <li>Policy that defines the restrictions that are considered while forming a bundle.</li> <li>Policy that defines the properties by which the bundle members are sorted within the bundle. Can also be used in the automated mode for determining the selection order of the bundle members.</li> <li>A service resource that is assigned to a service appointment.</li> <li>A location linked to a specific account.</li> <li>A downtime period associated with an asset.</li> <li>A warranty term associated with an asset.</li> <li>A nexpense such as tools or travel costs linked to a work order.</li> <li>A report that summarizes expenses.</li> <li>An expense that's included in an expense report.</li> <li>A collection of settings related to the Field Service mobile app.</li> <li>A set of skills used to match service resources to shifts.</li> <li>A knowledge article version that is attached to a work order, work order line item, or work type.</li> <li>A warehouse, site, van, or plant, usually where inventory is stored or used.</li> <li>A reoccurring maintenance on assets. Work orders are generated for all maintenance visits.</li> <li>A reoccurring maintenance item.</li> <li>The assignment of a field service mobile settings configuration to a user profile.</li> <li>Field service hours that you can define for service territories, service territory members, and accounts.</li> </ul>

Object Name	Definition	Tab in Salesforce?
Product Item	A portion of your inventory stored at a particular location. Every product item is linked to a product and a location.	~
Product Item Transaction	Represents the restocking, consumption, or stock adjustment of a product item.	
Product Request	A request for inventory.	~
Product Request Line Item	A subdivision of a product request, associated with a particular product.	~
Product Required	A product that is required for the completion of a work order or work order line item.	
Product Service Campaign	A set of activities to be performed on a product service campaign asset, such as a product recall for safety issues or product defects.	~
Product Service Campaign Item	A product service campaign's asset.	
Product Transfer	The transfer of inventory from one location to another.	~
Product Warranty	A warranty term associated with a product.	
Recordset Filter Criteria	A filter that uses field values from a source object to filter records in another object.	~
Recordset Filter Criteria Rule	The individual rules that make up a recordset filter criteria. Rules map fields to values.	
Resource Absence	A time period in which a service resource is unavailable to work.	
Resource Preference	The designation of a service resource as preferred, required, or excluded on specific accounts or work orders.	
Return Order	The return or repair of inventory or products.	~
Return Order Line Item	A subdivision of a return order.	
Service Appointment	An appointment to perform field service work for customers.	~
Service Appointment Status	Corresponds to the Status field on service appointments.	
Service Crew	A group of service resources that can be assigned to field service work as a unit.	~
Service Crew Member	A service resource that belongs to a service crew.	~
Service Report	A customer-facing report summarizing the status of a service appointment, work order, or work order line item.	
Service Report Template	A template for service reports.	
Service Resource	A user or crew who can perform field service work. You can assign service resources to service appointments and specify each resource's skills, service territory, and availability.	*

Object Name	Definition	Tab in Salesforce?
Service Resource Capacity	The maximum number of scheduled hours or number of service appointments that a capacity-based service resource can complete within a specific time period.	
Service Resource Skill	A skill assigned to a service resource. You can specify skill level and expiration.	
Service Territory	A region in which field service work is performed. You can assign service resources to territories and create territory hierarchies.	~
Service Territory Location	A location associated with a particular service territory.	
Service Territory Member	A service resource who is assigned to a particular service territory.	
Shift	A record used to schedule service resources.	~
Shift Pattern	A pattern of shift templates used to define groups of commonly used shifts.	~
Shift Pattern Entry	Shift pattern entries link shift templates to a shift pattern.	
Shift Template	A template used to define commonly used shifts.	~
Shipment	A shipment of inventory between locations.	*
Shipment Item	An item included in a shipment.	
Skill	A certification or area of expertise.	
Skill Requirement	A skill that is required to complete a particular field service task. Skill requirements can be added to work types, work orders, and work order line items.	
Time Sheet	A log of a service resource's time and attendance.	✓
Time Sheet Entry	A period when a service resource performs a specific function.	
Time Slot	A period in a day when field service work can be performed. Operating hours consist of one or more time slots.	
Warranty Term	Details of the benefits offered under a warranty.	
Work Order	Represents work to be performed for a customer.	~
Work Order Line Item	A subtask on a work order.	
Work Order Status	Corresponds to the Status field on work orders.	
Work Order Line Item Status	Corresponds to the Status field on work order line items.	
Work Type	A template that helps you standardize your work orders.	~
Work Type Group	A category of work types that's used to define work-type-based scheduling limits.	~
Work Type Group Member	A work type that belongs to a particular work type group.	

The following objects are available even if Field Service isn't enabled. These objects are often used in field service tasks.

Object Name	Definition	Tab in Salesforce?
Asset	A purchased or installed product.	~
Asset Relationship	A relationship between two assets that represents a replacement or upgrade.	
Contract Line Item	A subdivision of a service contract, typically representing a product covered by the service contract.	
Entitlement	Represents the level of support that a customer is entitled to.	~
Product	A product or service that your business sells.	~
Service Contract	Represents a service-level agreement, such as a warranty or subscription.	~
Skill	A capability required to perform tasks.	~
Work Order	A record that tracks work to be performed for customers. Work orders can have their own service appointments and work order line items.	~
Work Order Line Item	A subdivision of a work order, often representing a task to be completed.	

## **Custom Objects**

The following objects are provided by the Field Service managed package. You can view them in Setup and create custom tabs for them. Customize these objects only based on Salesforce recommendations.

Object Name	Definition
Appointment Dependency	A scheduling dependency between two service appointments.
Crew Management User Settings	A user's crew management preferences.
Crew Management User Settings Territory	A user's crew management preferences for the most recently loaded service territory.
Criteria	Custom criteria added to a scheduling recipe.
FSL Operation	Used in data processing.
Gantt Filter	A custom filter that controls what data appears in the Gantt.
Gantt Palette	A palette used to color-code service appointments on the Gantt.
Map Polygon	A custom polygon, which typically represents a service territory.
Optimization Data	Schedule optimization data and results.
Optimization Request	A request to optimize the schedule, created when a scheduled optimization job runs or a user triggers an optimization action.

Object Name	Definition
Scheduling Policy	A set of work rules and service objectives that guides schedule optimization.
Scheduling Policy Objective	A service objective assigned to a specific scheduling policy.
Scheduling Policy Work Rule	A work rule assigned to a specific scheduling policy.
Scheduling Recipe	A collection of optimization settings that dictate how to address a scheduling event such as an appointment cancellation.
Service Objective	A scheduling goal in an optimization operation.
SLR Cache	Cached data used in street-level routing.
Territory Optimization Request	A schedule optimization request for a specific service territory.
User Setting	The user's dispatcher console preferences, such as the last filters used. Don't customize.
User Setting Territory	A user's dispatcher console preferences for the most recently loaded service territory.
User Territory	A relationship between a user and the service territory that they belong to.
Work Rule	A rule that narrows the list of candidates for a service appointment.
Work Rule Entry	Supplemental details for a work rule such as flexible break parameters.

SEE ALSO: Set Up Field Service Field Service Developer Guide

# Appointment Bundle Aggregation Duration Downscale Fields

Appointment Bundle Aggregation Duration Downscales have the following fields.

Field Name	Description
Bundle Aggregation Policy	The ID of the parent appointment bundle aggregation policy.
From Bundle Member Number	The number of the first bundle member to which the downscale is applied.
Max Reduction	The maximum reduction that can be applied to a bundle member.
Name	The name of the appointment bundle aggregation duration downscale policy.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Percentage of Reduction	The percentage of duration reduction.
To Bundle Member Number	The number of the last bundle member to which the downscale is applied.

SEE ALSO:

Create Appointment Bundle Aggregation Duration Downscales

# Appointment Bundle Aggregation Policy Fields

Appointment Bundle Aggregation Policies have the following fields.

Field Name	Description
Additional Source Field	Name of an additional source field that is connected to the initial source field in the bundle member from which the value is taken. Possible values: All default and custom Service Appointment fields.
Aggregate only when the bundle is created	Indicates if you want to update the field in the bundle only when it's created.
Aggregation Action	The aggregation action to be performed. Possible values: All default and custom Service Appointment fields.
Aggregation Field Type	The target field type in the bundle to which the aggregation is directed. Possible values are: Boolean Date Numeric Picklist Picklist-Multi Skills String
Aggregation Order	The order the aggregation is triggered.
Allow the same value to appear more than once	Indicates if you want to allow the same string to appear more than once when using the 'Sum based on Bundle Members' action type.
Bundle Policy	ID of the parent bundle policy.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Bundle's Target Field	Name of the target field in the bundle where the value is taken from the bundle member. Possible values: All default and custom Service Appointment fields.
Constant Date Value	<ul> <li>Represents how the date value will be determined.</li> <li>Possible values are:</li> <li>End of Day</li> <li>Now</li> <li>Null</li> <li>Start of Day</li> </ul>
Constant Value	The constant value that is used in the aggregation.
Downscale Sorting Direction	<ul> <li>Applies only if the Set Downscaled Duration action is set. The downscaling sorting direction of the bundle member service appointments, according to their duration.</li> <li>Possible values are:</li> <li>Ascending</li> <li>Descending</li> </ul>
Maximum Bundle Duration	The maximum bundle duration that can be accumulated from the bundle members (after downscaling).
Name	The name of the appointment bundle aggregation policy.
Recordset Filter Criteria	The active recordset filter criteria used for aggregating the bundle members.
Source Field	Name of the source field in the bundle member from which the value is taken. Possible values: All default and custom Service Appointment fields.

SEE ALSO:

Create an Appointment Bundle Aggregation Policy

# Appointment Bundle Config Fields

Appointment Bundle Configs have the following fields.

Field Name	Description
Add to Bundle Statuses	The statuses of service appointment that are allowed to be bundled. Possible values: All service appointment statuses. The default value is None.
Add travel time to bundle duration	If the bundle members aren't in the same location, add travel time between them to the bundle's duration according to their sort order. The default value is false.
Bundle Member Statuses not to be Propagated	The bundle member statuses that aren't overridden when the bundle's status is updated. Possible values: All service appointment statuses. The default value is None.
Bundle Statuses to Propagate	The bundle statuses that when updated are inherited by the bundle members. Possible values: All service appointment statuses. The default value is None.
Criteria for Automatic Unbundling	The recordset filter criteria that causes a bundle service appointment to be unbundled.
Name	The name of the Appointment Bundle Config.
Owner	ID of the owner of this object.
Remove from Bundle Statuses	The statuses of service appointments that are allowed to be removed from a bundle. Possible values: All service appointment statuses. The default value is None.
Status on Removal from Bundle	The status that a service appointment is given when it's removed from a bundle. Possible values: All service appointment statuses. The default value is None.
Statuses not to Update on Unbundling	The statuses that aren't updated when a bundle is unbundled. Possible values: All service appointment statuses. The default value is None.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### SEE ALSO:

Create an Appointment Bundle Config

# Appointment Bundle Policy Fields

Appointment Bundle Policies have the following fields.

Field Name	Description
Allow Scheduling Dependencies in Bundle	This field is reserved for future use.
Automatic Bundling	Indicates if the policy is relevant for automatic bundling.
Bundle End Time Field Name	If IsTimeCalcByBundleDurationField is true, this field represents the name of the field used for entering the end time of the bundle.
Bundle Start Time Field Name	If IsTimeCalcByBundleDurationField is true, this field represents the name of the field used for entering the start time of the bundle.
Constant Time Value	If IsTimeCalcByBundleDurationField is true, this field represents the total time of the bundle as a preset constant value.
Filter Criteria	The active recordset filter criteria used for the bundle members. Only service appointments that meet the criteria can be bundled.
Limit Amount of Bundle Members	The maximum number of bundle members that can be included in a bundle.
Limit Duration of Bundle	The maximum duration of a bundle.
Manual Bundling	Indicates if the policy is relevant for manual bundling. The default value is 'false'.
Name	Name of the bundle policy.
Owner	ID of the owner of this object.
Priority	The priority level that this bundle policy should be given when the bundle policies are analyzed using the automatic mode.
Time Calculation by Bundle Duration Field	Indicates if the bundle's duration is validated. If true, the bundle's start time is subtracted from the bundle's end time. If the result is a negative value, it uses the entered ConstantTimeValue as the bundle duration. The default value is 'false'.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

SEE ALSO:

Create an Appointment Bundle Policy

# Appointment Bundle Policy Service Territory Fields

Appointment Bundle Policy Service Territories have the following fields.

Field Name	Description
Bundle Policy	The ID of the parent bundle policy.
Name	The name of the appointment bundle service territory.
Service Territory	The ID of the service territory.

SEE ALSO:

Create Appointment Bundle Policy Service Territories

# Appointment Bundle Propagation Policy Fields

Appointment Bundle Propagation Policies have the following fields.

Field Name	Description
Add Constant Value	Indicates if you want to enable adding a constant value to the bundle members.
Additional Constant Value	The additional constant value that is connected to the initial constant value to be added to the bundle members.
Bundle Field Name	Name of the source field in the bundle from which the value is taken.
Bundle Member Field Name	Name of the target field in the bundle member where the value is inherited from the bundle.
Bundle Policy	ID of the parent bundle policy.
Constant Date Value	Represents how the date value is determined.
Constant Value	<pre>The constant value to be added to the bundle members. Possible values are:     End of Day     Now     Null     Start of Day</pre>
Name	The name of the appointment bundle propagation policy.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Update on Add	Indicates if you want to enable updating the fields of the bundle members when they are added to the bundle.
Update on Remove	Indicates if you want to enable updating the fields of the bundle members when they are removed from the bundle.
Update on Unbundle	Indicates if you want to enable updating the fields of the bundle members when performing the Unbundle action.

#### SEE ALSO:

Create an Appointment Bundle Propagation Policy

# Appointment Bundle Restriction Policy Fields

Appointment Bundle Restriction Policies have the following fields.

Field Name	Description
Allow Empty	Allows a bundle member service appointment with an empty Restriction Field Name to be bundled.
Bundle Policy	ID of the parent bundle policy.
Name	The name of the appointment bundle restriction policy.
Restrict by Date Only	Indicates if you want the bundle to be restricted according to the calendar date only, ignoring the time of day.
Restrict in Automatic Mode	Indicates if you want to apply this restriction when using the automatic mode.
Restrict in Manual Mode	Indicates if you want to apply this restriction when using the manual mode.
Restriction Field Name	Name of the field in the service appointment used for applying the restriction. Possible values: All default and custom Service Appointment fields.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

SEE ALSO:

Create an Appointment Bundle Restriction Policy

# Appointment Bundle Sort Policy Fields

Appointment Bundle Sort Policies have the following fields.

Field Name	Description
Bundle Policy	The ID of the parent bundle policy.
Name	Name of the appointment bundle sort policy.
Sort Direction	<ul><li>The order of the appointments in a bundle.</li><li>Possible values are:</li><li>Ascending</li><li>Descending</li></ul>
Sort Field Name	Name of the field in the service appointment used for sorting the bundle members. Possible values: All default and custom Service Appointment fields.
Sort Order	The order of fields used for sorting the bundle members.
Sort Type	The applied sort type for arranging the bundle. Sort for Automatic Bundling defines the order that automated bundling uses to examine the candidate service appointments to be bundled. Sort Within a Bundle defines the order of bundle members. It's also used when you unbundle to define the order that the service appointments are scheduled on the Gantt.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### SEE ALSO:

Create an Appointment Bundle Sort Policy

# Asset Downtime Period Fields

Asset downtime represents a period during which an asset isn't able to perform as expected. Downtime periods include planned activities, such as maintenance, and unplanned events, such as mechanical breakdown. Asset Downtime Periods have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Field Name	Description
Asset Downtime Period Number	The unique number of this asset downtime period record.
Asset	The asset this asset downtime period applies to.
Description	The description of this asset downtime period.
Downtime Type	<ul><li>The type of this asset downtime period. Possible values are:</li><li>Planned</li><li>Unplanned</li></ul>
End Date	The date when this asset downtime period ended.
Outside Uptime Calculation Period	Whether this asset downtime period is excluded from the calculation of accumulated downtime and accumulated unplanned downtime, and therefore not included in availability and reliability calculations.
Start Date	The date when this asset downtime period started.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# **Expense Fields for Field Service**

Expenses let your service resources track costs and associate them to work orders.

Field Name	Description
Account ID	The ID of the account associated with the work order.
Amount	The amount of the expense.
Created By	(Read Only) User who created the expense.
Created Date	(Read Only) Date the expense was created.
Expense End Date	If the expense was incurred over multiple days, the Expense End Date is the last day that the expense covers.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Expense Number	An autogenerated number that uniquely identifies the expense.
Expense Start Date	If the expense was incurred over multiple days, the Expense Start Date is the first day that the expense covers.
Expense Type	The type of expense. The default choices are Billable and Non-billable.
Last Modified By	(Read Only) User who last modified the expense.
Last Modified Date	(Read Only) Date the expense was last modified.
Owner Name	Expense owner.
Transaction Date	The day that the expense was incurred, or the payment date for the expense.
Work Order ID	The associated work order.

# Geolocation-Based Action Fields

Geolocation-Based Actions have the following fields.

Field Name	Description
Action Data	The details of the selected action type.
Action Type	<ul><li>The type of action. Possible values are:</li><li>Platform Alert</li><li>Quick Action</li><li>View Record</li></ul>
Description	The description of the action.
First Time Triggered	Captures the first time the mobile worker invoked this action.
Last Time Triggered	Captures the last time the mobile worker invoked this action.
Name	The name of the action.
Radius (in meters)	The distance in meters from the location of the associated object that triggers the action.
Reference Record	The ID of the record that the action is associated with.
Trigger Type	The event that triggered this action. Possible values are: • Enter

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
	• Exit

#### SEE ALSO:

Set Up Geolocation-Based Actions for Field Service Mobile Workers

## Job Profile Fields for Field Service

Job profiles have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Field Name	Description	
Created By	(Read Only) User who created the job profile.	
Created Date	(Read Only) Date the job profile was created.	
Description	The description of the job profile.	
Job Profile Name	The associated job profile.	
Last Modified By	(Read Only) User who last modified the job profile.	
Last Modified Date	(Read Only) Date the job profile was last modified.	
Owner Name	The name of user or group that owns the job profile.	

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Linked Article Fields

A linked article is a Knowledge article that is attached to a work order, work order line item, or work type. Linked articles have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Field	Description
Article ID	The ID of the linked article record, which is created when an article is attached to a record.
Article Title	The title of the attached article.
Article Version	The version of the article that is attached to the record. This field displays the title of the attached version, and links to the version. It is a required field on linked articles attached to work orders and work order line items.
	When you attach an article to a record, that version of the article stays associated with the record even if later versions are published. If

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field	Description
	needed, you can detach and reattach an article to a record to link the latest version.
	For example, if an article was entitled "How to Replace a Filter" when it was attached to a work order, this field displays that title and links to the attached version.
Knowledge Article ID	Required. The ID of the article that is attached to the record.
Last Viewed	The date the article was last viewed.
Linked Object Type	Read only. The type of record that the article is attached to. For example, if the article is attached to a work order, this field displays "Work Order."
Linked Record ID	Required. The ID of the record that the article is attached to. For example, if the article is attached to a work order, this field displays the ID of the work order.
Record Type ID	The record type of the linked article. This field is populated only if record types are used.

#### SEE ALSO:

Set Up Knowledge for Work Orders Attach Knowledge Articles to Work Orders or Work Types

# Location Fields for Field Service

Locations, addresses, and associated locations have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## Location

Locations in field service can be associated with products items to track inventory stored at the location. They have the following fields.

Field Name	Description
Close Date	Date the location closed or went out of service.
Construction End Date	Date construction ended at the location.
Construction Start Date	Date construction began at the location.
Description	A brief description of the location.
Driving Directions	Directions to the location.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Inventory Location	Indicates whether the location stores parts.
	This field must be selected if you want to associate the location with product items.
Location	The geographic location.
Location Level	The location's position in a location hierarchy. If the location has no parent or child locations, its level is 1. Locations that belong to a hierarchy have a level of 1 for the root location, 2 for the child locations of the root location, 3 for their children, and so forth.
Location Name	Location name. For example, Service Van #4.
Location Type	Picklist of location types, which can be customized. By default, no value is selected. The available values are:
	Warehouse
	• Site
	<ul><li>Van</li><li>Plant</li></ul>
Mobile Location	Indicates whether the location moves. For example, a truck or tool box.
Open Date	Date the location opened or came into service.
Owner Name	The location's owner or driver.
Parent Location	The location's parent location. For example, if vans are stored at a warehouse when not in service, the warehouse is the parent location.
Possession Date	The date the location was purchased.
Remodel End Date	Date remodel construction ended at the location.
Remodel Start Date	Date remodel construction ended at the location.
Root Location	(Read Only) The top-level location in the location's hierarchy.
Time Zone	Picklist of available time zones.
Vistor Address	Lookup to an account's or client's address.

## Address

Addresses are mailing, billing, or home addresses, typically associated with a location. They have the following fields.

Field Name	Description
Address	Name for the address.

Field Name	Description
Address Type	<ul><li>Picklist of address types. The values are:</li><li>Mailing</li><li>Shipping</li><li>Billing</li><li>Home</li></ul>
Description	A brief description of the address.
Driving Directions	Directions to the address.
Location Type	<ul> <li>The type of location associated with the address. The values are:</li> <li>Warehouse (default)</li> <li>Site</li> <li>Van</li> <li>Plant</li> </ul>
Parent	A lookup field to the parent location .
Time Zone	Picklist of available time zones.

## Associated Location

Associated locations represent a relationship between an account and a location. Multiple accounts can be associated with a location; for example, a shopping mall location might be related to several accounts. They have the following fields.

Field Name	Description
Account Name	The account associated with the location.
Active From	Date and time the location starts being associated with the account.
Active To	Date and time when the location is no longer associated with the account.
Associated Location Name	(Read Only) Auto-generated number for the association.
Location Name	A lookup field to the associated location.
Туре	<ul><li>Picklist of address types. The values are:</li><li>Bill To</li><li>Ship To</li></ul>

SEE ALSO:

Create Inventory Locations for Field Service

# Maintenance Plan Fields

Maintenance plans, maintenance assets, and maintenance work rules have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

## Maintenance Plan

Maintenance plans let you define how often maintenance visits occur and mass-generate work orders for future visits. Maintenance plans can be associated with accounts, work types, assets (creating records known as maintenance assets), locations, and service contracts.

The Frequency and Frequency Type fields began their phased retirement in Summer '22. To prepare for this retirement and take advantage of updated features, migrate your frequency and frequency type data to maintenance work rules. The retired frequency fields impact work order generation. Complete migration as soon as possible to avoid being impacted by this change.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Account	The associated account, which typically represents the customer receiving the maintenance service.
Auto-generate work orders	Turns on auto-generation of work order batches for a maintenance plan and prohibits the manual generation of work orders via the Generate Work Orders action. If this option is selected, a new batch of work orders is generated for the maintenance plan on the next suggested maintenance date* listed on each maintenance asset, or on the maintenance plan if no assets are included. If a Generation Horizon is specified, the date of generation is that many days earlier.
Contact	The associated contact.
Date of the first work order in the next batch	The suggested date of service for the first work order, not the date the work order is created. This date corresponds to the work order's Suggested Maintenance Date. You can use this field to enforce a delay before the first maintenance visit, for example, where you want monthly maintenance to begin one year after the purchase date.
	For example, if you want the first maintenance visit to take place on May 1, enter May 1. When you generate work orders, the earliest work order lists a Suggested Maintenance Date of May 1. And the dates on the later work orders are based on the Generation Timeframe and Frequency settings.
	Note: Maintenance assets also list a date of the first work order in the next batch, which is initially inherited from the maintenance plan. If the plan has maintenance assets, this date auto-updates on the maintenance assets after each batch is generated. However, it doesn't update on the maintenance plan itself because batch timing is calculated at the maintenance asset level. If the plan doesn't have

Field Name	Description
	maintenance assets, this date auto-updates on the maintenance plan after each batch is generated.
Description	A brief description of the plan.
End Date	The last day the maintenance plan is valid.
Frequency	(Optional) Amount of time between the plan's work orders. The unit is specified in the Frequency Type field.
Frequency Type	<ul> <li>(Optional) The unit of frequency:</li> <li>Days</li> <li>Weeks</li> <li>Months</li> <li>Years</li> <li>For example, to perform monthly maintenance visits you need a work order for each visit, so enter 1 in Frequency and select Months.</li> </ul>
Generate new batch upon completion	If this option is selected, a new batch of work orders isn't generated until the last work order generated from the maintenance plan is completed. A work order is considered completed when its status falls into one of the following status categories: Cannot Complete, Canceled, Completed, or Closed. If a maintenance plan covers multiple assets, work orders are generated per asset. If a maintenance asset's final work order is completed late, its work order generation is delayed, which causes a staggered generation schedule between maintenance assets.
Generation Horizon (Days)	The next batch of work orders is generated this number of days before the maintenance plan's Date of the first work order in the next batch. A generation horizon of 5 means that the new batch of work orders is generated 5 days before the maintenance asset's or maintenance plan's next suggested maintenance date*. If there are no assets, the new batch is generated on the next suggested maintenance date*. The generation horizon must be a whole number.
Generation Timeframe	(Required) How far in advance work orders are generated in each batch. The unit is specified in the Generation Timeframe Type field.
Generation Timeframe Type	<ul> <li>(Required) The generation timeframe unit:</li> <li>Days</li> <li>Weeks</li> <li>Months</li> <li>Years</li> </ul>

Field Name	Description
	For example, to generate 3 months' worth of work orders at a time, enter 3 in Generation Timeframe and select Months.
Location	Where the service takes place.
Maintenance Plan Number	(Read Only) An auto-assigned number that identifies the maintenance plan.
Maintenance Plan Title	A name for the maintenance plan.
Maintenance Window End (Days)	Days after the suggested service date on the work order that its service appointment can be scheduled.
Maintenance Window Start (Days)	Days before the suggested service date on the work order that its service appointment can be scheduled.
	The maintenance window start and end fields affect the Earliest Start Permitted and Due Date fields on the maintenance plan's work orders' service appointments. For example, if you enter 3 for both the maintenance window start and end, the Earliest Start Permitted and the Due Date is 3 days before and 3 days after the Suggested Maintenance Date on each work order. If the maintenance window fields are left blank, the service appointment date fields list their work order's suggested maintenance date.
Owner	Maintenance plan owner.
Service Appointment Generation Method	How service appointments are generated when more than one asset is associated with the maintenance plan and work order generation method is <b>One work order line item per asset</b> . Choices are one service appointment for the parent work order or one service appointment for each work order line item.
Service Contract	The service contract associated with the maintenance plan. If any child maintenance asset is associated with a contract line item from the service contract, the service contract can't be updated.
Start Date	The first day the maintenance plan is valid.
Work Order Generation Method	How work orders are generated when more than one asset is associated with the maintenance plan. Choices are one work order for each asset or one parent work order and work order line items for each asset.
Work Order Generation Status	(Read Only) Indicates whether work order generation is:
	needs review
	no work order generated
	• completed
	unsuccessful
	You can generate only one batch at a time.

Field Name	Description
Work Type	The associated work type. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

## Maintenance Asset

A maintenance asset is a part or product covered by the maintenance plan. The Assets related list on the maintenance plan lists all covered assets. An asset can be covered by multiple maintenance plans.

Field Name	Description
Asset	Asset associated with the maintenance plan.
Contract Line Item	Contract line item associated with the maintenance asset. This field can only list a contract line item that is associated with the asset, and whose parent service contract is associated with the parent maintenance plan.
Date of the first work order in the next batch	The suggested date of service for the first work order, not the date the work order is created. This date corresponds to the work order's Suggested Maintenance Date. If left blank when the maintenance asset is created, this field inherits its initial value from the related maintenance plan. It auto-updates after each batch is generated.
Maintenance Asset Number	(Read Only) An auto-assigned number that identifies the maintenance asset.
Maintenance Plan	Maintenance plan associated with the maintenance asset.
Work Type	Work type associated with the maintenance asset. Work orders generated from the maintenance plan inherit its work type's duration, required skills and products, and linked articles. Maintenance assets covered by the plan use the same work type, though you can update them to use a different one.

## Maintenance Work Rule

A maintenance work rule is associated with a maintenance plan or maintenance asset and defines the frequency at which a maintenance task is performed on the asset. An asset can have multiple maintenance work rules.

Note: If you encounter problems with text wrapping in Recurrence Pattern, update your Density Setting from Compact view to Comfy view. Tell me more.

Field Name	Description
Date of the first work order in the next batch	The suggested date of service for the first work order, not the date the work order is created. This date corresponds to the work order's

Field Name	Description
	Suggested Maintenance Date. If left blank when the maintenance rule is created, this field inherits its initial value from the related maintenance asset. It auto-updates after each batch is generated.
Maintenance Asset	The asset associated with the maintenance plan.
Maintenance Work Rule Name	(Read Only) A name assigned to this maintenance work rule in the format MWR-nnnn.
Maintenance Plan	Maintenance plan associated with the maintenance asset.
Maintenance Work Rule Title	The title of this work order rule.
Maintenance Work Rule Type	<ul> <li>The type of maintenance work rule:</li> <li>Calendar-based (default): uses a recurrence pattern</li> <li>Criteria-based: uses a recordset filter criteria that defines conditions</li> </ul>
Generate on a Floating Schedule	<ul> <li>Generates work orders based on a floating, not fixed, cadence.</li> <li>Note: To display this field, from Setup enter Field Service Settings and select Update the work order generation based on the completion date of the previous work order.</li> </ul>
Owner	The maintenance work rule owner.
Parent Maintenance Plan Record	The maintenance plan this work rule applies to.
Parent Maintenance Record	The maintenance asset this work rule applies to.
Recordset Filter Criteria Name	The recordset filter criteria associated with this maintenance work rule.
Recurrence Pattern	For calendar-based rules, how frequently the event occurs during the selected time period. Recurrence pattern is defined on Maintenance Work Rules.
Sort Order	The sort order that applies to this work order rule.
Work Type	Work type associated with the maintenance work rule. Work orders generated from the maintenance work rule inherit its work type's duration, required skills and products, and linked articles.

\* The field label for the next suggested maintenance date on maintenance plans and maintenance assets is Date of the first work order in the next batch.

SEE ALSO:

Create Field Service Maintenance Plans

Guidelines for Generating Work Orders from a Maintenance Plan

# **Operating Hours Fields for Field Service**

Operating hours and time slots have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## **Operating Hours**

Operating hours can be assigned to service territories, service territory members, and accounts to indicate when they are available for field service work. Create operating hours via the Operating Hours tab.

Field Name	Description
Description	The description of the operating hours. Add any details that aren't included in the name.
Name	The name of the operating hours. For example: Summer Hours, Winter Hours, or Peak Season Hours.
Time Zone	The time zone that the operating hours fall within.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Time Slot

Time slots represent a time period within a day when field service work can be completed. After you create operating hours, create time slots for each day via the Time Slots related list.

Field Name	Description
Day of Week	The day of the week when the time slot takes place.
End Time	The time when the time slot ends.
Name	The name of the time slot. The name is auto-populated to a day and time format—for example, Monday 9:00 AM - 10:00 PM—but you can manually update it if you wish.
Operating Hours	The operating hours that the time slot belongs to. An operating hours' time slots appear in the Operating Hours related list.
Start Time	The time when the time slot starts.
Туре	The type of time slot. Possible values are Normal and Extended. You may choose to use Extended to represent overtime shifts.

SEE ALSO:

Guidelines for Creating Operating Hours for Field Service

# Product Request and Transfer Fields

Product requests, product request line items, product transfers, and shipments have these fields. Some fields aren't visible or editable depending on your page layout and field-level security settings.

## **Product Request**

Product requests represent a part or parts ordered. They have the following fields.

Field Name	Description
Account	The account associated with the product request.
Case	The case associated with the product request.
Currency ISO Code	Three-letter currency code. Available only if the multicurrency feature is enabled.
Description	Notes or context about the request.
Destination Location	Where the product is delivered.
Need By Date	Date the product must be delivered by.
Owner	The owner of the product request.
Product Request Number	(Read Only) An auto-generated number that identifies the product request.
Shipment Type	<ul> <li>The type of shipment. The picklist includes the following values, which can be customized:</li> <li>Rush</li> <li>Overnight</li> <li>Next Business Day</li> <li>Pick Up</li> </ul>
Ship To Address	The physical address where the product is delivered. For example, the mailing address of the warehouse that is requesting the product.
Source Location	Where the product is at the time of the request.
Status	<ul> <li>The status of the shipment. The picklist includes the following values, which can be customized:</li> <li>Draft: Finalizing the product request details.</li> <li>Submitted: The product request is ready for processing.</li> <li>Received: The department in charge of fulfilling the request is working on it.</li> </ul>

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Work Order	The work order associated with the product request.
Work Order Line Item	The work order line item associated with the product request.

## Product Request Line Item

Product request line items are subdivisions of a product request. Each line item is associated with a specific product being requested. They have the following fields.

Field Name	Description
Account	The account associated with the product request line item.
Case	The case associated with the product request line item.
Description	Notes and context about the request.
Destination Location	Where the product is delivered.
Need By Date	Date the product must be delivered by.
Parent	The product request that the line item belongs to.
Product	The product being requested.
Product Request Line Item Number	(Read Only) An auto-assigned number that identifies the product request line item.
Quantity Requested	The amount requested.
Quantity Unit Of Measure	Units of the requested product; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Shipment Type	<ul> <li>The type of shipment. The picklist includes the following values, which can be customized:</li> <li>Rush</li> <li>Overnight</li> <li>Next Business Day</li> <li>Pick Up</li> </ul>
Ship To Address	The physical address where the product is delivered.
Source Location	Where the product is at time of the request.
Status	<ul><li>The status of the shipment. The picklist includes the following values, which can be customized:</li><li>Draft</li><li>Submitted</li><li>Received</li></ul>

Field Name	Description
Work Order	The work order associated with the product request line item.
Work Order Line Item	The work order line item associated with the product request line item.

### **Product Transfer**

Product transfers track the transfer of product items between inventory locations. They have the following fields.

Field Name	Description
Description	Notes or context about the transfer.
Destination Location	The location where the product is to be delivered.
Expected Pickup Date	Date the product is expected to be picked up.
Owner	Owner of the product transfer.
Product Name	The product associated with the product transfer. If the product is being transferred from outside your inventory—for example, if it's being ordered from a manufacturer—enter a product name. Otherwise, we recommend entering a source product item.
Product Request	The product request associated with the product transfer. Not all transfers are created in response to a product request.
Product Request Line Item	The product request line item associated with the product transfer. Create a separate transfer for each line item on a product request.
Quantity Received	Amount of product received at the destination location.
Quantity Sent	Amount of product sent from the source location.
Quantity Unit Of Measure	The units of the product; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Received	Indicates that the product was received. To mark a product transfer received, you need permission to update product items. After you mark a product item received, you can't undo it. To find out what happens when a product transfer is marked received, see Guidelines for Transferring Inventory.
Received By	The contact who received the product at the destination location.
Return Order	The return order associated with the product transfer.
Return Order Line Item	The return order line item associated with the product transfer.

Field Name	Description
Sent	Indicates whether the product transfer was sent.
	This option is applicable only if the transfer record mode for the serialized product is Send and Receive.
Shipment	The shipment related to the product transfer.
Shipment Expected Delivery Date	The expected date of delivery, inherited from the related shipment.
Shipment Status	<ul><li>The shipment status, inherited from the related shipment. It includes the following values, which can be customized:</li><li>Shipped</li><li>Delivered</li></ul>
Shipment Tracking Number	The shipment tracking number, inherited from the related shipment.
Shipment Tracking URL	The shipment tracking URL, inherited from the related shipment.
Source Location	The location where the product is coming from.
Source Product Item	The product item representing the stock at the source location. Enter a source product item if the product is being transferred from a location within your inventory, such as a warehouse. Specifying a source product item on a product transfer automatically updates the quantity at the source location to reflect the transfer.
	If the product is being transferred from outside your inventory—for example, if it's being ordered from a manufacturer—use the Product Name field instead.
Status	<ul><li>Status of the product transfer. It includes the following values, which can be customized:</li><li>Ready for Pickup</li><li>Completed</li></ul>

### Product Transfer State

Product transfer state refers to an action taken to associate a serialized product to a product transfer and indicates the action done to the serialized product. The new state is a result of the action. The product transfer state is created when serialized products are attached to the product transfer. This object has these fields.

Field Name	Description
Action	The action that must be performed on the inventory item.
Product Transfer	The transfer for which this inventory transaction was requested.
Serialized Product	The serialized product being transferred.
Transfer State	The new status for the inventory item.

## Shipment

A shipment tracks a product item while it is in transit. They have the following fields.

Field Name	Description
Actual Delivery Date	Date the product was delivered.
Delivered To	The person or entity the product was delivered too.
Description	Notes or context about the shipment.
Destination Location	The place the product is to be delivered.
Expected Delivered Date	Date the product is expected to be delivered.
Owner Name	Owner of the shipment.
Ship From Address	The place the product is coming from.
Shipment Number	(Read Only) An auto-assigned number that identifies the shipment.
Shipping Provider	The company or person making the transfer.
Ship To Address	The address the product is to be delivered.
Source Location	The address the product is shipped from.
Status	<ul> <li>The status of the shipment. The picklist includes the following values, which can be customized:</li> <li>Shipped—The product is in transit.</li> <li>Delivered—The product is at the destination location.</li> </ul>
Tracking Number	Tracking number for the shipment.
Tracking URL	URL of website used for tracking the shipment.

#### SEE ALSO:

Product Item and Inventory Fields

Location Fields for Field Service

Return Order Fields

Set Up Your Field Service Inventory

Set Up Product Requests in the Field Service Mobile App

# Product Item and Inventory Fields

Product items, product item transactions, products required, and products consumed have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

### Product Item

Product items track the quantity of a particular product at a location. They have the following fields.

Field Name	Description
Location	Location associated with the product item. This location usually indicates where the product item is stored.
Owner	The product item's owner.
Product Item Number	(Read Only) Auto-generated number identifying the product item.
Product Name	Product associated with the product item.
Quantity On Hand	The quantity at the location. If you want to add a serial number, this value must be 1.
Quantity Unit of Measure	Units of the product item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Serial Number	A unique number for identification purposes. If you want to enter a serial number, the Quantity on Hand must be 1.
	Note: To learn more about the pros and cons of assigning serial numbers to product items, see Create Product Items to Represent Inventory.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Product Item Transaction

Product item transactions describe actions performed on a product item. They're auto-generated records that help you track when a product item is replenished, consumed, or adjusted. They have the following fields.

Field Name	Description
Description	A description of the transaction. The description is blank when the transaction record is created, but can be updated.
Product Item	The associated product item.

Field Name	Description
Product Item Transaction Number	(Read Only) Auto-generated number identifying the product item transaction.
Quantity	The quantity of the product item involved in the transaction. If inventory was consumed, the quantity is negative.
Related Record	(Read Only) The product consumed or product transfer related to the action. If the action wasn't related to consumption or transfer, the related record is blank.
Transaction Type	The action that the transaction tracks.
	• Replenished: When a part is stocked at a location. A Replenished transaction is created when a product item is created.
	• Consumed: When parts are consumed to complete a work order. A Consumed transaction is created when a record is added to the Products Consumed related list on a work order or work order line item.
	• Adjusted: When there's a discrepancy or a change in consumption. An Adjusted transaction is created when a product item's Quantity on Hand is edited, a product consumed is updated or delete, or a product transfer is deleted.
	• Transferred: When parts are transferred between locations.

## **Product Required**

Products required are products that are needed to complete a work order or work order line item. You can add products required to work orders, work order line items, and work types. They have the following fields.

Field Name	Description
Parent Record	Associated work order or work order line item.
Parent Record Type	Indicates whether the parent record is a work order or a work order line item.
Product Required	Name of the required product.
Product Required Number	Auto-generated number identifying the product required.
Quantity Required	Amount required of the product.
Quantity Unit of Measure	Units of the required product; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.

## Product Consumed

Products consumed are items from your inventory that were used to complete a work order or work order line item. They have the following fields.

Note: To create or delete products consumed, you need permission to create product items.

Field Name	Description
Consumed	Indicates that a product consumed was processed if the product it refers to has IsSerialized=true selected.
Description	Notes and context about the product consumed.
Discount	The discount provided.
List Price	The list price of the product.
Price Book Entry	Price book associated with the product consumed. If the work order and the product item's associated product are related to the same price book, the Price Book Entry auto-populates based on the product item.
Product	Product associated with the product consumed.
Product Consumed Number	(Read Only) Auto-generated number identifying the product consumed.
Product Item	Product item associated with the product consumed. Creating a product consumed record subtracts the quantity consumed from the linked product item's quantity.
Quantity Consumed	The quantity of products consumed.
Quantity Unit of Measure	Units of the consumed item; for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Subtotal	The product's unit price multiplied by the quantity consumed.
Total Price	The product's unit price multiplied by the quantity consumed minus the discount.
Unit Price	The price per unit of the product consumed.
Work Order	Work order associated with the product consumed.
Work Order Line Item	Work order line item associated with the product consumed.

## Product Consumed State

Product consumed state refers to the new state of the serialized product after it's consumed. This object has these fields.

Field Name	Description
Consumed State	The new state of the serialized product after it's consumed.

Field Name	Description
Product Consumed	The Product Consumed used to consume the serialized products.
Serialized Product	The serialized product being consumed.

### Product

Products are products that your company sells. They have these fields.

Field Name	Description
Serialized	Indicates whether a product is serialized.
Transfer Record Mode	<ul> <li>If serialized, indicates when the serial number is recorded:</li> <li>SendAndReceive means the serial number is recorded when sending or receiving.</li> <li>ReceiveOnly means the serial number is recorded when receiving only.</li> </ul>

#### SEE ALSO:

Location Fields for Field Service Product Request and Transfer Fields Return Order Fields Set Up Your Field Service Inventory

# Product Service Campaign Fields

Product service campaigns and product service campaigns line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

### Product Service Campaign

Product service campaign defines the activities to be performed on a product, such as a product recall for safety issues or product defects.

Field Name	Description
Description	The description of the product service campaign.
End date	The date that the product service campaign ends on.
Owner	The owner of the product service campaign.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Priority	<ul> <li>The priority of the product service campaign. Available values are:</li> <li>Critical</li> <li>High</li> <li>Medium</li> <li>Low</li> </ul>
Product	The product associated with this product service campaign.
Product service campaign name	The name of the product service campaign.
Start date	The date that the product service campaign starts on.
Status	<ul> <li>The status of the product service campaign. The picklist includes the following values, which can be customized:</li> <li>New—Product service campaign created, but there's no activity yet.</li> <li>In Progress—Product service campaign began.</li> <li>On Hold—Work is paused.</li> <li>Completed—Work is complete.</li> <li>Cannot Complete—Work couldn't be completed.</li> <li>Closed—All work and associated activity is complete.</li> <li>Canceled—Work is canceled, typically before any work began.</li> </ul>
Status category	The category that each status value falls into. The Status Category field has eight default values: seven values that are identical to the default Status values, and a None value for statuses without a status category. If you create custom Status values, you must indicate which category it belongs to. For example, you create a Waiting for Response value and decide that it belongs in the On Hold category. To learn which processes reference Status Category, see How are Status Categories Used?
Туре	<ul> <li>The type of the product service campaign. The picklist includes the following values, which can be customized:</li> <li>Modification—The asset requires an on-site alteration.</li> <li>Recall—The asset must be returned to the manufacturer for modification or upgrade.</li> <li>Service—The asset requires service.</li> <li>Upgrade—The asset requires updating.</li> </ul>
Work type	The work type associated with the product service campaign order. When a work type is selected, the product service campaign

Field Name	Description
	automatically inherits the work type's Duration, Duration Type, and required skills.

## Product Service Campaign Item

Represents a product service campaign's asset.

Field Name	Description
Asset	The asset associated with the product service campaign item.
Product	The product associated with this product service campaign item.
Product service campaign	The item's parent product service campaign record.
Product service campaign item number	The ID of the product service campaign item.
Status	<ul> <li>The status of the product service campaign. The default values are:</li> <li>New—Product service campaign created, but there's no activity yet.</li> <li>In Progress—Product service campaign began</li> <li>On Hold—Work is paused.</li> <li>Completed—Work is complete.</li> <li>Cannot Complete—Work couldn't be completed.</li> <li>Closed—All work and associated activity is complete.</li> <li>Canceled—Work is canceled, typically before any work began.</li> </ul>
Status category	The category that each status value falls into. The Status Category field has eight default values: seven values that are identical to the default Status values, and a None value for statuses without a status category. If you create custom Status values, you must indicate which category it belongs to. For example, you create a Waiting for Response value and decide that it belongs in the On Hold category. To learn which processes reference Status Category, see How are Status Categories Used?

# **Return Order Fields**

Return orders and return order line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

## Return Order

Return orders track the return or repair of products and inventory.

Field Name	Description
Account	The account associated with the return order.
Case	The case associated with the return order.
Contact	The contact associated with the return order.
Description	Notes or context about the return order.
Destination Location	The location where the items are being returned to. For example, if the return order tracks the return of products from a mobile worker's van to a warehouse, the warehouse is the destination location.
Expected Arrival Date	The date when the items are expected to arrive at the destination location.
Order	The order associated with the return order. When you associate a return order with an order, you can associate the return order's line items with order products.
Owner	The owner of the return order.
Product Request	The product request associated with the return order. When you associate a return order with a product request, you can associate the return order's line items with the product request's line items.
	A return order can be related to a product request if the return order tracks the return of unused products or products to be repaired or replaced. For example, a mobile worker creates a product request for three motors to prepare for a field visit. If the worker finds that only two motors are needed, they can create a return order to return the third to the original location and list the product request in this field.
Product Service Campaign	The product service campaign associated with the return order.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Return Order Number	(Read only) Auto-generated number identifying the return order.
Returned By	The user returning the items.
Ship From Address	The return shipping address. This address tracks the location of the items at the start of the return or repair. For example, if a customer is returning an item, the Ship From address is the customer's address.
Shipment Type	<ul> <li>The type of shipment associated with the return order. Available values are:</li> <li>Standard (default value)</li> <li>Rush</li> <li>Overnight</li> </ul>
	<ul><li>Next Business Day</li><li>Pickup</li></ul>
Source Location	The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a mobile worker's service vehicle to a warehouse, the service vehicle is the source location.
Status	<ul> <li>The status of the return order. Available values are:</li> <li>Draft</li> <li>Submitted</li> <li>Approved</li> <li>Canceled</li> <li>Closed</li> </ul>

## Return Order Line Item

Field Name	Description
Asset	The asset associated with the return order line item. One or more of the following fields must be completed: Asset, Order Product, Product, Product Item, and Product Request Line Item.
Description	Notes or context about the return order line item.
Destination Location	The location where the items are being returned to. For example, if the return order tracks the return of products from a mobile worker's van to a warehouse, the warehouse is the destination location.
Order Product	The order product associated with the return order line item. One or more of the following fields must be completed: Asset, Order Product, Product, Product Item, and Product Request Line Item.

Field Name	Description
Processing Plan	Indicates the preferred fate of the items following their return. Available values are:
	• Repair—Repair the items and return them to the owner
	• Discard—Discard the items
	Salvage—Salvage the items' working components
	Restock—Return the items to your inventory
Product	The product item representing the location of the product at the start of the return. One or more of the following fields must be completed: Asset, Order Product, Product, Product Item, and Product Request Line Item.
Product Item	The product item associated with the return order line item. One or more of the following fields must be completed: Asset, Order Product, Product, Product Item, and Product Request Line Item.
Product Request Line Item	The product request line item associated with the return order line item. One or more of the following fields must be completed: Asset, Order Product, Product, Product Item, and Product Request Line Item.
Product Service Campaign	The product service campaign associated with the return order.
Product Service Campaign Item	The product service campaign item associated with the return order.
Quantity Returned	The quantity of items being returned. If multiple types of products are being returned, track each product in a different return order line item.
Quantity Unit of Measure	Units of the returned items, for example, kilograms or liters. Quantity Unit of Measure picklist values are inherited from the Quantity Unit of Measure field on products.
Reason for Return	The reason the items are being returned. Available values are:
	• Damaged
	Defective
	Duplicate Order
	Wrong Item
	Wrong Quantity
	Not Satisfied
	<ul><li>Outdated</li><li>Other</li></ul>
Repayment Method	The method used to reimburse the customer or owner for the items being returned. Available values are:
	Replace—The items are replaced

Field Name	Description
	<ul> <li>Refund—The items are returned and the owner is refunded</li> <li>Credit—The items are returned and the owner receives credit for them</li> <li>Return—The items are returned to the owner, for example, after repairs</li> </ul>
Return Order	The return order that the return order line item belongs to.
Return Order Line Item Number	(Read only) Autogenerated number that identifies the return order line item.
Source Location	The items' location at the start of the return or repair. For example, if the return order tracks the return of products from a mobile worker's service vehicle to a warehouse, the service vehicle is the source location.

SEE ALSO: Track Customer Returns in Field Service

Guidelines for Tracking Customer Returns

# Recordset Filter Criteria Fields

Recordset filter criteria and recordset filter criteria rules have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

### **Recordset Filter Criteria**

Filter criteria store service appointment field criteria used for shift scheduling.

Field Name	Description
Active	Marks the recordset filter criteria available for use with the source object. For example, active criteria can be used to filter shifts in scheduling and optimization.
Description	Notes or context about the recordset filter criteria.
Filtered Object	<ul><li>Defines which object contains the records to be filtered. Possible values are:</li><li>Asset</li><li>Service Appointment</li></ul>
Owner Name	The owner of the recordset filter criteria.
Recordset Filter Criteria Name	The name of the recordset filter criteria.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Source Object	(Read only) Defines which object contains the link to the filter criteria. Possible values are:
	• Shift
	• Maintenance Work Rule

## Recordset Filter Criteria Rules

Field Name	Description
Logical Operator	Defines if the criteria is valid if all conditions are true or at least one of the conditions is true
Add lead-time to usage-based work rules	Allows you to create counter-based usage and duration-based usage rule types.
Criteria Field	The Service Appointment or Asset field used in the filter condition rule.
Recordset Filter Criteria	The ID of the linked recordset filter criteria.
Recordset Filter Criteria Rule Number	(Read only) Auto-generated number that identifies the filter condition rule.
Operator	The criteria used to compare the Criteria Field to the Value field.
Value	The value of the service appointment field to match on.
Usage Rate	Stores the daily usage rate of the asset. The unit for the usage rate must be per day.
Add Condition	Adds another rule to the criteria.

SEE ALSO:

Create Criteria-Based Maintenance

Guidelines for Recordset Filter Criteria

Guidelines for Criteria-Based Maintenance

Guidelines for Usage-Based Maintenance

# Serialized Products and Serialized Products Transactions Fields

Review the Serialized Products and Serialized Products Transactions fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

## Serialized Products

Each serialized product has a serial number. They have these fields.

Field Name	Description
Asset	The asset associated with the serialized product.
Expiration Date	The date the product expires.
Name	The name of the serialized product record (auto-generated).
Owner Name	The person who owns the serialized product.
Product	The product associated with the serialized product.
Product Item	The product item associated with the serialized product.
Serial Number	The serial number of the product.
Status	The status of the serialized product.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Serialized Products Transactions

Serialized product transactions are auto-generated records that help you track the status change for a serialized product. They have these fields.

Field Name	Description
Name	The number automatically assigned to the serialized product.
Serialized Product	The serialized product associated with the transactions.
Related Record	The product transfer or product consumed associated with the serialized product.
Transaction Type	The action that the transaction tracks.

# Service Appointment Fields for Field Service

Service appointments have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Field Name	Description
Account	(Read only) The account associated with the appointment. If the parent record is a work order or work order line item, this field's value is inherited from the parent. Otherwise, it remains blank.
Actual Duration (Minutes)	The number of minutes that it took the resource to complete the appointment after arriving at the address. When values are first added to the Actual Start and Actual End fields, the Actual Duration is automatically populated to list the difference between the Actual Start and Actual End. If the Actual Start and Actual End fields are subsequently updated, the Actual Duration field doesn't reupdate, but you can manually update it.
Actual End	The actual date and time the appointment ended.
Actual Start	The actual date and time the appointment started.
Address	The address where the appointment is taking place. The address is inherited from the parent record if the parent record is a work order or work order line item.
Appointment Number	An auto-assigned number that identifies the appointment.
Arrival Window End	The end of the window of time in which the mobile worker is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and End with the customer, but keep the Scheduled Start and End internal-only.
Arrival Window Start	The beginning of the window of time in which the mobile worker is scheduled to arrive at the site. This window is typically larger than the Scheduled Start and End window to allow time for delays and scheduling changes. You may choose to share the Arrival Window Start and

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

End with the customer, but keep the Scheduled Start and End internal-only.
Indicates if this service appointment is a bundle service appointment. The default value is false.
Indicates if this service appointment is a bundle member service appointment. The default value is false.
Reference to the bundle policy associated with this service appointment.
The contact associated with the appointment. If the parent record is a work order or work order line item, this field's value is inherited from the parent.
The description of the appointment.
The date by which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.
The estimated length of the appointment. If the parent record is work order or work order line item, the appointment inherits its parent's duration, but it can be manually updated. The duration is in minutes or hours based on the value selected in the Duration Type field.
The unit of the duration: Minutes or Hours.
The date after which the appointment must be completed. Earlies Start Permitted and Due Date typically reflect terms in the customer's service-level agreement.
Used with Longitude to specify the precise geolocation of the address where the service appointments is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places. This field is available via the API only.
To integrate data from an external data source for latitude, map your data to the ServiceAppointment.Latitude and not the ServiceAppointment.FSL_InternalSIRGeolocation_Latitude_s field.
Used with Latitude to specify the precise geolocation of the address where the service appointment is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places This field is available in the API only.
To integrate data from an external data source for longitude, map your data to the ServiceAppointment.Longitude and not the

Field Name	Description
	ServiceAppointment.FSL_InternalSIRGeolocation_Longitude_s field.
Manually Bundled	Applicable when you're using the Appointment Bundler. This field is a read-only field. Indicates if this bundle was created manually. The default value is false.
Offsite Appointment	Applicable only when you're using Enhanced Scheduling and Optimization. Indicates whether this appointment can be done remotely. If selected, no travel time is added to the schedule assigned resource record when the job is scheduled. For example, work such as remote technical assistance, filling out reports, or renewal of health and safety certification can be done from anywhere.
	Enhanced Scheduling and Optimization must be enabled. As of Summer '23 new Salesforce orgs have Enhanced Scheduling and Optimization enabled by default for all service territories. Orgs existing prior to Summer '23 must add the Offsite Appointment field to the page layout.
Parent Record	The parent record associated with the appointment. The parent record can't be updated after the service appointment is created.
Parent Record Status Category	(Read only) The Status Category of the parent record. If the parent record is a work order or work order line item, this field is populated; otherwise, it remains blank.
Parent Record Type	(Read only) The type of parent record: Account, Asset, Lead, Opportunity, Work Order, or Work Order Line Item.
Related Bundle	Applicable when you're using the Appointment Bundler. The bundle that this service appointment is a member of.
Scheduled End	The time at which the appointment is scheduled to end. If you're using the Field Service managed package with the scheduling optimizer, this field is populated when the appointment is assigned to a resource. Scheduled End – Scheduled Start = Estimated Duration.
Scheduled Start	The time at which the appointment is scheduled to start. If you're using the Field Service managed package with the scheduling optimizer, this field is populated when the appointment is assigned to a resource.
Schedule Mode	(Read only) Shows Auto or Manual after performing automated or manual scheduling. When using Enhanced Scheduling and Optimization, the Schedule Mode field shows how the appointment was scheduled: Drag and Drop, Schedule, Global Optimization, In-Day Optimization, or Resource Optimization.

Field Name	Description
Service Note	Add notes such as an appointment summary or recommendations for future work. Depending on your settings, these notes might appear on a customer-facing service report.
Service Territory	The service territory associated with the appointment. If the parent record is a work order or work order line item, the appointment inherits its parent's service territory.
Status	<ul> <li>The status of the appointment. The picklist includes the following values, which can be customized:</li> <li>None—Default value.</li> <li>Scheduled—The service appointment is scheduled.</li> <li>Dispatched—The service resource is in route.</li> <li>In Progress—The service resource started the work.</li> <li>Cannot Complete—The service resource couldn't complete the appointment for any reason.</li> <li>Completed—The service resource completed the work.</li> <li>Canceled—The service resource completed the work.</li> </ul>
Status Category	<ul> <li>The category that each Status value falls into. The Status Category field's values are identical to the standard Status values.</li> <li>If you create custom Status values, you must indicate which category it belongs to. For example, if you create a Customer Absent value, you may decide that it belongs in the Cannot Complete category.</li> <li>To learn which processes reference Status Category, see How are Status Categories Used?</li> </ul>
Subject	A short phrase describing the appointment.
Work Type	(Read only) The work type associated with the service appointment. The work type is inherited from the appointment's parent record if the parent is a work order or work order line item. If Lightning Scheduler is also in use, this field is editable. However, users see an error if they update it to list a different work type than the parent record's work type.

SEE ALSO:

Manage Field Service Appointments

# Service Crew Fields

Service crews and service crew members have the following fields. Depending on your page layout and field-level security settings, you may not be able to view or update some of them.

## Service Crew

Service crews are groups of users who can be assigned to a service appointment as a unit. Create service crews from the crew management tool or the Service Crews tab.

Field Name	Description
Crew Size	The ideal number of members on the crew. This field doesn't update when you add or remove members. The maximum crew size is 100.
	You can add crew size requirements to work types, work orders, and work order line items that are enforced during scheduling. To learn more, see Considerations for Scheduling Service Crews.
Gantt Color	Hex code of the crew's background color on the Gantt. Crews without a set Gantt color appear in purple. For example, set the Gantt color to green (#008000) for all service crews that use a company vehicle.
	This is a Field Service managed package feature.
Name	The name of the service crew. For example, Repair Crew.
Owner	By default, the person who created the service crew.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Service Crew Member

Service crew members are service resources who belong to a service crew. Add members to a service crew from the crew management tool or the Service Crew Members related list on the crew record.

Field Name	Description
End Date	The last day that the service resource belongs to the crew. You can use this field to track employment dates for contractors.
Gantt Label	Custom label that appears beneath the member's name on the Gantt. For example, enter the person's job title.
	This is a Field Service managed package feature.

Field Name	Description
Leader	Indicates that the member is the crew leader. Leaders can edit assigned appointments and their parent records, while members can only view them. Crew geolocation is based on the leader's location. Leaders appear in the crew management tool with a star next to their name.
Name	The name of the crew member. Depending on your preference, you can enter the service resource's name or their role in the crew.
Service Crew	The crew that the service resource belongs to.
Service Resource	The service resource that belongs to the crew.
Start Date	Required. The day the service resource joins the crew.

SEE ALSO:

Create Service Crews Set Up Crew Management Manage Field Service Crew Membership

## Service Report Fields

Service reports and digital signatures on service reports have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

### Service Report

Service reports display fields from related objects, including service appointments, work orders, and work order line items. In addition, the Service Report object comes with the following fields.

Field Name	Description
Parent ID	The ID of the record that the service report is summarizing. For example, if you click <b>Create Service Report</b> on a service appointment, this field lists the service appointment's record ID.
Service Report Language	The language used for the service report. The language is selected in the Service Report Language field on the associated work order. If the work order doesn't specify a service report language, the report is translated in the default language in Salesforce of the person generating the report.
Service Report Name	The name of the service report.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Service Report Template	The template used to create the service report.
	If the person creating the service report doesn't have Read access to objects or fields in the service report template, those fields aren't visible in the report they create.
Signed	Indicates that the service report contains one or more signatures.
	Note: To quickly find signed reports, add this field to the Service Reports related list on work orders.

## **Digital Signature**

Digital Signatures are signatures captured on service reports. For example, mobile workers can collect signatures from customers, other workers, or anyone else involved in field service work.

Field Name	Description
Date Signed	The date of the signing.
Parent Record	The service appointment, work order, or work order line item that the service report belongs to.
Place Signed	The place where the service report was signed.
Signature Image	The image of the signature.
Signature Number	An auto-generated number identifying the signature.
Signature Type	The role of the person signing. It comes with one value, Default. Service reports can have one signature per type, so your admin needs to create additional signature types in Setup.
	Create at least one value for every role that might need to sign a service report. For example, Technician, Customer, Supervisor, or Supplier. If you want some service reports to be signed by multiple people in one role—for example, if all mobile workers present at an appointment should sign—create numbered types: Technician 1, Technician 2, and so forth.
Signed By	The name of the person signing.

### SEE ALSO:

Create Field Service Report Templates

Create Field Service Customer Reports

Field Service Guidelines for Creating Service Report Templates

Field Service Guidelines for Using Signatures on Service Reports

# Service Resource Fields for Field Service

Service resources, resource absences, resource capacity records, assigned resources, and resource preferences have these fields. Sometimes certain fields aren't visible or editable depending on your page layout and field-level security settings.

### Service Resource

Service resources represent individual users or groups of users, known as service crews, who can complete field service work.

Field Name	Description
Active	When selected, this option means that the resource can be assigned to work orders. For service tracking purposes, resources can't be deleted, so deactivating a resource is the best way to send them into retirement.
Capacity-Based	Capacity-based resources are limited to a certain number of hours or appointments in a specified time period. The Capacities related list shows a resource's capacity.
Description	The description of the resource.
Include in Scheduling Optimization	Use only if the Field Service managed package is installed. When selected, this option checks whether the resource can be assigned to service appointments during the optimization process. To be included in optimization, resources need the Field Service Scheduling permission set license. If this option is selected and the resource doesn't have the permission set license, the user creating the service resource is prompted to assign it.
Location	The location associated with the service resource. For example, a service vehicle driven by the service resource.
Name	The resource's name. This name can be the name or title of the associated user or crew.
Resource Type	Indicates whether a resource is a technician (mobile worker), dispatcher, or crew. Resources who are dispatchers can't be capacity-based or included in schedule optimization. Only users with the Field Service Dispatcher permission-set

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
	license can be dispatchers. You can't add additional resource types. Field Service users can see Asset as a picklist option in the Resource Type field. But you can't save the record when you select Asset if you don't have access to Lightning Scheduler. To schedule assets with Salesforce Field Service, contact your account executive to get the required license.
Service Crew	The associated service crew. If the service resource represents a crew, select the crew. This field is hidden for all users by default. To use it, update its field-level security settings in Setup and add it to your service resource page layouts.
User	The associated user. If the service resource represents a crew instead of a single user, leave this field blank.

### **Resource Absence**

Resource absences are periods of time when a service resource isn't available to work.

Field Name	Description
Absence Number	(Read only) An auto-generated number identifying the absence.
Absence Type	The type of absence: Meeting, Training, Medical, or Vacation. You can add custom values if needed, but the name Break is reserved for the managed package.
Address	The address associated with the absence.
Description	The description of the absence.
End Time	The date and time when the absence ends.
Resource Name	The absent service resource.
Start Time	The date and time when the absence begins.

## Resource Capacity

A service resource's capacity indicates how much work the resource can perform in a specified time period.

Field Name	Description
End Date	The date the capacity ends, such as the end date of a contract.
Name	(Read only) An auto-generated number identifying the capacity record.

Field Name	Description
Hours per Time Period	The number of hours that the resource can work per time period. You must fill out this field, the Work Items per Time Period field, or both.
Service Resource	The associated resource.
Start Date	The date the capacity goes into effect.
Time Period	Day, Week, or Month. For example, if a resource can work 80 hours per month, select <b>Month</b> and enter <i>80</i> in Hours per Time Period.
Work Items per Time Period	The total service appointments that the resource can complete per time period. You must fill out this field, the Hours per Time Period field, or both.

## Assigned Resource

Assigned resources are service resources who are assigned to a service appointment. They appear in the Assigned Resources related list on service appointments. Assign a service appointment to a service crew by creating an assigned resource record that is linked to the service resource record representing the crew.

Field Name	Description
Actual Travel Time (Minutes)	The actual travel time in minutes to the work site.
Assigned Resource Number	An auto-generated number identifying the assigned resource.
Estimated Travel Time (Minutes)	The estimated travel time in minutes to the work site. If the resource represents a crew, you can't track individual crew members' travel time unless you create an assigned resource record for each crew member.
Service Appointment	The related service appointment.
Service Crew	The service crew assigned to the appointment. Typically, appointments are assigned to crews by creating an assigned resource record that links to the service crew record. If you're using that approach, you can leave the Service Crew field blank.
	If you want to assign an appointment to crew members individually so you can track each member's travel time, create an assigned resource record for each crew member that has both the User and Service Crew fields completed.
	This field is hidden for all users by default. To use it, update its field-level security settings in Setup and add it to your assigned resource page layouts.
Service Resource	The service resource assigned to the appointment.

### **Resource Preference**

Resource preferences determine which service resources are assigned to field service work. You can designate certain service resources as preferred, required, or excluded on specific accounts or work orders. Work orders inherit their associated account's resource preferences.

Field Name	Description
Preference Type	• Preferred: Indicates that the customer wants their field service work assigned to the resource
	• Required: Indicates that the resource must be assigned to the customer's field service work
	• Excluded: Indicates that the customer doesn't want their field service work assigned to the resource
	Resource preferences are suggestions, not requirements. You can assign a service appointment to any resource regardless of the related work order's resource preferences.
Related Record	The work order or account with the resource preference.
Resource Preference Number	An auto-generated number identifying the resource preference.
Service Resource	The service resource that is preferred, required, or excluded.

#### SEE ALSO:

Create Service Resources for Field Service Guidelines for Creating Service Resources for Field Service

## Service Territory Fields for Field Service

Service territories, service territory members, and service territory locations have these fields. Sometimes fields aren't visible or editable depending on your page layout and field-level security settings.

### Service Territory

Service territories represent regions in which field service work can be performed.

Field Name	Description
Active	Indicates whether the service territory is meant to be used. If a territory is inactive, you can't add members to it or link it to work orders, work order line items, or service appointments.
Address	An address to associate with the territory. For example, you can list the address of the territory's headquarters. A service territory's primary members use its address as their home base unless a different address is specified on

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
	the member record. If the Field Service managed package is installed, the home base is used to calculate travel for the first and last leg of the day.
	Note: When defining an address, make sure that it's geocoded. Entering a street address can be a requirement.
Average Travel Time (in minutes)	The average travel time for the service territory in minutes. The value is added to the Work Capacity Usage for each scheduled service appointment in the service territory. The average travel time must include both travel time and the travel time buffer, if defined. See Work Capacity Usage (WCU) on page 219.
Description	The description of the territory.
Name	The name of the territory.
Operating Hours	The territory's operating hours, which indicate when service appointments within the territory occur. Service resources who are members of a territory automatically inherit the territory's operating hours unless different hours are specified on the service territory member record.
Parent Territory	The territory's parent service territory, if it has one. For example, a Northern California territory can have a State of California territory as its parent.
Top-Level Territory	(Read only) The top-level territory in a hierarchy of service territories. Depending on where a territory lies in the hierarchy, its top-level territory can be the same as its parent.
Travel Mode	The travel mode used for travel time calculations. The travel mode includes information about the type of transportation, such as a car or walking, whether a vehicle can take toll roads, and whether a vehicle is transporting hazardous materials.
Typical In-Territory Travel Time	Estimated number of minutes needed to travel from one location to another within the service territory. You can use this field in Apex customization.

## Service Territory Member

Service territory members are service resources who are available to work in the service territory.

Field Name	Description
Address	The member's address. For example, you can list the related service resource's address in this field.
End Date	The date when the service resource is no longer a member of the territory. If the resource is scheduled to work in the territory for the

Field Name	Description
	foreseeable future, leave this field blank. This field is useful for indicating when a temporary relocation ends.
Member Number	(Read only) An auto-generated number identifying the service territory member.
Operating Hours	The member's operating hours, which are inherited from the service territory.
Service Resource	The service resource assigned to the service territory.
Service Territory	The service territory that the service resource is assigned to.
Start Date	The date when the service resource becomes a member of the service territory.
Territory Type	<ul> <li>Primary: Where the resource works most often. For example, near their home base. Service resources can have only one primary territory at a given time.</li> <li>Secondary: Where the resource can be assigned to appointments if needed. Service resources can have multiple secondary territories with overlapping dates.</li> </ul>
	<ul> <li>Relocation: Representing a temporary move. Resources with relocation territories are always assigned to appointments within their relocation territories during the specified relocation dates. If they don't have a relocation territory, the primary territories are favored over the secondary.</li> </ul>
	For example, a service resource can have these territories.
	Primary territory: West Chicago
	Secondary territories:
	<ul> <li>East Chicago</li> </ul>
	<ul> <li>South Chicago</li> </ul>
	Relocation territory: Manhattan, for a 3-month period

## Service Territory Location

Service territory locations represent locations that belong to a service territory, such as a warehouse located inside a territory.

Field Name	Description
Location	The related location.
Service Territory	The related service territory.

Field Name	Description
Service Territory Location Number	An auto-generated number identifying the territory location.

SEE ALSO:

Create Service Territories for Field Service Guidelines for Creating Service Territories for Field Service

# Shift Fields for Field Service

Shifts have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Shifts can be used to schedule and dispatch service resources.

Field Name	Description
Background Color	Color code shifts by adding a background color in hexadecimal format.
Created By	(Read Only) User who created the time sheet.
Created Date	(Read Only) Date the time sheet was created.
End Time	The date and time that the shift ends.
Holiday Shift	Indicates a shift that overlaps with holiday hours.
Job Profile	Job profile associated with the shift.
Label	The customizable label, or name, for the shift.
Last Modified By	(Read Only) User who last modified the time sheet.
Last Modified Date	(Read Only) Date the time sheet was last modified.
Non-Standard	Marks a shift as non-standard, such as evening or on-call shifts.
Owner Name	Shift owner.
Recordset Filter Criteria	Recordset filter criteria associated with the shift. Filter criteria can be used to match shift and service territory records against criteria you create.
Service Resource	Service resource associated with the shift.
Service Territory	Service territory associated with the shift.
Shift Number	(Read Only) The number automatically created for the shift.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	Description
Start Time	The date and time that the shift starts.
Status	<ul> <li>The status of the shift. The picklist includes the following values, which can be customized:</li> <li>Tentative</li> <li>Published</li> <li>Confirmed</li> </ul>
Status Category	<ul> <li>The status of the shift using static values. This field is derived from the Status field using the mapping you define. The picklist includes the following values:</li> <li>Tentative</li> <li>Published</li> <li>Confirmed</li> </ul>
Time Slot Type	<ul><li>The type of time slot for the shift. This field uses the same values as the Time Slot field in the Operating Hours object. The picklist includes the following values:</li><li>Normal</li><li>Extended</li></ul>

# Shift Pattern Fields

Shift patterns and shift pattern entries have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## Shift Patterns

Field Name	Description	Experience
Active	Marks the shift template active.	The Field Serv features, mar
Description	Notes or context about the shift template.	package, and are available
Owner Name	The owner of the shift template.	<b>Unlimited</b> , ar
Pattern Length	The number of days of the pattern.	Editions.
Shift Pattern Name	The name of the shift pattern.	

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### Shift Pattern Entries

Shift pattern entries link shift templates to the pattern.

Field Name	Description
Day Position	Applies the shift template to a specific day within the pattern.
Name	(Read only) Auto-generated number that identifies the shift pattern entry.
Shift Pattern	(Read only) The ID of the shift pattern.
Shift Template	(Read only) The ID of the linked shift template.

# Shift Template Fields

Shift templates have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## Shift Templates

Field Name	Description
Active	Marks the shift template active.
Background Color	Color code shifts by adding a background color in hexadecimal format.
Description	Notes or context about the shift template.
Duration	The duration in hours of the shift.
Job Profile	The job profile assigned to the shift.
Non-Standard	Marks a shift as non-standard, such as evening or on-call shifts.
Owner Name	The owner of the shift template.
Shift Template ID	(Read only) The ID of the shift template.
Shift Template Name	The name of the shift template.
Start Time	The shift's start time.
Time Slot Type	Sets the shift's time slot type, either Normal or Extended. If no time slot type is selected, shifts created from the template are marked Normal.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Skill Fields for Field Service

Skills represent certifications and areas of expertise in your field service workforce. Skills, service resource skills, and skill requirements have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## Skill

Skills represent a certification or area of expertise. They are created in Setup.

Field Name	Description
Name	The name of the skill.
Description	The description of the skill.
Developer Name	The unique name of the skill in the API.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Note: When you create a skill, leave the Assign Users and Assign Profiles sections blank. They are specific to Chat, which also uses skills.

## Service Resource Skill

Service resource skills are skills that are assigned to a service resource. They appear in the Skills related list on service resource detail pages.

Field Name	Description
End Date	The date when the skill expires. For example, if a resource must be re-certified after six months, the end date would be the date their certification expires.
Service Resource	The resource who possesses the skill.
Skill	The skill the resource possesses.
Skill Level	The resource's skill level. Skill level can range from zero to 99.99.
Start Date	The date when the resource gains the skill. For example, if the skill represents a certification, the start date would be the date of certification.

## Skill Requirement

Skill requirements are skills that a service resource needs to complete a task. They appear in the Skill Requirements related list on work type, work order, and work order line item detail pages.

Field Name	Description
Related Record	The work order, work order line item, or work type that the skill is required on.

Field Name	Description
Skill	The required skill.
Skill Level	The required skill level. Skill level can range from zero to 99.99.

SEE ALSO:

Create Skills for Field Service Add Required Skills to Work Orders or Work Types for Field Service

# Time Sheet Fields

Time sheets and time sheet entries have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

## Time Sheet

Time sheets relate service resources with their time and attendance.

Field Name	Description
Created By	(Read Only) User who created the time sheet.
Created Date	(Read Only) Date the time sheet was created.
Last Modified By	(Read Only) User who last modified the time sheet.
Last Modified Date	(Read Only) Date the time sheet was last modified.
Name	Time sheet name.
Owner	Time sheet owner.
Service Resource	Service resource associated with the time sheet.
Status	<ul> <li>The status of the time sheet. The picklist includes the following values, which can be customized:</li> <li>None</li> <li>New</li> <li>Submitted</li> <li>Approved</li> </ul>
Time Sheet End Date	The last day the time sheet covers.
Time Sheet Entry Count	(Read Only) The number of related time sheet entries.
Time Sheet Start Date	The first day the time sheet covers.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Time Sheet Entry

Time sheet entries track the continual time a resource performs a specific function.

Field Name	Description
Created By	(Read Only) User who created the time sheet entry.
Created Date	(Read Only) Date the time sheet entry was created.
Description	A text box for notes on how the time was spent. For example, "This service took longer than normal because the machine was jammed."
Duration (in Minutes)	(Read Only) Minutes recorded on the time sheet entry.
End Time	The date and time the activity finished.
Last Modified By	(Read Only) User who last modified the time sheet.
Last Modified Date	(Read Only) Date the time sheet was last modified.
Location Time Zone	Time zone of the location where the activity occurred.
Name	Time sheet entry name.
Start Time	The date and time the activity began.
Status	<ul> <li>The status of the time sheet entry. The picklist includes the following values, which can be customized:</li> <li>None</li> <li>New</li> <li>Submitted</li> <li>Approved</li> </ul>
Subject	Activity performed; for example, repair, lunch, or travel.
Time Sheet	(Read Only) Related time sheet.
Туре	<ul><li>The type of work performed. The picklist includes the following values, which can be customized:</li><li>None</li><li>Direct</li><li>Indirect</li></ul>
Work Order	The work order related to the time sheet entry. Work orders are searchable by their content.
Work Order Line Item	The work order line item related to the time sheet entry. Work order line items are searchable by their content.

SEE ALSO:

Create Time Sheet Templates

# Travel Mode Fields

Travel Modes have the following fields.

Field Name	Description
Can Use Toll Roads	Indicates if the vehicle is allowed to drive on toll roads. The default value is 'false'.
Is transporting Hazmat	Indicates if the vehicle is transporting hazardous materials. The default value is 'false'.
Name	Name of the Travel Mode.
Transport Type	Type of transportation.
	Possible values are:
	• Bicycle
	• Car
	• Heavy Truck
	• Light Truck
	• Walking

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Warranty Fields

Warranty terms, product warranty terms, and asset warranties have the following fields. Your page layout and field-level security settings can hide some fields and prevent you from editing others.

## Warranty Term

Warranty terms let you define the labor, parts, and expenses covered, along with any exchange options provided to rectify issues with products.

Field Name	Description
Active	Defines whether the warranty term is active.
Code	A code or other identifier associated with this warranty term.
Description	Description of the warranty term.
Effective Start Date	<ul><li>Date when the warranty term became available:</li><li>InstallDate</li><li>ManufactureDate</li><li>PurchaseDate</li></ul>
Exchange Type	The type of exchange offered: • AdvanceExchange

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field Name	<ul><li>Description</li><li>Loaner</li><li>ReturnExchange</li></ul>
Exclusions	Description of any exclusions.
Expenses Covered	(Required) The percentage of expenses covered.
Expenses Covered Duration	(Required) The period that expenses are covered for.
Expenses Covered Unit of Time	<ul> <li>(Required) The time measurement for expenses covered duration:</li> <li>Days</li> <li>Weeks</li> <li>Months</li> <li>Years</li> </ul>
Labor Covered	(Required) The percentage of labor covered.
Labor Covered Duration	(Required) The period that labor is covered for.
Labor Covered Unit of Time	<ul> <li>(Required) The time measurement for labor covered duration:</li> <li>Days</li> <li>Weeks</li> <li>Months</li> <li>Years</li> </ul>
Owner	Warranty term owner.
Parts Covered	(Required) The percentage of parts covered.
Parts Covered Duration	(Required) The duration that parts are covered for.
Parts Covered Unit of Time	<ul> <li>(Required) The time measurement for parts covered duration:</li> <li>Days</li> <li>Weeks</li> <li>Months</li> <li>Years</li> </ul>
Price Book	The price book item associated with this warranty term.
Transferable	Defines whether the warranty can be transferred to a new owner.
Warranty Duration	The duration of the warranty offered by this term.
Warranty Term Name	The name of the warranty term.
Warranty Type	The type of warranty: <ul> <li>Repair</li> <li>Standard</li> <li>Supplier</li> </ul>

Field Name	Description
Warranty Unit Of Time	The time measurement for warranty duration:
	• Days
	• Weeks
	• Months
	• Years

## Product Warranty Term

A product warranty term identifies a warranty term that applies to a product or product family to create a standard warranty. When an asset is installed, it picks up the standard warranty terms defined for its product or product family.

Field Name	Description
Covered Product Family	(Required if Covered Product isn't defined.) The product family that the warranty term applies to.
Covered Product	(Required if Covered Product Family isn't defined.) The product that the warranty term applies to.
Product Warranty Term Number	(Read Only) The identifier for this product warranty term.
Warranty Term	The warranty term.

## Asset Warranty Term

An asset warranty term lets you record any exclusions and extensions to a standard warranty term for an asset.

Field Name	Description
Asset	The asset this warranty term applies to.
Asset Warranty Number	(Read Only) The identifier of the asset warranty record.
End Date	The date when the warranty term expires.
Exchange Type	The type of exchange offered.
Exclusions	Description of any exclusions.
Expenses Covered	The percentage of expenses covered.
Expenses Covered End Date	The date when cover for expenses ends.
Labor Covered	The percentage of labor covered.
Labor Covered End Date	The date when cover for labor ends.
Parts Covered	The percentage of parts covered.
Parts Covered End Date	The date when cover for parts ends.

Field Name	Description
Price Book	The price book item associated with this warranty term.
Start Date	The date when cover under this warranty term starts.
Transferable	Defines whether the warranty can be transferred to a new owner.
Warranty Term	The warranty term this asset warranty term extends.
Warranty Type	The type of warranty.

# Work Order Fields for Field Service

Work orders have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

EDITIONS

Field	Description
Account	The account associated with the work order.
Address	The compound form of the address where the work order is completed. The work order's service appointments and line items inherit its address, though the address on line items can be updated.
Asset	The asset associated with the work order.
Business Hours	The business hours associated with the work order.
Case	The case associated with the work order.
City	The city where the work order is completed. Maximum length is 40 characters.
Contact	The contact associated with the work order.
Country	The country where the work order is completed. Maximum length is 80 characters.
Currency ISO Code	Three-letter currency code. Available only if the multicurrency feature is enabled.
Description	The description of the work order. We recommend describing the steps a user takes to mark the work order Completed.
Discount	(Read Only) The weighted average of the discounts on all line items on the work order. It can be any positive number up to 100.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field	Description
Duration	The estimated time required to complete the work order. Specify the duration unit in the Duration Type field.
	Work order duration and work order line item duration are independent of each other. If you want work order duration to automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.
DurationInMinutes	The estimated time required to complete the work order, in minutes. This field is for internal use.
Duration Type	The unit of the duration: Minutes or Hours.
End Date	The date when the work order is completed. This field is blank unless you set up automation to configure it. For a sample workflow rule that configures the Start Date field (a similar field), see Start Date.
Entitlement	The entitlement associated with the work order.
Entitlement Process End Time	The time the work order exits an entitlement process. If an entitlement process applies to a work order, this field appears.
Entitlement Process Start Time	The time the work order entered an entitlement process. If an entitlement process applies to a work order, this field appears.
Generated from maintenance plan	(Read Only) Indicates that the work order was generated from a maintenance plan rather than manually created.
	This option is deselected for work orders that were generated from maintenance plans before Summer '18.
Geocode Accuracy	The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
Grand Total	(Read Only) The total price of the work order with tax added.
Is Closed	Indicates whether the work order is closed. Use this field to report on closed versus open work orders.
Last Modified Date	The date when the work order was last modified.
Last Viewed Date	The date when the work order was last viewed.
Latitude	Used with Longitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
Line Items	(Read Only) The number of work order line items on the work order.

Field	Description
Location	The location associated with the work order. For example, a work site.
Longitude	Used with Latitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –180 and 180 with up to 15 decimal places.
Maintenance Plan	The maintenance plan associated with the work order. When the work order is auto-generated from a maintenance plan, this field automatically lists the related plan.
Maintenance Work Rule Id	(Read Only) ID of the maintenance work rule if the work order or work order line item was created by a maintenance plan. If created by the One Work Order Line Item per Asset option on the maintenance plan, the field is populated only on the work order line item.
Milestone Status	A milestone is a step in an entitlement process. It can have one of three statuses: Compliant, Open Violation, and Closed Violation. If an entitlement process applies to a work order, this field appears.
Milestone Status Icon	An icon that corresponds to the milestone status.
	• 🖌 Compliant
	• 🚇 Open Violation
	<u>A</u> Closed Violation
Minimum Crew Size	The minimum crew size allowed for a crew assigned to the work order.
	If you're not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you're using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a work order's minimum crew size requirement.
Owner	The work order's assigned owner.
Parent Work Order	The work order's parent work order, if it has one. View, create, and delete a work order's child work orders in the Child Work Orders related list.
Postal Code	The postal code where the work order is completed. Maximum length is 20 characters.
Post-Work Summary	The summary of a completed work order that's either entered manually, or, if using Einstein Copilot, the summary can be created by copilot.
Pre-Work Brief Prompt Template ID	The ID of the activated Pre-Work Brief prompt template.
Price Book	The price book associated with the work order. Adding a price book to the work order lets you assign different price book entries

Field	Description
	(products) to the work order's line items. This field is only available if products are enabled.
Priority	<ul> <li>The priority of the work order. The picklist includes the following values, which can be customized:</li> <li>Low</li> <li>Medium</li> <li>High</li> <li>Critical</li> </ul>
Product Service Campaign	The product service campaign associated with the work order.
Product Service Campaign Item	The product service campaign item associated with the work order.
Recommended Crew Size	The recommended number of people on the service crew assigned to the work order.
Record Type	The record type associated with the work type.
Return Order	The return order associated with the work order.
Return Order Line Item	The return order line item associated with the work order.
Root Work Order	(Read Only) The top-level work order in a work order hierarchy. Depending on where a work order lies in the hierarchy, its root can be the same as its parent.
Service Appointment Count	The number of service appointments on the work order.
Service Contract	The service contract associated with the work order.
Service Report Language	The language used for all service reports and service report previews created for the work order, its service appointments, and its work order line items and their service appointments. If the field is blank, service reports are generated in the default language in Salesforce of the person creating the report.
	To appear as an option in the Service Report Language field, a language must be set up in Translation Workbench or be one of the Salesforce 18 fully supported languages. Service report field names are translated, but rich text field names, service report section names, and text field values such as service notes aren't translated.
Service Report Template	The service report template that the work order's service reports uses. If you don't specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template.

Field	Description
	This field stays blank unless you update it on the work order. So to find out which template the work order's service reports uses, check its work type.
Service Territory	The service territory where the work order is taking place.
Start Date	The date when the work order goes into effect. This field is blank unless you set up automation to populate it. See the example for a workflow rule that configures this field. The Start Date and End Date fields are blank by default, but you can set up workflow rules to configure them.
State	The state where the work order is completed. Maximum length is 80 characters.
Status	The status of the work order. The picklist includes the following values, which can be customized:
	<ul> <li>New—Work order was created, but there hasn't yet been any activity.</li> <li>In Progress—Work has begun.</li> <li>On Hold—Work is paused.</li> <li>Completed—Work is complete.</li> <li>Cannot Complete—Work couldn't be completed.</li> <li>Closed—All work and associated activity is complete.</li> <li>Canceled—Work is canceled, typically before any work began.</li> <li>Changing a work order's status doesn't affect the status of its work order line items or associated service appointments.</li> </ul>
Status Category	The category that each status value falls into. The Status Category field has eight default values: seven values that are identical to the default Status values, and a None value for statuses without a status category. If you create custom Status values, you must indicate which category it belongs to. For example, if you create a Waiting for Response value, you can decide that it belongs in the On Hold category.
Stopped	Indicates that the milestone countdown has been paused.
Stopped Since	The time the milestone countdown was paused.
Street	The street number and name where the work order is completed.
Subject	The subject of the work order. Describe the nature and purpose of the job to be completed. For example: annual on-site well maintenance. The maximum length is 255 characters.

Field	Description
Subtotal	(Read Only) The total of the work order line items' subtotals before discounts and taxes are applied.
Suggested Maintenance Date	The suggested date that the work order is completed. When the work order is generated from a maintenance plan, this field is automatically populated based on the maintenance plan's settings.
Tax	The total tax on the work order. For example, in a work order whose total price is \$100, enter \$10 to apply a 10 percent tax. You can enter a number with or without the currency symbol and you can use up to two decimal places.
Total Price	(Read Only) The total of the work order line items' price after discounts but before tax is added.
Work Order Number	An autogenerated number that identifies the work order.
Work Type	The work type associated with the work order. When a work type is selected, the work order automatically inherits the work type's Duration, Duration Type, and required skills.

### SEE ALSO:

Set Up Work Order Management for Field Service Manage Field Service Work Orders

# Work Order Line Item Fields for Field Service

Work order line items have the following fields. Sometimes you can't see or edit certain fields because of your page layout and field-level security settings.

Field	Description
Address	The address of the line item. The line item inherits its address from its parent work order, but it can also be updated manually.
Asset	The asset associated with the line item. If your org uses hierarchical assets (available after Spring '16), you sometimes want to link a work order's line items with different assets. For this reason, line items don't automatically inherit their parent work order's asset value.
City	The city where the line item is completed. Maximum length is 40 characters.
Country	The country where the line item is completed. Maximum length is 80 characters.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

Field	Description
Currency ISO Code	The ISO code for any currency allowed by the organization. Available only for Salesforce orgs with the multicurrency feature enabled.
Description	The description of the line item. We recommend describing the steps for a user to follow to mark the line item Completed.
Discount	The percent discount to be applied to the line item. You can enter a number with or without the percent symbol and you can use up to two decimal places.
Duration	The estimated time required to complete the line item. Specify the duration unit in the Duration Type field.
	Note: Work order duration and work order line item duration are independent of each other. If you want work order duration to automatically show the sum of the work order line items' duration, replace the Duration field on work orders with a custom roll-up summary field.
DurationInMinutes	The estimated time required to complete the line item, in minutes. This field is for internal use.
Duration Type	The unit of the duration: Minutes or Hours.
End Date	The date when the line item is completed.
Geocode Accuracy	The level of accuracy of a location's geographical coordinates compared with its physical address. A geocoding service typically provides this value based on the address's latitude and longitude coordinates.
Is Closed	Indicates whether the line item is closed. Changing the line item's status to Closed causes this checkbox to be selected in the user interface.
Is Generated From Maintenance Plan	Identifies whether the work order line item is generated from a maintenance plan.
Last Referenced Date	The date when the line item was last modified. Its label in the user interface is Last Modified Date
Last Viewed Date	The date when the line item was last viewed.
Latitude	Used with Longitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between –90 and 90 with up to 15 decimal places.
Line Item Number	An auto-generated number that identifies the line item.
List Price	The price of the line item (product) as listed in its corresponding price book entry. If a product isn't specified, the list price defaults to zero. (Read only)

Field	Description
Location	A location associated with the work order line item. For example, a work site.
Longitude	Used with Latitude to specify the precise geolocation of the address where the work order is completed. Acceptable values are numbers between $-180$ and $180$ with up to 15 decimal places.
Maintenance Plan	The maintenance plan associated with the work order line item.
Maintenance Work Rule Id	(Read Only) ID of the maintenance work rule if the work order or work order line item was created by a maintenance plan. If created by the One Work Order Line Item per Asset option on the maintenance plan, the field is populated only on the work order line item.
Minimum Crew Size	The minimum crew size allowed for a crew assigned to the line item. If you're not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you're using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a line item's minimum crew size requirement.
Order	The order associated with the line item. For example, you order replacement parts before you can complete the line item.
Parent Work Order Line Item	The line item's parent line item, if it has one.  Note: View, create, and delete a line item's child line items in the Child Work Order Line Items related list.
Postal Code	The postal code where the line item is completed. Maximum length is 20 characters.
Pricebook Entry	The price book entry (product) associated with the line item. The label in the user interface is Product. This field's lookup search only returns products that are included in the work order's price book.
Priority	<ul> <li>The priority of the line item. The picklist includes the following values, which can be customized:</li> <li>Low</li> <li>Medium</li> <li>High</li> <li>Critical</li> </ul>
Product	The product (price book entry) associated with the line item. This field's lookup search only returns products that are included in the parent work order's price book.

Field	Description
Product Service Campaign	The product service campaign associated with the work order line item.
Product Service Campaign Item	The product service campaign item associated with the work order line item.
Quantity	The line item's quantity.
Recommended Crew Size	The recommended number of people on the service crew assigned to the line item.
Return Order	The return order associated with the work order line item.
Return Order Line Item	The return order line item associated with the work order line item.
Root Work Order Line Item	The top-level line item in a line item hierarchy. Depending on where a line item lies in the hierarchy, its root can be the same as its parent. (Read only)
Service Appointment Count	The number of service appointments on the work order line item.
Service Report Template	The service report template that the line item's service reports uses.
	If you don't specify a service report template on a work order line item, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the line item uses the default service report template.
	Note: This field stays blank unless you update it on the line item. To find out which template the line item's service reports uses, check its work type.
Service Territory	The service territory where the line item work is taking place.
Start Date	The date when the line item goes into effect.
State	The state where the line item is completed. Maximum length is 80 characters.
Status	The status of the line item. The picklist includes the following values, which can be customized:
	• New—Line item was created, but there's no activity yet.
	In Progress—Work has begun.
	• On Hold—Work is paused.
	<ul><li>Completed—Work is complete.</li><li>Cannot Complete—Work couldn't be completed.</li></ul>
	<ul> <li>Closed—All work and associated activity is complete.</li> </ul>
	<ul> <li>Closed—All work and associated activity is complete.</li> <li>Canceled—Work is canceled, typically before any work began.</li> </ul>
Status Category	The category that each status value falls into. The Status Category field has eight default values: seven values that are identical to the

Field	Description
	default Status values, and a None value for statuses without a status category.
	If you create custom Status values, you must indicate which category it belongs to. For example, if you create a Waiting for Response value, you can decide that it belongs in the On Hold category.
	To learn which processes reference Status Category, see How are Status Categories Used?
Street	The street number and name where the line item is completed.
Subject	The line item's subject. For example, Tire Check.
Subtotal	The line item's unit price multiplied by the quantity. (Read only)
Suggested Maintenance Date	Date when maintenance work is planned.
Total Price	The line item's subtotal with discounts applied. (Read only)
Unit Price	By default, the unit price for a line item is the product's list price from the price book, but you can change it.
Work Order	The parent work order of the line item. Because work order line items must be associated with a work order, this field is required.
Work Order Line Item Number	An autogenerated number that identifies the work order line item.
Work Type	The work type associated with the line item. When a work type is selected, the work order line item automatically inherits the work type's Duration, Duration Type, and required skills.

## SEE ALSO:

Set Up Work Order Management for Field Service Manage Field Service Work Orders

**EDITIONS** 

# Work Type Fields for Field Service

Work types have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Field Name	Description	Available in: both Salesforce Classic (not available in all
Auto-Create Service Appointment	Select to automatically create service appointments on work orders or work order line items that use the work type.	orgs) and Lightning Experience
	<ul> <li>Note:</li> <li>By default, the Due Date on auto-created service appointments is seven days after the created date. Admins can adjust this offset from the Field Service Settings page in Setup, or by updating the Due Date Offset field on a work type (a Field Service managed package feature).</li> <li>If a work type with the Auto-Create Service Appointment option selected is added to an existing work order or work order line item, a service appointment is only created for the work order or work order line item if it doesn't yet have one.</li> <li>If someone updates an existing work type by selecting the Auto-Create Service Appointment option, service appointments aren't created on work orders and work order line items that were already using the work type.</li> </ul>	The Field Service core features, managed package, and mobile app are available in <b>Enterprise</b> , <b>Unlimited</b> , and <b>Developer</b> Editions.
Description	The description of the work type. Try to add details about the task or tasks that this work type represents.	
Document Template – Service Appointment	The document template ID. If ServiceDocumentTemplateId isn't specified, this document template ID determines which service document template is used for service documents generated from a service appointment. The ID is 15 to 18 characters long.	
Document Template – Work Order	The document template ID. If ServiceDocumentTemplateId isn't specified, this document template ID determines which service document template is used for service documents generated from a work order. The ID is 15 to 18 characters long.	
Document Template – Work Order Line Item	The document template ID. If ServiceDocumentTemplateId isn't specified, this document template ID determines which service document template is used for service documents generated from a work order line item. The ID is 15 to 18 characters long.	
Duration Type	The unit of the Estimated Duration: Minutes or Hours.	
Estimated Duration	The estimated length of the work. The estimated duration is in minutes or hours based on the value selected in the Duration Type field.	
Exact Appointments	If selected, service appointment time slots reflect the time needed for the work rather than a time window in which the work occurs.	

Field Name	Description
	This setting is useful, for example, for work types such as office or showroom visits that have an exact start time.
Minimum Crew Size	The minimum crew size allowed for a crew assigned to records using the work type.
	If you're not using the Field Service managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer counts the number of service crew members on a service crew to determine whether it fits a record's minimum crew size requirement.
	Note: This field is hidden for all users by default. To use it, update its field-level security settings and add it to your work type page layouts.
Name	The name of the work type. Try to use a name that helps users quickly understand the type of work orders that can be created from the work type. For example, "Annual Refrigerator Maintenance" or "Valve Replacement."
Recommended Crew Size	The recommended number of people on the service crew assigned to the record using this work type.
	Note: This field is hidden for all users by default. To use it, update its field-level security settings and add it to your work type page layouts.
Service Report Template	The service report template associated with the work type.
	If you choose not to specify a service report template on a work order, it uses the service report template listed on its work type. If the work type doesn't list a template or no work type is specified, the work order uses the default service report template. The same is true for work order line items.

## SEE ALSO:

Create Work Types for Field Service Guidelines for Creating Work Types for Field Service Add Required Skills to Work Orders or Work Types for Field Service

# Manage Assets in Field Service

Use Field Service to track, maintain, and optimize assets.

## Associate an Asset with Its Related Contacts

Create Asset Contact Participant records to track all the contact associated with an asset in the asset's lifecycle. For example, associate an asset with the technician who repaired it, with the finance manager who facilitated its sale, and with the sales executive who sold it. An asset can have multiple contact participants.

### Associate an Asset with Its Related Accounts

Create Asset Account Participant records to track all the accounts associated with an asset in the asset's lifecycle. For example, an asset can be related with the supplier who supplied you the asset and the customer who bought the asset. An asset can have multiple account participants.

### Record Product Warranties in Field Service

Use Warranty Terms to record details of the labor, parts, expenses, and exchange options that you provide to rectify issues with products you sell or install.

## Manage Field Service Asset Attributes

Improve asset management and help mobile workers efficiently repair and maintain assets by defining and monitoring asset attributes that represent asset health and performance. Then, define threshold monitoring based on recordset filter criteria and track threshold compliance for multiple asset attributes.

## Track Availability and Reliability in Field Service

Obtain availability and reliability statistics to measure asset performance, efficiency, and depreciation.

#### Integrate Field Service Assets with MuleSoft

Connect, automate, and secure assets across any systems with MuleSoft.

#### Asset Health Score

The Asset Health Score indicates the overall condition and performance of an asset.

# Associate an Asset with Its Related Contacts

Create Asset Contact Participant records to track all the contact associated with an asset in the asset's lifecycle. For example, associate an asset with the technician who repaired it, with the finance manager who facilitated its sale, and with the sales executive who sold it. An asset can have multiple contact participants.

The admin can add picklist values for the Stakeholder Role field on the Asset Account Participant object in Object Manager.

- 1. From the App Launcher, find and select Asset Contact Participants.
- 2. Click New.
- 3. Enter a name for the participant.
- 4. Search for and select the contact to be linked with the asset.
- 5. For Stakeholder Role, select the role of the contact linked with the asset, such as technician, owner, or finance manager.
- 6. Search for and select an asset.

## EDITIONS

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

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### 7. Select Active.

- 8. Select a start date and effective end date for the association between the asset and the account.
- 9. For Usage Type, select Field Service Lightning.
- 10. Save your changes.

# Associate an Asset with Its Related Accounts

Create Asset Account Participant records to track all the accounts associated with an asset in the asset's lifecycle. For example, an asset can be related with the supplier who supplied you the asset and the customer who bought the asset. An asset can have multiple account participants.

The admin can add picklist values for the Stakeholder Role field on the Asset Account Participant object in Object Manager.

- 1. From the App Launcher, find and select Asset Account Participants.
- 2. Click New.
- 3. Enter a name for the participant.
- 4. Search for and select the account to be linked with the asset.
- 5. For Stakeholder Role, select the role of the account linked with the asset, such as financier, customer, or sales dealer.
- 6. Search for and select an asset.
- 7. Select Active.
- 8. Select a start date and end date for the association between the asset and the account.
- 9. For Usage Type, select Field Service Lightning.
- 10. Save your changes.

# **Record Product Warranties in Field Service**

Use Warranty Terms to record details of the labor, parts, expenses, and exchange options that you provide to rectify issues with products you sell or install.

To create a standard warranty, assign warranty terms to a product or product family. Then, when you sell or install a product, record details of additional or extended warranties along with exclusions and void terms.

Setting up warranty information involves these steps:

- Create warranty terms.
- Assign warranty terms to a product or product family.
- Create an asset and (if your admin hasn't set up automation) add the standard warranty terms for the product.
- Enter additional or extended warranty terms for the asset.

#### **Create Warranty Terms**

- 1. Navigate to Warranty Terms, and click New.
- 2. Enter the details of the warranty term.
- 3. Save the record.

## EDITIONS

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

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

#### **Assign Warranty Terms to a Product**

- 1. Navigate to the Product, and from the Warranty Terms related list, click New.
- 2. Search for a warranty term.
- 3. Choose whether this warranty term applies to the product or product family.
- 4. Save the record.

#### Enter Additional or Extended Warranty Terms for an Asset

When an asset is created, it picks up the standard warranty terms for the product. You can then modify these terms or add new ones.

- 1. Navigate to the Asset, and from the Asset Warranties related list, click New.
- 2. Search for a warranty term or enter details of the warranty term.
- **3.** Save the record.

SEE ALSO:

Organize Products with Product Families Set Up for Product Warranties in Field Service

## Manage Field Service Asset Attributes

Improve asset management and help mobile workers efficiently repair and maintain assets by defining and monitoring asset attributes that represent asset health and performance. Then, define threshold monitoring based on recordset filter criteria and track threshold compliance for multiple asset attributes.

Watch the video to see how to use asset attributes to track asset health and performance.

#### Watch a video

With Field Service asset attributes, product and asset managers can measure, track, and monitor the health and performance of assets. Use asset attributes to track and analyze large numbers of attributes for products or assets. An asset can have multiple attributes that represent an asset's health and performance.

Asset attributes help mobile workers better understand the condition of assets and let them repair and maintain those assets in the field more efficiently. They also enable asset managers to shift to

**EDITIONS** 

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

proactive, and ultimately predictive, service models that promote higher equipment uptime and compliance.

Use custom fields to characterize all assets that share characteristics. They can track slower-changing aspects of health, such as software version, or real-time performance values, such as temperature and pressure. Asset attributes can vary by product and asset and track faster changes.

Each asset attribute has a definition and a value. The definition describes the value and determines its data type. Attribute values appear in the Asset Attributes related list on the asset record.

After defining asset attributes, create thresholds that are based on attributes to monitor your asset's health and performance. For example, define a threshold based on engine temperature or engine pressure and then track the engine for faults. With thresholds, you can see when and where issues occur and take action to prevent or address them.

#### Set Up Asset Attributes

Configure your Asset Attributes settings and enable user permissions.

### Create Attribute Definitions

Define the value and data type of an attribute definition before you add it to an asset attribute.

### Create Asset Attributes

Create an asset attribute by associating it with an attribute definition on the asset record.

## Manage Threshold Monitoring for Field Service Asset Attributes

Set up monitoring based on recordset filter criteria defined for asset fields and asset attributes. Recordset Filter Criteria Monitoring uses the thresholds defined by recordset filter criteria for the fields and attributes to determine whether they're within the defined thresholds.

#### Asset Attributes Limitations and Considerations

Before you set up Asset Attributes, review its limitations and considerations.

## Set Up Asset Attributes

## **USER PERMISSIONS**

To configure Asset Attributes:	Customize Application
To enable permissions:	Manage Profiles and Permission Sets
To customize related lists:	Customize Application
To create and manage restriction rules:	Manage Sharing
To view restriction rules:	View Setup & Configuration AND View Restriction and Scoping Rules

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Configure your Asset Attributes settings and enable user permissions.

Before you create and manage asset attributes, make sure that you complete these tasks.

- 1. Enable user permissions for attribute definitions and units of measure.
  - a. From Setup, in the Quick Find box, enter Users, and then select Profiles.
  - **b.** Select the relevant profile, and then click **Edit**.
  - c. In Tab Settings, select **Default On** for Attribute Definitions and Units of Measure.
  - d. In Standard Object Permissions, enable basic access permissions for Attribute Definitions and Units of Measure.
- 2. Add picklist values for units of measure.
  - a. From the object management settings for units of measure, go to Fields and Relationships.
  - b. Select Type and add picklist values (for example Imperial or Metric).
- **3.** (Optional) Customize the fields to appear in the Asset Attributes related list. In the page layout of the Asset object, select the fields to show.

 (Optional) Create restriction rules for asset attributes when sharing asset records. The rules prevent sharing confidential asset attributes along with the asset record. From the object management settings for asset attributes, go to Restriction Rules and click Create New Rule.

### SEE ALSO:

Find Object Management Settings Customize Related Lists Create a Restriction Rule Restriction Rule Considerations

## **Create Attribute Definitions**

Define the value and data type of an attribute definition before you add it to an asset attribute.

- 1. From the App Launcher, find and select Attribute Definitions.
- 2. Click New and enter a name, a label, and a developer name.
- **3.** Select the data type. If you select the picklist data type, select an attribute picklist. If you select the number data type, select a unit of measure.
- 4. To show the associated asset attributes in the asset record's related list, select Active.
- 5. Set a default value for asset attributes that use this attribute definition.
- 6. If values for asset attributes using this attribute definition are required, select Required.
- 7. Enter a description and a source system ID.
- **8.** Save the attribute definition. After you add asset attributes to an attribute definition, you can't change the data type or the picklist for a picklist data type.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## **USER PERMISSIONS**

To create attribute definitions:

• Create on Attribute Definition

To view attribute definitions:

 Read on Attribute Definition

To edit attribute definitions:

Update on Attribute
 Definition

To delete asset attributes:

Delete on Attribute
 Definition

## **Create Asset Attributes**

Create an asset attribute by associating it with an attribute definition on the asset record.

Create asset attributes only for active attribute definitions. If an attribute definition is deactivated, all asset attributes associated with it become unavailable.

- 1. From the App Launcher, find and select Assets.
- 2. Click the relevant asset record and open the Related tab.
- 3. Click New.
- 4. Select an attribute definition. Only active attribute definitions are shown.
- 5. Enter a value for the asset attribute. The asset attribute value is required if designated as Required in the attribute definition you selected. Otherwise, if you don't enter a value, the attribute definition's default value is used. If the attribute definition is of type picklist, the Display Value field of Attribute Picklist Value is used when displaying picklist values.
- 6. Save the asset attribute.

# Manage Threshold Monitoring for Field Service Asset Attributes

Set up monitoring based on recordset filter criteria defined for asset fields and asset attributes. Recordset Filter Criteria Monitoring uses the thresholds defined by recordset filter criteria for the fields and attributes to determine whether they're within the defined thresholds.

## Recordset Filter Criteria Monitoring and Thresholds

An asset manager can define recordset filter criteria monitors that monitor an asset by considering one or more asset fields and asset attributes filtered by recordset filter criteria.

#### Set Up Threshold Monitoring

Add the Threshold Monitoring Lightning web component to the asset record page.

#### Create Recordset Filter Criteria for Asset Fields and Attributes

Create recordset filter criteria based on asset fields or asset attributes. Then, add the recordset filter criteria to a recordset filter criteria monitor to monitor threshold compliance.

#### Create Thresholds

After creating the recordset filter criteria, add it to a recordset filter criteria monitor to monitor the threshold compliance of an asset's fields and attributes.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create asset attributes:

- Create on Asset
- To view asset attributes:
- View on Asset
- To edit asset attributes:
- Edit on Asset
- To delete asset attributes:
- Delete on Asset

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

## Recordset Filter Criteria Monitoring and Thresholds

An asset manager can define recordset filter criteria monitors that monitor an asset by considering one or more asset fields and asset attributes filtered by recordset filter criteria.

The recordset filter criteria monitor uses thresholds for the fields and attributes to determine whether the values comply with the filter definitions. You can, for example, define a threshold based on attributes such as engine temperature, engine pressure, engine oil level, engine air influx, and RPM. You can then monitor the engine for faults by monitoring these attributes.

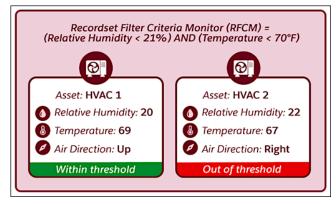
## Example: Air Conditioning Unit (HVAC)

Attribute Definition	Data Type	Unit of Measure
Relative Humidity	Number	%
Temperature	Number	Degrees F
Air Direction	Picklist	Picklist values: up, down, right, left



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



The asset's Attributes tab shows a card for each threshold defined for the asset. The cards show the compliance status of a threshold depending on whether it meets the recordset filter criteria conditions. If a recordset filter criteria condition is invalid, an Undetermined compliance status is shown on the threshold card.

## Set Up Threshold Monitoring

Add the Threshold Monitoring Lightning web component to the asset record page.

- 1. From the object management settings for assets, go to Lightning Record Pages.
- 2. Select the relevant Lightning record page, and then click Edit.
- 3. In Lightning App Builder, create a custom tab and name it Attributes.
- 4. Drag the Threshold Monitoring component onto the canvas.
- 5. Save your work and activate the Lightning record page.

#### SEE ALSO:

Find Object Management Settings Create and Configure Lightning Experience Record Pages Add and Customize Tabs on Lightning Pages Using the Lightning App Builder Activate Lightning Experience Record Pages

## Create Recordset Filter Criteria for Asset Fields and Attributes

Create recordset filter criteria based on asset fields or asset attributes. Then, add the recordset filter criteria to a recordset filter criteria monitor to monitor threshold compliance.

- 1. From the App Launcher, find and select Recordset Filter Criteria.
- 2. Click New and enter a name and a description for the recordset filter criteria.
- 3. For Source Object, select Recordset Filter Criteria Monitor.
- 4. For Filtered Object, select Asset.
- 5. In the Conditions section, select the relevant option for when the recordset filter criteria is valid.
- 6. Add filter conditions.
- 7. Save the recordset filter criteria.

After you create a recordset filter criteria, recordset filter criteria rules for each asset field or asset attribute used in the recordset filter criteria are created for you.

#### SEE ALSO:

Guidelines for Recordset Filter Criteria Recordset Filter Criteria Fields

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To edit Lightning pages in the Lightning App Builder:

Customize Application

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To view, create, and update recordset filter criteria:

 View, create, and edit on Asset, Recordset Filter Criteria, and Recordset Filter Criteria Rule AND View on Attribute Definition AND Delete on Recordset Filter Criteria Rule

## **Create Thresholds**

After creating the recordset filter criteria, add it to a recordset filter criteria monitor to monitor the threshold compliance of an asset's fields and attributes.

- 1. From the App Launcher, find and select Assets.
- 2. Click the relevant asset record and open the Attributes tab. If you don't see the Attributes tab, refresh the page.
- 3. Click **New Threshold** and enter a name and a description for the recordset filter criteria monitor.
- 4. Select a recordset filter criteria defined for the asset.
- 5. Save the recordset filter criteria monitor.

## Asset Attributes Limitations and Considerations

Before you set up Asset Attributes, review its limitations and considerations.

## Limitations

• Asset Attributes is limited to 25 attributes per asset.

To prevent data inaccuracies in work orders created from usage-based maintenance plans, limit the number of attributes to 10 per asset.

- Bulk inserts or updates of asset attributes are limited to 2,000 in one API operation.
- Asset threshold monitoring display is limited to 50 threshold cards.
- Asset threshold monitoring uses platform events, which together are limited to 2,000 concurrent users viewing real-time threshold updates on the asset's record page. These platform events don't impact your Salesforce org's platform event limitation.
- If a recordset filter criteria's custom logic condition is empty and a recordset filter criteria monitor is created for this recordset filter criteria with Asset, deleting the recordset filter criteria rule doesn't perform recordset filter criteria evaluation or update the threshold card data.
- When adding a recordset filter criteria rule via API, you must manually add the custom logic.
- When creating or updating a recordset filter criteria with a custom logic condition, you must open and close parentheses in the expression as needed. If the parentheses are missing, the recordset filter criteria evaluation fails, and the threshold field in the card isn't updated.
- For the number, price, and currency data type of fields and number data type of attributes, you must explicitly add the value zero to the recordset filter criteria custom logic when fields or attributes in the asset have an empty value.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## USER PERMISSIONS

To create, view, edit, or delete a recordset filter criteria monitor:

 Create, Read, Update, or Delete on Recordset Filter Criteria

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

- Real-time updates on formula fields aren't supported.
- Real-time updates aren't reflected on the threshold cards in these cases.
  - When you add or delete a recordset filter criteria monitor that's associated with an asset.
  - When you update the label of an asset attribute or asset field that's associated with a recordset filter criteria.
  - When you update the user permissions of asset attributes.
  - When you create a custom field for an asset and use it to monitor that asset.
- If you delete an asset attribute, you can't undo this action.

## Considerations

- These setup options in Object Manager for asset attributes aren't supported.
  - Validation rules
  - Record types
  - History tracking
  - Buttons, links, and actions
- For custom objects that have related attribute definitions, add the Datatype field to the Attribute Definition related list to show the Default Value field correctly on the related list.
- The Threshold card is presented only to users with Edit permissions on Asset.
- The Delete action appears in the threshold card and in the Asset Attribute related list even if the user doesn't have Delete permissions. An error message is shown if the user tries to delete.

# Track Availability and Reliability in Field Service

Obtain availability and reliability statistics to measure asset performance, efficiency, and depreciation.

1. On the asset, enter the Average Uptime Per Day, Uptime Record Start Date, and Uptime Record

	Availability 90.01%	Cumulative Downtime 72.00
	Reliability	Cumulative Unplanned Downtime
	93.34%	48.00
	Average Uptime Per Day	Uptime Record End Date
	24.00	
		Uptime Record Start Date
d Date.		2/3/2020, 8:00 AM

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Average Uptime Per Day records the number of hours the asset is expected to be available on average every day. For example, the public elevators in a retail store that is open from 8 AM to 8 PM Monday through Saturday. The Average Uptime Per Day is calculated as 12 hours for 6 days divided by 7 days in the week, for 10.28 hours.

2. Use the Asset Downtime Periods related list to Record Asset Downtime in Field Service on page 743.

**Note:** After updating Asset Downtime Periods, reload the Asset record to see the updated cumulative downtime, cumulative unplanned downtime, availability, and reliability.

About the calculations:

Note: Availability and reliability are calculated when an uptime record start date is provided. When no uptime record start date is provided we don't calculate availability or reliability, and both fields are blank.

Availability and reliability values are calculated as the ratio between expected uptime and actual uptime allowing for:

- planned and unplanned downtime (in calculating availability), that is Availability = (expected uptime accumulated planned and unplanned downtime) / expected uptime
- unplanned downtime (in calculating reliability), that is *Reliability* = (expected uptime accumulated unplanned downtime) / expected uptime

Average Time to Repair and Average Time Between Failures are calculated as follows:

- Average Time Between Failures = (Uptime in days unplanned downtime in days) \* Average uptime per day / number of unplanned downtime count
- Average Time to Repair = Unplanned downtime in hours / number of unplanned downtime count

Note: Average Time to Repair and Average Time Between Failures are calculated only when Uptime Record Start Date and Unplanned Downtime Count information are provided. The "unplanned downtime count" is calculated on the asset and based on the number of "AssetDowntimePeriod" records that are categorized as "Unplanned". To calculate Average Time Between Failures, the Uptime Record End Date must be provided as well.

Expected uptime is calculated as follows:

- If the uptime record end time is in the future or no uptime record end time is provided
  - Uptime = the average uptime per day \* number of days between the uptime record start time and now.
- Else
  - Uptime = the average uptime per day \* number of days between the uptime record start time and uptime record end time.

Planned and unplanned downtime are accumulated as follows:

- If the uptime record start time or uptime record end time change, the accumulated downtimes are recalculated based on the uptime record start time and uptime record end time. If there's no uptime record end time, all records after the uptime record start time are accumulated, including records dated in the future.
- When a downtime record is added, updated, or deleted, the accumulated downtime is updated if the record's downtime start or end date falls between the uptime record start time and uptime record end time. If there is no uptime record end time, all records after the uptime record start time are accumulated, including records dated in the future.

Note: If you record details of planned downtime, we recommended that you maintain the uptime record end time as a date close to now. This ensures that the availability and reliability calculations exclude planned downtime information. If the uptime record end time isn't set, and the accumulated planned downtime exceeds the accumulated uptime to date, the reliability and availability statistics may be reported as negative.

The read only Outside Uptime Calculation Period checkbox indicates whether a record is excluded from the cumulative downtime calculation.

✓ Information	
Asset Elevator	Downtime Type Planned
Start Date 7/13/2020, 10:00 AM	End Date 7/13/2020, 11:30 AM
Outside Uptime Calculation Period 🚯	Description Replacement of broken floor tile.

Note: When reporting on asset downtime records, you can't filter records using the Outside Uptime Calculation Period flag nor can you include the flag in the report

#### Record Asset Downtime in Field Service

Use the Asset Downtime Periods related list to record details of planned and unplanned downtime.

## Record Asset Downtime in Field Service

Use the Asset Downtime Periods related list to record details of planned and unplanned downtime.

- 1. Open the asset record and the Related tab.
- 2. Next to Asset Downtime Periods, click New.
- 3. In Downtime Type, select Planned or

Information						
*Asset			* Downtime Type			
Elevator		×	Planned			•
* Start Date			* End Date			
Date	Time		Date		Time	
7/13/2020	10:00 AM	0	7/13/2020	苗	11:30 AM	0
			Description			
			Replacement of	broken f	oor tile.	

#### **4.** Enter the date and time for the start and end of the downtime

- 5. Enter a description of the reason for the downtime.
- 6. Save your changes.
- Note: Enter details for downtime that occurs during the hours when the asset is expected to be available. For example, a public elevator in a retail store is expected to be available from 8 AM to 8 PM. In this example:
  - Planned maintenance performed between 9 PM and 10 PM isn't recorded as downtime.
  - Unplanned maintenance performed between 7 AM and 9 AM is recorded as unplanned downtime from 8 AM to 9 AM.
  - Unplanned maintenance performed between 1 PM and 11 AM the following day is recorded as two down time records:
    - Unplanned downtime from 1 PM to 8 PM on the first day.
    - Unplanned downtime from 8 AM to 11 AM on the second day.

If downtime outside the expected uptime is recorded, the reliability and availability figures are understated. In extreme cases, they can be reported as negative.

**Note:** When an asset is shared, its asset downtime period records are also shared.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

# Integrate Field Service Assets with MuleSoft

Connect, automate, and secure assets across any systems with MuleSoft.

## What is Salesforce Field Service?

Salesforce Field Service (SFS) is a platform that helps businesses manage field service operations. It's an extension of Salesforce Service Cloud that provides a centralized platform for managing service engagements, assigning tasks, and tracking performance. SFS also gives field service agents access to customer data and Al-driven insights to help them solve issues quickly and effectively on-site.

## What is Field Service Asset Management?

## EDITIONS

Available in: Field Service Einstein 1 Edition or as an add-on.

To purchase Field Service Einstein 1 Edition or as an add-on, contact your Salesforce account executive.

Field Service asset management involves the management of the physical assets of an organization throughout each asset's lifecycle. In Salesforce Field Service, businesses can track and manage the coverage, health, maintenance, repair, and replacement of their customers' assets. Some of the critical data required (ex. asset configuration) for the execution of these functions lives in systems outside of Salesforce. Integrating the data with Salesforce Field Service is critical in maintaining, monitoring, and prolonging the lifespan of assets.

## What is MuleSoft?

MuleSoft's unified integration, automation, and API management platform, powered by Einstein 1, transforms all of your IT assets into digital building blocks to deliver end-to-end, AI-powered experiences. Customers can connect, automate, and secure their data from any system or model, using discoverable and reusable APIs to generate increased revenue and cost savings.

## What is the Role of MuleSoft in Salesforce Field Service Asset Management?

To surface accurate data that field service organizations need to serve their customers effectively, integration with ERP is critical. MuleSoft is included as part of Field Service E1E to ensure customers can perform bi-directional integration between SAP ERP and Salesforce.

# What MuleSoft Capabilities and Capacity are Included?

This package includes (not comprehensive):

- 16 flows
- 1 million messages
- 3200-GB throughput
- SAP Connector (1 pre-prod, 1 prod)

Note: Mule capabilities included in this bundle are to be used only for the purposes of asset management integration between SAP and Salesforce. Using MuleSoft allotted capabilities for other use cases violates Field Service E1E contractual terms.

Asset management includes the integration of these components:

- Systems: SAP, Salesforce
- Objects: Products, Assets, Asset Attributes, Locations, Warranties, Service Contracts, Entitlements, Return Orders
- **Operations**: Create, Update, Delete, Get

#### Asset Health Score

## How Can I Monitor My MuleSoft Usage?

Understanding your usage allocation is important to the success of your integration. Salesforce provides tools to help you monitor usage so that you can avoid exceeding these allocations, or purchasing overages when needed. Refer to MuleSoft documentation to learn how to monitor your usage of MuleSoft.

## Where Can I Get Additional Support?

For additional support, contact your Salesforce account representative, or visit Salesforce Help for more resources and assistance.

# Asset Health Score

The Asset Health Score indicates the overall condition and performance of an asset.

Learn more about Asset Health Score.

# Set Up Field Service Appointment Assistant

Appointment Assistant helps you keep track of your customers' service experience from the moment they contact you to the moment your mobile worker arrives.

Watch the video to see how Appointment Assistant keeps track of your customers' service experience.

#### Watch a video

Watch the video to see how to modify the Appointment Assistant labels to better suit your company's culture.

Watch a video

# What Is Ethical Use?

Salesforce's Office of Ethical and Humane Use ensures that our technology is used to help, not harm, society and uphold the basic human rights of every human being. Its advisory council, composed of executive employees, academics, ethicists, industry experts, and society leaders, created a framework of Guiding Principles to guide processes for the ethical and humane use of Salesforce technology.

These are the principles.

- Human Rights: We work to ensure the direct us of our technologies uphold equal and inalienable protections.
- Privacy: We push the frontier of privacy best practice in our product design to enable customers to protect individuals' data.
- Safety: We aim to protect humans from direct harm from the use of our technology.
- Honesty: We oppose the use of our technology to knowingly spread disinformation or conspiracy theories.
- Inclusion: We create opportunity through equal access to technology.

Salesforce Appointment Assistant was created with these guiding principles in mind. You can be sure safety considerations for your mobile workers and your customers, along with privacy and data protections and accessible access, are built into the product.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# How Data Is Collected and Used

To learn how Salesforce protects and safely stores data that is gathered from the Field Service mobile app, see Field Service Mobile Security.

#### Before You Begin with Field Service Appointment Assistant

Before you set up Appointment Assistant, follow these steps.

### Set Up Field Service Appointment Assistant Real-Time Location

Appointment Assistant Real-Time Location integrates live tracking of Field Service mobile workers with Messaging to let customers know their mobile worker is on the way. Admins set appointment expirations to limit tracking of mobile workers and add worker identification like name and photo to provide safety for workers and customers while respecting their privacy.

### Set Up Field Service Appointment Assistant Self-Service Scheduling

Let Field Service Appointment Assistant customers book, confirm, reschedule, or cancel their upcoming appointments. For Self-Service Scheduling, you only need one license per org assigned to one user.

### Set Up Field Service Appointment Assistant Contactless Signature

Let your customers use their own device instead of the Field Service mobile worker's device to digitally sign service reports. Before you start setting up Contactless Signature, make sure that you have a service report template and a digital signature.

### Set Up Surveys for Field Service Appointment Assistant

Send Salesforce Surveys to customers to get their feedback after an appointment. Salesforce Surveys requires a license that isn't integrated with the Appointment Assistant license. You can also choose to integrate with GetFeedback.

### Integrate Pay Now with Field Service Appointment Assistant

Create a flow that easily enables your customers to pay for services through a provided link, eliminating the need to contact customer services.

SEE ALSO:

Custom Labels

# Before You Begin with Field Service Appointment Assistant

Before you set up Appointment Assistant, follow these steps.

#### Install the Appointment Assistant Package

Install the latest versions of the packages.

#### Create an Experience Builder Site for Appointment Assistant

To build a responsive web page for the Field Service Appointment Assistant components, first create an Experience Builder site.

#### Set Up Digital Engagement for Appointment Assistant

Salesforce Digital Engagement, which is an optional purchase, works seamlessly with Field Service Appointment Assistant when sending SMS notifications and using messaging apps like WhatsApp to update customers. However, you don't need Digital Engagement to use Appointment Assistant. Instead, you can send customer messages through other channels such as email.

## Install the Appointment Assistant Package

Install the latest versions of the packages.

To install the latest versions of the Salesforce Field Service Managed Package and Appointment Assistant, see Field Service Package Installation Hub.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Create an Experience Builder Site for Appointment Assistant

To build a responsive web page for the Field Service Appointment Assistant components, first create an Experience Builder site.

- 1. Enable Digital Experiences in your Salesforce org.
- From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- 3. Click New.
- 4. Follow the instructions for setting up an Experience Cloud site.

Note: When selecting an Experience Cloud template, don't use the Lightning Web Runtime (LWR) templates.

## Set Up Digital Engagement for Appointment Assistant

Salesforce Digital Engagement, which is an optional purchase, works seamlessly with Field Service Appointment Assistant when sending SMS notifications and using messaging apps like WhatsApp to update customers. However, you don't need Digital Engagement to use Appointment Assistant. Instead, you can send customer messages through other channels such as email.

To use Digital Engagement, see Set Up Messaging Channels.

**Note:** For information on the features included in the Digital Engagement subscription, see our pricing docs.

Unused conversations and triggered and bulk messages are forfeited at the subscription's end date. To purchase additional conversations or triggered and bulk messages, contact your Salesforce representative.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

## USER PERMISSIONS

To create, customize, or publish a site:

 Create and Set Up Experience Sites AND View Setup and Configuration

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Set Up Field Service Appointment Assistant Real-Time Location

Appointment Assistant Real-Time Location integrates live tracking of Field Service mobile workers with Messaging to let customers know their mobile worker is on the way. Admins set appointment expirations to limit tracking of mobile workers and add worker identification like name and photo to provide safety for workers and customers while respecting their privacy.

Watch the video to see how to give customers better insight into their mobile worker's location while waiting for their appointments.

#### Watch a video

Appointment Assistant Real-Time Location gives customers temporary, live tracking of Salesforce Field Service mobile workers.

These are some of the benefits.

- Customers get SMS notifications as the mobile worker approaches the job location, giving them time to prepare for the service appointment.
- Mobile workers know customers are expecting them, cutting down on no-shows and ensuring customers are ready for their appointments.
- Companies can deliver more proactive and personalized service to their customers.
- Customers, workers, and companies can trust that Appointment Assistant Real-Time Location follows Salesforce's Ethical Use Principles, which guide how we ensure the privacy and safety of both mobile workers and customers.

#### Assign a Permission Set for Appointment Assistant Real-Time Location

You can use this permission set for the Field Service mobile workers and the Field Service admins. For Appointment Assistant Real-Time Location, each mobile worker needs the Appointment Assistant license to share their location with customers when they're on their way to the appointment.

#### Configure Geolocation Settings for Appointment Assistant Real-Time Location

To give customers better insight into their mobile worker's location while waiting for their appointments, make sure your geolocation settings are set up.

#### Add Real-Time Location to Your Experience Builder Site

To enable Appointment Assistant Real-Time Location, add it to your Experience Builder site.

#### Give Guest Users Site Access for Real-Time Location

Guest users can view your Experience Builder site without logging in. All guest visitors to a public site share the same guest user record (one per site) and have the same access level.

#### Configure Field Service Settings for Real-Time Location

Allow worker tracking and customer messaging in your Field Service settings.

#### Create Message Templates for Real-Time Location

Create message templates for Field Service Appointment Assistant that let customers know when their mobile worker is on the way and when the mobile worker is approaching the work site.

#### Create Flows to Send Messages for Real-Time Location

Streamline your messaging process for Field Service Appointment Assistant by setting up flows that use the messaging templates that you created.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Add Real-Time Location to the Service Appointment Layout for Back-Office Users

Display the Appointment Assistant Real-Time Location component in the service appointment layout. This view lets your admins, dispatchers, and agents see the same ETA, map view, and mobile worker's details that your customers can see. The component is displayed as the team member travels to the customer, until arrival.

SEE ALSO:

Trailhead: Real-Time Location in Appointment Assistant

## Assign a Permission Set for Appointment Assistant Real-Time Location

You can use this permission set for the Field Service mobile workers and the Field Service admins. For Appointment Assistant Real-Time Location, each mobile worker needs the Appointment Assistant license to share their location with customers when they're on their way to the appointment.

- 1. From Setup, in the Quick Find box, enter *Users*, and then select **Permission Sets**.
- 2. Create a permission set.
  - a. Click New.
  - **b.** For Label, enter the name of the permission set, for example, *Appointment Assistant*.
  - c. Click the API Name field to populate it.
  - d. For License, select Field Service Appointment Assistant.

Permission Sets			
Permission Set Create			
	Save Cancel		
Enter permission set information			
Label	Appointment Assistant		
API Name	Appointment_Assistant		
Description			
Session Activation Required			
Select the type of users who will use	this permission set		
Who will use this permission set?			
-Choose a specific user license if you war	is permission set to multiple users with different user and permission set licenses. It users with only one license type to use this permission set. If you want this permission set license auto-assigned with the permission set.		
Not sure what a permission set license is? Learn more here,			
License	Field Service Appointment Assistant ~		
	Save		

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

## USER PERMISSIONS

To create permission sets:

• Manage Profiles and Permission Sets

The Field Service Appointment Assistant license is an add-on license. If the license isn't available for selection, ask your account executive for help.

- **3.** Save the permission set.
- 4. Enable the permission set.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - b. Open the Appointment Assistant permission set that you created.

- c. In System, click System Permissions.
- d. Click Edit and enable the Field Service Appointment Assistant permission.

SETUP Permission Sets	
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Permission Set FS Appointment Assistant	
	Ione Edit Properties Manage Assignments
	tone East Properties manage Assignments
Permission Set Overview > System Perm	
Permission Set Overview > System Perm System Permissions	lissions 💌
Permission Set Overview > System Perm System Permissions	sissions V Save Cancel
Permission Set Overview > System Perm System Permissions	lissions 💌

- e. Save your changes.
- 5. Assign this permission set to each mobile worker.

## Configure Geolocation Settings for Appointment Assistant Real-Time Location

To give customers better insight into their mobile worker's location while waiting for their appointments, make sure your geolocation settings are set up.

Geolocation settings are used for additional purposes in the Field Service mobile app, so it's likely they're set up. To verify setup, follow these steps.

- 1. Open Field Service Mobile Settings.
- 2. Make sure that the **Collect service resource geolocation history** option is enabled.
- **3.** Make sure that values are entered for the Geolocation Update Frequency in Minutes and Geolocation Update Frequency in Minutes (Background Mode) settings.

Field Service Mobile Settings	5		
Field Service Mobile Settings Field Service Mobile Settings			Clone
> Information			
> Branding Colors			
✓ Additional Settings			
Geolocation Update Frequency in Minutes 10	/	Geolocation Update Frequency in Minutes (Background Mode) 60	1
Geolocation Accuracy Medium		Geolocation Accuracy (Background Mode) Coarse	
Collect service resource geolocation history	,	Record Data Cache Time in Minutes 240	,
Metadata Cache Time in Days 7	/	Schedule Update Frequency in Minutes 30	/
Picklist Time Interval in Minutes 15	/	Enable mobile time sheets	/
Collect time zones for time sheet entries	/	Enable full edit on records	/
Display Resource Absences in Schedule View	/		

## **EDITIONS**

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The Field Service Appointment Assistant managed package and permission set license are required.

### **USER PERMISSIONS**

To configure resource tracking:

Customize Application



**Note:** Mobile worker locations are shared during travel to the customer until arrival. While the location is shared, geolocation settings are overridden and get updated every 60 seconds.

#### SEE ALSO:

Track Service Resource Geolocation with the Field Service Mobile App

## Add Real-Time Location to Your Experience Builder Site

To enable Appointment Assistant Real-Time Location, add it to your Experience Builder site.

- From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- 2. In the row for your site, click **Builder**.
- 3. From Experience Builder, click **Components**
- 4. From Custom Components, locate the Real-Time Location component.
- 5. Drag the component onto the site.

		# Appointment Asistum:
Your team member arrives in 0 - 0 MINUTES		
Customer Address Day, Date, Time Updated Just Now		
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Geogle powered by Geogle		La Marrier La Marrier La La Marrier La La Marrier La La Marrier La Marier La Marrier La Marrier La Marrier
Team Memil	ber Name kTite	

If you can't see the map in the Appointment Assistant component, add the https://maps.a.forceusercontent.com URL to your trusted URLs with a CSP context of All. Select the connect-src (scripts), frame-src (iframe content), and img-src (images) CSP directives. See Manage Trusted URLs.

Note: For the LWR Experience Cloud Site template, the map isn't fully supported.

Manage What Customers See About Field Service Mobile Workers You can control how much information is shared about your mobile workers and their location.

Add Custom Icons to the Real-Time Location Component

Add your own icons to mark the team member's and the customer's locations on the map.

Set Up Masked Phone Calls for Real-Time Location

Using masked phone calls requires setting up Service Cloud Voice with Amazon Connect.

Let Customers Reschedule and Cancel Appointments in the Real-Time Location Component

Let your customers reschedule and cancel appointments even if the mobile worker is on the way to the appointment.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To add components to sites:

 Create and Set Up Experience Sites AND View Setup and Configuration

### Manage What Customers See About Field Service Mobile Workers

You can control how much information is shared about your mobile workers and their location.

1. To open the settings panel, click anywhere in the Real-Time Location component.

Real-Time Location
Show time estimate
Show map
Show team member's exact location (1)
URL for the Team Member's Marker
URL for the Customer's Marker
Show team member's info
Show team member's image
Show Call button
Amazon Connect Phone Number
<ul> <li>Let customers reschedule appointments</li> </ul>
<ul> <li>Let customers cancel appointments</li> </ul>
URL for Self-Service Scheduling

- 2. Select what information to show the customers.
  - Show time estimate—Information related to the appointment's address, the appointment's start and end times, and the estimated arrival time.

The appointment's start and end times are taken from the ArrivalWindowStartTime and ArrivalWindowEndTime fields.

The Estimated arrival time is calculated based on the mobile worker's current location relative to the service appointment's location. The estimated arrival time is available from 12 hours before the appointment and is refreshed every 5 minutes.

- Show map—A map with the mobile worker's location and the service appointment location. The map is refreshed every 60 seconds.
- Show team member's exact location—When selected, the team member's exact location is shown. Otherwise, the worker's location is shown within a 500-meter radius.
- Show team member's info—The mobile worker's first name, the first initial of their last name, and their title.
- Show team member's image—The mobile worker's Chatter picture that's saved in Salesforce.
- Show Call button—Give your customers a button for calling the team member directly. The phone number is from the Phone field of the user that's connected to the service resource. If the phone number isn't populated, the Call button doesn't appear.
- Let customers reschedule appointments and Let customers cancel appointments—Customers can reschedule and cancel appointments even if the mobile worker is on the way to the appointment. See Let Customers Reschedule and Cancel Appointments in the Real-Time Location Component.

If you use all the options, your customer sees something like this.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To customize component settings:

 Create and Set Up Experience Sites AND View Setup and Configuration



### Add Custom Icons to the Real-Time Location Component

Add your own icons to mark the team member's and the customer's locations on the map.

- 1. From Setup, in the Quick Find box, enter Custom Code, and then select Static Resources.
- 2. Click New.
- **3.** Name the resource, and choose a file that contains the icon that you want to use for the team member's location.
- 4. For Cache Control, select Private.
- 5. Save your changes.
- 6. In the new static resource, click View File.

this used?
this used?
this used?

7. Copy the URL from the browser's address bar.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

#### **USER PERMISSIONS**

To customize component settings:

Create and Set Up
 Experience Sites AND
 View Setup and
 Configuration

- 8. In the Real-Time Location's component settings, paste the URL into the URL for the Team Member's Marker field.
- 9. Repeat this procedure for the customer's location marker.

Real-Time Location
Show time estimate
Show map
Show team member's exact location
URL for the Team Member's Marker
URL for the Customer's Marker
Show team member's info
Show team member's image
Show Call button
Amazon Connect Phone Number
<ul> <li>Let customers reschedule appointments</li> </ul>
<ul> <li>Let customers cancel appointments</li> </ul>
URL for Self-Service Scheduling

### Set Up Masked Phone Calls for Real-Time Location

Using masked phone calls requires setting up Service Cloud Voice with Amazon Connect.

- 1. Set up Service Cloud Voice with Amazon Connect.
  - a. Turn on Service Cloud Voice.
  - **b.** Confirm your tax registration number.
  - c. Assign contact center permission sets.
  - d. Create a Service Cloud Voice contact center.
- 2. Set up the contact flow and the lambda function.
  - a. From Setup, in the Quick Find box, enter Voice, and then select Amazon Contact Centers.
  - **b.** Open your contact center.
  - **c.** Make sure that your contact center is on version 9.0 or above. See Service Cloud Voice Contact Center Updates.
- 3. Create a phone number.
  - **a.** Set up your contact center phone number in Amazon Connect. See Manage Your Contact Center in Amazon Connect.
  - **b.** Connect the phone number to the flow: Sample SVC Field Service Phone Call Subflow.
  - **c.** Copy the Amazon Connect phone number, and paste it in the Amazon Connect Phone Number field of the Real-Time Location component settings. Make sure the Show Call button is also selected.

_	0
Real-Time Location	
✓ Show time estimate	
Show map	
Show team member's exact location	0
URL for the Team Member's Marker	0
URL for the Customer's Marker	0
Show team member's info	
Show team member's image	
Show Call button	
Amazon Connect Phone Number	0
Let customers reschedule appointmer	nts
✓ Let customers cancel appointments	
URL for Self-Service Scheduling	0

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Appointment Assistant managed package and permission set license are required. You also need Service Cloud Voice with the Amazon Connect license.

### USER PERMISSIONS

To view the Amazon Setup page:

Customize Application

To turn on Service Cloud Voice:

Customize Application

### Let Customers Reschedule and Cancel Appointments in the Real-Time Location Component

Let your customers reschedule and cancel appointments even if the mobile worker is on the way to the appointment.

- 1. To open the settings panel, click anywhere in the Real-Time Location component.
- 2. Select Let customers reschedule appointments and Let customers cancel appointments.
- **3.** In URL for Self-Service Scheduling, enter the URL of the page where your self-service scheduling component is located.

Real-Time Location
✓ Show time estimate
Show map
Show team member's exact location
URL for the Team Member's Marker
URL for the Customer's Marker
✓ Show team member's info
Show team member's image
Show Call button
Amazon Connect Phone Number
Let customers reschedule appointments
<ul> <li>Let customers cancel appointments</li> </ul>
URL for Self-Service Scheduling

To find this URL:

- a. From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- b. In the row of the required Experience site, click Builder.
- c. In Experience Builder, click Settings 💽.
- d. Copy the URL from the Publish Status. Make sure that the specific page is included in the URL.
- 4. Enable the notification delivery channels.
  - a. From Setup, in the Quick Find box, enter Notification Builder, and then select Notification Delivery Settings.
  - b. From Custom Notification Types, edit Appointment Assistant Custom Notifications.
  - c. Select Salesforce Field Service for Android and Salesforce Field Service for iOS. If you can't see these options, install the connected apps.
- 5. Mobile workers are notified when appointments are rescheduled or canceled. If you want to disable the notifications, follow these steps.
  - a. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
  - **b.** Open the Self-Service Scheduling Notifications flow.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To customize component settings:

 Create and Set Up Experience Sites AND View Setup and Configuration

#### c. Click Deactivate.

#### SEE ALSO:

Downloading the Field Service Connected App

# Give Guest Users Site Access for Real-Time Location

Guest users can view your Experience Builder site without logging in. All guest visitors to a public site share the same guest user record (one per site) and have the same access level.

- 1. In Experience Builder, click Settings
- 2. In Guest User Profile, click <Your Site Name> Profile.

Settings	General	>
General	View and edit the main properties of your site.	
Theme	Site Details	
Languages Navigation	Template Build Your Own	
CMS Connect	Public Access ①Guest users can see and interact with the site without logging in	
Security	Site Title	
Developer Updates	Published Status Published: https://lastmile.stmfa.stm.force.com/aa/s	
	Guest User Profile Configure access for guest or unauthenticated users. Learn More <u>Profile</u>	

- 3. From Profiles, click View Users and click the user's name.
- 4. From Permission Set Assignments, click Edit Assignments.
- 5. Add Appointment Assistant Guest Permissions.
- Note: For guest users, be sure to enable public access.

Settings	General
General	View and edit the main properties of your site.
Theme	Site Details
Languages	Template
Navigation	Build Your Own
CMS Connect	Public Access
Advanced	Guest users can see and interact with the site without logging in
Security	Site Title
Developer	aa
Updates	Published Status
	Published: https://lastmile.stmfa.stm.force.com/aa/s
	Guest User Profile
	Configure access for guest or unauthenticated users. Learn More Profile
1	<u>Truine</u>
1	

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

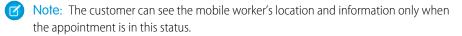
To create, customize, or publish a site:

• Create and Set Up Experience Sites AND View Setup and Configuration

# Configure Field Service Settings for Real-Time Location

Allow worker tracking and customer messaging in your Field Service settings.

- 1. From Setup, in the Quick Find box, enter *Field Service*, and then select **Field Service**. Settings.
- 2. Scroll to the Appointment Assistant section.
- **3.** In the Status field, select the service appointment status that generates the first platform event. For example, if the status is set to En Route, Appointment Assistant Real-Time Location sends a notification to the customer that the mobile worker is on their way.



If you don't use an En Route status, you can create it or use an existing status but only if its purpose is to indicate that a worker is en route.

To view and edit the Status Picklist Values:

- a. From Setup, go to the Object Manager tab.
- b. Click Service Appointment.
- c. In Fields & Relationships, click Status.

Service Appoint							
					-		
Details	Field Dependencie	6	New				Field Dependencies Help
Fields & Relationships	No dependencies defin	ned.					
Page Layouts	Validation Rules		New				Validation Rules Hel
Lightning Record Pages	No validation rules def	ined.					
Buttons, Links, and Actions	Status Picklist Valu	ies	New	Reorder Replace Printable Vi	ew Chart Colors	•	Status Picklist Values Hel
Compact Layouts	Action	Values	API Name	Status Category	Default	Chart Colors	Modified By
	Edit   Deactivate	None	None	None	~	Assigned dynamically	Admin User Test, 9/1/2020, 11:15 AM
Field Sets	Edit   Del   Deactivate	Scheduled	Scheduled	Scheduled		Assigned dynamically	Admin User Test, 9/1/2020, 11:15 AM
Object Limits	Edt   Del   Deactivate	Dispatched	Dispatched	Dispatched		Assigned dynamically	Admin User Test, 9/1/2020, 11:15 AM
	Edt   Del   Deactivate	En Route	En Route	In Progress		Assigned dynamically	Admin User Test, 9/1/2020, 12:18 PM
Record Types	Edt   Del   Deactivate	In Progress	In Progress	In Progress		Assigned dynamically	Admin User Test, 9/1/2020, 12:18 PM
Related Lookup Filters	Edit   Del   Deactivate	Cannot Complete	Cannot Complete	Cannot Complete		Assigned dynamically	Admin User Test, 9/1/2020, 12:18 PM
	Edit   Del   Deactivate	Completed	Completed	Completed		Assigned dynamically	Admin User Test, 9/1/2020, 12:18 PM
Search Layouts	Edit   Dei   Deactivate	Canceled	Canceled	Canceled		Assigned dynamically	Admin User Test. 9/1/2020, 12:18 PM

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant permission set license must be assigned to mobile workers.

#### USER PERMISSIONS

To configure Appointment Assistant settings:

 Field Service Appointment Assistant

- **4.** In the Site URL field, paste the URL of the Experience Builder site that contains the Appointment Assistant Real-Time Location Lightning Web Component.
- **5.** Enter a value for the Appointment Assistant Radius. This value generates the second platform event. For example, let's say that the radius is set to 2 miles. When the mobile worker is within 2 miles of the service appointment, Appointment Assistant Real-Time Location sends a notification to the customer that the mobile worker is nearing the appointment location.



**Note:** You can use an online conversion tool to calculate your Radius Field value. For example, you could use the conversion 2,640 feet = 0.5 miles.

6. Enter a value for the Appointment Assistant Expiration. For example, if the expiration is set to 1 hour, the customer stops seeing the mobile worker's location and information 1 hour after the link was generated.

Appointme	nt Assistant 🛭 🕚	
Enable Appoir	ntment Assistant through	Experience Cloud Sites
	Assistant Status Update prompts the first event for	Appointment Assistant.
En Route	~	
	Assistant Radius 👔	at prompts the second event for Appointment Assistant.
Value	Units	
2	Mile	•
	Assistant Expiration () mer from seeing the mob Minutes ()	ile worker's location.

7. Fill in the rest of the fields.

Note: Create a quick action on the Service Appointment object so that a mobile worker can easily mark En Route in the Field Service mobile app. For Appointment Assistant Real-Time Location to work, the change of status must occur on the mobile app and not on the server side. For example, flows and Lightning web components aren't supported for this purpose. When the service appointment status changes to En Route on the mobile app, the location status of the assigned service resource changes to EnRoute.

etais	Change Appointment Status						Help for the P
	Change Appointment Status		Eminimal Emil Jacob ()				
elds & Belationships	Action Detail						
age Layouts		Edit Debra Edit Layout Change Appointment Status			Secure Association		
ghtning Record Pages	Bandard Label Type			Aution Type	Update a Record		
uttons, Links, and Actions		Change, Jopcentment, Status Change Status on Service Appointment		kun			
	Success Message						
ompact Layouts	Created By	Admin. Lines. Text. 9-6 2020. 2 53 PM		Weddfied By	Admin. Steel: Teal. 9-9-2121. 2 53 PM		
eld Sets		East Dates Edit Layout					
0ject Limits	Predefined Eald Values						
econd Types		Ree					
elated Lookup Filters	Auton Fait Name	API Name Zisha	Field Spec			Take Note	
earch Layouts	in data fa fap		Always show the <b>V</b> mark records per related list				
earch-Layouts for Salesforce lassic							
(ggers							
vidation Bules							

Note: If you're using Appointment Assistant Real-Time Location and Automatic Status Change, it's recommended to enter a small radius in the Automatic Status Change settings. A small radius ensures that Appointment Assistant's Real-Time Location customers can see the mobile worker's location up until the worker's close to the appointment. See Set Up Automatic Status Change.

#### SEE ALSO:

Create the Salesforce Action and Add It to an Object Apply the Action to the Object's Page Layout

# Create Message Templates for Real-Time Location

Create message templates for Field Service Appointment Assistant that let customers know when their mobile worker is on the way and when the mobile worker is approaching the work site.

- 1. From Setup, in the Quick Find box, enter *Messaging*, and then select **Messaging Templates**.
- 2. To create the En Route template, click New.
- **3.** In the Information area, enter the template name, developer name, and the message that the customer receives.
- **4.** Add the URL placeholder to your message. The URL enables customers to navigate to the Experience Builder site that you configured for appointment details and arrival information.
  - **a.** For Related To, select one of the options.
  - b. For Field, select Appointment Assistant Info URL.
  - c. Click Insert. The URL placeholder is added to the message. For example, if you selected Assigned Resource in the Related To list, the URL placeholder looks like this: {!AssignedResource.ApptAssistantInfoUrl}
- 5. In the Channels area, select one or more channels.
- 6. Save your changes.
- 7. Repeat these steps to create another template that lets customers know when their mobile worker is approaching the work site. Just change the template name and the message that you send to your customers. For example, change the message to "Your mobile worker is nearing the work site" or something similar.

SEE ALSO:

Set Up WhatsApp in Messaging

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create message templates:

Configure Messaging

# Create Flows to Send Messages for Real-Time Location

Streamline your messaging process for Field Service Appointment Assistant by setting up flows that use the messaging templates that you created.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- 2. To Create the En Route flow, click New Flow.
- 3. Select Record-Triggered Flow, and click Create.
- 4. In the Configure Start window:
  - a. In Object, enter Assigned Resource.
  - b. In Trigger the Flow When, select A record is updated.
  - c. In Condition Requirements, select All Conditions Are Met (AND).
  - **d.** For Field, enter *LocationStatus*.
  - e. For Operator, select Equals.
  - f. For Value, enter *EnRoute*.
  - g. In When to Run the Flow for Updated Records, select **Only when a record is updated to meet the condition requirements**.
  - h. Click Done.
- **5.** To add an element to the flow, click  $\oplus$ .
- 6. Under Interaction, select Action.
- 7. In the Action field, enter *Messaging Notification*.
- 8. Fill in these fields:
  - Label—A name you choose
  - API Name—A name you choose
  - Messaging Channel Unique Name—Developer name of your Messaging channel
  - Messaging Template Unique Name—Developer name of the Messaging template that you created for En Route messages
  - Context Record ID—The Assigned Resource ID
  - Recipient Phone Number—The contact phone number used for sending the message
  - Recipient Record ID—The contact Record ID
- 9. Turn on these options to include them.
  - Context Record ID
  - Recipient Phone Number
  - Recipient Record ID

#### 10. Click Done.

- **11.** Save and activate the flow.
- **12.** To create the Approaching Messages flow, repeat these steps with a few changes.
  - a. In step 4:
    - In Condition Requirements, select All Conditions Are Met (AND).
    - For Field, enter *LocationStatus*.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

#### **USER PERMISSIONS**

To open, edit, or create a flow in Flow Builder:

• Manage Flow

- For Operator, select Equals.
- For Value, enter *LastMile*.
- **b.** In step 7:
  - In Messaging Template Unique Name, enter the developer name of the Messaging template that you created for Approaching messages.
  - In Messaging Channel Unique Name, enter the developer name of your Approaching Messaging channel.
- Note: To help troubleshoot flows, turn on flow debug logs.
- Note: For an optimal customer experience, ensure that you use complete addresses.
- Note: The limit for active flows per flow type is 2,000.

# Add Real-Time Location to the Service Appointment Layout for Back-Office Users

Display the Appointment Assistant Real-Time Location component in the service appointment layout. This view lets your admins, dispatchers, and agents see the same ETA, map view, and mobile worker's details that your customers can see. The component is displayed as the team member travels to the customer, until arrival.

- 1. Add the component to the service appointment layout.
  - a. In Service Appointments, open one of the appointments.
  - b. Click the settings icon and select Edit Page.



- c. In Lightning App Builder, drag the Real-Time Location component onto the layout.
  - Note: If you're using an Experience site custom template, the component can appear too large and include a scroll bar. You can change the size of the component in the service appointment layout to fix its appearance.
- **d.** Save your changes.
- 2. Allow the display of the component on the service appointment layout.
  - From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
  - **b.** In the row for your site, click **Builder**.
  - c. In Experience Builder, click Settings 💽.
  - d. Click Security & Privacy.
  - e. For Clickjack Protection Level, select Allow framing by any page.
  - f. Publish the Experience Builder site.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure layouts:

Customize Application

- 3. If the component appears as a gray screen, modify the Clickjack protection level.
  - a. In Experience Builder, click 💼 and select Administration.
  - **b.** Click **Pages**.
  - c. Under Advanced Customization, click Go to Force.com.

Administration Appointment ReBooking - test (Ak	
Settings	Pages
Preferences	Configure page assignments for your Experience Cloud site. Use the default page or override it with a custom Visualforce or Experience Bullder page.
Contributors	Home Page Experience Builder Page 🗸 main
Login & Registration	Service Not Available
Emails	Configure pages that display when there are connectivity or availability issues. Select and customize the auto-generated Service Not Available page in Experience Builder (recommended) or use your own static resource. Tell me more
Pages	Buse the auto-generated Service Not Available page in Experience Builder The Service Not Available page is available after the site is published.
Rich Publisher Apps	Take me to Experience Builder D
URL Redirects	O Use your own static resource
	Save
	Advanced Customizations
	Co to Force.com > Use Force.com / Sudio > Use Force.com / you want to use Visualforce to build custom pages using Force.com capabilities.

- d. From Site Detail, click Edit.
- e. For Clickjack Protection Level, select Allow framing by any page (No protection).
- f. Save your changes.
- g. Publish the Experience Builder site again.

# Set Up Field Service Appointment Assistant Self-Service Scheduling

Let Field Service Appointment Assistant customers book, confirm, reschedule, or cancel their upcoming appointments. For Self-Service Scheduling, you only need one license per org assigned to one user.

Before You Begin with Self-Service Scheduling

Before you set up Appointment Assistant Self-Service Scheduling, follow these steps.

Set Up Appointment Assistant Self-Service Scheduling for New Appointments Let your customers book their own appointments.

Set Up Appointment Assistant Self-Service Scheduling For Existing Appointments Let your customers confirm, reschedule, or cancel their upcoming appointments.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

# Before You Begin with Self-Service Scheduling

Before you set up Appointment Assistant Self-Service Scheduling, follow these steps.

#### Assign a Permission Set for Appointment Assistant Self-Service Scheduling

You can use this permission set for Field Service mobile workers and Field Service admins. For Appointment Assistant Self-Service Scheduling, you need only one Appointment Assistant license per Salesforce org to book or reschedule appointments.

#### Set Up the Experience Site for Self-Service Scheduling Authenticated Users

Contacts can view your Experience Site to book, reschedule, cancel, and confirm their appointments after logging in.

#### Set Up the Experience Site for Self-Service Scheduling Guest Users

Guest users can view your Experience Builder site without logging in. All guest visitors to a public site share a guest user record, one per site, and have the same access level.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### Assign a Permission Set for Appointment Assistant Self-Service Scheduling

You can use this permission set for Field Service mobile workers and Field Service admins. For Appointment Assistant Self-Service Scheduling, you need only one Appointment Assistant license per Salesforce org to book or reschedule appointments.

- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Create a permission set.
  - a. Click New.
  - **b.** For Label, enter the name of the permission set, for example, *Appointment Assistant*.
  - **c.** Click the API Name field to populate it.
  - d. For License, select Field Service Appointment Assistant.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create permission sets:

 Manage Profiles and Permission Sets

SETUP Permission Sets	
Permission Set Create	
	Save Cancel
Enter permission set information	
Label	Appointment Assistant
API Name	Appointment_Assistant i
Description	
Session Activation Required	
Select the type of users who will use	this permission set
Who will use this permission set?	
-Choose a specific user license if you war	is permission set to multiple users with different user and permission set licenses. It users with only one license type to use this permission set. If you want this permission set license auto-assigned with the permission set.
Not sure what a permission set license is	Learn more here.
License	Field Service Appointment Assistant ~
	Save

The Field Service Appointment Assistant license is an add-on license. If the license isn't available for selection, ask your account executive for help.

- e. Save the permission set.
- **3.** Enable the permission set.
  - a. Open the Appointment Assistant permission set that you created.
  - **b.** In System, click **System Permissions**.
  - c. Click Edit and enable the Field Service Appointment Assistant permission.

Permission Sets	
Permission Set	
FS Appointment Assistant	
Q. Find Settings	Edit Properties Manage Assignments
Find Settings  Permission Set Overview  System Permissions	
Permission Set Overview > System Permis	
Permission Set Overview > System Permis System Permissions	

- **d.** Save your changes.
- 4. Assign this permission set to one of the admin users.

### Set Up the Experience Site for Self-Service Scheduling Authenticated Users

Contacts can view your Experience Site to book, reschedule, cancel, and confirm their appointments after logging in.

- 1. From Setup, in the Quick Find box, enter Users, and then select Users.
- 2. Select the contact user and add permissions.
  - **a.** In Permission Set License Assignments, enable the **Field Service Standard** permission.
  - **b.** In Permission Set Assignments, add **Field Service Self Service Permissions**.
- 3. From the user profile, enable the Apex classes.
  - a. Go to Enabled Apex Class Access, and click Edit.
  - **b.** Add these Apex classes:

Enabled Apex Classes	
Enabled Apex Classes FSAA.aaNewBookingSendTokenController FSAA.aaNewBookingVerinfYokenController FSAA.AARebookingController FSAA.AARebookingGetURLcontroller FSAA.AARebookingGetURLcontroller FSAA.AARebookingSettings_SoperatingHour FSAA.AARebookingSettings_schedulingPoli FSAA.aARebookingSettings	
	Ŧ

- 4. From the user profile, enable access to the flows.
  - a. Go to Enabled Flow Access, and click Edit.
  - **b.** Add your Self-Service Scheduling flows to the enabled flows.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Standard license is required.

#### USER PERMISSIONS

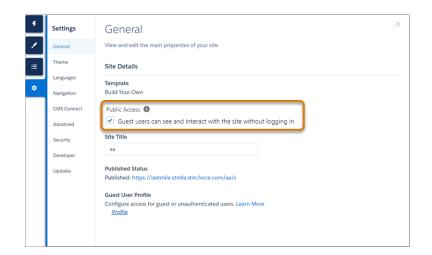
To create, customize, or publish a site:

 Create and Set Up Experience Sites AND View Setup and Configuration

### Set Up the Experience Site for Self-Service Scheduling Guest Users

Guest users can view your Experience Builder site without logging in. All guest visitors to a public site share a guest user record, one per site, and have the same access level.

- From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- 2. In the row for your site, click Builder.
- 3. In Experience Builder, click Settings
- 4. Enable public access.



5. In Guest User Profile, click <Your Site Name> Profile.

5	Settings	General	×
1	General	View and edit the main properties of your site.	
=	Theme	Site Details	
\$	Languages	Template	
<u> </u>	Navigation	Build Your Own	
	CMS Connect	Public Access 0	
	Advanced	Guest users can see and interact with the site without logging in	
	Security	Site Title	
	Developer	aa	
	Updates	Published Status	
		Published: https://lastmile.stmfa.stm.force.com/aa/s	
		Guest User Profile	
		Configure access for guest or unauthenticated users. Learn More <u>Profile</u>	

- 6. From the guest user profile, add permissions.
  - a. Click View Users, and then click the user's name.
  - **b.** In Permission Set License Assignments, click **Edit Assignments**, and enable **Field Service Guest User**. Then, save your changes.
  - c. In Permission Set Assignments, click Edit Assignments, and add Field Service Guest User Permissions to the enabled permission sets. Then, save your changes.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Guest User license is required.

### USER PERMISSIONS

To create, customize, or publish a site:

 Create and Set Up Experience Sites AND View Setup and Configuration If Field Service Guest User Permissions doesn't appear in the list, create a Field Service permission set for guest users.

- 7. From the guest user profile, enable the Apex classes.
  - a. Go to Enabled Apex Class Access, and click Edit.
  - **b.** Add these Apex classes:



Note: Make sure that the guest user has access to these objects.

- Assets: Read
- Contacts: Read
- Locations: Read
- Operating Hours: Read
- Recordset Filter Criteria: Read
- Service Appointments: Read, Create
- Service Crews: Read
- Service Resource Preferences: Read
- Service Resources: Read
- Service Territories: Read
- Service Territory Member: Read
- Shifts: Read
- Work Orders: Read, Create
- Work Type Groups: Read
- Work Types: Read

# Set Up Appointment Assistant Self-Service Scheduling for New Appointments

Let your customers book their own appointments.

Create a Message Template for the Self-Service Scheduling Flow for New Appointments Create a template for the message sent to customers with the verification code.

Set Up the Self-Service Scheduling Authentication Flow

Determine the details of the authentication flow that is connected to the main flow that lets your customers book new appointments.

Set Up the Self-Service Scheduling Flow

Configure the details of the main flow that lets your customers book new appointments.

Enable Complex Work for New Appointments with Self-Service Scheduling

If you're using Enhanced Scheduling and Optimization, you can let users create appointments with scheduling dependencies with Appointment Assistant Self-Service Scheduling.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### Create a Message Template for the Self-Service Scheduling Flow for New Appointments

Create a template for the message sent to customers with the verification code.

- 1. From Setup, in the Quick Find box, enter *Messaging*, and then select **Messaging Templates**.
- 2. Click New.
- 3. In the Information area, enter the template name, developer name, and an optional description.
- 4. In Insert Merge Field, create a custom field on the contact object or use an existing field.
  - a. For Related To, select Contact.
  - **b.** For Field, select a text custom field or an existing field to update with a random 6-digit code.
  - c. Click Insert.
- 5. Enter your message. Make sure to include the placeholder for the verification code. For example: Your access code is: { !Contact.CustomField\_c}. To book your appointment, we must confirm that this is you. Enter the code to continue.
- 6. In the Channels area, select one or more channels.
- 7. Save your changes.

#### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

### USER PERMISSIONS

To create a message template:

Configure Messaging

### Set Up the Self-Service Scheduling Authentication Flow

Determine the details of the authentication flow that is connected to the main flow that lets your customers book new appointments.

Watch the video to see how to determine the details of the authentication flow that is connected to the main flow that lets your customers book new appointments.

Watch a video

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- 2. Open the Self-Service Scheduling Authentication template.
- 3. Click Save As and create your own version of the flow based on the template.
- **4.** To use the email channel for authentication:
  - **a.** To modify the default text of the email, open the EmailSubject and EmailBody variables and modify the text as needed.
  - **b.** In the Get Records element, enter your organization-wide email address as the value of the DisplayName field.

	Edit	Set Records		
Find Salesforce records and store their field w	alues in flow varia	bles.		
Label		* API Name		
Get Organization-Wide from Email Address	Object	Get_Organi	zationWideFromEmailAddress_0	bject
Description				
Get Records of This Object				
-				
* Object				
Organization-wide From Email Address				
Filter Organization-wide From Email Ad	ddress Records			
Condition Requirements				
All Conditions Are Met (AND)				
Field	Operator		Value	
DisplayName	Equals	*	Replace display name	盲
+ Add Condition				

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

#### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

Note: To find the required email address, from Setup, in the Quick Find box, enter *Email*, and then select **Organization-Wide Addresses**. If the address isn't set up, see Organization-Wide Email Addresses.

- 5. To use the SMS channel for authentication, add the Update Records component.
  - **a.** To add an element to the flow, click (+).
  - b. Under Data, select Update Records.
  - c. Enter a name for the label. API Name is populated based on the label name.
  - d. Under How to Find Records to Update and Set Their Values, select **Specify conditions to identify records, and set fields individually**.
  - e. Under Update Records of This Object Type, for Object, select Contact.
  - f. To check if the user is new or an existing contact based on the mobile phone number that they entered, under Filter Contact Records, enter the match criteria.
    - For Condition Requirements, select All Conditions Are Met (AND).
    - For Field, enter *MobilePhone*.
    - For Operator, select **Equals**.

- For Value, select **MobilePhoneNumber**.
- g. Under Set Field Values for the Contact Records:
  - For Field, select the same field that you used in the messaging template to hold the 6-digit code. See Create a Message Template for the Self-Service Scheduling Flow for New Appointments.
  - For Value, select **AccessCode**.

#### h. Click Done.

- 6. To enable sending an SMS, add the Messaging Notification action.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - **b.** Under Interaction, select **Action**.
  - c. For Action, select Messaging Notification.
  - d. Enter a name for the label. API Name is populated based on the label name.
  - e. For Messaging Channel Unique Name, enter the messaging channel's developer name.
  - f. For Messaging Template Unique Name, enter the messaging template's developer name.
  - g. Include the Context Record ID, and then select SMScontactID {!\$SMScontactID}.
  - **h.** To send the code to the phone number that the user entered, include the Recipient Phone Number, and then select **MobilePhoneNumber** {!\$MobilePhoneNumber}.
  - i. Include the Recipient Record ID, and then select **SMScontactID** {!\$SMScontactID}.
  - j. Click Done.

Note: We recommend not making any other changes to this flow.

- 7. Save and activate the flow.
- 8. Control the access to the flow.
  - a. From Flows, click the arrow next to your flow, and select Edit Access.
  - b. Select Override default behavior and restrict access to enabled profiles or permission sets.
  - c. Add the required profiles.
  - **d.** Save your changes.
- 9. From the guest user profile, enable access to the flows.
  - a. Go to Enabled Flow Access, and click Edit.
  - **b.** Add your Self-Service Scheduling flows to the enabled flows.

Note: To control user permissions to run flows, see How Does Flow Security Work?

### Set Up the Self-Service Scheduling Flow

Configure the details of the main flow that lets your customers book new appointments.

Watch the video to see how to configure the details of the main flow that lets your customers book new appointments.

#### Watch a video

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. Open the Self-Service Scheduling template.
- **3.** To create your own version of the flow based on the template, click **Save As**, and add the required details.
- 4. Use the flow as is, or modify your version according to your needs. You can modify these settings.

Note: Don't modify fields marked as Locked.

- Authentication Channel component
  - Authenticate by Email and Authenticate by Mobile Phone: If you want to provide only one authentication method, set one of these settings to false.
  - Authentication Flow: Enter the developer name of the Self-Service Scheduling Authentication flow that you created. See Set Up the Self-Service Scheduling Authentication Flow.
- Authentication component
  - Minutes Until Resend is Available: Specify the number of minutes after customers open the web page when they can request another access code.
- Get Work Types component: Filter the work types presented to your customers.
- Get Operating Hours component: Enter the name of the required Operating Hours record.
- Get Scheduling Policy component: Enter the name of the Scheduling Policy record that defines the length of the appointment slots.
- Work Types component
  - Work Type Details: Enter the API name of the field that stores the work type details. The default is Description.
  - Work Type Title: Enter the API name of the field that stores the work type title. The default is Name.
- Location component
  - Note: You can manage service appointment assignments to territories with polygons or by adding another screen to the flow that includes the territory record.
  - Show Current Location Button: Let customers set their geolocation when they tap Use My Current Location.
- Appointment Selection component
  - Scheduling Horizon Units and Number of Scheduling Horizon Units: Shows customers a scheduling calendar based on your specification of the number of days, weeks, or months. The slots available for selection range from the earliest start permitted to the earliest end date. The end date is either the due date or the end of the scheduling horizon, whichever one is earlier.
  - Show Exact Appointment Times: To show exact appointment times, enter *true*. To show arrival windows, enter *false*.
     Make sure to enter the same value in the Summary component.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

- Service Territory ID: Leave blank if you use polygons or other automatic flows to assign service territories. If your Self-Service Scheduling flow includes service territory selection, enter a service territory ID.
- Summary component
  - Show Exact Appointment Times: To show exact appointment times, enter *true*. To show arrival windows, enter *false*.
     Make sure to enter the same value in the Appointment Selection component.
  - Work Order ID: The record ID that's updated and scheduled. If the Auto-Create Service Appointment setting is selected, a
    service appointment is created. If the setting is deselected, to create a service appointment for the work order, add a Create
    Record action to the flow.

Note: A default page title is provided with the package for each Lightning web component. If you want to replace the default with your own text, enter it in the Page Title field in each component.

- **5.** Save and activate the flow.
- 6. Control the access to the flow.
  - a. From Flows, click the arrow next to your flow and select Edit Access.
  - b. Select Override default behavior and restrict access to enabled profiles or permission sets.
  - c. Add the required profiles.
  - d. Save your changes.
- 7. Add the flow to your Experience Builder site.
  - a. From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
  - **b.** In the row for your site, click **Builder**.
  - c. In Experience Builder, click Components .
  - d. From Process Automation, drag the Flow component onto the site.
  - e. To open the settings panel, click anywhere in the component.
  - f. In Flow, select your Self-Service Scheduling flow.
    - Note: To eliminate the border that appears around the flow, in Theme, click the arrow in the top right and select **Edit** CSS. In the Override CSS window, click **Use Overrides**. Then, in the Edit CSS window, enter this code:

```
.slds-p-horizontal-medium{
margin: 0;
padding: 0;
}
.comm-layout-column{
margin: 0 !important;
padding: 4px !important;
}
.forceCommunityFlowCommunity{
border: none !important;
}
```

- g. Publish the site.
- 8. From the guest user profile, enable access to the flows.
  - a. Go to Enabled Flow Access, and click Edit.

**b.** Add your Self-Service Scheduling flows to the enabled flows.



Note: To control user permissions to run flows, see How Does Flow Security Work?

#### SEE ALSO:

Customize Appointment Booking Settings

### Enable Complex Work for New Appointments with Self-Service Scheduling

If you're using Enhanced Scheduling and Optimization, you can let users create appointments with scheduling dependencies with Appointment Assistant Self-Service Scheduling.

- Note: Appointment Assistant Self-Service Scheduling supports complex work only if you're using Enhanced Scheduling and Optimization.
- Note: When using complex work, it's possible that the **Maximum days to get candidates** or to book an appointment option in Field Service Settings can minimize the number of days that the user gets slots for. See Known Issue.
- Create a sharing rule to give guest users access to the required service appointments. To minimize what guest users can access, only share service appointments used for Appointment Assistant.
  - **a.** From Setup, in the Quick Find box, enter *Security*, and then select **Sharing Settings**.
  - b. For manage sharing settings, select Service Appointments.
  - c. Under Sharing Rules, click New.
  - d. For Rule Type, select Guest user access, based on criteria.
  - e. Enter the sharing criteria. For example, enter this criteria.
    - Field: Status

Operator: not equal to Value: Completed

- f. Select to include records owned by high-volume users.
- g. Share the rule with <Your Site Name> Site Guest User.
- **h.** Save the rule.
- 2. Create two Apex or flow triggers, one to create the dependent service appointment and the other to create the dependency junction object.
  - **Example**: Follow these steps to create the Apex triggers.

For the dependent service appointment, enter this body text.

```
trigger aaCreateNewSA on ServiceAppointment (after insert) {
   List<ServiceAppointment> newServiceAppointments = new List<ServiceAppointment>();
   for (ServiceAppointment sa : Trigger.New) {
        if (sa.WorkTypeId == '08qB000000Ho3bIAC' && sa.ServiceNote != 'temporary for
        complex work') {
```

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

#### USER PERMISSIONS

To create sharing rules:

Customize Application

```
// Clone the ServiceAppointment
ServiceAppointment clonedSA = sa.clone(false, true, false, false);
clonedSA.Id = null; // Ensure Id is null for the insert
clonedSA.ServiceNote = 'temporary for complex work';
clonedSA.FSL_GanttIcon_c = sa.Id;
newServiceAppointments.add(clonedSA);
}
}
if (newServiceAppointments.size() > 0) {
// Insert cloned ServiceAppointments
insert newServiceAppointments;
}
}
```

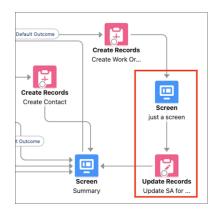
For the dependency junction object, enter this body text.

```
trigger aaCreateNewDependency on ServiceAppointment (after update) {
   List<FSL Time Dependency c> newTimeDependencies = new
List<FSL Time Dependency c>();
    for (ServiceAppointment sa : Trigger.New) {
       FSL Time Dependency c existingDependency = null;
       try {
           existingDependency = [SELECT Id
                                   FROM FSL Time Dependency c
                                   WHERE FSL__Service_Appointment_1_c =: sa.Id
                                   AND FSL Service Appointment 2 c =:
sa.FSL GanttIcon c];
        } catch (Exception e) {
           if (sa.WorkTypeId == '08q1Q000000koPqQAI' && sa.ServiceNote == 'temporary
 for complex work') {
               // Create FSL Time Dependency c records to connect the original and
cloned ServiceAppointments
               FSL Time Dependency c timeDependency = new FSL Time Dependency c(
                   FSL Service Appointment 1 c = sa.Id,
                   FSL__Service_Appointment_2__c = sa.FSL__GanttIcon c,
                   FSL Dependency_c = 'Start After Finish'
               );
               newTimeDependencies.add(timeDependency);
           }
       }
    }
   if (newTimeDependencies.size() > 0) {
       // Insert FSL Time Dependency c
       insert newTimeDependencies;
    }
}
```

Keep these considerations in mind when creating the triggers.

• To create the dependent service appointment, the first trigger must be triggered after the service appointment is created.

• The second trigger must be triggered after the first one using a separate trigger. That can be done, for example, by triggering after the service appointment is updated. When retrieving slots from the Appointment Selection LWC, the preexisting update event triggers the Apex trigger. However, to trigger the Apex trigger before scheduling with the Summery LWC, an Update Record must be added after the work order is created. You must also add a screen between the service appointment creation and the update. This breaks up the transactions and enables implementing the sharing rule.



• To verify that the trigger creates only the dependent service appointment and the dependency when a user initiates the process in Appointment Assistant, point the trigger at a specific value. For example, point the trigger at a specific work type or a value in a dedicated field on the service appointment.

# Set Up Appointment Assistant Self-Service Scheduling For Existing Appointments

Let your customers confirm, reschedule, or cancel their upcoming appointments.

#### (Optional) Add Notes to the Service Appointment Layout

To let your mobile workers see notes from customers, add the Service Notes field to the layout for mobile workers.

#### (Optional) Add a Service Appointment Status for Confirmed Appointments

Add a Confirmed status to the Service Appointment Status options. If you enter this status in the Appointment Assistant Self-Service Scheduling settings, when the customers confirm their appointments, the service appointment's status changes accordingly.

#### Configure Appointment Assistant Settings for Self-Service Scheduling

Make sure that the Appointment Assistant settings are configured.

Add Self-Service Scheduling to Your Experience Builder Site

To enable Appointment Assistant Self-Service Scheduling, add it to your Experience Builder site.

#### Enable Customers to Cancel Appointments with Self-Service Scheduling

To enable customers to cancel their appointments in the Appointment Assistant Self-Service Scheduling screen, you must disable the option for mentioning an assigned user when the service appointment is dispatched.

Create a Message Template for the Self-Service Scheduling Authentication Flow for Existing Appointments Create templates for messages that let customers open the Appointment Assistant Self-Service Scheduling page.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required. Create Flows to Send Messages for Self-Service Scheduling

Streamline your messaging process by setting up flows that use the messaging templates that you created.

Enable Complex Work for Existing Appointments with Self-Service Scheduling

If you're using Enhanced Scheduling and Optimization, you can let users reschedule appointments with scheduling dependencies with Appointment Assistant Self-Service Scheduling.

### (Optional) Add Notes to the Service Appointment Layout

To let your mobile workers see notes from customers, add the Service Notes field to the layout for mobile workers.

- 1. From Setup, go to the Object Manager tab.
- 2. In the Quick Find box, enter *Service Appointment*, and then select **Service Appointment**.
- 3. In Page Layouts, edit the layout used for the Field Service mobile workers.
- 4. Add the Service Note field to the layout.
- 5. Save the layout.

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure layouts:

Customize Application

### (Optional) Add a Service Appointment Status for Confirmed Appointments

Add a Confirmed status to the Service Appointment Status options. If you enter this status in the Appointment Assistant Self-Service Scheduling settings, when the customers confirm their appointments, the service appointment's status changes accordingly.

- 1. Add the new status.
  - a. From Setup, go to the Object Manager tab.
  - **b.** In the Quick Find box, enter *Service Appointment*, and then select **Service Appointment**.
  - c. Click Fields & Relationships.
  - d. In the Quick Find box, enter *Status*, and then select **Status**.
  - e. In Status Picklist Values, click New.
  - f. Enter the details of the Confirmed status.
  - g. Save the new status.
- **2.** If your Salesforce org uses status transitions:
  - a. From Field Service Admin, go to the Field Service Settings tab.
  - **b.** From Service Appointment Life Cycle, go to Status Transitions.
  - c. Add the flows for the Confirmed status.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure statuses:

Customize Application

### Configure Appointment Assistant Settings for Self-Service Scheduling

Make sure that the Appointment Assistant settings are configured.

- 1. Check if Appointment Assistant is configured in your org.
  - a. From Setup, in the Quick Find box, enter *Field Service*, and then select **Field Service**. Settings.
  - **b.** If the Appointment Assistant section is filled in, you're all set.
- 2. If it isn't configured, see Configure Field Service Settings for Real-Time Location.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure the Appointment Assistant settings:

Field Service
 Appointment Assistant

### Add Self-Service Scheduling to Your Experience Builder Site

To enable Appointment Assistant Self-Service Scheduling, add it to your Experience Builder site.

- From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- 2. In the row for your site, click **Builder**.
- 3. From Experience Builder, click Components .
- **4.** From Custom Components, locate the Self-Service Scheduling component.
- 5. Drag the component onto the site.

- **6.** To open the settings panel, click anywhere in the Appointment Assistant Self-Service Scheduling component.
- 7. In Operating Hours, select the record that defines the appointment slots. For example, in this Operating Hours record, the company has 3-hour slots on Mondays and Wednesdays, and 2-hour slots on Tuesdays, Thursdays, and Sundays.

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- 8. In Statuses That Allow Rescheduling, enter statuses that aren't pinned.
- 9. Fill in the remaining settings. Your selections are reflected in the preview of the component.

Note: The service appointment's territory time determines the time zone. If the service appointment's territory time is empty, the end user's time zone is used.

10. Publish the site.

#### SEE ALSO:

Customize Appointment Booking Settings



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To add components to sites:

Create and Set Up
 Experience Sites AND
 View Setup and
 Configuration

### Enable Customers to Cancel Appointments with Self-Service Scheduling

To enable customers to cancel their appointments in the Appointment Assistant Self-Service Scheduling screen, you must disable the option for mentioning an assigned user when the service appointment is dispatched.

- 1. In Field Service Admin, open the Field Service Settings tab.
- 2. Under Dispatch, select Scheduled Jobs.
- 3. Disable the Mention assigned user when the Service Appointment is dispatched option.

Field Service Admin Hom	e Reld Senice Settings Senice Tentories v Operating Hours v Senice Resources v Scheduling Policies v Work Rules	✓ store ▼
Search 0		
	Dispatch	
<ul> <li>Getting Started</li> </ul>	PRIP FEED SCHEDULED JOBS	
<ul> <li>Service Appointment Life Cycle</li> </ul>	DRIP FEED SCHEDUCED JOINS	
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Global Actions	menon and an and an an an an address and an address an	
<ul> <li>Scheduling</li> </ul>	Set recurring auto dispatch jobs	
	New job Edit	
Dispatcher Console UE	New job Edit	
Optimization	<ul> <li>Auto Dispatch</li> </ul>	Run now
Disette		
		_

**4.** Save your changes.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure the Appointment Assistant settings:

Field Service Admin

# Create a Message Template for the Self-Service Scheduling Authentication Flow for Existing Appointments

Create templates for messages that let customers open the Appointment Assistant Self-Service Scheduling page.

- 1. From Setup, in the Quick Find box, enter Messaging, and then select Messaging Templates.
- 2. To create the confirmation template, click New.
- **3.** In the Information area, enter the template name, developer name, and the message that the customer receives.
- **4.** Add the URL placeholder to your message. The URL enables customers to navigate to the Experience Builder site you configured.
  - **a.** For Related To, select Service Appointment.
  - b. For Field, select Appointment Booking URL.
  - c. Click Insert. The URL placeholder is added to the message. For example, if you selected Service Appointment in the Related To list, the URL placeholder looks like this: {!ServiceAppointment.ApptBookingInfoUrl}
- 5. In the Channels area, select one or more channels.
- 6. Save your changes.

## Create Flows to Send Messages for Self-Service Scheduling

Streamline your messaging process by setting up flows that use the messaging templates that you created.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- 2. Click New Flow.
- 3. Select Record-Triggered Flow, and then click Create.
- **4.** Set up the service appointment conditions that send the URL. For example, to send the URL when a service appointment moves to the Scheduled status, in the Configure Start window:
  - a. In Object, enter Service Appointment.
  - b. In Trigger the Flow When, select A record is updated.
  - c. In Condition Requirements, select All Conditions Are Met (AND).
  - d. Set the Condition Requirements.
    - In Field, enter *Status*.
    - In Operator, select Equals.
    - In Value, enter Scheduled.
  - e. In When to Run the Flow for Updated Records, select **Only when a record is updated to meet the condition requirements**.
  - f. To run the flow after the record is saved, select to optimize the flow for Actions and Related Records.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

#### **USER PERMISSIONS**

To create message templates:

Configure Messaging

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

#### g. Click Done.

- 5. Add new resources that connect between the community URL, Service Appointment ID, and URL expiration time.
  - **a.** From the Toolbox, click **New Resource**, and then create a variable for the URL input.
    - In Resource Type, select Variable.
    - Enter an API name.
    - In Data Type, select **Text**.
    - In Default Value, enter the link to the Experience Builder site, followed by these characters: /?guestToken=#{!\$Record.Id}#[Time in Hours]

🕜 Note: The [Time in Hours] indicates how long the URL is valid for from the time it's generated.

Note: To make sure that the link to the Experience Builder site is accurate, copy it from the Experience Builder settings.

Settings	General
General	View and edit the main properties of your site.
Theme	Site Details
Languages	Template
Navigation	Customer Service
Mobile Publisher	Public Access
SEO	Public can access the site
CMS Connect	Site Title
Advanced	AB Test
Security & Privacy	Published Status
Developer	Published:
Developer	Guest User Profile
Updates	Configure access for guest or unauthenticated users. Learn More
	AB Test Profile
	Topics

• In Availability Outside the Flow, select Available for input.

New Resource							
*Resource Type							
Variable		*					
• API Name							
URL_Input							
Description							
• Data Type							
Text	<ul> <li>Allow multiple values (collection)</li> </ul>						
Default Value							
	/?guestToken=#(I\$Record.Id)#1						
https://							
Availability Outside the Flow							
Availability Outside the Flow Available for input							
https:// Availability Outside the Flow Available for input Available for output							

- Click **Done**.
- b. Click New Resource again, and then create a variable for the URL output.
  - In Resource Type, select Variable.
  - Enter an API name.
  - In Data Type, select **Text**.
  - In Availability Outside the Flow, select Available for input and Available for output.

	New Resource	
Resource Type		
Variable		*
• API Name		
URL_Output		
Description		
*Data Type Text	Allow multiple values (collection)	
Default Value		
Enter value or search resources		Q
Availability Outside the Flow		
<ul> <li>Available for input</li> </ul>		
<ul> <li>Available for output</li> </ul>		

#### • Click Done.

- 6. Add the Apex action.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - **b.** Under Interaction, select **Action**.
  - c. In the Action field, enter FSAA. AARebookingGetURLcontroller.
  - d. Enter a name for the Label. The API Name is automatically populated accordingly.
  - e. In Set Input Values:
    - Include the valueFromFlow option.
    - Select the URL input variable that you created in step 5.

#### f. Under Advanced:

- Select Manually assign variables.
- In the output field, select the URL output variable that you created in step 5.

ter By	Action		
Category	▼ FSAA_AAReboo	okingGetURLcontroller	
All		v to set the inputs for the "FSAA_AAR ter in the flow, store them in variables.	ebookingGetURLcontroller
Users	*Label	• API Name	
Group	Encrypt URL	Encrypt_URL	
Work Plans	Description		
Work Steps			
Service Appointment			
Task	Set Input Values		
Price books	A <sub>a</sub> valueFromFlow		$\checkmark$
Feed Item	{!URL_Input}		Include
Field service			
Chatbots	<ul> <li>Advanced</li> </ul>		
Chatbots	<ul> <li>Manually assign variables</li> </ul>		
	Store Output Value	25	
	A <sub>a</sub> output		
	(!URL_Output)		
	(ione_output)		

#### g. Click Done.

- 7. Add the Update Records component.
  - **a.** To add an element to the flow, click  $\oplus$ .

- b. Under Data, select Update Records.
- c. Enter a name for the Label. The API Name is automatically populated accordingly.
- **d.** Under Set Field Values for the Service Appointment Record:
  - In Field, select **ApptBookingInfoUrl**.
  - In Value, select the URL output variable that you created in step 5.

#### e. Click Done.

- 8. Add the Messaging Notification action.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - **b.** Under Interaction, select **Action**.
  - c. In the Action field, enter *Messaging Notification*.
  - d. Enter a name for the Label. The API Name is automatically populated accordingly.
  - e. For Messaging Channel Unique Name, enter the messaging channel's developer name.
  - f. For Messaging Template Unique Name, enter the messaging channel's developer name.
  - g. Include the Context Record ID option, and then select Record and Id {!\$Record.Id}.
  - h. Include the Recipient Phone Number, and then select Record, Contact, and Mobile Phone {!\$Record.Contact.MobilePhone}.
  - i. Include the Recipient Record ID, and then select Record, Contact, and Id {!\$Record.Contact.ld}.

		Action		
er By		Messaging Noti	ification	
Category	•			
All	-		v to set the inputs for the "Messaging I	Notification" core action.
Users		use its outputs later in the flow, s	* API Name	
Group		Send SMS	Send_SMS	
Work Plans		Description		
Work Steps				
Service Appointment				
Task		Set Input Values		
Price books		Aa Messaging Channel Uniqu	e Name	
Feed Item		Text_IL_972526208714		
Field service		Aa * Messaging Template Uniqu	ue Name	
Chatbots	-	Appointment_Booking_		
		Aa Context Record ID		
		(ISRecord.Id)		Include
		A <sub>a</sub> ConversationBroadcast Reco	ord ID	Don't include
		Aa Recipient Phone Number		$\sim$
		{!\$Record.Contact.Mobi	lePhone}	Include
		Aa Recipient Record ID		$\sim$
		{!\$Record.Contact.Id}		Include
		i≣ Triggered Outbound Type		Don't Include
		> Advanced		
		,		

#### j. Click Done.

- 9. Save and activate the flow.
- To help troubleshoot flows, turn on flow debug logs.

- For an optimal customer experience, use complete addresses.
- The limit for active flows per flow type is 2,000.

### Enable Complex Work for Existing Appointments with Self-Service Scheduling

If you're using Enhanced Scheduling and Optimization, you can let users reschedule appointments with scheduling dependencies with Appointment Assistant Self-Service Scheduling.

**Note:** Appointment Assistant Self-Service Scheduling supports complex work only if you're using Enhanced Scheduling and Optimization.

Note: When using complex work, it's possible that the **Maximum days to get candidates** or to book an appointment option in Field Service Settings can minimize the number of days that the user gets slots for. See Known Issue.

Give guest users access to the required service appointments. To minimize what guest users can access, only share service appointments used for Appointment Assistant.

- 1. From Setup, in the Quick Find box, enter Security, and then select Sharing Settings.
- 2. For manage sharing settings, select Service Appointments.
- 3. Under Sharing Rules, click New.
- 4. For Rule Type, select Guest user access, based on criteria.
- 5. Enter the sharing criteria. For example, enter this criteria.
  - a. For Field, select Status.
  - b. For Operator, select not equal to.
  - c. For Value, enter Completed.
- 6. Select to include records owned by high-volume users.
- 7. Share the rule with <Your Site Name> Site Guest User.
- 8. Save the rule.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create a sharing rule:

Customize Application

# Set Up Field Service Appointment Assistant Contactless Signature

Let your customers use their own device instead of the Field Service mobile worker's device to digitally sign service reports. Before you start setting up Contactless Signature, make sure that you have a service report template and a digital signature.



This is a Field Service mobile app feature.

#### Create Permission Sets for Appointment Assistant Contactless Signature

You can use this permission set for the Field Service mobile workers and the Field Service admins. For Appointment Assistant Contactless Signature, each mobile worker needs the Field Service Appointment Assistant permission set license to share the service report with the customer.

Configure Appointment Assistant Settings for Contactless Signature

Make sure that the Appointment Assistant settings are configured.

Add Contactless Signature to Your Experience Builder Site

To enable Appointment Assistant Contactless Signature, add it to your Experience Builder site.

Create a Sharing Rule for Contactless Signature

Add a sharing rule to share service report records with the guest users.

Create a Message Template for Contactless Signature

Create a template for the message sent to customers for signing the service report.

Set Up Contactless Signature Flows

Create your own version of the flows based on the templates in the Appointment Assistant package.

Add a Quick Action for Contactless Signature

Create an action to send customers a link to the Contactless Signature page.

Expose the Document Recipient Object's Status Field

The Document Recipient object's Status field must be visible for the Contactless Signature flow.

SEE ALSO:

Create Service Report Templates

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### Create Permission Sets for Appointment Assistant Contactless Signature

You can use this permission set for the Field Service mobile workers and the Field Service admins. For Appointment Assistant Contactless Signature, each mobile worker needs the Field Service Appointment Assistant permission set license to share the service report with the customer.

- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Create the permission set.
  - a. Click New.
  - **b.** For Label, enter the name of the permission set, for example, *Appointment Assistant*.
  - **c.** Click the API Name field to populate it.
  - d. For License, select Field Service Appointment Assistant.

SETUP Permission Sets				
Permission Set Create				
	Save			
Enter permission set information				
Label	Appointment Assistant			
API Name	Appointment_Assistant			
Description				
Session Activation Required				
Select the type of users who will use	this permission set			
Who will use this permission set?				
-Choose '-None-' if you plan to assign this permission set to multiple users with different user and permission set licenses. -Choose a specific user license if you want users with only one flowne type to use this permission set. -Choose a specific permission set licenser if you want his permission test license auto-assigned with the permission set.				
Not sure what a permission set license is? Learn more here,				
License	Field Service Appointment Assistant ~			
	Save			

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create permission sets:

• Manage Profiles and Permission Sets

The Field Service Appointment Assistant license is an add-on license. If the license isn't available for selection, ask your account executive for help.

- e. Save the permission set.
- **3.** Enable the permission set.
  - a. Open the Appointment Assistant permission set that you created.
  - b. In System, click System Permissions.
  - c. Click Edit, and enable the Field Service Appointment Assistant permission.

Permission Sets	
$\sum (\langle \psi_{i},\psi_{i}\rangle) = (\langle \psi_{i},$	
Permission Set FS Appointment Assistant	
Q. Find Settings	Edit Properties Manage Assignments
Permission Set Overview > System Permi	ssions
Permission Set Overview > System Permi System Permissions	Save Cancel
,	J
System Permissions	J

- **d.** Save your changes.
- 4. Assign the permission set to each mobile worker.

## Configure Appointment Assistant Settings for Contactless Signature

Make sure that the Appointment Assistant settings are configured.

- 1. Check if Appointment Assistant is configured in your org.
  - a. From Setup, in the Quick Find box, enter *Field Service*, and then select **Field Service**. Settings.
  - **b.** If the Appointment Assistant section is filled in, you're all set.
- 2. If it isn't configured, see Configure Field Service Settings for Real-Time Location.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To configure the Appointment Assistant settings:

• Field Service Appointment Assistant

## Add Contactless Signature to Your Experience Builder Site

To enable Appointment Assistant Contactless Signature, add it to your Experience Builder site.

- From Setup, in the Quick Find box, enter *Digital Experiences*, and then select All Sites.
- 2. In the row for your site, click **Builder**.
- 3. Add the Contactless Signature component.
  - a. From Experience Builder, click Components .
  - **b.** From Custom Components, locate the Contactless Signature component.
  - c. Drag the component onto the site.

🗲 Contactless	
Almost done	+ 8
Review your documents, enter your name, and sign.	
Service Report Jan 01 2021 • PDF	
"Full Name	
Enter your name	
Use my name as my signature	
Signature	
Sign he	re

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Guest User license is required.

### **USER PERMISSIONS**

To add components to sites:

Create and Set Up
 Experience Sites AND
 View Setup and
 Configuration

**d.** To open the settings panel, click anywhere in the Contactless Signature component.



- e. A default page title is provided. To use your own text, enter it in the Page Title field.
- f. For Customer Confirmation Text, review the suggested text, and replace it as needed.
- 4. Enable guest user permissions.
  - a. From Experience Builder, click Settings .
  - **b.** Enable public access.

5	Settings	General	×
1	General	View and edit the main properties of your site.	
	Theme Languages	Site Details Template	
	Navigation	Build Your Own	
	CMS Connect	Public Access	
	Advanced	Guest users can see and interact with the site without logging in	
	Security	Site Title	
	Developer		
	Updates	Published Status Published: https://lastmile.stmfa.stm.force.com/aa/s	
		Guest User Profile	
		Configure access for guest or unauthenticated users. Learn More <u>Profile</u>	

c. In Guest User Profile, click <Your Site Name> Profile.

Settings	General	
General	View and edit the main properties of your site.	
Theme	Site Details	
Languages	Template	
Navigation	Build Your Own	
CMS Connect	Public Access 0	
Advanced	Guest users can see and interact with the site without logging in	
Security	Site Title	
Developer	aa	
Updates	Published Status	
	Published: https://lastmile.stmfa.stm.force.com/aa/s	
	Guest User Profile	
	Configure access for guest or unauthenticated users. Learn More <u>Profile</u>	

- **d.** Grant read permission.
  - a. From Profile Detail, click Edit.
  - b. Under Standard Object Permissions, grant read permission for Document Recipients, Service Appointments, and Work Orders.
  - c. Save your changes.
- e. Enable the Apex classes.
  - a. From Enabled Apex Class Access, click Edit.
  - **b.** Add these Apex classes: FSAA.TouchlessSignEncryptionService and FSAA.TouchlessSignServiceReportHandler.
  - c. Save your changes.
- **f.** Set field-level security.
  - **a.** Under Field-Level Security, click **View** next to Document Recipient.
  - b. Click Edit.

- c. Grant read access to the Status field.
- d. Save your changes.
- g. Grant permission set license assignments.
  - a. From Profiles, click View Users, and then click the user's name.
  - **b.** From Permission Set License Assignments, click **Edit Assignments**.
  - c. Select Field Service Guest User.
  - d. Save your changes.
- **h.** Grant permission set assignments.
  - a. From Permission Set Assignments, click Edit Assignments.
  - **b.** Add the Field Service Guest User Permissions permission set.
  - c. Save your changes.
- 5. Publish the site.

## Create a Sharing Rule for Contactless Signature

Add a sharing rule to share service report records with the guest users.

- 1. From Setup, in the Quick Find box, enter Security, and then select Sharing Settings.
- 2. For manage sharing settings, select **Document Recipients**.

Sharing Settings
こうしょう アンマン・シーン しょうしょう アンマン しょうしょう しょうしょう
Sharing Settings Help for this Page \varTheta
This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to <u>Background Jobs</u> to monitor the progress of a change to an organization-wide default or a parallel sharing recalculation.
Manage sharing settings for: [Documer Recipients V]

- 3. Under Sharing Rules, click New.
- 4. For Rule Type, select Guest user access, based on criteria.
- 5. Enter the sharing criteria.
  - a. For Field, select Status.
  - **b.** For Operator, select **not equal to**.
  - c. For Value, enter *Completed*.
- 6. Select to include records owned by high-volume users.
- 7. Share the rule with **<Your Site Name> Site Guest User**.
- 8. Save the rule.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create a sharing rule:

Customize Application

## Create a Message Template for Contactless Signature

Create a template for the message sent to customers for signing the service report.

- 1. From Setup, in the Quick Find box, enter Messaging, and then select Messaging Templates.
- 2. To create the template, click New Template.
- **3.** In the Information area, enter the template name, developer name, and the message that the customer receives.
- **4.** Add the URL placeholder to your message. The URL enables customers to navigate to the Experience Builder site that you configured for service report details and signatures.
  - a. For Related To, select Document Recipient.
  - **b.** For Field, select **Digital Signature URL**.
  - c. Click Insert.

The URL placeholder looks like
this: { !DocumentRecipient.DigitalSignatureUrl }

- 5. In the Channels area, select one or more channels.
- 6. Save your changes.

## Set Up Contactless Signature Flows

Create your own version of the flows based on the templates in the Appointment Assistant package.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. To create your own copy of the **Create Service Report and Document Recipient** flow, open the flow, click **Save As**, and activate the flow.
- 3. Add your site's URL to your Generate and send URL to Contact flow.
  - a. In Experience Builder, click Settings 🝙
  - **b.** From Published Status, copy your site's URL.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

### USER PERMISSIONS

To create a message template:

Configure Messaging

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

•	Settings	General
1	General	View and edit the main properties of your site.
=	Theme	Site Details
	Languages	Template
\$	Navigation	Customer Service
	Mobile Publisher	Public Access  Guest users can see and interact with the site without logging in
	SEO	
	CMS Connect	Site Title Contactless Signature
	Advanced	
	Security & Privacy	Published Status Published: https://example.force.com/ContactlessSignature/s
	Developer	Guest User Profile
	Updates	Configure access for guest or unauthenticated users. Learn More Contactless Signature Profile
		Topics
		Navigational Topics Create and edit the topics that appear in your site's navigation menu. Then select topic banner images. Set Navigational Topics 🗳

- c. Open the Generate and send URL to Contact flow.
- **d.** In the flow, open the **Get URL** apex action.
- e. In SiteURL, this URL appears: ?drld={!\$Record.Id}&expiration=60&type=Default

Add your site's URL at the beginning. For example: https://example.force.com/ContactlessSignature/s?drld={!\$Record.ld}&expiration=60&type=Default You can leave the rest of the URL as is, or you can change these details.

- Expiration—60 is the number of minutes the URL is valid for from the time it's generated. You can change this number according to your needs.
- Type—*Default* is the signature type defined in your service report template. If you're not using the default type of digital signature, change the type to the one that's used in your service report.
- 4. To use email, click Save As, and activate the Generate and send URL to Contact flow.
- 5. To use SMS, delete the Send URL action, and create a new action.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - **b.** Under Interaction, select **Action**.
  - c. In the Action field, enter *Messaging Notification*.
  - **d.** Turn on these options to include them.
    - Context Record ID
    - Recipient Phone Number
    - Recipient Record ID
  - e. Fill in these fields.

- Label—A name you choose
- API Name—A name you choose
- Messaging Channel Unique Name—Developer name of your Contactless Signature messaging channel
- Messaging Template Unique Name—Developer name of the Messaging template that you created for Contactless Signature messages
- Context Record ID—The Document Recipient ID
- Recipient Phone Number—The contact phone number used for sending the message. To populate this field, enter *contact*, and select **Contact from Get\_Contact**. Then select the required phone field. For example, if you select Mobile Phone, the field looks like this: { ! Get\_Contact.MobilePhone }
- Recipient Record ID—The RecipientId from the DocumentRecipient record
- f. Click Done.
- g. Click Save As, and activate the Generate and send URL to Contact flow.

## Add a Quick Action for Contactless Signature

Create an action to send customers a link to the Contactless Signature page.

- 1. Create the action that shares the service report with the customer.
  - **a.** From the Object Manager in Setup, choose the object that includes the contact information and the service report (Service Appointments, Work orders, or Work Order Line Items).
  - b. Click Buttons, Links, and Actions.
  - c. Click New Action.
  - d. For Action Type, select Flow.
  - e. For Flow, select your copy of the Create Document Recipient and Service Report flow.
  - f. Fill in the rest of the fields, and save your changes.
- 2. Add the action to the mobile layout.
  - **a.** From the Object Manager, click **Page Layouts**, and open the mobile layout.
  - b. From the layout editor, select Mobile & Lightning Actions.
  - c. Drag your action into the Salesforce Mobile and Lightning Experience actions.
  - d. Save your changes.

### SEE ALSO:

Connect a Flow to the Field Service Mobile App

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To create quick actions and add them to page layouts:

Customize Application

## Expose the Document Recipient Object's Status Field

The Document Recipient object's Status field must be visible for the Contactless Signature flow.

- 1. From Setup, go to the Object Manager tab.
- 2. In the Quick Find box, enter *Document Recipient*, and then select **Document Recipient**.
- 3. Click Fields & Relationships, and then select Status.
- 4. Click Set Field-Level Security, and make the field-level security visible for all profiles.

# Set Up Surveys for Field Service Appointment Assistant

Send Salesforce Surveys to customers to get their feedback after an appointment. Salesforce Surveys requires a license that isn't integrated with the Appointment Assistant license. You can also choose to integrate with GetFeedback.

Before you set up the flow for Salesforce Surveys, you must:

- Enable Salesforce Surveys.
- Grant permissions that allow your customers to access the survey. See Give Guest Users Permission to Respond.
- Create a Salesforce Survey that you can send to your customers. See Create a Survey.
- Add a custom field to the Service Appointment object as a placeholder for the link to the survey.

To set up the flow to send Salesforce Surveys, complete these steps.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- 2. Click New Flow.
- 3. Select Record-Triggered Flow, and click Create.
- **4.** In the Configure Start window:
  - a. In Object, enter Service Appointment.
  - **b.** In Trigger the Flow When, select **A record is updated**.
  - c. In Condition Requirements, select All Conditions Are Met (AND).

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

The Field Service Appointment Assistant managed package and permission set license are required.

### USER PERMISSIONS

To customize field settings:

Customize Application

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Available only if Digital Engagement is enabled.

### USER PERMISSIONS

To set up surveys:

 System Administrator profile

- d. For Field, enter *Status*.
- e. For Operator, select Equals.
- f. For Value, enter *Completed*.
- g. In When to Run the Flow for Updated Records, select Only when a record is updated to meet the condition requirements.
- h. Click Done.
- 5. Create a resource for the Experience Site name.
  - a. From the Toolbox, click New Resource.
  - **b.** For Resource Type, select **Variable**.
  - c. For API name, enter *SiteName*.
  - d. For Data Type, select Text.
  - e. In Default Value, enter your Experience Site name.
  - f. Click Done.
- 6. Create a resource for the survey ID.
  - a. From the Toolbox, click New Resource.
  - b. For Resource Type, select Variable.
  - c. For API name, enter *SurveyID*.
  - **d.** For Data Type, select *Text*.
  - e. In Default Value, enter your survey record ID.

Note: To find your survey record ID, from the App Launcher, find and select **Surveys**, and click the name of your survey. Then, copy the ID from the URL.

- f. Click Done.
- 7. Get the Experience Site ID.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - b. Under Data, select Get Records.
  - c. Enter a name for the label. API Name is populated based on the label name.
  - d. For Object, select Network.
  - e. In Condition Requirements, select All Conditions Are Met (AND).
  - f. For Field, enter Name.
  - g. For Operator, select Equals.
  - h. For Value, enter the resource that you created for the Experience Site name.
  - i. For How to Store Record Data, select Choose fields and assign variables (advanced).
  - j. For Where to Store Values, select In separate variables.
  - k. For Field, select Id.
  - I. For Variable, click in the field and select New Resource.
    - For Resource Type, select Variable.
    - For API name, enter *SiteID*.

- For Data Type, select **Text**.
- Click Done.
- m. Click Done.
- 8. Create and save the Survey Invitation object.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - **b.** Under Data, select **Create Records**.
  - c. Enter a name for the label. API Name is populated based on the label name.
  - d. For How to Set the Record Fields, select Use separate resources, and literal values.
  - e. For Object, select Survey Invitation.
  - **f.** Set the field values.

Field	Value
CommunityId	← A <sub>a</sub> CommunityId ×
Field	Value
Name	← A <sub>a</sub> \$Record > Service Appointment ID ×
Field	Value
OptionsAllowGuestUserResponse	
Field	Value
ParticipantId	← A <sub>a</sub> \$Record > Contact ID > Contact ID ×
Field	Value
Surveyld	← A <sub>a</sub> SurveyId ×

- g. Select Manually assign variables.
- h. For Variable, click in the field and select New Resource.
  - **a.** For Resource Type, select **Variable**.
  - **b.** For API name, enter *SurveyInvitationID*.
  - c. For Data Type, select Text.
  - d. Click Done.
- i. Click Done.
- 9. Create and save the Survey Subject to link the survey to the service appointment record.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - b. Under Data, select Create Records.
  - c. Enter a name for the label. API Name is populated based on the label name.
  - d. For How to Set the Record Fields, select Use separate resources, and literal values.
  - e. For Object, select Survey Object.
  - f. Set the field values.

Set Field Values for the Survey	Subject
Field	Value
SubjectId	← A <sub>a</sub> \$Record > Service Appointment ID ×
Field	Value
Name	← A <sub>a</sub> \$Record > Service Appointment ID ×
Field	Value
Parentid	← A <sub>a</sub> surveyInvitationId ×

### g. Click Done.

10. Get the Survey Invitation, and save the survey link.

- **a.** To add an element to the flow, click (+).
- b. Under Data, select Get Records.
- c. Enter a name for the label. API Name is populated based on the label name.
- d. For Object, select Survey Invitation.
- e. In Condition Requirements, select All Conditions Are Met (AND).
- f. For Field, enter Id.
- g. For Operator, select Equals.
- **h.** For Value, enter *SurveyInvitationId*.
- i. For How to Store Record Data, select Choose fields and assign variables (advanced).
- j. For Where to Store Values, select In separate variables.
- k. For Field, select InvitationLink.
- I. For Variable, select SurveyInvitationLink.
- m. Click Done.
- 11. Update the Service Appointment custom field that you created to hold the survey invitation link.
  - **a.** To add an element to the flow, click  $\oplus$ .
  - b. Under Data, select Update Records.
  - c. Enter a name for the label. API Name is populated based on the label name.
  - d. For Field, select the custom field that you created on the Service Appointment object.
  - e. For Value, select SurveyInvitationLink.

Set Field Values for the Service Appointment Record			
Field		Value	
Survey_Invitation_Link_c	€	{!SurveyInvitationLink}	Q

#### f. Click Done.

**12.** Create a messaging template.

- a. From Setup, in the Quick Find box, enter Messaging, and then select Messaging Templates.
- **b.** To create the confirmation template, click **New**.
- c. In the Information area, enter the template name, developer name, and the message that the customer receives.

- d. Add the URL placeholder to your message. The URL enables customers to navigate to the Experience Site that you configured.
  - a. For Related To, select Service Appointment.
  - **b.** For Field, select a placeholder for the survey link.
  - c. Click Insert. The URL placeholder is added to the message.
- e. In the Channels area, select one or more channels.
- f. Save your changes.

**13.** Send an SMS with a link to the survey.

- **a.** Open the survey flow.
- **b.** To add an element to the flow, click  $\oplus$ .
- c. Under Interaction, select Action.
- d. For Action, select Messaging Notification.
- e. Enter a name for the label. API Name is populated based on the label name.
- f. For Messaging Channel Unique Name, enter the messaging channel's developer name.
- g. For Messaging Template Unique Name, enter the messaging template's developer name.
- h. Include the Context Record ID, and then select Record.Id.
- i. Include the Recipient Phone Number, and then select Record.Contact.MobilePhone.
- j. Include the Recipient Record ID, and then select Record.Contact.Id.

### k. Click Done.

Set Ir	nput Values	
Aa	<ul> <li>Messaging Channel Unique Name</li> </ul>	
	Text_FR_33755541137	
A <sub>0</sub>	* Messaging Template Unique Name	
	Survey_Message	
Aa	Context Record ID	
	{!\$Record.ld}	Include
A <sub>a</sub>	ConversationBroadcast Record ID	Don't include
Aa	Recipient Phone Number	
	{!\$Record.Contact.MobilePhone}	Include
A <sub>3</sub>	Recipient Record ID	
	{!\$Record.Contact.Id}	Include
:=	Triggered Outbound Type	Don't include
		Cancel Done

**14.** Save and activate the flow.

# Integrate Pay Now with Field Service Appointment Assistant

Create a flow that easily enables your customers to pay for services through a provided link, eliminating the need to contact customer services.

Before you begin, complete these steps.

- Set up Salesforce Payments.
- Set up Salesforce Pay Now.

Set up a flow that sends customers a payment link.

- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
- 2. Click New Flow.
- **3.** Select what triggers the flow. For example, set up a flow that's triggered when the status of a Work Order changes to Completed.

To track the payment's intent, we recommend connecting the triggered object, in this example Work Order, to the Payment Link object.

**4.** Add an element that gets the Merchant Account Payment Method Set record. If multiple records exist, make sure that only one is retrieved. For example, get the last modified record.

Only the last modified Merchant Account Payment Method Set that isn't deleted and has a Payment Method Set Key is fetched. If multiple Merchant Account Payment Method Set records are active, set up the component to fetch the correct one.

- 5. Add an element that creates a payment link record.
  - **a.** Determine where the amount is taken from. In our example, it can be taken from the Total Amount field on the work order.
  - **b.** Use the Merchant Account Payment Method Set as the payment method set ID.
  - c. Set the status to Active.
  - d. Set the Usage Type to Single Use.
  - e. Enter the connected object, for example, Work Order ID.

To track the payment's intent and the links generated to collect payment, we recommend adding a connection between the Payment Link object and the relevant object, in our example, the Work Order.

6. Add an element that sends the customer an email or an SMS that includes the Payment URL field from the Payment Link object.

Here's an example of what the flow looks like.

### EDITIONS

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Salesforce Payments is available in **Enterprise** and **Unlimited** Editions.

Salesforce Payments and Pay Now licenses are required.

### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow



# Field Service Mobile App

The Field Service mobile app for Android and iOS is an all-in-one tool optimized for a modern mobile workforce. Designed as an offline-first app, you can work and have your changes saved without internet connectivity. And the app is highly customizable to meet your business needs.

Note: The Field Service Mobile App isn't available in the Apple App Store in mainland China.

Review this table to learn what the app has to offer. If you aren't yet using Field Service in Salesforce, see Set Up Field Service before getting started with the app.

Feature	Description
Appointment Assistant	Give customers temporary, live tracking of Salesforce Field Service mobile workers.
Chatter	Communicate with dispatchers, partners, and customers using Chatter.
Configurable actions	Configure quick actions to help users quickly complete common tasks, pass record data to other apps, and build flows to guide your team through collecting information and finalizing jobs.
Configurable layouts	Flexible layouts let you choose what record information to display to your users.

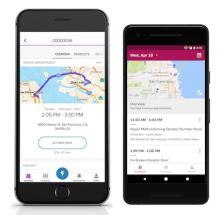
### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

Feature	Description	
Custom branding	Brand the app to give it your company's look and feel.	
Einstein: Copilot	Ask Einstein to find records, summarize records, and gather information in a conversational and intuitive experience on the Field Service mobile app. Use Einstein on the Field Service mobile app as soon as it's enabled for your Salesforce org.	
Einstein: Pre-Work Brief	Show mobile workers an Al-generated brief that tells them everything they need to know about their upcoming work order.	
Geolocation tracking	Keep tabs on service resources and enable smarter scheduling with resource geolocation tracking.	
Inventory tab	Let your team manage track consumption, request products, and view their inventory from the app.	
Measure lengths	Use augmented reality to measure between two or more points directly from the Field Service mobile app.	
Offline capability	The app works offline, so mobile workers can complete their work even with limited or no network connectivity.	
Push notifications	Push notifications help your mobile workforce stay up to date, making sure they never miss an important event.	
Quoting	With the Field Service Plus license, you can access the Quote object, which lets you upsell your business. For access to CPQ, an additional license is required.	
Salesforce Knowledge integration	Attach specs, instructions, and best practices to work orders and work order line items to keep relevant information at your team's fingertips.	
Service reports	Create previewable service reports summarizing field service visits. Seal the deal by capturing customers' signatures on the reports.	
Site user access	Give members of your Experience Builder site—like contractors—custom access to your field service operation.	
Work order overview screen	Help your team quickly find the information they need to complete assignments. The work order overview screen displays information about a work order's service appointments, line items, asset history, and more.	



#### Move to Lightning Data Service for Field Service Mobile

Lightning Data Service is an updated technology within the Field Service mobile app. Together with Lightning Web Components (LWCs), you get a powerful way to customize the app and use its latest features, all through using a simple setup.

#### Field Service Mobile App Requirements

Learn about the mobile app's device, connectivity, edition, and license requirements.

#### Field Service Mobile App Considerations

Review considerations for the Field Service mobile app for Android and iOS.

#### Offline Considerations in the Field Service Mobile App

Your field service workers' productivity doesn't have to stop when there's no connectivity. Learn how to use the Field Service mobile app when offline.

#### Field Service Mobile Security

Protect and safely store data that is gathered from the Field Service mobile app (Android and iOS).

### Field Service Mobile App Updates

Stay in the know about the Field Service mobile app releases. This topic includes information on the mobile app release cadence for major, patch, and daily releases (also known as emergency releases), plus information on testing and beta periods.

### Field Service Mobile Beta and Early Adopters Program

By participating in the Field Service Mobile Beta and Early Adopters program, you can test new versions of the app before adopting them.

### Supported Data Types in the Field Service Mobile App

Learn which data types are supported in the Field Service mobile app for Android and iOS.

#### Supported Barcodes

Learn about the barcodes that are compatible with the Salesforce Field Service mobile app.

Measure Lengths with Augmented Reality on the Field Service Mobile App

Mobile workers can use augmented reality to measure between two or more points directly from the Field Service mobile app.

### Initial Field Values in the Field Service Mobile App

The initial value shown in a field when running a quick action depends on several factors.

### Data Capture (Beta)

With the Data Capture flow type in Flow Builder, create dynamic forms that work online or offline.

#### Download the Field Service Connected App

Before you configure user access and customize the Field Service mobile app, download the connected app.

#### Salesforce Field Service

### Give Users Access to the Field Service Mobile App

To give your mobile workforce access to the Field Service mobile app, set them up with the right user license and permissions. These steps also apply to Experience Builder site users.

Generating Revenue from the Field Service Mobile App

Give your mobile workers ways to upsell your business directly from the app.

#### Customize the Field Service Mobile App

Learn how to customize the Field Service mobile app's screens, actions, and branding settings, and create unique mobile experiences for different user profiles.

#### Using the Field Service Mobile App

Learn how to install and log into the app, adjust in-app settings, and complete common tasks from the app.

#### SEE ALSO:

Field Service Mobile App Considerations Field Service Mobile App Requirements Using the Field Service Mobile App *Trailhead*: Boost Field Service with Mobile

## Move to Lightning Data Service for Field Service Mobile

Lightning Data Service is an updated technology within the Field Service mobile app. Together with Lightning Web Components (LWCs), you get a powerful way to customize the app and use its latest features, all through using a simple setup.

Lightning Data Service is a caching mechanism crucial for loading and displaying LWC components and new features in the app. We redesigned the app's architecture around this unified cache that powers all app experiences. To access the new architecture and features, you must enable the Lightning Data Service permission set, or enable it when you set up your org, even if you don't plan to create your own LWCs.

### **EDITIONS**

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

Note: All orgs will be auto-migrated to Lightning Data Service by Spring '26. We recommend customers begin preparations and testing as soon as feasible. Lightning Data Service is enabled by default for new orgs sometime after Winter '25 is released, but before Spring '25 is released.

## Get Started

To take advantage of all Lightning Data Service and LWCs have to offer, complete the steps in either of these options.

Option 1: LWC User Level Permissions

Define a Permission Set for Your Org

Assign the Permission Set to a Mobile User

Option 2: LWC Org-Wide Enablement

Use the Enable Lightning Mode setting.

## Learn About the Benefits, Preparations, and Changes with Lightning Data Service

Lightning Data Service has many benefits, but you can expect some changes to the app after you enable the LWC permission set. These changes can affect your preexisting Flow customizations. Be prepared to do additional testing and tweaking to some parts of the app that use Flows and data priming for offline use.

## Key Benefits

These Field Service features are available only with Lightning Data Service.

- LWC extensibility: Customize actions and create custom LWC tabs.
- Tab navigation customization: Add new list views and tailor tab navigation.
- Global search: Configure a new LWC tab in custom navigation to search against any object in the local cache, making it easy to find items in one place.
- High Volume Briefcase (pilot Summer '24): Prime up to 400,000 records, significantly more than the 50,000 record limit with standard briefcases.
- Data Capture (beta Winter '25): Use dynamic forms with field-level rules, branching logic, and custom UI support to streamline data collection in the field. Develop these forms quickly and easily in Flow Builder.
- Al features:
  - Pre-Work Brief: Get a concise overview of the tasks at hand, with customizable prompts to fit your work processes.
  - Einstein Copilot: Add a conversational AI assistant to the Field Service app to boost productivity, reduce service times, and improve first-time fix rates.
- Document Builder: Create richly formatted and branded PDF service documents, translate them, collect signatures, embed images, and generate previews on the desktop site and the mobile app.
- Revenue generation: Use a flow template that guides mobile workers through creating leads and opportunities from the app, without contacting customer services.
- Performance and experience improvements: See Lightning Data Service.

## **Recommended Preparation**

Make sure you're ready for Lightning Data Service to achieve optimal performance.

- Check device requirements: As we add more advanced features and scale the app for offline use, we recommend using the devices listed in Field Service Mobile App Requirements on page 808. Ensuring sufficient CPU and memory capacity is important for a good user experience. Assess your devices for RAM and CPU requirements to meet the minimum standards, and review the battery limitations of mobile devices.
- Review flow and priming changes: In some cases, small adjustments to your flows and priming strategy are necessary.
  - We recommend that you avoid flows that rely on Apex or record triggers. Record operations are routed through the LDS draft queue, which is frequently processed in the background. How often it runs depends on a variety of factors, including available system resources. We cannot guarantee that the draft queue is processed instantly.
  - Avoid depending on fields during flow execution that are updated by non-mobile sources.
  - Avoid deep linking out of the app in the middle of a flow.
  - We recommend that you retest all of your flows. By doing this work in a sandbox environment, you can prepare your Field Service configuration for the latest app features. Also, review the flows section in Field Service Mobile App Considerations on page 810 and Offline Considerations on page 819 to ensure your flows and priming strategies follow the recommendations and limitations. If your LWC data queries are set up correctly, data requested by global LWCs and LWCs on work order and service appointment records are automatically primed. See Use the Wire Service to Get Data.

## **Considerations and Limitations**

Review how Lightning Data Service can impact functionality critical to your business.

## **Developer Considerations**

- Avoid using Apex: Instead, use GraphQL (GQL) or the Lightning Data Service wire adapter. See Use the Wire Service to Get Data. GQL updates data in the local cache, allowing LWCs to function offline. Remember, mobile connectivity isn't always reliable, so GQL offers better performance in low-connectivity situations.
- Feature requests: If you find that Apex supports certain features or processes that GQL doesn't, submit a feature request through Salesforce Idea Exchange.
- Code optimization: Optimize your code to work with Lightning Data Service, ensuring a smooth user experience. See Understand the Wire Service and Graph QL Wire Adapter Best Practices.

## Limitations

Note these limitations when enabling Lightning Data Service.

- The Field Service mobile app can experience delays in areas with low connectivity. When a connection is available, the app tries to fetch the latest data, which can result in longer loading times as it waits for data fetches to finish before letting the user proceed.
- Manage memory usage proactively by priming only the data you need. Avoid using a large number of related lists on service appointment and work order records, and limit attaching numerous or large files to primed objects.
- LWC modules can take a while to load during priming, and work order loading times can be lengthy if priming is still in progress. Optimize performance for your users by considering these factors.
- Mobile Extension Toolkit (MET) isn't supported.

# Field Service Mobile App Requirements

Learn about the mobile app's device, connectivity, edition, and license requirements.

## Devices

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.

Supported Devices	Recommended Devices	Supported Mobile Operating System	Other Requirements
Android: All major Android devices with at least 4 GB of memory are supported.	Android: All major Android devices with at least 6 GB of memory are supported. Android devices with 8 GB of RAM are recommended if you need to prime more than	Version 9.0 and later	Google     Play     Services     version     18.0.0 and     later

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

Supported Devices	Recommended Devices	Supported Mobile Operating System	Other Requirements
	20,000 records for offline use via Offline Briefcase.		<ul> <li>Minimum Android WebView version is 90.0</li> <li>Wi-Fi</li> <li>GPS</li> </ul>
iOS • iPad:	iOS • iPad:	Version 16.0 and later	None
<ul> <li>iPad 10th generation and later</li> <li>iPad Air 4 and later</li> <li>iPad Mini 6 and later</li> <li>iPad Pro 2nd generation and later</li> <li>iPhone: <ul> <li>iPhone XS and iPhone XS Max</li> <li>iPhone 11, iPhone 11 Pro, and iPhone 11 Pro Max</li> <li>iPhone 12 Mini, iPhone 12, iPhone 12 Pro, and iPhone 12 Pro Max</li> <li>iPhone 13 Mini, iPhone 13, iPhone 13 Pro, and iPhone 13 Pro Max</li> <li>iPhone 14, iPhone 14 Plus, iPhone 14 Pro, and iPhone 14 Pro Max</li> <li>iPhone SE 3rd generation and later</li> </ul> </li> </ul>	<ul> <li>iPad Air 5th generation and later</li> <li>iPad Pro 11 inch, 2nd generation, and later</li> <li>iPad Pro 12.9 inch, 4th generation, and later</li> <li>iPhone: <ul> <li>iPhone 12 Pro and iPhone 12 Pro Max</li> <li>iPhone 13 Pro and iPhone 13 Pro Max</li> <li>iPhone 14, iPhone 14 Plus, iPhone 14 Pro, and iPhone 14 Pro Max</li> </ul> </li> <li>iPhone 13 Pro and later is recommended if you need to prime more than 20,000 records for offline use via Offline Briefcase.</li> </ul>		

Because we enhance functionality with every release, we support the latest version of the Field Service app available in Google Play or the App Store only.

Note: To protect your company data, we only support OS versions that get security updates from the device manufacturer.

For optimal performance, keep your mobile devices' operating systems updated and upgrade to the latest model of devices as allowed by your mobile plan. When you update the Field Service mobile app, sometimes you must remove support for older operating systems, and newer operating systems don't always perform well on older devices.

Salesforce Customer Support uses commercially reasonable efforts to troubleshoot issues with the Field Service app, provided:

- A user's device meets current minimum platform requirements
- Field Service app users have the most recent version installed

## Wireless Connection

The Field Service app is optimized for offline performance, but a Wi-Fi<sup>®</sup> or cellular network connection is needed for the app to communicate with Salesforce. For cellular connections, a 3G network or faster is required. For the best performance, we recommend using Wi-Fi or LTE.

### SEE ALSO:

Give Users Access to the Field Service Mobile App Field Service Mobile App Considerations Field Service Mobile App Updates Field Service Mobile Beta and Early Adopters Program

# Field Service Mobile App Considerations

Review considerations for the Field Service mobile app for Android and iOS.

Note: The Field Service Mobile App isn't available in the App Store in mainland China.

## Service Appointments

- The Recently Viewed service appointments list view shows all service appointments assigned to a user even if the user hasn't viewed them.
- Service appointment list views of more than 2000 don't display labels as dropdown values on the mobile app's Schedule tab.
- The schedule list isn't refreshed unless the ScheduleUpdateFreq timeout value is reached.
- If you're using Appointment Assistant, when a mobile worker manually updates the status of a service appointment by directly editing the record, Appointment Assistant is triggered. It's also triggered when the appointment gets updated through a flow or an automatic status change. When a Lightning web component updates the same status, Appointment Assistant isn't triggered.
- The mobile app fetches a maximum number of 1000 service appointments from all service appointment list views.
- When you view a service appointment from your desktop, the LastViewedDate field is updated.

## Document Builder

- For a Work Order template to work on the Field Service mobile app, you must also create a Service Appointment template.
- For a parent work order with a child service appointment, mobile users can't access the Work Order template from the template selector. You must create a Service Appointment template even if you don't want to use it. We suggest creating a Service Appointment template that's identical to your Work Order template to minimize confusion.
- You can't select different templates for drafts saved with Work Order or Work Order Line Item templates. You can select different templates only for drafts saved with Service Appointment templates.
- Only the language defined in the service report language field is available to the user at the time of priming.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### Service Reports

- Users can't select a template when creating a service report in the mobile app. Instead, a template is selected based on this order:
  - 1. The work order template
  - 2. The work type template
  - 3. The standard template
- Service report previews have these limitations:
  - Although users can make an offline request to generate a service report, the final PDF is created only when the user's device is online.
  - The app doesn't automatically get the latest data before generating a service report preview, so data in service report previews can be out of date. This limitation applies to online and offline service report previews.
  - If a reference field exceeds the maximum priming depth of 2, it isn't populated.
  - Formula field values can be inaccurate in a preview because they aren't dynamically calculated.
  - Roll-up summary fields are blank.
  - Related lists behave differently in mobile previews.
    - The order of records in related lists can differ between the preview and the printed report.
    - If a service report template includes a related list, the list populates only if it's on the page layout of the record that the service report is being generated for.
    - On the printed report, all related lists are printed. In the mobile preview, a related list must be on the preview page layout to appear on the preview.
  - These elements aren't visible:
    - Cases related list
    - Headers and footers
    - Organization fields
    - Certain data fields
    - Images in rich text fields on a service report template or service appointment, work order, or work order line item page layout
- The Digital Signature object **Place** field isn't supported.
- Text fields and rich text area fields are truncated to 255 characters. This limitation occurs on rich text area fields, other types of text fields, standard fields, and custom fields.
- A service report language pick list shows all supported languages, not only the active ones.
- Although the picklist values aren't translated in service report previews, they're translated into the supported language when the service report is generated.
- The signature image doesn't appear when mobile workers create multiple service reports offline from the same record on the Field Service mobile app.
- When mobile workers collect signatures on a service report from the Service Appointment object, the Client Signature button shows only on the Service Appointment overview. When mobile workers collect a signature for a service report from the service appointment's Action screen, the Client Signature button shows as "Default Signature."

## **Inventory Management**

• If you use the setting Enable Multiple Locations, the **Add** and **Add All** buttons are removed from the Product Required screen. Instead, manually add the required products for multiple inventory locations.

- When using multiple inventory locations, a maximum of 10 locations per location type are shown and primed.
- A maximum of 1,000 products are shown in inventory lists and is the maximum number of products that can be primed.
- When consuming a serialized product in the Field Service mobile app, a products consumed record without serial numbers is created. Mobile users can remove those records only if they've deleted permissions for products consumed.
- If a work order includes serialized products as required items, you can view the required products, but the **Add All Products Required** button is disabled.
- Only admin profiles and users can delete product consumed records for serialized products.

### Chatter

- The Feed tab in iOS is supported only on the work order, work order line item, service appointment, and case objects. The Feed tab in Android is supported only on the work order, work order line item, and service appointment objects.
- (Android only) Chatter is disabled when the app doesn't have internet connectivity.

## Knowledge

- (iOS only) If images in knowledge articles are hosted outside of Salesforce, they display normally. Images uploaded to Salesforce don't load correctly. As an alternative, we recommend using an image link that users can open themselves. You can avoid this issue by selecting the option to use POST requests for cross-domain sessions. Find this option on the **Session Settings** page in Setup.
- (iOS only) Some knowledge articles of supported UI languages, such as Japanese, don't show in the Field Service mobile app.
- (Android only) The Knowledge Article action isn't visible on the Work Order Overview screen. View knowledge articles using the related list.
- (Android only) In Knowledge Article details, field names such as Title don't display on Android devices.
- If a device is running in any of Salesforce's 26 supported languages, the app automatically translates knowledge articles to that language. If the device isn't running in a supported language, no knowledge articles are shown.
- Settings for optimized images are supported in files uploaded in mobile flows, but aren't applied to images uploaded in the Chatter Feed.

## Barcode Scanner

- For a list of supported barcodes, see Supported Barcodes.
- (iPad) Barcode scanning isn't supported in Split View.

## Briefcase Builder

- Related lists don't work offline when the records are primed with Briefcase Builder.
- The Product object in the Inventory tab isn't supported.
- Time sheets aren't supported for offline use via briefcase.
- The Inventory tab isn't available offline.

### Flows

- Automatic Screen Fields with fieldType = ObjectProvided isn't supported on mobile flows.
- Compound fields, for example street addresses, can't be used directly in mobile flows. To access this data, fields such as city and country that comprise the compound field must be used instead.

- Select formula functions and operators are available offline.
- Backslash \ characters, single quotes ( ' ), and multi-line strings aren't supported in flow formula fields.
- CRM Core App screen flows aren't supported in the Field Service mobile app. Only Field Service mobile flows are supported.
- Email alert actions aren't supported in flows.
- Paused flows aren't supported. If you left a flow in progress or exit the Field Service mobile app, you can't resume the flow where you left off.
- Flows with many CRUD operations can take a long time to process. To speed up this process contact Salesforce Support to request that the draft queue is paused.
- Flows cannot have dependencies on Apex or record triggers.
- Flows with deep links can cause issues and are not recommended at this time. If you must deeplink out of the flow, deeplink back into the Field Service mobile app without triggering another view. This should allow you to resume the flow and close it.
- The wasSelected operator can't be used in decisions.
- For eval() functions, the boolean values true and false are case-sensitive.
- Hardcoded ID values must be 18 digits long. 15-digit values aren't supported.
- Fault connectors aren't supported in flows.
- When uploading images in flows, the content document IDs parameter isn't supported. Admins must create a flow confirmation screen to show which images were uploaded. Videos and other file types aren't supported.
- Flows don't support the following elements. Adding these elements to a flow causes it to display an error.
  - Lightning components (except for file upload)
  - Output parameters on file upload except for "Uploaded File Names"
  - Choice resources with Display Text Input enabled
  - Actions with output parameters

**Note:** Some flows that have actions with output parameters don't cause an error immediately, but they're still not supported.

- Flows don't support the Section screen component.
- Flow picklists that include a default value aren't supported. If you choose a default value, it isn't shown as the default value in the picklist and isn't used in the mobile flow. To work around this issue, add a separate choice that is a constant equal to the value of the default value in the object's screen picklist value.
- In flows, radio button fields that aren't required allow the user to select from a list of values, including a --None-- option. --None-- is a null value that allows the field to be optional.
- Flow picklists use the values of the choice set from which the default value is assigned.
- Flow record variables require record fields to be accessed through their field API names. Use of field relationship names isn't supported.
- Record field lookups are limited to one level of indentation. If more levels are required, use assignment elements.
- Flow text areas have a 2,000-character limit.
- Using semicolons when defining user choices in flow checkbox groups and multi-select picklists isn't supported. If you use semicolons for user choices, the data doesn't render accurately.
- Record choice sets don't retain the value that is selected. A record choice set variable can't be used to determine what selection was made. However, the component used to make the selection, such as a picklist, saves that value for later use.
- Custom Logic and the or operator within Get elements and the record choice set variable aren't supported in the Field Service mobile app.
- When using a flow that has a subflow, returning to the main flow from the subflow using the Previous button discards entered data.

- Recently added records from the Field Service org don't show in mobile flows when using Flow Record Choice Set or the Get element to query from these records. To resolve this issue, log out and then back into the mobile app.
- Flows installed on the Field Service mobile app using a managed package result in an error. We recommend using an unmanaged package instead. This error only occurs on the mobile app.
- HTML text isn't supported in Flow builder.
- Mobile flows support only these global values:
  - \$Flow.CurrentDateTime
  - \$Flow.CurrentDate
  - \$GlobalConstant.EmptyString
- Flows on desktop and mobile don't support picklist default values that are derived from an object's picklist values.
- If a default value is assigned in the picklist component of the flow, then the values are populated from the default picklist field value and not the picklist choice set assigned to it.
- Running a flow as another user isn't supported.
- Only the following assignment operations for collections are supported:
  - Add
  - Equal
  - Equals Count
- Picklist values are expanded if there are five or fewer values or if the picklist is the only component on that particular flow screen. Otherwise, values are displayed as a dropdown list.
- When a Record Choice Set is used as a data list for a single item picklist in a flow, the screen doesn't display correctly. To work around this behavior, add additional items to the picklist.
- In mobile flow filtering, the user sees a related list instead of a picklist if these conditions are met:
  - The flow value store always has a specified parent ID (the parameter with ID passed in), unless the parent ID from the value store is nulled.
  - The user creates a screen step in the flow builder with a single field, and that field uses a single dynamic choice as choice reference. Additionally, the dynamic choice isn't a picklist and contains the parent record ID as a filter.
  - The parent record identified by the parent ID has a dynamic choice type configured as a related list.
- Flows can have up to nine conditions in a decision element.
- Record Choice Sets created using the AttachedContentDocument objects on a Work Order or other supported object don't work in the mobile app. The mobile app doesn't support showing a related list for files within a flow.
- When using the NOW () formula in fields, create a separate formula resource that resolves to NOW (), and use that resource in the validation field. Doing so ensures the latest timestamp is used on the flow launch.
- Flows retain variable values after they're entered. Clicking the **Back** button in a flow doesn't clear the value.
- In Field Service mobile app flows that use the Create Record element, the ID populates with the app's cache ID. This cache ID isn't the newly created record's ID. To access the cache ID in a flow on the app, you must turn on the option "Use separate resources, and literal values" in the Create Record element.
- Chaining of formulas in the same flow step isn't supported.
- Collection Choice Sets aren't supported in flows.
- Changing the name of or hiding navigation buttons in flows isn't supported in the Field Service mobile app.
- When a mobile flow contains an image, the BeforeInsert trigger in Apex can cause an error.
- To remove access to custom objects, log out and then back into the mobile app.

- Conditional visibility isn't supported, with the exception of Data Capture (Beta).
- The In and Not In operators in flows aren't supported in the Field Service mobile app.
- Dependent picklists are supported in mobile flows but aren't supported on the desktop site.
- Results for Get Record in a flow are cached locally. To access newly available records in the flow, log out and back in to the mobile app.
- Rich text in flows doesn't show color in the Field Service mobile app.
- A custom flow for login must be set up when the Session Activation Required permission is enabled for Field Service mobile users. Without a custom flow for login, mobile users lose access to the Service Resource object and can't log in to the mobile app.
- Flows that modify the Service Report Language field on the Work Order object don't work offline.
- New records created using a flow in the Field Service mobile app don't have the auto-number field data type's value populated. The field isn't populated, because the number is generated by the server during record creation and isn't available locally on the app.
- Flow Builder on web allows users to assign empty values for record fields and are treated as null. However, on mobile, any fields in the assignment block with empty values are ignored, and no empty values are specified.
- You can't update the chatter feed on a new record from a flow when LDS is enabled.

## Data Capture (Beta)

- You can only add create, update, or delete operations at the end of a Data Capture flow.
- The Get Records flow element has these limitations:
  - You can only select Choose fields and assign variables (advanced) under How to Store Record Data.
  - You can only select **All records** under How Many Records to Store.
- Only these operators are supported for the object filters.
  - Equal
  - Does Not Equal
  - Greater Than
  - Less Than
  - Greater Than Or Equal
  - Less Than Or Equal
- For the Create Records flow element, you can only create records manually, not from a record variable.
- For the Update Records flow element, you can only select Use the IDs and all field values from a record or record collection.
- For the Assignment flow element, collection related operators aren't supported.
- Only admin profiles and users with Manage Flow permissions can associate a Data Capture flow to the junction object.
- DateTime is converted based on the user's local timezone. The official engine changes the value for a DateTime field according to the user's local timezone. The online engine doesn't support the user's time zone. Instead, it converts the DateTime that the user inputs.
- Global variables aren't supported for Data Capture flow. See Flow Resources: Global Variables.

## Lightning App Extensions

• The Salesforce app can launch and accept parameters for Visualforce pages exposed as a Lightning Page Tab. However, the Lightning Page Tab name can't have any spaces in it.

## Lightning Web Components (LWCs)

- LWCs in Field Service Mobile do not fetch picklist values during priming. As a result, LWC page references aren't primed.
- Priming times when SLDS is enabled are significantly affected by the LWCs that are being primed. Customers who experience long priming times may have LWCs that trigger numerous adapter calls during Komaci priming.
- Service Appointments and Work Orders are not supported for LWC Quick Actions.
- Implement state saving in LWC actions to allow users to perform other tasks in the Field Service mobile app while an LWC action is running. Without state saving, if users leave the LWC action to perform other work in the web browser, Android devices will reset the in-progress LWC's state.
- Tabs containing content, such as forms that use LWCs, can reset and lose their content. On iOS, this issue occurs when switching between LWC tabs. On Android, it can happen when switching between any tab types and when rotating the device.

## **Quick Actions**

- In environments enabled with Salesforce Lightning Data Service, a quick action that relies on default values to modify or create a record honors only the default value if the field is added to the quick action layout. Additionally, the user must have edit permission for that field.
- For Salesforce Lightning Data Service-enabled environments, global quick actions don't refer to the record type fields.
- Lightning Component and custom override quick actions aren't supported.
- Quick action values aren't updated when working offline.
- Quick actions can override the permission "accurate record dates for offline", causing inaccurate logging after the app comes back online.
- Custom icons in quick actions aren't supported.
- Quick actions with default values can take up to a minute to render during poor or unstable network connectivity.
- Service Appointments and Work Orders aren't supported for LWC Quick Actions.

## **Resource Absences**

• If you haven't primed or viewed any resource absences, you receive a network error when you try to create and view resource absences offline.

## Work Orders

- To numerically sort work order line item records, use this format:
  - Add a zero, if needed, to create a two-digit number. For example, 02 correctly sorts before 12.
  - If 100 items or more are required, create a text field and add numeric values prepended by zeros to create a three-digit number. Then, sort on that field. For example, 002 and 012 correctly sorts before 100. However, Field Service on desktop doesn't support preceding zeros. To sort correctly on the desktop, define the sort order by 10 on a number field of a custom object, for example, 10, 20, 30.
- For the Overview tab to be visible, work order line item page layouts must include the Asset field and the Service Report related list.
- Searching the price book fails if you assign rich text area fields to the Product object's search layout.
- Work orders allow a maximum of 1,000 work steps per work order. However, the total length of all fields in the Work Order object must not exceed 20,000 characters. If you exceed this limit, some work steps don't appear in the mobile app.
- If sharing isn't enabled for the Work Order object, work orders disappear from the search list view in the Work Order lookup after the user logs out of the Field Service mobile app.

## **General Limitations**

- When displaying related lists in the mobile app, such as the work order line items for a work order, users see an accurate record count of up to 2,000 records. More than 2,000 records are indicated as 2,000+, but no more than 2,000 records are retrievable.
- Plain text fields no longer support rich text or HTML content.
- Time fields without a date aren't supported in the Field Service mobile app.
- Under the profile tab, only 10 resource absence records are displayed.
- The Notes related list isn't supported.
- Under the Files related list, only 50 files are displayed.
- Visualforce pages aren't supported in the app, including actions and Visualforce components on page layouts.
- Lookup filters aren't supported.
- Enhanced notes aren't supported.
- Users aren't able to change the ownership of objects like Service Appointments or Work Orders.
- In some countries, certain mapping features, such as driving directions and ETA, aren't supported for Apple or Google maps.
- Google Maps is the only supported mapping application for features in the Field Service app.
- If a user's device is offline, its location data can't be accessed. When the device is back online, its last known location is sent to Salesforce.
- The Contact Card section on the Work Order Overview screen displays the contact associated with the Service Appointment, rather than the Work Order. To view the Contact Card, make sure to populate the Contact field of the Service Appointment.
- Paging isn't supported for SOQL queries. The maximum number of records a query can return is 2,000.
- Formulas aren't supported on the Details tab.
- If a default list view is selected, all list views that a user has access to are shown in the app. There's no way to hide or suppress specific list views in the Field Service app.
- If a selected picklist value is inactive, it isn't shown in the Field Service app, but it's shown on the Field Service desktop application.
- If the launch field value passes a URL from a formula field value, App Extensions throw an error that a required app isn't installed.
- Default values in Time Sheet Entry fields don't populate on the Field Service mobile app.
- If the currency field is updatable, it's displayed as a number without a currency symbol and obeys the field decimal places setting. However, if the currency field isn't updatable, it's displayed as a number with a currency symbol and two decimal places only.
- When a currency field supports multiple currencies, only the set amount shows in the mobile app. Currency conversions aren't displayed.
- If the record type field isn't on the page layout when a resource absence is created, the default record type is automatically set. To work around this issue, add the Record Type field to the resource absence page layout.
- User Profile on the User page and RecordType on the Work Order Details page aren't supported as layout objects, but they can appear as links in the Field Service mobile app. Clicking these objects shows an error message and a blank screen.
- Record pagination isn't supported in the Field Service mobile app.
- Notification settings use the mobile settings assigned to the user initiating the request, not the user receiving the request.
- If an object hasn't been primed or previously accessed, including new records, it isn't visible from another object's UI.
- When launching the mobile app, the lock screen keeps the same screen orientation, which can't be changed by rotating the device. To change the lock screen orientation, close the mobile app, change to the desired orientation, then relaunch the mobile app.
- Mobile Extension Toolkit (MET) isn't supported in SLDS. Customers must migrate their MET to a Lightning web component (LWC) for use with SLDS.
- During OAuth 2.0 authentication, Salesforce creates a temporary short-term session to bridge the gap between login and the Salesforce authorization (Allow Access) screen. This temporary session, which uses a cookie, isn't tied to the OAuth refresh or access

token and therefore isn't invalidated at logout. Instead, the session remains valid until it expires. The most recently authenticated customer remains logged in until the temporary session expires and they're temporarily unable to log out. These sessions have an intentionally short lifetime, after which the user can log in normally.

- In environments enabled with SLDS, the field values OldValue and NewValue can't be loaded in Histories related records.
- Related lists don't show details of Salesforce objects that you can't include in a page layout, such as Work Order History.
- The Field Service mobile app doesn't support free-form text entries in picklists.
- If a network error occurs, the Field Service mobile app can attempt to recreate a link from a record to a content document resulting in the error message, "Document with ID XXXX is already linked with the entity with ID YYYY". This issue can also occur when uploading images in flows. To prevent these false error messages from showing, set the custom attribute **DUPLICATE\_AVOIDANCE** to *True*. This issue occurs only when Lightning web components aren't enabled.
- Apps that use Experience container aren't fully duplicated in Partial Copy, Developer Copy, or Developer Pro Copy sandboxes. Data is copied only in Full Copy sandboxes, which carries over to Experience container as well.
- When an image is stored in an embedded binary store from the feed tab, it isn't available in the Files related list.
- Biometrics aren't supported for the Field Service mobile app. Don't add the Biometric custom attribute to the connected app.
- Icons in the Field Service mobile app are not customizable.
- When you create Partial, Developer, or Developer Pro sandbox copies, only the metadata from the production org is copied, not the data. To ensure both metadata and data are copied, use a Full Copy sandbox.
- Backdating is available via record creation, not record updates. Use the permissions mentioned in this Knowledge Article.

### Android Only

- The Event Insights card is available only on Android devices.
- Some device makers prohibit using commas as a decimal separator in their standard app keyboards. To work around this issue, download a new keyboard app, or copy and paste the comma from another input in the application.
- By default, you must use a Lightning app extension to automatically open records in the Salesforce app.
- Features that use Google services like push notifications and Google maps aren't supported in China.
- Related list file previews are limited to .pdf, .html, and .txt file types. To view other file types you must have third-party apps installed. For example, to view spreadsheets you must download an application like Google Sheets.
- Dark mode isn't supported.
- Some Android devices running Android 11 reset flow states when the device screen is rotated. To avoid this issue, lock the device's screen rotation.
- Hex values defined in mobile settings must be six digits.
- Tabs that are customized using the Field Service Mobile App Builder don't maintain their current state when switching between tabs and when rotating the device. To avoid this issue, lock the device's screen rotation.

### iOS Only

- iOS devices automatically stay awake during priming without the user tapping the screen. If low power mode is on, the device doesn't stay awake during priming.
- Custom list views can take a minute or more to sync.
- Only plain text is supported for rich text fields.
- Default values aren't available in offline mode.
- Lookup fields like Account aren't supported on the Schedule, Work Order, and Work Order Line Item tabs.
- Custom override on actions isn't supported, including custom override on lookup logic.
- Apple limits what apps can do while in the background or when the device is locked, which is important when priming. Always prime to completion before going offline.

- In iOS14 and later, the Field Service mobile app doesn't comply with the default app settings you set. For example, if you choose Outlook or Gmail for email, Field Service ignores the setting and instead uses the iOS Mail app, which is the Field Service default.
- Actions in landscape orientation aren't supported. Actions are only shown in portrait mode.
- iOS has a 24-hour format setting that overrides other time settings regardless of the device's region or locale. This format override impacts some components, such as the date and time picker and flow fields.
- You can't copy and paste data from apps that aren't Salesforce, such as Safari, when DISABLE\_EXTERNAL\_PASTE is set to **TRUE** in the connected app settings.
- In iOS 15, the iPad calendar view doesn't show dots to indicate that a service appointment exists.
- In iOS, an ETA and driving directions are provided only if the user is within 1000KMs of the destination.

### SEE ALSO:

Field Service Limits and Limitations Field Service Mobile App Requirements View Knowledge Articles in the Field Service Mobile App

# Offline Considerations in the Field Service Mobile App

Your field service workers' productivity doesn't have to stop when there's no connectivity. Learn how to use the Field Service mobile app when offline.

The Field Service mobile app can work effectively when offline. You may notice some slight differences. For example, when you create an object offline, it doesn't display fully until your device syncs with the server.

The following topics describe how to prepare the mobile app for offline use, and what features work differently when offline.

Торіс	Description
Offline Priming	Before using the app offline, sync the app while online. To learn more, see Offline Priming on page 925.
Initial Field Values	The initial values shown in a field can be different when offline. To learn more, see Initial Field Values on page 833.
Flows	Flows cannot retrieve additional information beyond what's available in the cache. Offline execution may prevent some lookups from returning all the expected information. You can encounter an error in this situation.
Date/Time	• Date/Time fields sync to the server when the app comes back online. The date and time does not reflect the date and time when the record was created and/or updated.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

Торіс	Description
	• To reflect the actual creation or updated date and time, contact Field Service Support to enable the option Accurate Record Dates for Offline for your org.
	• If you use the 'NOW()' function with your Date/Time fields, the value still reflects the date and time the record synced to the server instead of the current date and time.
	• To keep the offline date/time value when a service appointment record is updated on the app, save the LastModifiedDate value to another date/time field in the same service appointment record.
	• The Date column in the service appointment History tab does not reflect the offline date/time that update was made on the app if a consecutive update is triggered. To retain the offline date/time value in such a case, save the LastModifiedDate value of that service appointment record to another date/time field in the same service appointment record.
Search Results	To access search results offline with Briefcase, first search when online to cache records.

#### SEE ALSO:

Work with Offline Priming in the Field Service Mobile App Initial Field Values in the Field Service Mobile App

## Field Service Mobile Security

Protect and safely store data that is gathered from the Field Service mobile app (Android and iOS).

The Field Service App is built with the Salesforce Mobile SDK. The Salesforce Mobile SDK provides a set of low-level services that include security and authentication to applications that are built using this framework.

For information about data protection regulations and Service Cloud, see Data Protection and Privacy.

## Local Encryption at Rest

Encryption boosts the security of your customers' data and helps you comply with privacy policies, regulatory requirements, and contractual obligations. Shield Platform Encryption and Field Audit Trail are supported for the following fields on work orders, work order line items, and service appointments:

- Description
- Subject
- Address (Street and City only)

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license. To encrypt these fields, add them to your Encryption Policy in Setup. The Subject and Address fields support both probabilistic and deterministic encryption, while the Description field supports only probabilistic encryption. If Field Audit Trail is enabled, you can set field history data retention policies for the fields whose data you want to retain.

#### Note:

- Encryption is not supported for the Latitude and Longitude fields, which could be used to pinpoint an address.
- When you encrypt a field, existing values aren't encrypted. Contact Salesforce for help with encrypting existing data.

Table 2: Offline Data		
Salesforce App	Field Service App	
Offline data is stored using Core Data, and encrypted using NSFileProtectionCompleteUntilFirstUserAuthentication. This authentication dictates how passcodes are exposed internally to access the offline data. The passcode for the offline data is removed from the local keychain when Salesforce is closed or running in the background. Salesforce offline data is only accessible when the app is open and in the foreground.		

### Table 2. Offline Date

### **Table 3: Files and Attachments**

Salesforce App	Field Service App
Files and attachments are stored on the device's file system in a double-encrypted format. The device's hardware encryption encrypts the files while the device is locked. In addition, Salesforce encrypts using an AES algorithm (128-bit block size and 256-bit key size). When the file is viewed, there's a temporary unencrypted copy kept on the file system (removed when the 'viewing' operation is complete).	Files are stored in an iOS sandboxed directory and are also encrypted by application encryption. While viewing, files are temporarily unencrypted in another sandbox directory, but are erased when the app is in the background or when the viewer is dismissed. Also, the temp directory is cleaned when the application is launched.

### **Table 4: Chatter Feed Data**

Salesforce App	Field Service App
Feed data is stored using Core Data, and encrypted using NSFileProtectionCompleteUntilFirstUserAuthentication. This authentication dictates how passcodes are exposed internally to access the feed data. The passcode for the feed data is removed from the local keychain when Salesforce is closed or running in the background. Salesforce feed data is only accessible when the app is open and in the foreground. Also, the feed data storage is time-based. The feed cache purges items older than one week, unless the remainder of feed items is fewer than 25 items. Also feeds that have more than 500 items have their excess items removed.	All Chatter feed data is stored with the Sqlcipher provider for Sqlite3. Cached data is purged based on a least-recently-used cache policy. In addition, Feed functionality is provided by a shared component, which makes the experience on iOS and Android the same.

## Server-Side Encryption at Rest

Salesforce provides encryption abilities for data at rest on the Salesforce servers. The Platform Encryption feature allows customers to create policies at the field-level to encrypt sensitive data. This feature supports custom objects, and a subset of standard fields on standard objects. As of the time of this writing, encryption is supported for some fields on the following standard objects: Account, Contact, Opportunity, Lead, Case, and Case Comment.

Custom fields on these or other objects can be encrypted assuming that they use data types that can be encrypted.

## **Encrypting Data in Transit**

Data transmitted to and from the Salesforce server is protected using SSL. Authentication, access controls, and digital signatures are protected using SHA-256.

## User Authentication

Salesforce App	Field Service App
the Salesforce mobile app supports certificate-based login, whereby the customer can push a unique certificate to the device using Mobile Device Management (MDM). The certificate can authenticate the user to Salesforce.	Certificate-based authentication is a function of the Identity Provider. Files are stored in the application directory and are encrypted using application encryption. The files are decrypted while viewing and deleted after the view operation is complete.
Alternatively, Salesforce's Lightning Login feature has multifactor authentication from the Salesforce Authenticator app. The factors are:	The directory is cleared when the user logs out.
• What you have: The mobile device	
• What you are: If fingerprint biometrics is enabled on the device	
• What you know: if the device is enabled for PIN-based login.	
Lightning Login is only enabled on devices that have either PIN or fingerprint enabled.	

## **Trusted IP Ranges**

Logins to the Field Service mobile app can be restricted to specific trusted IP ranges, which is also true for the Salesforce mobile app. You can implement this using a Virtual Private Network (VPN) solution on mobile devices. After logging in to VPN, users can log in to the app. Afterwards, the user can log in to Salesforce.

## **Device Identification**

Salesforce is piloting a new feature to track device fingerprints accessing the Salesforce services. The feature supports the ability to see who logged in with a particular device and to revoke access to specific devices.

## Handling Sensitive Data

To prevent leakage of sensitive data, Salesforce apps support four settings to limit data exfiltration on a mobile device.

• **DISABLE\_EXTERNAL\_PASTE** : Allows users to copy-and-paste data *within the app*, but prevents users from pasting data copied from the app to other apps or OS features.

Note: This feature does not work on Samsung phones (and other manufacturers of Android phones) where a custom clipboard implementation is used or on any screens that show Lightning web components.

- FORCE\_EMAIL\_CLIENT\_TO: If a user taps on an email action within the app, the user is directed to the email app specified in the attribute value.
- SHOW\_OPEN\_IN : Prevents users from opening files in applications outside of the app.
- **SHOW\_PRINT** : Used to disable printing from within the app.

The following table shows the level of support for these features in the Field Service mobile app as well as the Salesforce mobile app.

Setting	Supported on Field Service Mobile	Supported on Salesforce Mobile
DISABLE_EXTERNAL_PASTE	✓ (Default: FALSE)	*
FORCE_EMAIL_CLIENT_TO	×	*
SHOW_OPEN_IN	✓ (Default: TRUE)	*
SHOW_PRINT	×	*

The Field Service Mobile app settings are non-restrictive by default. To change a setting from the default value, go to Setup. Enter *Connected Apps* in the Quick Find box, select **Manage Connected Apps**, then click the name of the Field Service connected app. Update the attribute from the Custom Attributes section on the connected app page.

## Mobile Device Management

Salesforce provides an extra level of security compliance with the most popular Mobile Device Management (MDM) suites. Both Android and iOS, with an MDM, give you enhanced functionality for distribution and control over your users' devices. The enhanced security functions, when you combine Salesforce with an MDM, include certificate-based authentication and automatic custom host provisioning.

MDM	Supported on Field Service Mobile	Supported on Salesforce Mobile
RequireCertAuth	*	*
AppServiceHosts	*	*
AppServiceHostLabels	*	*
OnlyShowAuthorizedHosts		
ClearClipboardOnBackground	*	*

SEE ALSO:

Encrypt New Data in Fields

Which Standard Fields and Data Elements Can I Encrypt?

Field Audit Trail Implementation Guide

Salesforce Mobile App Security Guide

# Field Service Mobile App Updates

Stay in the know about the Field Service mobile app releases. This topic includes information on the mobile app release cadence for major, patch, and daily releases (also known as emergency releases), plus information on testing and beta periods.

**Note:** For users with the Access Lightning Web Components (LWCs) permission set, you must update the mobile app to ensure LWCs function properly. The app must be no more than two major releases behind the Salesforce platform for the app to continue to work with LWCs. For example, when your org updates to Summer '25, any versions from Summer '24 and earlier will stop working. Note that the Spring '24 release will reach its end of life early with the Winter '25 release. Additionally, you must update the app to the latest major version to access new features or bug fixes.

## **Release Maintenance Types**

The Field Service mobile app has three types of releases, which align with Salesforce maintenance types: major releases, patch releases, and daily releases. So you can best prepare for changes, here's a description for each type of release, including the length of their associated beta testing period.

Release Type	Description	Frequency
Major release	Updates Salesforce Field Service mobile app with new features. The beta period is approximately 30 days.	Three times per year
Patch release	Deploys changes and fixes as needed to address significant, but nonemergency, customer impacting issues. The beta period is 7 days.	As needed
Daily release (also known as emergency release)	Deploys fixes to emergency customer-impacting issues as needed. No beta period, because daily releases are deployed on an emergency basis.	As needed

## Mobile Release Calendar and Communication

Here are the approximate dates for the next three major releases. Release dates are occasionally delayed to maintain customer trust.

- Winter '25: October 14, 2024
- Spring '25: February 18, 2025
- Summer '25: June 16, 2025

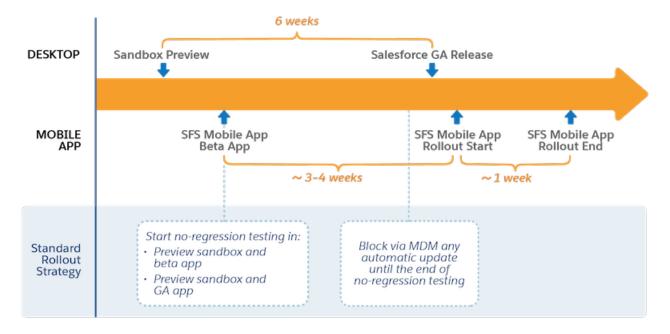
Note: We deploy major and patch releases over several days to ensure stability. The updates aren't necessarily available for all users until 7 days after the app becomes generally available.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.



Note: Use the current APK file for emergency installation during beta testing periods, and use the APK file from the previous release for emergency installation during major releases.

And here's where and when you can find communication about each release.

Release Type	Where	When
Major release	Learn more about major releases and new mobile app features in our standard Salesforce Field Service release notes. You also receive notification through your Trailblazer group.	Release notes offer a preview of new features approximately two months before the release. And you get notification via your Trailblazer group when beta and major releases go live.
Patch release	Find information about patch releases through the Field Service Mobile Trailblazer group.	When we identify a need, we inform you. You receive a second announcement when the release goes live, approximately 7 days later. The first announcement includes a brief description of each issue resolved to help you focus your testing.
Daily release (emergency)	Find information about daily releases through the Field Service Mobile Trailblazer group.	When we identify a need, we inform you at least a day before a daily release. You receive a second announcement when the release goes live.

# **Testing Best Practices**

Test features before they're generally available by using the Field Service Mobile Beta and Early Adopters Program. If you have issues with a beta version, log a case immediately so that it can be reviewed before the generally available (GA) release.

If you have complex security or compliance requirements and require greater control over what updates go out, you can use Mobile Device Management (MDM).

# Field Service Mobile Beta and Early Adopters Program

By participating in the Field Service Mobile Beta and Early Adopters program, you can test new versions of the app before adopting them.

The generally available (GA) Salesforce Field Service mobile application is released three times per year for iOS and Android. The mobile release occurs about a week after the major core application release. To learn more about the different types of releases and delivery dates for the Field Service mobile application, see Field Service Mobile App Updates.

You can test the Field Service mobile app releases ahead of time using the iOS and Android Beta Early Access programs. The mobile beta versions are available the Monday after sandboxes are updated with the upcoming major release, which takes place approximately one month before the major release.

# Benefits of Participating

By using the iOS and Android Beta Early Access programs, you can test upcoming mobile releases before they become available on the App Store or Google Play Store.

- Preview changes so you can plan and communicate to your workers.
- Test what's coming and determine whether any issues affect your implementation
- Build and integrate the latest features so you're ready to use them in production.
- Report problems so that we can correct them before the app becomes generally available.

# Eligibility

You can use the beta release to test the latest Salesforce Field Service features as soon as they're available. The beta app can be used only after your org has been updated to the newest version. As a result, there's approximately a month when the beta version can be used only with sandbox orgs. Any attempt to log into production results in an error.

Use of the beta feature is subject to the Beta Services Terms.

# Availability

Salesforce Field Service mobile application beta releases are published as major and patch releases. See the full schedule and information about different types of releases at Field Service Mobile App Updates.

#### Resources for Testing Beta Versions of the Field Service Mobile App

Salesforce provides resources to help you use the beta program to test the latest Field Service mobile app major releases and patch releases.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Sign Up for the Field Service Mobile App Beta Program for Android

All users of Salesforce Field Service software packages can access our beta builds. You can access beta versions of our Field Service mobile application for Android in the Google Play store.

#### Sign Up for the Field Service Mobile App Beta Program for iOS

All users of Salesforce Field Service software packages can access our beta builds. You can access beta versions of our Field Service mobile application for iOS via TestFlight. TestFlight is an app that Salesforce uses to share beta versions of the Salesforce Field Service mobile app.

#### Channels for Providing Feedback on Beta Releases

You can provide feedback on beta releases at any time. Feedback helps our customer support and engineering teams improve your experience with Salesforce Field Service by better understanding your experiences with the app. You can provide feedback through a number of channels.

# Resources for Testing Beta Versions of the Field Service Mobile App

Salesforce provides resources to help you use the beta program to test the latest Field Service mobile app major releases and patch releases.

# Sandboxes

When you have the mobile application beta version installed, you're ready to start testing. The most effective way to test beta versions of the mobile app is via the latest Salesforce sandbox test environment. We suggest that you keep an existing sandbox instance up to date, so that you can perform testing using data specific to your unique configurations and needs. Sandbox test environments are also an excellent resource when interacting with our support teams for any issues you encounter while consuming our beta versions.

For instructions on how to obtain and use sandboxes for testing, see Sandboxes: Staging Environments for Customizing and Testing.

If you're a first-time user or have to start a Sandbox from scratch, check out Where Do I Start with Field Service to set up for testing.

# **Testing Major Releases**

Major releases introduce new features, performance improvements, UI or UX updates, and API changes. We hope these features improve your work and business, but the changes can sometimes also create configuration conflicts. Although we strive to maintain backward compatibility, new releases can unexpectedly affect customizations that are specific to your implementation. The best way to protect your implementation is through beta testing.

To benefit most from the beta, create a test plan based on the most recent changes to the Field Service mobile app. Consider which features or Salesforce Field Service products you use most or that are most important to your business. To identify changes that impact your most crucial processes, focus your testing by reviewing Salesforce release notes each release.

Here's where you can find release notes pertaining to Field Service:

- Salesforce Release Notes alert you to the features being released for all Salesforce products.
- Within the *Salesforce Release Notes*, the Salesforce Field Service Release Notes cover the Field Service features specifically, and includes a special section for the latest features released for the Salesforce Field Service Mobile Release Notes. These notes alert you to what's changed in the mobile application.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# **Testing Patch Releases**

Patch releases are deployed only to resolve specific issues discovered on an existing production release. Beta versions for patch releases are made available at least one week before changes to the app are deployed.

When consuming a patch release, you can isolate your testing to the specific purpose of the patch release.

# **Recommended Test Areas**

In addition to reviewing the *Salesforce Release Notes* and testing potentially affected areas, it's important to review parts of the application that you've customized or extended for your specific needs.

We suggest starting your testing with Lightning Web Components and flows, because they're the most commonly customized features.

- Lightning Web Components
- flows

Also consider these frequently customized items when you plan for testing.

- Mobile Settings
- Custom Actions
- Customized Push Notifications
- Deep Linking
- Custom Triggers

# Lightning Web Components (LWC) Test Harness

If you use Lightning Web Components (LWC), the LWC Offline Test Harness (Test Harness, for short) is a lightweight testing and debugging app. Test Harness lets you iteratively develop, test, and debug Lightning web components for use in LWC Offline-based mobile apps. The streamlined app experience accelerates the interactive development lifecycle, making it easy to quickly test incremental improvements and fixes to your mobile LWCs.

# More Tools for Debugging Lightning Web Components

We suggest using your web browser to debug Lightning Web Components. You can find resources and a tutorial in the Mobile and Offline Developer Guide. To test your sandbox environments, you can also use the emulator for Android and the simulator for iOS. If the simulator and emulator are installed, you can directly access debug builds for iOS and for Android.

# Trailblazer Communities and Customer Support

If you require further support, don't worry, we've got your back!

Salesforce Trailblazer Communities can also help you prepare for and implement testing. These communities include everything from training material to ways to connect with other users.

And, if you encounter an issue or require additional support, contact Salesforce Customer Support. If you find an issue only happens on the beta version, share about it in your case details.

# Sign Up for the Field Service Mobile App Beta Program for Android

All users of Salesforce Field Service software packages can access our beta builds. You can access beta versions of our Field Service mobile application for Android in the Google Play store.

- Note: You can have only one version of the Field Service mobile app installed on your device at any given time. To switch back to the public version of the app after installing the beta version, uninstall the beta version and then install the public version of the app from Google Play. Although you have to leave the beta program to install the public version, you can always join the beta program again in the future, as needed.
- 1. Find and select the Field Service mobile application in the Google Play store.
- Locate the option to become a beta tester, and then click Join.
   Google Play appends (Beta) to the application name and serves the latest beta version when the application loads.

# Sign Up for the Field Service Mobile App Beta Program for iOS

All users of Salesforce Field Service software packages can access our beta builds. You can access beta versions of our Field Service mobile application for iOS via TestFlight. TestFlight is an app that Salesforce uses to share beta versions of the Salesforce Field Service mobile app.

**Note:** You can have only one version of the Field Service mobile app installed on your device at any given time. The beta version of the app replaces the App Store version on your device.

To receive notifications when the latest beta versions become available, be sure that you enable push and email notifications for the TestFlight application.

- 1. Download the TestFlight app on your iOS device.
- 2. On your device, open this signup link.
- 3. Click Accept, and then click Install.

After the beta version of the app is installed, TestFlight notifies you when a new build is available. TestFlight also provides instructions on how to install the new beta version and offers easy ways to provide feedback.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Channels for Providing Feedback on Beta Releases

You can provide feedback on beta releases at any time. Feedback helps our customer support and engineering teams improve your experience with Salesforce Field Service by better understanding your experiences with the app. You can provide feedback through a number of channels.

# TestFlight

If the app crashes while you're testing a beta build in iOS, an alert asks if you want to send crash details through TestFlight. When the crash alert displays, click **Share**, add any comments about the crash, and then submit the crash details. To provide generic feedback via the TestFlight application, click **Send Beta Feedback**.

# **Application Settings**

- Android: To provide feedback via the application settings on Android, go to Profile and then, under Settings, select **Provide Feedback**.
- iOS: To provide feedback via the application settings on iOS, go to Profile, then under Settings, select **Report an Issue**.

# Support

Contact Salesforce Customer Support if you have issues with beta testing.

# Trailblazer Community

Post feedback, questions, and comments to the Field Service Mobile Application Trailblazer Community. We pay close attention to Trailblazer discussions to catch recurring issues and discover areas where we can improve the app.

# Supported Data Types in the Field Service Mobile App

Learn which data types are supported in the Field Service mobile app for Android and iOS.

Data Type	Supported
Auto Number	✓
Formula	✓
Roll-Up Summary	×
Lookup Relationships	×
External Lookup Relationship	×
Checkbox	✓ (Shows Yes/No.)
Currency	<ul> <li>✓</li> </ul>
Date	✓

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Data Type	Supported
Date/Time	✓ (The following fields are not supported: Scheduled End, Scheduled Start, Arrival Window End, Arrival Window Start.)
Email	✓
Geolocation	*
Number	✓
Percent	*
Phone	*
Picklist	✓ (Picklists with fewer than six options are shown in an expanded view.)
Picklist (Multiple Select)	✓ (Picklists with fewer than six options are shown in an expanded view.)
Text	×
Text Area	×
Text Area (Long)	×
Text Area (Rich)	×
Text Area (Encrypted)	×
Time	X (Time fields without a date are not supported.)
URL	*

# SEE ALSO:

Field Service Mobile App Considerations Customize the Field Service Mobile App

# Supported Barcodes

Learn about the barcodes that are compatible with the Salesforce Field Service mobile app.

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.

To build your own barcode scanning experience using Lightning web components, use the Barcode Scanner plug-in. See Scan Barcodes on a Mobile Device.

Device	Barcodes	features, managed
Android	• Aztec	package, and mobile app are available in <b>Enterprise</b> ,
	Codabar	Unlimited, and Developer
	• Code-39	Editions.
	• Code-93	To access the Field Service
	• Code-128	mobile app, users need the Field Service Mobile user
	Data Matrix	license.
	• EAN-8, EAN-13	
	• ITF	
	• PDF417	
	• QR Code	
	• UPC-A, UPC-E	
iOS	• Aztec	
	Codabar	
	<ul> <li>Code-2 of 5 Interleaved, Code-2 of 5 Interleaved Checksum</li> </ul>	
	<ul> <li>Code-39, Code-39 Checksum, Code-39 Full ASCII, Code-39 Full ASCII Checksum</li> </ul>	
	• Code-93, Code-93i	
	• Code-128	
	Data Matrix	
	• EAN-8, EAN-13	
	<ul> <li>GS1 Data Bar, GS1 Data Bar Expanded, GS1 Data Bar Limited</li> </ul>	
	• ITF-14	
	Micro PDF417	
	Micro QR	
	• PDF417	
	• QR Code	
	• UPC-E	

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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# Measure Lengths with Augmented Reality on the Field Service Mobile App

Mobile workers can use augmented reality to measure between two or more points directly from the Field Service mobile app.

Instruct your mobile workers to tap the Measure global action and point their camera at the required object. They can then copy the measurement to their clipboard and paste it into the required field.



**Note:** If you don't want your mobile workers to use the Measure action, contact Salesforce Customer Support to disable the feature.

# Considerations for Using the Measure Action

- The action is supported on iPhone 11 and later with LiDAR support.
- Measurement accuracy can vary depending on lighting, contrast, and other environmental conditions.
- The action measures only straight lines and rectangular shapes.
- The measurement is a total of all the captured lines and doesn't show the length of each line individually.
- The unit of measurement is taken from the device's locale.
- For security purposes, after copying the measurement to the clipboard, you can paste the measurement only into a field in the Field Service mobile app.
- Mobile workers must grant the app permission to access the device's camera.

# Initial Field Values in the Field Service Mobile App

The initial value shown in a field when running a quick action depends on several factors.

When running a quick action from the mobile app, like for creating a work order, it can be difficult to identify where initial field values come from. Fields can have default values that you can find using Object Manager. Also, quick actions can have predefined values for fields. We try to use a predefined value as the initial value, and only use a different value when no predefined value exists or when offline.

The following table lists the initial field values given different criteria.

Action	Does a Predefined Value Exist?	Initial Online Value	Initial Offline Value
Create a new record	Yes	Predefined Value*	None
	No	Default Value	None
Update an existing record	Yes	Predefined Value*	Existing Value
	No	Existing Value	Existing Value

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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# **EDITIONS**

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\* Predefined values can contain formulas. A blank value appears if the server can't resolve the formula.

SEE ALSO:

Set Predefined Field Values for Ouick Action Fields

# Data Capture (Beta)

With the Data Capture flow type in Flow Builder, create dynamic forms that work online or offline.

Note: Data Capture is a pilot or beta service that is subject to the Beta Services Terms at Agreements - Salesforce.com or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the Product Terms Directory. Use of this pilot or beta service is at the Customer's sole discretion.

Data Capture flows configure the Form tab, which mobile workers can access via the Work Order Overview or the related list on a work order line item or service appointment. Build forms that follow

conditional logic, tailoring additional questions based on how the user answers prior questions. From safety protocol to environmental assessment, Data Capture tailors forms to match the task, so mobile workers can get the job done faster.

#### Set Up Data Capture (Beta)

Use the Dynamic Data Capture object to create and customize the Form tab on Work Order Overview and the related list on Service Appointment and Work Order Line Item.

#### Build a Data Capture Flow (Beta)

Data Capture presents mobile workers with dynamic, responsive forms that work online or offline. You can also apply conditions to control when a flow takes a specific decision.. To build a form with Data Capture, use the Data Capture flow in Flow Builder.

#### Data Capture Flow Screen Components (Beta)

The screen components that you can add to Data Capture flows are simplified Lightning Web components. For ease of use, they have fewer properties than standard screen components.

#### Discovery Framework Based Data Capture with Field Service Mobile App (Beta)

With Assessment Questions and the Discovery Framework Data Capture Flow process type in Flow Builder, build dynamic and responsive forms. Your mobile workers can use these forms on the Field Service Mobile app to efficiently collect data from customers, even in areas with poor or no internet connectivity.

# Set Up Data Capture (Beta)

Use the Dynamic Data Capture object to create and customize the Form tab on Work Order Overview and the related list on Service Appointment and Work Order Line Item.

To assign Data Capture flows to users, you must add the Form junction object to your parent record (such as a work order, work order line item, or service appointment) page layout. The Form junction object allows you to link a parent record with a form you build in Flow Builder.

To add the Form junction object to the parent record, follow these steps.

- 1. From Setup, in the Quick Find box, type *Object* and select **Object Manager**.
- 2. Search for your parent record (work order, work order line item, or service appointment).
- 3. Select Page Layouts, and then choose a page layout you want to add the Form tab to.
- 4. Click Related Lists, and then drag Forms onto your page layout.

#### **EDITIONS**

Available in: Lightning Experience in Enterprise, Unlimited, and Developer Editions.

#### **USER PERMISSIONS**

To create Data Capture flows:

Field Service Standard

**EDITIONS** 

Available in: Liahtnina Experience in Enterprise, Unlimited, and Developer Editions.

You're ready to create and assign Data Capture flows.

Note: Data Capture relies on Briefcase Builder to prime records for offline use. See Briefcase Builder.

# Build a Data Capture Flow (Beta)

Data Capture presents mobile workers with dynamic, responsive forms that work online or offline. You can also apply conditions to control when a flow takes a specific decision.. To build a form with Data Capture, use the Data Capture flow in Flow Builder.

- 1. From Setup, in the Quick Find box enter and select Flow Builder.
- 2. Add a flow, and then select the Data Capture (Beta) flow type.
- 3. Add components to your form, and set their respective properties. For example, add Date & Time to let mobile users input a date or range of dates. Data Capture flow supports conditional visibility. See Define Conditions in a

### **EDITIONS**

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

#### **USER PERMISSIONS**

To create Data Capture flows:

Field Service Standard •

	New Screen			
Screen Components		← Date & Time		
	[Flow Label]			
Search components Q				
G Checkbox	Date & Time			
Checkbox Group	No preview is available for this component.	* Label Enter value or search resources		
Date		Enter a value.		
Date & Time	Pause Previous Finish Default Value			
Long Text	Previous Previous Previous	M/d/yyyy, h:mm a		
9 Numeric		Disabled		
Radio Buttons		{!\$GlobalConstant.False}		
Short Text	Maximum Date and Time			
Get more on the AppExchange		M/d/yyyy, h:mm a		

**4.** Save and activate the flow.

Make sure that only Data Capture flow types are linked with the junction object to properly initialize all Data Capture flows as Lightning Web components (LWCs).

5. Test the form by navigating to a work order on the mobile app and launching the form.

Admin profiles and users with the Manage Flow permission can assign the form using the related list on work order, work order line item, or service appointment. You can also access the form from the related list on service appointment or work order line item.

# Data Capture Flow Screen Components (Beta)

The screen components that you can add to Data Capture flows are simplified Lightning Web components. For ease of use, they have fewer properties than standard screen components.

Data Capture supports conditional visibility for these screen components.

Component	Description
Address	Enter an address or latitude and longitude of a location.
Checkbox	Select one option.
Checkbox Group	Select multiple options.
Date	Select a date or date range.
Date & Time	Select a date and a time.
Long Text	Enter up to 1,000 characters.
Numeric	Enter a number.
Radio Buttons	Select one option.
Short Text	Enter up to 255 characters.
Upload File	Upload and attach files to records.

# Discovery Framework Based Data Capture with Field Service Mobile App (Beta)

With Assessment Questions and the Discovery Framework Data Capture Flow process type in Flow Builder, build dynamic and responsive forms. Your mobile workers can use these forms on the Field Service Mobile app to efficiently collect data from customers, even in areas with poor or no internet connectivity.

Note: Discovery Framework Based Data Capture is a pilot or beta service that's subject to the Beta Services Terms at Agreements - Salesforce.com or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the Product Terms Directory. Use of this pilot or beta service is at the Customer's sole discretion.

Discovery Framework Data Capture flows set up the Form tab, which the mobile workers can access through the related list on a service appointment record. Create forms with conditional logic that adapt by presenting additional questions based on the user's earlier answers. With Discovery Framework, you can track, store, and manage both questions and their answers, along with their versions, for better auditability. Your Salesforce org doesn't require Omnistudio to be installed for data capture with Discovery Framework.

#### Complete the Prerequisites for Discovery Framework Based Data Capture (Beta)

Give your mobile workers access to the Field Service Mobile app by assigning the right user license and permissions.

#### **EDITIONS**

Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

#### Create Assessment Questions

Define dynamic questions that can be easily integrated into the flows and forms used by the mobile workers in the Field Service Mobile app. These questions form the backbone of a structured questionnaire that's essential for capturing specific and consistent information during service appointments.

#### Build a Discovery Framework Data Capture Flow (Beta)

Offer your mobile workers dynamic and responsive forms that can be used online or offline. You can also set conditions to guide specific decisions within the flow. To build a form with Discovery Framework Data Capture, use the Discovery Framework Data Capture Flow process type in Flow Builder.

#### Set Up Discovery Framework Based Data Capture (Beta)

Use the Dynamic Data Capture object to create and customize the Form tab on the related list of a service appointment record.

#### Create Service Appointments for Your Mobile Workers

Service appointments are field service visits to customers and include scheduling and assignment details. Work orders outline the work to be done. A single work order can have multiple service appointments, depending on the job. For instance, if a customer orders installation of multiple devices, each visit is a separate service appointment.

# Complete the Prerequisites for Discovery Framework Based Data Capture (Beta)

Give your mobile workers access to the Field Service Mobile app by assigning the right user license and permissions.

- 1. Enable Field Service to start using Field Service features. See Enable Field Service.
- **2.** Give your mobile workers access to the Field Service Mobile app by assigning the right user license and permissions. See Give Users Access to the Field Service Mobile App.
- 3. Enable Discovery Framework.
- 4. Enable Discovery Framework Import or Export settings.
- **5.** Authorize your users to create screen flows with Discovery Framework Data Capture Flow process type that presents assessment questions from Discovery Framework.
  - a. From Setup, in the Quick Find box, enter *Discovery Framework*, and then select **General Settings**.
  - **b.** Turn on Discovery Framework Data Capture Flow (Beta).

SEE ALSO:

Discovery Framework and Assessments Set Up Field Service

#### **EDITIONS**

Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

#### USER PERMISSIONS

To enable Field Service, Discovery Framework, Import or Export, Discovery Framework Data Capture Flow (Beta)

Customize Application
 AND

Field Service Mobile

AND

Field Service Standard

To assign permission sets:

 Assign Permission Sets AND

> View Setup and Configuration

### **Create Assessment Questions**

Define dynamic questions that can be easily integrated into the flows and forms used by the mobile workers in the Field Service Mobile app. These questions form the backbone of a structured questionnaire that's essential for capturing specific and consistent information during service appointments.

Structured questions guide mobile workers through the data collection process, reducing the likelihood of errors and omissions.

• Use the Discovery Framework to create questions. See Create assessment questions.

# EDITIONS

Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

#### USER PERMISSIONS

To create questions

 Financial Services Cloud Extension OR FSC Sales OR

Health Cloud Foundation

OR

Industries Assessment

OR

Product Catalog Management Designer

# Build a Discovery Framework Data Capture Flow (Beta)

Offer your mobile workers dynamic and responsive forms that can be used online or offline. You can also set conditions to guide specific decisions within the flow. To build a form with Discovery Framework Data Capture, use the Discovery Framework Data Capture Flow process type in Flow Builder.

Before you begin, complete the preliminary tasks required for data capture with Discovery Framework Data Capture Flow. on page 838

- 1. From Setup, find and select Flows.
- 2. Click New Flow, and then select Start From Scratch.
- 3. Click Next.
- 4. Select Discovery Framework Data Capture Flow (Beta) flow type, and click Create.
- 5. Add a Screen element in your flow.
- 6. Enter a label and an API name for the screen element.
- 7. Click More, and then select Questions.



Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

USER PERMISSIONS

To create Discovery Framework Data Capture Flow

- Field Service Mobile AND
  - Field Service Standard

Components More V	
Fields	[Flow Label]
Search ce Q Questions	
V Display	
Display Text	
Section	Pause

- 8. Drag the required assessment questions to the flow canvas.
- 9. Set the required properties for each question. For example, you can mark a question as required if the user must add a response to the question to save the form.

	New Screen	
Questions More ~	[Flow Label]	Control Contro Control Control Control Control Control Control Control Control Co
V Assessment Questions (23)	[riow Laber]	*API Name O
Address	Discovery Question	Address_1
Age		
Age of the Person	Discovery Question Address_1	Disabled
Annual Income	Discovery Question	Enter value or search resources Q
Are you an existing custo		Read Only
Cky		Enter value or search resources Q
Contact Number	Discovery Question	Require
DEMO Question	Discovery Question	Enter value or search resources Q
DoB		
Existing Account Number	Discovery Question	> Set Component Visibility
Father's Name	Discovery Question	> Advanced
First Name		
Landmark		
Last Name	Discovery Question	
OmniQ1Version2	Discovery Question	
OmniQ2Version2		
PIN code	O Discovery Question	
Social security number	Discovery Question	
		Cancel Done

#### 10. Click Done.

- **11.** Save your changes.
- 12. Enter a flow label and an API name, and then save the flow.
- 13. Activate the flow.

# Set Up Discovery Framework Based Data Capture (Beta)

Use the Dynamic Data Capture object to create and customize the Form tab on the related list of a service appointment record.

To assign Discovery Framework Data Capture flows to users, add the Form junction object to the service appointment record page layout. The Form junction object links a parent record with a form you build in Flow Builder.

- 1. From the object management settings for Service Appointment, go to Page Layouts.
- 2. Select the record page layout where you want to add the Form tab.
- 3. Click Related Lists, and then drag Forms to your page layout.
- 4. Save your changes.

# EDITIONS

Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

### USER PERMISSIONS

To use the Dynamic Data Capture object

Field Service Mobile
 AND

Field Service Standard

To update record page layouts

Customize Application

# Create Service Appointments for Your Mobile Workers

Service appointments are field service visits to customers and include scheduling and assignment details. Work orders outline the work to be done. A single work order can have multiple service appointments, depending on the job. For instance, if a customer orders installation of multiple devices, each visit is a separate service appointment.

- 1. From the App Launcher, find and select Service Appointments.
- 2. Add a service appointment.
- 3. Select a parent record.

Service appointments can be added to work orders, work order line items, opportunities, leads, accounts, or assets. By associating service appointments with work orders or work order line items, you can use Field Service mobile and Field Service scheduling logic that's available only when a work order or work order line item is used.

- 4. Enter an earliest start permitted date and time, and a due date and time for the appointment.
- 5. On the Related tab of the service appointment record, add a new form.
- 6. Enter a name for the form.
- **7.** Select the screen flow that you created by using the Discovery Framework Data Capture Flow process type as the action definition.

### **EDITIONS**

Available in: Lightning Experience

Available in: **Enterprise** and **Unlimited** Editions where Field Service, Discovery Framework, Discovery Framework Import or Export, and Discovery Framework Data Capture Flow (Beta) are enabled.

#### **USER PERMISSIONS**

To create service appointments:

 Create on service appointments

To create, update or delete assigned resources:

 Edit on service appointments AND Read on service

resources

	New	Form	mode=Create, version=RRH
			<ul> <li>= Required Information</li> </ul>
Information			
Name Customer Account Opening Form Status New Execution Order	*>	Parent Record     SA-0040     Action Definition     Account Opening Form IsRequired	x 5 x
Description			

Your mobile workers are ready to launch the Discovery Framework Data Capture form on the Field Service Mobile app. They can launch it from the Related tab on a service appointment record.

#### SEE ALSO:

Create Service Appointmentsfor Field Service Using the Field Service Mobile App

# Download the Field Service Connected App

Before you configure user access and customize the Field Service mobile app, download the connected app.

The connected app provides push notifications, geolocation services, and other app settings related to service report generation and app customization. If your team uses mobile devices, open a new incognito or private browser window and download the connected app for Field Service. If you want to use a sandbox, change *login.salesforce.com* to *test.salesforce.com* 

Ø

**Note:** Biometrics aren't supported for the Field Service mobile app. Don't add the Biometric custom attribute to the connected app.

Apple and Google Maps provide high-level routes and ETAs in the Field Service mobile app. Android users require additional setup to get this functionality.

- Apex Rest Services permission enabled for their profile with access to these classes:
  - FSL\_RESTController\_GoogleApis\_Directions
  - FSL\_RESTController\_GoogleApis\_Requestor
  - FSL\_RESTController\_GoogleApis\_Geo

#### SEE ALSO:

Give Users Access to the Field Service Mobile App Using the Field Service Mobile App Set Apex Class Access from the Class List Page **EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To install connected apps and update user permissions:

Customize Application

# Give Users Access to the Field Service Mobile App

To give your mobile workforce access to the Field Service mobile app, set them up with the right user license and permissions. These steps also apply to Experience Builder site users.

- 1. Create a permission set.
  - a. From Setup, in the Quick Find box, enter *Permission Sets*, and then select **Permission Sets**.
  - b. Click New.
  - **c.** Enter a name. For example, enter *Field Service Mobile*. The API name is populated for you.
  - d. For License, select Field Service Mobile.
  - e. Save the permission set.
- 2. Enable the required system permissions.
  - **a.** In the permission set, click **System Permissions**, and then click **Edit**.
  - b. Select these system permissions: Field Service Standard, Field Service Mobile, and API Enabled.
  - c. Save your changes.
- **3.** Customize the object permissions.
  - a. In the permission set, click Object Settings.
  - **b.** Click an object's name to modify its permissions.
  - c. Save your changes.

At a minimum, mobile users need the permissions in this table. You can assign additional permissions to objects such as assets, accounts, and products, according to your business needs.

Object Name	Object Permission Needed	Field Permission Needed
Contact	Read	Email, Name, Phone, Title, Mobile
Service Appointment	Read	Appointment Number, Created By, Created Date, Parent Record, Parent Record Type, Parent Record Status Category
Service Appointment	Read, Edit	Address, Contact, Owner, Scheduled Start, Scheduled End, Status, Work Type
Service Resource	Read, Edit	Active, User
Work Order	Read, Create, Edit	None

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To create permission sets:

• Manage Profiles and Permission Sets

To manage users:

- Manage Users
- To create service resources:
- Create on service resources

- 4. Assign the permission set to the mobile users.
  - a. Click Manage Assignments, and then click Add Assignments.
  - **b.** Select all of the mobile users.
  - c. Click Assign.
- 5. Create a service resource record for each user.

**Note:** To use the Field Service mobile app, each user needs Read access to their service resource record. If you have Service Resources set to Private in Sharing Settings, see Manual Sharing for how to give your users Read access, or consider implementing sharing rules.

- 6. (Android only) Add Apex class access for users that need the Google Maps functionality.
  - a. Create a permission set.
  - b. In the permission set, click Apex Class Access.
  - c. Click Edit.
  - d. Add these Apex classes to the list of Enabled Apex Classes. These classes enable the Android Salesforce Field Service mobile app to securely access directions and geo-coding information through Google Maps APIs:

# FSL\_RESTController\_GoogleApis\_Directions, FSL\_RESTController\_GoogleApis\_Geo, and FSL\_RESTController\_GoogleApis\_Requestor.

- e. Assign the permission set to Android users.
- f. Save your changes.

#### Give Contractor Service Resources Access to the Field Service Mobile App

The way you track contract work in Salesforce depends on how you want to track capacity, assign appointments, exchange data with contractors, and give them access to the Field Service mobile app. Follow these simple steps to add contractors to your database and give them the access they need.

#### SEE ALSO:

Set Up Inventory Access for Mobile Workers Field Service Permission Set Licenses Granting Access to Records with Manual Sharing Create Sharing Rules

# Give Contractor Service Resources Access to the Field Service Mobile App

The way you track contract work in Salesforce depends on how you want to track capacity, assign appointments, exchange data with contractors, and give them access to the Field Service mobile app. Follow these simple steps to add contractors to your database and give them the access they need.

# Create an Account and Contacts

Create an account that represents the contractor, something like Widget Corporation Contracting. Then create contacts linked to the account. Create at least one contact for the contractor manager. If other contractors need access to Experience Builder sites, create contacts for each user.

### Set up Access and Permissions

Depending on the licenses that your organization purchased, you can assign contractors the Customer Community Plus or Partner Community license. If both license types are available, partner licenses are ideal for users who are engaged in sales or distribution with your company. Community licenses are required to access Experience Cloud sites.

Assign the Field Service Scheduling permission set license so that the user can be included in scheduling. Assign the Field Service Mobile permission set license to users that need access to the Field Service mobile app. Then, create a user profile for contractors (recommended) and configure their object permissions.

#### Granting Access and Permissions to Contractors

To give your mobile workforce access to the Field Service mobile app, set them up with the right user license and permissions.

### Granting Access and Permissions to Contractors

To give your mobile workforce access to the Field Service mobile app, set them up with the right user license and permissions.

- 1. Assign the Field Service user license to the user.
- 2. Create a Field Service permission set.
  - a. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
  - **b.** Click New.
  - c. Select the appropriate Field Service Mobile license for your contractor from the picklist, whether that's Customer Community Plus or Partner Community
  - d. Click Save.
  - e. Click System Permissions, then click Edit.
  - f. Select the Field Service Standard and Field Service Mobile system permissions.
  - g. Click Save.
- **3.** Customize the permission set's object permissions by clicking Object Settings, then click an object's name to modify its permissions.
- 4. Assign the permission set to your mobile app users:
  - a. Click Manage Assignments, and then click Add Assignments.
  - **b.** Select all users who need the app permission set.
  - c. Click Assign.
- 5. Make sure the user has the API Enabled system permission set enabled. This permission set is assigned from either the user profile or other permission set which includes the API Enabled system permission.
  - a. Click System Permissions.
  - **b.** Click Edit.
  - c. Select API Enabled.
  - d. Click Save.



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### **USER PERMISSIONS**

To grant access to contractors

Customize Application

# Generating Revenue from the Field Service Mobile App

Give your mobile workers ways to upsell your business directly from the app.

#### Set Up Mobile Quoting for Field Service Mobile Workers (Beta)

Let your mobile workers create quotes for customers directly from the Field Service mobile app without contacting customer services.

#### Set Up Lead and Opportunity Creation for Field Service Mobile Workers

Use a flow template that guides your mobile workers through creating leads and opportunities for potential customers directly from the app, without contacting customer services.

# Set Up Mobile Quoting for Field Service Mobile Workers (Beta)

Let your mobile workers create quotes for customers directly from the Field Service mobile app without contacting customer services.

**Note:** This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at Agreements and Terms.

- 1. Enable the Lightning web component permission set and assign it to mobile workers.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - **b.** Select the permission set assigned to mobile workers. See Give Users Access to the Field Service Mobile App.
  - c. Click System Permissions, and then click Edit.
  - d. Select Lightning SDK for Field Service Mobile.
  - e. Save your changes.
  - **f.** Make sure that this permission set is assigned to all mobile workers who use Lightning web components.
- 2. Make sure that the look and feel is consistent with your Field Service app.
  - a. From Setup, in the Quick Find box, enter *Field Service*, and then select **Field Service** Setting.
  - **b.** Under Lightning Web Components, select **Override default styling**.
- 3. Enable using quotes.
  - a. From Setup, in the Quick Find box, enter *Quotes*, and then select **Quotes Settings**.
  - b. Select Enable Quotes.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

#### **USER PERMISSIONS**

To set up mobile quoting:

Customize Application

Make sure that all mobile workers who are creating quotes have the Salesforce user license.

If you don't select **Create Quotes Without a Related Opportunity**, instruct your mobile workers to fill in the Opportunity ID field when creating a quote.

- 4. Let mobile workers create and access quotes from a work order.
  - **a.** From Setup, go to the Object Manager tab.
  - b. Select the Work Order object, and then go to Page Layouts.
  - c. Open the mobile worker layout.
  - d. From Salesforce Mobile and Lightning Experience Actions, drag New Quote (Beta) into the Quick Actions section.
  - e. Add Quotes to the Related Lists section.
- 5. Make sure that the mobile workers can access the required objects and fields.
  - a. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
  - **b.** Create a permission set.
  - c. In the new permission set, under Apps, click **Object Settings**.
  - d. In the Price Book object, under Object Permissions, select Read.
  - e. In the Price Book Entry object, under Field Permissions, select **Read Access** for these fields: Price Book, Product, and Product Code.
  - f. In the Product object, under Object Permissions, select Read.

Under Field Permissions, select **Read Access** for these fields: Product Description, Product Family, Product Name, and Quantity Unit Of Measure.

g. In the Quote object, under Object Permissions, select Read, Create, and Edit.

Under Field Permissions, select **Read Access** and **Edit Access** for the fields that are included in the Quotes object page layout that's assigned to the mobile workers. Make sure you give permissions to the Related Work field even if it's not on the layout.

- h. In the Quote Line Item object, under Field Permissions, select **Read Access** and **Edit Access** for these fields: Product, Quantity, Quote Name, and Sales Price.
- In the Work Order object, under Object Permissions, select Read.
   Under Field Permissions, select Read Access for these fields: Price Book and Contact.
- j. Assign the permission set to the mobile workers.
- 6. Share the relevant price book with the mobile workers. See Guidelines for Sharing Price Books.
- 7. In the Price Book field of each work order, find and select the relevant price book.
- 8. Set up the mobile worker page layout for quotes.
  - a. From Setup, go to the Object Manager tab.
  - **b.** Select the Quote object, and then go to Page Layouts.
  - c. Open the layout that's assigned to mobile workers.
  - d. Add the fields that you want the mobile worker to fill in when they're creating the quote. Make sure you add the Name field.

Keep these considerations in mind.

- To let mobile workers create a quote when they're offline, you must prime the Pricebook2, Pricebook Entry, and Product2 data. To let mobile workers select the data when they're offline, you must prime the lookup fields that are included in the Quote object's page layout. See Work with Offline Priming in the Field Service Mobile App.
- Mobile workers must be online the first time that they click the New Quote quick action. After that, they can be offline when creating quotes.
- Mobile workers must be online when opening the preview of the quote.
- We strongly recommend not making changes to the price book throughout the workday. When the mobile worker is offline, changes aren't reflected in the app. The final prices in the quote are determined according to the saved price book.

# Set Up Lead and Opportunity Creation for Field Service Mobile Workers

Use a flow template that guides your mobile workers through creating leads and opportunities for potential customers directly from the app, without contacting customer services.

- 1. Copy the flow.
  - a. From Setup, in the Quick Find box, enter *Process Automation*, and then select **Flows**.
  - b. Open the Field Service Mobile: Create Leads and Opportunities flow template.
  - c. Click Save As and create your own version of the flow based on the template.
- 2. Create a quick action and add it to the mobile worker's layout.
  - **a.** From the object management settings for service appointments, go to Buttons, Links, and Actions.
  - b. Click New Action.
  - c. For Action Type, select Flow.
  - d. For Flow, select the copy of the flow that you created.
  - e. Enter a label. The name is populated based on the label.
  - **f.** Save the action.
  - g. From Page Layouts, open the mobile workers' layout.
  - **h.** From Salesforce Mobile and Lightning Experience Actions, drag the action that you created onto the layout.

### EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To set up lead and opportunity creation:

Customize Application

# Customize the Field Service Mobile App

Learn how to customize the Field Service mobile app's screens, actions, and branding settings, and create unique mobile experiences for different user profiles.

# 🕜 Note:

- Users must re-log in to the app to receive metadata updates like page layout changes.
- Salesforce doesn't recommend manually deleting metadata. If the mobile device goes
  offline immediately after metadata is deleted, data may not be available until the device
  is back online. After metadata is deleted, refresh all application tabs—Schedule, Inventory,
  and Profile—by pulling down on each screen.

#### Customize and Extend the Field Service Mobile App with Lightning Web Components

Lightning web components (LWCs) let you create your own experiences using Quick Actions to customize the app to meet your business needs. LWCs represent the best of the Salesforce platform, bringing modern web standards in performant, modular components that are easy to build.

#### Custom List Views Management

List views are a great way to view, sort, and prioritize the information that is most important to your mobile workers.

#### Set Up the Field Service Mobile Widget

Let mobile workers view their next appointment's details, update the status of appointments from Dispatched to En Route, and navigate to appointments directly from the home screen.

#### Set Up Inventory Access for Mobile Workers

Customize your page layouts and user permissions so that your team can take care of inventory management tasks. For example, give mobile workers the ability to log product consumption, create product requests, and keep their service vehicle inventory current. Inventory management is supported on both Android and iOS.

#### Set Up Multiple Inventory Locations

By default, all products consumed for a work order or work order line item come from the same location. However, you can let mobile workers log product consumption from multiple locations. You might want to do this when, for example, workers provide services to multiple vendors or want separate inventories for different types of work.

#### Customize the Field Service Mobile App by User Profile

Assign unique configurations of mobile app settings to different user profiles to accommodate the needs of contractors, supervisors, and other app users.

#### Customize Tabs with the Field Service Mobile App Builder

The Field Service Mobile App Builder is a point-and-click tool that lets you configure custom tab navigation and give users quick access to screens and records based on their role.

#### Customize Screens in the Field Service Mobile App

Control which fields users see in the Field Service mobile app by updating page and search layouts.

#### Add a Profile Tab Background Image in the Field Service Mobile App

Add a background image to customize the Profile Tab in the Field Service Mobile App.

#### Customize Push Notifications for the Field Service Mobile App

Push notifications alert your mobile workforce to approaching appointments and scheduling changes.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### Track Service Resource Geolocation with the Field Service Mobile App

Use geolocation to manage your mobile workforce. You can exclude certain users from geolocation tracking.

#### Set Up Custom Actions in the Field Service Mobile App

Configure quick actions, global actions, flows, and app extensions to help your team work more efficiently from the field. Actions are displayed in a predefined order in the action launcher on record pages in the app.

#### Set Up Automatic Status Change

Accurate and on-time status changes are a key part of field operations workflow. With Automatic Status Change, mobile workers can focus on their jobs and work more efficiently while the Field Service mobile app tracks status changes for them. For the back office, accurate status changes give better insight into the activity in the field without creating more work for mobile workers.

#### Set Up Service Appointment Bundling for Mobile Workers

To give mobile workers access to the bundled service appointments in the Field Service mobile app, you update the service appointment layout and add field permissions for mobile users.

#### Set Up Geolocation-Based Actions for Field Service Mobile Workers

Automate actions based on the location of your mobile workers. Prompt your mobile workers to complete the actions before or after their service appointments.

#### SEE ALSO:

#### Using the Field Service Mobile App

# Customize and Extend the Field Service Mobile App with Lightning Web Components

Lightning web components (LWCs) let you create your own experiences using Quick Actions to customize the app to meet your business needs. LWCs represent the best of the Salesforce platform, bringing modern web standards in performant, modular components that are easy to build.

Watch the video to see how LWCs can let your mobile workers find nearby records, add images to a record, and reschedule an appointment directly from the Field Service mobile app.

Watch a video

# What Can I Do with LWCs in the Field Service Mobile App?

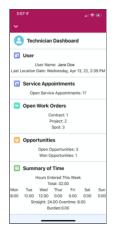
You can create custom components that are accessed from the Actions menu. The Actions menu is available globally and on record detail pages.

Lightning Web Components in Salesforce allow you to create a wide range of actions tailored to your specific needs. They are versatile and can function seamlessly even when mobile devices are offline. With LWCs, you can perform tasks such as adding annotations to images for service reports, ordering parts, contacting subject matter experts (SMEs), and creating custom dashboards for your mobile workers, as shown in the example image.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.



# Work with LWCs

Use the resources in the following table to learn about LWCs for the Field Service mobile app or find a partner who can help.

Task	Where to Find It
Learn about and develop with LWCs.	Salesforce Developers: Lightning Web Components Developer Guide
Get started with LWCs for mobile apps	Salesforce Developers: Mobile and Offline Developer Guide
Get Started with LWCs for Field Service	Field Service Developer Guide: Get Started with Lightning Web Components in the Field Service Mobile App
Find a Partner to help you develop with LWCs.	Find the right Salesforce expertise: Salesforce Partners

# **Custom List Views Management**

List views are a great way to view, sort, and prioritize the information that is most important to your mobile workers.

# **Viewing Records**

In a list view, you can view details about a record by clicking it. You see only the data that you have access to. You can view records that you own, have read or write access to, or are shared with you. List views also include records owned by or shared with users in roles below you in the hierarchy. The fields you see depend on your page layout and field-level security settings.

When you access a tab, the default list view assigned to the object is shown. To switch to a different list view, click the app bar and then select from the available lists.

# Searching List Views

Use the list view search box to search for records in a list view. Click the search box, enter your query, and press Enter. The list view search looks at all searchable fields even if the corresponding columns aren't shown in the list view. In your search, you can enter any special character except for the % since it's treated as a wildcard.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Considerations for Custom List Views

- Custom list view is supported for use only with the Lightning Web Components (LWC) framework. To use custom list views, the user
  must have the Access Lightning Web Components for Field Service Mobile permission enabled.
- You can view and prime a maximum of 200 records per custom list view.
- To ensure optimal performance of your custom lists:
  - Configure your list view to return the minimum number of records.
  - Avoid using reference fields in the list view.
  - Minimize the number of fields you use on each object.
- Custom lists sorted by Last Modified Date are always ordered newest to oldest, which is standard for all related lists.
- The Recently Viewed list view isn't supported. When accessed, it doesn't return records, and an error is returned.
- Limitations apply to what filter configurations are supported. When encountered, no records are returned and an error is shown. Here's a list of known filters that aren't supported in mobile list views. Other filters not in this list can apply.
  - A filter that uses a multiple currency field
  - A filter that uses a locale and org-based date literal, such as
    - THIS\_WEEK
    - THIS\_FISCAL QUARTER
    - LAST\_WEEK
    - THIS\_WEEK
    - NEXT\_WEEK
  - A filter that uses a polymorphic field
  - A filter that uses a number *n* type date literal, such as
    - LAST\_N\_QUARTERS
    - NEXT\_N\_QUARTERS
    - LAST\_N\_WEEKS
    - NEXT\_N\_WEEKS
    - LAST\_N\_YEARS
    - NEXT\_N\_YEARS
    - N\_DAYS\_AGO
    - N\_WEEKS\_AGO
    - N\_MONTHS\_AGO
    - N\_QUARTERS\_AGO
    - N\_YEARS\_AGO
  - A filter that uses an unsupported scope
  - In some cases, new records aren't shown on certain custom list views. For example, in a Case custom list view that filters on closed = false, a new offline Case record isn't shown on the list view because closed isn't populated. The filtering criteria don't apply to this record.
  - In some cases, a record created offline doesn't show all the details in the card for the record. For example, if a contact is created
    with the first name and last name but the header of the card uses name only. The header can be blank because the name field
    isn't populated.
  - Fields that have a reference that could be many different things, a reference to either a group or a user, aren't supported.

# Performance Considerations

- The number of objects in your database can impact the performance of custom list views.
- The number of fields entered when you're performing a search can also affect performance.
- Your current network speed can affect the performance of network requests.

# Set Up the Field Service Mobile Widget

Let mobile workers view their next appointment's details, update the status of appointments from Dispatched to En Route, and navigate to appointments directly from the home screen.

Define a default list view that determines which fields are shown for each service appointment in the widget. The three values separated by dots are determined by the order of the fields in the default list view of the Field Service Mobile Settings that are associated with the mobile worker's profile.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

#### USER PERMISSIONS

To edit object permissions:

• Manage Profiles and Permission Sets



- 1. Locate a list view that has the fields sorted according to the order that you want to show in the widget, or create one for this purpose.
  - a. From Field Service, open the Service Appointments tab.
  - **b.** From List View Controls, click **New**.
  - c. Enter the details.



- d. Save the view.
- e. From List View Controls, click Select Fields to Display.
- **f.** Customize the view so that the second, third, and fourth columns show the fields that you want to include in the widget. The first column is ignored for this purpose. In this example, Status is first, Subject is second, and Description is third.

			Q Search		*• 🖩 🗠 ? 🌣 🗳 🧑
	Field	Service Home	Reports 🗸 Field	Service Accounts V Work Ord	lers 🗸 Service Appointments 🗸 More 🔻
	Field	te Appointments ds for Widget wrted by Appointment Nun • Updated 44 minutes ago	nber • Filtered by My service	Q Search this list	
		Appointment Numbe	r 🕆 🗸 Status 🔒 🗸	Subject 😦 🗸 🗸	Description 🥹
1		Appointment Numbe SA-0001	r ↑ ∨ Status 1 ∨ Dispatched	Subject 2 ~ Electric wiring Custom Notifica	Description 1 Custom Notification
1			-		
1 2 3		SA-0001	Dispatched	Electric wiring Custom Notifica	
		SA-0001 SA-0002	Dispatched Scheduled	Electric wiring Custom Notifica Electric wiring	Custom Notification
3		SA-0001 SA-0002 SA-0009	Dispatched Scheduled Scheduled	Electric wiring Custom Notifica Electric wiring Electric wiring Custom Notifica	Custom Notification Electric circuit wiring

- **2.** Define this list view as the default.
  - a. From Setup, in the Quick Find box, enter Field Service Mobile, and then select Field Service Mobile Settings.
  - b. In the settings that are assigned to your mobile workers, click the arrow and select Show Details.
  - c. Under Customization, in Default List View Developer Name, enter the API name of the list view that you created.

#### Salesforce Field Service

Keep these considerations in mind.

- The Field Service mobile widget doesn't support the use of custom status update workflows.
- If more service appointments are on today's schedule but they're in the Completed, Cannot Complete, or Canceled status categories, the widget shows that nothing else is scheduled for today.

SEE ALSO:

Apple Developer Guide: Keeping a widget up to date Add the Field Service Mobile Widget (Beta)

# Set Up Inventory Access for Mobile Workers

Customize your page layouts and user permissions so that your team can take care of inventory management tasks. For example, give mobile workers the ability to log product consumption, create product requests, and keep their service vehicle inventory current. Inventory management is supported on both Android and iOS.

Before getting started, get to know Salesforce inventory management terms and processes.

# Show the Inventory Tab (Android and iOS)

Let users view and update their inventory, log inventory consumption, and request parts from the Inventory tab. To see the Inventory tab, app users must be active service resources who are associated with a mobile inventory location. They must have at least Read access to product items or product requests. The Inventory tab isn't available offline.

A location represents a physical area where products are stored. Because field service workers typically bring products with them in their vehicle, you can create a field location type to represent their inventory, such as a vehicle or toolbox.

- 1. From the full Salesforce site, click the Service Resources tab.
- 2. On a service resource, click Edit.
- 3. In the Location lookup field, enter a location that has both **Inventory Location** and **Mobile** Location selected.

Note: If you don't see the Location field, add it to your service resource page layout.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To update page layouts:

Customize Application

To update connected apps:

 Customize Application AND either Modify All Data

OR

Manage Connected Apps

Service Van 42		
Location Type Van		
Related Details		
✓ Information		
Location Name Service Van 42	Visitor Address	
Location Type Van	Time Zone (GMT-07:00) Pacific Daylight Time (America/Los_Angeles)	
Description Standard service van	Driving Directions	
Parent Location	Inventory Location	
	Mobile Location	

Because this service resource is associated with the location, the user sees the Inventory tab in the app.

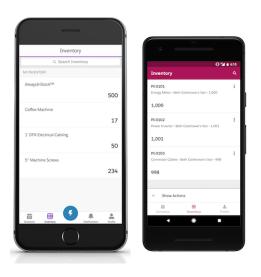
User Sita Nagappan-Alvarez	Resource Type Technician	Active	
Related Details			S46-34
✓ Information			
Name Sita Nagappan-Alvarez		Active	
Sita Nagappan-Alvarez <sup>User</sup>			

# Manage Inventory in the Field (Android and iOS)

To let service resources who are associated with a mobile inventory location manage their inventory, you create product items that represent the stock. Each product item is linked to a location, such as a van or warehouse, and to a specific inventory product. When you create product items, you can track inventory usage and restock when necessary.

Note: To search by a product code, it must be added to the Product Search Layout. Inventory lists in the Field Service mobile app shows up to 1,000 products. To see inventory for locations added during an active mobile session, log out and then log back in.

- 1. On the Product Items tab in the full Salesforce site, create product items for the mobile inventory location associated with the service resource. For example, if Service Van 42 contains 30 batteries, create a product item associated with the Service Van 42 location and the Battery product.
- 2. To let your team create or update the product items representing their inventory, assign the object permissions listed in Create Product Items to Represent Inventory.



# Log Product Consumption (Android and iOS)

You can let users who are associated with a mobile inventory location create product consumed records from the field service app.

- 1. Add the Products Consumed related list to the work order page layout to make it visible in the Products and Related tabs of the work order carousel.
- 2. Assign the user the object permissions listed in Track Inventory Consumption in Field Service.

# Let Users Add Required Products (Android and iOS)

If a particular product is required to complete a work order or work order line item, add it as a required product. You can let your team create product-required records.

- 1. Add the Products Required related list to work order and work order line item page layouts.
- 2. Assign the user the object permissions listed in Track Required Inventory in Field Service.

# Hide the Inventory Tab (Android and iOS)

If your mobile workers no longer require access to the Inventory tab, you can hide it. After you complete the steps, users must log out and log in to the Field Service mobile app to see the changes.

- 1. From Setup, in the Quick Find box, enter **Permission Sets**, and then select **Field Service Mobile License**. Then, go to **Object Settings**, and remove access for Product Item and Product Requests.
- 2. In the Quick Find box, enter Service Resource Layout. Remove the Location field from the Field Service layout.
- 3. To clear the cache metadata in the mobile app, go to Settings in the Profile. Select Advanced Settings, and then select Clear Cached Metadata.

SEE ALSO:

Set Up Your Field Service Inventory Set Up Product Requests in the Field Service Mobile App Set Up Multiple Inventory Locations

# Set Up Multiple Inventory Locations

By default, all products consumed for a work order or work order line item come from the same location. However, you can let mobile workers log product consumption from multiple locations. You might want to do this when, for example, workers provide services to multiple vendors or want separate inventories for different types of work.

- 1. Enable multiple inventory locations in the connected app.
  - a. From Setup, enter *Connected Apps* in the Quick Find box, then select **Connected Apps**.
  - **b.** Click Salesforce Field Service for iOS or Salesforce Field Service for Android.
  - c. Scroll to the custom attribute list, and click New.
  - **d.** Enter the attribute key *ENABLE\_MULTIPLE\_LOCATIONS*.
  - To enable consuming parts from multiple locations, enter the attribute value *TRUE*.
     When this setting is enabled, users see the following locations for product items in their search results.
    - Locations that belong to the same hierarchy as the user's own location
    - Locations that are associated with a work order on the user's schedule
    - Locations that are associated with the user's service territory
- 2. Create a parent location.
  - **a.** From the App Launcher, find and open **Locations**.
  - b. Click New.
  - c. Enter the details for your new location.
    - For Location Name, enter a name for your location.
    - For Location Type, select which type of location it is.
    - For Time Zone, select the time zone that the location is in.
    - Select Inventory Location and Mobile Location.
    - Optionally, enter a description and driving directions for the location.
  - d. Click Save.
- 3. Create child locations.
  - **a.** From the App Launcher, find and open **Locations**.
  - b. Click New.
  - c. Enter the details for each new location. For Parent Location, select the location that you created.
  - d. Click Save.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To update page layouts:

- Customize Application
- To update connected apps:
- Customize Application AND either Modify All Data OR

Manage Connected Apps

8	My Locations V M				
4 item	s • Sorted by Location Name • Filtered by my locations • Updated a few seconds ago		Q. Search this list ♀ ▼	℃ 🖍 🔮 🔻	
	LOCATION NAME T	LOCATION TYPE	✓ PARENT LOCATION	~	
1	A&B Construction Van Stock	Van	Jane's Van	•	
2	Bay Bridge Contracting Van Stock	Van	Jane's Van	•	
3	Jane's Van	Van		•	
4	Jane's Warehouse	Warehouse			

- 4. Create consignment locations. A consignment location represents an inventory location at the site of a work order or work order line item. For example, you can use a consignment location for parts shipped directly to a work site.
  - **a.** From the App Launcher, find and open **Locations**.
  - b. Click New.
  - c. Enter the details for your new location. Select Inventory Location so that parts can be stored there.

formation		
* Location Name	Parent Location	
Salesforce Tower	Search Locations	Q
* Location Type	Driving Directions	
Site	•	
Description	Inventory Location	
Time Zone	Mobile Location	
(GMT-07:00) Pacific Daylight Time (A	merica/Tijuana) 🔻	
Visitor Address		
Search Addresses	Q	

d. Click Save.

- **5.** Create product items for the consignment location.
  - **a.** From the App Launcher, find and open **Product Items**.
  - **b.** Click **New**.
  - **c.** Enter the details for your new product item.

	New Pro	duct Item	
nformation			
Product Name		Location	
Electric Cable	×	Salesforce Tower	×
* Quantity On Hand		Quantity Unit Of Measure	
5.00		Each	•
Serial Number			
001122			
		Cancel Sav	ve & New Save
		Cancel Sav	ve & New Save

- For Product Name, select a product.
- For Location, select the consignment location that you created.
- For Quantity on Hand, select the number of products available at that location.
- Optionally, select a Quantity Unit of Measure and enter the product's serial number.

#### d. Click Save.

- 6. Create cross-border locations. A cross-border location represents an inventory location that belongs to a specific service territory.
  - **a.** Add the Service Territory Locations related list to the Service Territory layout.
    - From the Object Manager, enter Service Territory in the Quick Find box, and select Service Territory.
    - Select Page Layouts.
    - Select Service Territory Layout.
    - Drag Service Territory Locations under Related Lists.
    - Click Save.
  - **b.** Add a location to a service territory.

nformation			
* Service Territory		* Location	
San Francisco	×	Salesforce Tower	×

- From the App Launcher, find and open **Service Territory**.
- Select the service territory that you want to add a location to.
- Click Related.
- Next to Service Territory Locations, click **New**.
- Select a location.
- Click Save.

- For the setup to take effect, have each user log out and log back.
- Consuming product items from multiple locations is a beta feature. Up to 10 hierarchical locations or cross-border locations are supported, with a maximum of 1,000 product items for each location.
- When a location is associated with a service resource, only direct parent-child locations are supported. Grandchild locations are not supported.
- When a location is associated with a work order or a service territory location, parent-child relationships aren't used.
- Child locations of consignment locations and cross-border locations aren't available in the app.
- To make a location available in the inventory tab in the app, select **Mobile Location**.
- For cross-border locations, don't select the Mobile Location field. When the Mobile Location field is selected, the location isn't available in the app.

# Customize the Field Service Mobile App by User Profile

Assign unique configurations of mobile app settings to different user profiles to accommodate the needs of contractors, supervisors, and other app users.

For example, you can create a different branding experience for contractors, or assign particular geolocation settings or app extensions to mobile workers versus supervisors. Alternatively, you can use the same settings configuration for all users.

- From Setup, enter Field Service Mobile Settings in the Quick Find box, then select Field Service Mobile Settings
- 2. Your org comes with one settings configuration named Field Service Mobile Settings, which is assigned to all user profiles by default.
  - a. To edit that configuration, click Edit.
  - **b.** To create a new configuration of mobile settings that can be assigned to different user profiles, click **New**.
- 3. Update the label if desired.

For example, you might want two settings configurations named *Supervisor Settings* and *Technician Settings*, respectively.

**4.** Update the settings as needed.

Note: To give app users edit access to their field service records, select **Enable Full Edit** on **Records**. If you want to restrict editing from the mobile app, don't select this option.

- 5. Click Save.
- 6. Click **Mobile Settings Assignment**, then click **Edit Assignment** to assign your settings configurations to user profiles.

#### Learn More About Field Service Mobile Settings

Customize your Field Service Mobile Settings configurations to suit your users' needs.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To configure Field Service Mobile Settings:

Customize Application

#### Brand the Field Service Mobile App

Give the Field Service mobile app your company's look and feel by customizing the colors used in the user interface. Apply your company colors or optimize the color scheme to compensate for the relative brightness of your mobile workforce's work environments.

### SEE ALSO:

Brand the Field Service Mobile App Track Service Resource Geolocation with the Field Service Mobile App Set Up Custom Actions in the Field Service Mobile App

# Learn More About Field Service Mobile Settings

Customize your Field Service Mobile Settings configurations to suit your users' needs.

### Field Service Mobile Settings

Setting	Description	
Information		
Label	The name of the Field Service Mobile Settings configuration.	
Name The developer name of the Field Service Mobil configuration.		
Default	Each user profile can be associated with only one Field Service Mobile Settings configuration. If selected, the configuration is used as the default that's automatically assigned to users.	
Branding Colors	See Brand the Field Service Mobile App on page 866.	
Additional Settings		
Collect service resource geolocation history	Controls whether geolocation tracking of services resources is enabled.	
Collect time zones for time sheet entries	Controls whether time zones of work locations are captured on time sheets.	
Destination Type	Determines if the mobile worker navigates to the destination based on the address or the latitude and longitude.	
Display resource absences in Schedule view	Sets whether resource absences are combined with other work in the Schedule page of the app.	
Enable full edit on records	Controls whether users can edit records using the Field Service mobile app.	
Enable mobile time sheets	Controls whether users can access time sheets on their mobile devices.	

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

Setting	Description
Geolocation Accuracy	Controls the accuracy of service resource geolocation tracking. Lowering accuracy reduces battery consumption for mobile devices. The options are:
	• Fine: Accurate to within 10 meters
	Medium: Accurate to within 100 meters
	Coarse: Accurate to within 1 kilometer
Geolocation Accuracy (Background Mode)	Controls the accuracy of service resource geolocation tracking while the app is running in the background. Lowering accuracy reduces battery consumption for mobile devices. The options are:
	Medium: Accurate to within 100 meters
	Coarse: Accurate to within 1 kilometer
	• Very Coarse: Accurate to within 3 kilometers
Geolocation Update Frequency in Minutes	Controls the frequency between attempts to retrieve service resource geolocation updates.
Geolocation Update Frequency in Minutes (Background Mode)	Controls the frequency of attempts to retrieve service resource geolocation updates while the app is running in the background. Lowering frequency reduces battery consumption for mobile devices.
Metadata Cache Time in Days	Controls the number of days that org metadata, such as layouts, is kept in the app's local cache.
Picklist Time Interval in Minutes	Controls the spacing of picklist options for time values, such as when creating resource absences.
Record Data Cache Time in Minutes	Controls the number of minutes that record data is kept in the app's local cache.
Schedule Update Frequency Time in Minutes	Controls the number of minutes between attempts to update a user's schedule.
Default List View Developer Name	The API name of the default service appointment list view on the schedule screen (optional).
Future Days in the Date Picker	Controls the number of days into the future that a user can select from the date picker on the schedule screen.
Past Days in the Date Picker	Controls the number of days into the past that a user can select from the date picker on the schedule screen.
Send appointment notifications on assignment	If selected, workers are notified when they're assigned to a service appointment and when their assignment is changed or removed. They're not notified when they're dispatched for the appointment. Followers of a service appointment receive a separate notification regarding a service appointment assignment to another worker.
Send appointment notifications on dispatch	If selected, workers are notified when they're dispatched for a service appointment and when their assignment is changed or removed.

Setting	Description	
Service Appointment Priming		
Default List View Developer Name	The API name of the default service appointment list view on the schedule screen (optional).	
Future Days in the Date Picker	Controls the number of days into the future that a user can select from the date picker on the schedule screen.	
Past Days in the Date Picker	Controls the number of days into the past that a user can select from the date picker on the schedule screen.	
Document Builder Template Priming		
Days Before Current Service Date	Controls the number of days prior to the current service date that service document templates related to the service appointment, work order, or work order line item are primed for offline use.	
Days After Current Service Date	Controls the number of days after the current service date that service document templates related to the service appointment, work order, or we order line item are primed for offline use.	
Maximum Number of Service Appointments	Defines the maximum number of service appointments to prime service document templates for.	
Quick Status Change		
Flow Name	The name of an existing flow that the Quick Status Change action is applied to.	
App Extensions	See Create App Extensions for the Field Service Mobile App on page 902.	

# Brand the Field Service Mobile App

Give the Field Service mobile app your company's look and feel by customizing the colors used in the user interface. Apply your company colors or optimize the color scheme to compensate for the relative brightness of your mobile workforce's work environments.

- 1. From Setup, enter *Field Service Mobile Settings* in the Quick Find box, and select **Field Service Mobile Settings**.
- 2. Click **Edit** next to the mobile settings configuration you want to modify, or **New** to set up a new settings configuration.

Each configuration can be assigned to one or more user profiles.

**3.** Under Branding Colors, update the hex color code of each setting as needed.

Note: Each value must consist of the # symbol followed by six letters or numbers.

- When you have entered values for every token you wish to modify, click Save. Users must log out and log in to the app to see changes to branding.
  - Note: iOS 13 and later app users can enable Dark Mode from their OS settings. However, this overrides the custom branding colors for some UI elements.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

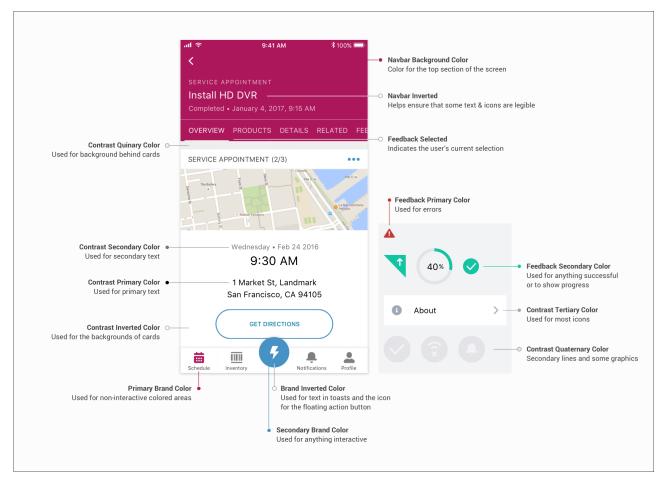
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To customize branding colors:

Customize Application



Token Name	Description	Default Value
Navbar Background Color	The color of the top bar in the app.	#803ABE
Navbar Inverted Color	The secondary color of the top bar in the app.	#FFFFFF
Brand Inverted Color	The color of toasts and the contrast color for the floating action button.	#FFFFF
Feedback Primary Color	The color of error messages.	#C23934
Feedback Secondary Color	The color of success messages or progress icons.	#13C4A3
Feedback Selected Color	The color indicating the user's current selection.	#FFFFFF
Primary Brand Color	The color of non-interactive areas in the app.	#803ABE
Secondary Brand Color	The color of interactive areas in the app.	#2A7AB0
Contrast Primary Color	The color of primary text.	#000000
Contrast Secondary Color	The color of secondary text.	#444444
Contrast Tertiary Color	The color of the icons on the settings screen and of primary lines that delineate different areas of the UI.	#9FAAB5

Token Name	Description	Default Value
Contrast Quaternary Color	The color of some graphics and of secondary lines that delineate different areas of the UI.	#E6E6EB
Contrast Quinary Color	The color of the background behind cards in the UI.	#EEEEE
Contrast Inverted Color	The color of card backgrounds in the UI.	#FFFFF

SEE ALSO:

Add a Profile Tab Background Image in the Field Service Mobile App Customize the Field Service Mobile App by User Profile Track Service Resource Geolocation with the Field Service Mobile App

# Customize Tabs with the Field Service Mobile App Builder

The Field Service Mobile App Builder is a point-and-click tool that lets you configure custom tab navigation and give users quick access to screens and records based on their role.

With the Field Service Mobile App Builder you can:

- Rename tabs
- Define new tabs
- Reorder tabs
- Delete tabs
- Change tab icons
- Assign tabs to navigate to native Field Service screens, some object list views, and Lightning web components.

#### Field Service Mobile App Builder Considerations and Limitations

Before you start working with the Field Service Mobile App Builder, here are some things to know.

Set Up User Permissions for Field Service Mobile Builder Let mobile users see the configuration.

#### Create a Configuration

Use the Field Service Mobile App Builder to configure what tabs are available within the Field Service mobile app and assign those configurations to profiles.

#### Explore the User Interface

The Field Service Mobile App Builder user interface makes configuring navigation tabs easy.

#### Set Up the Search Tab

Let mobile workers search for records in the Field Service mobile app.

# Field Service Mobile App Builder Considerations and Limitations

Before you start working with the Field Service Mobile App Builder, here are some things to know.

• The Field Service Mobile App Builder is available for Android and iOS.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

- Field Service Mobile Builder configurations aren't fully duplicated in Partial Copy, Developer Copy, or Developer Pro Copy sandboxes. To use Mobile Builder configurations in sandboxes, use Full Copy.
- On Android, tabs that are customized using the Field Service Mobile App Builder don't maintain their current state when switching between tabs and when rotating the mobile device. To avoid this issue, lock the device's screen rotation.
- The maximum number of tabs allowed is 15.
- The Profile tab in the Field Service mobile app is fixed on the right side of the tab bar. Because you can't modify its location and function, it isn't shown in the mobile app builder.
- The number of tabs shown in the mobile app builder canvas doesn't match what the user sees on the actual mobile device. There's always one additional tab on the device. The Profile tab in the Field Service mobile app is fixed on the tab bar and can't be modified, so it isn't shown in the mobile app builder.

## Set Up User Permissions for Field Service Mobile Builder

Let mobile users see the configuration.

- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Select the permission set that's assigned to mobile workers. See Give Users Access to the Field Service Mobile App.
- 3. Click System Permissions, and then click Edit.
- 4. Enable Lightning SDK for Field Service Mobile and Custom Applications for Field Service Mobile.
- 5. Save the permission set.

# Create a Configuration

Use the Field Service Mobile App Builder to configure what tabs are available within the Field Service mobile app and assign those configurations to profiles.

1. From Setup, in the Quick Find box, enter *Field Service Mobile App Builder*, and then select **Field Service Mobile App Builder**.



# oblic.

**USER PERMISSIONS** 

To assign permission sets:

**Customize Application** 

#### **USER PERMISSIONS**

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

 Custom applications for Field Service mobile

2. Click New Configuration.

- **3.** Give your configuration an app name.
- 4. To populate the API Name field, click in the box, and then click Save.

The Field Service Mobile App Builder user interface opens.

# Explore the User Interface

The Field Service Mobile App Builder user interface makes configuring navigation tabs easy.

## EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

÷	Field Service Mobile App Builder 🌓 Demo 🚺	3
		Publish Save
+	Components 2 × All Accounts	◆ List View
Ξ	Search Q	•Objects 0
	✓ Tabs (8)	Account X
	Content Libraries	*Filters O
	IIII inventory	All Accounts X
	Gightning Web Component	*Tab Label Add a tab label
	E List View	Complete this field.
	5 LWC Attributes	*lcon list ×
	A Notifications	Create New Record
	🛱 Schedule	
	() Time Sheet	
	= = List View + Ø ô	
	4 🛗 IIII 🐥 🗮	

Here's a breakdown of the parts of the tool.

The header shows you the label of your page. From here you can return to Setup without saving by clicking the **Back** arrow. (1)

The component palette lets you drag components onto the canvas to create tabs. (2)

In the status bar, you can check whether your configuration is active or a draft, see when it was last modified, and publish or save. (3)

The page canvas area is a preview of your screen. Click the tab to copy, delete, or move the tab. Clicking the tab also brings up properties to edit in the Properties pane.(4)

+ Component Tree Inventory 🗸 Tab Bar 亩 Q Search Product Ite Ligh 亩 Notification 盲 ô Time Sheet 合 ..... ₩. 蔮

Edit tab details in the Properties pane. Click a tab in the canvas to see that component's options in the Properties pane. (5)

Clicking the component tree toggle lets you see your selected components. From here, you can interact with a component and delete it. You can also easily see if you have components in the tab overflow area, which are available when a user taps **More** in the app. The overflow area activates when you have more than 4 tabs in the app.

#### Work with Tabs

Choose tab types and their placement, and add other customizations to create workflows optimized for your users.

#### Publish a Configuration

Give users access to your customized tabs in the Field Service mobile app.

#### Work with a Configuration

After you create a custom configuration, you can easily change its style, function, or assignment.

## Work with Tabs

Choose tab types and their placement, and add other customizations to create workflows optimized for your users.

Assign a Native Field Service Page to a Tab Improve workflows for your users by creating tabs for frequently accessed information.

Assign a List View Page to a Tab

Create tabs containing list views so your users can easily see what's needed to get the job done.

Change the Icon for a Tab

Style your tabs so users know the tabs' function at a glance.

Assign a Lightning Web Component (LWC) Page to a Tab Extend tab functionality with Lightning web components.

Assign a Lightning Web Component with Attributes to a Tab

Add a Lightning Web Component (LWC) that contains attributes as a tab.

Reorder Tabs

Change tab order to work efficiently for your users.

Delete a Tab Change tab order to work efficiently for your users.

Set Up Content Libraries

To organize files related to Field Service objects, create content libraries.

#### Assign a Native Field Service Page to a Tab

Improve workflows for your users by creating tabs for frequently accessed information.

- 1. In the Component palette, pick a page (Content Libraries, Inventory, Notifications, Schedule, or Time Sheets) and drag it to the canvas.
- 2. If you want to move the tab to a different location, drag the move icon ( 💶 ) to the new location.
- **3.** Select a filter to set the default list view for the tab. This filter is the list view mobile workers see when they first open on the tab. Apply up to three filters for Time Sheets to assign list views for offline priming.
- 4. Name the tab in the Tab Label field.
- 5. In the status bar, click Save.

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### USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

#### Assign a List View Page to a Tab

Create tabs containing list views so your users can easily see what's needed to get the job done.

- 1. In the Component palette, drag List View to the canvas.
- 2. In the Properties pane, select which object you want to create a list from.
- 3. If it's allowed for the object type, choose how to filter the list.
- 4. Name the tab in the Tab Label field.
- 5. In the status bar, click Save.

#### Change the Icon for a Tab

Style your tabs so users know the tabs' function at a glance.

#### **User Permissions Needed**

For admins to create and manage email templates and content in Customize application a builder:

For mobile app users to customize using App Setup menu options: Custom applications for Field Service mobile

- 1. To change the icon, in the canvas, click the tab whose icon you want to change.
- 2. Click the X next to the current icon, and then click Select Icon.
- 3. Choose an icon and click Select.
- 4. Click Save.
- 5. In the status bar, click Save.

Assign a Lightning Web Component (LWC) Page to a Tab

Extend tab functionality with Lightning web components.

- 1. In the Component palette, drag Lightning Web Component (LWC) to the canvas.
- Select which LWC Page for the tab to navigate to.
   The list is based on which global quick actions you created
- **3.** Name the tab in the Tab Label field.
- 4. To change the icon, click the X next to the current icon, and then click Select Icon.
- 5. Choose an icon and click **Select**.
- 6. In the status bar, click Save.

## USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

 Custom applications for Field Service mobile Assign a Lightning Web Component with Attributes to a Tab

Add a Lightning Web Component (LWC) that contains attributes as a tab.

- 1. In the Component palette, drag LWC Attributes to the canvas.
- 2. Select an LWC with attributes in the properties pane.

The component and attributes must have the Experience Container Salesforce Field Service (ECSFS) target type.

- 3. Name the tab in the Tab Label field.
- **4.** To change the icon, click the **X** next to the current icon, and then click **Select Icon**.
- 5. Choose an icon and click Select.
- 6. In the status bar, click Save.

#### SEE ALSO:

Lightning Web Components Developer Guide: XML Configuration File Elements

#### Reorder Tabs

Change tab order to work efficiently for your users.

- 1. In the canvas, hover over the tab you want to move. A menu appears.
- 2. Drag the move icon ( ) in the menu to the new location in the preview. Changing the order of the tabs can change which tabs are moved onto the More page.

Delete a Tab

Change tab order to work efficiently for your users.

- 1. In the canvas, hover over the tab you want to delete. A menu appears.
- 2. Click the delete icon ( ) in the menu.
- 3. Click Delete to confirm.

### USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

### USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

# USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

Custom applications for
 Field Service mobile

#### Set Up Content Libraries

To organize files related to Field Service objects, create content libraries.

- Note: To use the content libraries feature on the Field Service mobile app, you must create custom content libraries. The default Asset Library folder doesn't work with content libraries. If you try to open Asset Library on the Field Service mobile app, you receive an error message on both Android and iOS.
- 1. From Setup, in the Quick Find box, enter and select Field Service Mobile App Builder.
- 2. Select a configuration to add your custom Content Libraries tab to.
- 3. In the Component palette, drag Content Libraries to the canvas.
- 4. Name your tab with a custom tab label and, optionally, add an icon.
- From the App Launcher, navigate to the Field Service Mobile App Builder. From the Mobile App Builder, grant access to people or public groups by navigating to Files > Libraries > Manage Members.

In the Field Service mobile app, if a user opens a file in the Content Libraries tab while online, that same file remains available offline. Files that aren't opened online aren't available offline.

## Publish a Configuration

Give users access to your customized tabs in the Field Service mobile app.

#### **User Permissions Needed**

For admins to create and manage email templates and content in a builder:	Customize application
For mobile app users to customize using App Setup menu options:	Custom applications for Field Service mobile

1. From the Mobile App Builder status bar, click **Publish**.

The Publish button is available when the configuration is in a draft state (if it has never been published or when changes occurred since the last publish date).

- 2. Select the profiles that can view your app configuration.
- 3. If no conflicts exist, click Assign.
- 4. If conflicts exist, click Next.
- 5. Review the assignment changes you're about to make. Take one of these actions.
  - Confirm that you want to override the current assignments and click Override & Publish.
  - To change the selected assignments, click Cancel & Back.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For admins to create and manage email templates and content in a builder:

Content Builder Access

### Work with a Configuration

After you create a custom configuration, you can easily change its style, function, or assignment.

Edit Your Custom Tabs ConfigurationImprove tabs to better suit your users' needs.Edit the App NameChange the app name to suit your needs or add clarity on its purpose.Assign Profiles to a ConfigurationChoose who sees the custom configuration in their Field Service mobile app based on user<br/>preferences and needs.Clone a ConfigurationMake your work customizing configurations for multiple users go more quickly.Delete a ConfigurationRemove unneeded custom configurations.

#### Edit Your Custom Tabs Configuration

Improve tabs to better suit your users' needs.

#### User Permissions Needed

For admins to create and manage email templates and content in Customize application a builder:

For mobile app users to customize using App Setup menu options: Custom applications for Field Service mobile

- 1. From Setup, in the Quick Find box, enter *Field Service Mobile App Builder*, and then select **Field Service Mobile App Builder**.
- 2. In the App Configurations pane, click the dropdown next to the selected configuration, and then select Edit App Configuration.

2023-05-25 19	:42:40
2023-05-09 0	Edit App Configuration
2023-04-21 2	Edit Basic Information
2023-04-21 2	Assign Profiles

This action opens the mobile app builder user interface where you can rename, reorder, delete, and add tabs.

#### Edit the App Name

Change the app name to suit your needs or add clarity on its purpose.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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To access the Field Service mobile app, users need the Field Service Mobile user license.

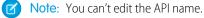
#### Customize the Field Service Mobile App

#### **User Permissions Needed**

For admins to create and manage email templates and content in Customize application a builder:

For mobile app users to customize using App Setup menu options: Custom applications for Field Service mobile

- 1. From Setup, click the dropdown next to the selected configuration and select Edit Basic Information.
- 2. Edit the App Name field, and then click Save.



#### Assign Profiles to a Configuration

Choose who sees the custom configuration in their Field Service mobile app based on user preferences and needs.

- 1. Assign profiles from within Setup or in the mobile app builder user interface.
  - a. From Setup, click the dropdown next to the selected configuration, and then select Assign Profiles.
  - **b.** Select the profiles that can view your app configuration.
  - c. If no conflicts exist, click Assign.
  - d. If conflicts exist, click Next.
  - e. Review the assignment changes you're about to make. Take one of these actions.
  - Confirm that you want to override the current assignments and click Override & Publish.
  - To change the selected assignments, click Cancel & Back.
  - Assign profiles from the mobile app builder user interface.
- 2. In the App Configurations pane, click the app you want to open.

#### a. Click Publish.

The Publish button is available when the configuration is in a draft state (if it has never been published or when changes occurred since the last publish date).

- **b.** Select the profiles that can view your custom app configuration.
- c. If no conflicts exist, click Assign.
- d. If conflicts exist, click Next.
- e. Review the assignment changes you're about to make. Take one of these actions.
- Confirm that you want to override the current assignments and click Override & Publish.
- To change the selected assignments, click **Cancel & Back**.

#### Clone a Configuration

Make your work customizing configurations for multiple users go more quickly.

### USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

### **User Permissions Needed**

For admins to create and manage email templates and content in Customize application a builder:

For mobile app users to customize using App Setup menu options: Custom applications for Field Service mobile

- 1. From Setup, click the dropdown next to the selected configuration, and then select Clone.
- 2. Edit the App Name field.
- 3. Edit the API Name field.
- 4. Click Save.

#### Delete a Configuration

Remove unneeded custom configurations.

- Note: A configuration can't be reinstated and after it's deleted assigned profiles can no longer view the configuration.
- 1. From Setup, click the dropdown next to the selected configuration, and then select Delete.
- **2.** Confirm and then click **Delete**.

# USER PERMISSIONS

For admins to create and manage email templates and content in a builder:

Customize application

For mobile app users to customize using App Setup menu options:

• Custom applications for Field Service mobile

# Set Up the Search Tab

Let mobile workers search for records in the Field Service mobile app.

- **1.** Set up the user permissions on page 869.
- 2. Add the Search component.
  - **a.** In Field Service Mobile App Builder, drag **LWC Attributes** to the bottom bar. See Work with Tabs on page 872.
  - **b.** For Lightning Web Component, select **Search**.
  - **c.** Give the tab a label and select an icon. The mobile worker sees the label and icon in the Field Service mobile app. For example:



Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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To access the Field Service mobile app, users need the Field Service Mobile user license.

# USER PERMISSIONS

To customize tabs:

Customize Application

+	Components ×		← LWC Attributes
Ξ	Search Q V Tabs (8)	Search ~	Lightning Web Component     Search     X
	<ul> <li>Content Libraries</li> <li>IIII Inventory</li> <li>Lightning Web Component (LWC)</li> <li>List View</li> <li>LWC Attributes</li> <li>Notifications</li> <li>Schedule</li> <li>Time Sheet</li> </ul>	() Search We can't show a preview of a custom LWC page.	* Tab Label Search *Icon Q search X
		E 5 LWC Attributes 4 2 1	

d. Click Save and then click Publish.

3. The component searches in these objects, listed in the order they appear: Service Appointment, Work Order, Work Order Line Item, Asset, Contact, Account, Product Item, and Resource Absence.

Determine which fields are searched and shown in the search results.

- a. The search bar at the top of the component lets users enter free text. The component then searches in all the fields that are in the object's search layout. To determine which fields are searched, from Object Manager, select the **Service Appointment** object, and then click **Search Layouts**.
- **b.** In the row of the required profile, click the arrow and select **Edit**.
- c. The component searches in all of the fields in the Selected Fields list. Review the fields in the list and add or remove fields accordingly.
- **d.** The first five fields are shown in the search results. Determine which fields are shown by reordering the fields.

The top two fields are shown in the collapsed mode. The first field is the title of the search result, and the second field appears below it. The next three fields are seen only in the expanded mode. For example, if the fields are sorted in the order shown in this example, these fields are shown in the collapsed mode and the expanded mode.

	Collapsed mode	Expanded mode
Selected Fields Appointment Number Subject Status City Arrival Window Start Parent Record Type Arrival Window End Parent Record	Collapsed mode	Expanded mode

- e. The component's Filter By option lets you select any of the object's fields that are in the page layout. Review the fields in the object's page layout and add or remove fields accordingly.
- f. Repeat steps a. to e. for the remaining objects that the component searches in.

Keep these considerations in mind.

- The search results show only the first 50 records that were modified in the last 2 years, based on the last modified field on the record. Older results aren't shown.
- The component searches in a set list of objects. You can't search in other objects that were added to the briefcase.
- When the mobile worker is offline, the component searches only in cached records. Make sure you add the relevant records to the briefcase so that they're available offline.
- When the mobile worker performs a search, the results are retrieved from the server and cached. If the information changes on the server and the mobile worker then performs the same search, they don't see the updated information, because the information was already cached. When the data cache policy expires, the search can retrieve the updated information.
- The component retrieves only records that the user has access to. When a mobile worker searches for service appointments, only appointments that are assigned to them are retrieved.

SEE ALSO:

Customize Tabs with the Field Service Mobile App Builder Search for Records

# Customize Screens in the Field Service Mobile App

Control which fields users see in the Field Service mobile app by updating page and search layouts.

Records in the Field Service mobile app display the first three fields in the corresponding page layout. Some fields are hard-coded, meaning they are shown in the app regardless of their place in the page layout.

# Note:

- When you update metadata like a page layout, users must log out and log into the Field Service mobile app to see the changes.
- Not all field types are supported in the Field Service app. Review Supported Data Types in the Field Service Mobile App before you configure your layouts.

Screen in the mobile app	Page Layout	Details
Absences	Absences related list on the Service Resource page layout	You can reach the Absences screen from the Profile screen.
		Resource absences are displayed differently in the app based on whether the start time and end time fields are included in the related list layout.
Inventory	Search results layout on the product item object.	The Inventory tab represents the items in the user's inventory. It shows product items associated with the user's service resource record.
		Service resources only see the Inventory tab if they're associated with a mobile inventory location (which represents their service vehicle). See Set Up Inventory Access for Mobile Workers.
Products	Product search layout	Users must be able to find products to create product requests and product items.
		Users viewing products in the app see the Product Name field and the top 3 fields in the search layout.
		<b>Note:</b> To search Products, a pricebook

# EDITIONS

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## USER PERMISSIONS

To modify page layouts:

Customize Application

To create custom list views:

 Read on the type of record included in the list AND

> Create and Customize List Views

To create, edit, or delete public list views:

 Manage Public List Views

Screen in the mobile app	Page Layout	Details
		must be set on the parent object. Only string fields are searchable. Numbers, Dates and other fields can't be searched.
Products Consumed	Product consumed related list on the work order. Product consumed number must be the first field.	You can reach the Products Consumed screen from the Related tab or the Products tab in the work order carousel.
Record Highlight for any record	Compact Layout of the record (for example, Service Appointment Compact Layout)	A record highlight is a preview of a record. The top-most field in a record's compact layout is displayed prominently.
Record Lookup	Search Layout of the record (for example, Contact Search Layout)	A record lookup is a search for a record. To change the search results, update the search layout in your org.
Related Lists	Related list layout	Related list sorting uses the default page layout sorting. If the user overrides the sort setting, the app uses this setting for related list sorting. Related list sorting only sorts on one column.
Schedule	<ul> <li>The layout selected in the Default List View Developer Name field on the Field Service Mobile Settings assigned to the user's profile.</li> <li>(If no list view is specified) Service Appointment search layout</li> </ul>	The Schedule tab lists service appointments assigned to the user. For details, see Customize the Schedule Tab. Note: The Default List View Developer Name is the name of the list view that shows when the mobile Service Appointment page is first opened. If the Default List View Developer Name isn't defined, mobile users see their service appointments within the date picker range. This list and the list defined are available offline. However, there isn't an option to change to another list view on the mobile device unless the Default List View Developer Name is defined.
Service Appointment	List view layout.	<ul><li>The service appointment screen includes the following fields in the following order:</li><li>First field in the service appointment list view (displayed as a title)</li></ul>

Screen in the mobile app	Page Layout	Details
		<ul> <li>Scheduled Start (only visible if the field has a value)</li> <li>First three fields in the service appointment search layout</li> <li>Address (only visible if the field has a value)</li> <li>Scheduled End (only visible if the field has a value)</li> </ul>
Work Order Overview	<ul> <li>List view layout</li> <li>First field in Work Order compact layout is in bold in the app</li> <li>Description field can't be changed and shows a max of 3 lines.</li> <li>Has up to 5 fields (including the title) displayed in this layout</li> </ul>	You can reach the Work Order Overview screen by tapping a service appointment from the Schedule tab.

#### Customize the Schedule Tab

The Schedule tab in the Field Service mobile app shows service appointments that are assigned to the user. The Schedule tab layout is based on a list view specified in Setup. If no list view is specified, it uses the service appointment search layout.

#### Customize the Layout of the Work Order Overview Screen

When a user taps a service appointment on the Schedule tab, an overview of the work order is shown. You can customize the highlights and cards shown on the work order overview screen.

SEE ALSO:

Customize the Schedule Tab Customize the Layout of the Work Order Overview Screen

# Customize the Schedule Tab

The Schedule tab in the Field Service mobile app shows service appointments that are assigned to the user. The Schedule tab layout is based on a list view specified in Setup. If no list view is specified, it uses the service appointment search layout.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

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To access the Field Service mobile app, users need the Field Service Mobile user license.

# USER PERMISSIONS

To modify search layouts:

Customize Application

To create custom list views:

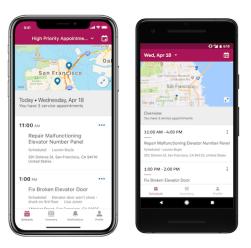
Read on the type of
record included in the list

AND

Create and Customize List Views

To create, edit, or delete public list views:

 Manage Public List Views



You can base the Schedule tab on a list view. Using a list view allows you to set criteria to filter the records that appear to app users.

- 1. Create a service appointment list view with up to four fields. Set filter criteria to filter the records according to your use case. Note the API name of the list view.
- 2. From Setup, in the Quick Find box, enter *Field Service Mobile*, and then select **Field Service Mobile Settings**.
- 3. Click the arrow next to the mobile settings you want to define the list view for and select Show Details.
- 4. Under Customization, edit the Default List View Developer Name and enter the API name of the list view you want to use.
  - Note: The Default List View Developer Name is the name of the list view that shows when the mobile Service Appointment page is first opened. If the Default List View Developer Name isn't defined, mobile users see their service appointments within the date picker range. This list and the list defined are available offline. However, there isn't an option to change to another list view on the mobile device unless the Default List View Developer Name is defined.
- 5. Save your changes.

If no list view is specified in Setup, users viewing service appointments from the Schedule tab see the following fields:

- Scheduled Start
- Scheduled End
- Address
- The top two fields in the Service Appointment search layout.

Considerations for Customizing the Schedule Tab

- The service appointment calendar view appears differently on Android and iOS devices. On Android, the calendar uses a month view. On iOS, the calendar uses a week view.
- If the Schedule tab is based on a list view, including the Scheduled Start field in your list view filter lets app users see a date picker with a range of 45 days before and after the current date. If the list view doesn't include this field, users see a single Schedule tab of the user's appointments based on your filter criteria, as it would appear on the desktop site.
- While list views can be set for a range of ±45 days, this may affect performance. We recommend configuring list views for a range of ±15 days to maintain optimal performance.
- Each list view displays a maximum of 1000 service appointments for a 90-day window. For example, if your 90-day window contains 1100 service appointments, only 1000 of those appointments are displayed.
- The app prominently displays the top two fields of the service appointment search layout, so consider which fields your mobile workers want to see on the Schedule tab. Many users, for example, prefer to see Subject instead of the service appointment ID. Scheduled Start and Address are displayed in the same location regardless of the list view or search layout settings

- Service appointments in the schedule list are shown in chronological order. This order can't be changed.
- Custom lookup fields aren't supported and don't appear on the Schedule tab.
- Formulas aren't supported on the Schedule tab.
- Multi-day appointments appear on the Schedule tab in the following way:
  - If a multi-day appointment includes both a Scheduled Start and Scheduled End, the appointment appears on the schedule for every day between those two dates and includes a visual progress bar representing the job's scheduled completion.
  - If a multi-day appointment includes a Scheduled Start but not a Scheduled End, the appointment appears on the schedule every day after the Scheduled Start date until the appointment is complete.
  - If a multi-day appointment doesn't include a Scheduled Start, the appointment doesn't appear in the Field Service mobile app.
- To add resource absences to the list of Schedule tab items, turn on Display resource absences in the Schedule page on any Field Service mobile settings configuration. Mobile workers get an integrated view of their schedule on calendar-based list views.
- The Recently Viewed list view isn't supported. When accessed, it doesn't return records, and an error is returned.

SEE ALSO:

Customize the Layout of the Work Order Overview Screen Field Service Mobile App Considerations

# Customize the Layout of the Work Order Overview Screen

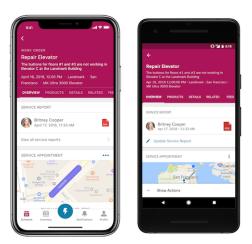
When a user taps a service appointment on the Schedule tab, an overview of the work order is shown. You can customize the highlights and cards shown on the work order overview screen.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.



## Note:

- When you modify a page layout, users must log out and log in to the Field Service mobile app to see the changes.
- Not all field types are supported in the Field Service app. Before you configure your layouts, review Supported Data Types in the Field Service Mobile App.
- Formula URL fields aren't supported in compact layouts.

## Change the Screen Layout

A preview of the work order is anchored to the top of the screen. This preview shows the first five fields in the work order compact layout, with the Description field counted as one of the five. The first field in the compact layout appears in bold and is used as the title of the work order overview. The Description field appears below the title and is followed by the next three fields in the compact layout.

- 1. From the Object Manager in Setup, select Work Order.
- 2. Click Compact Layouts.
- 3. Click the name of the compact layout and edit the layout as desired.
- 4. Save your changes.

### Navigate the Work Order Carousel

The horizontal work order carousel lets users switch between the following views:

- Overview: Shows work order cards
- **Products**: Where users manage required and consumed products
- **Details**: Shows all supported fields on the work order page layout
- **Related**: Shows all related lists on the work order page layout
- Feed: Shows the Chatter feed if feed tracking is enabled
- Location: Shows work in the same location as the current appointment. To see the Location view users need access to the Location field, which must be populated on the Work Orders object.

# Add Cards

The Overview tab in the work order carousel displays information about the work order and its child records. The information appears in cards, which represent the related lists on the work order. Manage which cards are displayed by adding or removing related lists on the Work Order page layout in Setup. You can add the following cards to the work order overview.

Card	Description	How to Display and Customize	Available In
Asset Service History	Provides context about the maintenance history of an asset. It shows the asset associated with the current work order. It also lists the asset's three most recent work orders and provides a link to view all associated work orders. It doesn't show work order line items that are associated with the asset. In Salesforce Lightning Design System (SLDS), the Asset Service History card doesn't list the asset's three most recent work orders. Click <b>Show All</b> to view all associated work orders.	The Asset Service History card is shown if the page layout for the work order or work order line item contains the <b>Asset</b> field In Android, the Asset Service History card displays the first four fields in the work orders related list from the asset page layout. The first field is displayed prominently. In iOS, this card displays the work order number and the first field from the asset detail page layout. Normally, the first field is the asset name.	Android and iOS
Contact	Shows the contact's name and gives the option to call, message, and email the contact.	The Contact card can't be customized. It shows the following fields and options: Customer Name, Phone, Message, Email. The <b>Customer</b> <b>Name</b> field always shows on the Contact card, even if the field is empty. If <b>Phone</b> , <b>Message</b> or <b>Email</b> fields are empty, they don't show on the card. In Android, you must specify a contact. In iOS, if no contact is specified, this card is empty, but you can assign a contact to the card.	Android and iOS
Knowledge	Shows knowledge articles that are attached to the work order, with a snippet of each article included.	In iOS, the Knowledge card is only visible if an article is attached to the work order.	iOS only

Card	Description	How to Display and Customize	Available In
Service Appointment	Shows a map and the option to navigate to the address of the appointment. If the address isn't set, the card instead presents the user with the option to set the address, and then activate navigation.	If the work order has one or more service appointments, the Service Appointment card is visible. For information about bundled service appointments, see Manage Bundled Service Appointments on the Field Service Mobile App.	Android only
		The following fields on this card can't be removed from it: Start Time, End Time, Date, Address, ETA (estimated time of arrival).	
Service Report	Displays service reports associated with the work order's service appointments.	If a service report has been previously generated, the Service Report card appears at the top of the Overview tab. There's no option to create a service report. Otherwise, the card appears at the bottom of the Overview tab and includes an option to create a service report. The Service Report card is visible by default in iOS. To make the card visible in Android, manually add it to the layout.	Android and iOS

Card	Description	How to Display and Customize	Available In
Work Order Line Item	Shows a visual progress indicator for the work order and lists its work order line items. iOS users with the proper permissions can tap the + icon to create line items. For details, see Let Users Create Work Order Line Items from the Field Service Mobile App.	If the work order has work order line items, the Work Order Line Item card is visible. In Android, this card displays four fields for each line item. The Work Order Line Item Number field is always visible. It's followed by the first three fields from the Work Order Line Items related list. The card for child Work Order Line Items isn't available in Android. In iOS, this card displays the first two fields from the Work Order Line Item's related list.	Android and iOS

SEE ALSO:

Customize the Schedule Tab Set Up Custom Actions in the Field Service Mobile App

# Add a Profile Tab Background Image in the Field Service Mobile App

Add a background image to customize the Profile Tab in the Field Service Mobile App.

- 1. Upload your image as a static resource.
  - a. From Setup, enter *Static Resources* into the Quick Find box and click **Static Resources**.
  - b. Click New.
  - c. Give the static resource a name, like *background\_banner*. Remember the name, since you need to use it in a later step.
  - **d.** Select an image file for upload. An image sized at 3072 x 819 pixels leads to the best results on large displays such as iPads in landscape mode. However, if your users often encounter slow mobile networks, consider using a smaller image.
  - e. Click Save.
- 2. Create a custom attribute to use the static resource on every user's Profile tab.
  - a. From Setup, enter *Connected Apps* into the Quick Find box, then select **Connected Apps**.
  - b. Select Salesforce Field Service for iOS or Salesforce Field Service for Android.
  - c. Scroll down to the list Custom Attributes and click New.
  - **d.** For the attribute key, enter *COMPANY\_PROFILE\_IMAGE\_RESOURCE\_NAME*.
  - **e.** For the attribute value, enter the name of the static resource you created surrounded by quotation marks.

Note: If you named your static resource background\_banner, your attribute value is "background banner".

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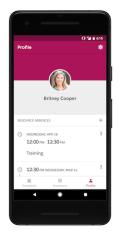
### USER PERMISSIONS

To set the company profile image:

Customize Application

#### f. Click Save.





#### SEE ALSO:

Brand the Field Service Mobile App In-App Profile Settings in the Field Service Mobile App

# Customize Push Notifications for the Field Service Mobile App

Push notifications alert your mobile workforce to approaching appointments and scheduling changes.

You can extend or replace the default notifications using custom notifications.

- 1. Ensure that the connected app (different from the app itself) has been downloaded.
- 2. Enable notifications in Setup.
  - **a.** From Setup, enter *Field Service Settings* in the Quick Find box, then select **Field Service Settings**.
  - b. Under Notifications, select Enable notifications, and save your changes.
- **3.** Choose when service appointment notifications are sent.
  - a. From Setup, enter *Field Service Mobile Settings* in the Quick Find box, then select **Field Service Mobile Settings**.
  - **b.** Next to your mobile settings configuration, click **Edit**.
  - **c.** Under Customization, select how to send appointment notifications and then save your changes.
    - When you select Send appointment notifications on assignment, workers are
      notified when they're assigned to a service appointment and when their assignment
      is changed or removed. They're not notified when they're dispatched for the
      appointment. If a worker changes or is removed from the service appointment after
      they were assigned, they still receive the notification, regardless of the status of the
      service appointment.

When you select **Send appointment notifications on dispatch**, workers are notified when the status of the service appointment changes to Dispatched and when their assignment is changed or removed. If a worker changes or is removed from the service appointment after it's dispatched, they still receive the notification.

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#### **USER PERMISSIONS**

To customize push notifications:

Customize Application

- When you select both options, workers receive assignment and dispatch notifications.
- If you select neither option, no service appointment notifications are sent.

Note: The notification received on the Field Service mobile app shows this message: [User] assigned resource [Service Resource] on Service Appointment [Appointment]. This signals to the technician that the appointment is ready to be picked up. This happens at assignment time (when an Assigned Resource is created) or dispatch time (when an assigned Service Appointment is dispatched) based on the settings selected.

Workers also receive push notifications in the following circumstances.

- Followers of a service appointment receive a separate notification regarding the service appointment assignment to a another worker.
- A Chatter text post is made on a work order that the worker follows.
- A Chatter file post is made on a work order that the worker follows.
- A feed-tracked change is made to a work order that the worker follows.
- (iOS only) A feed-tracked change is made to a service appointment that the worker follows.
- Push notifications or chatter posts push the most recent record data onto the mobile device.
- Note: Mobile workers aren't automatically added as followers to work orders and service appointment records that they're assigned to. Consider creating an Apex trigger on the service resource object to add or remove users as followers when assignments change.

# Track Service Resource Geolocation with the Field Service Mobile App

Use geolocation to manage your mobile workforce. You can exclude certain users from geolocation tracking.

When service resource tracking is enabled, the Field Service mobile app uploads the geolocation of app users to Salesforce at regular intervals. Enable service resource tracking in Setup.

- 1. From Setup, in the Quick Find box, enter *Field Service Settings*, and then select **Field Service Mobile Settings**.
- 2. Click Edit next to the settings configuration that you want to update.
- **3.** Under Additional Settings, select **Collect Service Resource Geolocation History**. This option is mandatory for data collection.
- 4. Enter values for the following geolocation-related fields.
  - Note: Higher-precision or higher-frequency settings increase battery consumption on mobile devices. To conserve battery power with Android O and later, your position is updated less frequently when the app is in the background. To get an accurate position update, open the Field Service mobile app on your phone.
  - Note: Because of an iOS device limitation in background mode, the location updates only about every five minutes when the device moves 500 meters or more from its previous location. When the app is in the foreground, it updates as specified in the Geolocation Update Frequency in Minutes and Geolocation Accuracy fields.
  - Geolocation Update Frequency in Minutes: Controls how often geolocation is polled when the app is running in the foreground. For iOS devices, this value also controls update frequency when the app is in the background.

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### USER PERMISSIONS

To configure resource tracking:

Customize Application

To assign permission sets:

Assign Permission Sets

- Geolocation Update Frequency in Minutes (Background Mode): For Android devices, this value controls how often geolocation is polled when the app is running in the background. See the important note about iOS devices when in background mode.
- Geolocation Accuracy: This value controls the accuracy of the geolocation data collected when the app is running in the foreground. Choose from the following values:
  - Fine: 10 meters
  - Medium: 100 meters
  - Coarse: 1 kilometer
- Geolocation Accuracy (Background Mode): For Android devices, this value controls the accuracy of the geolocation data collected when the app is running in the background. See the important note about iOS devices when in background mode. Choose from the following values:
  - Medium: 100 meters
  - Coarse: 1 kilometer
  - Very Coarse: The app doesn't poll for geolocation data, and geolocation coordinates update only when another app polls for geolocation. The accuracy of the geolocation data depends on the accuracy setting of the application that triggers the geolocation poll.
- 5. Save your changes.

To gain insights on the location of mobile workers, you can track the history of the Last Known Location and Last Known Location Date fields of the Service Resources object. See Field History Tracking.

#### Exclude Specific Mobile Workers From Location Tracking

Individual mobile users can turn off location tracking for the Field Service mobile app from their phone's operating system settings. To exclude specific mobile workers from tracking, such as when not all members of your workforce are legally protected against geolocation tracking, take these steps.

#### Limit Mobile Workers' Location Tracking for Appointment Assistant

Appointment Assistant customers can choose to track the location of mobile workers only in the En Route status, meaning that they're on the way to their next service appointment.

SEE ALSO:

Manage Data Integration Rules for Field Service

# Exclude Specific Mobile Workers From Location Tracking

Individual mobile users can turn off location tracking for the Field Service mobile app from their phone's operating system settings. To exclude specific mobile workers from tracking, such as when not all members of your workforce are legally protected against geolocation tracking, take these steps.

- 1. From Setup, in the Quick Find box, enter *Permission Sets*, and then select **Permission** Sets.
- 2. Create a permission set for users that you want to exclude from geolocation tracking.
- 3. Give the permission set a label and under License, select Field Service Mobile.
- 4. Save the permission set.
- 5. From the settings of your new permission set, click System Permissions.
- 6. Click Edit and select Exclude Technician from Geolocation Tracking.
- 7. Save your changes.
- 8. Click Manage Assignments, and then click Add Assignment.
- 9. Select the users that you want to exclude from geolocation tracking, and then click Assign.

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### USER PERMISSIONS

To configure resource tracking:

Customize Application

To assign permission sets:

• Assign Permission Sets

# Limit Mobile Workers' Location Tracking for Appointment Assistant

Appointment Assistant customers can choose to track the location of mobile workers only in the En Route status, meaning that they're on the way to their next service appointment.

- From Setup, in the Quick Find box, enter *Field Service Mobile*, and then select **Field** Service Mobile Settings.
- **2.** Open the required settings.
- 3. Under Additional Settings, select Enable Limited Tracking.

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# USER PERMISSIONS

To configure resource tracking:

Customize Application

To assign permission sets:

• Assign Permission Sets

# Set Up Custom Actions in the Field Service Mobile App

Configure quick actions, global actions, flows, and app extensions to help your team work more efficiently from the field. Actions are displayed in a predefined order in the action launcher on record pages in the app.

#### Which Actions Appear in the Field Service Mobile App

Learn which actions are visible in the Android and iOS app action launcher.

#### Add Global Actions to the Field Service Mobile App

Add global actions to the Field Service mobile app to give your agents easy access to common tasks.

#### Create Quick Actions for the Field Service Mobile App

Add quick actions to object page layouts so your mobile workforce can quickly create and edit records, send messages to contacts, and more.

#### Let Users Create Work Order Line Items from the Field Service Mobile App

Help your team stay organized in the field by letting them create work order line items to split work orders or work order line items into sub-tasks. This feature is available in the Field Service mobile app for iOS, but not for Android.

#### Create App Extensions for the Field Service Mobile App

Create app extensions to let users pass data from the Field Service app to another app.

#### Add Flows to the Field Service Mobile App

Guide your team through mobile flows in which they can view information, create and update records, and trigger input-based actions.

# Which Actions Appear in the Field Service Mobile App

Learn which actions are visible in the Android and iOS app action launcher.

### Actions Available in the App

When a user clicks the Actions button from the Work Order Overview screen, they see a list of actions found on the page layouts for the Service Appointment and Work Order objects. The Actions launcher displays actions in the following order:

- Create Service Report: Only visible on the Work Order screen if an alternate service closure flow isn't configured and the service appointment page layout includes the Service Reports related list.
- Actions are then separated by Object Work Order and Service Appointment. App extensions and flows scoped to work orders or service appointments are at the top of the section (sorted alphanumerically).
- After app extensions and flows, Salesforce Classic Publisher Quick Actions display in the order of the page's layout. (Android only): View Detail is displayed under Quick Actions.
- After Quick Actions, Edit Work Order, Edit Work Order Line Item, or Edit Service Appointment are displayed.
- App extensions and flows not scoped to an object are shown at the bottom of the page layout.

Note: To see Actions order changes in the mobile app that were made on the desktop, log out and back in to the mobile app.

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### USER PERMISSIONS

To create quick actions and add them to page layouts:

Customize Application

# **EDITIONS**

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The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

## Considerations for Android Devices

- In Android, actions are categorized as Work Order Actions or Service Appointment Actions. In iOS, these actions are consolidated into one list.
- The Create Service Report action isn't visible in Android. To create a service report in Android, navigate to the Work Order Overview screen.
- The Knowledge Article action isn't visible on the Work Order Overview screen in Android. View knowledge articles using the related list.

# Add Global Actions to the Field Service Mobile App

Add global actions to the Field Service mobile app to give your agents easy access to common tasks.

- 1. From Setup, in the Quick Find box, enter *global actions*, and select **global actions**. Add an action.
- 2. From Setup, Under Publisher Layouts, add the global action to the global layout.
- **3.** Drag the quick action you want to add to your app into the Quick Actions in the Salesforce Classic Publisher section.

#### 4. Click Save.

The action is accessible from the navigation bar in the Field Service mobile app.

- Note: The app only supports global actions of the types **Create a Record** and **Lightning Web Components**. Other action types aren't supported.
- Note: Ensure the global layout is assigned to the correct role, and the global actions are assigned to the correct global layout.

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## USER PERMISSIONS

To create actions and modify publisher layouts:

# Create Quick Actions for the Field Service Mobile App

Add quick actions to object page layouts so your mobile workforce can quickly create and edit records, send messages to contacts, and more.

Users viewing records can call a quick action by tapping the action from the action launcher. Quick actions are assigned to record page layouts. For example, you can add a Create Opportunity action to the contact page layout to let users create an opportunity from any contact record in the app.

Create a work order quick action and add it to the work order overview screen.

Note: You can follow these steps for any field service object available in the app.

- 1. From the Object Manager in Setup, click Work Orders, then click Buttons, Links, and Actions.
- 2. Click New Action.
- 3. Configure an action to either create or edit a record, and save your changes.
- 4. From the Object Manager, click Page Layouts under Work Orders.
- 5. Click the work order page layout.
- 6. From the layout editor, select Quick Actions.
- 7. Drag your newly created action into the **Quick Actions in the Salesforce Lightning Publisher** section.
- 8. Save your changes.

The action will be visible in the app and on the full Salesforce site.

# Note:

- The app supports quick actions of the types **Create a Record**, **Update a Record**, and **Lightning Web Components**. Other action types aren't supported.
- When you modify a page layout, users must log out and log in to the Field Service mobile app to see the changes.

#### Set Up Product Requests in the Field Service Mobile App

Let your mobile workers create product requests when they find defective parts in their vehicles or their stock has run out.

SEE ALSO:

**Quick Actions** 

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### USER PERMISSIONS

To create quick actions and add them to page layouts:

# Set Up Product Requests in the Field Service Mobile App

Let your mobile workers create product requests when they find defective parts in their vehicles or their stock has run out.

- 1. Create a global quick action for product requests.
  - **a.** From Setup, enter *Global Actions* in the Quick Find box, and select **Global Actions**.
  - **b.** Click **New Action**.
  - c. Enter the details for your new action.
    - For Action Type, select Create a Record.
    - For Target Object, select Product Request.
    - For Standard Label Type, select **Create New [Record Type]**.
    - For Name, enter an API name for your action.
  - d. Click Save.
- 2. Add fields to the action's layout, and click Save.

When mobile workers use this action to request inventory, they complete these fields. We recommend using no more than eight fields.

- **3.** Add the Product Request quick action to the Publisher Layout that's assigned to your mobile workers.
  - a. From Setup, enter *Publisher Layouts* in the Quick Find box, and select **Publisher Layouts**.
  - **b.** Click **Edit** next to the publisher layout you want to add the action to.
  - c. Drag the Product Request quick action to the **Quick Actions in the Salesforce Classic Publisher** list.
  - d. Click Save.
- 4. Create a global quick action for the Product Request Line Item.
  - a. From the Object Manager, select Product Request.
  - b. In the sidebar, select Buttons, Links, and Actions.
  - c. Click New Action.
  - **d.** Enter the details for your new action.
    - For Action Type, select Create a Record.
    - For Target Object, select **Product Request Line Item**.
    - For Standard Label Type, select Create New [Record Type].
    - For Name, enter an API name for your action.
- 5. Add fields to the action's layout, and click Save.
- 6. Add the quick action to the Product Request page layout.
  - a. From the Object Manager, select Product Request.
  - **b.** In the sidebar, select **Page Layouts**.
  - c. Under Page Layouts, select Product Request Page Layout.

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## USER PERMISSIONS

To create quick actions and add them to page layouts:

Customize Application

To view product request line items:

 Read on product requests

To create product requests:

 Create on product requests

To create, update, or delete product request line items:

• Edit on product requests

- d. At the top of the screen, select Quick Actions.
- e. Drag the Product Request Line Item quick action to the Quick Actions in the Salesforce Classic Publisher list.
- f. Click Save.

SEE ALSO:

Request Inventory in Field Service Product Request and Transfer Fields Set Up Inventory Access for Mobile Workers Set Up Multiple Inventory Locations

# Let Users Create Work Order Line Items from the Field Service Mobile App

Help your team stay organized in the field by letting them create work order line items to split work orders or work order line items into sub-tasks. This feature is available in the Field Service mobile app for iOS, but not for Android.

- 1. Create a quick action to create a work order line item.
  - a. From the Object Manager in Setup, select **Work Order**, and then click **Buttons**, **Links**, and **Actions**.
  - b. Click New Action.
  - c. Select the action type Create a Record.
  - d. Select the target object Work Order Line Item.
  - e. Select the standard label type New Child [Record].
  - f. Enter a label, such as New Line Item. This automatically generates the API name.
  - g. Add a description, such as Create a work order line item.
  - **h.** Select whether or not to create a Chatter feed post when the action is used.
  - i. Optionally, enter a success message that will show when the user creates a line item.
  - j. Save your changes.
- 2. Add your quick action to the work order page layout.
  - a. From the Object Manager in Setup, select Work Order, then click Page Layouts.
  - b. Click Work Order Page Layout.
  - c. In the layout editor, select Quick Actions.
  - d. Drag your newly created action into Quick Actions in the Salesforce Classic Publisher.
  - e. Save your changes.

When this action is added to the layout, iOS users see a + icon in the Work Order Line Item card on work orders and work order line items. Users can tap the icon to create a new work order line item.

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### USER PERMISSIONS

To create quick actions and add them to work order line item page layouts:

Note: When a record type other than Master is set to the default, you must use that same record type when creating a quick action for the page layout.

# Create App Extensions for the Field Service Mobile App

Create app extensions to let users pass data from the Field Service app to another app.

App Extension Type	Supported in Android	Supported in iOS
Android	Yes	No
iOS	No	Yes
Lightning Apps	Yes	Yes
Web apps	Yes	Yes
Flow	Yes	Yes

To set up an app extension, follow the steps below.

- 1. From Setup, enter *Field Service Mobile Settings* in the Quick Find box, then select **Field Service Mobile Settings**.
- 2. Click **Edit** next to the mobile settings configuration that you want to create an app extension for.
- 3. Under App Extensions, click Add.
- 4. Fill out the fields.
  - Field Service Mobile Settings: Automatically populated. Represents the current Mobile Field Service Settings configuration.
  - Type: A picklist of app extension types. The *iOS* and *Android* types will only show on their respective devices. *Flow* refers to a Flow (Setup > Process Automation > Flows) of the type Field Service Mobile Flow. *Lightning App* refers to an app that is exposed in Salesforce for Android or Salesforce for iOS (Setup > Mobile Apps > Salesforce > Salesforce Navigation).
  - Label: The label as it appears to users in the app. The label isn't localized automatically.
  - Name: The extension's name.
  - Scoped To Object Types: The records from which a user can activate an app extension. Scoping an app extension to an object lets users activate that app extension from records of the specified type. The object names are entered as comma separated values and cannot include spaces. For example, to scope an extension to the Work Order object and the Service Appointment object, enter *WorkOrder*, *ServiceAppointment*. To create a global app extension so users can activate it from any record, leave this field blank.
  - Launch Value: A launch value of "https://google.com" will launch a web browser on both iOS and Android. The value to use to launch the app or Flow. If type is *Flow*, then the launch value is the API name of the flow you want to use. If type is *Lightning App*, the launch value is the name of the tab in Salesforce for iOS and Salesforce for Android. The tab name represents a Lightning Component Tab and you can find the tab name in **Setup** > **Salesforce Navigation**. The launch values for types iOS, Android, and Lightning App support passing parameters.

Note: Using a nickname in an app extension launch URL results in an error.

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## USER PERMISSIONS

To create and modify App Extensions:

Note: For Lightning App types: Salesforce for Android version 17.0 supports passing Lightning App parameters. Salesforce for iOS version 18.0 does not currently support passing parameters. To bypass this issue, use a type of iOS with a URL format of https://{orgURL}/lightning/n/{tab name}?params=...

- 5. Click Save.
  - Note: the Salesforce mobile app can launch and accept parameters for Visualforce pages exposed as a Lightning Page Tab. However, the Lightning Page Tab name can't have any spaces in it.
    - Note: The Salesforce app must be installed on iOS to display Lightning app extensions in the Actions launcher.

Note: Open in Salesforce is available in iOS, but in Android, you need to create an Android app extension with the launch value of salesforce1://sObject/{!ld}/view

Passing Tokens Into the Launch Value

Note: Flow app extensions do not accept tokens. They receive the Flow input parameters described in Considerations for Using Flows in the Field Service Mobile App on page 904.

The launch value supports static URLs for web addresses, as well as dynamic values that can be used to pass contextual information to the other app in the form of tokens. These tokens can pass field information from any record that is visible on the Field Service app. For example, if the user is viewing a service appointment, the tokens can be used to pass the data from any field on that service appointment to the app extension. The basic format for these tokens is based on the names of the field, like so: {!Name}.

Note: Any content in the guery parameters for the launch value should be url-encoded, not including the parameters that are substituted by Salesforce Field Service.

Note: The following example uses a token to dynamically pass a custom text field that is on a work order into a Google search. The token is written in **bold** for clarity: https://www.google.com/#g={!WO\_Custom\_Text\_Field\_\_c}

The field name is case sensitive and must match the field name exactly as it is defined on the object.

Values that aren't related to a record are called global variables. When you use a global variable in a token, use the format {!\$User.email}.

Supported Global Variables
Organization.id
User.displayName
User.email
User.firstName
User.id
User.language*
User.lastName
User.locale*
User.nickName
User.orgId
User.userName



Note: \*Android uses the device's language and locale settings.

# Add Flows to the Field Service Mobile App

Guide your team through mobile flows in which they can view information, create and update records, and trigger input-based actions.

One quick and recommended way to accelerate adding flows is by installing the optional, and free, Field Service Starter Kit. The Starter Kit is a Salesforce Labs managed package containing Flow Templates that you can enable and use immediately or customize to tailor fit to your company's specific use case. The kit contains 13 features that you can easily install and test in a sandbox environment and roll out to your users. The features are grouped into three families – Status-Based features, Mobile Notifications, and General Flows.

The Starter Kit is a great way to get started adding flows to Field Service. See the Field Service Starter Kit Simple Implementation Guide for a good introduction to the features in the kit.

**Note:** Salesforce Labs solutions like the Salesforce Field Service Starter Kit app aren't official Salesforce products and don't have Salesforce official support. The Field Service Starter Kit group on the Trailblazer Community is the place to post your questions and get answers.

But, before you begin, learn how to build flows and connect them to the Field Service Mobile app.

#### Considerations for Using Flows in the Field Service Mobile App

Review flow considerations before using flows in the Field Service mobile app.

Build Flows for the Field Service Mobile App

Create, activate, and manage flows for the Field Service mobile app in the drag-and-drop Flow Builder.

Connect a Flow to the Field Service Mobile App

You can set up an app extension that connects a flow to the Field Service Mobile App.

### Considerations for Using Flows in the Field Service Mobile App

Review flow considerations before using flows in the Field Service mobile app.

#### Downloading Flow Data

When the app loads a user's schedule data, it also downloads global flows and any flows scoped to records in their schedule data. Pulling down on the screen to sync with Salesforce causes the app to reload flow metadata.

#### Flow Input Parameters

When an iOS or Android app launches a flow, it passes the following input parameters:

- Id—The ID of the record that the flow is launched from.
- UserId—The ID of the current user.
- ParentId—The record ID of the parent record that the flow is launched from. For example, if a flow is launched from a service appointment, the ParentId is the ID of the parent work order or work order line item.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

Manage Flow

To run flows from the app:

Run Flows

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

### Creating a Choice Option

If the user selects the choice value to use in a screen component, such as a radio button or multi-select picklist, the screen component is set to this value. If no choice value is configured, the screen component is set to the choice label.

### Using Flows with Case Assignment Rules

Mobile flows with record updates trigger assignment rules if the request updates an entity that has assignment rules in the same transaction for a case or a lead. To bypass assignment rules, in Apex run Assignment Rules with DMLOptions, and set the header Sforce-Auto-Assign as False.

### Flow Limitations in the Field Service Mobile App

- Automatic Screen Fields with fieldType = ObjectProvided isn't supported on mobile flows.
- Compound fields, for example street addresses, can't be used directly in mobile flows. To access this data, fields such as city and country that comprise the compound field must be used instead.
- Select formula functions and operators are available offline.
- Backslash \ characters, single quotes ( ' ), and multi-line strings aren't supported in flow formula fields.
- CRM Core App screen flows aren't supported in the Field Service mobile app. Only Field Service mobile flows are supported.
- Email alert actions aren't supported in flows.
- Paused flows aren't supported. If you left a flow in progress or exit the Field Service mobile app, you can't resume the flow where you left off.
- Flows with many CRUD operations can take a long time to process. To speed up this process contact Salesforce Support to request that the draft queue is paused.
- Flows cannot have dependencies on Apex or record triggers.
- Flows with deep links can cause issues and are not recommended at this time. If you must deeplink out of the flow, deeplink back into the Field Service mobile app without triggering another view. This should allow you to resume the flow and close it.
- The wasSelected operator can't be used in decisions.
- For eval() functions, the boolean values true and false are case-sensitive.
- Hardcoded ID values must be 18 digits long. 15-digit values aren't supported.
- Fault connectors aren't supported in flows.
- When uploading images in flows, the content document IDs parameter isn't supported. Admins must create a flow confirmation screen to show which images were uploaded. Videos and other file types aren't supported.
- Flows don't support the following elements. Adding these elements to a flow causes it to display an error.
  - Lightning components (except for file upload)
  - Output parameters on file upload except for "Uploaded File Names"
  - Choice resources with Display Text Input enabled
  - Actions with output parameters

- Flows don't support the Section screen component.
- Flow picklists that include a default value aren't supported. If you choose a default value, it isn't shown as the default value in the picklist and isn't used in the mobile flow. To work around this issue, add a separate choice that is a constant equal to the value of the default value in the object's screen picklist value.

Note: Some flows that have actions with output parameters don't cause an error immediately, but they're still not supported.

- In flows, radio button fields that aren't required allow the user to select from a list of values, including a --None-- option. --None-- is a null value that allows the field to be optional.
- Flow picklists use the values of the choice set from which the default value is assigned.
- Flow record variables require record fields to be accessed through their field API names. Use of field relationship names isn't supported.
- Record field lookups are limited to one level of indentation. If more levels are required, use assignment elements.
- Flow text areas have a 2,000-character limit.
- Using semicolons when defining user choices in flow checkbox groups and multi-select picklists isn't supported. If you use semicolons for user choices, the data doesn't render accurately.
- Record choice sets don't retain the value that is selected. A record choice set variable can't be used to determine what selection was made. However, the component used to make the selection, such as a picklist, saves that value for later use.
- Custom Logic and the or operator within Get elements and the record choice set variable aren't supported in the Field Service mobile app.
- When using a flow that has a subflow, returning to the main flow from the subflow using the Previous button discards entered data.
- Recently added records from the Field Service org don't show in mobile flows when using Flow Record Choice Set or the Get element to query from these records. To resolve this issue, log out and then back into the mobile app.
- Flows installed on the Field Service mobile app using a managed package result in an error. We recommend using an unmanaged package instead. This error only occurs on the mobile app.
- HTML text isn't supported in Flow builder.
- Mobile flows support only these global values:
  - \$Flow.CurrentDateTime
  - \$Flow.CurrentDate
  - \$GlobalConstant.EmptyString
- Flows on desktop and mobile don't support picklist default values that are derived from an object's picklist values.
- If a default value is assigned in the picklist component of the flow, then the values are populated from the default picklist field value and not the picklist choice set assigned to it.
- Running a flow as another user isn't supported.
- Only the following assignment operations for collections are supported:
  - Add
  - Equal
  - Equals Count
- Picklist values are expanded if there are five or fewer values or if the picklist is the only component on that particular flow screen. Otherwise, values are displayed as a dropdown list.
- When a Record Choice Set is used as a data list for a single item picklist in a flow, the screen doesn't display correctly. To work around this behavior, add additional items to the picklist.
- In mobile flow filtering, the user sees a related list instead of a picklist if these conditions are met:
  - The flow value store always has a specified parent ID (the parameter with ID passed in), unless the parent ID from the value store is nulled.
  - The user creates a screen step in the flow builder with a single field, and that field uses a single dynamic choice as choice reference. Additionally, the dynamic choice isn't a picklist and contains the parent record ID as a filter.
  - The parent record identified by the parent ID has a dynamic choice type configured as a related list.
- Flows can have up to nine conditions in a decision element.

- Record Choice Sets created using the AttachedContentDocument objects on a Work Order or other supported object don't work in the mobile app. The mobile app doesn't support showing a related list for files within a flow.
- When using the NOW () formula in fields, create a separate formula resource that resolves to NOW (), and use that resource in the validation field. Doing so ensures the latest timestamp is used on the flow launch.
- Flows retain variable values after they're entered. Clicking the **Back** button in a flow doesn't clear the value.
- In Field Service mobile app flows that use the Create Record element, the ID populates with the app's cache ID. This cache ID isn't the newly created record's ID. To access the cache ID in a flow on the app, you must turn on the option "Use separate resources, and literal values" in the Create Record element.
- Chaining of formulas in the same flow step isn't supported.
- Collection Choice Sets aren't supported in flows.
- Changing the name of or hiding navigation buttons in flows isn't supported in the Field Service mobile app.
- When a mobile flow contains an image, the BeforeInsert trigger in Apex can cause an error.
- To remove access to custom objects, log out and then back into the mobile app.
- Conditional visibility isn't supported, with the exception of Data Capture (Beta).
- The In and Not In operators in flows aren't supported in the Field Service mobile app.
- Dependent picklists are supported in mobile flows but aren't supported on the desktop site.
- Results for Get Record in a flow are cached locally. To access newly available records in the flow, log out and back in to the mobile app.
- Rich text in flows doesn't show color in the Field Service mobile app.
- A custom flow for login must be set up when the Session Activation Required permission is enabled for Field Service mobile users. Without a custom flow for login, mobile users lose access to the Service Resource object and can't log in to the mobile app.
- Flows that modify the Service Report Language field on the Work Order object don't work offline.
- New records created using a flow in the Field Service mobile app don't have the auto-number field data type's value populated. The field isn't populated, because the number is generated by the server during record creation and isn't available locally on the app.
- Flow Builder on web allows users to assign empty values for record fields and are treated as null. However, on mobile, any fields in the assignment block with empty values are ignored, and no empty values are specified.
- You can't update the chatter feed on a new record from a flow when LDS is enabled.

#### Available Formula Functions and Operators

Note: Formula functions are case-sensitive. Make sure to use the formatting listed. For more details, see Formula and Operator Functions

Formula Functions and Operators	
Math Operators	<ul> <li>+ (Add)</li> <li>- (Subtract)</li> <li>* (Multiply)</li> <li>/ (Divide)</li> <li>() (Open and Close Parenthesis)</li> </ul>
Logical Operators	<ul> <li>== (Equal), only == , not =</li> <li>!= (Not Equal), only != , not &lt;&gt;</li> </ul>

Formula Functions and Oncustors	
Formula Functions and Operators	<ul> <li>&lt; (Less Than)</li> <li>&gt; (Greater Than)</li> <li>&lt;= (Less or Equal)</li> <li>&gt;= (Greater or Equal)</li> <li>&amp;&amp; (And), only &amp;&amp;, not AND</li> <li>   (Or), only    not OR</li> </ul>
Date and Time Functions	<ul> <li>DAY</li> <li>MONTH</li> <li>NOW</li> <li>WEEKDAY</li> <li>YEAR</li> </ul>
Logical Functions	<ul><li>ISBLANK</li><li>ISNUMBER</li></ul>
Math Functions	<ul> <li>ABS</li> <li>CEILING</li> <li>FLOOR</li> <li>LN</li> <li>LOG</li> <li>SQRT</li> </ul>
Text Functions	<ul> <li>BEGINS</li> <li>CONTAINS</li> <li>FIND</li> <li>LEFT</li> <li>LEN</li> <li>LOWER</li> <li>RIGHT</li> <li>SUBSTITUTE</li> <li>TRIM</li> <li>UPPER</li> <li>VALUE</li> </ul>
Advanced Functions	• REGEX

# Build Flows for the Field Service Mobile App

Create, activate, and manage flows for the Field Service mobile app in the drag-and-drop Flow Builder.

Creating flows for the Field Service mobile app uses the same Flow Builder you know and love. Here are some basic guidelines to follow.

- Save your flows as the Field Service Mobile Flow type.
- Include help text on each screen so that users understand what is expected of them.
- Don't ask more than one question per screen, especially if a screen involves picklists.

Some special flows, like image upload flows and signature capture flows, are great additions to the Field Service mobile app.

### Create a Flow to Capture Images in the Field Service Mobile App

Create a flow that lets your team capture images from the Field Service mobile app. For example, make it easy for mobile workers to save photos of a customer's asset before and after service.

#### Customer Signatures on Service Reports with a Flow

Using an app extension, you can add a final step to capture a customer's signature at the end of a flow.

Create a Flow to Capture Images in the Field Service Mobile App

Create a flow that lets your team capture images from the Field Service mobile app. For example, make it easy for mobile workers to save photos of a customer's asset before and after service.

1. Build a flow with a Screen element that contains a File Upload component.

An API name is generated when you label your flow. You need the API name to connect the flow to the Field Service mobile app.

2. Save your flow as the Field Service Mobile Flow type.

You can now connect the flow to the Field Service app with an app extension or Quick Action, just like any other flow.

### Customer Signatures on Service Reports with a Flow

Using an app extension, you can add a final step to capture a customer's signature at the end of a flow.

After you build a flow, create an app extension with these settings, which don't affect the rest of your flow. When the mobile app detects the Service\_Report\_Flow name, it launches the Service Report preview interface when your flow is complete.

- Label—Enter the text that you want to appear in the Actions tab. For example, My Service Report Flow.
- Type—Select Flow.
- Name—Enter Service\_Report\_Flow.
- Scoped to Object Types—Enter ServiceAppointment.
- Launch Value—Enter the API name of the flow that you want to conclude with signature capture.

## **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

## USER PERMISSIONS

To open, edit, or create a flow in Flow Builder:

- Manage Flow
- To run flows from the app:
- Run Flows

Because the API name of the service report flow is unique, you can have only one Service\_Report\_Flow at a time.

#### SEE ALSO:

Flow Builder Tour Flow Screen: File Upload *Trailhead*: Customize User Settings Guidelines for Capturing Signatures

### Connect a Flow to the Field Service Mobile App

You can set up an app extension that connects a flow to the Field Service Mobile App. Before you create an app extension, make sure that you have already created a flow.



Note: You must use the Field Service Mobile flow type.

- 1. From Setup, enter *Field Service Mobile Settings* in the Quick Find box, and select **Field Service Mobile Settings**.
  - Note: Only the user profiles assigned to the mobile settings configuration you select have access to the flow. To manage user profile assignments, click **Manage Assignments** on the Field Service Mobile Settings page.
- 2. In Lightning Experience, click the dropdown menu next to the mobile settings configuration that you want to add the flow to and select **Show Details**. If you're using Salesforce Classic, click the name of the mobile settings configuration that you want to add the flow to.
- **3.** In Lightning Experience, under App Extensions, click **New**. If you're using Salesforce Classic, under App Extensions, click **Add**.
- 4. Enter a label for your app extension. This label is what your users see in the user interface.
- 5. For Type, select Flow.
- 6. Enter a name that expresses the purpose of the flow.
- **7.** For Scoped to Object Types, which controls where users can find and activate the flow, enter the API name of the object.

If you want to scope the flow to multiple objects, separate the object names with a comma and no space. For example, if you enter *WorkOrder*, *Contact*, users can activate the flow from the detail page of a work order or contact.

To create an unscoped flow action so that users can activate the flow from multiple screens, leave this field blank.

### 8. Note: Flows must be of the type Field Service Mobile.

For Launch Value, enter the unique name of your flow.

9. Click Save.

#### Add a Flow from a Quick Action

- 1. Create a Flow with type Field Service Mobile Flow. Remember the Flow Label name for future steps.
- 2. Mark the new flow as **Active**.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To view, edit, or create a flow in Flow Builder:

• Manage Flow

To run flows from the app:

Run Flows

- 3. In Object Manager select Work Order or Work Order Line Item, depending on which layout you want to use.
- 4. Click Buttons, Links, and Actions.
- 5. Click New Action and set the Action Type to Flow.
- 6. Set the Flow dropdown to the Flow Label name.
- 7. Enter the text you want to appear in the app for the name field. Remember this name for future steps.
- 8. Save your work.
- 9. In Object Manager, search for Work Order and select Page Layouts.
- 10. Click the page layout you want to modify, then select Mobile and Lightning Actions.
- **11.** Find the action you created by searching for the name you entered in the name field.
- 12. Drag your action to the Salesforce Mobile and Lightning Experience section of your layout.
- 13. Save your layout.

# Set Up Automatic Status Change

Accurate and on-time status changes are a key part of field operations workflow. With Automatic Status Change, mobile workers can focus on their jobs and work more efficiently while the Field Service mobile app tracks status changes for them. For the back office, accurate status changes give better insight into the activity in the field without creating more work for mobile workers.

Automatic Status Change is triggered at three points depending on location and time for today's appointments.

• When the mobile worker is traveling toward the first appointment of the day or traveling to their next appointment.

The traveling status change for the first appointment is triggered only if the mobile worker:

- Has traveled 80% of the distance to the service appointment.
- Is traveling within 1 hour before the appointment is scheduled to start.
- When the mobile worker arrives at the location of the appointment.
- When the mobile worker has finished an appointment. If another appointment is on the schedule, the next appointment's status changes to En Route, regardless of the mobile worker's distance from the appointment or the time remaining before the appointment starts.

Before you begin:

- Make sure that your mobile workers set the location permission on their device to Always.
- Automatic Status Change only supports the default list view. To show service appointments for one mobile worker in the default list view, in the Owner filter, select **My Service Appointments**.
- From Setup, in the Quick Find box, enter *Field Service Mobile*, and then select **Field** Service Mobile Settings.
- 2. Edit the required settings.
- 3. Scroll down to the Automatic Status Change settings.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To customize Automatic Status Change settings:

Field Service Mobi	le Settings		
Collect time zones for time sheet entries	0		
Customization			
	45 45	Send appointment notifications on assignment Send appointment notifications on dispatch	2
Automatic Status Change			
Mode ⊕ Radius in Meters ⊕ Time Limit in Minutes ⊕ Cancellation or Dismissal Timer in ⊕ Seconds	None >	"Traveling" Status "Onsite" Status "Completed" Status	v           v           v           v
Quick Status Change			
Flow Name 😡			
System Information			
Created By	Automated Process	Last Modified By	Admin User
	Save	Save & New Cancel	

4. Select a mode.

Manual	The mobile worker must cancel or confirm the change.	
Timed	The mobile worker can cancel or confirm the change. If no action is taken, the status changes when the timer ends.	
Automatic	The mobile worker is informed about the change after it happens.	

- 5. For Radius in Meters, enter the service appointment radius (100–5,000 meters) that can trigger status changes.
- **6.** For Time Limit in Minutes, enter the amount of time (1–60 minutes) before an appointment's scheduled start time or actual end time that can trigger a status change.
- 7. For Cancellation or Dismissal Timer in Seconds, enter the duration (10–600 seconds) that the timer is visible. After this time, the status changes automatically and can't be canceled. This setting is only for Timed mode.
- 8. For Traveling Status, enter the status that indicates that a mobile worker is traveling to a service appointment.
- 9. For On-Site Status, enter the status that indicates that a mobile worker is at a service appointment.
- 10. For Completed Status, enter the status that indicates that a mobile worker completed a service appointment.
- **11.** Save your changes.

Consider these points when you're setting up Automatic Status Change.

- If you're using Automatic Status Change and Appointment Assistant Real-Time Location, it's recommended to enter a small radius in Radius in Meters. A small radius ensures that Appointment Assistant customers can see the mobile worker's location up until the worker's close to the appointment.
- If you're using mobile flows, Automatic Status Change can cause a conflict with these flows. It's recommended to run status-related flows on the server.

SEE ALSO:

Automatic Status Change

- Configure Field Service Settings
- Add Flows to the Field Service Mobile App

# Set Up Service Appointment Bundling for Mobile Workers

To give mobile workers access to the bundled service appointments in the Field Service mobile app, you update the service appointment layout and add field permissions for mobile users.

Watch the video to see how grouping short appointments at nearby or same-site locations to create a bundle helps you and your customers.

Watch a video

#### Add the Related List to the Service Appointment Layout

In new Salesforce orgs, the Bundle Member Service Appointments related list appears in the service appointment's Related tab. In existing orgs, you add the Bundle Member Service Appointments related list and its properties to the service appointment layout.

#### Add Field Permissions for Mobile Users

Give mobile users read access to fields on the Service Appointment object.

# Add the Related List to the Service Appointment Layout

In new Salesforce orgs, the Bundle Member Service Appointments related list appears in the service appointment's Related tab. In existing orgs, you add the Bundle Member Service Appointments related list and its properties to the service appointment layout.

- 1. From Setup, open the **Object Manager**.
- 2. Search for and open the Service Appointment object.
- 3. Click Page Layouts.
- **4.** Open the relevant layout.
- 5. Click Related Lists.
- 6. Drag Bundle Member Service Appointments into the Related Lists.

04			
Bundle Member Service Appointments	New		
Subject	Status	Due Date	
Sample Text	Sample Text	6/23/2021 3:51 AM	

7. To configure the properties of the related list, click 🔍 .

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To customize layouts:

Related List Prop	erties - Bundle	Member	Service Appointments	×
				Help 🕜
Available Fields Account Actual Duration (N Actual End Actual Start Appointment Grac Appointment Num	/linutes) de uber	t. You can Add F Remove	also re-order the selected fields. Selected Fields Subject Status Due Date	Up I Down
Arrival Window Er Arrival Window St Sort By:			*	
	<ul> <li>Ascending</li> <li>Descending</li> </ul>			
Buttons				Ŧ
	ОК	Cancel	Revert to Defaults	



Note: The Sort By option isn't currently supported.

- 8. Save your changes.
- 9. To see the Bundle Member Service Appointments list, in a bundle service appointment, open the Related tab. The appointments appear in the order determined by the Appointment Bundle Sort Policy, if configured.

Image: Service Appointment History (1)       Image: Service Appointment History (1)         Date       Field       User       Original Value       New Value         Service Appointment History (1)       Image: Service Appointment History (1)       Image: Service Appointment History (1)       Image: Service Appointment History (1)         Date       Field       User       Original Value       New Value         Service Appointment Kumber       Created.       Test User       Image: Service Appointments (3)       New Att         Appointment Number       Subject       Status       Mone       Image: Service Appointment Number         Service Subject       None       Image: Service Appointment Number       None       Image: Service Appointment Number	Service Appointment SA-0001					
Image: Service Appointment History (1)       Image: Service Appointment History (1)         Date       Field       User       Original Value       New Value         Service Appointment History (1)       Image: Service Appointment History (1)       Image: Service Appointment History (1)       Image: Service Appointment History (1)         Date       Field       User       Original Value       New Value         Service Reports (0)       Image: Service Appointments (3)       New Appointment Number         Appointment Number       Status       Mone         Service 1       Status       Status			Or d	rop files		
Or drop files       Image: Service Appointment History (1)       Date     Field       Date     Field       Created.     Test User       Vice AB       Image: Service Reports (0)       Image: Service Reports (3)       Appointment Number       Subject       Status	🚺 Files (0)					Add Files
Image: Service Appointment History (1)       User       Original Value       New Value         Date       Field       User       Original Value       New Value         Stra2021, 839 AM       Created.       Test User       New All         Voire All         Assigned Resources (0)       New         Image: Service Reports (0)       New       New         Image: Service Reports (3)       Status       New         Appointment Number       Subject       Status         Service Size (3)       None       Status						
Bank Construction     Field     User     Original Value     New Value       SnR2021, 839 AM     Created.     Test User     View All       Image: Assigned Resources (0)     View All     New Value       Image: Assigned Resources (0)     New Value     New Value       Image: Assigned R			Or d	op files		
SINU 2021, 8.39 AM Created. Test User Viter All           Assigned Resources (0)         Viter All           Service Reports (0)         Resources (0)           Bandle Member Service Appointments (3)         New           Appointment Number         Subject         Status           Service Reports         None         Status	Service Appoint	ment History (1)				
Image: Service Reports (0)     New       Image: Service Reports (0)     New       Image: Service Appointments (3)     New       Appointment Number     Subject     Status       Success     None     Status	Date	Field	User	Original Value	New Value	
	5/18/2021, 8:39 AM	Created.	Test User			
Image: Service Reports (0)     New       Image: Bundle Member Service Appointments (3)     New       Appointment Number     Subject     Status       60002     None     1       54-0003     None     1			Vi	w All		
Appointment Number         Subject         Status           \$6.0002         None         Status           \$6.0003         None         Status	Assigned Resou	rces (0)				New
Appointment Number         Subject         Status           \$64002         None         Status           \$4.0003         None         Status	Service Reports	(0)				
54-0002 None 9	Bundle Member	Service Appointments	(3)			New
SA-0003 None 🗨			Subject	Status		
				None		
SA-0004 None 1				None		
	SA-0004			None		



Note: The expanded view of the related list indicates that the appointments are sorted by due date, even if the order is determined by the Appointment Bundle Sort Policy.

Note: Don't use the arrow that changes the order of the appointments according to a specific column. The arrow overrides the order determined in the Appointment Bundle Sort Policy.

#### SEE ALSO:

Create an Appointment Bundle Sort Policy

# Add Field Permissions for Mobile Users

Give mobile users read access to fields on the Service Appointment object.

- 1. From Setup, in the Quick Find box, enter Users, and then select Permission Sets.
- 2. Open the permission set used for mobile users.
- 3. From Apps, click Object Settings.
- 4. Open the Service Appointments object.
- 5. Click Edit.
- 6. Give Read access to the Bundle, Bundle Member, and Related Bundle fields.
- 7. Save your changes.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To add field permissions:

# Set Up Geolocation-Based Actions for Field Service Mobile Workers

Automate actions based on the location of your mobile workers. Prompt your mobile workers to complete the actions before or after their service appointments.

## **Give Mobile Workers Permissions**

- 1. From Setup, in the Quick Find box, enter Users, and then select Profiles.
- 2. Edit the required profile.
- 3. From the General User Permissions section, select Run Flows.
- **4.** From the Standard Object Permissions section, give Read and Edit permission for the Geolocation Based Actions object.

### Add the Related List

- 1. From the object management settings for service appointments, go to Page Layouts.
- 2. Open the mobile worker's page layout.
- 3. Drag Geolocation Based Actions into the Related Lists section.
- 4. Repeat steps 1–3 for the admin's page layout.
- **5.** In the mobile app and in the desktop application, open a Geolocation Based Actions record and verify that you can see the related list.

## Create the Flow

Create a flow for the location-based actions that your mobile workers can see. Setting up a flow helps you automate the location-based actions so that you don't need to add the actions to individual service appointments.

- Note: If you choose to manually create a geolocation-based action for a specific service appointment instead of using a flow, make sure to set the owner as the assigned service resource's user.
- 1. From Setup, in the Quick Find box, enter *Process Automation*, and then select Flows.
- 2. Click New Flow.
- 3. Select Start From Scratch and click Next.
- 4. Select Record-Triggered Flow and click Create.
- 5. In the Configure Start window, determine when the flow is triggered.
  - a. For Object, find and select Service Appointment.
  - b. For Trigger the Flow When, select A record is created or updated.
  - c. In Optimize the Flow for, select Actions and Related Records.
- 6. Click Save.
- Enter a label. API Name is populated based on the label you entered.
- 8. Save the flow.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To create and edit custom objects:

Customize Application

To edit object permissions:

 Manage Profiles and Permission Sets

To open, edit, or create a flow in Flow Builder:

• Manage Flow

# Create the Resources for the Flow

- 1. Open the Toolbox.
- 2. Create a resource for the assigned resource record.
  - a. For Resource Type, select Variable.
  - **b.** Enter an API name, for example *AssignedResourceRecord*.
  - c. For Data Type, select Record.
  - d. For Object, find and select Assigned Resource.
  - e. Select Available for Input and Available for Output.
- 3. Create a resource for the geolocation-based action that's triggered when the mobile worker enters the geofence.
  - a. For Resource Type, select Variable.
  - **b.** Enter an API name, for example, *EnterGeolocationAction*.
  - c. For Data Type, select Record.
  - d. For Object, find and select Geolocation Based Action.
  - e. Select Available for Input and Available for Output.
- 4. Create a resource for the geolocation-based action that's triggered when the mobile worker exits the geofence.
  - a. For Resource Type, select Variable.
  - **b.** Enter an API name, for example, *ExitGeolocationAction*.
  - c. For Data Type, select Record.
  - d. For Object, find and select Geolocation Based Action.
  - e. Select Available for Input and Available for Output.
- 5. Create a resource for the collection of geolocation-based actions.
  - a. For Resource Type, select Variable.
  - **b.** Enter an API name, for example, *GeolocationActions*.
  - c. For Data Type, select Record.
  - d. For Object, find and select Geolocation Based Action.
  - e. Select Available for Input and Available for Output.
  - f. Select Allow multiple values (collection).

# Add Elements to the Flow

You can add only one geolocation-based action that's triggered before a service appointment and one that's triggered after.

- 1. Add a Get Records element for the assigned resources.
  - **a.** Enter a label, for example, *Get Assigned Resource*.
  - **b.** Enter an API Name, for example, *GetAssignedResource*.
  - c. For Object, find and select Assigned Resource.
  - d. For Condition Requirements, select All Conditions Are Met (AND).
  - e. For Field, find and select ServiceAppointmentId.

- f. For Operator, select Equals.
- **g.** For Value, find and select the service appointment record, and then find and select Service Appointment Id. The value looks like this when you click on it: { !\$Record.Id}.
- h. For How Many Records to Store, select Only the first record.
- i. For How to Store Record Data, select Choose fields and assign variables (advanced).
- j. For Where to Store Field Values, select Together in a record variable.
- **k.** For Record, find and select the variable that you created for the assigned resource record. In our example, that's the AssignedResourceRecord variable.
- I. For Select Assigned Resource Fields to Store in Variable, add the ServiceResourceld field.
- 2. Add a Decision element that checks whether an assigned service resource exists.
  - **a.** Enter a label, for example, *Is Service Resource Assigned?*.
  - **b.** Enter an API Name, for example, *IsServiceResourceAssigned*.
  - c. Set up the decision so that the flow ends if there's no assigned resource and continues if there's an assigned resource. To determine whether an assigned resource exists, for Resource, find and select the variable that you created for the assigned resource record. In our example, that's the AssignedResourceRecord variable. For Operator, select **Is Null**, and for Value, find and select **False**.
- 3. Add a Get Records element for the geolocation-based actions.
  - **a.** Enter a label, for example, *Get Geolocation-Based Actions*.
  - **b.** Enter an API Name, for example, *GetGeolocationBasedActions*.
  - c. For Object, find and select Geolocation Based Action.
  - d. For Condition Requirements, select All Conditions Are Met (AND).
  - e. For Field, find and select ReferenceRecordId.
  - f. For Operator, select Equals.
  - g. For Value, find and select the service appointment record, and then find and select **Service Appointment Id**. The value looks like this when you click on it: { !\$Record.Id}.
  - h. For How Many Records to Store, select All records.
  - i. For How to Store Record Data, select Choose fields and assign variables (advanced).
  - **j.** For Record Collection, find and select the variable that you created for the collection of geolocation-based actions. In our example, that's the GeolocationActions variable.
  - k. For Select Geolocation Based Action Fields to Store in Variable, add the ActionType, Name, and TriggerType fields.
  - I. Select When no records are returned, set specified variables to null.
- 4. Add a Decision element that checks whether there are any geolocation-based actions that are associated with this service resource.
  - **a.** Enter a label, for example, *Has Geolocation-Based Actions?*.
  - **b.** Enter an API Name, for example, *HasGeolocationBasedActions*.
  - c. Set up the decision so that the flow ends if actions exist and continues if none exist. To determine whether an action exists, for Resource, find and select the variable that you created for the collection of geolocation-based actions. In our example, that's the GeolocationActions variable. For Operator, select **Is Null**, and for Value, find and select **True**.
- 5. Add a Create Records element for the actions that are triggered when the mobile worker enters a geofence.

- a. Enter a label, for example, *Create Enter Action*.
- **b.** Enter an API Name, for example, *CreateEnterAction*.
- c. For How to set record field values, select Manually.
- d. For Object, select Geolocation Based Action.
- e. For ActionData, enter the JSON format of the action.

If this flow opens a record, enter the ID of the record, for example, { "viewRecord": "1WLxx00000003FGAQ" }.

If this flow launches a quick action, enter the API name of the quick action as it's shown in the page layout, for example, { "quickAction": "Global.LogACall"}. Quick actions must be of type Flow, Lightning Web Component, or Create and Update Record.

Note: To find the API name of a quick action, in Object Manager, open the Service Appointment object and click **Page** Layouts. Open the mobile worker's page layout and hover over the required quick action. The API name is shown as the name of the action in the tooltip. In this example, the API name is ServiceAppointment.SendEmail.

Service Setup	Home Object Manager $ \lor $				
Service Appo				//////////////////////////////////////	
	Service Appointment Lay	out -			
Details	Save * Quick Save Previ	w As * Cancel	Undo 🐴 Redo 🔢 📻 🖬	ayout Properties	
Fields & Relationships	Fields	Quick Find Quick	Action Name	)	
Page Layouts	Buttons	Book Appointment	Email	Link Modify S	rvice Ap.
Lightning Record Pages	Quick Actions Mobile & Lightning Actions	Candidates		Name: ServiceAppointment.SendEmail	unt
Lightning Record Pages	Expanded Lookups	Change Status	File	Action Type: Send Email Target Object: Outgoing Email	
Buttons, Links, and Action	s Related Lists	Email	Guest Community Case	Create Feed Item: Yes	
Compact Layouts	Report Charts				

- f. For the value of ActionType, find and select Platform Alert, Quick Action or View Record.
- g. Enter a name.
- **h.** For the value of Radius, enter the number of meters from a service appointment that triggers the action.
- i. For the value of TriggerType, find and select Enter.
- j. Add the ReferenceRecordId field. For Value, find and select the service appointment record, and then find and select **Service Appointment Id**. The value looks like this when you click on it: { ! \$Record.Id }.
- k. Select Manually assign variables.
- I. For Variable, find and select the variable that you created for the geolocation-based action that's triggered when the mobile worker enters the geofence. In our example, that's the EnterGeolocationAction variable. Then, find and select the ID of the geolocation-based action. The value looks like this example when you click on it: { ! EnterGeolocationAction.Id }.
- 6. Add a Create Records element for sharing the actions that are triggered when the mobile worker enters a geofence.
  - a. Enter a label, for example, Create Enter Action Share.
  - **b.** Enter an API Name, for example, *CreateEnterActionShare*.
  - c. For How to set record field values, select Manually.
  - d. For Object, find and select Geolocation Based Action Share.
  - e. For AccessLevel, find and select Read/Write.
  - f. Add the Parentld field. For Value, find and select the variable that you created for the geolocation-based action that's triggered when the mobile worker enters the geofence. In our example, that's the EnterGeolocationAction variable. Then, find and select the ID of the geolocation-based action. The value looks like this example when you click on it: {!EnterGeolocationAction.Id}.

- g. Add the RowCause field. For Value, find and select Manual Sharing.
- **h.** Add the UserOrGroupId field. For Value, find and select the variable that you created for the assigned resource record. In our example, that's the AssignedResourceRecord variable. Then, add ServiceResource, RelatedRecord, and User Id. The value looks like this example when you click on it: { ! AssignedResourceRecord.ServiceResource.RelatedRecord.Id }.
- 7. Add a Create Records element for the actions that are triggered when the mobile worker exits a geofence.
  - a. Enter a label, for example, Create Exit Action.
  - **b.** Enter an API Name, for example, *CreateExitAction*.
  - c. For How to set record field values, select Manually.
  - d. For Object, find and select Geolocation Based Action.
  - e. For ActionData, enter the JSON format of the action.

If this flow opens a record, enter the ID of the record, for example, { "viewRecord": "1WLxx00000003FGAQ"}. If this flow launches a quick action, enter the API name of the quick action as it's shown in the page layout, for example, { "quickAction": "Global.LogACall"}. Quick actions must be of type Flow, Lightning Web Component, or Create and Update Record.

Note: To find the API name of a quick action, in Object Manager, open the Service Appointment object and click **Page Layouts**. Open the mobile worker's page layout and hover over the required quick action. The API name is shown as the name of the action in the tooltip. In this example, the API name is ServiceAppointment.SendEmail.

Service Setup	Home Object Manager $ \lor $				
Service Appoi				//////////////////////////////////////	
	Service Appointment Lay	out <del>v</del>			
Details	Save * Quick Save Previe	w As * Cancel	Undo 🐴 Redo 📗 🚍 L	ayout Properties	
Fields & Relationships	Fields	Quick Find Quick	Action Name	)	_
Page Layouts	Buttons	Book Appointment	Email	Link Modify Sa	rvice Ap.
	Quick Actions Mobile & Lightning Actions	Candidates	Emergency	Name: ServiceAppointment.SendEmail	unt
Lightning Record Pages	Expanded Lookups	Change Status	File	Action Type: Send Email Target Object: Outgoing Email	
Buttons, Links, and Actions	Related Lists	Email	Guest Community Case	Create Feed Item: Yes	
Compact Layouts	Report Charts				_

- f. Enter a name.
- g. For the value of Radius, enter the number of meters from a service appointment that triggers the action.
- **h.** For the value of TriggerType, select **Exit**.
- i. Select Manually assign variables.
- **j.** For Variable, find and select the variable that you created for the geolocation-based action that's triggered when the mobile worker exits the geofence. In our example, that's the ExitGeolocationAction variable. Then, add the Geolocation Based Action ID. The value looks like this example when you click on it: { ! ExitGeolocationAction.Id }.
- 8. Add a Create Records element for sharing the actions that are triggered when the mobile worker exits a geofence.
  - a. Enter a label, for example, Create Exit Action Share.
  - **b.** Enter an API Name, for example, *CreateExitActionShare*.
  - c. For How to set record field values, select Manually.
  - d. For Object, find and select Geolocation Based Action Share.
  - e. Add the RowCause and UserOrGroupId fields. For the values of AccessLevel, RowCause, and UserOrGroupId, enter the same values that you entered in the Create Exit Action element.

- f. Add the Parentld field. For Value, find and select the variable that you created for the geolocation-based action that's triggered when the mobile worker enters the geofence. In our example, that's the EnterGeolocationAction variable. Then, find and select the ID of the geolocation-based action. The value looks like this example when you click on it: {!ExitGeolocationAction.Id}.
- 9. Save and activate the flow.

SEE ALSO:

Geolocation-Based Actions

# Using the Field Service Mobile App

Learn how to install and log into the app, adjust in-app settings, and complete common tasks from the app.

### Get the Field Service Mobile App

The Field Service mobile app is available to users with the Field Service Mobile license and a supported Android or iOS device. Learn how to install the app and log in.

#### Add the Field Service Mobile Widget

You can add the Field Service mobile widget along with the Field Service mobile app on iOS devices.

#### Search for Records

Use the Search tab to search for records.

#### Work with Offline Priming in the Field Service Mobile App

Equip your workforce with the Field Service mobile app's offline capability so that they can complete tasks regardless of network availability.

### In-App Profile Settings in the Field Service Mobile App

Click the gear icon in the top right-hand corner of the Profile tab to view pending uploads, manage linked accounts, and provide feedback to Salesforce about the app.

#### Use Time Sheets in the Field Service Mobile App

View time sheets, log working hours, and submit time sheets for approval on the go.

#### Chatter in the Field Service Mobile App

Collaborate on field service jobs using Chatter. Feed tracking must be enabled to display the Feed tab.

#### Create Service Reports in the Field Service Mobile App

Service reports summarize the work that was performed by a customer, and can be signed by the mobile worker, customer, and others involved in the work. Learn how to configure the Field Service mobile app to support service report generation and review important considerations about offline service reports and service report previews.

### View Knowledge Articles in the Field Service Mobile App

Knowledge articles can be attached to work orders, work order line items, and work types to share product specs, instructions, and guidelines with your team.

#### Create Resource Absences in the Field Service Mobile App

Resource absences indicate when a service resource is unavailable to work. During schedule optimization, service resources aren't assigned to appointments that conflict with their absences. View and manage absences from the Profile tab in the app. Or view work and absences together in the Schedule tab.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### View and Complete Work Plans on the Field Service Mobile App

Front-line workers can use the Field Service mobile app to view and complete work plans. Using the Work Plans tab, they can complete assignments quickly and accurately.

### Automatic Status Change

Receive in-app updates that notify you of automatic status changes.

Manage Bundled Service Appointments on the Field Service Mobile App

You can view and report your progress on one or more bundled service appointments.

# Get the Field Service Mobile App

The Field Service mobile app is available to users with the Field Service Mobile license and a supported Android or iOS device. Learn how to install the app and log in.

- 1. To get the app, search for Field Service in the Google Play Store or the iOS App Store on your mobile device.
- 2. Open the app and log in. If prompted, create a passcode for an added level of security. If your Salesforce admin allows logins only through a company-specific login URL such as mycompany.my.salesforce.com, you must log in with a custom domain. To specify production or sandbox, click the gear icon in the top right of the login screen, or press + to enter a custom domain.

If you're an Experience Builder site user, the first login is slightly different. On the initial login screen, click the settings button in the top right, and then add a connection with the URL of your site. You can find the URL in Setup under Digital Experiences. If you're on an iOS device, omit https:// when entering the site URL.

If you see a prompt that says FieldServiceApp Wants to Use salesforce.com to Sign In, accept it to log in to the app. For custom logins, see Customize the Apex Login Controller.

- **3.** When you open the app for the first time, you receive several device permission requests. Approve the requests to let the app:
  - Send you notifications.
  - Access your basic information.
  - Always access your location, which is used in the app's mapping functionality and geolocation tracking for scheduling. Always means that your location is tracked when you're using the app and when it's running in the background. If the app isn't running in the background or you're logged out, your location isn't tracked.
  - Access your camera.
  - Note: When using the iOS app with iOS 13 or later, the location permission request allows the app to track the location only while the app is being used. To track the location while the app is in the background, set this value to Always from the device's Settings app (Settings > Field Service > Location).

#### SEE ALSO:

Field Service Mobile App Requirements Give Users Access to the Field Service Mobile App Customize the Apex Login Controller **EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Add the Field Service Mobile Widget

You can add the Field Service mobile widget along with the Field Service mobile app on iOS devices.

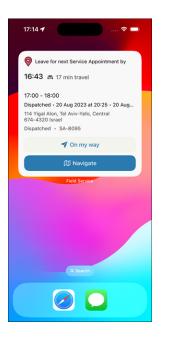
The widget shows the next service appointment on your home screen. You can see the appointment details and check when to head out to the appointment to make sure you're on time. You can also update the appointment's status from Dispatched to En Route and navigate to the location directly from the widget.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.



SEE ALSO:

Apple Guide: How to add widgets on your iPhone Set Up the Field Service Mobile Widget (Beta)

# Search for Records

Use the Search tab to search for records.

Note: If you can't see the Search tab, ask your Salesforce admin for help.

1. From the Field Service mobile app, open the search tab.



2. Enter a search term or use the barcode scanner.

The search results show only the first 50 records that were modified in the last 2 years, based on the last modified field on the record. Older results aren't shown.

3. To apply filters and determine how the results are sorted, tap the filter icon.

12:03	al 🗢 🕅
12:03 Search	- 11 (* <b>122</b> )
Search	
Q Search service appointment	ts (m)
✓ Filter & Sort	
Sort By Ty	pe
Last Modified S	ervice Appointme
Recent Service Appointments	Expand All
Filter & Sort	×
Sort By Last Modified	>
Туре	>
Service Appointment	
+ Add Filter	
Clear Filters	
F Actions	
Schedule Inventory Notifications Se	Q A
accesses memory normations se	Prome

4. To determine how the results are sorted, tap Sort By.

You can sort the results by Last Modified, First Modified, A–Z, and Z–A. Objects that have Latitude and Longitude fields (Service Appointment, Work Order, Work Order Line Item, and Asset) can also be sorted by Closest Location and Furthest Location.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To access the Search tab:

 Custom Applications for Field Service Mobile

AND

Lightning SDK for Field Service Mobile

- Note: When you sort by distance, the 50 last modified records are loaded and only then sorted according to distance, and it's possible that you can't see the most accurate results. For example, if you sort service appointments according to Closest Location and the service appointment with the shortest distance hasn't been modified recently, it's possible that it doesn't appear in the results.
- 5. To search in a different object, tap Type.
- 6. To search for a specific field value, tap Add Filter to select a field and a value.
- 7. To see more details about the results, tap Expand All.
- 8. When you find the result that you were looking for, tap it to open the record.

### SEE ALSO:

Set Up the Search Tab

# Work with Offline Priming in the Field Service Mobile App

Equip your workforce with the Field Service mobile app's offline capability so that they can complete tasks regardless of network availability.

### Get Started with Field Service Mobile Offline

Learn about the offline capabilities of the Field Service mobile app.

Recommendations and Considerations

Before you set up and use the Field Service mobile app, learn about the differences between the offline and online experience and considerations for use.

Use Briefcase Builder with Field Service for Offline Work

Get access to thousands of records offline, even in the most challenging environments.

Offline Behaviors in the Field Service Mobile App

See what gets primed and what is available offline with the Field Service mobile app.

#### Offline Frequently Asked Questions

Here, we address some of the most frequently asked questions and provide answers and solutions.

### SEE ALSO:

Field Service Mobile App Considerations Briefcase Builder Download the Field Service Connected App

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Get Started with Field Service Mobile Offline

Learn about the offline capabilities of the Field Service mobile app.

After it's added, the quick action appears for any record in the object's main layout. To conditionally navigate users to specific screens, configure LWCs to show links or buttons based on certain conditions.

# Key Offline Capabilities

- Create, edit, and delete records even with limited or no connectivity. When devices reconnect to the internet, the app automatically syncs changes to Salesforce and alerts users to any conflicts that require resolution.
- With Briefcase Builder, you can define the objects and records that users need access to while offline.
- High Volume Briefcase (beta Summer '24) enables access to large volumes of data offline.
- A new priming engine efficiently preloads records in preparation for offline use.
- Lightning Data Service works with primed records. When online, it uses the cache to enhance performance, and when offline, it provides access to all records whether existing, changed, or new.

# Recommendations and Considerations

Before you set up and use the Field Service mobile app, learn about the differences between the offline and online experience and considerations for use.

# Recommendations

Understanding the differences between offline and online experiences is crucial, as certain features require online access to function correctly. These differences are detailed in the Considerations and Limitations section of the Mobile and Offline Developer Guide, which is essential reading for success when working with Lightning web components. We recommend developing your components while online and thoroughly testing their behavior in online and offline scenarios. For field testing, limit participation to features or users who are aware of the limitations of early access software to avoid compromising your business operations.

# **General Considerations**

- The Lightning Web Components framework includes a wide range of built-in components, a number of modules that enable features, and a range of wire adapters for data access. The implementation currently available in the Field Service mobile app supports a subset of these features. See additional details in the Mobile Offline Developer Guide and the Field Service Developer Guide.
- Field Service offline-specific features support only Lightning web components. Aura components and Visualforce aren't supported.
- Field Service offline-specific features rely on platform-native implementations that are only available in an offline-enabled mobile app, such as Salesforce Field Service. They don't work in a web browser, whether on a mobile device or a desktop.
- Some settings don't affect offline use but can affect data usage.
  - Record data cache time: This setting controls how long cached data is valid. After this cache time expires, the app checks for updates on the next sync or when the record is accessed. Setting the cache time to a low value can lead to excessive network

# **EDITIONS**

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To access the Field Service mobile app, users need the Field Service Mobile user license.

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

usage and decreased performance. To ensure that your data cache remains up to date, sync data frequently, especially if you work offline often.

Schedule update frequency time: This setting controls how frequently the user's schedule is checked for updates. Consider using
the highest value to reduce data usage. Additionally, schedule updates can be triggered from push notifications to further reduce
data usage. If a large volume of data exists, priming can take a while from the initial app launch or after a user logs on to the
app.

# **Offline Considerations**

- The Field Service mobile app and LWCs don't have a reliable way to detect online or offline status, as connectivity can change frequently and mobile signals are often unreliable. Our goal is to make sure that LWCs function offline first, treating offline use as a normal condition, not a failure. We recommend designing components with this consideration in mind.
- The Field Service mobile app automatically preloads (primes) data for offline use. You can customize your priming strategy with Briefcase Builder by creating briefcase definitions tailored to your users' needs.
- The app also primes essential metadata. For example, custom object and field definitions, page layouts, quick actions, flow metadata, and other Salesforce metadata, including the necessary LWC code for offline apps. While the app doesn't have specific knowledge of your custom LWC features, it analyzes and loads relevant objects, layouts, and components. To improve this process and boost performance, follow the Mobile and Offline Developer Guide.
- During priming, you can use your device for other tasks, but download start times vary: Android devices download records immediately, while iOS devices sometimes download records with a delay.

# Use Briefcase Builder with Field Service for Offline Work

Get access to thousands of records offline, even in the most challenging environments.

With Briefcase Builder, you can create a briefcase and then select the records that you want to put in the briefcase. After the briefcase is set up, you can make it available to your users while they're offline in the Field Service iOS and Android mobile apps.

Note: To use Briefcase Builder and access its full functionality, install the iOS and Android Field Service connected apps. Without the connected apps, Briefcase Builder doesn't work.

# **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

# Offline Behaviors in the Field Service Mobile App

See what gets primed and what is available offline with the Field Service mobile app.

### Table 5: Service Appointments, Work Orders, Assets, Feeds, Knowledge Articles

Object	Record data	Object spec	<b>Ryforplin</b> layout	Reference data	Related list (list only)	Related list (details)	Actions (attached LWCs)	Files (content doament only)
Service appointment (SA) schedule list	~	~	~	~	~	~	~	
Work Order (WO) (parent of SA on schedule list)	•	•	•	•	•	*	•	*
Work Order Line Item (WOLI) (parent of SA on schedule list or child of WO that's a parent of SA on schedule list)	•	*	•	*	•	*	•	*
Asset (child of WO that is parent of SA on schedule list)	~	~	~	~	~	~	~	*
RadicCorsme) PadaReque; Account,	~	*	*	*				Case and product only

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Object	Record data	Object spec	<b>Rg:Conputieuh</b> layout	Reference data	Related list (list only)	Related list (details)	Actions (attached LWCs)	Files (content document only)
Case, Contact, AssignedResource (child of WO that is parent of SA on schedule list)								
Object X (child of WO/WOLI that is parent of SA on schedule list). (Any other object not mentioned before.)	*	*	*	✓ When referencing an object with record data object spec, and page layout data that's primed				
Object X (child of SA on schedule list)	*	*	*	✓ When referencing an object with record data, object spec, and page				
Object Y (child of child [level 3] of WO that is parent of SA on schedule list). (Only if referenced by objects not explicitly mentioned before.)	*							
Object Z (WO -> object x -> object y -> object z)								

Object	Record data	Object spec	<b>Rg:Consulficul</b> a layout	Reference data	Related list (list only)	Related list (details)	Actions (attached LWCs)	Files (content document only)
Service Reports 1.0								
Service Documents/ Service Reports 2.0								
Feeds for asset, case, WO, product request, product request line item, SA								
Knowledge articles	*							

# Table 6: Inventory list Tab

Object	Record data	Object spec	Page/Compact/Search layout	Reference data	Related list (list only)	Related list (details)	Actions (attached LWCs)	Files (content document only)
Product Items, Product Request, Product Transfer	*	*	*	~	*		~	
Timesheets, Timesheet Entry	*	*	*					

### Flows

- All Field Service flows in Field Service mobile settings are primed.
- Subflows referenced explicitly by a Field Service flow are primed.
- Records referenced by flows aren't primed.

# Offline Frequently Asked Questions

Here, we address some of the most frequently asked questions and provide answers and solutions.

Common question	Answer
What are drafts?	When records are created, updated, or deleted in the Field Service mobile app, each change is recorded as a draft and queued to sync back to your org. This process happens whether the device is online or offline. If the device is online, the app syncs drafts immediately. Otherwise, it syncs them when the device is back online. With a good network connection, there's no visible difference between directly editing records in the standard Salesforce Field Service mobile app and syncing changes via drafts. Drafts are typically created by using a <lightning-record-form> to create or update a record or by explicitly calling the @wire adapters for createRecord, updateRecord, or deleteRecord.</lightning-record-form>
How are drafts synced?	When a network connection is restored, the draft queue activates and syncs draft records in the order that they were created. Changes in a draft record are applied when the draft syncs to the Salesforce service. This process affects system-maintained fields like created and last modified dates, and it can impact features implemented in triggers. Drafts are synced without checking for version conflicts with server data. If a draft conflicts with other server edits, the outcome depends on when the mobile user comes back online and syncs the draft. The last change applied to the service takes precedence.
Why did my draft fail to sync?	<ul> <li>A draft can fail to sync for several reasons.</li> <li>The draft failed to pass validation checks on a custom object or field value. These checks, which occur only on the server, can involve one or multiple fields.</li> <li>There were conflicting changes to the record since the draft was created. For example, if a draft references or modifies a record that was deleted, the sync fails.</li> <li>Drafts sync to the server in the order that they were created. If one draft fails, the</li> </ul>

# EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

Common question	Answer
	remaining drafts stay in the queue until you delete or fix the failed draft.
	To delete a draft that failed to sync, tap Undo, which reverts the changes in the draft. To fix a draft that failed due to validation issues, tap Edit. You need an <objectapiname>.edit LWC quick action to support editing drafts.</objectapiname>
How are sync conflicts handled?	When a sync conflict occurs, the most recent change uploaded to the Salesforce server takes precedence. If a conflict arises during the upload, the Pending Uploads queue pauses. Because subsequent changes in the queue can depend on the prior change, you must resolve the conflict before the queue can process further. To resolve a conflict, either delete the pending upload or, where possible, tap items to edit the data.
How are appointment changes handled?	Mobile workers can receive new or updated appointments. When appointment schedules change, mobile workers receive a text notification, If the app is in the foreground or background when the mobile worker gets a notification, the service appointment is automatically primed. If the app isn't running, the service appointment and any associated records aren't updated and primed until the mobile worker opens the app and taps the notification.
How do I resolve priming errors?	If a network error occurs during priming, an error message appears, and priming stops. Use the offline priming UI to resync your data after connectivity is restored. Priming can also stop if the server receives too many requests. In this case, retry your request after a short break to allow the server to catch up. If an ID error message occurs in Briefcase Builder, it indicates that the ID isn't set correctly. Contact your Salesforce admin or Salesforce Customer Support for assistance.
How do I get quick actions to show in the Actions launcher when I view a record?	To display quick actions in the Actions launcher, add the quick action to the object's main layout. After the quick action is added, it appears for any record in the object's main layout. To conditionally navigate users to specific screens, configure LWCs to show links or buttons based on certain conditions. See Create Quick Actions for the Field Service Mobile App on page 899.

# In-App Profile Settings in the Field Service Mobile App

Click the gear icon in the top right-hand corner of the Profile tab to view pending uploads, manage linked accounts, and provide feedback to Salesforce about the app.

### View pending uploads

The upload queue shows pending uploads that the app sends to your org when internet access is restored. Each upload represents individual changes to records that the user has made in the order that they made them. If an upload in the queue encounters an error, the queue pauses until the error is resolved. To delete a pending upload, swipe it left and confirm the deletion.

## Manage linked accounts

In the account management section, you can log out from your current user profile or log in with a different account.

## Give feedback

Tap the feedback button to share your feedback about the app with Salesforce. Your Salesforce admin doesn't receive the feedback you submit.

## Advanced Settings: Clear Cached Metadata

To refresh all metadata from the server, tap **Clear Cached Metadata**. Use this action if the app is reacting slowly or behaving unexpectedly. This action doesn't touch customer data.

When the cache is cleared, any changes that the admin made in these items are erased.

- Page, search, or compact layouts
- Fields and relationships for objects
- Field service mobile settings
- Themes
- Feature flags
- List views for inventory
- Quick actions
- Flows
- App extensions

Clearing the cache is also useful when the admin is developing a Lightning web component (LWC). Clear the cache to remove old caches and to retrieve the latest data for any changes made on the LWC.

After clearing the cache, close the app and make sure that it isn't running in the background. For iOS devices, see instructions on how to close an app. For Android devices, see instructions on stopping apps working in the background.

You can then reopen the app to carry on working.

### Advanced Settings: Flow Refresh

To immediately refresh the flow metadata from the server, tap **Flow Refresh**.

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

## Advanced Settings: Preferred Email App

(iOS only) To choose your favorite email app to send emails, tap **Email App**, and select your preferred app.

#### SEE ALSO:

Add a Profile Tab Background Image in the Field Service Mobile App Field Service Mobile App Considerations

# Use Time Sheets in the Field Service Mobile App

View time sheets, log working hours, and submit time sheets for approval on the go.

To ensure that mobile workers can access time sheets on their mobile devices, make sure that you follow the setup steps in Get Started with Field Service Time Sheets on page 422.

- **1.** To access mobile time sheets, tap **Profile**, then tap **O**.
- 2. View your current time sheets or use the dropdown menu to view past time sheets. To view time sheet details, such as time sheet entries and related lists, tap **View Time Sheet**.

The Current Time Sheets list view shows time sheets that are within the current time period. Once the time period is over, time sheets are moved to the Past Time Sheets list view. For example, if your time period ends on Friday, a new time sheet appears in the Current Time Sheets list view on Monday.

- **3.** To create time sheet entries, navigate to the time sheet overview screen. Then tap + next to a date in the time sheet, and enter the time sheet entry details.
- 4. To submit a time sheet, navigate to a current or past time sheet and tap Submit.

Note: If the Salesforce admin hasn't set up an approval process, users don't see the Submit button.

Considerations and limitations for mobile time sheets:

- Time sheets list views are custom list views. To use time sheet list views, the user must have the Access Lightning Web Components in Field Service Mobile permission enabled.
- Only the time sheet owner has access to view, track, modify, or submit a time sheet. To provide that access to a different user, reassign ownership to the new user.
- Salesforce syncs time sheet data to the cache. If mobile users are offline, they can see time sheets that were previously viewed and cached. When they go back online and their device's time sheet data is out of sync with the server's data, they are prompted to review a new version of their time sheet. Users must be online to submit time sheets.
- To access mobile time sheets for the first time, users may need to log out and then log back in to the Field Service mobile app.
- The service resource must own the time sheet record for the time sheet icon to show on the Profile tab.
- After a user submits a time sheet, the status doesn't visually update from Unsubmitted to Pending. To view the updated status, refresh the screen.
- In the mobile app, the submitter can't choose an approver manually.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

#### USER PERMISSIONS

To view time sheets and time sheet entries:

Read on time sheets

To create, update, or delete time sheet entries:

Edit on time sheets

To create time sheets:

• Create on time sheets

• To give the best performance and offline experience, users can't update time sheets that are pending or approved. If your workflow allows these changes, you can use a quick action or flow to update the status.

#### SEE ALSO:

Create Time Sheet Templates Get Started with Field Service Time Sheets Create Time Sheet Templates Time Sheet Fields

# Chatter in the Field Service Mobile App

Collaborate on field service jobs using Chatter. Feed tracking must be enabled to display the Feed tab.

To show the Feed tab on the work order overview carousel, enable feed tracking on work orders.

- 1. From Setup, enter *Chatter* into the Quick Find box and select **Feed Tracking**.
- 2. Select Work Order from the object list.
- 3. Check Enable Feed Tracking.
- 4. Click Save.

These object types are allow listed to show the feed tab in the record detail page of the Field Service mobile app: Work Order, Work Order Line Item, Case, Service Appointment, Product, ProductRequest, ProductRequestLineItem, Asset.

Note: admins can disable feed tracking for these objects and the app will respect the setting.

Limitations

- The Feed tab in iOS is supported only on the work order, work order line item, service appointment, and case objects. The Feed tab in Android is supported only on the work order, work order line item, and service appointment objects.
- (Android only) Chatter is disabled when the app doesn't have internet connectivity.

SEE ALSO:

Customize Field Service Appointment Chatter Settings

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

To customize fields tracked in feeds:

Customize Application

To view the field tracking setup page:

 View Setup and Configuration

# Create Service Reports in the Field Service Mobile App

Service reports summarize the work that was performed by a customer, and can be signed by the mobile worker, customer, and others involved in the work. Learn how to configure the Field Service mobile app to support service report generation and review important considerations about offline service reports and service report previews.

To allow app users to preview and create service reports, make the following configurations.

- 1. Complete the steps in Create Service Report Templates to prepare for and create service report templates
- 2. Ensure that the service appointment page layout includes the Service Reports related list.
- 3. Add the Work Type field to work order and work order line item page layouts, and make sure users have permission to view it.
- 4. Add the Service Report Template field to the work type page layout.
- **5.** (Recommended) Select a service report template in the Service Report Template field on each work type in your org.

#### Create a Service Report in the App

To create a service report in the app, navigate to a service appointment, work order, or work order line item. Tap the action icon, then tap **Create Service Report**. If the service report template includes a signature section, you're prompted to Sign & Confirm. If there isn't a signature section, only a Confirm option appears.

In Android, the Create Service Report action appears on the Service Reports card. If a work order already has a service report, users can edit the existing report, but can't create additional reports.

EDITIONS

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

#### **USER PERMISSIONS**

To create or edit a Service Report Template:

Customize Application

A service report is translated in the language selected in the Service Report Language field on

the associated work order. If that field is blank, the report uses the default language of the person generating the report. To add languages, from Setup, in the Quick Find box, enter *Translation Language Settings*, and select it. Click **Edit** next to the desired language, then click **Active**. To add a user as a translator for the language, select them from the available list and click **Add**, then save your changes.

#### **Create a Service Report Offline**

Mobile workers can create service report previews while offline. For the iOS app, you can disable offline service report generation.

- 1. From Setup, enter Connected Apps in the Quick Find box, then select **Connected Apps**.
- 2. Click Salesforce Field Service for iOS.
- 3. In the Custom Attributes list, click New.
- 4. Set the Attribute key to DISABLE\_SERVICE\_REPORT\_PREVIEW\_IOS.
- 5. Set the Attribute value to "true". Be sure to include the quotation marks.

#### Limitations

- Users can't select a template when creating a service report in the mobile app. Instead, a template is selected based on this order:
  - 1. The work order template
  - 2. The work type template
  - 3. The standard template
- Service report previews have these limitations:

- Although users can make an offline request to generate a service report, the final PDF is created only when the user's device is online.
- The app doesn't automatically get the latest data before generating a service report preview, so data in service report previews can be out of date. This limitation applies to online and offline service report previews.
- If a reference field exceeds the maximum priming depth of 2, it isn't populated.
- Formula field values can be inaccurate in a preview because they aren't dynamically calculated.
- Roll-up summary fields are blank.
- Related lists behave differently in mobile previews.
  - The order of records in related lists can differ between the preview and the printed report.
  - If a service report template includes a related list, the list populates only if it's on the page layout of the record that the service report is being generated for.
  - On the printed report, all related lists are printed. In the mobile preview, a related list must be on the preview page layout to appear on the preview.
- These elements aren't visible:
  - Cases related list
  - Headers and footers
  - Organization fields
  - Certain data fields
  - Images in rich text fields on a service report template or service appointment, work order, or work order line item page layout
- The Digital Signature object **Place** field isn't supported.
- Text fields and rich text area fields are truncated to 255 characters. This limitation occurs on rich text area fields, other types of text fields, standard fields, and custom fields.
- A service report language pick list shows all supported languages, not only the active ones.
- Although the picklist values aren't translated in service report previews, they're translated into the supported language when the service report is generated.
- The signature image doesn't appear when mobile workers create multiple service reports offline from the same record on the Field Service mobile app.
- When mobile workers collect signatures on a service report from the Service Appointment object, the Client Signature button shows only on the Service Appointment overview. When mobile workers collect a signature for a service report from the service appointment's Action screen, the Client Signature button shows as "Default Signature."

#### SEE ALSO:

Create Field Service Report Templates Customer Signatures on Service Reports with a Flow

# View Knowledge Articles in the Field Service Mobile App

Knowledge articles can be attached to work orders, work order line items, and work types to share product specs, instructions, and guidelines with your team.

### Letting App Users View Knowledge Articles

To let Field Service mobile app users view knowledge articles:

- Ensure you have Salesforce Knowledge set up in your org.
- Add the Articles related list to work order and work order line item page layouts.

### Viewing Articles in the App

To view the Articles related list on a work order, tap **Related** in the work order carousel. Tap the name of an article to view it. The Knowledge card in the work order overview screen also shows articles attached to the work order or work order line item.

### Limitations

- (iOS only) If images in knowledge articles are hosted outside of Salesforce, they display normally. Images uploaded to Salesforce don't load correctly. As an alternative, we recommend using an image link that users can open themselves. You can avoid this issue by selecting the option to use POST requests for cross-domain sessions. Find this option on the Session Settings page in Setup.
- (iOS only) Some knowledge articles of supported UI languages, such as Japanese, don't show in the Field Service mobile app.
- (Android only) The Knowledge Article action isn't visible on the Work Order Overview screen. View knowledge articles using the related list.
- (Android only) In Knowledge Article details, field names such as Title don't display on Android devices.
- If a device is running in any of Salesforce's 26 supported languages, the app automatically translates knowledge articles to that language. If the device isn't running in a supported language, no knowledge articles are shown.
- Settings for optimized images are supported in files uploaded in mobile flows, but aren't applied to images uploaded in the Chatter Feed.

#### SEE ALSO:

Salesforce Knowledge

Customize Work Order Settings for Field Service

Set Up Knowledge for Work Orders

Attach Knowledge Articles to Work Orders or Work Types

**EDITIONS** 

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

# Create Resource Absences in the Field Service Mobile App

Resource absences indicate when a service resource is unavailable to work. During schedule optimization, service resources aren't assigned to appointments that conflict with their absences. View and manage absences from the Profile tab in the app. Or view work and absences together in the Schedule tab.

To allow users to create, update, and delete absence records from the app, make the following configurations.

- 1. Add the Absences related list to the service resource page layout, and customize its fields as needed.
  - Note: The date picklist values on resource absences are based on the Picklist Time Interval in Minutes setting on the Field Service Mobile Settings page in Setup.
- 2. Add the "Non Availability" record type to user profiles.
  - a. From Setup, in the Quick Find box, enter Users, and then select Profiles.
  - **b.** Select the user profile that you want to add the record type to.
  - c. Under Apps, select Object Settings.
  - d. Select Resource Absences and click Edit.
  - e. Next to Non Availability, select the circle for Default Record Type. The checkbox for Assigned Record Type is automatically filled in.



Note: For resource absences created from the app to be considered for schedule optimization, Non Availability must be selected as the default record type.

- f. Click Save.
- 3. Optionally, hide certain resource absence types in the app.
  - a. From Setup, in the Quick Find box, enter *Connected Apps*, and then select Manage **Connected Apps.**
  - b. Select Salesforce Field Service for Android or Salesforce Field Service for iOS.
  - c. Under Custom Attributes, click New.
  - d. For Attribute key, enter EXCLUDE RESOURCE ABSENCE TYPES.
  - e. For Attribute value, enter a comma-separated list of the resource absence types you want to hide from the Profile tab, and then click Save.

For example, if you want to hide meetings and trainings, you would enter "Meeting, Training".

- 4. To control how many resource absences are displayed in the app, set a date range in Field Service Mobile Settings.
  - a. From Setup, in the Quick Find box, enter Field Service Mobile Settings, then select Field Service Mobile Settings.
  - b. Edit the mobile setting configuration, then choose values for the Future Days in the Date Picker and Past Days in the Date Picker fields. For example, select 7 days in the past and 30 days in the future so workers can see absences in the prior week and the month ahead.

### **EDITIONS**

Available in: both Salesforce Classic (not available in all oras) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in Enterprise, Unlimited, and Developer Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

#### **USER PERMISSIONS**

To view, create, edit, or delete resource absences:

Read on service resources

To customize the page layout:

**Customize Application** 

To customize Field Service mobile settings:

**Customize Application** 

- 5. Optionally, combine resource absences with the work items on the Schedule tab. Mobile workers get an integrated view of the schedule. Desktop users don't see absences added to Service Appointment list views.
  - a. From Setup, in the Quick Find box, enter *Field Service Mobile Settings*, then select **Field Service Mobile** Settings.
  - **b.** Edit the configuration where you want to add absences to the schedule, and select **Display resource absences in the Schedule page**.
  - **c.** Save your changes.

#### Managing Absences in the App

View and manage absences from the Absences card on the Profile tab. You see absences for the date range specified in Field Service Mobile Settings.

To create a resource absence, click the + icon. The Type field indicates the nature of the time off from work, and comes with the following values:

- Vacation (default)
- Meeting
- Training
- Medical

#### SEE ALSO:

Create Service Resource Absences for Field Service Service Resource Fields for Field Service

# View and Complete Work Plans on the Field Service Mobile App

Front-line workers can use the Field Service mobile app to view and complete work plans. Using the Work Plans tab, they can complete assignments quickly and accurately.

The Work Plans tab displays all the work plans associated with a work order and its related work order line items.

Note: If a work order doesn't have related work plans, the Work Plans tab is hidden.

- 1. On the home screen of the Field Service app, tap a service appointment.
- 2. To view the work plans associated with your work order and all its related work order line items, tap the Work Plans tab. If the tab doesn't show right away, pull down to refresh the work order page.

Work plans associated with a work order are grouped and displayed first on the Work Plans tab. Work plans associated with work order line items are grouped by their parent work order line item and displayed at the bottom of the Work Plans tab. The work order line item ID is displayed in the work plan header.

- Note: You can view the work plans and work steps associated with a work order and its work order line items using the work order's Related tab. You can also view work plans related to work order line items from the Work Plans tab on the work order line item's page.
- 3. Expand a work plan to view its details and its associated work steps.
- **4.** On the work plan, view the progress of the work plan on the progress ring. The progress ring is updated based on the real-time progress of the work plan.
- 5. To edit or view the details of a work plan, tap the overflow menu of the work plan.
- **6.** On the work step, view the status of a step on the step's status icon. You can also view different fields associated with the step.

Note: If more than one field is displayed for a work step and the text in the first field is long, the second field doesn't display.

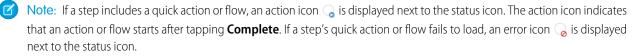
**7.** To view the details page of a work step, tap the name of the step. Here, you can find the description and other information related to the step.

# 8. To edit the information on the work step detail page, tap the overflow menu of a work step, and select **Edit Work Step**. From the overflow menu, you can also mark a step Not Applicable or Complete.

Note: If you don't have permission to edit a work plan, a lock icon 🔒 is displayed for all its associated work steps. The lock icon indicates that you can view these steps but you can't update the status or other fields on the step.

9. To mark a work step's status completed, tap the gray circle next to the work step name, or select **Complete** on the work step's overflow menu.

If the step is a simple instruction such as "Put on your safety gear", we mark the step's status as completed. If the step includes a quick action or a field service mobile flow, selecting **Complete** starts it.



#### **EDITIONS**

Available in: Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

When the managed package is installed, scheduling and optimization consider shift availability. Confirmed shifts appear on the Gantt.

#### **USER PERMISSIONS**

To view and update work plans:

 Read and Update permissions on the work plans object

To run flows associated with work steps:

 Run Flows permission or the Flow User field enabled on the user detail page When a flow or quick action is completed, we change the status of the work step to Complete. Completed work steps remain on the work plan record. To let mobile workers manually override work step autocompletion, from Setup, go to Work Plans. Select **Manually update a work steps status when flows are launched**. Work steps default to autocomplete when this setting isn't selected.

Note: Tapping a completed work step relaunches the quick action or flow associated with that step. Tapping a completed work step with no associated quick action or flow resets the status of that step to New.

10. You can set different statuses to a work step by tapping the overflow menu of the step and selecting Edit Work Step.

Note: To edit a work step, turn on **Enable Full Edit on Records** under Field Service Mobile Settings.

On the Status section of the details page, select the relevant status, and tap Save.

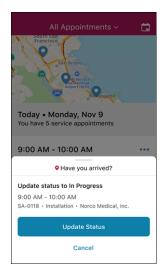
SEE ALSO:

Create Field Service Work Plans View and Complete Work Plans Quick Actions Flows

## Automatic Status Change

Receive in-app updates that notify you of automatic status changes.

- 1. When you're within the time frame and the area of your appointment, update the appointment's status according to the mode your company uses for status updates.
  - Manual—A prompt appears to suggest a status update. To accept the suggestion, click **Update Status**. To update the status later, click **Cancel**.



 Timed—A prompt appears to suggest a status update, and the progress bar indicates the time that remains before the status is updated. To accept the suggestion, click Update Status. To update the status later, click Cancel.

#### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

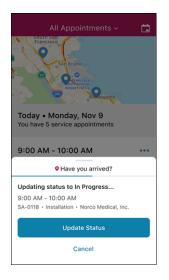
The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

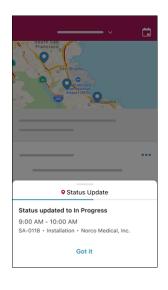
#### USER PERMISSIONS

To change statuses:

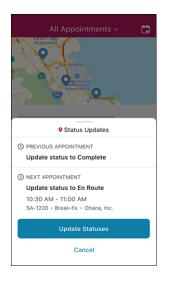
 Field Service Mobile License



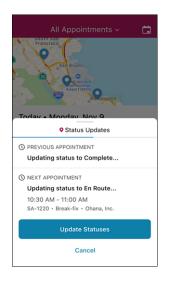
• Automatic—A prompt appears to notify you that the status was updated.



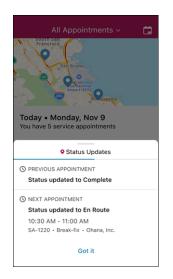
- 2. When you leave the area of the service appointment, update the appointment's status according to the mode your company uses for status updates.
  - Manual—A prompt appears to suggest status updates for your previous and next appointments. To accept the suggestions, click **Update Statuses**. To update the statuses later, click **Cancel**.



• Timed—A prompt appears to suggest status updates for your previous and next appointments. The progress bar indicates the time that remains before the statuses are updated. To accept the suggestions, click **Update Statuses**. To update the statuses later, click **Cancel**.



• Automatic—A prompt appears to notify you that the statuses of your previous and next appointments were updated.



3. Your service appointment statuses are updated until you finish work for the day.

Consider these points when you're using Automatic Status Change.

- If you're on your way to your next service appointment outside of the time frame, you're prompted to update your status manually.
- If you're offline when you update a status, the change is synced when you're back online.
- The prompts appear only if the app is open. When the app is closed, the updates appear as notifications.

#### SEE ALSO:

Set Up Automatic Status Change

# Manage Bundled Service Appointments on the Field Service Mobile App

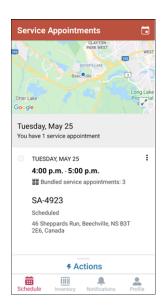
You can view and report your progress on one or more bundled service appointments.

Watch the video to see how grouping short appointments at nearby or same-site locations to create a bundle helps you and your customers.

#### Watch a video

1. In the Field Service mobile app, tap Schedule.

Bundles have the bundle icon 🚦 .



#### **2.** Tap a bundle.

OVERVIEW	APPOINTMENTS	PRODUCTS	DE
SERVICE AP	POINTMENT		:
ezuela Brazil Google	Ngera	Sudan Ethiopia Kenya Tanzania Ia	
Tuesday • M BB Bundled	5:00 p.m. ay 25, 2021 service appointment Is Run, Beechville, NS		da
Ø Get Dr	iving Directions		
→ View B	Bundled Service A	opointments	
CONTACT			
	<b>#</b> Actions		

### **EDITIONS**

Available in: both Salesforce Classic (not available in all orgs) and Lightning Experience

The Field Service core features, managed package, and mobile app are available in **Enterprise**, **Unlimited**, and **Developer** Editions.

To access the Field Service mobile app, users need the Field Service Mobile user license.

### USER PERMISSIONS

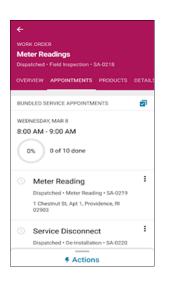
To manage bundles in the Field Service mobile app:

Field Service Mobile
 License

Field Service Recourse Permissions

3. Tap View Bundled Service Appointments, or open the APPOINTMENTS tab.

As you go through your day, appointments that move to a status from the Completed category are considered done. At the top of this screen, you can see how many appointments are done. For example, 3 of 10 done.



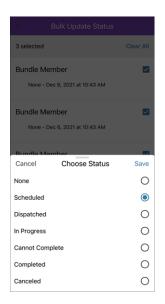
Note: The fields shown for each bundled service appointment are based on the fields selected in the Bundle Member Service Appointments related list search layout on the Service Appointment object.

- 4. Edit a single bundled service appointment to update the status, or update multiple appointments together.
  - **a.** Tap 🔽.
  - **b.** Select the bundled service appointments, and tap **Update Status**.

× Bulk Update Status	
3 selected	Clear All
Bundle Member None - Dec 6, 2021 at 10:43 AM	
Bundle Member None - Dec 6, 2021 at 10:43 AM	
Bundle Member None - Dec 6, 2021 at 10:43 AM	
Update Status	

c. Select the new status, and tap Save.

#### Salesforce Field Service



# Improve Operations with Field Service Intelligence

Field Service Intelligence is a data-driven solution that displays key contact center performance metrics. Determine whether you're meeting your customer service goals with easy-to-understand data visualizations. Field Service Intelligence includes Data Cloud, CRM Analytics, and Service Cloud. The combination of customer data, key performance indicators (KPIs), and AI help your service team improve operations and reduce costs.

#### Field Service Intelligence Considerations and Requirements

When you set up Field Service Intelligence, you must have certain settings configured for your org.

#### Field Service Intelligence Setup

Use the Field Service Intelligence Setup page to walk through the steps for Data Cloud prerequisites, installation prerequisites, and then install Field Service Intelligence.

#### Field Service Intelligence Dashboards

Field Service Intelligence dashboards display key field service performance metrics and provide data-driven visuals.

# Field Service Intelligence Considerations and Requirements

When you set up Field Service Intelligence, you must have certain settings configured for your org.

- Note: For Summer '24, Data Cloud, Service Cloud, and CRM Analytics must be enabled in the same org.
- Note: Field Service Intelligence is available to Service Cloud and Data Cloud users only. To use Field Service Intelligence, your org must have the Field Service Intelligence add-on license. To set up Data Cloud, see Set Up and Maintain Data Cloud.

# **CRM** Analytics Requirements

- CRM Analytics Data Cloud integration must be enabled.
- The CRM Analytics apps and template functionality included as a part of CRM Analytics is available in English only.

# Field Service Intelligence Dashboards Requirements

To view data in the Field Service Intelligence dashboards, you need to have the features associated with the dashboards configured and populated with data. If you configure survey data after installing the Field Service Intelligence app, and you want to see that data in dashboards, follow the instructions below.

### Field Service Intelligence Data Refresh

The Field Service Intelligence dashboards rely on up-to-date data. When you install Field Service Intelligence, set a schedule to refresh the data hourly or daily. The refresh includes running the data transforms and updating the datasets.

#### Field Service Intelligence Assets

When you install the Service data kit in Data Cloud, all of the Field Service assets and data mappings are created. When you install Field Service Intelligence, the data transforms run, ingesting Data Cloud data and creating the Field Service data model objects for visualization in CRM Applytic

ingesting Data Cloud data and creating the Field Service data model objects for visualization in CRM Analytic dashboards.

#### SEE ALSO:

Set Up and Maintain Data Cloud Set Up Service Cloud Basics

# Field Service Intelligence Data Refresh

The Field Service Intelligence dashboards rely on up-to-date data. When you install Field Service Intelligence, set a schedule to refresh the data hourly or daily. The refresh includes running the data transforms and updating the datasets.

The Data Cloud data streams refresh hourly, updating the Service data model objects (DMO). The data transforms must be scheduled to process the new and updated DMO data and bring the data into CRM Analytics. The simplest way to do this is to schedule the app refresh during the installation of Field Service Intelligence.

### **EDITIONS**

Available in: Field Service Einstein 1 Edition or as an add-on.

To purchase Field Service Einstein 1 Edition or as an add-on, contact your Salesforce account executive.

### USER PERMISSIONS

To manage Data Cloud:

• Data Cloud Admin permission set

To manage Service Cloud:

Service Cloud User
 permission set

To install Field Service Intelligence:

• Field Service Intelligence Admin permission set

To use Field Service Intelligence:

• Field Service Intelligence User permission set You can change the schedule or refresh the data as needed on the app management tab. For more information, see Change Your Intelligent App Settings.

SEE ALSO:

Batch Data Transforms

## Field Service Intelligence Assets

When you install the Service data kit in Data Cloud, all of the Field Service assets and data mappings are created. When you install Field Service Intelligence, the data transforms run, ingesting Data Cloud data and creating the Field Service data model objects for visualization in CRM Analytic dashboards.

#### Resources

The app assets are listed under Resources on the Setup page for your app after successful installation. These include Data Cloud data transforms and data model objects (DMO) and CRM Analytics dashboards and components. When you select an asset, it opens in its respective tool for detailed inspection.

Field Service Intell	ligence				
Setup FSI Instance					
Template Name: FSL_Intelligence	Template Version: 1.0	Status:	Created By: Automated Process	Created On: 04/01/2024	Description:
Open in Analytics Studio					
Monitoring Resources Se	ttings				
Analytics Includes dashboards, cor	mponents, and lenses.				
Appointments Over Time Last Modified On: 04/01/202 Last Modified By: Automated	4 I Process	Asset Managemer Last Modified Dr: 04 Last Modified Dr: Au	4/01/2024		rders ified On: 04/01/2024 ified By: Automated Process
Last Modified On: 04/01/202 Last Modified By: Automated					
Intelligence Includes Einstein Discove	ery and Einstein Studio models.				
Data Includes datasets, data n	nodel objects, and calculated insights.				
Transformations Includes recipes and data	a transforms.				
Control Contro	*	Last Modified By: Au	4/V (/ Z V Z *	Last NO	to FSL Work Orders Sfled On: 04/01/2024 Sfled By: Automated Process

SEE ALSO:

Sales and Service Bundle Data Mappings

# Field Service Intelligence Setup

Use the Field Service Intelligence Setup page to walk through the steps for Data Cloud prerequisites, installation prerequisites, and then install Field Service Intelligence.

Note: Data Cloud must be enabled and setup in order to start these steps. For more information, see Set Up and Maintain Data Cloud.

From Setup, in the Quick Find box, enter *Field Service Intelligence*, and then select **Field Service Intelligence**. This setup page leads you through everything you need to do for the successful installation of Field Service Intelligence.

As you progress through the setup steps, refresh the page to update the steps that are complete.

Field Service Intelligence	
Serve / El Indance	
Cet Started with Field Service Intelligence Combine the capabilities of Data Cloud and CRM Analytics to gain Field Service Insights and leverage data-driven service solutions. Review considerations before you begin setup.	
Data Cloud Prerequisites	
Oreste the Data Cloud Salasforce CBM Connection     To use Field Sanka Intelligence, find connect to Data Cloud Learn About Data Cloud Connections in Help	
Evalue Service Cloud Features IRecommended     Field Service IntelSpace regules specific Service Cloud features like Email-to-Case, Omni-Channel, and Surveys to be enabled. Learn About Reguled Features in Holp	
Install and Deploy Service Cloud Data KX     Data KIX support the creation of data stream bundles. They include data model costomization and relationships.	
Installation Prerequisites           Assign the Field Service Intelligence Admin & CMM Analytice Flux Admin Permission Set           Assign the Field Service Intelligence Admin & CMM Analytice Flux Admin Permission set to users who need to manage Field Service Intelligence.	
Enable CRM Analytics     Field Barvice Intelligence Insights are powered by CRM Analytics.	
Install Field Service Intelligence           Install and Enable Field Service Intelligence           Unlock pre-bull mights and dashboards to provide a data-driven service solution. Learn About Installation Steps in Salesburs Help	

1. Create a Data Cloud Salesforce CRM Connection

Before installing the Service data kit and Field Service Intelligence, connect Data Cloud to Service Cloud.

2. Enable Service Cloud Features

To install the Field Service Intelligence data kit, you need to enable certain Service Cloud features, even if they're not currently in use for your operations.

- Update the Data Cloud Salesforce Connector Permission Set
   Update the Data Cloud Salesforce Permission Set to enable Service Cloud object settings and system permissions.
- 4. Install the Service Data Kit for Field Service Intelligence

The Service data kit includes the Service data bundle and provides the necessary data streams, data model objects, and data mappings for Field Service Intelligence.

- Enable CRM Analytics for Field Service Intelligence
   To use Field Service Intelligence, enable CRM Analytics and set up permissions.
- 6. Install Field Service Intelligence

After Service Cloud data is ingested into Data Cloud and CRM Analytics is enabled, you're ready to install Field Service Intelligence.

# Create a Data Cloud Salesforce CRM Connection

Before installing the Service data kit and Field Service Intelligence, connect Data Cloud to Service Cloud.

Note: For Summer '24, Field Service Intelligence supports only an internal Salesforce connection.

- 1. On the Field Service Intelligence setup page, click **Connect** for the Create the Data Cloud Salesforce CRM Connection step.
- 2. Ensure you have an internal Salesforce connection.
  - a. If no connections are listed, click Connect. Then click Connect again for the Salesforce org.
  - **b.** If connections exist, make sure that you have a connection to the Salesforce org. If you don't, click **New** and then click **Connect** for the Salesforce org.

Your Salesforce org is now connected as a data source and data action target.

SEE ALSO:

Set Up the Salesforce CRM Connection

# **Enable Service Cloud Features**

To install the Field Service Intelligence data kit, you need to enable certain Service Cloud features, even if they're not currently in use for your operations.

1. On the Field Service Intelligence setup page, click **Enable** for the Enable Service Cloud Features step.

These Service Cloud features are automatically enabled.

- Email Drafts
- Email-to-Case
- Omni-Channel
- Skills-based Routing
- Surveys

# Update the Data Cloud Salesforce Connector Permission Set

Update the Data Cloud Salesforce Permission Set to enable Service Cloud object settings and system permissions.

Note: The Service Cloud object settings and system permissions may already be enabled, making these steps a checklist to ensure the Data Cloud Salesforce Connector is set up correctly.

- 1. From Setup, in the Quick Find box, enter *users*, and then select **Permission Sets**.
- 2. Click Data Cloud Salesforce Connector.
- 3. Select Object Settings.
- 4. Click Cases and then click Edit.
- 5. For Business Hours and Closed When Created, select Read Access and save.
- 6. Click Object Settings and select Survey Subjects
- 7. Click Edit.
- 8. Under Object Permissions, select View All, and save.
- 9. Click Permission Set Overview and select System Permissions.

10. Click Edit, select View Roles and Role Hierarchy, and save.

## Install the Service Data Kit for Field Service Intelligence

The Service data kit includes the Service data bundle and provides the necessary data streams, data model objects, and data mappings for Field Service Intelligence.

### Install the Service Data Kit

Note: If you already have the Service data kit installed, reinstall it to ensure that it's up to date. Upgrading the data kit is necessary to access the latest enhancements to Field Service Intelligence.

- 1. Click the Setup gear icon and then select **Data Cloud Setup**.
- 2. Under Configuration, select Salesforce CRM.
- 3. Find the Service Cloud bundle, and click the menu button on the right. Select Install.
- 4. In the Package Install flow, follow the standard process for installing a package.

To view the data kit details, go to Data Cloud Setup. Under Tools, select **Data Kits** and then click **ServiceDK**.

### Set Up Service Data in Data Cloud

- 1. In Data Cloud, go to the Data Streams tab and click New.
- 2. Select the Salesforce CRM connected data source and click Next.
- 3. Select your connected Salesforce org.

If you have only one Salesforce org connected to Data Cloud, it's selected by default.

- 4. Select Data Bundles, then select the Service data bundle, and click Next.
- 5. Select the default data space and click Next.

The installed objects and fields are displayed. Don't remove the data objects, fields, or mappings because Field Service Intelligence relies on the standard installation to populate the dashboards correctly.

#### 6. Click Deploy

The Service data bundle deploys over 20 data streams. The Data Streams tab displays the progress. When the data streams show an Active status, you're ready to continue.

From the Setup menu, installed versions of Field Service Intelligence display as separate tabs. To view details about the app installation, select an app tab. The app details include the installation status, a list of installation events, and the tasks for each event. You can schedule app refreshes or refresh manually and see details of all the installed app resources like dashboards and data transforms. For more information about app management, see Manage Your Intelligent Apps.

etup FSI Instance							
emplate Name:	Template Version:	Status:	Created By:	Created On:		Description:	
SL_Intelligence	1.0	✓ Success	Automated Process	04/01/2024			
Open in Analytics Stu     Monitoring Resources	_					Edit	Delete
Open in Analytics Stu Monitoring Resource: Status All	_					Edit	Delete
Monitoring Resources	s Settings	Task Overview	Started By	Started On	Duration		

SEE ALSO: Install Standard Data Bundles Powered by Data Kits Data Streams in Data Cloud

# Enable CRM Analytics for Field Service Intelligence

To use Field Service Intelligence, enable CRM Analytics and set up permissions.

1. On the Field Service Intelligence setup page, click **Assign** for the Assign the Field Service Intelligence Admin & CRM Analytics Plus Admin Permission step.

This step assigns the Field Service Intelligence Admin and CRM Analytics Plus Admin permission sets to your user.

Go back to the Field Service Intelligence setup page and click Enable for the Enable CRM Analytics step.
 This step takes you to the Getting Started page for CRM Analytics, where you click Enable CRM Analytics.

## Install Field Service Intelligence

After Service Cloud data is ingested into Data Cloud and CRM Analytics is enabled, you're ready to install Field Service Intelligence.

- On the Field Service Intelligence Setup page, click Start Install for the Install and Enable Field Service Intelligence step.
   Field Service Intelligence checks whether your org includes the data and settings to transform the data model objects and create the dashboards and components. If you receive an error message, follow the instructions and then restart the installation process.
- 2. When the readiness checks are completed, click Next.
- 3. Complete the Field Service Intelligence installation.
  - **a.** Give your instance a unique, easily recognizable name.
  - **b.** Leave the log level as is, unless you require more information about the Field Service Intelligence installation.
  - c. Select Scheduled and choose which hours and days to refresh Field Service Intelligence.

Adding a refresh schedule ensures that Field Service Intelligence has up-to-date data. For more information, see Field Service Intelligence Data Refresh.

4. Click Next.

Installing Field Service Intelligence can take a few minutes. To check the status, go to the App Install History page in Setup.

After Field Service Intelligence is successfully installed, assign the Field Service Intelligence User Permission Set to any users who need access to the dashboards. The dashboards are accessible in both the Service app and the Service Console.

To access Field Service Intelligence dashboards from the Service app, go to the App Launcher and search for *Field Service Intelligence*. Click **Field Service Intelligence** to open it. The tab doesn't persist, so you must open Field Service Intelligence from the App Launcher the next time you open the Service app.

To access Field Service Intelligence dashboards from the Service Console app, go to the Console App Navigation and click **Edit** > **Add More Items**. Search for *Field Service Intelligence* and click the + sign to select it. Click **Add 1 Nav Item** and **Save**. The next time you open the Console App Navigation, Field Service Intelligence displays in the list.

# Field Service Intelligence Dashboards

Field Service Intelligence dashboards display key field service performance metrics and provide data-driven visuals.

Determine whether you're meeting your customer service goals with easy-to-understand data visualizations in the Field Service Intelligence dashboards. The combination of customer data, key performance indicators (KPIs), and artificial intelligence (AI) help your service team improve operations and reduce costs.

#### Assets Management Dashboard

Understand and monitor your active assets. Keep up with your organizational goals for average asset uptime, unscheduled downtime, and SLA compliance for asset repair.

#### Service Appointments Dashboard

Understand and monitor service appointment volume across your organization by territory, status, work type, account, priority, and other attributes.

#### Work Orders Dashboard

Understand and monitor work across territories based on status, priority, and other attributes. View trends and keep up with your organizational goals.

#### Parts and Inventory Dashboard

Get insights on your inventory and products. Track and analyze stock levels, consumption rates, demand, and request statuses.

#### Resource Management Dashboard

Monitor resource utilization, performance efficiency, and burnout risk. You can compare individual metrics against team and organizational benchmarks.

**EDITIONS** 

Available in: Field Service Einstein 1 Edition or as an add-on.

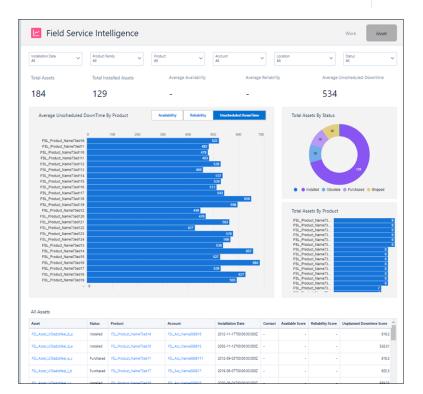
# Assets Management Dashboard

Understand and monitor your active assets. Keep up with your organizational goals for average asset uptime, unscheduled downtime, and SLA compliance for asset repair.

Select from the filters to refine your view ), and review the high-level statistics. In the charts, you can see total assets, total assets installed, and averages for availability, reliability, and unscheduled downtime. Lastly, drill into details for each asset.

### **EDITIONS**

Available in: Field Service Einstein 1 Edition or as an add-on.



My Performance KPI	CALCULATION
Total asset	Total number of assets.
Total Installed Assets	Total number of assets installed in the org.
Availability (%)	Average availability of assets based on the Availability field on the Asset object.
Average time between Failures	Average time between failures based on the Average Time Between Failures field on the Asset object.
Reliability (%)	Average reliability of assets based on the Reliability field on the Asset object.

My Performance KPI	CALCULATION
Mean time to repair	Average time between repairs based on the Average Time Between Repairs field on the Asset object.
Unscheduled Downtime	Average unplanned downtime based on the Unscheduled Downtime field on the Asset object.
Unscheduled Downtime by product type	You can view the average availability, reliability and unscheduled downtime for each product type.
Total assets by status	Total number of assets grouped by status.
Total assets by product type	Total number of assets sorted by product type.

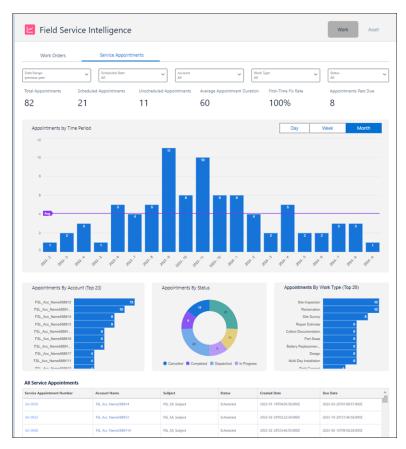
# Service Appointments Dashboard

Understand and monitor service appointment volume across your organization by territory, status, work type, account, priority, and other attributes.

Select from the filters to refine your view, and review the high-level statistics. In the charts, you can see service appointments by time, territory, status, and work type. Lastly, drill into details for each service appointment.

### EDITIONS

Available in: Field Service Einstein 1 Edition or as an add-on.



КРІ	CALCULATION
Total Appointments	Total number of service appointments.
Unscheduled	Total number of service appointments in unscheduled status.
Scheduled	Total number of service appointments in scheduled status.
Average travel time	The estimated travel time from the assigned Resource object for the appointment.
Average appointment duration	The average number of minutes it takes to complete a service appointment.
First time fix rate*	The percentage of service appointments marked as Complete versus the total number of appointments marked as Completed and Cannot Complete over the specified time period.
Due date	Total number of service appointments that are the past due date without any activity or set status.
Service appointment by status	Total number of service appointments by status.
Service appointment by territory	Total number of service appointments by service territories.
Service appointment by work type	Total number of service appointments by work type.

КРІ	CALCULATION
Service appointment by time	Total number of service appointments by day, week, month or year based on scheduled start date.

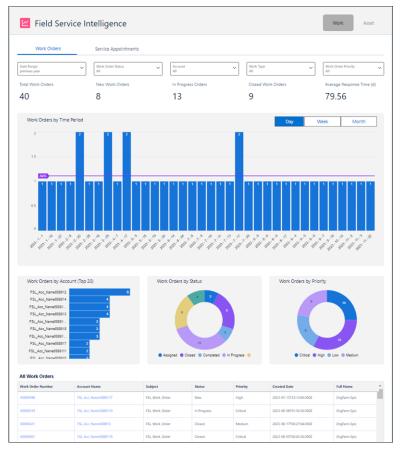
# Work Orders Dashboard

Understand and monitor work across territories based on status, priority, and other attributes. View trends and keep up with your organizational goals.

Select from the filters to refine your view, and review the high-level statistics. In the charts, you can see work orders by time, account, status, and priority. Lastly, drill into details for each work order.

### EDITIONS

Available in: Field Service Einstein 1 Edition or as an add-on.



ROUTING KPI	CALCULATION
Total work order count	Total number of work orders created in the past 30 days.

ROUTING KPI	CALCULATION
New work orders	Total number of work orders in new status.
Closed work orders	Total number of work orders in closed status.
In Progress Work orders	Total number of work orders in progress.
Average Response Time	The amount of time between when the work order was created and when the service appointment was created and scheduled.
Average Completion Time	The amount of time between when the work order was created and when it was closed.
Work order status	Total number of work orders sorted by status.
Work order priority	Total number of work orders sorted by priority.
Work order by account	Total number of work orders sorted by account.
Work order by time	Total number of work orders by day, week, or month based on the created date.

# Parts and Inventory Dashboard

Get insights on your inventory and products. Track and analyze stock levels, consumption rates, demand, and request statuses.

To refine your view, select from the filters and review the high-level statistics. In the charts, you can see data on products items, consumed and required products, and product requests.

KPI	CALCULATION
Total Product Items	Total from the Quantity On Hand field. The source is the Product Item object.
Total Products Required	Total from the Quantity Required field. The source is the Product Required object.
Total Products Consumed	Total from the Quantity Consumed field. The source is the Product Consumed object.
Total Product Requests	Total from the Quantity Requested field. The source is the Product Request–Product Request Line Item child object.
Total Product Items	Top 10–20 products available listed in descending order of quantity on hand. The source is the Product Item object.
Products Required	Total number of products required sorted by product name. The source is the Product Required object and looks up to the Product object.

### EDITIONS

Available in: Field Service Einstein 1 Edition or as an add-on.

KPI	CALCULATION
Products Required by Work Type	Top products required sorted by work type. The source is the Product Required object and looks up to the Work Type object.
Products Consumed	Total product consumed sorted by product name. The source is the product lookup.
Product Requests	Most requested products listed in descending order. The source is the Product Request–Product Request Line Item child object.
Product Requests by Status	Product requests sorted by status. The source is the Product Request–Product Request Line Item child object.

# Resource Management Dashboard

Monitor resource utilization, performance efficiency, and burnout risk. You can compare individual metrics against team and organizational benchmarks.

To refine your view, select from the filters and review the high-level statistics. In the charts, you can see technician use over time, appointments that can't be completed, and the average resource travel time and distance. Lastly, drill into details for each service resource.

Note: These metrics are derived from the Service Resource object.

КРІ	CALCULATION
Total Active Resources	Total number of service resources with an Active status.
Average Technician Utilization (%)	Percentage of hours that resources work out of their total available hours.
Average Travel Time (Hours)	Estimated travel time for all resources.
Average Travel Distance	Estimate from the Travel Time field on the Assigned Resource object, which links the Service Resource and Service Appointment objects.
On Time Arrival	Total number of appointments where the Actual Start time occurs before the Scheduled Start time.
Overtime (Hours)	Total number of hours that are identified as overtime.
Average Closed Service Appointments	Total number of service appointments with a status of Closed compared to the number of resources for the defined date range.
Average Incomplete Service Appointments	Average number of service appointments with a Cannot Complete status compared to the number of resources for the defined date range.

### EDITIONS

Available in: Field Service Einstein 1 Edition or as an add-on.

КРІ	CALCULATION
Technician Utilization	Hours that a resource works out of their total available hours by day, week, month, or year based on Scheduled Start Date.
Average Travel Time by Resource	The estimated travel time from the assigned Resource object for the appointment.
Average Travel Distance	Average based on the Distance field on the Assigned Resource object, which links the Service Resource and Service Appointment objects.