

Complete Guide to Field Service

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FIELD SERVICE LIGHTNING

Field Service Lightning is a powerful, highly customizable set of features that you can use to set up a mobile-friendly field service hub in Salesforce.

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

- Create service resources and service crews that represent your field service technicians, and add details about their skills, service territories, and availability
- Set up multi-level service territories that represent the regions where your technicians can work
- Track the location and status of your product inventory, warehouses, service vehicles, and customer sites
- Schedule one-time or recurring work orders for customers, and add details about technician preference and 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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

What's Included in Field Service Lightning

Core Features

When Field Service Lightning 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

If you need advanced scheduling capabilities, download the Field Service Lightning managed package. The managed package builds on the standard objects and includes:

- A scheduling optimizer that allocates resources to appointments in the most efficient way possible by accounting for technician skill level, travel time, location, and other factors
- A dynamic scheduling console that gives dispatchers and supervisors a bird's-eye view of all scheduled appointments
- Out-of-the-box scheduling policies and triggers that help you customize your scheduling model and display preferences

Mobile App

The offline-friendly Field Service Lightning mobile app for iOS and Android makes work a pleasure for technicians in the field, who 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.

Ready to get started? The resources linked below will help you stay organized.

? Tip: Check out the Field Service Lightning Developer Guide for object relationship diagrams, API reference information, and code samples.

SET UP FIELD SERVICE LIGHTNING

Build and manage your field service processes in one place. Create records representing your workforce and territories, set up work order tracking and inventory management, and customize the Field Service Lightning mobile app to set up your mobile workforce for success.

1. Enable Field Service Lightning

Enable Field Service Lightning to start using field service features like work orders and service appointments.

2. Give Users Access to Field Service Lightning

Give your team access to Field Service Lightning features by assigning them permission set licenses.

3. Set Up Your Workforce

Create service territories to track the places where your team performs field service work. Then, create service resources and crews to represent your workforce.

4. Set Up Time Tracking

Establish operating hours for service territories and service resources to indicate when field service work can take place. Use time sheets to track how much time your field service employees spend on tasks.

5. Set Up Work Orders

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

6. Set Up and Manage Your 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. Whether parts are transferred from the warehouse to the customer or between technicians, your field service center has it covered.

7. Set Up Service Reports

Make your customers happy with fast field service reports delivered to their inboxes. Technicians and dispatchers can create reports for work orders, work order line items, or service appointments and email them directly to the customer. Use standard templates or create variations of your own.

8. Set Up Field Service in Communities

Keep customers, partners, and contractors in the loop about field service work. All field service objects can be added to Lightning communities and communities built using the Salesforce Tabs + Visualforce template. Exposing these objects and related objects like assets, accounts, and contacts make it easy for customers to schedule appointments or check field service records straight from their community.

9. Report on Field Service Lightning

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

10. Set Up Self-Service Appointment Booking for Field Service Lightning (Beta)

Snap-ins Appointment Management (beta) gives your customers an easy way to schedule, modify, and cancel appointments with your mobile workforce. The experience is powered by Visual Workflow. This lets you craft the perfect interaction and decide when and how to create related records like work orders.

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Enable Field Service Lightning

Enable Field Service Lightning to start using field service features like work orders and service appointments.

- From Setup, enter Field Service Settings in the Quick Find box, then select Field Service Settings.
- 2. Click Enable Field Service Lightning.
 - Note: If you don't have a Field Service Lightning add-on license, you just see an **Enable Work Orders** option, which is on by default.
- 3. Click Save.
- **4.** Allow sharing to be controlled by Field Service Lightning's sharing rules. Enter *Sharing* in the Quick Find box, then select **Sharing Settings** under Security.
- **5.** Change the sharing settings for the Work Order, Service Appointment, Service Territory, and Service Resource objects to **Private**.
- 6. Click Save.
- 7. Enter Field Service Settings in the Quick Find box, then select Field Service Settings.
- **8.** Optionally, select the option to 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.

- **9.** Select any of the following settings that fits your needs:
 - 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

Sharing Considerations

- When an appointment is canceled, all sharing rules are removed. The appointment is visible only to the appointment owner and the relevant dispatchers based on the user territory object.
- You can give dispatchers access to objects they need by sharing information across territories and syncing calendars to include absences and other events.
- In some orgs, similar sharing options are found in the managed package settings. We recommend disabling those sharing settings and using the settings described above.
- **10.** 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 Due Date on all auto-created service appointments by indicating how many days past the Created Date it should fall.

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USER PERMISSIONS

To enable Field Service Lightning:

Customize Application

- **11.** 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. Press the Shift key and click the fields you want to select.
- 12. Click Save.



Note: Enabling Field Service Lightning turns on geocoding (location data) for supported features. To learn more, see Manage Geocodes and Data Integration Rules in Field Service Lightning.

Give Users Access to Field Service Lightning

Give your team access to Field Service Lightning features by assigning them permission set licenses.

(1) Important: Field Service Lightning must be enabled.

All users need the Field Service Standard user permission to access field service objects. Most user licenses already include this permission; for the full list of licenses, contact Salesforce Support.

Field Service Lightning also includes three permission set licenses related to the managed package and mobile app:

- Dispatchers need the Field Service Dispatcher permission set license to access the dispatcher console
- Technicians need the Field Service Scheduling permission set license to be included in scheduling optimization
- Mobile users (typically technicians) need the Field Service Mobile permission set license to use the Field Service Lightning mobile app

You don't need a permission set license to access field service objects. For example, inventory managers, admins, and customer support agents probably don't need one.

To give users access to field service features:

- 1. Create a permission set for each of the three Field Service Lightning permission set licenses.
 - **a.** From Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets** under **Manage Users**.
 - b. Click New.
 - **c.** Enter a label, API name, and description for your permission set. To keep it simple, use the same name as the permission set license you plan to associate it with.
 - **d.** Under **Select the type of users who will use this permission set**, select the corresponding Field Service Lightning permission set license.
 - e. Click Save.
 - **f.** On the permission set overview page, under **System**, click **System Permissions**.
 - g. Click Edit.
 - h. Enable the corresponding Field Service Lightning permission set license (Field Service Scheduling, Mobile, or Dispatcher).
 - i. Click Save.
- **2.** On the permission set overview page, assign the permission set to relevant users. Assigning a permission set automatically assigns the associated permission set license to the user.
- **3.** Update all relevant user profiles to include access to field service objects.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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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

- a. In Setup, navigate to the profile you want to update and click Edit.
- **b.** Under Administrative Permissions, select **Field Service Standard**.
- c. Click Save.
- d. Under Standard Object Permissions on the profile, define the access level to field service objects.
 - 1 Tip: For a full list of field service objects, see Field Service Lightning Objects.
- e. Click Save.

Set Up Your Workforce

Create service territories to track the places where your team performs field service work. Then, create service resources and crews to represent your workforce.

1. Configure Service Territory Settings

Control how your team works with service territories by customizing page layouts and assigning user permissions.

2. Create Service Territories

Create service territories to organize your workforce and ensure that service resources are assigned to service appointments near their home base.

3. Configure Service Resource and Service Crew Settings

Control how your team works with service resources and crews by customizing page layouts and assigning user permissions.

4. Create 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.

5. 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.

6. Set Up Skills for Field Service

Assign skills to service resources to indicate the type of work that they can perform. You can also add required skills to work orders and work types so that only resources with certain skills can be assigned to complete the work.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Configure Service Territory Settings

Control how your team works with service territories by customizing page layouts and assigning user permissions.

Note: Field Service Lightning must be enabled in your org.

1. Assign user permissions.

| Users Who Will | Need These Permissions |
|--|-------------------------------|
| Enable Field Service Lightning | Customize Application |
| View the Service Territories tab and service territories | Read on service territories |
| Create or clone service territories | Create on service territories |
| Edit service territories | Edit on service territories |
| Delete service territories | Delete on service territories |
| Create service territory members | Edit on service resources |

2. Customize 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in Enterprise, Performance, Unlimited, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To edit page layouts and set field history tracking:

Customize Application

To create and edit users:

Manage Internal Users

| Page Layout | Recommended Customizations |
|-------------------|--|
| Service Resource | Add the Service Territories related list, which shows territories where the service resource can work. |
| Service Territory | Arrange the fields. The default layout includes only some of the available fields. Confirm that your page layout has the desired related lists: Child Service Territories: Service territories that represent a subdivision of the current territory Service Territory Locations: Warehouses, customer sites, or vehicles that are located or operate in the service territory Service Territory Members: Service resources that work in the service territory |

3. Make the Service Territories tab visible to your users. Users create and manage service territories from the Service Territories tab. You can add the tab to a custom app or instruct users to add the tab in Salesforce.

Create Service Territories

USER PERMISSIONS

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

Create service territories to organize your workforce and ensure that service resources are assigned to service appointments near their home base.

Service territories typically represent geographical areas where your field service team works.

However, you may decide to create functional territories, such as field sales versus field service. You can also organize service territories into hierarchies.



- 1. From the Service Territories tab, click **New**.
- 2. Select **Active** to be able to add members to the territory or associate it with work orders, work order line items, or service appointments.
- **3.** Enter a name and description for your territory. For example, enter the name of a county or district.
- **4.** Optionally, enter an address.

You may want to enter the address of the territory's headquarters.

- **5.** If your territory is part of a larger territory, select a parent territory.
- **6.** Select operating hours for the territory, which indicate when service appointments within the territory should take place. For help, see Create Operating Hours.
- 7. Click Save.
- **8.** Assign service resources to your territory from the Service Territory Members related list.

Service territory members are service resources who are available to work within the territory. If you haven't created service resources yet, you can also define a service resource's territories from the resource's detail page.

Service resources use their territory's operating hours by default, but you can define different hours for resources.

When you add a member, indicate whether this territory is the member's primary, secondary, or relocation territory. The primary territory is typically the territory where they work most often—for instance, near their home base—while secondary territories are territories where they can be assigned to appointments if needed. Relocation territories represent temporary moves.

9. Optionally, assign locations to the territory from the Service Territory Locations related list. For example, if a warehouse is located within the service territory and has a corresponding location record, you can add it.

EDITIONS

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Example: Create a hierarchy of territories to represent the areas where your team works in California. Include a top-level territory named *California*, three child territories named *Northern California*, *Central California*, and *Southern California*, and a series of third-level territories corresponding to California counties. Assign service resources to each county territory to indicate who is available to work in that county.

Configure Service Resource and Service Crew Settings

Control how your team works with service resources and crews by customizing page layouts and assigning user permissions.



Note: Field Service Lightning must be enabled in your org.

1. Assign user permissions.

| Users Who Will | Need These Permissions |
|--|-----------------------------|
| Enable Field Service Lightning | Customize Application |
| View the Service Resources tab and service resources | Read on service resources |
| Create service resources | Create on service resources |
| Create service crews | Create on service crews |
| Create, update, or delete service crew members | Edit on service crews |
| Edit or deactivate service resources | Edit on service resources |

2. Customize 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 want to rename.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To edit page layouts and set field history tracking:

Customize Application

To create and edit users:

Manage Internal Users

| Page Layout | Recommended Customizations |
|------------------|---|
| Service Resource | Arrange the fields. The default layout includes only some of the available fields. If you intend to create service crews, update the field-level security settings of the Service Crew field so it's not hidden. Then, add the field to service resource page layouts and make sure that the User field is not marked as required. This allows you to create service resources that represent service crews so they can be assigned to service appointments. |
| | Note: Though the User and Service Crew fields won't be marked required in the UI, a built-in validation ensures that service resource records can't be saved unless one of the fields is filled out. |
| | Confirm that your page layout has the desired related lists: Absences: The service resource's absences |

Capacities: The service resource's capacity, or how much they can work in a specified time period

| Page Layout | Recommended Customizations |
|--------------|---|
| | Service Appointments: Service appointments assigned to the service resource Service Crews: Service crews that the service resource belongs to Service Territories: Service territories where the service resource is available to work Skills: The service resource's skills, which represent certifications and areas of expertise Time Sheets: Time sheets that track the service resource's time at work |
| Service Crew | Arrange the fields. The default layout includes only some of the available fields. Confirm that your page layout has the Service Crew Members related list. If you're using the Field Service Lightning managed package, update the field-level security settings of the Gantt Label field on the Service Crew Member object so it's not hidden. Then, add the field to the Service Crew Member page layout. |

3. Make the Service Resources and Service Crews tabs visible to your users.

Users create and manage service resources and crews from these tabs. You can add a tab to a custom app or instruct users to add it in Salesforce.

Create Service Resources

| USER PERMISSIONS | | EDITIONS |
|---|---|---|
| To create service resources: | Create on service resources | Available in: Salesforce |
| To deactivate service resources: | Edit on service resources | Classic and Lightning Experience |
| To view resource capacities: | Read on service resources | Field Service Lightning |
| To create, update, or delete resource capacities: | Edit on service resources | features, managed package, and mobile apps |
| To view service resource skills: | Read on service resources | are available in Enterprise , Performance , Unlimited , |
| To create, edit, or delete service resource skills: | Edit on service resources | and Developer Editions. Work orders are also available in Professional |
| To view, create, or update resource | Read on service resources | Edition. |
| absences: | Note: Read Only users with Read permission on service resources can create resource absences. | |
| 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.

1. From the Service Resources tab, click **New**.

2. Enter a name and description.

You may want the name to be the name or title of the associated user or crew.

- **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.** If you want to assign the resource to service appointments, select **Active**.
- **5.** Indicate whether the resource is a technician, dispatcher, or crew.

Resources who are dispatchers can't be capacity-based, included in scheduling 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.
- 7. 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.

8. If you're using the Field Service Lightning managed package with scheduling optimization, select **Include in Scheduling Optimization** to let the scheduling optimizer assign the resource to service appointments.

Only users with the Field Service Scheduling permission set license can be included in scheduling optimization.

9. Click Save.

Once a resource is created, add information about their capabilities.

1. In the Service Territories related list, select the territories where the resource is available to work.

Indicate whether each territory is the resource's primary, secondary, or relocation territory. The primary territory is typically the territory where they work most often—for instance, near their home base—while secondary territories are territories where they can be assigned to appointments if needed. Relocation territories represent temporary moves.

For example, a service resource might have the following territories:

- Primary territory: West Chicago
- Secondary territories:
 - East Chicago
 - South Chicago
- Relocation territory: Manhattan, for a three-month period
- 2. If the resource is capacity-based, define their capacity in the Capacities related list.
 - a. Click New Resource Capacity.
 - **b.** Enter a start date and an end date to indicate when the capacity is in effect for the resource. For example, if the capacity represents a six-month contract, enter the contract's start and end dates.
 - **c.** Specify how much the resource can work:
 - Select the Time Period that the capacity is based on: hours, days, or months. For example, if the resource can work 80 hours per month, select **Month**.
 - If you want the resource's capacity to be based on the number of hours worked, fill out Hours per Time Period. For example, if the resource can work 80 hours per month, enter 80.
 - If you want the resource's capacity to be based on the number of service appointments they are assigned to, fill out Work Items per Time Period. For example, if the resource can complete 20 appointments per month, enter 20.

You must enter a value in at least one of these fields: Hours per Time Period and Work Items per Time Period. If you're using the Field Service Lightning managed package, capacity must be set in hours, and capacity-based service resources can only be associated with one service territory.

- **d.** Click **Save**. You can set multiple capacities for a resource as long as their start and end dates do not overlap.
 - (1) Important: If you aren't using the Field Service Lightning managed package, capacity serves more as a suggestion than a rule. Resources can still be scheduled beyond their capacity, and you aren't notified when a resource exceeds their capacity.
- **3.** In the Skills related list, assign skills to indicate the resource's areas of expertise. For details, see Assign Skills to Service Resources.

Create Service Crews

| USER PERMISSIONS | | EDITIONS |
|--|---|--|
| To create service crews: | Create on service crews | Available in: Enterprise , |
| To create service resources representing crews: | Create on service resources | Performance, Unlimited, and Developer 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 | |

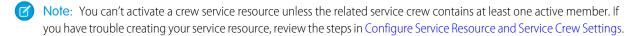
Set up teams who can be assigned to field service appointments as a unit. A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer,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

- 1. From the Service Crews tab, click New.
- 2. Enter a crew name and size.
- 3. Save your changes.
- **4.** From the Service Crew Members related list, add service resources to the crew. You can specify start and end dates for crew members and flag the crew leader. Only service resources of the Technician resource type can be added to crews.



- Service resources that belong to a service crew don't receive notifications about assignments or assignment changes. Assignment notifications are only sent to service resources that are assigned individually to appointments.
- You can see who the crew leader is by viewing the Service Crew Members related list or the leader's crew membership record. Leaders don't have extra object permissions.
- **5.** Create a service resource record to represent the crew, which is used to assign the crew to service appointments. 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 lookup field.
- **d.** Select a Resource Type of Crew.
- **e.** Select **Active** to be able to assign the crew to service appointments. Service resources that are crews can't be activated unless the crew has at least one active member.
- **f.** Skip the scheduling optimization option, which doesn't apply to service crews.
- g. Save your changes.



- **6.** Assign the crew to service appointments.
 - **a.** In the Assigned Resources related list on an appointment, click **New**.
 - **b.** Select the service resource that represents the crew, and fill out the other fields as needed.
 - c. Save your changes.

The crews that a service resource belongs to appear in the Service Crews related list on the resource's detail page. You can also see all service crew memberships in the Service Crew Members tab in Salesforce. A service resource can be a member of multiple crews as long as the membership dates don't overlap.



Tip: To change the fields that appear in the Service Crew Members related list, update the service crew page layout.

Set Up Skills for Field Service

Assign skills to service resources to indicate the type of work that they can perform. You can also add required skills to work orders and work types so that only resources with certain skills can be assigned to complete the work.

1. Configure Skill Settings

To control how your field service team works with skills, customize page layouts and specify who can view and create skills.

2. Create Skills

To get started with skills for field service, create basic skills in your org. When you assign skills to service resources or mark them as required on work orders and work types, you can add details like skill level and duration.

3. Assign Skills to Service Resources

Assign skills to service resources to track their certifications and areas of expertise.

4. Group Service Crew Skills

Learn how the Field Service Lightning managed package considers a service crew's skills when scheduling appointments.

EDITIONS

Available in: Salesforce Classic.

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Configure Skill Settings

To control how your field service team works with skills, customize page layouts and specify who can view and create skills.

Note: Field Service Lightning must be enabled in your org.

1. Assign user permissions.

| Users Who Will | Need These Permissions |
|---|---|
| Enable Field Service Lightning | Customize Application |
| Create, update, and delete skills in Setup | Customize Application |
| Assign skills to service resources | Edit on service resources |
| View resources' skills | Read on service resources |
| Add required skills to work orders, work order line items, or work types | Edit on work orders, work order line items, or work types |
| View required skills on work orders, work order line items, or work types | Read on work orders, work order line items, or work types |

EDITIONS

Available in: Salesforce Classic.

Field Service Lightning features, managed package, and mobile apps are available in Enterprise, Performance, Unlimited, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To edit page layouts:

Customize Application

To create and edit users:

Manage Internal Users

2. Customize 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 |
|----------------------|--|
| Service Resource | Add the Skills related list, which shows skills assigned to a service resource. |
| Work Order | Add the Skill Requirements related list, which shows skills required to complete the work order. |
| Work Order Line Item | Add the Skill Requirements related list, which shows skills required to complete the line item. |
| Work Type | Add the Skill Requirements related list, which shows skills required to complete the type of work. |

3. Decide how skill levels should be determined.

Skills assigned to a service resource or to a work order, work order line item, or work type can have a skill level from 0 to 99.99. For example, you can:

- Use the Skill Level field to indicate years of experience.
- Create a matrix that corresponds professional license classes to skill level numbers.

Tip:

- If you'd like to limit potential skill level values, create a validation rule that, for example, only allows multiples of 10.
- Create field-level help that lets your users know how skill level is determined.

Create Skills

To get started with skills for field service, create basic skills in your org. When you assign skills to service resources or mark them as required on work orders and work types, you can add details like skill level and duration.

- From Setup in Salesforce Classic, enter Skills in the Quick Find box, then select Skills under Field Service.
- 2. Enter a name. For example, Electrician Certification.
- **3.** Enter a description.
- **4.** Skip the Assign Users and Assign Profiles sections, which are specific to Live Agent.
- 5. Click Save.

You can now assign the skill to service resources or list it as required on work types, work orders, and work order line items. Resource skills and skill requirements are supported in both Salesforce Classic and Lightning Experience.

EDITIONS

Available in: Salesforce Classic

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition

USER PERMISSIONS

To create skills:

Customize Application

Assign Skills to Service Resources

Assign skills to service resources to track their certifications and areas of expertise.

- 1. Navigate to the resource that needs a skill assigned.
- 2. In the Skills related list, click **New Service Resource Skill**.
- **3.** Select a skill. Skills must be created before they can be assigned to a resource; to learn how, see Create Skills.
- **4.** Enter a skill level from 0 to 99.99 based on how your business measures skill level.
- **5.** Enter a start date and, if needed, an end date. For example, if a technician must be recertified in a particular skill every six months, you can enter an end date that's six months later than the start date.
- **6.** Click **Save**. The resource's skill now appears in their Skills related list.
- 1 Tip: To make it easier to track a resource's abilities, upload photos of licenses and certifications in the Files section on the resource's detail page.

EDITIONS

Available in: Salesforce Classic.

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To create, edit, or delete service resource skills:

Edit on service resources

To view service resource skills:

 Read on service resources

Group Service Crew Skills

Learn how the Field Service Lightning managed package considers a service crew's skills when scheduling appointments.

Skills can be assigned to service resources of any type—Technician or Crew—and the Field Service Lightning managed package considers skills during appointment scheduling. However, it doesn't automatically consider a service crew's members' combined skills. This means that unless skill are assigned to service crew via the service resource of type Crew, service crews may be under-scheduled.

If you want the scheduling engine to consider a service crew's combined skills—that is, all skills assigned to the service crew members—you can enable skill grouping. This way, if an appointment requires the Drilling skill, a service crew with a member that has the Drilling skill will be considered as a candidate.

From the Field Service Settings tab in the managed package settings, click **Scheduling**, then click **General Logic**. Select **Enable resource skill grouping** and save your changes.



Note:

- When skill grouping is enabled, the scheduling engine calculates the skill set the crew
 has for the relevant time slot. The skill set is calculated at run-time each time the scheduling
 engine searches for appointment candidates, because it is dependent on the allocation
 of the service crew members.
- If multiple member of a service crew have the same skill, the scheduling engine considers the highest skill level when calculating the crew's combined skill set.

EDITIONS

Available in: Salesforce Classic.

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Set Up Time Tracking

Establish operating hours for service territories and service resources to indicate when field service work can take place. Use time sheets to track how much time your field service employees spend on tasks.

1. Create Operating Hours

Define operating hours and assign them to service territories, service territory members, or accounts to indicate their field service hours.

2. Set Up Time Sheets

To control how your team works with time sheets, customize page layouts and assign user permissions.

3. Create Time Sheets

Time sheets let service resources track their time and attendance.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Create Operating Hours

USER PERMISSIONS

| To create operating hours: | Create on operating hours |
|---|-----------------------------|
| To assign operating hours to service resources: | Edit on service resources |
| To assign operating hours to service territories: | Edit on service territories |
| To assign operating hours to accounts: | Edit on accounts |
| To view time slots: | Read on operating hours |
| To update, create, or delete time slots: | Edit on operating hours |

Define operating hours and assign them to service territories, service territory members, or accounts to indicate their field service hours.

By default, only System Administrators can view, create, and assign operating hours.

- (1) Important: Before you get started, read Operating Hours Considerations.
- 1. Click the Operating Hours tab, then click New.
- **2.** Enter a name, description, and time zone.
- 3. Click Save.
- **4.** In the Time Slots related list on the operating hours, create time slots for each day. For example, if the operating hours should be 8 AM to 5 PM Monday through Friday, create five time slots, one per day. To reflect breaks such as lunch hours, create multiple time slots in a day: for example, *Monday 8:00 AM 12:00 PM* and *Monday 1:00 PM 5:00 PM*. To establish 24/7 operating hours, create a time slot for each day of the week that begins and ends at 12:00 AM.
- **5.** Assign the operating hours to one or more service territories.
 - **a.** Navigate to the service territory detail page.
 - **b.** Select the desired hours in the Operating Hours lookup field on the territory detail page.
 - **c.** Save your changes.
- **6.** Service resources automatically use their service territory's operating hours. If a resource needs different operating hours than their territory, update their service territory member record to reflect this.
 - **a.** From the Operating Hours tab, create separate operating hours to assign to the service territory member.
 - **b.** From the Service Territory Members related list on the service territory, click the Member Number for the territory member whose hours you want to modify.
 - **c.** Select the desired hours in the Operating Hours field.
 - **d.** Save your changes.
- 7. If needed, assign operating hours to accounts. From the account detail page, select the desired hours in the Operating Hours field.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.



Note: If the Field Service Lightning managed package is installed in your org, the default operating hours used when booking an appointment for an account are set elsewhere. From the Field Service Settings tab, click **Global Actions**, then select **Appointment Booking** and update the operating hours listed there.

Set Up Time Sheets

To control how your team works with time sheets, customize page layouts and assign user permissions.

Time sheets make it possible to track service resources' time and attendance. A time sheet covers a defined period of time, such as a week or a month. Each time sheet is made up of time sheet entries, which track specific tasks, travel time, and break time.



Note: Field Service Lightning must be enabled in your org.

1. Assign user permissions.

| Users Who Will | Need These Permissions |
|--|------------------------|
| Enable Field Service Lightning | Customize Application |
| Create or clone time sheets | Create on time sheets |
| View time sheets and time sheet entries | Read on time sheets |
| To create, update, or delete time sheet entries: | Edit on time sheets |

2. Customize 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To edit page layouts and set field history tracking:

Customize Application

To create and edit users:

Manage Internal Users

| Page Layout | Recommended Customizations |
|------------------|---|
| Service Resource | Add the Time Sheets related list, which is where service resources manage their time sheets. |
| Time Sheet Entry | Arrange the fields. The default layout includes only some of the available fields. |
| Time Sheet | Arrange the fields. The default layout includes only some of the available fields. Confirm that your layout has the Time Sheet Entries related list, which is where service resources track their daily hours. |

3. Make the Time Sheets tab visible to your users.

Users create and manage time sheets from the Time Sheets tab. You can add the tab to a custom app or instruct users to add it in Salesforce.

Create Time Sheets

Time sheets let service resources track their time and attendance.



- 1. From the Time Sheets tab, click **New**.
- 2. Use the lookup field to enter a service resource within your org.
- **3.** Enter a start and end date for your time sheet.

 If you want to use a different time sheet for each day, enter the same start and end date.
- **4.** In the Time Sheet Entries related list, click **New**.
- **5.** Enter start and end dates and times.

Time sheet entries are for individual activities; for example, travel, dryer repair, or break. Therefore, the start and end dates are usually the same. Only the time changes.

- **6.** Fill in the rest of the fields according to your needs.
- 7. Click Save.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Set Up Work Orders

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

1. Configure Work Order Settings

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

2. Create Work Types

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.

3. Create Work Orders

Create work orders to track work to be performed for a customer.

4. Choose Preferred Service Resources on Work Orders

Designate certain service resources as preferred, required, or excluded on specific accounts or work orders.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

5. Add Required Skills to Work Orders or Work Types

Define skill requirements on work types, work orders, and work order line items to ensure that the work is assigned to a service resource with the right skills.

6. 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.

7. Create Service Appointments

Service appointments help you track field service work to be performed for customers. While work orders describe the work to be performed, service appointments are where you add the scheduling and assignment details. You can associate service appointments with several types of records.

8. Create Maintenance Plans

Create preventive maintenance plans for specific assets so your customers never miss a beat. Maintenance plans let you define how often maintenance visits occur and mass-generate work orders for future visits.

Configure Work Order Settings

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 Lightning | 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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 | Arrange the fields. The default layout includes only some of the available fields. |
| | Confirm that your page layout has the desired related lists: |
| | Articles: Knowledge articles attached to the work order (available only if Knowledge is set up |
| | Child Work Orders: The work order's child work orders |
| | Object Milestones: Milestones on the work order (available only if entitlement management set up) |
| | Products Consumed: Products used during the completion of the work order |
| | Product Requests: Products requested for the work order |
| | Product Request Line Items: Line items on product requests |
| | Products Required: Products needed to complete the work order |
| | Resource Preferences: Preferred, required, or excluded service resources on the work order |
| | Service Appointments: Appointments indicating when the work is scheduled |
| | Service Reports: Reports summarizing the work for customers |
| | Skill Requirements: Skills needed to complete the work order |
| | Time Sheet Entries: Schedule of technicians' time spent on the work order |
| | Work Order Line Items: Subtasks or steps on the work order |
| | Optionally, add your own custom values to the Status picklist field. The Status field comes with the default values: |
| | - New |
| | In Progress |
| | - On Hold |
| | Completed |
| | Cannot Complete |
| | Closed |
| | Canceled |
| | When you create a custom value, select a status category that the value falls into. The available stat categories match the default status values. For example, if you create a Waiting for Response values you may decide that it belongs in the On Hold category. |
| | The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management. |

(available only if Knowledge is set up).

• To let users view and modify attached Knowledge articles from the console, in the layout editor, select Custom Console Components and add the Knowledge One widget to the console sidebar

| Page Layout | Recommended Customizations | | |
|----------------------|--|--|--|
| | • In Lightning Experience, add the Knowledge component to your detail page layout. This lets users manage linked articles in Lightning experience. | | |
| Work Order Line Item | Arrange the fields on page 136. The default layout includes only some of the available fields. Optionally, add your own custom values to the Status picklist field. The Status field is identical to the Status field on work orders, which is described above. Confirm that your page layout has the desired related lists: Articles: Knowledge articles attached to the line item (available only if Knowledge is set up) Child Work Order Line Items: The line item's child line items Product Request Line Items: Line items on product requests Product Requests: Products requested for the line item Products Consumed: Products used during the completion of the line item Products Required: Products needed to complete the line item Service Appointments: Appointments indicating when the work is scheduled Service Reports: Reports summarizing the work for customers Skill Requirements: Skills needed to complete the line item Time Sheet Entries: Schedule of technicians' time spent on the line item To let users view and modify attached Knowledge articles from the console, in the layout editor, select Custom Console Components and add the Knowledge One widget to the console sidebar (available only if Knowledge is set up). In Lightning Experience, add the Knowledge component to your detail page layout. This lets users manage linked articles in Lightning experience. | | |
| Work Type | Arrange the fields on page 140. The default layout includes only some of the available fields. Tip: The Minimum Crew Size and Recommended Crew Size fields are hidden for all users by default. To use them, update their field-level security settings in Setup. Confirm that your page layout has the desired related lists: Articles: Knowledge articles attached to the work type (available only if Knowledge is set up) Products Required: The products needed to complete the work. Work orders and work order line items inherit their work type's required products. Skill Requirements: The skills needed to complete the work. Work orders and work order line items inherit their work type's skill requirements. In Lightning Experience, add the Knowledge component to your detail page layout. This lets users manage linked articles in Lightning experience. | | |

- **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: To add the Work Orders related list to maintenance plan page layouts, change 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
- 3. Make the Work Orders and Work Types tabs visible to your users.

Users create and manage work orders and work types from these tabs. You can add the tabs to a custom app or instruct users to add the tabs in Salesforce.

Create Work Types

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.

- 1. From the Work Types tab, click **New**.
- 2. Enter a name and description. Try to use a name that helps users quickly understand the nature of the records that can be created from the work type. For example, Annual Refrigerator Maintenance or Valve Replacement.
- **3.** Enter an Estimated Duration, which is how long the work is estimated to take, and a Duration Type of Minutes or Hours.
- **4.** Select a service report template to be applied to service reports for records that use the work type. If a different service report template is specified on the record, that overrides the work type template.
- **5.** Add a Minimum Crew Size and Recommended Crew Size to indicate the desired size of a service crew assigned to the work. For example, specify that the work is best handled by a crew of 3 (recommended), but can be done with just 2 technicians (minimum).
 - Tip: The crew size fields are hidden for all users by default. If you don't see them, you may need to update their field-level security settings in Setup.
- **6.** If you'd like a service appointment to be automatically created on work orders and work order line items that use the work type, select **Auto-Create Service Appointment**.
 - Note: By default, the Due Date on auto-created service appointments is seven days after the created date. You can adjust this offset from the Field Service Settings page in Setup.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

- 7. Click Save.
- **8.** If the task represented by the work type requires certain skills or certifications, add them in the Skill Requirements related list. Skills must be created before they can be added as required; to learn how, see Create Skills.
- 9. If certain products are needed to complete the work, add them in the Products Required related list.

- **10.** To attach instructions, specs, or guidelines to records that use the work type, attach knowledge articles in the Articles related list or Knowledge Lightning component.
- **11.** 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 certain settings from the work type.
- **Example:** Suppose you own a window company, and your crew typically needs 90 minutes to install a window. Create a work type with the following settings:
 - Name: Window Installation
 - Description: Standard installation of single- or double-paned windows
 - Estimated Duration: 90Duration Type: Minutes
 - Skill Requirements:
 - Window Installation with a skill level of 50
 - Window Cleaning with a skill level of 10
 - Products Required: 1 Hammer
 - Attach an article named "How to Install a Window"
 - Select the option to auto-create a service appointment

When a customer needs a window installed, create a work order for them and select the Window Installation work type in the Work Type field. This auto-populates the work order's duration, required skills, and required products, attaches the knowledge article, and automatically creates a service appointment on the work order.

Create Work Orders

Create work orders to track work to be performed for a customer.

- 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 the following 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 where the work order is taking place. The work order's service appointments and line items inherit its address, though the address on line items can be updated.
- **4.** Optionally, select a price book. This lets you select a corresponding price book entry (product) for each work order line item, and is used on Product Consumed records that are associated with price book entries.
- **5.** If you're tracking 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 you can use up to two decimal places.
- **6.** Fill out the remaining fields as needed.
- 7. Click Save.
- 8. Optionally, add further details in the work order's related lists.
 - **a.** Create line items via the Work Order Line Items related list. Work order line items represent specific tasks that a technician must perform to complete the work order. They can be marked as completed one by one, and can each have their own active service appointment. Pricing details like discounts and unit price are set at the line item level on work orders.
 - **b.** Specify which skills are required to complete the work order from the Skill Requirements related list. For details, see Add Required Skills to Work Orders or Work Types.
 - c. Specify which products are required to complete the work order from the Products Required related list.
 - **d.** Create a service appointment from the Service Appointments related list. Service appointments are where you assign service resources and add scheduling details. Work orders and work order line items can have multiple service appointments.
 - Note: If **Auto-Complete Service Appointment** is selected on the associated work type, a service appointment is automatically created when you create the work order. If you are using the Field Service Lightning managed package, we suggest enabling the following settings on the Service Appointment Lifecycle page of the Field Service Settings tab:
 - Derive the Service Appointment due date from its Work Type
 - Set your default Service Appointment duration to one hour

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Choose Preferred Service Resources on Work Orders

Designate certain service resources as preferred, required, or excluded on specific accounts or work orders.

Resource preferences serve as a suggestion rather than a requirement. You can still assign a service appointment to any resource regardless of the related work order's resource preferences.

Work orders inherit their account's resource preferences. If you don't want to establish resource preferences at the account level, just add them to individual work orders.

- 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.

Example:

- If your customer, Ursa Major Solar, has had positive experiences with Alicia, a service resource, create a resource preference on the Ursa Major Solar account that designates Alicia as "Preferred"
- If Ursa Major Solar had a bad experience with Nigel, a service resource, create a resource preference on the Ursa Major Solar account that designates Nigel as "Excluded"
- If Ursa Major Solar purchased a challenging piece of equipment which was installed by Evan, a service resource, create a resource preference on the Ursa Major Solar account that designates Evan as "Required"

Ursa Major Solar's work orders will automatically list those three preferences. This helps the dispatcher know to assign their service appointments to Evan and, if a second technician is needed, to Alicia if she is available. The dispatcher also knows never to assign the account's service appointments to Nigel.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Add Required Skills to Work Orders or Work Types

Define skill requirements on work types, work orders, and work order line items to ensure that the work is assigned to a service resource with the right 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, if all annual maintenance visits for your Classic Refrigerator product require a Refrigerator Maintenance skill level of at least 50, add that required skill to the Annual Maintenance Visit work type. When it's time to create a work order for a customer's annual fridge maintenance, applying that work type to the work order adds the required skill.

To add a required skill to a work order, work order line item, or work type:

- 1. Navigate to the record that needs required skills.
- 2. In the Skill Requirements related list, click New.
- **3.** Select a skill. Skills must be created before they can be added as a requirement; to learn how, see Create Skills.
- **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.

Skill requirements serve more as a suggestion than a rule. You can still assign a work order, work order line item, or related service appointment to a service resource that does not possess the required skills.

If you're using the Field Service Lightning managed package, use matching rules to ensure that appointments are only assigned to service resources who possess the required skills listed on the parent work order.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

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: Lightning Experience

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

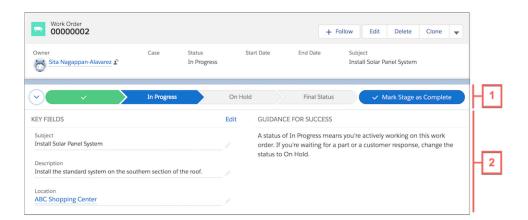
USER PERMISSIONS

To set up a path:

Modify All Data

To create, customize, or publish a community:

 Create and Set Up Communities AND View Setup and Configuration



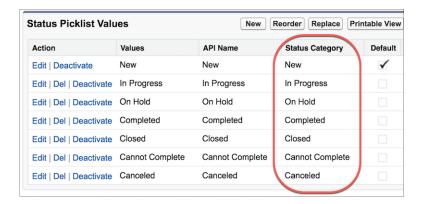
You can set up one path per record type. The steps in a path (1) correspond to the Status picklist values. Help users succeed by displaying up to five key fields and handy step-specific guidance beneath each path step (2).

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 Lightning communities. It isn't available in Salesforce Classic, the Salesforce mobile app, or the Field Service Lightning 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 optimization.



- **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 a Lightning community, drag the Path component onto the object detail page in Community Builder.

Create Service Appointments

Service appointments help you track field service work to be performed for customers. While work orders describe the work to be performed, service appointments are where you add the scheduling and assignment details. You can associate service appointments with several types of records.

Service appointments can be added to work orders, work order line items, opportunities, accounts, or assets. To create a service appointment:

- 1. Navigate to the record that the appointment is associated with.
- 2. In the Service Appointments related list, click **New Service Appointment**.
- **3.** Fill out the General Information section:
 - a. Add an appointment subject and description.
 - **b.** If needed, update the duration. If the parent record is work order or work order line item, the appointment inherits its duration from its parent.
 - **c.** Fill out the Earliest Start Permitted and Due Date fields, which together represent the window during which the appointment must be completed. These fields typically represent terms in the customer's service-level agreement.
 - **d.** In the Service Note field, add notes such as an appointment summary or recommendations. Depending on your settings, these notes might appear on a customer-facing service report.
- **4.** Fill out the Scheduled Times section:
 - **a.** Add scheduled start and end times. If you're using the Field Service Lightning managed package with the scheduling optimizer, these fields are populated when the appointment is scheduled
 - **b.** Define an arrival window, which is the window of time when the technician is expected 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.
- **5.** Assign service resources to the appointment in the Assigned Resources related list. If the parent record is a work order, work order line item, or account, check the parent for any resource preferences.
 - Note: Service resource who are dispatchers can't be assigned to service appointments.
- **6.** When the technician 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 number of minutes it took to travel to the appointment in the Actual Travel Time field on their assigned resource record.

You can also create service appointments from the Service Appointments tab. Even better, work types have an **Auto-Create Service Appointment** option which, if selected, auto-creates a service appointment on work orders or work order line items that use the work type. For details, see Create Work Types.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Create Maintenance Plans

USER PERMISSIONS

| To create maintenance plans: | Create on maintenance plans |
|--|--|
| To view maintenance assets: | Read on maintenance plans and assets |
| To create, update, or delete maintenance assets: | Edit on maintenance plans |
| To generate work orders for a maintenance plan: | Read on assets and work types AND Create on work orders and service appointments |
| To edit page layouts: | Customize Application |

Create preventive maintenance plans for specific assets so your customers never miss a beat. Maintenance plans let you define how often maintenance visits occur and mass-generate work orders for future visits.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Heads-up: Some multiplication is required. So grab the nearest math whiz, buy 'em a coffee, and fire up Salesforce!



Note: Depending on your page layout settings, you may not see some of these fields.

- 1. From the Maintenance Plans tab or related list, click New.
- **2.** Enter a start date and, if applicable, an end date. For example, you may have a service contract that entitles the customer to two years of maintenance visits. All work orders related to the plan will fall within this date range.
- **3.** Select a 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.
- **4.** Select an account and contact to 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 will occur at a location that's tracked in Salesforce, such as a customer site, select the location.
- 7. In the Frequency and Frequency Type fields, enter the desired amount of time between the maintenance plan's work orders.

 For example, if you've agreed to perform monthly maintenance visits, you need a work order for each visit, so enter 1 and select Months.
- **8.** 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.
- 9. 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 will list a Suggested Maintenance Date of May 1, and the dates on the later work orders will be based on the Generation Timeframe, Frequency, and End Date settings. After each batch is run, if the maintenance plan includes assets, this field auto-updates only on the maintenance assets because batch timing is calculated at the maintenance asset level.

- **10.** Optionally, enter a number of 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, if you enter 3 for both the maintenance window start and end, the Earliest Start Permitted and the Due Date will be 3 days before and 3 days after, respectively, the Suggested Maintenance Date on each work order.
- 11. If you'd like batches of work orders to be generated automatically whenever the current batch nears completion, 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.
 Batch size is based on the generation timeframe, frequency, and number of assets covered by the plan, because a separate work order is created for each maintenance asset for each maintenance date. So 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.
- 12. If you selected the option to auto-generate work orders, you can add details about when new batches should be generated:
 - To move up the timing of batch generation, enter a generation horizon. For example, a generation horizon of 5 means 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.
- 13. Enter a title and description for the maintenance plan.
- **14.** Save your changes and give yourself a high five. You're almost there!
- **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.
 - 🁔 Tip: To control which fields appear in the related list, edit the Maintenance Assets page layout in Setup.
- **16.** If you didn't select the option to auto-generate work orders, click **Generate Work Orders** on the maintenance plan each time you need to generate a batch of work orders for the plan. Otherwise, they're automatically generated for you.

You can't generate more than 2,500 work orders at a time. You can decrease the number of work orders generated by making one of the following changes:

- Increasing the Frequency value
- Decreasing the Generation Timeframe value
- Removing assets from the maintenance plan

Set Up and Manage Your 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. Whether parts are transferred from the warehouse to the customer or between technicians, your field service center has it covered.

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
- **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.
- **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.

1. Configure Field Service Location Settings

To control how your team works with locations, which are customer sites or places where inventory is stored, customize page layouts and assign user permissions.

2. Create Field Service Locations

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

3. Configure Parts and Inventory Settings

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

4. Create Parts

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

5. Track Required Parts

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 required products to work types, work orders, and work order line items to ensure that the assigned service resource arrives with the right equipment.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, Performance, Unlimited, and **Developer** Editions. Work orders are also available in **Professional** Edition.

6. Track Consumed Parts

Create products consumed to track the use or consumption of items from your inventory.

7. Request Parts

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.

8. Transfer Parts

To fulfill a product request, create a product transfer. Product transfers track the movement of parts from one field service location to another. When you track product transfers in Salesforce, the inventory numbers at your various storage locations update automatically to reflect the transfers.

9. Create Shipments

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.

10. Create Return Orders

Create return orders to facilitate the return and repair of items that were sold to customers or supplied to field service technicians.

Configure Field Service Location Settings

To control how your team works with locations, which are customer sites or places where inventory is stored, customize page layouts and assign user permissions.



Note: Field Service Lightning must be enabled in your org.

Your service locations can be as large as a warehouse or as small as a toolbox. They can be your client sites or your service vans. They vary in size, location, and what they contain, and they are unique to your company.

1. Assign user permissions.

USER PERMISSIONS

To edit page layouts and set field history tracking:

Customize Application

To create and edit users:

Manage Internal Users

| Users Who Will | Need These Permissions |
|------------------------------------|------------------------|
| Enable Field Service Lightning | Customize Application |
| View the Locations tab and records | Read on locations |
| Create or clone locations | Create on locations |
| Edit locations | Edit on locations |
| Delete locations | Delete on locations |
| Create addresses for locations | Create on addresses |

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. The default layout includes only some of the available fields. | | |
| | (1) Important: | | |
| | Add the Inventory Location field so you can track where inventory is stored. | | |
| | Add the Mobile Location field so you can flag mobile locations such as service vehicles. | | |
| | If you plan to create location hierarchies, add the Parent Location field, and optionally the read-only Root Location and Hierarchy Level fields. | | |
| | Optionally, customize the values in the Location Type field. Its out-of-the-box values are Warehouse, Van, Site, and Plant. | | |
| | Add the Product Items related list, which shows the products stored at a location. | | |
| | Confirm that your layout includes the desired related lists: | | |
| | The Addresses related list shows addresses related to the location, such as billing and shipping addresses. | | |
| | The Assets related list shows assets at the location. | | |
| | The Associated Locations related list shows related accounts. | | |
| | The Child Locations related list shows locations within the location, such as vehicles which are parked at a warehouse when not in use. | | |
| | The Maintenance Plans related list shows maintenance plans linked to the location. | | |
| | The Product Items related list shows product items (inventory) stored at the location. | | |
| | - The Product Transfers (Source) related list shows product transfers that originated at the location | | |
| | The Product Transfers (Destination) related list shows product transfers in which items were transferred to the location. | | |
| | The Service Territory Locations related list shows related service territories, which usually indicates that the location is within the territory. | | |
| Address | Arrange the fields, which appear in the Addresses related list on locations. | | |
| | Optionally, customize the values in the Address Type field. Its out-of-the-box values are Mailing, Shipping, Billing, and Home. | | |
| Associated location | Associated locations let you associate multiple accounts with one location. For example, a shopping center location may have multiple customer accounts. | | |
| | Arrange the fields, which appear in the Associated Locations related list on locations and accounts | | |

3. Make the Locations tab visible to your users.

Users create and manage service locations from the Locations tab. You can add the tab to a custom app or instruct users to add it in Salesforce.

Create Field Service Locations

USER PERMISSIONS

| To create locations: | Create on locations |
|--|---------------------|
| To view associated locations: | Read on accounts |
| To create, update, or delete associated locations: | Edit on accounts |
| To view addresses: | Read on locations |
| To create, update, or delete addresses: | Edit on locations |

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



Note: Field Service Lightning must be enabled in your org.

- 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Configure Parts and Inventory Settings

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

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Note: Field Service Lightning must be enabled in your org.

1. Assign user permissions.

| Users Who Will | Need These Permissions |
|--|---|
| Enable Field Service Lightning | Customize Application |
| View the Products, Product Items, Product Requests, Product Transfers, Return Orders, or Shipments tab and records | Read on the object |
| Create, edit, or delete 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 |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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.
 - Tip: 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 |
|-------------|--|
| Product | Confirm that your layout includes the following related lists: |
| | The Product Items related list shows product items that track the storage of the product in an inventory location. |
| | The Return Order Line Items shows return order line items that track the return or repair of the product. |
| | 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. |
| | a. From Setup, enter <i>Products</i> in the Quick Find box, then select Fields under Products. |
| | b. Click Quantity Unit of Measure. |
| | c. In the Quantity Unit of Measure Picklist Values related list, click Edit to change the default or New to add values. For example, you may need values like Kilograms or Liters. |
| | d. Save your changes. |

| Page Layout | Recommended Customizations for Inventory Management |
|---------------------------|---|
| Product consumed | Arrange the fields that appear in the Products Consumed related list. |
| Product item | Arrange the fields. The default layout includes only some of the available fields. Confirm that your layout includes the following related lists. The Product Item Transactions related list automatically tracks the replenishment, consumption, and adjustment of product items. The Product Transfers related list shows transfers of the inventory. |
| Product item transaction | Arrange the fields that appear in the Product Item Transactions related list. |
| Product request | Arrange the fields. The default layout includes only some of the available fields. Optionally, customize the Status field values. The default values are Draft, Submitted, and Received. Confirm that your layout includes the following related lists. The Product Transfers related list shows transfers that are created to fulfill the request. The Product Request Line Items related list shows the request's line items (each associated with a product). The Return Orders related list shows return orders associated with the request. |
| Product request line item | Arrange the fields. The default layout includes only some of the available fields. Optionally, customize the Status field values. The default values are Draft, Submitted, and Received. Confirm that your layout includes the following related lists: The Product Transfers related list shows transfers created to fulfill the request. The Return Order Line Items related list shows return order line items associated with the product request line item. |
| Product required | Arrange the fields that appear in the Products Required related list. |
| Product transfer | Arrange the fields. The default layout includes only some of the available fields. Optionally, customize the Status field values. The default values are Ready for Pickup and Completed. 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. |
| Return order | Arrange the fields on page 114. Confirm that your layout includes the following related lists: The Product Transfers related list shows product transfers related to the return The Return Order Line Items related list shows subdivisions of the return, each associated with a specific product The Work Orders related list shows work orders related to the return The Work Order Line Items related list shows work order line items related to the return |
| Return order line item | Arrange the fields on page 114. |

| Page Layout | Recommended Customizations for Inventory Management | | |
|----------------------|---|--|--|
| | Confirm that your layout includes the following related lists: | | |
| | The Product Transfers related list shows product transfers related to the return | | |
| | The Work Orders related list shows work orders related to the return | | |
| | - The Work Order Line Items related list shows work order line items related to the return | | |
| Shipment | Arrange the fields. The default layout includes only some of the available fields. | | |
| | Optionally, customize the Status field values. The default values are Shipped and Delivered. | | |
| | • 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:
 - 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.

4. Configure the Field Service Lightning mobile app for inventory management.

Create Parts

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



Note: Field Service Lightning must be enabled in your org.

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.

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.
- If you choose not to assign serial numbers, you can specify a quantity on each product item.

 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

Product item quantities auto-update to reflect transfers between locations.



Note: If you plan to specify serial numbers on product items, review these considerations:

- 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 use this beta functionality,
 contact Salesforce.
- Technicians using the Field Service Lightning mobile app can consume—via the Products
 Consumed related list—only one serialized product item looking up to the same product
 per work order. This limitation is on mobile only.
- 1. From the Product Items tab, click **New**.
- 2. Use the lookup field to select a product.
 - ?

Tip: 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Track Required Parts

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 required products 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.

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Track Consumed Parts

Create products consumed to track the use or consumption of items from your inventory.

When a part 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.



Note: Field Service Lightning must be enabled in your org.

- 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.
- **6.** Add context in the Description field.
- 7. Save your changes.



Tip: After a product item is consumed, track it as an asset (an installed or purchased product) and add product details like a serial number.

EDITIONS

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

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

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

Request Parts

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.



Note: Field Service Lightning must be enabled in your org.

Technicians or mobile workers can make 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 technicians 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 technician'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.
 - Tip: 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:
 - 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in Enterprise, Performance, Unlimited, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Transfer Parts

To fulfill a product request, create a product transfer. Product transfers track the movement of parts from one field service location to another. When you track product transfers in Salesforce, the inventory numbers at your various storage locations update automatically to reflect the transfers.

Note:

- Field Service Lightning must be enabled in your org.
- To allow the creation of product transfers for serialized product items (a beta functionality), contact Salesforce.

Create one product transfer for each product request line item. This way, you can track the status of each part being requested. The Product Transfers related list on a product request shows all product transfers associated with the request's line items. In addition, product request line items have their own Product Transfers related list that shows related transfers.

While product transfers are typically created in response to a product request, they don't have to be. For example, when a new technician joins your team, you can create a series of product transfers to track the initial stocking of their service vehicle.

- ? Tip: When creating a transfer, set the status of the related product request line item to Received to indicate that the request is being processed.
- 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 the parts are being transferred 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, if you need five hammers to be transferred from Warehouse A to Warehouse B, select the product item record that tracks the hammers stored at Warehouse A.
 - If the products are being transferred from outside your inventory—for example, if they're being ordered from a manufacturer—enter a product name.
- **3.** Enter the quantity being transferred 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.
- 5. Use the lookup field to select the shipment on which the product items are being transferred.
- **6.** Enter the destination location, 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 the following fields:
 - Received By
 - Quantity Received
 - Status

Once you mark a product transfer received, you can't undo it.

10. Save your changes.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To create product transfers for field service:

 Create on product transfers

To mark product transfers received:

Edit on product items

When a product transfer is marked received, Salesforce creates or updates several related records to ensure that your inventory numbers stay accurate. To learn more, see How Product Transfers Work.

Create Shipments

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.

You can link shipments to product transfers so your team always knows the status of part transfers. While shipments are an optional part of inventory management, they make it easier to stay informed about the coming and going of parts 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.

EDITIONS

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

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

USER PERMISSIONS

To create shipments:

Create on shipments

Create Return Orders

Create return orders to facilitate the return and repair of items that were sold to customers or supplied to field service technicians.

- 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 technician 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, Product Item, and Product Reguest Line Item.

EDITIONS

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

Available in: **Enterprise**, **Performance**, **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

- (1)
- Tip: 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.

Set Up Service Reports

Make your customers happy with fast field service reports delivered to their inboxes. Technicians and dispatchers can create reports for work orders, work order line items, or service appointments and email them directly to the customer. Use standard templates or create variations of your own.

1. Create Service Report Templates

A service report is a PDF that summarizes a work order or service appointment and can be signed by customers and your team members. To control what shows up in your service reports, create service report templates.

2. Create Service Reports

Create service reports that provide your customers with summaries of their work orders, work order line items, and service appointments.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Create Service Report Templates

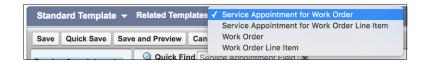
A service report is a PDF that summarizes a work order or service appointment and can be signed by customers and your team members. To control what shows up in your service reports, create service report templates.



Note: Field Service Lightning must be enabled.

Users generate a service report for a record by clicking **Create Service Report** on the record. Multiple service reports can be created for a record, and these appear in its Service Report related list. If you assign a specific template to a work order, work order line item, or work type using the Service Report Template lookup field, the record's service reports always use the associated template. If a record doesn't list a service report template, users are prompted to select from a list of active templates when they try to create a service report.

- 1. If you want your team to collect signatures on service reports using the Field Service Lightning 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.
 - In Salesforce Classic, from Setup, enter *Digital Signatures* in the Quick Find box, then select **Fields** under Digital Signatures.
 - In Lightning Experience, go to Digital Signature in the Object Manager, then click Fields and Relationships.
 - b. Click Signature Type.
 - **c.** From the Signature Type Picklist Values related list, add up to 1,000 values to the picklist. For tips on creating signature types, see 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 are 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 sub-template.



Each template comes with four sub-templates, which allow it to be used for service reports on multiple types of records:

- Service Appointment for Work Order
- Service Appointment for Work Order Line Item
- Work Order

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To edit page layouts and picklist values:

Customize Application

To create service report templates:

 View Setup and Configuration Work Order Line Item

The Related Templates field shows the sub-template that you're currently editing. We recommend customizing all four sub-templates for each template so you're confident that your service reports contain the right information. Save your changes after you modify each sub-template.

- 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 certain objects or fields in the service report template, those fields don't appear on the report they create.

- **g.** (Recommended) Select a new sub-template in the Related Templates field, and customize its layout. Repeat until you've reviewed the layout of all four sub-templates.
- **h.** Click **Activate** next to the template name on the Service Report Templates home page.

Create Service Reports

Create service reports that provide your customers with summaries of their work orders, work order line items, and service appointments.



Note: Field Service Lightning must be enabled in your org.

- **1.** From a work order, work order line item, or service appointment, click **Create Service Report** in the action dropdown menu.
 - Tip: 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, or opportunity.
- 2. Use the lookup to find the template you'd like to use.
- 3. Click Create PDF.

The service report preview displays.

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.

Service reports are translated in the language selected in the Service Report Language field on the associated work order. If that field is blank, they use the default language of the person generating the report.



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 you create.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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:

 Edit on the parent object AND Send Email

Set Up Field Service in Communities

Keep customers, partners, and contractors in the loop about field service work. All field service objects can be added to Lightning communities and communities built using the Salesforce Tabs + Visualforce template. Exposing these objects and related objects like assets, accounts, and contacts make it easy for customers to schedule appointments or check field service records straight from their community.

If you use a community to connect with your business partners, employees, or customers, keeping the communication lines open is key to your field service success. For example, you can add work orders and service appointments to a partner community to stay in sync with contractors, or add return orders and return order line items to a community to coordinate customer returns.

- 1. To set up field service objects in a Lightning community:
 - **a.** Create a new object page in Page Manager in Community Builder.
 - **b.** When prompted to choose a Salesforce object, choose a field service object. Page Manager automatically creates three related pages for the new object page: a record detail page, a record list page, and a related list page.
 - c. To expose the field in your Customer Service community, add it to the Navigation Menu in the Page Editor.
- 2. To set up field service objects in a community built using the Salesforce Tabs + Visualforce template, simply add the objects as tabs. For details, see Add Tabs to Your Community.

Note: Linked articles, which are knowledge articles attached to supported field service objects, are not supported in Lightning communities.

EDITIONS

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

USER PERMISSIONS

To create, customize, or publish a community:

 Create and Set Up Communities AND View Setup and Configuration

Report on Field Service Lightning

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. | Field service objects: 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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 | Maintenance Assets |
| | assets. | Work Orders |
| Operating Hours | View the operating hours of service | Service Territories |
| | territories and their members. | Time Slots |
| Orders | View an order's associated return orders. | Field service objects: |
| | | 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. | Field service objects: 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 | r Object Milestones |
| | of appointments or line items per work order, or work order service territories. And | Products Consumed |
| | analyze how resource preferences and skil | D. I. D |
| | requirements vary between work orders. | Products Required |
| | | 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 |
| Work Types | Compare information such as work type duration and skill requirements. | Maintenance Plans |
| | | Products Required |
| | | Skill Requirements |
| | | |

- **3.** Complete the required fields and click **Next**.
 - Tip: 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.

Tip: 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.

Set Up Self-Service Appointment Booking for Field Service Lightning (Beta)

Snap-ins Appointment Management (beta) gives your customers an easy way to schedule, modify, and cancel appointments with your mobile workforce. The experience is powered by Visual Workflow. This lets you craft the perfect interaction and decide when and how to create related records like work orders.

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

- (1) Important: You must have Field Service Lightning enabled and the latest version of the Field Service Lightning Managed Package installed and working in your org.
- 1. Update your Field Service Lightning permission sets.
 - **a.** In the Field Service Admin app, on the Field Service Settings tab, Click **Permission Sets**.
 - **b.** Ensure the Self Service permission set is up to date.

 If you don't have Self Service permission set on in the Field Service Lightning managed package, you don't have the latest version of the package.
- 2. Enable Snap-ins Appointment Booking.
- 3. Change the Service Territory field on the account object.
 - a. From Setup, click Object Manager.
 - **b.** Enter Account in the Quick Find box, then select **Account**.
 - c. Click Field & Relationships.
 - **d.** Scroll down and click **Service Territory**.
 - e. Click Edit.
 - f. Change the Field Name value from Service_Territory to Default Service Territory.
 - $\textbf{g.} \ \ \text{Change the Child Relationship value from Accounts to } \textit{Default_Accounts}.$
 - h. Click Save.
- 4. Install the FSL Scheduling Flows package.
 - a. In the same browser session, go to the URL: https://login.salesforce.com/packaging/installPackage.apexp?p0=04tB000000JPmb.
 - b. Click Install FSL Snap-In Flows"/"Summer 2018"/"1.4.
 - c. For What if existing component names conflict with ones in this package? select Do not install.

EDITIONS

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

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

USER PERMISSIONS

To configure the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

- d. Select Install for all users.
- e. Click Install.
- **f.** In the Approve Third-Party Access dialog box, select **Yes, grant access to these third-party web sites**, then click **Continue**.
- **g.** Wait for an email from support@salesforce.com confirming that Package FSL Snap-In Flows Install was successful before proceeding.

() Important:

- If you receive an error message that the app can't be installed because your org doesn't have permission to create flows, Snap-ins Appointment Booking isn't enabled.
- If you receive an error message that the "Accounts__r" relationship field is already used, ensure that you've change the Service Territory field on the account object correctly.
- **5.** Create skeleton Scheduling and Scheduling_CallBack Visualforce pages.
 - **a.** From Setup, enter *Visualforce* in the Quick Find box, then select **Visualforce Pages** and click **New**. The Visualforce Pages page can take up to a minute to load.
 - **b.** In the Label field, enter *Scheduling* and click **Save**.
 - **c.** Click **Clone** on the Visualforce Pages, Scheduling page.
 - **d.** On the Visualforce Page page, in the Label and Name fields, enter *Scheduling Callback* and click **Save**.
- **6.** Add the Visualforce pages to your community or public website.
 - **a.** From Setup, enter *Communities* in the Quick Find box, then select **All Communities** and click **Workspaces** on your consumer community.
 - **b.** Click the **Administration** panel.
 - **c.** On the left-hand side, click **Pages**.
 - **d.** Click **Go to Force.com**.
 - **e.** In the Custom URLs section, copy and save the domain name.
 - f. Click Edit.
 - **g.** Scroll through the available Visualforce pages list, select **Schedling** and **Scheduling_Callback**, and move them to the enabled Visualforce pages, and then click **Save**.
 - **h.** To ensure the community opens, click **View**.
- **7.** Create and configure a connected app.
 - a. From Setup, enter App Manager in the Quick Find box, then select App Manager and click New Connected App.
 - **b.** On the New Connected App page, in Connected App Name, enter *Snap-ins Appointment Booking*.
 - **c.** Adjust the API Name to *Snapins_Appointment_Booking*. Remove the dash (-) in Snap-ins.
 - **d.** In Contact Email, enter your email address.
 - e. Select Enable OAuth Settings.

The Callback URL field appears.

- f. In the Callback URL field, enter:
 - https://*COMMUNITY DOMAIN NAME HERE*/consumer/Scheduling Callback.

Occasionally, copying and pasting the string creates erroneous characters. Ensure that the value in the Callback URL field matches the string exactly before proceeding to the next step.

- (1) Important: Do NOT click save yet!
- g. In Callback URL replace *COMMUNITY DOMAIN NAME HERE* with the domain name field value you saved earlier.
- h. Select Allow access to your unique identifier (openid) from Available OAuth Scopes and move it to Selected OAuth Scopes.
- i. Now, click **Save**, and then **Continue**.
- j. On the Manage Connected Apps page, copy and save the Consumer Key and the Callback URL.
 - Tip: To return to the Managed Connected Apps detail page, if you need to get your Consumer Key and/or Callback URL values:
 - **a.** From Setup, go to App Manager (not Manage Connected Apps).
 - **b.** Find your scheduling app. For example, Snap-ins Appointment Booking.
 - **c.** From the row-menu, click the drop down and select **View**.
 - **d.** You can see the Consumer Key and Callback URL fields there.
- **8.** Configure the Snap-in.
 - a. From Setup, enter Snap-ins in the Quick Find box, then select Snap-ins and click New Deployment.
 - **b.** On the New Snap-in Deployment page, in Snap-in Deployment Name, enter Appointment Booking.
 - c. Under Site Endpoint, select Consumer_Community and click Create.
 - **d.** On Snap-in Deployment Settings, click **Start** next to Field Service settings.
 - Note: If you don't have a line for Field Service settings, Snap-ins Appointment Booking isn't enabled.
 - **e.** Optionally, select **Let Customers Schedule New Appointments** and **Let Customers View Their Appointments** on the Field Service Settings page, and click **Save**.
 - **f.** In the Scheduling Flows section, click **Edit**.
 - **g.** Select the following flows.
 - New Appointment Flow: ESW_FS_Main_Flow_multi_data" or FSL_Snap_ins_New_Appointment_Flow depending
 upon your package version
 - Modify Appointment Flow: ESW FS Modify Flow
 - Cancel Appointment Flow: FLS_Snap_ins_Cancel_Flow
 - (1) Important: If there are no values in Appointment Booking Flow, the FSL Scheduling Flows package failed to install.
 - To customize the images used in the flow, click Edit under Field Service custom branding.
 You can enter your logo in Logo Image URL.
 - i. To go back to the deployment home, click **APPOINTMENT_BOOKING** at the top of the page.
 - **j.** To activate the snap-in, click the slider on Field Service settings.
 - **k.** Click **Get Code** next to Snap-in code snippets.

- I. On the Snap-in Code Snippets page, click Copy to Clipboard, save the code snippets for later, and click Done.
- **9.** Complete the Scheduling Callback Visualforce page.
 - **a.** From Setup, enter *Visualforce* in the Quick Find box, then select **Visualforce Pages**.
 - **b.** On the Visualforce Pages page, click the letter **S**.
 - **c.** Click **Edit** next to Scheduling Callback.
 - **d.** Copy this entire code block.

```
<apex:page sidebar="false" showHeader="false">
<html>
<head>
    <meta name="salesforce-community"</pre>
content="https://COMMUNITY DOMAIN NAME/consumer"></meta>
    <meta name="salesforce-client-id" content="CLIENT ID"></meta>
    <meta name="salesforce-mode" content="popup-callback"></meta>
    <meta name="salesforce-save-access-token" content="true"></meta>
    <meta name="salesforce-allowed-domains"</pre>
content="COMMUNITY DOMAIN NAME/consumer,*.force.com"></meta>
    <meta name="salesforce-redirect-uri"</pre>
content="http://COMMUNITY DOMAIN NAME/consumer/Scheduling Callback"></meta>
    <meta name="salesforce-target" content="#salesforce-login"></meta>
    <!-- <meta name="salesforce-login-handler" content="onLogin"> -->
    <meta name="salesforce-logout-handler" content="onLogout"></meta>
    <script
src="https://COMMINITY DOMAIN NAME/consumer/servlet/servlet.loginwidgetcontroller?type=javascript widget"
 async='true' defer='true'></script>
</head>
<body></body>
</html>
</apex:page>
```

- **e.** In Visualforce Markup, select everything from <apex:page > through </apex:page> and paste the code you copied, replacing it completely.
- **f.** Replace the 4 instances of **COMMUNITY_DOMAIN_NAME** with the domain name you saved earlier.
- **g.** Replace the instance of **CLIENT_ID** with the consumer key you saved earlier.
- h. Click Save.
- **10.** Complete the Scheduling Visualforce page.
 - **a.** From Setup, enter *Visualforce* in the Quick Find box, then select **Visualforce Pages**.
 - **b.** Click **Edit** next to Scheduling.
 - c. In Visualforce Markup, delete everything between, but not including, <apex:page > and </apex:page>.
 Leave <apex:page > and </apex:page>.
 - **d.** Copy the code that you saved for later from the Snap-in Code Snippets page and paste it between <apex:page > and </apex:page>.
 - Note: Initially, it may appear that no code was copied. To see the code, scroll left in Visualforce Markup.

e. Copy this entire code block.

- **f.** On your Visualforce page, in Visualforce Markup, highlight <apex:page > and paste the code you copied so that it replaces it.
- g. Copy this entire code block.

```
<h1>Scheduler</h1>
</head>

<body>
<div id="salesforce-login">
<button>Schedule Appointment</button>
</div>
</div>
</body>

<footer>
</footer>
</footer>
</footer>
</footer>
</footer>
</footer>
```

- **h.** On your Visualforce page, in Visualforce Markup, scroll down to the very bottom, highlight </apex:page > and paste the code you copied so that it replaces it.
 - Note: When pasting any code into Visualforce Markup, check for and remove any erroneous characters in code.
- i. Click Quick Save.
- j. In the code, replace true, on line 17, with false.
- k. Insert the Consumer Key you saved earlier between the empty single quotes in the code on row 30.
- **I.** Insert the Callback URL you saved earlier between the empty single quotes in the code on row 31.
- m. Insert the #salesforce-login between the empty single quotes in the code on row 32.

- n. Click Save.
- 11. Create a Cross-Origin Resource Sharing (CORS) record.
 - **a.** From Setup, enter *CORS* in the Quick Find box, then select **CORS** and click **New**.
 - b. Enter http://sdodemo-main*.force.com in Origin URL Pattern, and click Save.
- 12. Update the hard coded values in the flow.
 - Note: To get the necessary ID records, use the Chrome browser.
 - **a.** From the App Launcher, click the **Field Service Admin** panel.
 - **b.** On the Operating Hours tab, switch to the **All Operating Hours** list view.
 - **c.** Click an operating hours record.
 - **d.** In your browser's address bar, copy the Operating Hours Record ID and save it. https://.../sObject/[Operating Hours Record ID]/view
 - **e.** On the Scheduling Policies tab, switch to the **All** list view.
 - **f.** Click a scheduling policies record.
 - g. In your browser's address bar, copy the Scheduling Policy's Record ID and save it. https://.../sObject/[Scheduling Policy's Record ID]/view
 - h. From the App Launcher, under All Items, click Accounts and switch to the All Accounts list view.
 - i. Click an account record.
 - j. In your browser's address bar, copy the Account Record ID and save it. https://.../sObject/[Accounts' Record ID]/view
 - **k.** From Setup, enter *Flows* in the Quick Find box, then select **Flows**.
 - Note: If you get a Flash error, click **Run Once**, **Install** and/or **Allow**.
 - **I.** On the Flow Designer page, click **Explorer**.
 - **m.** Under Constants, click the pencil icon next to OperatingHoursId.
 - **n.** In the value field, replace what is there with the Operating Hours Record ID you saved earlier and click **OK**.
 - **o.** Again under Constants, click the pencil icon next to Policyld.
 - **p.** In the value field, replace what is there with the Scheduling Policy's Record ID you saved earlier and click **OK**.
 - **q.** Under Variables, click the pencil icon next to AccountID.
 - r. In the default value field, replace what is there with the Account Record ID you saved earlier and click **OK**.
 - s. Click Save As, and then OK and Close.
 - **t.** In the flow detail page, click **Activate** next to the version of the flow that you created.

FIELD SERVICE LIGHTNING CONSIDERATIONS

Before you set up Field Service Lightning, review these important considerations about its features.

Field Service Lightning Limits and Limitations

Learn about the limits and limitations that exist for Field Service Lightning.

Manage Geocodes and Data Integration Rules in Field Service Lightning

Ensure your data integration rules are set up so that the closet qualified resource can deliver field service.

How Pricing Works on Work Orders

Work orders and work order line items have several price-related fields. Find out how they interact and how to use them.

Operating Hours Considerations

Learn how operating hours work and how to assign them to people and regions.

Service Crew Scheduling Considerations

Review important information on how the Field Service Lightning managed package schedules service crews. These considerations apply only if the managed package is installed.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Lightning Limits and Limitations

Learn about the limits and limitations that exist for Field Service Lightning.

To review the limitations of the Field Service Lightning mobile app, see Field Service Lightning Mobile App Limitations.

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 |
| Maximum number of work order line items in a work order line item hierarchy | 10,000 |
| Maximum number of work orders that can be generated simultaneously for a maintenance plan | 2,500 Tip: To decrease the number of work orders generated, increase the Frequency value, decrease the Generation |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

| Limit | Details |
|---|--|
| | Timeframe value, or decrease the number of assets related to the maintenance plan. |
| 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 |
| 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 |

Limitations

Inventory Management

- Technicians using the Field Service Lightning mobile app can consume—via the Products Consumed related list—only one serialized product item per product per work order. For example, you may have multiple product items that are assigned serial numbers and that are all associated with your Inverter product. A mobile app user can add only one of them as a product consumed on a specific work order. This limitation doesn't apply to non-mobile 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 use this beta functionality, contact Salesforce.

Linked Articles

Linked articles are knowledge articles attached to a work order, work order line item, or work type. They 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 app, linked articles can't be accessed from feed items.
- The Linked Work Orders and Linked Work Order Line Items related lists on articles are available only in Salesforce Classic. A Linked Work Types related list isn't available 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 app.

Operating Hours

You can't create a master-detail relationship between a custom object and Time Slot in which Time Slot is the master object.

Service Appointments

• The Parent Record field on service appointments isn't available in custom report types.

- The Parent Record field on service appointments can't be referenced in formulas, validation rules, workflow rules, or process flows. If you want to limit the available 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, or process flows. The standard inherited fields are Work Type, Account, Parent Record Type, and Parent Record Status Category.

Service Reports

- Service reports can't be created on service appointments whose parent records are assets, accounts, or opportunities.
- The **Create Service Report** action isn't available in the Salesforce 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 Resources

• The User field on service resources isn't editable in Lightning Experience. To update the user on a service resource, switch to Salesforce Classic.

Skills

• Skills can be created only in Salesforce Classic. However, they can be assigned to service resources or added as required skills in both Salesforce Classic and Lightning Experience.

The Salesforce App

Most Field Service Lightning standard features and managed package are available in all versions of the Salesforce app. They include the following 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.
- The dispatcher console, which is part of the managed package, isn't available in the Salesforce app.
- When working offline without the offline sync permission enabled, creating or updating records could result in an error if the Created Date or Last Modified Date fields appear to occur in the future.

Manage Geocodes and Data Integration Rules in Field Service Lightning

Ensure your data integration rules are set up so that the closet qualified resource can deliver field service.

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 Lightning managed package is installed.

This geolocation data feature, known as "geocoding", is enabled for all supported field service objects when you enable Field Service Lightning. The API contains values for the following three fields on work orders, work order line items, service appointments, service territories, resource absences, and service territory members:

| Field Name | Description |
|-----------------|---|
| Latitude | The latitude of the street address. |
| Longitude | The longitude of the street address. |
| GeocodeAccuracy | The accuracy of the latitude and longitude. This field contains one of the following values, listed in order from most to least accurate: |
| | Address—In the same building |
| | NearAddress—Near the address |
| | Block—Midway point of the block |
| | Street—Midway point of the street |
| | ExtendedZip—Center of the extended ZIP code area |
| | Zip—Center of the ZIP code area |
| | Neighborhood—Center of the neighborhood |
| | City—Center of the city |
| | County—Center of the county |
| | • State—Center of the state |
| | Unknown—No match for the address was found (for instance, the address is invalid) |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Keeping Geocoding Data Current

Salesforce periodically refreshes these three geocoding fields to keep them accurate. The refreshes are managed by a feature known as data integration rules. A record's geocoding fields are refreshed 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 amount of processing time varies based on how many records are being updated at once.



Note: If bulk geocoding is turned off for a data integration rule, deactivating or reactivating the rule does not refresh the geocoding fields. Bulk geocoding is enabled by default.

You can keep an eye on the status of a record's geocoding data in several ways.

- 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 which lets you manually run an instant refresh.
- In Lightning Experience: On the record, select Check Integration Status in the action dropdown menu to view its geocoding status.

Turning Off GPS Tracking for Individual Users

If your org has tracking turned on at the org level but a few technicians need it off, add the Exclude Technician from Geolocation Tracking permission on their user profile.

If you're using the Field Service Lightning managed package, opting out of geocoding means that latitude, longitude, and geocode accuracy are no longer calculated for field service records. Without this geocoding data, the scheduling optimizer doesn't function properly.

Opting Out of Geocoding

If you're already using another geocoding service, you can opt out of Field Service Lightning geocoding.

- 1. From Setup, enter Data Integration in the Quick Find box, then select Data Integration Rules.
- 2. Find the entries for Field Service Lightning and click **Deactivate** next to each rule:
 - 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

How Pricing Works on Work Orders

Work orders and work order line items have several price-related fields. Find out how they interact and how to use them.

If you've set up a product catalog in Salesforce to track the goods and services your business offers, 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 you specify a price book on a work order, this allows you to 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 goods or services listed 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 the following 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. |
| 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Work order line items contain these price-related fields. If you intend to use these fields, add them to work order line item page layouts.

| 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. |

| Work Order Line Item Field | Description |
|----------------------------|--|
| 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. |
| | Note: 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 |
| | Note: Inline editing isn't supported on the Product field. To change the product on a line item, click Edit . 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. |

Considerations

- To apply a discount to a work order, apply the discount at the line item level. If your work order doesn't have line items, its discount is zero.
- When filling out price fields on a work order, just fill out the Price Book and Tax fields. The Discount, Subtotal, Total Price, and Grand Total fields are all automatically calculated based on line item fields.
- When filling out price fields on a work order line item, just fill out the Product and Discount fields. The Subtotal, Total Price, List Price, and Unit Price fields are all automatically calculated based on other line item fields.
- Work order line items don't have to be linked to a product. For example, you might prefer to use work order line items 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.
- 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.

Operating Hours Considerations

Learn how operating hours work and how to assign them to people and regions.

Creating Operating Hours

To assign operating hours to a service territory, service territory member, or account, you must first create the operating hours from the Operating Hours tab. By default, only System Administrators can view, create, and assign operating hours.

Assigning Operating Hours to Accounts

Assign operating hours to an account using the Operating Hours field on the account detail page. An account's operating hours represent the times during which its service appointments should be scheduled. For example, if ABC Labs only allows technicians to visit their office Monday through Friday from 8 AM to noon, create operating hours for them that reflect this preference.

If the Field Service Lightning managed package is installed in your org, the default operating hours used when booking an appointment for an account are set elsewhere. From the Field Service Settings managed package tab, click **Global Actions**, then select **Appointment Booking** and update the operating hours.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Assigning Operating Hours to Service Resources

A service resource's operating hours can vary depending on which service territory they're working in, so they have unique operating hours for each territory they belong to. To view a service resource's operating hours for a particular territory, navigate to their Service Territories related list and click the Member Number for the territory. This takes you to the service territory member detail page, which lists the member's operating hours and territory membership dates.

Service territory members automatically use their service territory's operating hours. If a resource needs different operating hours than their territory, create separate operating hours for them from the Operating Hours tab. Then, select the desired hours in the Operating Hours lookup field on the service territory member detail page.



Tip: You can navigate to a service territory member record in two ways:

- From the service resource detail page, find the Service Territories related list, then click the Member Number for the territory.
- From a service territory detail page, find the Service Territory Members related list, then click the Member Number for the territory member whose hours you want to modify.

Enforcing Operating Hours

- If you're using the Field Service Lightning managed package, the scheduling optimizer only assigns service resources to service
 appointments that fall within the operating hours listed on the resource's territory member record. If you're not using the managed
 package, operating hours serve as a suggestion rather than a rule.
- You can create Apex triggers that limit time slot settings in your org. For example, you may want to restrict the start and end times on time slots to half-hour increments, or to prohibit end times later than 8 PM.



Example: Henry is an electrician who mostly works in the San Francisco Bay Area, but is occasionally assigned to appointments in Sacramento. His primary service territory is San Francisco Bay Area, and his secondary service territory is Sacramento.

Henry's operating hours in the San Francisco Bay Area are 8 AM to 5 PM, Monday through Friday. However, because Henry needs extra time to travel to and from Sacramento and wants to avoid Friday traffic, his operating hours in that territory are 10 AM to 3 PM, Monday through Thursday. Both service territories use the same operating hours: 6 AM to 6 PM, Monday through Friday.

To reflect these hours in Salesforce, his Salesforce admin does the following:

- 1. Create three sets of operating hours from the Operating Hours tab, adding time slots for each day:
 - 6 AM to 6 PM Monday Friday
 - 8 AM to 5 PM Monday Friday
 - 10 AM to 3 PM Monday Thursday
- **2.** Add the first set of operating hours to the San Francisco Bay Area and Sacramento service territories via the Operating Hours field.
- **3.** Add the second set of operating hours to Henry's service territory member record for the San Francisco Bay Area service territory via the Operating Hours field.
- **4.** Add the third set of operating hours to Henry's service territory member record for the Sacramento service territory via the Operating Hours field.

Now, a dispatcher assigning service appointments to Henry knows which hours he is available to work in each territory.

Service Crew Scheduling Considerations

Review important information on how the Field Service Lightning managed package schedules service crews. These considerations apply only if the managed package is installed.

Absences

If the service resource representing a service crew has resource absences, those absences are considered in scheduling. Absences associated with individual crew member's corresponding service resources aren't considered.

Assigned Resources

When an appointment is assigned to a service crew, the service resource of type Crew and the service resources who are service crew members whose membership is active during the appointment time are added as assigned resources on the appointment. Whenever a service appointment's Scheduled Start changes or an assigned resource of type Crew is updated, this calculation is triggered so the assigned resource and sharing settings remain current. A change in a service crew membership record doesn't trigger the calculation.

If you want appointments that don't require crews to be assigned to individual service resources, use the Resource priority objective in your scheduling policies. Give your technicians 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 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: Salesforce Classic and Lightning Experience

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Efficiency

When an appointment is scheduled to a crew, the efficiency factor used to calculate the appointment's Scheduled End is taken from the Crew Efficiency field on the crew's service resource. 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 updated location is displayed on the 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.
- A service crew member's home base is considered to be the home base defined for the service resource representing the crew they belong to.

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 might 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, you may need to update their field-level security settings in Setup.

The scheduler 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 scheduler 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 may assign the work to technicians or to crews.

The Service Crew Resources Availability work rule is configured in two ways:

- 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 1 on the service appointment's parent record, all service resources (of either the Crew or Technician type) are considered as candidates. This is also true for optimization, although a crew is not 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 need to create this work rule and add it to your scheduling policies.

Multi-Day Appointments

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

Resource Preferences

The Required Resource and Excluded Resource work rules and the Preferred Resource service objective do not apply to service crew members. This is because service resources that belong to a crew aren't considered as candidates for assignments during the time in which they belong to the crew.

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 is not 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.

Utilizations

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.

FIELD SERVICE LIGHTNING GUIDELINES

Learn how and when to use Field Service Lightning features.

Guidelines for Setting Up Service Territories

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

Guidelines for Setting Up Your Workforce

Learn how to manage your field service workforce with the help of service resources and service crews.

Guidelines for Setting Up Field Service Contractors

If you're running 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.

Guidelines for Using Work Orders

Work orders help you track tasks to be performed on a product. Learn how to create and manage work orders.

Guidelines for Using Work Types

Learn how to use work types to save your field service team time and keep your processes consistent.

Guidelines for Generating Work Orders from a Maintenance Plan

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 Using Knowledge with Work Orders

You can attach knowledge articles to work orders, work order line items, and work types to connect technicians in the field with important procedural info, guidelines, and specs.

Guidelines for Using Service Appointments

A service appointment tracks field service work to be performed for a customer, and is associated with a work order or work order line item. Learn how to create and manage service appointments.

Guidelines for Customizing Service Report Templates

Service report templates in field service determine the type and organization of information in service reports. Follow these tips to make your service report templates the envy of other Salesforce admins.

Guidelines for Using Signatures on Service Reports

Field service technicians can capture signatures from customers and partners for service reports. The number and type of signatures on a service report are defined beforehand on the service report template.

Common Tasks in Inventory Management

Learn how to perform everyday tasks in field service inventory management.

How Product Transfers Work

Product transfers track the transfer of inventory between locations in field service. Learn how to link product transfers to other inventory management records, and how they make it easy to manage inventory in both large and small field service operations.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

How Product Consumption Works

When you consume products as part of a work order, logging the consumption in Salesforce kicks off several behind-the-scenes changes. Learn how product consumption fits into your field service operation.

Guidelines for Creating Return Orders

Learn how to use return orders to track the return and repair of products and inventory in field service.

Guidelines for Setting Up Service Territories

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

Viewing Service Territories

View service territories on the Service Territories tab. You can also view a service resource's territories on the Service Territories related list on the resource detail page.

Creating Service Territories

If you want to use service territories, determine which territories you need to create. Depending on how your business works, you may decide to create territories based on cities, counties, or other factors. If you plan to build out a hierarchy of service territories, create the highest-level territories first. Service territory hierarchies can contain up to 10,000 territories.

Create service territories from the Service Territories tab in Salesforce. After you create a territory, you can add members to it via the Service Territory Members related list. Service territory members are resources who work within the territory, and associating them with a territory ensures that they're assigned to appointments near their home base.



Note: When you create a service territory, public groups are created in your org. These groups are used with the Field Service Lightning managed package to ensure the correct data is available even when field service object access is set to private.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Assigning Service Territories to Service Resources

You can link a service resource to multiple territories to indicate where they are available to work. Assign territories to a resource via the Service Territories related list on the resource detail page, or via the Service Territory Members related list on the territory detail page.

When you assign a territory to a resource, use the Type field to indicate whether the territory is a primary, secondary, or relocation territory for the resource.

- 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.
- 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. If you're using the Field Service Lightning managed package with the scheduling
 optimizer, resources with relocation territories are always assigned to services 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.

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 resources who were members no longer have any connection to the territory.

Adding Locations to Service Territories

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

Guidelines for Setting Up Your Workforce

Learn how to manage your field service workforce with the help of service resources and service crews.

Viewing Service Resources

View service resources on 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

Creating Service Resources

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

- 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.

Assigning Service Resources to Service Appointments

Assign a resource to a service appointment via the Assigned Resources related list on the appointment detail page. If needed, you can modify the related list layout from the Assigned Resources node in Setup. You can assign multiple resources to an appointment. Optionally, indicate which service crew a service resource belongs to in the Service Crew field on the assigned resource record.

To access assigned resource records, you need access to service appointments.

Deactivating Service Resources

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

To deactivate a service resource, deselect **Active** on the service resource detail page. Service resources that belong to service crews can't be deactivated.

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

Viewing Service Resource Schedules

The Service Appointments related list shows all appointments that a resource is assigned to, while the Absences related list on a resource lets you define periods of time when a resource is unavailable to work. Unless you're using the Field Service Lightning managed package with the scheduling optimizer, resources can still be assigned appointments that conflict with their absences.

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

If you're not using the Field Service Lightning managed package, a calendar view isn't available for individual service resources.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Creating Service Crews

A service crew is a group of service resources whose combined skills and experience make them a good fit to work together on service appointments. For example, a wellhead repair crew might include a hydrologist, a mechanical engineer, and an electrician.

Create crews from the Service Crews tab. After you create a crew, add members to it from the Service Crew Members related list. Only active service resources of the Technician resource type can be added to crews.

The crews that a service resource belongs to appear in the Service Crews related list on the resource's detail page. You can also see all service crew memberships in the Service Crew Members tab in Salesforce. A service resource can be a member of multiple crews as long as the membership dates don't overlap.

Managing Crew Size

You can add crew size requirements to work types, work orders, and work order line items. The Recommended Crew Size and Minimum Crew Size fields guide dispatchers who are assigning service appointments. Work orders and work order line items inherit their work type's crew size values. If you enter a recommended crew size, you must enter a minimum crew size.

Assigning Crews to Service Appointments

Service appointments can only be assigned to service resources. Therefore, to assign a crew to a service appointment, you must create a service resource that represents the crew. From the Service Resources tab, click **New**. Select your crew in the Service Crew lookup field and select a Resource Type of Crew. Activate the service resource, fill out the other fields according to your needs, and save your changes.

Once your crew has a service resource to represent it, assign the crew to a service appointment from the Assigned Resources related list on the appointment. Select the representative service resource in the Service Resource field, and save your changes. The Assigned Resources related list now shows a single assignee.

Sharing and Service Crews

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 you're not using the managed package, service crew leaders don't receive any extra permissions.

Guidelines for Setting Up Field Service Contractors

If you're running 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.

Getting 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 to your org.

| Step | Details |
|--|---|
| 1. Create an account that represents the contractor. | For example, "Solar Installation Contracting." |
| 2. Create contacts for the account. | You can create a contact for every contractor technician, or just for the contractor manager. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Step | Details |
|--|--|
| 3. Make the contacts community users. | Depending on how you use communities, you can assign them the Customer Community Plus or Partner Community license. |
| 4. Assign permission set licenses, create a contractor user profile, and configure object permissions. | Assign field service permission set licenses to each user: The Field Service Scheduling permission set license includes the user in scheduling optimization The Field Service Mobile permission set license gives the user access to the Field Service Lightning mobile app For help assigning the permission set licenses, see Give Users Access to Field Service Lightning. Then, create a user profile for contractors (recommended) and configure their object permissions. Tip: 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. |
| 5. Create a service resource to represent the contractor users. | You can create service resources for every contractor technician or just for the contractor manager. |

Assigning 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.

| Approach | Best for you if |
|--|---|
| The contractor manager is a community user but not a service resource | You want to track individual contractor technicians' details in Salesforce |
| The contractor technicians are service resources with Field Service Mobile licenses | You want contractor technicians to be able to view or update appointment details in the field |
| 1. The dispatcher shares the work order with the contractor manager. | You want the scheduling engine to consider each contractor technician's schedule when making assignments |
| 2. In your community, the contractor manager uses the Book Appointment action to assign the associated service appointment to a technician. | |
| 3. The technician uses the mobile app to view the assignment, and update the service appointment and work order status when the work is complete. | |
| The contractor manager is a community user and a service resource | You don't want to track individual contractor technicians' details in Salesforce |

Approach

- The contractor manager tracks the contractor technicians in a separate system
- **1.** The dispatcher assigns the service appointment to the contractor manager by creating an assigned resource record.
- **2.** The contractor coordinates with the contractor team to complete the work.
- **3.** When the service appointment is complete, the contractor updates the service appointment and work order status from your Salesforce community.

Best for you if...

- You want the contractor manager to be responsible for viewing and updating appointment details in the field
- You don't need to differentiate between different contractor technicians' schedules when assigning work with the scheduling engine



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

Guidelines for Using Work Orders

Work orders help you track tasks to be performed on a product. Learn how to create and manage work orders.

Viewing Work Orders

View work orders from the Work Orders tab. The Work Orders related list on the following record detail pages also lists the work orders associated with a record:

- Accounts
- Assets
- Cases
- Contacts
- Entitlements
- Maintenance plans
- Service contracts
- Return orders



Tip: Add work orders to the console to view and edit work orders and their associated records in one place.

Creating Work Orders

Create and edit work orders from the Work Orders tab or the Work Orders related list on supported objects.

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 represent specific tasks that a technician must perform to complete the work order. They can be marked as completed one by one, and 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Deleting 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.

Work Order and Work Order Line Item Status

Work orders and their line items have a status to track progress towards completing the tasks or activities. You can define more status values in Setup.

| Picklist Status | Status Category | Description | |
|-----------------|-----------------|--|--|
| None | None | Default value | |
| New | New | New work order, no activity has started | |
| Canceled | Canceled | Work is canceled, typically before any work is started | |
| In Progress | In Progress | Work has started | |
| On Hold | On Hold | Temporary pause in work | |
| Completed | Completed | Work completed successfully | |
| Cannot Complete | Cannot Complete | Work couldn't be completed successfully | |
| Closed | Closed | All work and associated activity is finished | |



Note: The default status values on work orders and work order line items are automatically assigned to their corresponding status category (for example, the New status has a status category of New). If your org is older, existing status values may have a status category of None. To change an existing status value's status category from None, a little housekeeping in Setup is necessary.

Creating Work Order Hierarchies

Work orders can have parent and child relationships with each other. Child work orders are standalone records that can be scheduled, given statuses, and assigned. They can each have their own set of work order line items to describe the tasks required to perform the work.

Cancellations are a common reason to use parent and child work orders. 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.

Sharing 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 how to set up sharing rules to control work order sharing, see Create Work Order Sharing Rules.

How Work Orders and Service Appointments Work Together

Service appointments on work orders and work order line items offer a more detailed view of the work being performed. While work orders and work order line items let you enter general information about a task, service appointments track the details about the site visits and work performed.

Work orders and work order line items provide important capabilities such as relationships to price books and Salesforce Knowledge. The technician experience in the Field Service Lightning mobile app is also optimized for service appointments with work orders or work order line items as the parent record.

Guidelines for Using Work Types

Learn how to use work types to save your field service team time and keep your processes consistent.

Inherited Values

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 that contain a value in the Work Type field inherit their work type's Duration and Duration Type.

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Skill Requirements

Skill requirements on work types represent the skills that are needed to complete the work. When a work order or work order line item is created and lists a work type, it inherits its work type's required skills. Define required skills in the Skill Requirements related list on a work type.

Skill requirements serve more as a suggestion than a rule. You can still assign a work order, work order line item, or related service appointment to a service resource that does not possess the required skills.

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.



Note: Customizations to required skills, such as validation rules or Apex triggers, are not 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. When a work order or work order line item is created and lists a work type, it inherits its work type's required products. Define required products in the Products Required related list on a work type.

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, are not 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.

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 may display in a different title or language in the Articles related list versus in the Knowledge Lightning component. The Articles related list reflects the article version that is inherited by work orders and work order line items using the work type.

To allow knowledge articles to be attached to work types, add the Articles related list to your work type detail page layout, and add the Knowledge component to the layout in Lightning Experience.

Here's how to attach an article to a work type.

- In Lightning Experience, search for an article in the Knowledge component, then select the option to attach it.
- In Salesforce Classic, click **Find Article** in the Articles related list and attach the desired article.

Guidelines for Generating Work Orders from a Maintenance Plan

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.

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 different maintenance plan settings:

- Generation timeframe, which determines how far into the future work orders will be generated
- Frequency, which determines the amount of time between work order dates
- Number of maintenance assets, because one work order is created per asset, per 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 one year's worth of maintenance visits. (Work orders are also generated for the final day of the timeframe: if the generation timeframe is one year and the Date of the first work order in the next batch is January 1, 2019, work orders are also generated for January 1, 2020.)

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

How do I generate work orders?

You can manually generate each batch of work orders or choose to have a new batch generated automatically when the current batch nears completion. Manual generation gives you a bit more control if frequent changes are needed after each visit. Automatic generation provides the assurance that you're delivering the maintenance service you promised to your customer.

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 newly generated work orders appear in the Work Orders related list.

To turn on automatic generation, select Auto-generate work orders.

If auto-generation is turned on, when is a new batch generated?

- If the maintenance plan includes assets, a new batch is generated for each maintenance asset on the Date of the first work order in the next batch listed on the maintenance asset.
- If the maintenance plan doesn't include any assets, a new batch is generated on the Date of the first work order in the next batch listed on the maintenance plan

You can further customize batch generation timing by specifying a Generation Horizon (Days) or selecting **Generate new batch upon completion**. For details, see Maintenance Plan Fields.



Note: If both **Auto-generate work orders** and **Generate new batch upon completion** are selected, Salesforce doesn't generate a new batch of work orders 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 only generated for the first maintenance asset, causing the plan's batch generation schedule to become staggered.

Guidelines for Using Knowledge with Work Orders

You can attach knowledge articles to work orders, work order line items, and work types to connect technicians in the field with important procedural info, guidelines, and specs.

Important: Before you get started, follow the steps in Configure Work Order Settings to set up your org for Knowledge and field service.

Attaching an Article

You can search for and attach articles to a record from the Articles related list, the Knowledge One console widget, and 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, then select the option to 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 select the option to attach it.

Viewing 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. You can also navigate to attached articles from the feed of a record if feed tracking for related lists is enabled.

On article detail pages in Salesforce Classic, the Linked Work Orders and Linked Work Order Line Items related lists show which records an article is attached to. A Linked Work Types related list isn't available

Detaching 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.

Updating an Attached Article

If an article is out of date, publish a new version by navigating to the article and clicking 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, you can 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.

Customizing Article Suggestions

On work orders and work order line items in the console, the Knowledge One widget suggests articles to attach based on key fields. You can select the fields that suggestions are based on. Article suggestions aren't available in the Knowledge Lightning component.

- 1. From Setup, enter Field Service in the Quick Find box, then select Field Service Settings.
- 2. In the work order and work order line item field lists, select which fields you want the search engine to use when suggesting relevant articles from your knowledge base.
- **3.** Save your changes.

Managing Linked Articles

Customize linked articles' page layouts, fields, validation rules, and more from the Linked Articles node in Setup under Knowledge.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, Performance, Unlimited, and **Developer** Editions. Work orders are also available in **Professional Edition**

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 To learn how to configure your console and page layouts so articles can be attached to work orders and work order line items, see Set Up Work Orders.



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 app, linked articles can't be accessed from feed items.
- The Linked Work Orders and Linked Work Order Line Items related lists on articles are available only in Salesforce Classic. A Linked Work Types related list isn't available 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.

Guidelines for Using Service Appointments

A service appointment tracks field service work to be performed for a customer, and is associated with a work order or work order line item. Learn how to create and manage service appointments.

Viewing Service Appointments

View service appointments on the Service Appointments tab and in the Service Appointments related list on work orders, work order line items, and service resources.

Creating Service Appointments

Create service appointments from the Service Appointments tab or related list.



Note: On the Service Appointments related list on a service resource record, you can't create new appointments, but you can assign the resource to existing appointments.

Deleting Service Appointments

You can delete a service appointment to indicate that it has been canceled, or just change its status to Canceled. Deleting a record, like a work order, deletes its child service appointments.

Associating 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 type of parent record tells you about the nature of the service appointment:

- Service appointments on work orders and work order line items offer a more detailed view of the work being performed. While work orders and work order line items let you enter general information about a task, service appointments are where you add the details about 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 created from the work type. In addition, the Field Service Lightning managed package scheduling engine is based on service appointments.
- Service appointments on assets represent work being performed on the asset.
- Service appointments on *accounts* represent work being performed for the account.
- Service appointments on opportunities represent work that is related to the opportunity.

For example, suppose you create a work order to track a customer's annual refrigerator maintenance. In the Service Appointments related list on the work order, you create an Annual Maintenance appointment.

During the appointment, the technician completes most of the maintenance but determines that a replacement part must be ordered and installed. The technician changes the appointment status to Cannot Complete, and a second service appointment is

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Available in: Salesforce Classic and Lightning Experience

created on the work order to track the installation. When the second appointment is completed and it is determined that the fridge is fully repaired, the second appointment and the work order can then be closed.

Guidelines for Customizing Service Report Templates

Service report templates in field service determine the type and organization of information in service reports. Follow these tips to make your service report templates the envy of other Salesforce admins.

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 on 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.

To hide unneeded records from a related list on generated service reports, create a filter. For example, set up a filter so the Work Order Line Items related list on work order service reports 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. Here's how to set up a filter.

- 1. From the service report template editor, check the Related Templates field to make sure 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.** Select a checkbox or picklist field to define the filter, and choose an operator.
- **4.** Click the lookup icon to select one or more values, 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.
 - Note: 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.



- The Status field on contract line items isn't available for filtering
- The Filters tab isn't available in Internet Explorer 8

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Adding Signatures

To let technicians 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 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. 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 on 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.

Guidelines for Using Signatures on Service Reports

Field service technicians can capture signatures from customers and partners for service reports. The number and type of signatures on a service report are defined beforehand on the service report template.

Setting Up Signature Types

The Signature Type field on digital signatures represents the role of the person signing a service report. It helps you ensure that your service reports are signed by the proper people.

For example, suppose that whenever your company performs preventive maintenance on an asset, you want both the customer and the technician to sign the final service report. Those signatures tell you that everyone agrees on the work that was completed, and help prevent future squabbles.

Your org comes with just one signature type, Default. A service report template can only contain one signature per type. If you plan to collect multiple signatures on service reports, create additional signature types in Setup by editing the Signature Type picklist field on the Digital Signature object.

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, all technicians present at an appointment—create numbered types: Technician 1, Technician 2, and so forth.



Note: You can create up to 1,000 signature types. You can't delete signature types, but you can deactivate them so they can't be used in service report templates. When you deactivate a type, it still appears on service report templates that used it, but isn't available for new service report templates.

Adding Signature Blocks to Service Report Templates

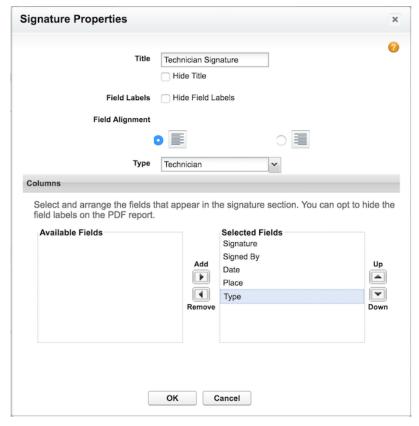
To create or edit service report templates, in Setup, enter *Service Report Templates* in the Quick Find box, then select **Service Report Templates**.

To add a signature block to a service report template, open the service report template and drag the Signature element to the template layout. The signature block's settings display, which you can modify as needed. The Type field is required in signature blocks. Make sure

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Available in: Salesforce Classic and Lightning Experience

to also add the Signature field, which is the designated space for the signature. You can update the title of each signature block to reflect who is signing, or hide the title and field labels.



Dragging a signature element to a service report template layout displays its settings.

You can add up to 20 signature blocks to a service report template. Double-click the title of any signature block to display its settings.



Note: Because only one signature per type is allowed on a report, you can't drag additional signature blocks onto a template until you've defined additional Signature Type values. Signature blocks can't use multiple columns.

Capturing Signatures for Service Reports

Signatures are captured from the Field Service Lightning mobile app. Captured signatures aren't reused in future versions of the report.

For example, suppose a technician generates a service report for a service appointment and the customer signs the report. Then, the technician updates the service notes to add a recommendation. If the technician re-generates the service report, the customer's signature doesn't appear on the new report.

If you'd like signatures to be reused across all service report versions, contact Salesforce.

Finding Signed Service Reports

To easily find the service reports that contain signatures, add the Signed field 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 selected.

Common Tasks in Inventory Management

Learn how to perform everyday tasks in field service inventory management.

This table explains at a high level how to complete common tasks using Salesforce's out-of-the-box inventory management features. 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 Parts | 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 | Look at the Product Items related list on the location record. Helpful links: Create Field Service Locations | 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 | Look at the Product Items related list on the product record. Helpful links: Create Parts | To find out how many wheelbarrows you have in your inventory and where they are stored, 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: How Product Transfers Work | 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 Parts | To let the assigned technicians know that they will need a forklift to complete work order #00046982, create a product required for the Forklift product on the work order. |
| Request more parts from | 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 |

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Available in: Salesforce Classic and Lightning Experience

| I Want To | How To Do It | Example |
|--|---|--|
| another inventory location when my stock gets low | Request Parts | request for the Van A location. Include one product request line item for the nails, and another for the hammers. |
| Transfer parts between inventory locations | 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). Create a shipment to track the transfer's shipping details. Mark the product transfer received when the items arrive. Helpful links: Transfer Parts How Product Transfers Work | To transfer 25 tires from Warehouse A to Warehouse B, create a product transfer with these settings: Source Location: Warehouse A Source Product Item: Warehouse A Tires Destination Location: Warehouse B Quantity: 25 Quantity Unit of Measure: Each Create a shipment to track the shipping details for the tire transfer. Select Received on the product transfer when the tires arrive at Warehouse B. |
| Transfer parts from an outside vendor to an inventory location | Create a product request, listing the outside vendor as the account. Create a product transfer. Make sure to specify the quantity, destination location, and product. Create a shipment to track the transfer's shipping details. Mark the product transfer received when the items arrive. Helpful links: Request Parts Transfer Parts How Product Transfers Work | 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: Product: Safety Glasses Destination Location: Service Van A Quantity: 20 Quantity Unit of Measure: Each Because the items are coming from outside of your inventory, leave the Source Location and Source Product Item blank. Create a shipment to track the shipping details for the glasses transfer. Select Received on the product transfer when the glasses arrive at Service Van A. |
| 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 Consumed Parts How Product Consumption Works | 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: Product Item: Service Van A Bolts Quantity Consumed: 15 The product item quantity is automatically reduced by 15 to reflect that the bolts are no longer in stock. |

| I Want To | How To Do It | Example |
|---|--|---|
| Track the return of a customer product | Create a return order that lists the related case, order, or product. Helpful links: Create Return Orders Guidelines for Creating Return Orders | A customer creates a case from the customer community 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 | Create a work order to repair the product. Create a return order that tracks the return of the product to the repair workshop. When the product is repaired, create a product transfer to track the return of the product back to the customer. Helpful links: Create Return Orders Guidelines for Creating Return Orders | 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 | Create a return order that lists the unused inventory in the Product or Product Item field. Helpful links: Create Return Orders Guidelines for Creating Return Orders | 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. |

How Product Transfers Work

Product transfers track the transfer of inventory between locations in field service. Learn how to link product transfers to other inventory management records, and how they make it easy to manage inventory in both large and small field service operations.

Associating Product Transfers with Product Requests

While product transfers are typically created in response to a product request, they don't have to be. For example, when a new technician joins your team, you can create a series of product transfers to track the initial stocking of their service vehicle.

If the product transfer is fulfilling a product request, create one product transfer for each product request line item. This way, you can track the status of each part being requested. The Product Transfers related list on a product request lists all product transfers associated with the request's line items. In addition, product request line items have their own Product Transfers related list that shows related transfers.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition

Associating Product Transfers with Shipments

To get more visibility into the movement of inventory between locations, create shipments and link them to product transfers. Shipments contain information about the products on board, the shipping carrier, and the expected delivery date. While shipments are an optional part of inventory management, they make it easier to stay informed about the coming and going of parts in your inventory.

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 the hammers, and one for the nails. To fulfill the request, your inventory manager creates two product transfers—one for each product request line item—that indicate that the hammers and nails should be transferred from Warehouse B. Then, he creates a shipment to track the transfer, and enters it in the Shipment field on both product transfers. Now, anyone looking at the product request can see the related product transfers, and refer to their related shipment to find out where the hammers and nails are on their inter-warehouse journey.

A shipment can be associated with multiple product transfers, shown 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.

Updating or Deleting Product Transfers

If a product transfer hasn't yet been marked received, you can edit it normally. Received transfers cannot be updated, but you can delete them if needed. When you delete a transfer:

- The Quantity on Hand of the source and destination product items reverts to the pre-transfer quantity
- Product item transactions with a transaction type of Adjusted are added to the source and destination product items

Transferring Serialized Inventory

For higher-value inventory such as computers, you may decide to create one product item record per item. This lets you record each item's serial number on the product item record and track the item's movement.

The creation of product transfers for serialized product items is in beta, and is only permitted 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 the following 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. This means that 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.

Marking Product Transfers Received

When you select **Received** on a product transfer, that indicates that the items have been added to the inventory at their destination location. Marking a product transfer received causes several record updates that keep your inventory numbers accurate:

- **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 of the source location product item is reduced to reflect the transfer. In addition, one of two things happens:
 - If there's already a product item that represents the transferred products stored at the destination location, the quantity of that
 product item is increased to reflect the transfer.
 - If such a product item doesn't exist (in other words, if it's the first time that the product is being stored at the location), a product item is automatically created that reflects the quantity transferred there.

For example, if Service Van B has never contained any hammers, there probably isn't a product item record representing the hammers stored at Service Van B. In that case, when hammers are transferred to Service Van B, a product item is automatically created whose quantity reflects the number of hammers transferred there.

- **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 addition of stock at the destination location. If a source location or soure product item is specified, a second transaction is created to represent the removal of stock from the source location. The first transaction's quantity is positive because stock is being 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. They let you quickly review past transactions at your inventory locations.
- **Example:** Warehouse A has 100 hammers in stock. Your new technician, Jessica, has received her service van, and you've 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. Since Jessica's van hasn't contained hammers before, selecting Received on the transfer causes the following events.
 - The quantity on the existing product item for hammers stored at Warehouse A is reduced from 100 to 95
 - A second product item is created with 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

How Product Consumption Works

When you consume products as part of a work order, logging the consumption in Salesforce kicks off several behind-the-scenes changes. Learn how product consumption fits into your field service operation.

How to Track Product Consumption

When a technician 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

Tracking product consumption in Salesforce helps 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 automatically 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, and makes it easy to keep an eye on inventory levels.



Note: If you want your team to log product consumption but aren't interested in tracking the movement of inventory between locations, you can skip creating locations and product items and fill in 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 reflect changes made to product items in your org. They appear in the Product Item Transactions related list on related records. Most actions that you take on products consumed result in 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 technician 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 a type of adjustment. A product item transaction of type Adjusted is created with a positive quantity equal to the quantity consumed.

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Available in: Salesforce Classic and Lightning Experience

Guidelines for Creating Return Orders

Learn how to use return orders to track the return and repair of products and inventory in field service.

You can use return orders to track customer returns, customer repairs, or the return of inventory from a technician's van stock to a warehouse or supplier. Customers can initiate a return from a community, or agents can create return orders in response to a customer call or technician request.

Return orders are available in Lightning Experience, Salesforce Classic, the Salesforce app, the Field Service Lightning mobile app for Android and iOS, and communities built using Salesforce Tabs + Visualforce.

Creating 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.

Important: If you fill out the Product Item field on a return order line item, remember that product items that list a serial number can't be transferred between inventory locations. If the item was already tracked as a serialized asset in Salesforce, we recommend noting the serial number using a custom field or other method. That way, you can use product transfers to track the item's movement to and from workshops, warehouses, and customer sites.

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 community. The assigned agent creates a return order for the customer which lists

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Available in: Salesforce Classic and Lightning Experience

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 technician 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 quidelines.

- On the return order:
 - 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.

Technician 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 technician'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 technician 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 technician creates a product request for three

large hydraulic arms. Upon arriving at the site, the technician learns that only two arms are needed. To return the unwanted arm to the main warehouse, the technician 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.

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.

FIELD SERVICE LIGHTNING OBJECT FIELDS

Learn about the fields available on Field Service Lightning standard objects.

Field Service Lightning Objects

When you enable Field Service Lightning, you gain access to a suite of standard Salesforce objects.

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

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 and maintenance assets have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Operating Hours Fields

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.

Part Request and Transfer Fields

Product requests, product request line items, product transfers, and shipments have the following fields. Some fields might not be visible or editable depending on your page layout and field-level security settings.

Parts and Inventory Fields

Product items, product item transactions, products required, and products consumed have the following fields. Some fields might not be visible or editable depending on your page layout and field-level security settings.

Return Order Fields

Return orders and return order line items have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Service Appointment Fields

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.

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Available in: Salesforce Classic and Lightning Experience

Service Resource Fields

Service resources and their related objects have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Service Territory Fields

Service territories, service territory members, and service territory locations 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.

Work Order Fields

Work orders have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Work Order Line Item Fields

Work order line items have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

Work Type Fields

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 Service Lightning Objects

When you enable Field Service Lightning, you gain access to a suite of standard Salesforce objects.



Note: This list doesn't include sharing, feed, or history objects.

| Object Name | Definition | Tab in Salesforce? |
|-------------------------------|--|--------------------|
| Address | Address associated with a location. | |
| App Extension | Link between the Field Service Lightning mobile app and other mobile apps. | |
| Assigned Resource | Service resource who is assigned to a service appointment. | |
| Associated Location | Location linked to a specific account. | |
| Digital Signature | Captured signature from a field service customer or technician. | |
| Field Service Mobile Settings | Represents a collection of settings related to the Field Service Lightning mobile app. | |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Object Name | Definition | Tab in Salesforce? |
|----------------------------|--|--------------------|
| Linked Article | Knowledge article that is attached to a work order, work order line item, or work type. | |
| Location | Warehouse, site, van, or plant, usually where inventory is stored or used. | ✓ |
| Maintenance Asset | Asset associated with a particular maintenance plan. The plan's work orders list the asset associated with it. | |
| Maintenance Plan | Plan for preventative maintenance on assets. Work orders are automatically generated for all maintenance visits. | ✓ |
| Mobile Settings Assignment | The assignment of a field service mobile settings configuration to a user profile. | |
| Operating Hours | Field service hours that you can define for service territories, service resources, and accounts. | ✓ |
| Product Consumed | A product from your inventory that was used to complete a work order or work order line item. | |
| 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 a part or parts. | ✓ |
| 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 Transfer | The transfer of inventory from one location to another. | ✓ |
| 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. | ✓ |

| Object Name | Definition | Tab in Salesforce? |
|-----------------------------|--|--------------------|
| Service Report | A customer-facing report summarizing the status of a service appointment, work order, or work order line item. | |
| Service Report Template | Templates 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. | ✓ |
| 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 can be 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. | |
| Shipment | A shipment of inventory between locations. | ✓ |
| 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 record used to track a service resource's time and attendance. | ✓ |
| Time Sheet Entry | A period of time in which a service resource performs a specific function. | |
| Time Slot | A period of time on a specified day of the week during which field service work can be performed. Operating hours consist of one or more time slots. | |
| 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. | ✓ |

The following objects are available whether or not Field Service Lightning is enabled. You'll likely encounter them when completing 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. | |

| Object Name | Definition | Tab in Salesforce? |
|----------------------|---|--------------------|
| 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 needed 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 tasks to be completed. | |

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 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field | Description |
|--------------------|--|
| 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. |

Location Fields

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. |
| Inventory Location | Indicates whether the location stores parts. |
| | Note: 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|--------------------|---|
| Location Type | Picklist of location types, which can be customized. The values are: Warehouse (default) Site Van Plant |
| 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. |
| Address Type | Picklist of address types. The values are: Mailing Shipping Billing Home |
| Description | A brief description of the address. |
| Driving Directions | Directions to the address. |
| Location Type | The type of location associated with the address, which is automatically filled in. The values are: Warehouse (default) |

| Field Name | Description |
|------------|---|
| | SiteVanPlant |
| Parent | A lookup field to the parent address. For example, if the address is a billing address, its parents address might be the address of the associated warehouse. |
| 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 | Picklist of address types. The values are: Bill To Ship To |

Maintenance Plan Fields

Maintenance plans and maintenance assets have the following fields. Some fields may not be visible or editable depending on 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. They can be associated with accounts, work types, assets (creating records known as maintenance assets), locations, and service contracts.

| 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 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, if monthly maintenance should 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 will list a Suggested Maintenance Date of May 1, and the dates on the later work orders will be based on the Generation Timeframe and Frequency settings. |
| | (1) Important: 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 |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|------------------------------------|---|
| | maintenance assets, this date auto-updates on the maintenance assets after each batch is generated, but doesn't update on the maintenance plan itself because batch timing is calculated at the maintenance asset level. If the plan doesn't have 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 | (Required) Amount of time between the plan's work orders. The unit is specified in the Frequency Type field. |
| Frequency Type | (Required) The unit of frequency: Days Weeks Months Years For example, to perform monthly maintenance visits you need a work order for each visit, so enter 1 in Frequency and select Months. |
| Generate new batch upon completion | If both this option and Auto-generate work orders are 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 may cause a staggered generation schedule between maintenance assets. |
| Generation Horizon (Days) | Moves up the timing of batch generation if Auto-generate work orders is selected. A generation horizon of 5 means the new batch of work orders is generated 5 days before the maintenance asset's (or maintenance plan's, if there are no assets) 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 | (Required) The generation timeframe unit: • Days |

| Field Name | Description |
|---------------------------------|---|
| | • Weeks |
| | • Months |
| | • Years |
| | 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 will be 3 days before and 3 days after, respectively, 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 Contract | The service contract associated with the maintenance plan. The service contract can't be updated if any child maintenance asset is associated with a contract line item from the service contract. |
| Start Date | The first day the maintenance plan is valid. |
| Work Order Generation Status | (Read Only) Indicates whether the work order generation is in progress or complete. You can generate only one batch at a time. |
| 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 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. |

^{*}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.

Operating Hours Fields

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: Salesforce Classic and Lightning Experience

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. |

Part Request and Transfer Fields

Product requests, product request line items, product transfers, and shipments have the following fields. Some fields might not be 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|----------------------|--|
| Shipment Type | The type of shipment. The picklist includes the following values, which can be customized: |
| | • Rush |
| | Overnight |
| | Next Business Day |
| | Pick Up |
| 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 | The status of the shipment. The picklist includes the following values, which can be customized: |
| | 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. |
| 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. |

| Field Name | Description |
|--------------------------|---|
| 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 | The type of shipment. The picklist includes the following values, which can be customized: Rush Overnight Next Business Day Pick Up |
| Ship To Address | The physical address where the product is delivered. |
| Source Location | Where the product is at time of the request. |
| Status | The status of the shipment. The picklist includes the following values, which can be customized: Draft Submitted Received |
| 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. |

| Field Name | Description |
|---------------------------------|--|
| 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. Once you mark a product item received, you can't undo it. |
| | Note: To find out what happens when a product transfer is marked received, see How Product Transfers Work. |
| 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. |
| Shipment | The shipment related to the product transfer. |
| Shipment Expected Delivery Date | The expected date of delivery, inherited from the related shipment. |
| Shipment Status | The shipment status, inherited from the related shipment. It includes the following values, which can be customized: • Shipped • Delivered |
| 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 | Status of the product transfer. It includes the following values, which can be customized: Ready for Pickup |

| Field Name | Description |
|------------|-------------|
| | Completed |

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 | The status of the shipment. The picklist includes the following values, which can be customized: • Shipped—The product is in transit. • Delivered—The product is at the destination location. |
| Tracking Number | Tracking number for the shipment. |
| Tracking URL | URL of website used for tracking the shipment. |

Parts and Inventory Fields

Product items, product item transactions, products required, and products consumed have the following fields. Some fields might not be visible or editable depending on 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 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. |
| | ? Tip: To learn more about the pros and cons of assigning serial numbers to product items, see Create Parts. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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 is 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 |
|--------------------------|---|
| Description | Notes and context about the product consumed. |
| 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. |
| 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. |

Return Order Fields

Return orders and return order line items have the following fields. Some fields may not be visible or editable depending on 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 technician'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 associated 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 associated 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 might 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 technician creates a product request for three motors to prepare for a field visit. If the technician 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. |
| Return Order Number | (Read only) Auto-generated number identifying the return order. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|-------------------|--|
| 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 | The type of shipment associated with the return order. Available values are: Standard (default value) Rush Overnight Next Business Day Pickup |
| 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 technician's service vehicle to a warehouse, the service vehicle is the source location. |
| Status | The status of the return order. Available values are: Draft Submitted Approved Canceled Closed |

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 filled out: 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 technician'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 filled out: 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 filled out: Asset, Order Product, Product, Product Item, and Product Request Line Item. |
| Product Item Product Request Line Item | The product item associated with the return order line item. One or more of the following fields must be filled out: Asset, Order Product, Product, Product Item, and Product Request Line Item. The product request line item associated with the return order line |
| Froduct nequest Line item | item. One or more of the following fields must be filled out: Asset, Order Product, Product, Product Item, and Product Request Line Item. |
| 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 Outdated Other |
| Repayment Method | The method by which the customer or owner is reimbursed for the items being returned. Available values are: Replace—The items are replaced Refund—The items are returned and the owner is refunded Credit—The items are returned and the owner receives credit for them |

| Field Name | Description |
|-------------------------------|--|
| | Return—The items are returned to the owner (for example, following their repair) |
| Return Order | The return order that the return order line item belongs to. |
| Return Order Line Item Number | (Read only) Auto-generated 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 technician's service vehicle to a warehouse, the service vehicle is the source location. |

Service Appointment Fields

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 re-update, 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|-------------------------------|--|
| Appointment Number | An auto-assigned number that identifies the appointment. |
| Arrival Window End | The end of the window of time in which the technician 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 technician 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. |
| Contact | 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. |
| Description | The description of the appointment. |
| Due Date | 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. |
| Duration | 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. |
| Duration Type | The unit of the duration: Minutes or Hours. |
| Earliest Start Permitted | The date after which the appointment must be completed. Earliest Start Permitted and Due Date typically reflect terms in the customer's service-level agreement. |
| 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, Opportunity, Work Order, or Work Order Line Item. |
| Scheduled End | The time at which the appointment is scheduled to end. If you are using the Field Service Lightning managed package with the scheduling optimizer, this field is populated once the appointment is assigned to a resource. Scheduled End – Scheduled Start = Estimated Duration. |

| Field Name | Description |
|--------------------------|---|
| Scheduled Start | The time at which the appointment is scheduled to start. If you are using the Field Service Lightning managed package with the scheduling optimizer, this field is populated once the appointment is assigned to a resource. |
| 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 | The status of the appointment. The picklist includes the following values, which can be customized: None—Default value. Not Scheduled—The service appointment isn't scheduled. Scheduled—The service resource is in route. In Progress—The service resource started work. Completed—The service resource completed work. Canceled—The service appointment has been canceled. Missed—The service resource didn't make it to the location. Running Long—The service resource started the job but didn't complete it by the scheduled end time. Late—The service resource didn't start the job by the scheduled start time. |
| Status Category Subject | The category that each Status value falls into. The Status Category field has seven values which are identical to the default Status values. 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 Missed category. The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management. A short phrase describing the appointment. |
| · | <u> </u> |
| Work Type | The work type associated with the service appointment. |

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.

| Field Name | Description |
|------------|--|
| Crew Size | The number of members on the crew. This field is manual, so it doesn't auto-update when you add or remove members. |
| Name | The name of the service crew. For example, Repair Crew. |
| Owner | By default, the person who created the service crew. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Service Crew Member

Service crew members are service resources who belong to a service crew. Add members to a service crew from 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. |
| Leader | Indicates that the member is the crew leader. |
| 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. |

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 Create Service Report 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. |
| Service Report Template | The template used to create the service report. Note: 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. Tip: To quickly find signed reports, add this field to the Service Reports related list on work orders. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Digital Signature

Digital Signatures are signatures captured on service reports. For example, technicians can collect signatures from customers, technicians, or anyone else involved in field service work.

| Field Name | Description |
|-------------|--------------------------|
| Date Signed | The date of the signing. |

| Field Name | Description |
|------------------|--|
| 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 technicians present at an appointment should sign—create numbered types: Technician 1, Technician 2, and so forth. |
| Signed By | The name of the person signing. |

Service Resource Fields

Service resources and their related objects have the following fields. Some fields may not be 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. |
| | ? Tip: The Capacities related list shows a resource's capacity. |
| Description | The description of the resource. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|------------------------------------|---|
| Include in Scheduling Optimization | When selected, this option means that the service scheduling optimizer can assign this resource to work orders during the optimization process. Use only if the Field Service Lightning managed package is installed. Only users with the Field Service Scheduling permission set license can be included in scheduling optimization. |
| Location | The location associated with the service resource. For example, a service vehicle driven by the service resource. |
| Name | The resource's name. This might be the name or title of the associated user or crew. |
| Resource Type | Indicates whether a resource is a technician, dispatcher, or crew. Resources who are dispatchers can't be capacity-based or included in scheduling optimization. Only users with the Field Service Dispatcher permission set license can be dispatchers. Note: You can't add additional resource types. |
| Service Crew | The associated service crew. If the service resource represents a crew, select the crew. Note: 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 in which 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. |
| 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; for example, the end date of a contract. |
| Name | (Read only) An auto-generated number identifying the capacity record. |
| 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 | Days, Hours, or Months. For example, if a resource can work 80 hours per month, the capacity's Time Period would be Month and Hours per Time Period would be 80. |
| Work Items per Time Period | The total number of 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. |
| | Note: 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 |

| Field Name | Description |
|------------------|--|
| | 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 indicate which service resources should be 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 would like 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 does not want their field service work assigned to the resource |
| | Resource preferences serve more as a suggestion than a requirement. You can still 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. |

Service Territory Fields

Service territories, service territory members, and service territory locations have the following fields. Some fields may not be 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. You may want to list the address of the territory's headquarters. |
| 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 should 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 might be the same as its parent. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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. You may want to list the related service resource's address in this field. |

| Field Name | Description |
|-------------------|--|
| End Date | The date when the service resource is no longer a member of the territory. If the resource will be working in the territory for the foreseeable future, leave this field blank. This field is mainly 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 | Primary, Secondary, or Relocation. |
| | • The primary territory is typically the territory where the resource works most often—for example, near their home base. Service resources can only have one primary territory. |
| | Secondary territories are territories where the resource can be assigned to appointments if needed. Service resources can have multiple secondary territories. |
| | Relocation territories represent temporary moves for service resources. If you're using the Field Service Lightning managed package with the scheduling optimizer, resources with relocation territories are always assigned to services 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. |
| | For example, a service resource might have the following territories: |
| | Primary territory: West ChicagoSecondary territories: |
| | East Chicago |
| | - South Chicago |
| | Relocation territory: Manhattan, for a three-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. |

| Field Name | Description |
|-----------------------------------|--|
| Service Territory | The related service territory. |
| Service Territory Location Number | An auto-generated number identifying the territory location. |

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: Salesforce Classic

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.



Note: When you create a skill, leave the Assign Users and Assign Profiles sections blank. They are specific to Live Agent, 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. For tips on how to define skill level, see Configure Skill Settings on page 13. |
| 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. |
| Skill | The required skill. |
| Skill Level | The required skill level. Skill level can range from zero to 99.99. |

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. |
| Currency ISO Code | Three-letter currency code. |
| 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 | The status of the time sheet. The picklist includes the following values, which can be customized: None New Submitted Approved |
| Time Sheet End Date | The last day the time sheet covers. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|------------------------|---|
| Time Sheet Entry Count | (Read Only) The number of related time sheet entries. |
| Time Sheet Start Date | The first day the time sheet covers. |

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. |
| Currency ISO Code | Three-letter currency code. Time sheet entries inherit their time sheet's currency code. Updates to a time sheet's currency code aren't reflected in existing time sheet entries' currency code. |
| 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. |
| Name | Time sheet entry name. |
| Start Time | The date and time the activity began. |
| Status | The status of the time sheet entry. The picklist includes the following values, which can be customized: None New Submitted Approved |
| Subject | Activity performed; for example, repair, lunch, or travel. |
| Time Sheet | (Read Only) Related time sheet. |
| Type | The type of work performed. The picklist includes the following values, which can be customized: None Direct |
| | • Indirect |

| Field Name | Description |
|----------------------|--|
| 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. |

Work Order Fields

Work orders have the following fields. Some fields may not be visible or editable depending on your page layout and field-level security settings.

| 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 must complete 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field | Description |
|---------------------------------|---|
| Duration | The estimated time required to complete the work order. 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. |
| 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 below. |
| 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. |
| | Note: 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. |
| | Tip: 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. |
| Location | The location associated with the work order. For example, a work site. |
| | |

| Field | Description |
|-----------------------|--|
| 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. |
| 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. To learn more, see Milestone Statuses. |
| Milestone Status Icon | An icon that corresponds to the milestone status. • ✓ Compliant • ⊕ Open Violation • △ 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 Lightning 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 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. |
| | Tip: 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. |
| 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 (products) to the work order's line items. This field is only available if products are enabled. |
| Priority | The priority of the work order. The picklist includes the following values, which can be customized: Low Medium High Critical |

| Field | Description |
|---------------------------|---|
| 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 might 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 Salesforce's 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 should use. 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. Note: This field stays blank unless you update it on the work order. So to find out which template the work order's service reports will use, 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. For a sample workflow rule that configures this field, see below. |
| State | The state where the work order is completed. Maximum length is 80 characters. |

| Field | Description |
|----------------------------|--|
| Status | The status of the work order. The picklist includes the following values, which can be customized: |
| | New—Work order was created, but there hasn't yet been any activity. |
| | • In Progress—Work has begun. |
| | On Hold—Work is paused. |
| | Completed—Work is complete. |
| | Cannot Complete—Work could not be completed. |
| | • Closed—All work and associated activity is complete. |
| | • Canceled—Work is canceled, typically before any work began. |
| | Changing a work order's status does not affect the status of its work order line items or associated service appointments. |
| Status Category | The category that each status value falls into. The Status Category field has eight default values: seven values which 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 may decide that it belongs in the On Hold category. |
| | The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management. |
| Stopped | Indicates the 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. Try to describe the nature and purpose of the job to be completed. For example, "Annual on-site well maintenance." The maximum length is 255 characters. |
| 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. |

| Field | Description |
|-------------------|---|
| Total Price | (Read Only) The total of the work order line items' price after discounts but before tax is added. |
| Work Order Number | An auto-generated 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. |



Example: The Start Date and End Date fields are blank by default, but you can set up workflow rules to configure them. The following rule populates the Start Date field with the current date and time when the Status field is changed to In Progress:

- 1. Create a workflow rule on the Work Order object:
 - Under Evaluation criteria, select **Created**.
 - Under Rule Criteria, enter Work Order: Status EQUALS In Progress.
- 2. Add a New Field Update workflow action:
 - Under Field to Update, select **Start Date**.
 - Under Date Options, select the option to use a formula and enter the formula NOW().
- **3.** Save and activate your rule.

Work Order Line Item Fields

Work order line items have the following fields. Some fields may not be visible or editable depending on 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 may want to link a work order's line items with different assets. For this reason, line items do not automatically inherit their parent work order's asset value. |
| Currency ISO Code | The ISO code for any currency allowed by the organization. Available only for orgs with the multicurrency feature enabled. |
| Description | The description of the line item. We recommend describing the steps a user must follow to mark the line item Completed. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field | Description |
|-------------------|--|
| 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. |
| 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 has been closed. Changing the line item's status to Closed causes this checkbox to be selected in the user interface. |
| 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) |
| 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. |
| Minimum Crew Size | The minimum crew size allowed for a crew assigned to the line item. If you're not using the Field Service Lightning 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 line item's minimum crew size requirement. |
| Order | The order associated with the line item. For example, you may need to order replacement parts before you can complete the line item. |

| Field | Description |
|-----------------------------|---|
| Parent Work Order Line Item | The line item's parent line item, if it has one. |
| | ? Tip: View, create, and delete a line item's child line items in the Child Work Order Line Items related list. |
| Priority | The priority of the line item. The picklist includes the following values, which can be customized: Low Medium High Critical |
| 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. |
| 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 might be the same as its parent. (Read only) |
| Service Report Template | The service report template that the line item's service reports should use. |
| | 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. So to find out which template the line item's service reports will use, 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. |
| Status | The status of the line item. The picklist includes the following values, which can be customized: |
| | New—Line item was created, but there hasn't yet been any activity. In Progress—Work has begun. |
| | On Hold—Work is paused. |

| Field | Description |
|-----------------------------|---|
| | Completed—Work is complete. Cannot Complete—Work could not be completed. Closed—All work and associated activity is complete. Canceled—Work is canceled, typically before any work began. |
| Status Category | The category that each status value falls into. The Status Category field has eight default values: seven values which 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 may decide that it belongs in the On Hold category. The Status Category field can be useful to reference in custom apps, triggers, and validation rules. Status categories let you extend and customize the work life cycle while still maintaining a consistent work classification for tracking, reporting, and business process management. |
| Subject | The line item's subject. For example, "Tire Check." |
| Subtotal | The line item's unit price multiplied by the quantity. (Read only) |
| 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 auto-generated 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. |

Work Type Fields

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 |
|---------------------------------|---|
| Auto-Create Service Appointment | Select to automatically create service appointments on work orders or work order line items that use the work type. |
| | Note: |
| | 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. 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. |
| | 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. |
| Description | The description of the work type. Try to add details about the task or tasks that this work type represents. |
| 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. |
| 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 Lightning managed package, this field serves as a suggestion rather than a rule. If you are using the managed package, the scheduling optimizer |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

| Field Name | Description |
|-------------------------|--|
| | 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. |

FIELD SERVICE LIGHTNING MANAGED PACKAGE

The Field Service Lightning managed package builds on Salesforce's standard field service features to deliver a rich, highly customizable experience for dispatchers and technicians.

The Field Service Lightning managed package is translated into Salesforce's supported languages and includes the following features.

Scheduling and optimization

A robust toolbox of work rules and scheduling policies optimizes resource assignments by considering skills, location, and your business objectives.

Administration app

Admins can integrate and maintain scheduling policies, global actions, sharing tools, and optimization rules all in one place.

Automatic user permission setup and updates

Set up your field service user permissions and keep them updated with the click of a button.

Dispatcher console

A customizable appointment list, scheduling actions, Gantt chart, and interactive map give dispatchers and supervisors a bird's-eye view of all service appointments. Dispatchers can ensure

that a job is routed to the right mobile employee and immediately see alerts for pressing issues. Easily schedule complex jobs, and track and monitor service delivery in real time.



Note: Before installing the Field Service Managed package, enable Field Service Lightning.

1. Install the Field Service Lightning Managed Package

After Field Service Lightning is enabled, install the managed package to gain access to the dispatcher console and scheduling tools.

2. Guided Setup for Field Service Lightning

After you install the Field Service Lightning managed package, you can use its Guided Setup to create your service territories and operating hours, define your work types and skill sets, define your agents, dispatchers, and service resources, and configure your scheduling policies. Use guided setup as often as you'd like to adjust your field service settings.

3. Set Up Permissions and Page Layouts for the Field Service Lightning Managed Package

After you install the Field Service Lightning managed package, create and assign permission sets and ensure that page layouts are configured correctly.

4. Get Ready for Scheduling with the Field Service Lightning Managed Package

Define your service appointment life cycle, configure appointment booking settings, and get to know your scheduling policies, optimization settings, and sharing settings.

5. Work in the Field Service Lightning Dispatcher Console

The dispatcher console in the Field Service Lightning managed package is the main working space for dispatchers. It features a dynamic map and highly customizable Gantt chart showing upcoming appointments, active team members, and more. To reach the dispatcher console, open the Field Service app from the App Launcher and click the Field Service tab.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Install the Field Service Lightning Managed Package

After Field Service Lightning is enabled, install the managed package to gain access to the dispatcher console and scheduling tools.

 Click the appropriate installation link on the download page: https://fsl.secure.force.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**. This request allows Salesforce to collect the latitude and longitude values for service appointment addresses so that the service scheduling optimizer can function.

3. If a message indicates that the installation is taking longer than expected, click **Done**. Once the installation is complete, you will receive an email notification.

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

- 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To install the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

Manage Profiles and Permission Sets

Guided Setup for Field Service Lightning

After you install the Field Service Lightning managed package, you can use its Guided Setup to create your service territories and operating hours, define your work types and skill sets, define your agents, dispatchers, and service resources, and configure your scheduling policies. Use guided setup as often as you'd like to adjust your field service settings.

From the Field Service Admin app, go to the Field Service Settings tab. Under Getting Started, click **Go to Guided Setup**. Follow the steps in the left side panel in order, as each step relies on the previous step being complete. Once you've set up field service, you can return to guided setup and make adjustments in any order.

When you launch guided setup, all Field Service Lightning permission sets are updated to the latest permissions required. If you're missing a necessary permission, you'll see a message telling you which permissions you need to continue.



Note: When you edit a record's details in guided setup, your changes are saved immediately. There's no **Save** button.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

The bottom of the guided setup home page includes icons that show the number of records for each object in your org. Click an icon to navigate to its guided setup page.

Define Field Service Territories with Guided Setup

Service territories can represent a geographical or functional area of your field service organization. Try to create territories with no more than 50 service resources so that your dispatchers can coordinate with a reasonable number of resources.

Define Work Types and Skills with Guided Setup

Chances are, your business performs the same tasks for multiple customers. Work types are work orders templates that save you time and make it easier to standardize your field service work. The skills required to complete those task are also standard to your company.

Define Field Service Resources with Guided Setup

Service Resources are users who can complete field service work. Define your service resources, their primary service territory, their skills, and assign them the necessary FSL licenses.

Define Field Service Dispatchers and Agents with Guided Setup

Define your dispatchers and agents that use Field Service Lightning. Assign licenses and permissions and create User Territory records to specify which territory the users cover.

Define Field Service Appointment Booking with Guided Setup

The Field Service Lightning Appointment Booking feature lets you offer truth-based graded appointment slots, meaning slots are based on actual availability of the mobile workers and graded according to the organization KPIs (key performance indicators) as defined in the selected Scheduling Policy.

Define Field Service Scheduling Policies with Guided Setup

When building and maintaining the schedule, the FSL scheduling and optimization engine apply scheduling logic that is defined in various scheduling policies. Scheduling policies are configurable. It is possible to have several policies for the same territory in different times or for various territories.

Define Field Service Territories with Guided Setup

Service territories can represent a geographical or functional area of your field service organization. Try to create territories with no more than 50 service resources so that your dispatchers can coordinate with a reasonable number of resources.

Defining your service territories and having a manageable number of resources is a crucial step for Field Service Lightning to operate properly and provide the best optimization results.

Members of a territory automatically inherit the territory's operating hours unless different hours are specified on the service territory member record.

Define the address on the service territory, as it is used as the territory's default home base. If a service resource's home base is different, than define the address on the service territory member record. That overrides the default territory home base. Field Service Lightning uses the home base information to calculate travel for the first and the last leg of the day.

When creating new Operating Hours define the days of the week and hours for each day. Very important to select the Timezone that this Service Territory is located in. NOTE: If you need to create the Operating Hours with varying work hours for each day you will need to do this in the Record itself. The Guided Setup helps define generic Operating Hours. Select the new Operating Hours, they are now assigned to the new Service Territory.

1. Under Territories Definition, enter the name of the new service territory and click Add.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- **2.** After the record is saved, edit the service territory details.
- **3.** Use operating hours drop down, to select existing operating hours or create a new operating hour. When creating new operating hours define the days of the week and hours for each day. Click **Save Operating Hours** and the operating hours are saved to the new service territory. Create operating hours that vary each day on the operating hours record itself.



Note: It's very important to select the timezone for the service territory.

Define Work Types and Skills with Guided Setup

Chances are, your business performs the same tasks for multiple customers. Work types are work orders templates that save you time and make it easier to standardize your field service work. The skills required to complete those task are also standard to your company.

- 1. Under Work Types & Skills, enter a name and description. 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.
- 2. Add a Due Date Offset. When this value is set for a work type any work orders you create using the work type have their service appointments' due date set to the created date + due date offset.
- 3. Add an Estimated Duration, which is how long the work is estimated to take.
- **4.** Add a Duration Type of minutes or hours.
- **5.** If you'd like a service appointment to be automatically created on work orders and work order line items that use the work type, select **Auto-Create Service Appointment**.
- **6.** You can also add required skills to work orders and work types so only resources with certain skills can be assigned to complete the work. In the **Skill Requirements** field start typing the name of the skill you wish to add. Select the skill from the list provided.

Define Field Service Resources with Guided Setup

Service Resources are users who can complete field service work. Define your service resources, their primary service territory, their skills, and assign them the necessary FSL licenses.

Select a user and name your Service Resource. Optionally, fill in the Gantt label which is shown under the resource name in the dispatcher console. Select the Resource's primary territory. The primary territory is typically the territory where the resource works most often. Service resources can only have one primary territory. A primary service territory membership record is automatically created, which begins on the previous day and is open ended.

Select which licenses and permissions are needed for the user. A user must be assigned the scheduling license for its resource record to be available for scheduling services, such as scheduling from the dispatcher console or by the appointment booking chatter action. In addition, a user must be assigned the mobile license to log in to the FSL mobile app. The necessary licenses and permissions are added to the users by assigning the relevant FSL permission sets.

Below you can search the new and existing Service Resources and add/edit their Skills. Find the newly created resource and check the checkbox by their name. An Update Skills button will appear by the search field. Next to the search window you can see how many Dispatcher and Mobile licenses are available

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

You can update Skills for multiple resources at a time. When updating the skills select the relevant Skills the resource has.

After making selecting the relevant skills there are 3 update options:

- Add Add the selected Skills to the Resource's current Skills.
- Remove Remove the selected Skills from the Resource's current Skills.
- Override Remove all current Skills assigned to the Resource and assign only the selected Skills

Define Field Service Dispatchers and Agents with Guided Setup

Define your dispatchers and agents that use Field Service Lightning. Assign licenses and permissions and create User Territory records to specify which territory the users cover.

Dispatchers need a license to access the dispatcher console. In addition, they need specific permissions for FSL features. Assign your dispatcher users the necessary license and permissions with the Dispatcher icon, which assigns the FSL Dispatcher Permissions and the FSL Dispatcher License permission sets.

Agents need specific permissions for FSL features. Assign your agents the minimal permissions needed with the Agent icon, which assigns the FSL Agent Permissions permission set.

Ø

Note: It is required to use the FSL permission sets. The permission set holds the minimal permissions needed per each persons for the product to function well.

A User Territory record defines which territory these users cover. Create your user territory records to grant their users read/write access to the appropriate Field Service Lightning records.

- 1. Search for existing users to update or click **Add**.
- **2.** Select the user from the drop down and then select the service territories that the user needs access to.
- **3.** In the list assign either the dispatcher license and permissions or the agent permissions. A user cannot have both as the agent permissions is the most restrictive in FSL.
- **4.** Make sure the user territory scheduled job under **Field Service Settings tab** > **Sharing** > **Automation** is configured properly so in the next run it will create and modify the sharing rows so your users will see the data they need. If you want to test, click **Run Now** after you finish configuring the scheduled job.

FSL Scheduled job to calculate sharing

As some of the FSL objects are time phased in nature, FSL need to calculate which of the records actually belong to the territories the Dispatchers and Agents covers so it will open up access to the correct records.

For example, John is a Dispatcher covering the New Jersey territory. The admin created a single User Territory record for john to open up access to FSL records which belong to New Jersey. Jane is a technician working in the Philadelphia territory, but next month she will be moving to work in New Jersey. The admin modified Jane's Service Territory Membership record for Philadelphia to end next month, and created a new service Territory Membership record for her to begin next month in New Jersey. As John should not see FSL records belonging to Philadelphia, FSL cannot share Jane's records with John immediately. Instead, a daily scheduled job will calculate which records should be exposed to John. The admin configured FSL time horizon to open up access 1 day before the service territory membership records starts, so a day before Jane starts to work in New Jersey, John will have access to records related to Jane.

After you create new user territory records:

- 1. Go to Field Service Settings tab > Sharing > Automation.
- 2. Expand the user territories scheduled job to see its details.
- **3.** Make sure it is active and that all required territories are checked.
- **4.** Evaluate the frequency the job runs and its time horizon.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- 5. Save you changes.
- 6. Optionally, you can click run now to update the sharing rows immediately.

Define Field Service Appointment Booking with Guided Setup

The Field Service Lightning Appointment Booking feature lets you offer truth-based graded appointment slots, meaning slots are based on actual availability of the mobile workers and graded according to the organization KPIs (key performance indicators) as defined in the selected Scheduling Policy.

On this page, define your default scheduling policy for the appointment booking and candidate quick actions, and create or update the arrival windows that you want to offer to your customers.

Scheduling Policy Select a scheduling policy for the appointment booking and candidates chatter actions. The default scheduling policy provided by Field Service Lightning upon installation is the customer first policy, which balances great customer service with travel minimization.

Operating Hours Select operating hours that specify the arrival window time slots you are offering to your customers. Field Service Lightning schedules appointments while making sure the scheduled start falls within the arrival window the customer requested. The default scheduling policy provided by Field Service Lightning upon installation is the Gold Appointments Calendar: two-hour time slots, 9am to 5 pm, Monday to Friday.

If you want to create a different operating hours for the appointment booking slots. Press **Create New Operating Hours**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Set the Name of the Operating Hours. Next choose which days you wish to create slots for. Then the duration of each slot (i.e. 1 hour slots, 2 hour slots etc.) and between which hours. These slots will be created for each day selected between the hours defined. If you need to create more complex or varying time slots this can be done on the Operating Hours record itself.

Appointment Booking and Time Zones

Appointments may be booked for customers who reside in a different time zone than the technician, the agent or both. It is crucial that the arrival windows offered to the customer will be in the customer's timezone.

The FSL Appointment Booking chatter action was built to handle this requirement out of the box. When creating the work order (or the service appointment) it's important to populate the Service Territory lookup. The territory selected for the work order (or service appointment) should be the territory where the customer resides. That Service Territory needs to have an Operating Hours configured with the customer's time zone.

Based on this behavior, It is important to note that when creating an Operating Hours record for the Appointment Booking arrival windows, FSL does not consider the time zone defined for that Operating Hours record, instead it only considers the Time zone defined for the Operating Hours on the Service Territory which is populated on the Service Appointment record.

For example, GES (Green Energy Solutions) operation is covering the entire of the USA. John is a call center agent working from GES operation center located in New Jersey. Jane is a Senior engineer located in Idaho, but she may service customers from the neighboring states. Richard is a customer from Nevada who is calling the operation center trying to book an appointment.

John is setup as an agent, his user's time zone is Eastern Standard Time (EST). Jane is setup as a Service Resource. Her primary service territory is based on the Mountain Standard Time (MST) time zone. In addition, Jane user's time zone is set to MST as well.

When John is creating the Work Order for Richard, he is setting the Service Territory to match the customers address, so he is using a service territory set to the Pacific Standard Time time zone (PST).

Richard is presented with some time slots options for the engineer's arrival window and is selecting the 1:00 pm to 3:00 pm arrival window. This time slot is based on the Service Territory defined on the Service Appointment record which was inherited from the Work Order, meaning the arrival window is in PST time zone.

John is booking the slot and closing the Appointment Booking chatter action. When John will check the arrival window details on the service appointment record, it will be presented to him based on the time zone configured under his user settings. As the time zone configured for him is EST, the arrival window will be shown to John on the page layout as 4:00 pm to 6:00 pm (EST).

On the day of service, Jane is opening her mobile app to see her day schedule. She will see that she have a Service Appointment assigned to her with arrival window of 2:00 pm to 4:00pm (MST) as her user timezone is set to Mountain Standard Time time zone.

In summary:

- Richard, GES's customer, received the arrival windows information in his time zone: 1:00 pm to 3:00 pm PST.
- For John the agent, the Appointment Booking chatter action shows the arrival windows in the timezone of his customer's time zone
 1:00 pm to 3:00 pm PST, and on the Service Appointment detail page he sees the arrival window in his user' time zone: 4:00 pm to 6:00 pm EST.
- Jane the engineer sees the arrival window in her time zone: 2:00 pm to 4:00 pm MST.

Define Field Service Scheduling Policies with Guided Setup

When building and maintaining the schedule, the FSL scheduling and optimization engine apply scheduling logic that is defined in various scheduling policies. Scheduling policies are configurable. It is possible to have several policies for the same territory in different times or for various territories.

A scheduling policy is a collection of two elements, which are: work rules and service objectives.

- A work rule filters out candidates (service resources) for a service appointment if they don't meet the rule requirements.
- A service objective is a desirable goal for scheduling, but not an absolute requirement. When
 assembling a scheduling policy, objectives can be assigned a weight in order to adjust the
 importance of certain objectives against others in the scheduling policy.

In this screen you can manage your scheduling policies. You can clone an existing policy or create a new one, and add and remove rules and objectives from a policy and change the objective weighting.



Note: When cloning a Scheduling Policy it will add the same instances of the work rules and service objectives that the original policy had.

After creating or selecting an existing policy you can update the name, description, remove/add work rules.



Note: All changes are committed immediately, there is no save or undo.

In the goals editor you can decide which service objectives to use on the scheduling policy and what their weight will be. When the weight is 0 the service objective will be removed from the policy. Below the graph will be updated to reflect the current weighting.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Set Up Permissions and Page Layouts for the Field Service Lightning Managed Package

After you install the Field Service Lightning managed package, create and assign permission sets and ensure that page layouts are configured correctly.

Before you start customizing the managed package features, we recommend setting up your service territories with their operating hours and members assigned. It's also a good idea to create work types and create and assign service resource skills.

Create Permission Sets with the Field Service Lightning Managed Package Configure and update permission sets with a few clicks of a button.

Assign Permissions with the Field Service Lightning Managed Package

After you create your field service permission sets, give users the permissions they need to complete their field service tasks.

Assign Page Layouts from the Field Service Lightning Managed Package

Update page layouts of field service objects for profiles used for field service lightning.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To configure the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

Create Permission Sets with the Field Service Lightning Managed Package

Configure and update permission sets with a few clicks of a button.

- 1. In the App Launcher, select the Field Service Admin app.
- 2. Select the Field Service Settings tab.
- 3. Click **Getting Started** from the left-side panel.
- 4. Click Permission Sets.
- **5.** On each tile, click **Create Permissions.** The following permission sets are created.

| Tile Name | Permission Sets Created | Purpose |
|--------------|--|--|
| FSL Admin | FSL Admin License* FSL Admin Permissions | Let users access and manage all Field Service Lightning objects, including the Field Service Lightning Visualforce pages and logic services. FSL Admin Permissions contains the permissions included in FSL Dispatcher Permissions along with additional configuration permissions. |
| FSL Agent | FSL Agent License* FSL Agent Permissions | FSL Agent Permissions provides the minimum permissions needed to use the field service Chatter actions, such as the Book Appointment, Get Candidates, and Emergency. |
| FSL Resource | FSL Mobile License FSL Resource License FSL Resource Permissions | FSL Mobile License provides the permission set license needed for users to log in to the Field Service Lightning mobile app. FSL Resource Permissions provides the minimum permissions needed for users to update appointment status and update their last known location. FSL Resource License provides the permission set license needed for the user to be scheduled by |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To configure the Field Service Lightning managed package:

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 Manage Profiles and Permission Sets

| Tile Name | Permission Sets Created | Purpose |
|--------------------------|---|---|
| | | the scheduling engine and optimizer. |
| FSL Dispatcher | FSL Dispatcher License FSL Dispatcher Permissions | FSL Dispatcher License gives users the permission set license needed to load the dispatcher console. FSL Dispatcher Permissions contains the permissions included in FSL Agent Permissions and FSL Resource Permissions along with permissions to operate the dispatcher console and run optimization. |
| FSL Self Service | FSL Self Service License FSL Self Service Permissions | Let community users view all global actions and their related objects for creating, booking, and scheduling their own appointments. |
| FSL Community Dispatcher | FSL Community Dispatcher License FSL Community Dispatcher Permissions | Let users view and use the dispatcher console, view global actions and their related objects, and schedule, optimize, and dispatch service appointments. |

^{*}Newer Salesforce orgs don't need the FSL Agent License and FSL Admin License permission sets. In these orgs, Salesforce won't create these two permission sets.

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.

Auto-Updating Field Service Permission Sets

The Field Service Lightning managed package automatically updates its permission sets at the beginning of each major release.

Auto-Updating Field Service Permission Sets

The Field Service Lightning managed package automatically updates its permission sets at the beginning of each major release.

The managed package has three major releases each year that follow Salesforce's 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. We know admins are busy people, so we update all of the managed package-provided permission sets when a user launches one of the following pages:

- Dispatcher Console (vf001_ServiceExpert)
- Appointment Booking Chatter action (AppointmentBookingVf and AppointmentBookingCommunitiesVf)
- Candidates Chatter action (GetCandidates)

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- Emergency Chatter action (EmergencyWizard)
- Admin Settings (vf066_settings)

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

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

(1)

Important: 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 FSL Permission Sets* feature.

Assign Permissions with the Field Service Lightning Managed Package

After you create your field service permission sets, give users the permissions they need to complete their field service tasks.

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

Administrator

A Salesforce admin integrates Field Service Lightning features and sets up user permissions as needed for your org.

Agent

Agents handle inbound cases, create work orders, and book appointments from the dispatcher console

Dispatcher

Dispatchers build and manage appointments, assign technicians, and optimize scheduling based on technician skills, routing, and job priority.

Resource

Field resources or technicians receive work orders and appointments from dispatchers or agents. They also update job progress from mobile devices with the Salesforce app or the Field Service Lightning mobile app.

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

| Tasks | Required Standard Profile | Permission Sets |
|---|------------------------------|--|
| Administrator: Manage all Field Service Lightning objects, including the Field Service Admin app, Field | System Administrator | FSL Admin License*FSL Admin Permissions |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

To assign a permission set

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

| Tasks | Required Standard Profile | Permission Sets |
|--|---------------------------------------|--|
| Service Lightning Visualforce pages, and logic services. | | |
| Agent: Access all global actions and their related objects to create, book, and schedule service appointments. | Standard User or System Administrator | FSL Agent License*FSL Agent Permissions |
| Dispatcher: Access all global actions and their related objects to create, book, and schedule service appointments. | Standard User or System Administrator | FSL Dispatcher LicenseFSL Dispatcher Permissions |
| Manage service appointments and their related parent objects. | Standard User or System Administrator | FSL Mobile LicenseFSL Resource LicenseFSL Resource Permissions |

^{*}Newer Salesforce orgs don't need the FSL Agent License and FSL Admin License permission sets. In these orgs, Salesforce won't create these two permission sets, so they don't need to be assigned.

- **6.** Under Permission Set License Assignments, click **Edit Assignments**.
- 7. Enable the appropriate permission set licenses and click **Save**.

| Permission Set License | Description |
|--------------------------|--|
| Field Service Standard | Enable this permission set license for all field service users. |
| Field Service Scheduling | Enable this permission set license for all mobile resources. |
| Field Service Dispatcher | Enable this permission set license for all dispatcher console users. |
| Field Service Mobile | Enable this permission set license for all mobile resources. |

Set Custom Permissions for the Field Service Lightning Managed Package

Use custom user permissions to control users' access to actions and views.

Set Custom Permissions for the Field Service Lightning Managed Package

Use custom user permissions to control users' access to actions and views.

Use custom permissions to limit access to:

- Bulk actions, such as dispatching, optimizing, and scheduling
- Console list views, such as appointments with a specific status, contractors, and the Gantt chart
- Resource scheduling actions, such as fill-in and fix overlaps
- Appointment scheduling actions, such as Schedule, Reshuffle, and Group Nearby Appointments
- Gantt views, such as multi-day work and month views
- Map polygon actions, such as create, edit, and view
- Service territory utilization
- Creating service resource absences from the Gantt chart
- Viewing secondary territory members on the Gantt chart
- Applying Gantt palettes
- Viewing and using custom dispatcher console actions



Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

- **Example**: To limit the dispatchers who can optimize your schedule so the system isn't bogged down with optimization requests, create custom permissions for bulk actions in the dispatcher console:
 - FSL.Bulk Dispatch
 - FSL.Bulk Optimize
 - FSL.Bulk Schedule

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

Assign Page Layouts from the Field Service Lightning Managed Package

Update page layouts of field service objects for profiles used for field service lightning.

- (1) Important: 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. Selecting 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 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

To assign page layouts:

 Manage Profiles and Permission Sets

Get Ready for Scheduling with the Field Service Lightning Managed Package

Define your service appointment life cycle, configure appointment booking settings, and get to know your scheduling policies, optimization settings, and sharing settings.

Define the Service Appointment Life Cycle

A service appointment life cycle is 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. If the Field Service Lightning managed package is installed, you can configure the life cycle to meet your business needs.

Configure Appointment Booking Settings

Users can book service appointments for a work order, work order line item, or other records by clicking **Book Appointment** in the record's Chatter feed. Customize this booking experience from the Field Service Admin app.

Enable Street-Level Routing for Accurate Travel Times

Street-level routing (SLR) improves travel calculation drastically by considering real turn-by-turn data. Enable SLR for the Field Service Lightning managed package to improve schedule optimization.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Manage Schedule Optimization with the Field Service Lightning Managed Package

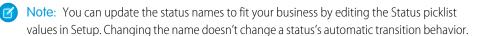
The scheduling optimizer helps your field service team comply with SLAs, minimizes travel time, overtime, costs, and no-shows. It maximizes efficiency by assigning resources to as many service appointments per shift as possible. You can configure the optimizer to run repeatedly—for example, every day—or you can run it manually.

Define the Service Appointment Life Cycle

A service appointment life cycle is 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. If the Field Service Lightning managed package is installed, you can configure the life cycle to meet your business needs.

Service appointments come with the following statuses to represent stages in their life cycle.

- None
- Scheduled
- Dispatched
- In Progress
- Completed
- Cannot Complete
- Canceled



Here's how to customize your service appointment life cycle.

- 1. From the App Launcher, open the Field Service Admin app and click the Field Service Settings tab.
- 2. Click Service Appointment Life Cycle.
- 3. Click **SA Status**. Select a status value to correspond to 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.
- **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. The status flow diagram at the bottom of the page shows your status flows, but doesn't show profile-based restrictions.
- **8.** Save your changes.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Configure Appointment Booking Settings

Users can book service appointments for a work order, work order line item, or other records by clicking **Book Appointment** in the record's Chatter feed. Customize this booking experience from the Field Service Admin app.

From the App Launcher, open the Field Service Admin app and click the Field Service Settings tab. Then click **Global Actions** > **Appointment Booking** to review your appointment booking settings.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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For an appointment to be scheduled, the following information is needed.

- Which scheduling policy to use
- The appointment's work type, service territory, address, Earliest Start Permitted, and Due Date

On the Appointment Booking page, you can define a default scheduling policy to be used when booking appointments for any type of record. Alternatively, you can set the default scheduling policy for each object on the Derivations page.

On the Appointment Booking page, you can also control:

- The fields shown on the Book Appointment Chatter action
- The display settings for potential time slots

Enable Street-Level Routing for Accurate Travel Times

Street-level routing (SLR) improves travel calculation drastically by considering real turn-by-turn data. Enable SLR for the Field Service Lightning managed package to improve schedule optimization.

One of the most important KPIs that field service organizations track and try to improve is travel time per job. A small improvement can add a lot of time for the technician to perform additional work, drive less, save on gas, have a lower carbon footprint, and reach the customer on time. Accurate route planning greatly contributes to the ability of your mobile workforce to perform at the highest level.

Routing allows you to calculate the following:

- Travel time: How long it takes the worker to arrive at a location.
- Travel distance: From one location to another

Field Service Lightning uses routing to minimize worker travel time and distance between appointments, calculate travel time and distance, and make this information visible to the user.

While **aerial** routing computes the shortest distance between two locations based on a straight line route, **SLR** computes the distance along roads or transportation routes. This is the most accurate

distance, as it is based on information and measurements of actual road speeds and the expected travel speed based on road type. SLR calculation takes a bit longer than aerial routing calculation.

To opt to use street-level routing in travel calculation, open the Field Service Admin app from the App Launcher. Click **Field Service Settings** > **Scheduling** > **Routing** and select **Enable Street Level Routing**.

Street Level Routing Considerations

- Resource travel speed isn't taken into account when SLR mode is activated. However, if the calculation falls back to aerial routing, travel speed is then taken into account.
- The Street Level Routing Cache object improves SLR calculation time for distances that were already calculated in the last 30 days between two given points. We recommend you don't delete the SLR Cache object.
- The travel time is based on the Driving profile in Google maps and can't be changed.
- SLR creates a grid of 200m squares. Every service appointment within the grid gets the same geolocation for routing purposes.
- Service appointments with more than a 100-kilometer distance uses aerial routing instead.
- Multiday work scheduling doesn't support SLR and use aerial routing instead.
- When you drag and drop a service appointment the routing calculates depending on the chosen start time.
- Any scheduling action that is triggered in a transaction with data manipulation language uses aerial routing instead.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Manage Schedule Optimization with the Field Service Lightning Managed Package

The scheduling optimizer helps your field service team comply with SLAs, minimizes travel time, overtime, costs, and no-shows. It maximizes efficiency by assigning resources to as many service appointments per shift as possible. You can configure the optimizer to run repeatedly—for example, every day—or you can run it manually.

For example, before running the service scheduling optimizer you may have:

- 62 scheduled hours
- 24 minutes average travel
- 51 scheduled jobs

After you run the service scheduling optimizer, you have:

- 69.5 scheduled hours
- 15 minutes average travel
- 56 scheduled jobs

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Building Blocks of Field Service Lightning Optimization

Learn how work rules, service objectives, and scheduling policies keep your scheduling optimization ticking.

Activate the Field Service Lightning Optimizer

Activate the service scheduling optimizer so you can get started creating an efficient schedule for your field service team. You can configure the optimizer to run regularly, or run it manually.

Fix Scheduling Overlaps

Reschedule appointments that overlap another appointment or an absence with the click of a button.

Fill-In Schedule Gaps for Service Resources

Fill-in schedule creates a list of appointments for a technician and finds the optimal schedule.

Group Nearby Appointments

Group nearby appointments that are close to a given appointment.

Reshuffle Appointments to Schedule High Priority Work Over Lower Priority Jobs

When your schedule has no room for that high priority job, Appointments Reshuffle moves lower priority jobs to a later date or unschedules them. This frees up your technician for the more important job.

Reserve Time Slots for Designated Work

Create specific time slots dedicated to service appointments that meet your criteria.

Optimize a Single Resource's Schedule

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 Limits and Considerations

Learn about the limits and considerations that exist for optimization in Field Service Lightning.

Building Blocks of Field Service Lightning Optimization

Learn how work rules, service objectives, and scheduling policies keep your scheduling optimization ticking.

Manage Field Service Scheduling Policies

A scheduling policy is a set of rules that guides the Field Service Lightning scheduling engine in its decisions. Use scheduling policies to promote or de-emphasize factors like business priorities, travel time, and customer preferences.

Field Service Lightning Definitions for Optimization

Work rules, service objectives, scheduling policies, and relevance groups are important to efficient optimizations. Learn how they are defined in relation to Field Service Lightning.

Work Rules for Optimization

Review the work rules that affect field service optimization.

Service Objectives for Optimization

An objective is a desirable goal for the logic operation, but not an absolute requirement.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Manage Field Service Scheduling Policies

A scheduling policy is a set of rules that guides the Field Service Lightning scheduling engine in its decisions. Use scheduling policies to promote or de-emphasize factors like business priorities, travel time, and customer preferences.

The Field Service Lightning managed package comes with four scheduling policies. You can also create your own.

- 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
 provide the service 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 you need to focus first on employee productivity and second on customer preferences.
- **Soft Boundaries**—Identical to the Customer First policy, but allows the sharing of employees between territories to enhance service coverage.
- **Emergency**—Used with the Emergency Chatter action to dispatch emergency service appointments.

A scheduling policy must include a resource availability rule, so one resource availability rule is automatically added to each policy.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

You can change the weights of the predefined scheduling policies. You can also clone a predefined scheduling policy and adjust the rules, objectives, and objective weights according to your preference.

To create and manage scheduling policies, open the Field Service Admin app from the App Launcher. Click **Field Service Settings** > **Scheduling Policies**. Add existing service objectives and work rules to your policy from their respective related lists on the policy.



Tip: After you define or modify scheduling logic, test the results of various scheduling scenarios by using the Get Candidates action in the dispatcher console.

Field Service Lightning Definitions for Optimization

Work rules, service objectives, scheduling policies, and relevance groups are important to efficient optimizations. Learn how they are defined in relation to Field Service Lightning.

Work Rules

Work rules are hard yes-no qualifiers, allowing to instantly identify those field resources who are actual candidates for the job at hand. A work rule places a constraint on scheduling; It defines which assignments (an assigned resource, such as a technician, for a specific service at a specific time) are valid and which are not. For example, the Match Skill rule ensures that a service will be assigned only to resources that have the skill set needed to perform the task.

Field Service Lightning comes with a predefined set of Work Rules. These can be edited, limited to specific groups of resources (using relevance groups) and even applied differently to different types of Service Resources.

The system will never schedule work to resources who violate one of the rules by itself. Manual override is possible on the Gantt itself, in which case a rule violation notification will be shown, and an explanation highlighting which rule is violated will be shown in the tooltip.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Service Objectives

Every company has its own set of business goals and priorities. Field Service Lightning allows you to modify its scheduling behavior and adjust it to your company's needs. As many field service objectives might conflict with one another, these objectives can be weighed and considered in every scheduling decision made by the system.

A service objective reflects a scheduling goal or target. Each objective returns a grade, or score, for services. When a service is scheduled, the scheduling engine calculates the added score of an objective, and the total score of all objectives taken into consideration is the scheduled service's total score. Services with higher scores are preferred by the scheduling engine.

Scheduling Policies

Scheduling Policies align system's behavior with organizational KPIs in determining an 'optimal' resource for each and every service appointment at hand. It combines Work Rules and Service Objectives to scenario-specific behavior preference (business as usual, high load, emergency, etc').

A scheduling policy is a set of work rules and service objectives that the scheduling engine can consider when it's finding the best candidates and slots to create an optimized schedule. Field Service Lightning comes with a predefined set of scheduling policies, and you can edit them or create your own.

Relevance Groups

It is very common for Service Resources to differ one from another (Full Time vs Part Time, Internal vs Contractor, etc) and this may affect how scheduling rules should apply to them.

Most Rules and Service Objectives contain various inner configurations. Rules and Objectives may be cloned (one for each category of resources), allowing you to modify internal configurations and then to limit each record to the right group ('Relevance Group') with one of the two visualforce components:

- Work Rule component: Vf001GRoupOnWorkRules
- Service Objectives component: Vf002GroupOnObjectives

Relevance Group may be defined based on one of the following:

- Boolean on the Service Resource record
- Boolean on the 'Service Territory Member' record
- (1) Important: For the scheduling logic to function, Service Appointments must be parented by Work Order or Work Order Line Items.

Work Rules for Optimization

Review the work rules that affect field service optimization.

Field Service Optimization Work Rule: Service Resource Availability

This fundamental rule type ensures that a resource is available to perform the service. This is based on each service territory's operating hours (default) or on service resources' operating hours assigned to them via their service territory member record (which overrides the default).

Field Service Optimization Work Rule: Match Boolean

This rule type validates that a Boolean property on the Service Resource object is set to true or false. For example it can check whether a Service Resource is Active, and avoid scheduling an inactive Service Resource.

Field Service Optimization Work Rule: Match Skills

This rule type matches the required skills for a service with a resource's skill set. It can also be used to match skill levels.

Field Service Optimization Work Rule: Match Fields

This rule type matches a property between 'Service Appointment' and 'Service Resource' objects.

Considering the 50-skills per resource guidance (see 'Match Skills' rule), It is particularly useful in scenarios where Service Resource Skills embody a complex model. For example, categorizing Service Resources Skills per territory+technical level+specific parts or products to work on.

Field Service Optimization Work Rule: Match Time Rule

Timing is everything in Field Service, and the 'Match Time' Rule enables FSL users to perfect timing like no one else! This rule does so by limiting the scheduling time windows according to service date, and other time properties.

Field Service Optimization Work Rule: Required Resources

This rule type ensures that the assigned resource for the service is one of the required resources specified on the service. This rule is particularly useful when a 1:1 relationship between a customer and service provider must be maintained. Home healthcare with dedicated providers is a great example.

Field Service Optimization Work Rule: Excluded Resources

Sometimes service organizations may need a way to make sure certain Service Resources never interface with specific customers. This may be a result of poor service delivered by the resource previously, competitive situations (where end customers compete with one another) or other.

Field Service Optimization Work Rule: Maximum Travel From Home

This rule type lets you set the maximum distance or maximum travel time between a Service Resource's home base and their first Service Appointment.

Field Service Optimization Work Rule: Service Appointment Visiting Hours

Often, customers have specific demands regarding service delivery times. For example, a shopping mall may only agree to maintain its elevators after hours. This work rule ensures that the service scheduling optimizer only schedules appointments for customers within their operating hours.

Field Service Optimization Work Rule: TimeSlot Designated Work

For many service organizations, work continues well after working hours are over, and Service Resources may be asked to work 'on call' and be prepared to handle urgent work that cannot stand a delay until next day. There are many scenarios where service organizations need to reserve certain times of the day to handle only one type of work. When only one type of work should be allowed for scheduling at specific times of day, the TimeSlot Designated Work Rule comes to play.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Optimization Work Rule: Match Territory

Service Resources need to belong to a Service Territory in order to be considered for Service Appointments. Match Territory is the rule that matches between the Service Territory of the Service Appointment and the one of the Service Resource.

Field Service Optimization Work Rule: Working Territories

Sometimes, resources need to be available to take on work in more than one group or geographical area. The Working Territories rule supports such scenarios, governing the Primary and Secondary Territory Memberships.

Field Service Optimization Work Rule: Service Resource Availability

This fundamental rule type ensures that a resource is available to perform the service. This is based on each service territory's operating hours (default) or on service resources' operating hours assigned to them via their service territory member record (which overrides the default).

This rule takes into account travel time (or gap) between appointments and previously scheduled services, as well as additional constraints described in this table.

| Field Name | Description |
|-------------------------------|---|
| Overtime | If set to 'True', the system will allow scheduling work during time marked in the relevant 'Operating Hours' record as 'Extended'. You may need to add field to layout. |
| Fixed Gap | If selected, the gap between services will be based on the minimum gap field, without travel calculations. This setting is useful for remote consultants; for example, you may want to provide twenty minutes between appointments for record-keeping. |
| Minimum Gap (minutes) | Determines the minimum gap between services. If Fixed Gap is selected, the value here will determine the gap between the services. |
| Break Start | Determines the minimum break start time in the format {HH:MM} to create breaks. Leave this field empty if you don't want to create breaks. Note: Break start will be considered as earliest possible time, not set time. When scheduling the system will insert the break between service appointments, as close as possible to earliest start time but without compromising ability to start and complete service appointments. |
| Break Duration | Defines break length |
| Travel from Home (minutes) | Determines how many minutes the resource will be available for travel before the start of the work day (at the resource's expense). If this field is empty, any amount of travel before the start of the work day is valid. |
| Travel To Home | Determines how many minutes the resource will be available for travel at the end of the work day (at the resource's expense). If this field is empty, any amount of travel after the end of the work day is valid. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

It is very common for service resources to differ from one another in how scheduling rules apply to them (Full Time vs Part Time, Internal vs Contractor, etc). Resource Availability is a key rule to materialize this differentiation, whether it's the ability to work overtime, receive a scheduled break (or not) and its duration, and finally - defining where one should be at the beginning and end of his or her availability.

Using the Vf001GroupOnWorkRules Visualforce component, you may differentiate between resources based on custom boolean fields on the 'Service Territory Member' object.

Travel at the Expense of the Resource

Resource Availability rule relies on one's 'Operating Hours'. It is important to define where the service resource should be at the beginning and end of his or her daily availability.

- Be On Site: If one's availability starts at 9 AM, and the expectation is for the resource to commence work on site at this time, then travel should occur 'at the expense of the resource' or in other words, before the availability begins.
 - Assign maximum time that the system should consider for travel before Service Resource availability begins.
 - You may choose 'unlimited travel time' by keeping the 'Travel From/To Home' fields blank.
- Start Driving: If one's availability starts at 9 AM, and the expectation is for the resource to start driving towards its first work site, then travel time occurs 'at the expense of the employer.'
 - Set Travel From home to zero.

When scheduling contractors, the Service Resource Availability work rule fails if one of the following happens.

- 1. There are more scheduled working hours than specified on the resource capacity.
- **2.** There are more scheduled work items than specified on the resource capacity.
- **3.** A service appointment was scheduled to a resource capacity and then its capacity was deleted or changed.

Field Service Optimization Work Rule: Match Boolean

This rule type validates that a Boolean property on the Service Resource object is set to true or false. For example it can check whether a Service Resource is Active, and avoid scheduling an inactive Service Resource.

This rule contains two key fields.

- Resource Property: points the rule to the relevant field on the Service Resource object.
- Value is True: defines whether a rule is triggered when the property is set to True or False.

If you wish to introduce a new Boolean for consideration by this rule, simply add the API name of your new field as a picklist value to the 'Resource Property' field.

Active Resources is a Match Boolean rule type that is provided out of the box with Field Service Lightning. It serves two purposes.

- It assures that only 'Active' Service Resources are considered for scheduling.
- It allows to preserve historical data on the Gantt, so even after a Service Resource is no longer employed by the company, the historical data remains.

The optimization cloud supports a maximum of 10 Match Boolean rules in a single scheduling policy.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Optimization Work Rule: Match Skills

This rule type matches the required skills for a service with a resource's skill set. It can also be used to match skill levels.

| Field Name | Description |
|-------------------|--|
| Match Skill Level | If selected, Service Resources whose skill level is lower than what is specified on the service will be filtered out, and won't be considered as eligible candidates to perform the service. |

You can create skills from the Setup section. Note: do not confuse with 'Work.com Skills" and "Service Resource Skills". Look for Field Service > Skills section. You only need to assign Name and Developer Name.

Skill requirements are derived from Work Types. Once your skills are created, you may assign them to relevant work types.

Once your skills are created and assigned to relevant work types, you may assign skills to individual Service Resources, including Skill Levels.

Look for the lowest common denominator. Only configure skills that will make a difference when making scheduling decisions: Do not include skills that are common amongst all Service Resources. Aim to assign less than 50 skills per resource.

Leverage time phased skills. Certain skills such as mandatory periodic drug tests, or mandatory certifications may have an expiry date after which the Service Resource should not be scheduled unless updated. On the Service Resource profile, each skill can be set to 'Phase Out' at a certain date.

Field Service Optimization Work Rule: Match Fields

This rule type matches a property between 'Service Appointment' and 'Service Resource' objects. Considering the 50-skills per resource guidance (see 'Match Skills' rule), It is particularly useful in scenarios where Service Resource Skills embody a complex model. For example, categorizing Service Resources Skills per territory+technical level+specific parts or products to work on.

This rule is currently not supported by the optimization cloud.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Optimization Work Rule: Match Time Rule

Timing is everything in Field Service, and the 'Match Time' Rule enables FSL users to perfect timing like no one else! This rule does so by limiting the scheduling time windows according to service date, and other time properties.

| Component | Definition |
|--------------------------------|--|
| Service Schedule Time Property | Defines if the rule controls the planned beginning or end of a Service Appointment time frame. |
| Service Time Operator | How the time fields are compared to each other. Options are: Before, Before or Equal to, Equal to, Later than or Equal to. |
| Service Time Property | EarliestStartTime/DueDate: The total time frame during which a service should commence and complete. ArrivalWindowStart/EndTime: The narrower time frame (usually an appointment) promised to the customer. |
| Pass Empty Values | If the values of either of the Service Time Properties are empty then ignore this rule. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Field Service Lightning comes with two pairs of out-of-the-box match time rules which govern the fundamental time dimensions of FSL making scheduling possible.

- Earliest Start Permitted: ensures that the service will be executed on time in relevance to the earliest start allowed by validating that the equation Early Start <= start is true.
- Due Date: ensures that the service will be executed on time in relevance to the required due date by validating that the equation Due Date <= finish is true.

These two rules take care of the broadest time horizon, the "Playground" in which the Service Appointment must take place - often measured in 3-7 days.

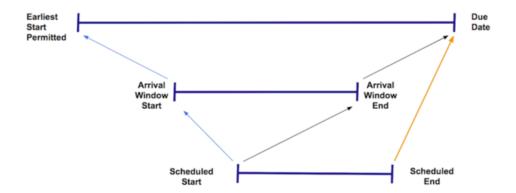
These two rules are essential for the system to be able to function in a time space, and so they are always automatically included in every scheduling policy.

- Arrival Window Start: ensures that the resource will not arrive to the service site before the promised Appointment Start by validating that the equation Appointment Start <= Start is true.
- Arrival Window End: ensures that the resource will arrive to the service site before the promised Appointment Finish by validating that the equation Start <= Appointment finish is true.

The second set of rules looks after the appointment booking functionality and enforces scheduling within the much more constrained time windows, usually two to four hours.

With the rules in place, the system is able to produce "Scheduled Start/End" times.

- Scheduled Start will always happen within the time windows, leveraging travel time calculation from previous Service Appointment to calculate exact start time within these windows.
- Scheduled End will be derived from Scheduled Start time + Work Type Duration.



Time constraints limit system's ability to optimize. Validate current-state time constraints and customer commitments when booking appointments, and evaluate the desired goals.

- Improve service delivery within SLAs
- Reduce customer wait time when booking appointments

Field Service Optimization Work Rule: Required Resources

This rule type ensures that the assigned resource for the service is one of the required resources specified on the service. This rule is particularly useful when a 1:1 relationship between a customer and service provider must be maintained. Home healthcare with dedicated providers is a great example.

This rule leverages the 'Resource Preference' related list on the Account & Work Order objects. To assure only specific resources are scheduled to service a specific account, create new resource preference in the account, lookup the Service Resource at hand, and set preference type to 'Required'. When a new Work Order is created, this information will carry over and be considered when making scheduling decisions and recommendations.

Be mindful of the fact that this is a highly restrictive rule, as it narrows down the options for the system only to the resources noted as required for a particular account.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Optimization Work Rule: Excluded Resources

Sometimes service organizations may need a way to make sure certain Service Resources never interface with specific customers. This may be a result of poor service delivered by the resource previously, competitive situations (where end customers compete with one another) or other.

This rule type insures that the assigned resource is not one of the excluded resources specified on the Work Order. It leverages the 'Resource Preference' related list on the Account & Work Order objects. In order to exclude resources from being scheduled to service a specific account, create new resource preference in the account, lookup the Service Resource at hand, and set preference type to 'Excluded'. When a new Work Order is created, the Resource Preferences will be copied from the Account and be considered when scheduling.

Most resource 'exclusions' are based on availability, proximity, and skills - aspects covered by other rules in Field Service Lightning. We recommend to leverage this rule to manage 'non systematic exceptions' - in other words, scenarios where a rare event (a customer complaint for example) serves as the trigger to exclude someone from serving the account, even though the resource is fully qualified based on all other rules.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Optimization Work Rule: Maximum Travel From Home

This rule type lets you set the maximum distance or maximum travel time between a Service Resource's home base and their first Service Appointment.

This work rule may be particularly useful if the Service Territories don't represent geographical regions but rather functional such as Maintenance and Installation departments. In such a situation, this rule prevents resources from being assigned to services that are too far from their home base.

| Component | Definition |
|-------------------------------|---|
| Maximum Travel From Home Type | Define the maximum distance based on travel time or distance. Both options are calculated using aerial distance, or more commonly, as the crow flies. |
| Maximum Travel From Home | The numerical value to be considered: minutes, or miles/kilometers, the default setting in Field Service Settings. |
| Relevance Groups | You may apply this rule to specific types of resources based on custom fields in the Service Territory Member object, as well as for specific types of Service Appointments, based on a custom Boolean field on the object. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Additional Considerations

- If a Service Resource's Home Base hasn't been specified, they cannot be a candidate for any Service Appointment.
- If a Service Appointment does not have geo coordinates (address) they can be assigned to any resource with a Home Base.
- The Maximum value on the work rule must be positive.
- The relevance groups on the object may be used to address scenarios where certain type of work or certain type of resources should not be dispatched far away in the morning.

- Do not drive more than 20 Miles away for maintenance work at day start.
- Do not dispatch highly qualified workers more than 20 Miles away at day start.

Field Service Optimization Work Rule: Service Appointment Visiting Hours

Often, customers have specific demands regarding service delivery times. For example, a shopping mall may only agree to maintain its elevators after hours. This work rule ensures that the service scheduling optimizer only schedules appointments for customers within their operating hours.

Dispatchers can manually schedule appointments outside customer's operating hours, though they'll be alerted of a rule violation when they are doing so. This rule leverages the Operating Hours lookup field on the account.

For details, see Enforce Visiting Hours.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Optimization Work Rule: TimeSlot Designated Work

For many service organizations, work continues well after working hours are over, and Service Resources may be asked to work 'on call' and be prepared to handle urgent work that cannot stand a delay until next day. There are many scenarios where service organizations need to reserve certain times of the day to handle only one type of work. When only one type of work should be allowed for scheduling at specific times of day, the TimeSlot Designated Work Rule comes to play.

This rule relies on the 'Operating Hours' object, and its 'Designated Work' functionality and Service Appointment Booleans. With the rule included in your scheduling policy, you can assign time slots, and set them to 'Designated Work'. Select the differentiating Boolean on the Service Appointment, and the system will only allow to schedule Service Appointments where this value is set to True.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Optimization Work Rule: Match Territory

Service Resources need to belong to a Service Territory in order to be considered for Service Appointments. Match Territory is the rule that matches between the Service Territory of the Service Appointment and the one of the Service Resource.

This rule matches between the "Service Territory" lookup field on Service Resource's Service Territory Membership, and the same field on the Service Appointment objects.

The Match Territory Work Rule assumes 1:1 relationship between Service Resources and their territories. For example: Johanna is a Service Resource working in the Los Angeles area. This rule is suitable when working in a different group or territory is an exception rather than the rule, in which case it is handled by the Relocation feature, which is also enforced by this rule.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Optimization Work Rule: Working Territories

Sometimes, resources need to be available to take on work in more than one group or geographical area. The Working Territories rule supports such scenarios, governing the Primary and Secondary Territory Memberships.

A resource can belong to one 'Primary' territory but multiple 'Secondary' territories. By default, the Working Territories rule doesn't consider the primary territory and only considers a match if the service appointment territory matches one of the secondary territories. If you want the optimizer to consider the primary territory as well, ensure 'Working Location Enable Primary' field is checked.

In designing your solution, you will need to decide between "Match Territory" & "Working Territories" rules. Consider how your data model is structured.

- How many Service Resources
- How many Service Territories
- How often the Service Resource might be called in to a different Service Territory

If the movement is inevitable (Service Territories can't merge into one) and frequent (Service Resources constantly move), then 'Working Territories' will be the right Work Rule to include in your scheduling policy. Relevance Groups may come very handy when some Service Resource are more "static" than others, and the need to be able to differentiate exists.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Service Objectives for Optimization

An objective is a desirable goal for the logic operation, but not an absolute requirement.

Objective: Minimize Travel

Minimize travel is an objective that optimizes scheduling a service with the goal of minimizing the travel time required by field resources. The minimize travel time objective is a starting point. You can configure this objective indirectly by increasing weight levels in other objectives for business values other than minimizing travel time.

Minimize travel scale will be based on the maximum and minimum travel time of each scheduling option for a given SA. For example, if the system has an option to schedule the SA next to another SA in the same-site (0 travel time) and the worst option is one hour long. When using this objective in the optimization service, the system is set to scale travel time between 0 and 120 minutes. If you would like to change it, please contact Salesforce support.

Objective: ASAP

This objective schedules the service as soon as possible. It normalizes the scheduling date-time on a linear scale of 0-100 between the earliest and the furthest scheduling option. For example, if the earliest option is Now and the furthest option is in two weeks, an assignment evaluated for 1 week ahead will get a score of 50.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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In the optimization engine, when multiple services are evaluated simultaneously, the scale is between now and 30 days.



Tip:

- ASAP objective may contradict other objectives such as Minimize travel, as sometimes, scheduling the service as soon as possible won't be the best option from travel standpoint.
- If you want to add 'balance' between employees, ASAP is a good option.

Objective: Minimize Overtime

This objective will try to minimize the use of overtime hours. The scale will be between 0 and the scheduled service duration. For example, if an hour long service is scheduled entirely on OT, the score will be 0. If it's only half on OT, the score will be fifty.

Objective: Preferred Resource

This objective will give a score of 100 to a schedule of a service to the WO's preferred resource, zero otherwise.

Objective: Resource Priority

This objective will look at the resource's priority field. It will rank each SA schedule option based on the resource's priority value. The lower the number the higher is the score given by the objective.

Objective: Skill Level

This objective will score the SA assignment based on the assigned resource skill level. The objective has two options.

- Least qualified: the least qualified valid candidate will be preferred. This is a great option when you try to dispatch a resource that is 'good enough' to perform the job.
- Most qualified: the most qualified valid candidate will be preferred. For example, you can use this option in conjunction with relevance groups in order to send your most qualified resources only to Work Orders of VIP accounts.

In case multiple skills are required by the WO, the objective will evaluate all skills and will base the score on the average.

Internal Objectives

When using the optimization service, a 'Priority objective' will be automatically added to the scheduling policy. This objective is set to promote higher priority SAs over lower ones. This internal objective's weight can be changed in special cases.

Activate the Field Service Lightning Optimizer

Activate the service scheduling optimizer so you can get started creating an efficient schedule for your field service team. You can configure the optimizer to run regularly, or run it manually.

Scheduling optimization creates a schedule of service appointments that:

- Minimizes travel time, overtime, cost, and no-shows
- Maximizes your team's efficiency by assigning resources to as many service appointments per shift as possible
- **1.** As a system administrator with the "Modify All Data" user permission, open the App Launcher and open the Field Service Admin app.
- Click the Field Service Settings tab, and then click Optimization. On the Activation tab, click
 Create Optimization Profile to create an optimization profile and user that are used during
 activation.
 - Note: This process consumes one Salesforce license. Before you enable optimization, ensure that a license is available.
- **3.** When you're prompted, switch to the newly created optimization user to set up your optimization.
 - **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.
 - c. Select Generate new password and notify user immediately.
 - d. Log out.
- **4.** When you receive a password reset email, click the link and complete the steps to log in to your org as the optimization user.
- 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 the settings tab.
- 8. Log out as the optimization user and log back in with your regular username and password.

Optimization is now active in your org, as seen by the message on the **Optimization** > **Activation** page in Field Service Settings.

To have the optimizer run on repeat, from the App Launcher, open the **Field Service Admin** app. Click the Field Service Settings tab, then click **Optimization** > **Scheduled Jobs**. Select the job and adjust the settings as needed, or create a new job.

To manually run the optimizer—for instance, for a particular geographical area using a certain scheduling policy—click **Optimize** in the dispatcher console appointment list action menu. Then, define your settings.

Note:

- A message displays at the top of the Gantt when the optimizer is running.
- If you deactivate the optimization user, the optimization will fail.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

To create users:

Manage Internal Users

Fix Scheduling Overlaps

Reschedule appointments that overlap another appointment or an absence with the click of a button.

Configure Fix Overlaps for dispatchers on the Field Service Settings tab.

From the Field Service Settings tab go to **Scheduling** > **Dynamic Gantt** > **Fix Overlaps**. There are four settings.

- 1. Automatically fix overlaps when an appointment overlaps with another appointment or absence: When enabled, Fix overlaps is triggered whenever an appointment overlaps with another appointment or an absence.
- 2. When attempting to fix overlaps:
 - **a.** Schedule to original resource only: When selected, only the original assignee is considered when rescheduling the appointments.
 - **b.** Schedule to all resources: When selected, the scheduling engine considers other resources as well.
- 3. After unscheduling services reschedule them by:
 - a. Chronological Order
 - **b.** Priority
- 4. When unable to find a valid schedule for an appointment:
 - **a.** Leave on Gantt and set in-jeopardy: If the scheduling engine can't reschedule without breaking work rules, the appointment is left in its original time and an in-jeopardy flag is raised.
 - **b.** Unschedule the appointment(s): If the scheduling engine can't reschedule without breaking work rules, the appointment is unscheduled and removed from the Gantt chart.
 - **c.** Reshuffle other assignments: If the scheduling engine can't reschedule without breaking work rules, the scheduling engine reshuffles the appointment. Reshuffling means moving around, or even unscheduling, lower priority appointments to make room for a higher priority appointment. More information.

Considerations for Fix Overlaps

- Fix overlaps respects the order of the original plan so the earliest appointment remains the earliest and the last remains last.
- If a service is pinned, fix overlaps can't move it. However, fix overlaps don't respect pinned statuses and can move appointments in one of the pinned statuses.
- Fix overlaps only reschedules for the given day. If fix overlaps is progressing to a reshuffle operation it may schedule to other days as well.
- Fix overlaps isn't supported for capacity based resources.
- Fix overlaps leaves the appointments in their original status.
- When a service appointments is scheduled by a fix overlaps operation, the Schedule Mode on the Service appointments is **Automatic**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Fill-In Schedule Gaps for Service Resources

Fill-in schedule creates a list of appointments for a technician and finds the optimal schedule.

The first step of the Fill-in Schedule operation is to build a pool of available jobs for the scheduling engine to try to schedule ('candidates service appointments'). A consideration when building the pool is which Service Appointments should be selected as candidates and which should not. Some jobs shouldn't be considered as a candidate, per the service organization definitions (example: for break fix, it may require to book an appointment with the customer over the phone before sending a technician onsite). As the definitions could be related to the service appointment itself and/or the parent of the service appointment, the scheduling engine will evaluate a checkbox field on the parent record and another checkbox field on the service appointment level.

3 new fields were introduced through the managed package in this release all named 'Is Fill In Candidate', but are on different objects - Service Appointment, Work Order and Work Order Line Item. The default value for these field is TRUE, meaning that by default every service appointment is a candidate for Fill-In Schedule. If the service organization wants to control which appointment should be a candidate and which should not they can do one of the following

• Automation: using Process Builder or Apex Triggers, set the value of the field(s) to False if the record fails to meet the needed criteria.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

• Formula Fields: create a new checkbox formula field(s) that evaluate if that record should be a candidate, and change the settings that controls which fields the scheduling engine evaluates when building the pool of candidates, to use your custom formula field(s) instead of the default 'Is Fill In Candidates' fields (see below)

Settings: (Field Service Settings tab>Scheduling>Dynamic Gantt>Fill-in Schedule)

- 1. Service Appointment Candidate Boolean field Select a checkbox field that indicates if a service appointment is a candidate for fill-in schedule. You can select any standard or custom checkbox field from the service appointment object, including formula fields.
- 2. Work Order Candidate Boolean field In the case of Work Order as an appointment's parent this field should be true for the service appointment to be a candidate. You can select any standard or custom checkbox field from the work order object, including formula fields.
- 3. Work Order Line Item Candidate Boolean field In the case of Work Order Line Item as an appointment's parent this field should be true for the service appointment to be a candidate. You can select any standard or custom checkbox field from the work order line item object, including formula fields.
- **4.** Order candidate appointments by (picklist) Select either Priority or Distance.
 - **a.** Priority the scheduling engine will first sort the candidates based on their priority field (as defined in the Scheduling>General Logic settings) starting from the highest priority. Distance will be also considered when sorting, but as a secondary consideration (meaning starting with the closest service appointment when 2 Work Orders have the same priority)
 - **b.** Distance The scheduling engine will first sort the candidates based on their proximity to the previous Appointment (or in case it is the first assignment of the day, their proximity to the technician home base). After a Service Appointments get scheduled, the scheduling engine will consider its location as the point for distance calculation. Priority will be also considered when sorting, but as a secondary consideration (meaning starting with the Work Order with higher priority, when 2 Service Appointments are in the same proximity)
- **5.** Max appointments to schedule (number) When building the pool of candidates service appointments, the scheduling engine will stop looking for more candidates after finding this number of appointments (or after the max runtime settings, what ever is first). Max value to set is 50 candidates.
- **6.** Max runtime (seconds) (number) When building the pool of candidates service appointments, the scheduling engine will stop looking for more candidates after this number of seconds (or after the max appointments to schedule settings, what ever is first). Max value to set is 60 seconds.

Considerations for Fill-In Schedule

- Fill-in schedule will only try to schedule for the given day (first day shown on the Gantt).
- The Is Fill In Candidate fields on the service appointment, work order and work order line items default value is True. This means any
 new service appointment will be considered as a fill in candidate, while service appointment records that existed prior to the upgrade
 will not be considered as candidates. The admin can use Process Builder to control these fields to fit your organization fill in schedule
 needs, or even create new formula fields that will evaluate in real time whether the record should be a candidate or not.
- Service Appointments without geolocation will be sorted last if sorting by distance.
- Candidate Service Appointments are only ones that are unscheduled or scheduled for the future (day after and onward).
- When a Service Appointments was scheduled by Fill-in Schedule operation, the 'value for the Schedule Mode' field on the Service appointments will be 'Automatic'.

Group Nearby Appointments

Group nearby appointments that are close to a given appointment.

Group nearby appointments unschedules the appointments that are scheduled later that day and, after building a pool of near by service appointments, it schedules appointments close to the source appointment.



Note: Lower priority work may be unassigned to make room for the nearby appointments.

Settings: (Field Service Settings tab>Scheduling>Dynamic Gantt>Group Nearby Appointments)

- Service Appointment candidate Boolean field Select a checkbox field that indicates if a service
 appointment is a candidate for group nearby appointment. You can select any standard or
 custom checkbox field from the service appointment object, including formula fields.
- **2.** Work Order Candidate Boolean field In the case of Work Order as an appointment's parent this field should be true for the service appointment to be a candidate. You can select any standard or custom checkbox field from the work order object, including formula fields.
- 3. Work Order Line Item Candidate Boolean field In the case of Work Order Line Item as an appointment's parent this field should be true for the service appointment to be a candidate.

 You can select any standard or custom checkbox field from the work order object, including formula fields.
- **4.** Max appointments to schedule (number) When building the pool of candidates service appointments, the scheduling engine will stop looking for more candidates after finding this number of appointments (or after the max runtime settings, what ever is first). Max value to set is 50 candidates.
- **5.** Max runtime (seconds) (number) When building the pool of candidates service appointments, the scheduling engine will stop looking for more candidates after this number of seconds (or after the max appointments to schedule settings, what ever is first). Max value to set is 60 seconds.
- **6.** When attempting to schedule an appointment near other appointment, the Group Nearby appointment operation first unschedules the services that were planned for the resource for the remainder of the day. The operation continues with building a pool of surrounding appointments and scheduling these to the resource. The last step is to try and schedule the appointments that were unscheduled in the first step of the operation. There are two options in the picklist:
 - **a.** Schedule to original resource only when selected, only the original assignee will be considered as a candidate when the scheduling engine will try to reschedule the appointments
 - b. Schedule to all resources When selected, the scheduling engine will consider other resources as well
- 7. When unable to arrange schedule (picklist) There are 3 options in the picker:

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- **a.** Leave on Gantt and set in-jeopardy If the scheduling engine couldn't reschedule without breaking work rules, the appointment will be left in it's original time, and an in-jeopardy flag will be raised.
- **b.** Unschedule the appointment(s) If the scheduling engine couldn't reschedule without breaking work rules, the appointment will be unscheduled. I.e removed from the Gantt.
- **c.** Reshuffle other assignments if the scheduling engine couldn't reschedule without breaking work rules, the scheduling engine will then try to reshuffle the appointment (Reshuffle means moving around (or even unscheduling) lower priority appointments to make room for a higher priority appointment to be scheduled. More information on Reshuffle process in section 'Appointments Reshuffle')
- **8.** Radius for nearby appointments (number) The radius around the originating service appointments where other appointments are considered to be candidates for the Group Nearby Appointments operation. The distance unit can either be Km or Mile, depending on the 'default driving speed unit' defined under the Routing settings (Field Service Settings tab>Scheduling>Routing)

Considerations for Group Nearby Appointments

- Group Nearby Appointments will only try to schedule for the given day (first day shown on the Gantt).
- The Is Fill In Candidate fields on the service appointment, work order and work order line items default value is True. This means any new service appointment will be considered as a fill in candidate, while service appointment records that existed prior to the upgrade will not be considered as candidates. The admin can use Process Builder to control these fields to fit your organization fill in schedule needs, or even create new formula fields that will evaluate in real time whether the record should be a candidate or not.
- Only unscheduled Service Appointments can be candidates for Group Nearby Appointments.
- When a Service Appointments was scheduled by Group Nearby Appointments operation, the 'value for the Schedule Mode' field on the Service appointments will be 'Automatic'.

Reshuffle Appointments to Schedule High Priority Work Over Lower Priority Jobs

When your schedule has no room for that high priority job, Appointments Reshuffle moves lower priority jobs to a later date or unschedules them. This frees up your technician for the more important job.

Settings: (Field Service Settings tab>Scheduling>Dynamic Gantt>Reshuffle Assignments)

1. Max time horizon (days) in which the appointment can be scheduled The Reshuffle process will try to schedule the appointment in a date range which is the Earliest Start PErmitted (or the current time if it is later) up until X more days (where x is the value configured here). Seven is the maximum value.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Reserve Time Slots for Designated Work

Create specific time slots dedicated to service appointments that meet your criteria.

Reserve time slots on your calendar for particular types of work. On the Operating Hours tab, right-click a time slot to select one or more fields available from the context menu. The Field Service scheduling engine schedules the time slot for service appointments that meet the criteria. To add additional checkbox options to the calendar editor context menu, add fields to the relevant field set in Salesforce Classic.

- 1. Switch to Salesforce Classic.
- 2. From Setup, enter Service Appointment in the Quick Find box and select Field Sets under Service Appointments.
- 3. Click **Edit** next to Designated Work Fields.
- **4.** Drag any checkbox field into the field set.
 - Note: You can customize a field by adding it to the service appointment object.
- **5.** Switch back to Lightning Experience.
- **6.** Open the Field Service Admin app from the App Launcher, then click **Field Service Settings** > **Scheduling** > **Scheduling** Policies.
- 7. Click the policy for which you want to enforce the designated work time slots.
- **8.** On the Related tab, under Scheduling Policy Work Rule, click **New**.
- 9. Add the Field Service TimeSlot Designated Work work rule to the policy.
- 10. Click Save.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Optimize a Single Resource's Schedule

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.

Every night before the day of service begins, global optimization runs and creates the optimal schedule for all of your service resources. When last-minute changes require a particular resource's schedule to be re-optimized, you can do so from the Gantt without affecting other resources' schedules.

- **1.** Optionally, exclude service appointments with certain statuses from being changed during resource schedule optimization.
 - a. From the App Launcher, open the Field Service Admin app and click Field Service Settings
 > Optimization > Logic > Resource Schedule Optimization.
 - **b.** 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 dropdown action menu of the resource you want to optimize.
 - b. Click Resource Schedule Optimization.
 - **c.** Define the scope of your optimization. Consider which service appointments need to stay scheduled and which ones can be unscheduled or pushed to a later date.
 - Dates: Select the time frame to be optimized. Service appointments are scheduled
 only within this time frame, but candidate service appointments can come from outside
 the time frame.
 - All or Unscheduled service appointments: When Unscheduled is selected, scheduled service appointments aren't changed, and only unscheduled appointments are optimized.
 - Scheduling policy: Select the scheduling policy that will guide the optimization decisions.
 - Filter candidate service appointments by: Select a service appointment category.
 Only appointments that fall into the selected category can be assigned to the resource and scheduled.
 - **Filter only service appointments assigned to the resource:** If this option is selected, only appointments that are already assigned to the resource can be scheduled or rescheduled.
 - **Keep the following service appointment scheduled:** Select a service appointment category. Scheduled appointments that fall into the selected category will not be changed.
 - d. Click Optimize.

Considerations

- Resource schedule optimization doesn't support capacity-based resources.
- 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 complex work dependency.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To configure the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

To see Resource Schedule Optimization on the Gantt:

 Resource Schedule Optimization custom permission Resource schedule optimizations can't run in parallel for the same service resource on the same time interval.

Optimization Limits and Considerations

Learn about the limits and considerations that exist for optimization in Field Service Lightning. When using the optimization service, consider the following.

- To be included in optimization, a service appointment must have a work order or work order line item as its parent record.
- If a service appointment doesn't list an address and therefore lacks a defined latitude and longitude, the scheduling optimizer uses the appointment's assigned resource's home base to make scheduling decisions.
- To troubleshoot optimization request failures, add the field Failure Details to the layout of the Optimization Request object.
- Scheduled optimization jobs can generate one or more JSON files. If a JSON file contains more than 6 million characters, the optimization fails.

To check whether an optimization job exceeded this limit, go to the Optimization Requests tab. (You may need to create a custom tab for the Optimization Request object, which is a managed package custom object.) Open the Optimization Request record 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, Performance, Unlimited. and **Developer** Editions. Work orders are also available in **Professional Edition**



👔 Tip: 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.

Optimization Request Limits

| Limit | Details |
|--|---------|
| Maximum service appointments optimized per rolling 24 hours | 50,000 |
| Maximum service appointments optimized per request | 5,000 |
| Maximum service resources optimized per request | 500 |
| Maximum days optimized per request | 21 |
| Maximum number of objects passed to the optimization service in 1 request (for example, service appointments + related objects such as required skills and assigned resources) | 45,000 |

Setting Optimization Run Time

The longer an optimization runs, the closer it gets to an optimal solution. You can control the optimization run time per task according to your preference. In Field Service Settings, click **Optimization** > **Logic**. Select your preferred run time in Optimization run time per service appointment and then click Save.

For better-guality results, use **High**. For guicker results, use **Low**. In many cases, Low is enough for the optimizer to produce a satisfactory schedule. Run time never exceeds two hours. The ratio of run time for Low: Medium: High is 1:2:3 (meaning High-level optimization takes three times as long as Low-level optimization).

Longer run times might be beneficial in the following scenarios.

- Many candidates per service appointment: Service resources are considered candidates for a service appointment if they comply with
 all the rules of the scheduling policy in use. For example, a scheduling policy may 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. When a service appointment has many candidates, the optimizer must consider many scheduling
 options and may benefit from longer run time.
- Service resources start their day from a centralized service depot: Do your service resources start their day from home, or from a centralized service depot? When many service resources start from the same place and could potentially be routed to the same work, the optimizer needs more time to determine the optimal routes.
- Service appointments have the same priority: Service appointments of a higher priority serve as 'anchors' for the optimizer and narrow down the routing options. When all, or most, service appointments have the same priority, the optimizer needs more time to determine the optimal routes.
- Complex work: A complex work chain is a chain of dependent 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. In cases where complex work is common, consider allowing more run time for the optimizer.
- SLR (Street Level Routing): Aerial travel times are a quick arithmetic calculation. For SLR, the optimizer uses some of the optimization time to fetch travel times from a GIS server, requiring a longer run time. However, as optimization continues to be used, Field Service Lightning will learn the SLR travel times of your service territories and will become more efficient. We recommend using a longer run time for the first few weeks when optimizing a new service territory.

Work in the Field Service Lightning Dispatcher Console

The dispatcher console in the Field Service Lightning managed package is the main working space for dispatchers. It features a dynamic map and highly customizable Gantt chart showing upcoming appointments, active team members, and more. To reach the dispatcher console, open the Field Service app from the App Launcher and click the Field Service tab.

Customize the Dispatcher Console

Learn how to adjust the time frame and contents of the appointment list and Gantt, create custom actions for dispatchers, and add the dispatcher console to a Lightning community.

Dispatcher Console Service Appointment List

The service appointment list is located on the left side of the dispatcher console and contains a list of service appointments. Users can filter, sort, and search within the list, and perform actions on selected appointments in the list.

Dispatcher Console Gantt

The Gantt is located on the right side of the dispatcher console and contains the resource list, the schedule view, and additional features.

Dispatcher Console Map

The dispatcher console map is an invaluable tool to help dispatchers get a bird's-eye view of their mobile workforce.

Manage Service Appointments

Learn how to schedule, reschedule, and unschedule service appointments.

Manage Service Resources

Service resources represent technicians that are assigned to complete a service appointment. Learn tips for managing service resources when the Field Service Lightning managed package is installed.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Customize the Dispatcher Console

Learn how to adjust the time frame and contents of the appointment list and Gantt, create custom actions for dispatchers, and add the dispatcher console to a Lightning community.

Control Which 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 Lightning dispatcher console. For example, choose which fields appear as columns in the dispatcher console appointment list.

Create Custom Actions for the Dispatcher Console

Put customized 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.

Add the Dispatcher Console to a Community

Hand over the dispatching reins to a contractor manager by embedding the Field Service Lightning dispatcher console in a Lightning community.

Control Which 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.

Controlling the time frame

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

EDITIONS

Available in: Salesforce Classic and Lightning Experience



The Gantt time frame is controlled by the following settings.

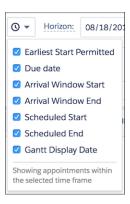
- Gantt filter (1):
 - On the Hours tab, choose which hours of the day are shown on the Gantt.
 - On the Utilization tab, specify how many days are shown when the Utilization view is applied.
- **Gantt resolution dropdown (2):** Select how many days to show on the Gantt at once. If the Utilization view is selected, the number of days shown is controlled on the Utilization tab of the Gantt filter.
- Date and calendar toggles (3): Toggle between days and months.

The appointment list time frame is controlled by the following settings.

- 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 match the dates shown on the Gantt.
- Scheduling window limit (6): Click the gear icon and select Dispatcher console settings to define the scheduling window limit,
 which represents the number of days 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.
- Note: If a custom filter is applied, the appointment list time frame is controlled by the horizon date and the custom filter settings. 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.

Controlling which appointments are shown

The date field dropdown menu in the dispatcher console control which appointments are visible on the Gantt. If the value of any of the selected date fields on an appointment falls within the specified time frame, the appointment appears on the Gantt.



If an appointment's dates for any selected fields among the first six don't fall within the Gantt time frame, you can 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, maybe a maintenance appointment must be completed within the next six months, and you want to see it on the Gantt every day as a reminder.

? Tip: Set up a process in Lightning Process Builder 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 gear icon in the appointment list, which filters the Gantt and appointment list according to your criteria
- Any custom appointment list filters in place

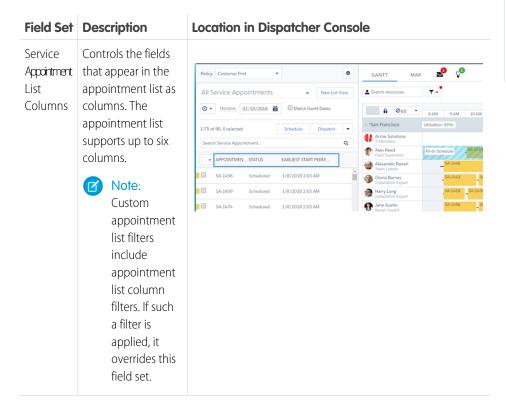
Customize the Dispatcher Console with Field Sets

Use field sets to control which fields appear in different sections of the Field Service Lightning dispatcher console. For example, choose which fields appear as columns in the dispatcher console appointment list.

To manage a field set, switch to Salesforce Classic. In the Quick Find box in Setup, enter the name of the object whose field set you want to edit—for example, <code>Service Resources</code>. Then, click **Field Sets** under the object name.

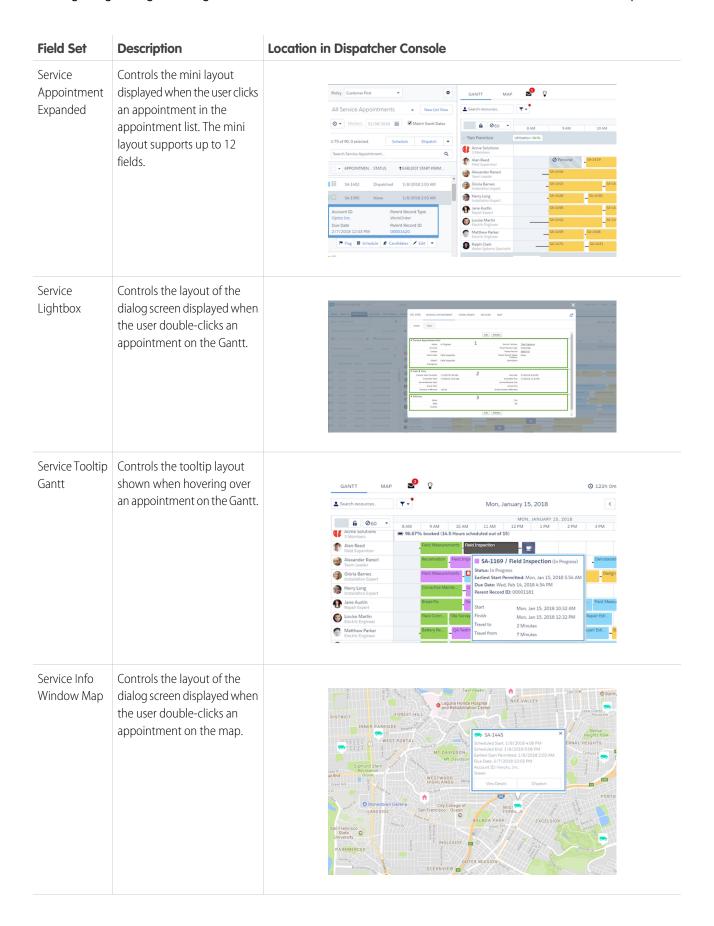
Field sets support the following field types: Number, Text, Date, Date/Time, Currency, and Reference (lookup fields).

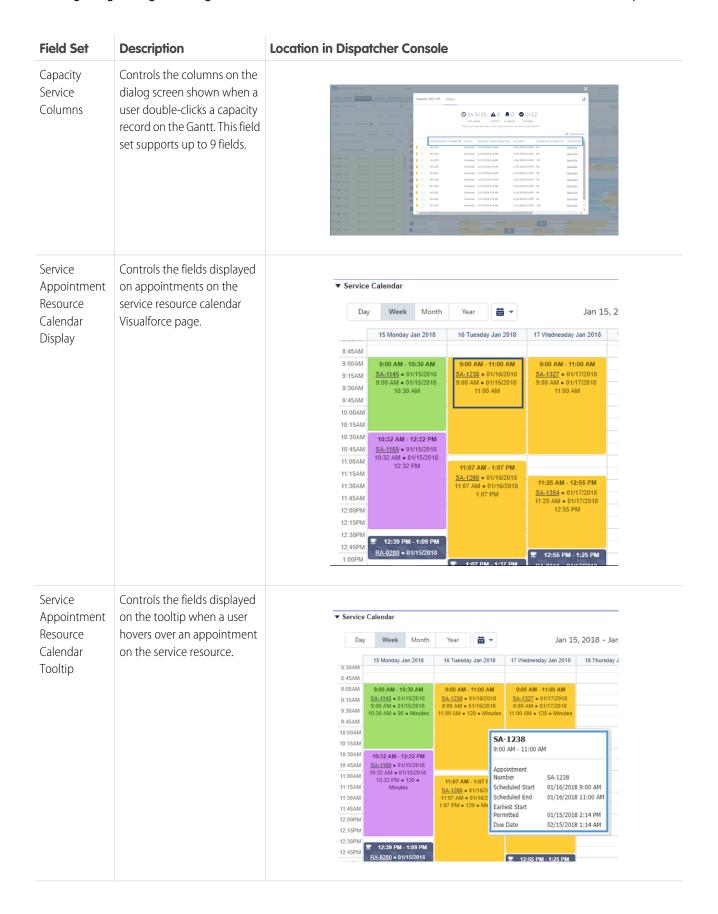
Service Appointment Field Sets

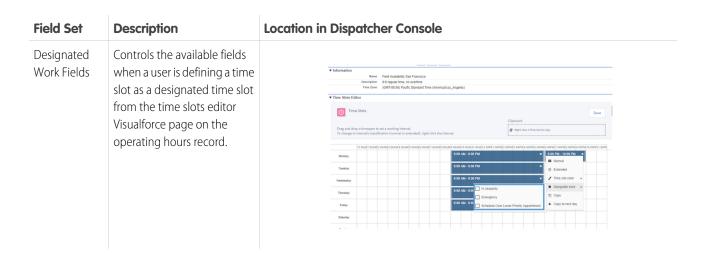


EDITIONS

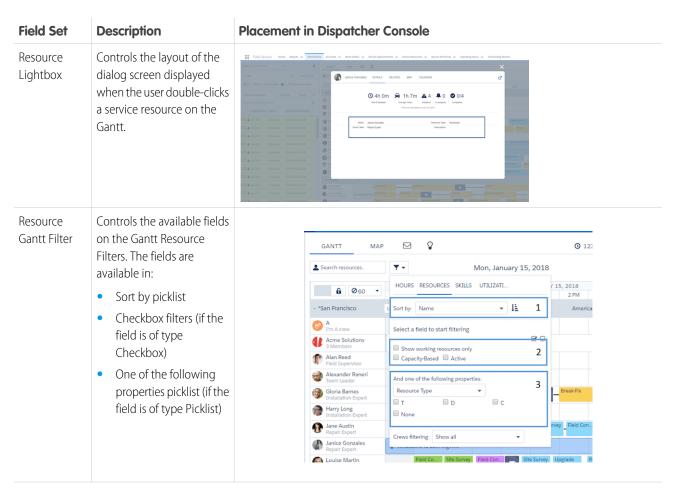
Available in: Salesforce Classic and Lightning Experience





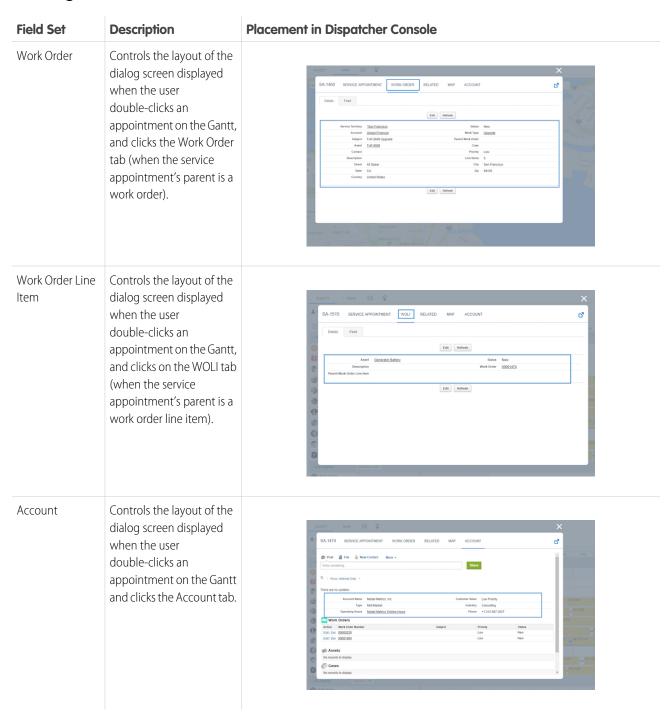


Service Resource Field Sets

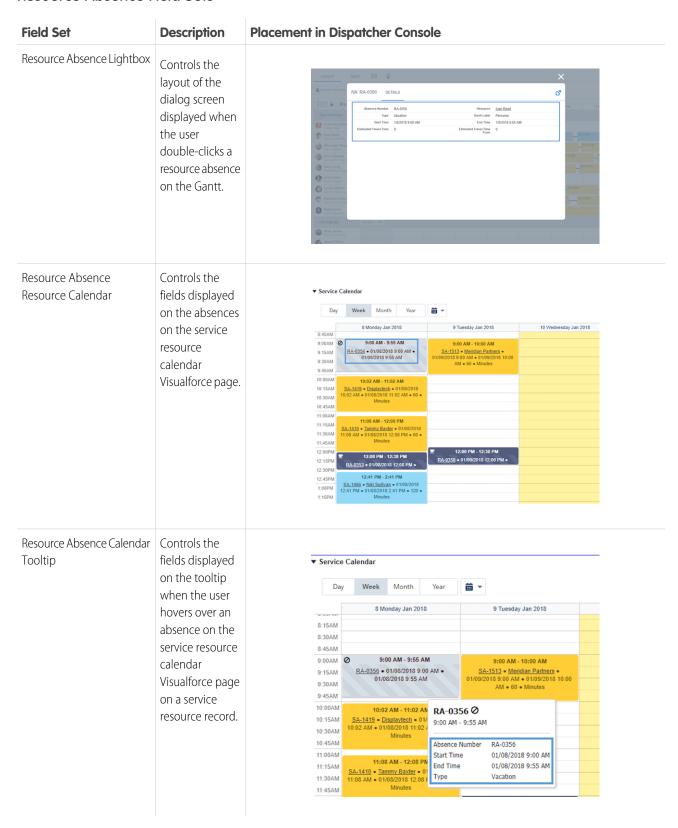


Description **Field Set Placement in Dispatcher Console** Emergency Controls the fields displayed Fields on the service resource in the emergency Chatter action. Controls the fields shown Get Candidates when expanding a resource 00001474 row on the candidates Resource Details Chatter action. Schedule 00001474 Tue, Jan 9, 2018 10:07 AM

Gantt Lightbox



Resource Absence Field Sets



Create Custom Actions for the Dispatcher Console

Put customized 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.

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:

- Calls an Apex class that reassigns all selected service appointments to a different service resource, or
- Opens a Visualforce page where the dispatcher can update the Earliest Start Permitted on all appointments within a polygon (say, if the polygon represents a flood in the service territory)

Before starting, decide what you want your action to do and where it should appear in the Gantt.

- 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.
- **2.** Create and assign a custom permission to limit who sees the action, or select an existing permission to use.
- **3.** From the App Launcher, open the Field Service Admin app. Click the Field Service Settings tab, and then click **Dispatcher Console UI** > **Custom Actions**.
- **4.** In the left-hand column, select an action category to define the location and breadth of the action.
- 5. Click **New Action** and enter your details.
 - **Label in Dispatcher Console:** Enter the action label that dispatchers will 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.

6. Click Save.

7. 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

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

Add the Dispatcher Console to a Community

Hand over the dispatching reins to a contractor manager by embedding the Field Service Lightning dispatcher console in a Lightning community.

- 1. Add the dispatcher console to your Lightning community.
 - a. In Community 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 new 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 FSL Community Dispatcher Permissions to be allowed in the community.
 - **h.** Publish your changes.
- 2. Give community users access to the new dispatcher console page.
 - **a.** Confirm that the community users who need access to the dispatcher console have either of the following user licenses:
 - Customer Community Plus
 - Partner Community
 - b. Create the community dispatcher permission sets. From the Field Service Admin app, clickField Service Settings > Getting Started > Permission Sets.
 - **c.** Find the FSL Community Dispatcher tile. Confirm that the tile includes a message in green indicating that the permission set is up to date, no action is needed. If it doesn't, click **Create Permissions**.
 - **d.** Assign two permission sets to the community users who need access to the dispatcher console:
 - FSL Community Dispatcher License permission set
 - FSL Community Dispatcher Permissions permission set

Note: Community dispatchers can't access the complex work feature—for details, see Schedule Work Dependencies with Complex Work—or Live Gantt updates.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To create, customize, or publish a community:

 Create and Set Up Communities 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 community:

Partner Community license and FSL Dispatcher permission set license

Dispatcher Console Service Appointment List

The service appointment list is located on the left side of the dispatcher console and contains a list of service appointments. Users can filter, sort, and search within the list, and perform actions on selected appointments in the list.

From within the appointment list, you can:

- View the scheduling policy that is 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
- Customize the dispatcher console settings, reached by clicking the gear icon in the top right-hand corner

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

The layout of the appointment list is controlled by field sets. To learn how to customize field sets, see Customize the Dispatcher Console with Field Sets.

Filter the Dispatcher Console Appointment List

Filters, similar to list views, control which service appointments are shown in the appointment list on the left-hand side of the dispatcher console. The filtered service appointments also depend on the horizon, selected date fields, and search values.

Search the Dispatcher Console Service Appointment List

You can search for appointments from the service appointment list.

Customize the Dispatcher Console Appointment List

Learn how to customize the appointment list (also called the service list) found in the dispatcher console.

Mass-Edit the Appointment List

You can perform mass actions on an appointment list.

Filter the Dispatcher Console Appointment List

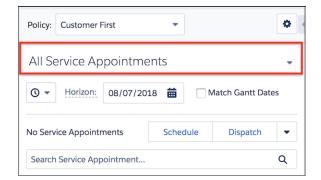
Filters, similar to list views, control which service appointments are shown in the appointment list on the left-hand side of the dispatcher console. The filtered service appointments also depend on the horizon, selected date fields, and search values.

Apply a filter by selecting one from the filter dropdown menu in the appointment list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.



The following table lists the out-of-the-box filters. All filters consider the Status Category—which maps all standard and custom status values to categories corresponding to the out-of-the-box status values—and conditions have an "OR" statement between them.

| Filter Name | Definition | |
|--------------------------|--|--|
| Todo | The Todo filter shows service appointments that are waiting for the dispatcher's next action. It includes service appointments that match one of the following criteria: | |
| | The Status Category is None | |
| | The appointment has rule violations | |
| | The appointment is In Jeopardy and is not Canceled or Completed | |
| All Service Appointments | All service appointments in the org. | |
| Selected | Service appointments that the user selected in the appointment list. | |
| Flagged | Service appointments that the user marked as flagged. Flagged services are not saved between sessions. | |

| Filter Name | Definition | |
|-----------------|---|--|
| Recent | 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. Note: Recent service appointments are not saved between sessions. | |
| Unscheduled | Service appointments that don't have an assigned resource and aren't canceled. | |
| Rules Violating | Service appointments that have rule violations and aren't canceled. | |
| In Jeopardy | Service appointments that are marked In Jeopardy and aren't canceled. | |
| Scheduled | Service appointments with an assigned resource. | |
| 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. | |
| Contractors | Service appointments that are scheduled to capacity-based resources. | |
| Canceled | Service appointments whose status category is Canceled. | |

All users have access to these standard filters.



🎧 Tip:

- If you'd like to use a modified version of a standard filter, consider creating a custom filter with the settings you need.
- To filter the appointment list by territory, click the gear icon in the appointment list and select **Territory filtering**.

Create Custom Appointment List Filters with the Field Service Lightning Managed Package

Create custom filters to filter the service appointments that appear in the dispatcher console appointment list. Choose which service appointment fields to use as criteria and add your own logic. Determine a time period to filter service appointments, and let dispatchers create their own filters or share them with others.

Create Custom Appointment List Filters with the Field Service Lightning Managed Package

| USER PERMISSIONS | | EDITIONS |
|---|--|---|
| To configure the Field Service Lightning managed package: | Customize Application | Available in: Salesforce Classic and Lightning Experience Field Service Lightning features, managed |
| To assign a permission set license: | Manage Users | |
| To create a permission set: | Manage Profiles and Permission Sets | |
| To create, edit, and delete custom filters: | FSL Dispatcher or FSL Admin Permissions AND Create Filter custom permission | package, and mobile apps are available in Enterprise , Performance , Unlimited , and Developer Editions. Work orders are also |
| To share personal custom filters and edit and hide public custom filters: | FSL Dispatcher or FSL Admin Permissions AND Create Filter custom permission AND Publish Filter custom permission | available in Professional Edition. |

Create custom filters to filter the service appointments that appear in the dispatcher console appointment list. Choose which service appointment fields to use as criteria and add your own logic. Determine a time period to filter service appointments, and let dispatchers create their own filters or share them with others.

- 1. To enable custom filters, from the App Launcher, go to the Field Service Admin app and click the Field Service Settings tab. Click **Dispatcher Console UI**, and then select **Enable Custom Filters**.
 - Note: This feature replaces the original custom list view functionality for the appointment list. Therefore, all existing custom list views aren't accessible once custom filters are enabled.
- 2. From the App Launcher, go to the Field Service app. Click the Field Service tab to open the dispatcher console.
- **3.** To the right of the filter dropdown menu, click the **New** icon.
- **4.** Add a name and description to your custom filter.
- **5.** Select whether the filter displays service appointments according to the number of days before and after the Horizon Date, or service appointments currently displayed on the Gantt chart (similar to the Gantt standard filter).
 - Note: The horizon date takes into account the selected date properties, Earliest Start Permitted, Due Date, Arrival Window Start, Arrival Window End, Scheduled Start, and Scheduled End.
 - Standard filters let you set the scheduling window limit, the number of days up to and including the selected horizon date. The default value is 14 days.
 - Custom filters let you set how many days before and after this date should be displayed.
- **6.** Add criteria to your filter.
 - Note: The available fields are on page layout of the Gantt filter service appointment field set. Only standard and custom service appointment fields are supported. Related object fields are not supported.

- 7. To filter service 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.
 - 1 Tip: To dynamically consider date and time fields, use formula fields. For example, Due date in 2 days Equals True.
- 9. Under Fields to Display, indicate the fields that should be shown 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 is shared with the All Internal Users public group.
- 11. Click Save.
- **12.** To hide a public custom filter, click the down arrow next to the filter and select **Hide**.
 - Note: Admins can expose hidden filters by editing the custom filter record itself and setting Hidden to false.

Considerations for Using Custom Appointment List Filters

- The maximum number of days before and after the horizon date is 30 days.
- We recommend keeping the number of fields included in the Gantt Field Set page layout below 15, as too many fields can negatively affect performance.
- All users have access to the standard filters provided with the Field Service Lightning managed package. If required, you can hide these standard filters as well. Remove the relevant custom permission from the user profile or assigned permission set.
- If only certain users should have access to a specific custom filter, share the custom filter record with the relevant public group or
 individuals. For example, if only San Francisco dispatchers should be able to access the "Bay Area Emergency Work" custom filter,
 create the custom filter as private (not published) and share "Bay Area Emergency Work" with the San Francisco public group using
 standard sharing.

Search the Dispatcher Console Service Appointment List

You can search for appointments from the service appointment list.

To search for an appointment in the appointment list, enter at least two characters in the list search box. The following service appointment fields are considered in the search process:

- 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 are of the following types: text, text area, lookup name, and picklist

You can search using more than one keyword by separating each keyword with a comma. OR logic condition is applied on all search items.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

After you enter two characters in the search box, the service list is filtered to list only service appointments that have at least one matched property with the entered value. If no appointments match your search query, click **Search All Records** in the body of the list to search

all service appointments in your org. This allows you to force-add a service appointment to the service list that doesn't match the Gantt loading criteria. The **Search All Records** action only search queries of a complete service appointment number or record ID.

Customize the Dispatcher Console Appointment List

Learn how to customize the appointment list (also called the service list) found in the dispatcher console.

There are two components you can customize for the appointment list:

- Appointment list columns: Use the Service Appointment List Columns field set to configure
 which fields you want to appear at the appointment list header. You can select up to 6 fields.
 Alternatively, create a custom appointment list filter on page 195, which includes settings to
 control the appointment list columns.
- **Appointment mini view**: When you click an appointment in the list, the row extends to expose the mini view. Use the *Service Appointment Expanded* field set to configure up to 12 fields that you want to appear in the mini view.

The appointment list and mini view are responsive, so expanding and reducing the width of the sidebar component will expose or hide fields to match the screen real estate available.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Mass-Edit the Appointment List

You can perform mass actions on an appointment list.

You can perform different mass actions on appointments in the list by opening the Actions menu and choosing an action. Available actions are:

- **Schedule**: Execute an automatic scheduling process for the selected appointments.
- **Change Status**: Change the status for the selected appointments.
- **Flag** / **Unflag**: Add or remove a flag for the selected appointments. You can use the flag for filtering later.
- **Unschedule**: Unschedule the selected appointments, or define the relevant time range and service territories of the appointments that should be unscheduled.
- **Optimize**: Turn on scheduling optimization.

The list of actions is customizable; you can remove some actions and edit the order based on your preference. In addition, any custom actions that you created in the Service List action category appear below the built-in actions in the action list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Dispatcher Console Gantt

The Gantt is located on the right side of the dispatcher console and contains the resource list, the schedule view, and additional features.

Filter Appointments in the Gantt

Customize the Gantt's contents by filtering it based on service resource settings, skills, utilization, hours, and other features.

Color-Code the Gantt

Help dispatchers compare service appointments in the Gantt at a glance 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.

Control Which Absences Appear on the Gantt

Enable approval confirmation so only approved absences block your technician's availability and appear on the Gantt chart. Unapproved resource absences are not considered in scheduling nor shown on the Gantt until they are approved.

Filter the Dispatcher Console by Service Territory

Learn how to filter service appointments by service territory in the Gantt.

Measure Resource Utilization

View the individual utilization percentages of your service resources to make informed scheduling and hiring decisions. You can see each resource's utilization percentage for a particular day or over multiple days, and sort resources in the Gantt by utilization.

View Appointment KPIs

Assess the health of your field service operation at a glance with the help of the Gantt KPI (Key Performance Indicator) bar.

View Live Updates on the Gantt (Beta)

The Dispatcher Console Gantt refreshes itself every according to what's defined in your Field Service Settings. With Gantt Live Update you can use Streaming API and Push Topics, so that relevant changes are reflected immediately on the Gantt.

Filter Appointments in the Gantt

Customize the Gantt's contents by filtering it based on service resource settings, skills, utilization, hours, and other features.

Click the filter icon in the top left-hand corner of the Gantt to open the filter settings.

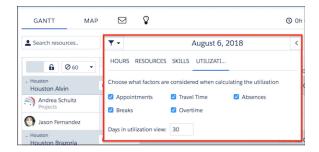
EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

EDITIONS

Available in: Salesforce Classic and Lightning Experience



- **Hours**: Select a range of hours to show across all date resolutions (daily, 2 days, 3 days and weekly), and choose whether to display weekends on the Gantt.
- **Resources**: Specify which resources are shown and in what order. Select **Show working resources only** in the filter box to show only resources that are scheduled to perform services in the calendar interval shown on the Gantt.
- Skills: Select skills that resources must possess to be shown on the Gantt. The Gantt support a maximum of 20 resource skills.
- **Utilization**: Select the factors that are considered when calculating resource utilization, and control the days shown in the utilization view. (Reach the utilization view by selecting Utilization in the dropdown in the top right-hand corner of the Gantt.)
- **Palettes**: Create, manage, and apply palettes to color-code service appointments on the Gantt. Click the icon in the top right-hand corner to open the palette editor.

By default, the Gantt is sorted by resource name. If you'd like to add more filterable fields to the Resources tab in the Gantt filter, add a field to the Resource Gantt Filter field set.

Color-Code the Gantt

Help dispatchers compare service appointments in the Gantt at a glance 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.

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, 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 to accommodate color-blind users.
 - 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To create, edit, and delete Gantt palettes:

Gantt Palettes Edit

To view the Palettes tab in the Gantt and apply a palette:

Gantt Palettes View

- **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 the 10 last modified active palettes in the org.
 - **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. Reloading the Gantt reverts it to the default color scheme.

The Gantt Color field on service appointments overrides the default color scheme. If you don't like the default color scheme, create a process in Lightning 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.



🁔 Tip: 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
- Color-code appointments based on the priority level of their parent work order

Control Which Absences Appear on the Gantt

Enable approval confirmation so only approved absences block your technician's availability and appear on the Gantt chart. Unapproved resource absences are not considered in scheduling nor shown on the Gantt until they are approved.

- Important: Before enabling this feature, make sure you approve all existing absences.
- 1. Create an approval process for absences that checks the Approved c field.
- 2. In the App Launcher, open the Field Service Admin app.
- 3. Select the **Field Service Settings** tab.
- **4.** Click **Scheduling** in the left-hand panel and then click **General Logic**.
- 5. Select Activate approval Confirmation on resource absences.
- 6. Click Save.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

Filter the Dispatcher Console by Service Territory

Learn how to filter service appointments by service territory in the Gantt.

You can filter the locations displayed on the Gantt by clicking the Settings icon and then Service Territory filtering.

The selected service territories will be loaded with the relevant resources and service appointments.



Note: Service territories that don't have resources assigned as territory members are shown on the appointment list but not on the Gantt chart.

- You can choose whether to Show Service Appointments that aren't associated with a territory. You will be able to schedule them to any of the loaded Service Territories.
- Search Territories: Use the search bar to filter out Service Territories.
- All / None: Use these buttons to quickly select all Service Territories or remove all selections.

If your mobile workers are assigned to more than one territory, you can view your mobile workforce's secondary service territory memberships on the Gantt.

1. From the Field Service Admin app, click the Field Service Settings tab.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- 2. Click Dispatcher Console UI in the left-side panel.
- 3. In the Gantt Configurations tab, check the Show secondary Service Territory Members on Gantt chart check box.
- 4. Click Save.
- 5. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets under Users.
- 6. Click FSL Dispatcher Permissions.
- 7. In the Apps section, click **Custom Permissions**.
- 8. Click Edit
- 9. Add FSL. View Resource on secondary STM permission to the FSL Dispatcher permission set.
- 10. Click Save.

Secondary Territory Membership Considerations

- When you use the Get Candidates action, any secondary territory membership candidates have a green mark to show that it's not their primary territory.
- When you drag and drop service appointments on the Gantt, the time slots are filled on both of the service resource's rows.
- Territory utilization doesn't calculate 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 other secondary territory memberships are still visible.

Measure Resource Utilization

View the individual utilization percentages of your service resources to make informed scheduling and hiring decisions. You can see each resource's utilization percentage for a particular day or over multiple days, and sort resources in the Gantt by utilization.

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.

How utilization is calculated

To determine which factors are considered when calculating a resource's utilization, click the filter icon in the Gantt, and then click the **Utilization** tab. Deselect any factors that you don't want to be included 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*)

- 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

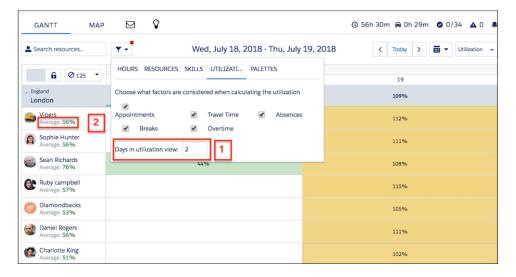
For example, if a resource's operating hours are a total of 20 hours per week and they're scheduled to work 10 hours in a particular week, their average utilization for the week is 50%.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

How utilization is shown in 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 dropdown list in the top right-hand corner.



From the utilization resource view, you can:

- View each resource's average utilization over the days in the utilization view (item 2 in the image above).
- View a resource's utilization for a particular day.
- Click an event name to view its details.
- Flag services.
- Click the date on the vertical axis to switch to the date's daily view.

Here are some ways to customize the utilization display settings.

Change the number of days in the utilization view

The utilization view can show between 1 and 31 days. To modify this setting from its 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 percentage makes it easier to quickly identify which resources need more or fewer assigned appointments. Click the Gantt filter icon, then click **Resources**. In the Sort by field, select **Average Utilization**.

Customize the utilization-based color code

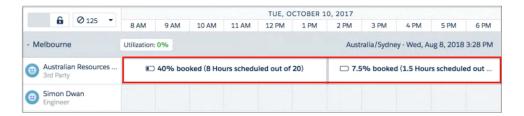
Resources in the resource list are shown in green, yellow, or red depending on their utilization percentage. To define the limits for these three colors, go to the Field Service Admin app and click **Field Service Settings** > **Scheduling** > **Dispatcher Console UI** > **Monthly View Settings**. Enter 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. Open the Field Service Admin app from the App Launcher and 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 are to reaching their capacity.



View Appointment KPIs

Assess the health of your field service operation at a glance with the help of the Gantt KPI (Key Performance Indicator) bar.

The KPI bar consists of five indicators, and can be found in the top right-hand corner of the Gantt.



Available in: Salesforce Classic and Lightning Experience

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The available indicators are, from left to right:

- Total scheduled time (workload) of all loaded service territories
- Average travel time per service 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

View Live Updates on the Gantt (Beta)

The Dispatcher Console Gantt refreshes itself every according to what's defined in your Field Service Settings. With Gantt Live Update you can use Streaming API and Push Topics, so that relevant changes are reflected immediately on the Gantt.

To learn more about the streaming API and push technology, see the Streaming API Developer Guide.

(1) Important: This release contains a beta version of Gantt Live Updates that is production quality but has known limitations. To provide feedback and suggestions, contact Salesforce.

To enable Gantt Live Update in your org:

- 1. Update Sharing Settings
- 2. Optionally, Update Push Topics
- 3. Enable Gantt Live Update
- 4. Grant Access
- 5. Enable for Admins

Update Sharing Settings

To ensure your dispatchers only receive notifications for the data they have access to, specific objects need to be defined as Private in your Org-wide Sharing Settings. Navigate to **Field Service Settings** > **Dispatcher Console UI** > **Updating the Gantt**. View the current status of these objects, and make any necessary changes.

Update Push Topics

Push topics are used to send event notifications on specified objects, fields, and criteria. The Field Service Lightning Managed Package creates push topics for:

- Service Resource
- Resource Absence
- Service Appointment
- Assigned Resource
- Service Resource Capacity
- FSL Operation
- Optimization Request

Make any necessary changes to your Gantt Field Sets, see Customize the Dispatcher Console with Field Sets.

If push topics aren't created, click **Update push topics** on the Updating the Gantt dialog.

Enable Gantt Live Update

From the Field Service Admin app, Field Service Settings, go to **Dispatcher Console UI** > **Updating the Gantt Updates are Enabled Org Wide** and then **Save**.

Grant Gantt Live Update Access

Give selected dispatchers the Streaming API custom permission.

Note: Dispatchers without the Streaming API custom permission get timed updates on the Gantt, as defined in your settings. Community dispatchers can't access live updates.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To configure the Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

To see live updates for the Gantt:

 Streaming API custom permission

Enable for Admins

Gantt live update access isn't automatically available to all admins. If too many update requests are be sent to the client, the Gantt chart can crash. After you've warned your admins of the risk, enable Gantt Live Updates for selected admins.

From the Field Service Admin app, Field Service Settings, go to **Dispatcher Console UI** > **Updating the Gantt** click **Allow admins to use Gantt Updates** and then **Save**.

Dispatcher Console Map

The dispatcher console map is an invaluable tool to help dispatchers get a bird's-eye view of their mobile workforce.

Switch Between Map Views

Control what information is shown on the Field Service Lightning dispatcher console map. By default, the map shows markers for all service resources whose appointments are currently loaded in the Gantt or appointment list.

Enable Map Polygons

Set up and configure map polygons so you can draw your own territories directly on the map.

Manage Map Polygons

Draw your own 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Switch Between Map Views

Control what information is shown on the Field Service Lightning dispatcher console map. By default, the map shows markers for all service resources whose appointments are currently loaded in the Gantt or appointment list.

To navigate to the dispatcher console map, from the App Launcher, open the Field Service app. Click the **Field Service** tab, then click the **Map** tab.



Note: The dispatcher console map may appear different than the map displayed on service territory member detail pages because of a difference in geocoding granularity. The dispatcher console map tends to be more accurate.

Choose what information is shown

Click **Map Layers**, which opens on the Markers tab. Select the types of 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, which is 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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 reports in the Field Service Reports folder appear in the Reports tab. The markers' icons on the map are visible according to the first column in the report. Up to 10 additional columns are visible inside the marker's info window.

Manage map polygons

Click **Map Layers**, then click the Polygons tab. Choose which polygons are displayed, customize their color-coding, and create new polygons.

View traffic conditions

Click **Traffic** at the top of the map to show traffic conditions.

Enable Map Polygons

Set up and configure map polygons so you can draw your own territories directly on the map.

- 1. From Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets** under Users.
- 2. Click FSL 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.
 - ? Tip: To give access to a selection of your users, create custom permission sets and assign these permissions to those users.
- 7. From the App Launcher, open the Field Service Admin app and click the Field Service Settings
- **8.** Click Service Appointment Life Cycle > Creation.
- 9. Enable Base service appointment territories on polygons.
- **10.** Set the territory classification policy to **Highest**.

When there are parent-child relationships between service territories (for example, East Village and New York), the service appointment is set to the highest in the hierarchy (New York). Set it to **Lower** if you want the lowest territory assigned (East Village). Middle tier territories are never assigned service appointments.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To configure the Field Service Lightning managed package:

Customize Application

Manage Map Polygons

Draw your own 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.

Creating and Updating 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 through API.

- 1. Open the Field Service app from the App Launcher, then click the Field Service tab.
- 2. Click the Map tab in the dispatcher console.
- 3. Click Map Layers.
- 4. Select Polygons.
- 5. Click New.
- **6.** Name your polygon.
- 7. Select a color.
- 8. Optionally, select a service territory.
- 9. Draw your polygon on the map.
- 10. Click Save.

To update a polygon, return to the Polygons tab in the dispatcher console map. Select a polygon, click **Edit**, make your desired changes, and click **Save**.

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.

Taking Mass Actions on Polygons

From the dispatcher console map view, you can apply mass actions to all service appointments within a polygon. Simply right-click a polygon and select the action to take. The following actions are available.

- **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.
- 1 Tip: Create custom actions to add to the actions list on polygons. For details, see Create Custom Actions for the Dispatcher Console.

Limits and Considerations

- A single polygon can contain up to 3,200 coordinates.
- If your org contains more than 200 polygons, you may experience performance issues with the dispatcher console. To avoid
 performance issues, set the sharing of the Map Polygon objects to Private and use sharing to expose only the relevant polygons to
 dispatchers.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

- If the service appointment 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.
 - **Ø**

Note: When creating polygons, don't create overlaps unless there are parent-child relationships between the corresponding service territories (for instance, East Village and New York). Service appointments are never assigned to middle-tier territories.

Manage Service Appointments

Learn how to schedule, reschedule, and unschedule service appointments.

Enforce Visiting Hours

Respect your customers' operating hours by enforcing them with a scheduling policy work rule. For example, if a customer's operating hours are weekdays between 8:00 AM and noon, use a work rule to ensure that appointments for the customer are scheduled only within those hours.

Scheduling Service Appointments

There are multiple options for scheduling service appointments.

Unscheduling Service Appointments

You can unschedule service appointments in Field Service Lightning in several ways.

Rescheduling Service Appointments

Use the Book Appointment Chatter action to reschedule a booked service appointment.

Check Rule Violations

Rule violations occur when an appointment schedule doesn't adhere to predefined scheduling

rules. Examples of rule violations include travel time conflicts, and appointments that are not scheduled between their Earliest Start Permitted and Due Date.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Enforce Visiting Hours

Respect your customers' operating hours by enforcing them with a scheduling policy work rule. For example, if a customer's operating hours are weekdays between 8:00 AM and noon, use a work rule to ensure that appointments for the customer are scheduled only within those hours.

- 1. From the Operating Hours tab, create operating hours on page 16 that reflect each customer's preferred hours for service appointments. Add the operating hours to the customer's account using the Visiting Hours field. Work orders created for the account use the account's operating hours.
- 2. Create a work rule to enforce operating hours.
 - **a.** From the Field Service Admin app, click the Work Rules tab and click **New**.



- b. Select Field Service Service Appointment Visiting Hours and click Next.
- **c.** Add a name, such as "Service Appointment Visiting Hours," and a description.
- **d.** Save your changes.
- 3. Add your new visiting hours work rule to a scheduling policy.
 - a. Click the Scheduling Policies tab.
 - **b.** Click the name of the scheduling policy you want to use.
 - **c.** In the Scheduling Policy Work Rules related list, click **New**.
 - **d.** Select the work rule you just created.
 - e. Save your changes.

When a scheduling policy containing this work rule is applied during optimization, appointments won't be scheduled outside of your customers' visiting hours.

Considerations

- Dispatchers can still manually schedule appointments outside a customer's operating hours. However, they'll be alerted that they're doing so.
- Service appointments use their work order's operating hours. A work order can't be associated with more than one operating hours record.
- Operating hours use the time zone of the service appointment they're attached to. The service appointment inherits its location's time zone. If the location has no time zone specified, GMT is used.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

Scheduling Service Appointments

There are multiple options for scheduling service appointments.

You can schedule service appointments in several ways:

- Use the Book Appointment Chatter quick action
- Drag an appointment from the appointment list onto the Gantt
- Click Schedule from the appointment mini view
- Click Schedule from the appointment list mass actions
- Use the Candidates Chatter guick action
- Use the Emergency Chatter guick action

Book Appointments

Use the Field Service Lightning managed package to book service appointments for different objects, including work orders, work order line items, accounts, assets, and opportunities.

Scheduling a Service Appointment Manually

A dispatcher can manually schedule service appointments.

Scheduling an Appointment in the Mini View

You can schedule service appointments in the service list's mini view.

Schedule Multiday Service Appointments

You can schedule service appointments that span multiple days.

Schedule Work Dependencies with Complex Work

To stay on top of complex projects, create dependencies between related service appointments. For example, ensure that related appointments start at the same time or are assigned to the same service resource.

Scheduling an Appointment from the Mass Schedule Action

Mass actions let you schedule multiple service appointments automatically.

Scheduling an Emergency Service Appointment

A real-time map view helps you schedule and manage emergency service appointments.

Changing the Service Appointment Status Manually

You can change a service appointment's status manually.

Changing an Appointment Status from the Gantt Chart

You can use the Gantt chart to change a service appointment's status.

Changing an Appointment Status in Chatter

You can go to the Chatter feed to change a service appointment's status.

Changing an Appointment Status on Service Appointment Detail Page

You can go to a service appointment detail page to change an appointment's status.

Automatic Appointment Status Change

A service appointment's status can be changed automatically or manually by the dispatcher or the field resource.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Book Appointments

Use the Field Service Lightning managed package to book service appointments for different objects, including work orders, work order line items, accounts, assets, and opportunities.

One or more service appointments can be booked for a parent record—like a work order—to reflect different visits. Use the Book Appointment action to create a new appointment or reschedule an existing one.

- 1. Open the record that requires an appointment. As an example, we'll use a work order.
- 2. In the Chatter feed, select **Book Appointment**. If this action isn't available, add it to the layout.
- 3. Skip the Work Type field.

Work types provide key inputs to the scheduling optimizer, including an estimated duration and skill requirements for the assigned service resource. For work orders and work order line items, the work type is defined on the parent record and can't be updated from the appointment booking window. If you're booking an appointment for any other type of record, the Work Type field is editable.

- **4.** If needed, update the address. The address is inherited from the parent record.
- **5.** If needed, update the service territory. The service territory is inherited from the parent record.
- **6.** Click **Show more options** to update the Earliest Start Permitted and Due Date.
- 7. Click **Get Appointments** to view a graded list of available time slots. The list considers all scheduling constraints, such as the current schedule, work rules, and service objectives. Depending on your settings, slots may be flagged as Ideal or Recommended or shown in yellow to indicate a prime slot. Click the information icon to see how each slot ranks against the scheduling policy's KPIs.
- **8.** Click **Extend Dates** to show a wider range of service appointment dates.
- 9. Select an appointment window. A service appointment is created and automatically assigned to a service resource, taking into consideration all scheduling constraints. To view the details, click View Service Appointment.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

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To create a permission set:

 Manage Profiles and Permission Sets

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.

Scheduling a Service Appointment Manually

A dispatcher can manually schedule service appointments.

The Dispatcher can schedule a service appointment by dragging it from the appointment list and dropping it on a selected resource space on the Gantt chart.

Using this method, you can drag the service appointment to any resource. If it causes rule violations (for example, the wrong skill set), it will be marked with a yellow triangle. Hovering over the service appointment space shows the appointment details and the list of rule violations, as shown below:



Note: Rule violations can only occur when a service appointment is scheduled manually. Automatic scheduling never breaks a rule.

You can configure what should be the stopping points for your appointments when dragging & dropping. Simply change the value in the settings to the duration of your choice.

- For Field Service Settings, click Scheduling > Dispatcher Console UI > Drag Jumps >> on
 Gantt
- 2. Set the minute window to your preference.

Manual Scheduling Considerations

- When dropping an appointment block on the Gantt, it shifts to the closest valid slot. For example, if drag jumps are set to 30 minutes and the appointment is dropped at 10:20 it moves to 10:30. If it is dropped at 10:14 it moves to 10:00.
- Gantt Chart Appointment Minimum Drag Step settings lock the appointment block for a minimum amount of time. It was meant to avoid human errors when the dispatcher moved the appointment block accidentally. Customers who are using the Drag Jump feature usually don't need the Gantt Chart Appointment Minimum Drag Step feature, and are best to leave it configured to 1 minute.

Scheduling an Appointment in the Mini View

You can schedule service appointments in the service list's mini view.

Click a service appointment in the service list to expand a mini service view. On the bottom of the mini service view, you can find the Schedule action.

Click **Schedule** to let the system schedule the service appointment while taking into account the rules and objectives in the configured scheduling policy (located above the service appointment list).

You will be notified if there are no available candidates. You can manually bypass the rules and objectives for further scheduling.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Schedule Multiday Service Appointments

You can schedule service appointments that span multiple days.

Rome wasn't built in a day, and chances are that your grander projects also require more than a day's work. Happily, you can schedule service appointments that span multiple days.

To enable multiday scheduling:

- 1. In the App Launcher, select the **Field Service Admin** app.
- 2. Select the Field Service Settings tab.
- 3. Click Scheduling in the left-hand panel and then click **General Logic**.
- 4. In the Multi-day service appointment field dropdown select Is MultiDay.
- **5.** From the Setup Object Manager, enter *Service Appointment* in the Quick Find box and select **Service Appointment**.
- 6. Click Page Layouts.
- 7. Click FSL Service Appointment Layout in the Page Layout Name column.
- 8. Add the Is MultiDay to page layouts.
- 9. Click Save.
- **10.** From Setup, enter *Permission Sets* in the Quick Find box, then select **Permission Sets** under Users.
- 11. Click FSL Dispatcher Permissions.
- **12.** In the Apps section, click **Custom Permissions**.
- 13. Click Edit.
- **14.** Add FSL.MDT View permission to the FSL Dispatcher permission set.
 - Tip: If you want only some of your users to be able to access the multiday view you can create your own permission sets and assign these to your users.

15. Click Save.

When a service appointment spans multiple days, select this checkbox on the service appointment. The multiday service spans over the time needed based on its duration and the assigned resource availability. multiday is supported in the following scheduling actions:

- Drag and drop
- Get candidates (get candidates only shows the time the multiday work can start)
- Appointment booking
- Scheduling from the Gantt or the guick action
- Reshuffle
- Optimization
- On multiday service appointments, start and end times must be in valid time slots of the assigned resource's calendar.
- The resource can't be assigned to any other appointment during the multiday service appointment.
- Multiday service appointments that overlaps with other services don't trigger the fix overlaps capability.
- Multiday service appointments can't be assigned to a capacity based resource or contractor.
- Multiday service appointments can't span over more that eight weeks.
- Multiday work calculations are run when the assigned resource changes, the service appointment duration changes, or the service appointment start changes.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

Schedule Work Dependencies with Complex Work

To stay on top of complex projects, create dependencies between related service appointments. For example, ensure that related appointments start at the same time or are assigned to the same service resource.

To be able to create dependencies between related service appointments, enable complex work.

- 1. In the App Launcher, select the Field Service Admin app.
- 2. Select the Field Service Settings tab.
- 3. Click **Scheduling** in the left-hand panel and then click **General Logic**.
- 4. Under Complex Work, select Enable complex work.
- 5. 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 a chain of two service appointments with dependencies between them from being scheduled separately. It doesn't apply for chains of three or more appointments.

After complex work is enabled, you can create any size chain of appointments and schedule it right from the Complex Work Visualforce page. This page is embedded in the service appointment page layout, but can be embedded in any page layout. The following dependencies are available:

- **Same start**: The service appointments must start together.
- Start after finish: Service appointment B cannot start until service appointment A is completed.
- **Same resource**: The service appointments must be assigned to the same service resource.

You can also use the scheduling actions, dispatcher console, and optimization to schedule chains of two appointments. For example, if you use the Book Appointment quick action to try to schedule an appointment that is part of a chain of two appointment, both appointments in the chain will be scheduled.

Considerations for Using Complex Work

- To view a service appointment's related appointments, right-click the appointment on the Gantt and select Show related.
- To control which fields are shown in the search results, modify the Service Appointments List Columns field set.
- Capacity-based resources can't be assigned to appointments that are part of an appointment chain.
- If a chain of service appointments encompasses multiple service territories, all of the territories must be selected in the optimization request for the appointments to be scheduled.
- Community dispatchers can't access this feature.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Scheduling an Appointment from the Mass Schedule Action

Mass actions let you schedule multiple service appointments automatically.

By using the Schedule option from the Service Appointment List Mass Actions menu, you can automatically schedule multiple service appointments in order based on their priority.

To schedule service appointment(s):

- 1. In the Service Appointment list, select the appointment(s) you would like to schedule.
- **2.** On the service list mass schedule menu, click Schedule. The progress bar appears at the bottom right corner.
- **3.** When the scheduling process is completed, you can either close the message box or view the detailed schedule results by clicking **View Service Appointments**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

Scheduling an Emergency Service Appointment

A real-time map view helps you schedule and manage emergency service appointments.

Swiftly schedule, dispatch, and track emergency appointments with the help of a real-time map view. Clicking the Emergency Chatter action on a service appointment reveals a map view of your closest field resources so you can dispatch work immediately.

The Emergency Wizard settings include several ways to customize your approach to emergency service appointments. From the App Launcher, open the Field Service Admin app, then click the Field Service Settings tab > **Global Actions** > **Emergency Wizard**.

| Setting Name | Description |
|------------------------------|--|
| Emergency scheduling policy | The default policy that will be used to find resources to assign to an emergency service. 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—such as resource location or geolocation—is no longer valid. For example, if the breadcrumb validity is 20 minutes and the location of resource X was last updated 30 minutes prior, the emergency dispatcher calculates the resource's ETA based on the |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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| Setting Name | Description |
|---|--|
| | location of the last appointment they completed, or if they did not complete any appointments that day, their home base. The home base is the resource's service territory member address, or if not applicable, their service resource address. |
| Ideal availability grade Good availability grade | The grading of candidates (color-coded). In the breadcrumbs example: Resources who can reach the appointment in less than 30 minutes are ideal candidates. Resource who can reach the appointment between 30 and 60 minutes are good candidates. Resources who can reach the appointment after 60 minutes are bad candidates. |
| Emergency search timeframe | The amount of time you have to resolve the emergency, not counting the appointment duration. The <code>Earliest Start</code> Permitted on the appointment is set to the current time, and the <code>Due Date</code> is the current time + appointment duration + Emergency Search Timeframe. |
| | For example, if an appointment will require 1 hour of work and you set the Emergency Search Timeframe to 360 minutes (6 hours), the emergency dispatcher shows you only resources who can travel to and complete the task in the next 7 hours. |
| Allow Chatter post | If selected, in an emergency service appointment dispatch, the dispatcher is shown the option to make a custom Chatter post or not post at all. If not selected, no Chatter post is made. |

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.
- A Dispatch button. Click **Dispatch** to assign the appointment to them and, if **Allow Chatter post** is selected, customize their Chatter notification.

Resource locations are calculated based on their latest breadcrumbs. If they don't have valid breadcrumbs, their location is the location of the last appointment they completed, or if they did not complete any service appointments that day, their home base, which is either their Service Territory Member address, or if not applicable their Service Resource address.

The emergency dispatcher tool comes with a range of helpful features:

- If your current scheduling policy isn't returning any candidates, change the policy directly on the map to trigger another search (for instance, from Medium to Easy).
- If you want a candidate to complete their current service before heading to the emergency service, change the dispatcher setting from "as soon as possible" to "after current service" at the top of the map. Changing this setting updates the candidates' ETA.
- Click Candidates to view a list of all candidates in order of ETA. Hover over a resource name in the list to see options to dispatch them or view them on the map.

- Quickly spot emergency services in the Gantt by looking for the lightning icon.
- If available, click the traffic layer.
- Zoom in on the emergency service location.

Changing the Service Appointment Status Manually

You can change a service appointment's status manually.

The Service Appointment status can be changed either automatically (that is, status becomes 'None' by the unscheduled Gantt action, status becomes Dispatched by the Auto dispatch background job etc.) or manually by the dispatcher or the field resource. This section explains manual status changes done by a dispatcher. Automatic status changes are described under Automatic Service Status Change.

You can manually change the Service Appointment status from several places:

- Service Appointment on the Gantt Chart Right click, and change the status
- Change status Chatter quick action
- Service Appointment detail page or lightbox

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Changing an Appointment Status from the Gantt Chart

You can use the Gantt chart to change a service appointment's status.

- 1. On the Gantt, select the appointment(s) whose status you want to change. You can select more than one service by holding CTRL / CMD while clicking on service appointments.
- **2.** Right-click on the selection to display the Gantt actions.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

USER PERMISSIONS

To customize the Field Service Lightning managed package:

Customize Application

Changing an Appointment Status in Chatter

You can go to the Chatter feed to change a service appointment's status.

- **1.** Open a service appointment record whose status you want to change, either in a Salesforce record detail view or in a Gantt lightbox.
- **2.** In the Chatter feed, select the 'Change Status' Chatter quick action.
- **3.** Select the desired status. Only status values that obey the status flow configuration are shown. A notification appears that the status was updated successfully.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To edit service appointments:

 Edit on service appointments

Changing an Appointment Status on Service Appointment Detail Page

You can go to a service appointment detail page to change an appointment's status.

- 1. Open the service appointment record whose status you want to change, either in a Salesforce record detail view or in a Gantt lightbox.
- 2. Double-click the **Status** field to select a new value.
 - Note: The dropdown list will show all statuses in the system, but the status change will work only according to the configured Service Appointment Lifecycle status transitions.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To edit service appointments:

 Edit on service appointments

Automatic Appointment Status Change

A service appointment's status can be changed automatically or manually by the dispatcher or the field resource.

Automatic status changes are triggered by the following:

- Automatic Status change Auto dispatch background job: This job enables automatic
 dispatching of assigned appointments. It changes the status of the chosen appointments
 (according to the job configuration) from Scheduled to Dispatched.
- Automatic Status change System trigger

Unschedule the Service Appointment when its status is changed to Canceled or New: When a service is Canceled or its status is changed to None, the service will be automatically unscheduled and removed from the Gantt.

The above trigger can be activated or deactivated, according to the business needs.

EDITIONS

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Unscheduling Service Appointments

You can unschedule service appointments in Field Service Lightning in several ways.

- In the appointment list, select one or more appointments to unschedule and select **Unschedule** in the mass actions menu.
- Right-click an appointment on the Gantt and select **Unschedule**. To select multiple appointment, hold down CTRL or CMD.
- Change the service appointment status to **None**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Rescheduling Service Appointments

Use the Book Appointment Chatter action to reschedule a booked service appointment.

- 1. Open the parent record—typically a work order or work order line item—of the appointment you want to reschedule.
- 2. In the Chatter feed, select **Book Appointment**. If this action is not available, add it to the layout.
- **3.** Update the appointment settings as needed.
- **4.** Click **Get Appointments** to view a list of available slots.
- **5.** Select your new appointment window.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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USER PERMISSIONS

To enable Field Service Lightning managed package:

Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets

Check Rule Violations

Rule violations occur when an appointment schedule doesn't adhere to predefined scheduling rules. Examples of rule violations include travel time conflicts, and appointments that are not scheduled between their Earliest Start Permitted and Due Date.

The scheduling policy displayed at the top of the appointment list controls which rules are taken into consideration. If rule violations occur, a service appointment is marked in the Gantt with a yellow triangle. Hover over the appointment to view its details and the list of violated rules.

When automatic scheduling is used—with the Schedule or Get Candidates action—rule violations don't occur. Field Service Lightning automatically chooses schedules that don't violate rules.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Manage Service Resources

Service resources represent technicians that are assigned to complete a service appointment. Learn tips for managing service resources when the Field Service Lightning managed package is installed.

View a Service Resource's Calendar

Resource detail pages include a customizable calendar that shows the resource's scheduled services and absences. This makes it easier for dispatchers to get a snapshot of a resource's availability, and helps resources keep track of their schedule.

View Daily Travel Routes

The scheduling engine uses street-level routing to schedule your technician's day appropriately. On the day of service, the geocoding feature of the Field Service Lightning mobile app tracks the actual route taken. You can see both the planned and actual routes together on the resource map view.

Estimate Service Resource Efficiency

Some service resources work faster or slower than expected due to different skills and levels of experience. Measure how fast service resources complete work orders and ensure that your

work type duration estimates are accurate. Resource efficiency is taken into account during scheduling and can result in an adjustment of an appointment's Scheduled End.

View Service Crews on the Gantt

If service crews are enabled in the Field Service Lightning managed package, the dispatcher console Gantt displays service resources of type Crew and service crew members.

EDITIONS

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View a Service Resource's Calendar

Resource detail pages include a customizable calendar that shows the resource's scheduled services and absences. This makes it easier for dispatchers to get a snapshot of a resource's availability, and helps resources keep track of their schedule.

To view a service resource's calendar, navigate to their detail page from the Service Resources tab and scroll to the Calendar tab. Clicking a field on a calendar entry opens 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

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USER PERMISSIONS

To enable Field Service Lightning managed package:

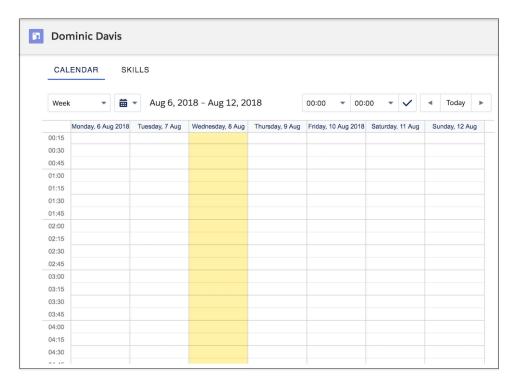
Customize Application

To assign a permission set license:

Manage Users

To create a permission set:

 Manage Profiles and Permission Sets



Follow these steps to control which information appears in the calendar.

- 1. Customize field sets to control which fields appear in calendar entries for service appointments and resource absences.
 - 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.

Fore more details, see Customize the Dispatcher Console with Field Sets.

- 2. Update the Gantt Color field on resource absences with a 6-digit hex code to color-code resource absences on the calendar.

 This lets you represent different types of absences with different colors—for example, lunch breaks in red and internal meetings in green.
 - Tip: Use the Process Builder to automate the color-coding of resource absences.

View Daily Travel Routes

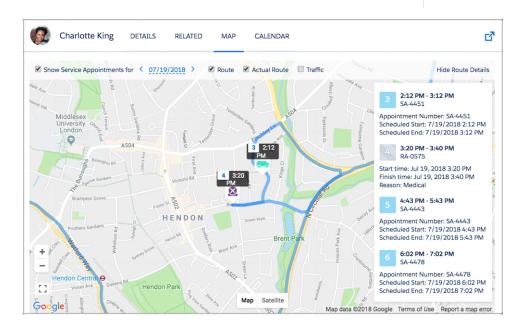
The scheduling engine uses street-level routing to schedule your technician's day appropriately. On the day of service, the geocoding feature of the Field Service Lightning mobile app tracks the actual route taken. You can see both the planned and actual routes together on the resource map view

Navigate to a service resource's map from the dispatcher console resource list by clicking **Details** in a resource's action menu and then clicking 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.

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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 only be shown if history tracking is set on the service resource's Last Known Location field and geolocation tracking is turned on for them.

Appointments are shown with a truck icon. Resource absences with a valid address—meaning a latitude and longitude can be calculated—are shown with an X icon.

1

Note: To show or hide resource absences on the map, open the Field Service Admin app from the App Launcher. Click **Field Service Settings** > **Dispatcher Console UI** > **Gantt Configurations**. Select **Show absences on resource map**.

On the right-hand side of the map, show or hide the route details pane. To zoom in on an appointment, hover over the appointment number in the pane and click **Center on Map**.

Estimate Service Resource Efficiency

Some service resources work faster or slower than expected due to different skills and levels of experience. Measure how fast service resources complete work orders and ensure that your work type duration estimates are accurate. Resource efficiency is taken into account during scheduling and can result in an adjustment of an appointment's Scheduled End.

Efficiency is a measure of a technician's relative working speed. The efficiency scale ranges from 0.1 to 10.0. An efficiency of 1 means that the technician works at a typical or average speed. An efficiency greater than 1 means that the technician works faster than average, and less than 1 means that the technician works slower than average.

The scheduling optimizer uses resource efficiency to estimate the time that a technician needs to complete an appointment, according to the following formula: Actual time to perform an appointment = Duration / Efficiency.

For example, suppose the Estimated Duration on the Battery Replacement work type is 1 hour.

- Alexander, an Expert, has an efficiency of 2.0. If Alexander is assigned to a Battery Replacement appointment, the appointment will be scheduled to end 30 minutes after the Scheduled Start (60/2=30).
- Jane, a Technician, has an efficiency of 1.00. If Jane is assigned to a Battery Replacement appointment, the appointment will be scheduled to end 1 hour after the Scheduled Start (60/1=60).
- Janice, a Junior Technician, has an efficiency of 0.50. If Janice is assigned to a Battery Replacement appointment, the appointment will be scheduled to end 2 hours after the Scheduled Start (60/0.5=120).

Tip: Factor in Efficiency in the priority field used in the Resource Priority service objective to give preferences to highly efficient service resources.

View Service Crews on the Gantt

If service crews are enabled in the Field Service Lightning managed package, the dispatcher console Gantt displays service resources of type Crew and service crew members.

For service resources of type Crew, select **Show Crew** in the Service Resources menu 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.

The Gantt displays the Gantt Label text of the service crew member. 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.

Crew-related Gantt filters

The following filter settings related to crews are available:

- Hide Crews and Service Crew Members: Shows only service resources of type Technician that are not allocated to a crew in the time frame open on the Gantt.
- Show only Crews: Show only service resources of type Crew.
- Show Crews and Their Service Crew Members: Show only service resources of type Crew and service resource of type Technician who are allocated to these crews in the time frame open on the Gantt.
- 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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• Show all: Do not filter based on crew properties.

The appointment list also includes a filter that shows service appointments that fit one or both of the following requirements:

- The appointment is assigned to a service resource of type Crew
- The appointment's parent record's Minimum Crew Size is greater than 1



Note: The FSL.Service List View - Crews custom permission controls the user visibility of the Crews list view. If you want your users to be able to access this view, assign them this custom permission. For instance, if you would like all of your dispatchers to access the Crews view, add the custom permission to the FSL Dispatcher Permissions permission set.

FIELD SERVICE LIGHTNING MOBILE APP

The Field Service Lightning mobile app for Android and iOS is an all-in-one tool for field service technicians on the go. This enterprise-class mobile experience leverages Salesforce in a lightweight design optimized for a modern mobile workforce. Offline capability means that users can keep working without internet connectivity and know that all their changes are saved. And the app is highly customizable, allowing you to tailor it to your unique field service needs.

Review this table to learn what the app has to offer. If you aren't yet using Field Service Lightning in Salesforce, see Set Up Field Service Lightning before getting started with the app.

| Feature | Description |
|----------------------------------|---|
| Offline capability | The app works offline, so technicians 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. |
| Custom branding | Brand the app to give it your company's look and feel. |
| Configurable layouts | Flexible layouts let you choose what record information to display to your users. |
| 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. |
| Chatter | Communicate with dispatchers, partners, and customers using Chatter. |
| Community user access | Give members of your Salesforce Communitylike contractorscustom access to your field service operation. |
| Geolocation tracking | Keep tabs on service resources and enable smarter scheduling with resource geolocation tracking. |
| Service reports | Create previewable service reports summarizing field service visits. Seal the deal by capturing customers' signatures on the reports. |
| 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. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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| Feature | Description |
|----------------------------|--|
| 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. |
| Find nearby work | Help your team find other work orders in the same location so they can take care of nearby jobs. |
| Inventory tab | Let your team manage track consumption, request products, and view their inventory from the app. |





Field Service Lightning Mobile App Requirements

Learn about the mobile app's device, connectivity, edition, and license requirements.

Supported Devices

| Supported Devices | Supported Mobile OS | Other Requirements |
|--|-----------------------|---|
| Android: All major Android devices are supported. The app is optimized for Samsung, Nexus, and Pixel devices. | Version 5.0 and later | Google Play Services version 10.2.0 and later Field Service Lightning Mobile app for Android isn't supported on tablets when using a restricted profile. |
| iOS:iPhone 5c/5s or later models | iOS 10.3 or later | |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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| Supported Devices | Supported Mobile OS | Other Requirements |
|---|---------------------|--------------------|
| • iPad 4 or later models (including iPad Air 2 and iPad Pro) | | |

For optimal performance, keep your mobile devices' operating systems updated and upgrade to the latest model of devices as allowed by your mobile plan. Future versions of the Field Service Lightning mobile app may require removing support for older operating systems, and sometimes newer operating systems don't perform well on older devices.

Wireless Connection

The Field Service Lightning app is optimized for offline performance, but a Wi-Fi® 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.

Field Service Lightning Mobile App Limitations

Review limitations for the Field Service Lightning mobile app for Android and iOS.

Service Appointments

Service appointment status can't be updated manually from the mobile app, but you can create
a flow to let users update it.

Service Reports

- If a work order has one or more service appointments, app users can create service reports only
 for the work order's service appointments, not for the work order itself. Clicking Create Service
 Report on the work order overview screen creates a service report that uses the Service
 Appointment for Work Order sub-template of the selected service report template. The same
 limitation applies to work order line items with service appointments: the line item's service
 reports use the Service Appointment for Work Order Line Item sub-template. Users in the full
 Salesforce site can generate service reports without issue for any work order or work order line
 item.
- (Android only) Service closure flows aren't supported. This means that signature capture can't be included as the final step of a flow and must be performed separately.
- Service report previews include the following limitations, which don't apply to non-preview service reports:
 - The data in service report previews may be out of date because the app doesn't automatically get the latest data before generating
 a preview.
 - Reference fields aren't populated if they exceed the maximum priming depth of 2.
 - If a service report template includes a related list, but the record that the service report is being generated for doesn't have the related list on its page layout, the related list isn't populated.
 - Formula field values may be inaccurate in a preview because they aren't dynamically calculated.

EDITIONS

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- Roll-up summary fields are blank.
- The following 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

Inventory Management

- App users can consume—via the Products Consumed related list—only one serialized product item per product per work order.
 For example, you may have multiple product items that are assigned serial numbers and that are all associated with your Inverter product. An app user can add only one of them as a product consumed on a specific work order. This limitation doesn't apply to non-mobile platforms.
- For better performance, only 1000 of the most recently modified inventory items are primed.

Chatter

- Users can't edit Chatter posts or set Chatter profile images from within the app.
- The Feed tab in iOS is supported only on the work order, work order line item, and case objects. The Feed tab in Android is supported only on the work order and work order line item objects.
- (Android only) Chatter is disabled when the app doesn't have internet connectivity.

For a comparison of supported Chatter functions in Android and iOS, see Chatter in the Field Service Lightning Mobile App.

Knowledge

- (iOS only) Images in knowledge articles display normally if they are hosted outside of Salesforce. Articles that use images uploaded to Salesforce won't load those images. 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.
- (Android only) If a mobile app user's device is running in any of Salesforce's 26 supported languages, the app automatically translates the articles to the language of their mobile device's operating system. Otherwise, the app defaults to English.

Barcode Scanner

- The barcode scanner is compatible only with 1D serial barcodes and 2D QR codes.
- In barcode scanning, the Android app uses the Zebra Crossing library. The iOS app uses Apple's built-in libraries with the exception of AVMetadataObjectTypeFace; for details, see AVMetadataObjectType.
- The barcode scanner can only be used to search for existing barcodes in your org, and cannot be used to add new barcodes.

Flows

Resources of the type Formula aren't supported.

- Actions in flows can't rely on the output parameters of an action.
- Returning to a previous screen is not allowed during a flow if the flow includes a loop or subflow.
- The wasSelected operator can't be used in decisions.
- Hardcoded ID values must be 18 digits long. 15-digit values aren't supported.
- Apex classes aren't supported in flows.
- (Android only) Service closure flows aren't supported, so signature capture can't be included as the final step of a flow and must be performed separately.
- For uploading images in flows, the content document IDs parameter isn't supported, an admin must create a flow confirmation screen to show which images were uploaded, and videos and other files types aren't supported.

Lightning App Extensions

- The Salesforce app no longer support parameters passed through Lightning app extensions. Attempting to pass parameters from Field Service Lightning with a Lightning app extension to the Salesforce app opens the Salesforce app on the mobile device, but without any of the parameters being read by it.
- 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.

General Limitations

- Under the profile tab, only 10 resource absence records display.
- Visualforce pages aren't supported in the app, including actions and Visualforce components on page layouts.
- Lightning Component and custom override quick actions aren't supported.
- Lookup filters aren't supported.
- Country/state and country/territory dependent picklists don't always display the correct values in the app. To avoid data errors, we recommend disabling state and country picklists in your org.
- (Android only) By default, there is no way to automatically open a record from the Field Service Lightning app in the Salesforce app without a Lightning app extension.
- (Android only) Files and Notes aren't supported.
- (Android only) the Field Service Lightning app isn't supported on tablets when using a restricted profile.
- (iOS only) Only plain text is supported for rich text fields.
- (iOS only) Default values are not available in offline mode.
- (iOS only) Lookup fields, like Account, aren't supported on the Schedule, Work Order, and Work Order Line Item tabs and won't show up.
- (iOS only) Custom override on actions is unsupported, including custom override on lookup logic.

Field Service Lightning Mobile Security

Protect and safely store data that is gathered from the Field Service Lightning mobile app (Android and iOS).

The Field Service Lightning 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

to retain.

• Address (Street and City only)

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

Important:
 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 encrypting existing data.

Salesforce App Field Service Lightning 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. Field Service Lightning App Data is stored using the SmartStore encrypted database which is provided by the Salesforce Mobile SDK. Encryption is provided by sqlite3 provider, Sqlcipher. Cached data is purged based on a least-recently-used cache policy

Table 2: Files and Attachments

| Salesforce App | Field Service Lightning App |
|---|--|
| Files and attachments are stored on the device's file system in a double-encrypted format. The device's hardware encryption | Files are stored in iOS sandboxed directory and are also encrypted by application encryption. While viewing, files are temporarily |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

| Salesforce App | Field Service Lightning App |
|---|--|
| 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). | unecrypted 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 3: Chatter Feed Data

| Salesforce App | Field Service Lightning 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. | All Chatter feed data is stored in local SmartStore encrypted database (encryption is provided by Sqlcipher library). Cached data is purged based on a least-recently-used cache policy |
| Also, the feed data storage is time-based. The feed cache purges items older than one week, unless the remainder of feed items is less than 25 items. Also feeds that have more than 500 items have their excess items removed. | |

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 Lightning App |
|--|--|
| The Salesforce 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. | Provider. The functionality between SF1 and FSL mobile apps have |

| Salesforce App | Field Service Lightning App |
|--|-----------------------------|
| Alternatively, Salesforce's Lightning Login feature has multifactor authentication from the Salesforce Authenticator app. The factors are: | |
| What you have: The mobile device | |
| What you are: If fingerprint biometrics are 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 Lightning 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.

Data Loss Prevention on Mobile Devices

To prevent leakage of sensitive data, the Salesforce app supports four settings to limit data exfiltration via a mobile device.

- **DISABLE_EXTERNAL_PASTE**: Allows users to copy-and-paste data *within the Salesforce App*, but prevents users from copying within and pasting outside of the Salesforce App.
- **FORCE_EMAIL_CLIENT_TO**: If a user taps on an email action within the Salesforce 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 Salesforce App.
- SHOW_PRINT: Used to disable printing from within the Salesforce App.

| Setting | Supported Salesforce Mobile | Supported on Field Service Lightning Mobile |
|------------------------|-----------------------------|---|
| DISABLE_EXTERNAL_PASTE | ▽ | ▽ |
| FORCE_EMAIL_CLIENT_TO | ▽ | 8 |
| SHOW_OPEN_IN | ▽ | 8 |
| SHOW_PRINT | ▽ | 8 |

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 O=on Salesforce Mobile | Supported on Field Service Lightning Mobile |
|----------------------------|----------------------------------|--|
| RequireCertAuth | ✓ | ✓ |
| AppServiceHosts | ✓ | ✓ |
| AppServiceHostLabels | ✓ | ✓ |
| OnlyShowAuthorizedHosts | | |
| ClearClipboardOnBackground | ~ | ✓ |

Field Service Lightning Android and iOS Mobile App Comparison

Learn about the main feature differences between the Android and iOS versions of the Field Service Lightning mobile app.

| Feature | Supported on Android | Supported on iOS |
|---|----------------------|------------------|
| Native deep linking to the Salesforce App | 8 | ~ |
| Mentioning people and groups | ~ | 8 |
| Video, image, and PDF posts | ~ | 8 |
| Deleting posts | ~ | 8 |
| Liking and bookmarking posts | ~ | 8 |
| Offline posts | 8 | ~ |
| Find work by location | ~ | 8 |
| Products required | 8 | ✓ |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Supported Data Types in the Field Service Lightning Mobile App

Learn which data types are supported in the Field Service Lightning mobile app for Android and iOS.

| Data Type | Supported |
|------------------------------|---|
| Auto Number | <u>~</u> |
| Formula | <u>~</u> |
| Roll-Up Summary | 8 |
| Lookup Relationships | 8 |
| External Lookup Relationship | 8 |
| Checkbox | ✓ (Shows Yes/No) |
| Currency | <u>~</u> |
| Date | <u>~</u> |
| Date/Time | ✓ (The following fields aren't supported: Scheduled End, Scheduled Start, Arrival Window End, Arrival Window Start) |
| Email | ✓ |
| Geolocation | <u>~</u> |
| Number | <u>~</u> |
| Percent | <u>~</u> |
| Phone | ✓ |
| Picklist | <u>~</u> |
| Picklist (Multiple Select) | <u>~</u> |
| Text | <u>~</u> |
| Text Area | <u>~</u> |
| Text Area (Long) | <u>~</u> |
| Text Area (Rich) | 8 |
| Text Area (Encrypted) | 8 |
| TimeBETA | ✓ |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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| Data Type | Supported |
|-----------|-----------|
| URL | ✓ |

Prepare for the Field Service Lightning Mobile App

Before you configure user access and customize the Field Service Lightning mobile app, download the connected app.

The connected app, which is different from the actual Field Service Lightning mobile app, provides push notifications and other app settings related to service report generation and app customization. If your team uses mobile devices, download the connected app for Field Service Lightning.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

USER PERMISSIONS

To install connected apps

Customize Application

Give Users Access to the Field Service Lightning Mobile App

To give your mobile workforce access to the Field Service Lightning mobile app, set them up with the right user license and permissions. These steps also apply to community users.

- **1.** Assign the Field Service Mobile user license to the user.
- 2. Create a Field Service Mobile permission set.
 - a. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
 - **b.** Click **New**.
 - **c.** Select the Field Service Mobile license from the picklist.
 - 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.

Click **Object Settings**, then click an object's name to modify its permissions. Save your changes after modifying an object. At a minimum, app users need the following permissions. You can assign additional permissions to objects such as assets, accounts, and products, as you see fit.

| Object Name | Object Permission Needed | Field Permission Needed |
|---------------------|-----------------------------|---|
| Contact | Read | Email, Name, Phone, Title |
| Resource Absence | Read, Create, Edit | Absence Number, End Time, Start Time, Resource, Type |
| Service Appointment | Read, Edit | Address, Appointment Number, Contact, Created By, Created Date, Owner, Parent Record, Parent Record Type, Parent Record Status, Category, Scheduled Start, Scheduled End, Status, Work Type |
| Service Resource | Read, Edit | Active, User |
| Work Order | Read, Create, Edit | None |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

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.** Add the API Enabled system permission to the permission set.
 - a. Click System Permissions.
 - **b.** Click **Edit**.
 - c. Select API Enabled.

- d. Click Save.
- 5. Assign the permission set to your mobile app users.
 - a. Click Manage Assignments, and then click Add Assignments.
 - **b.** Select all users who needs the app permission set.
 - c. Click Assign.
- **6.** Create a service resource record for each user. For instructions, see Create Service Resources.

Let Users Manage Inventory from the Field Service Lightning Mobile App

Customize your page layouts and user permissions to your team can take care of inventory management tasks. For example, give technicians the ability to log product consumption, create product requests, and keep their service vehicle inventory current. Inventory management is supported in both Android and iOS.

Before getting started, get to know Salesforce inventory management lingo and processes. See Set Up and Manage Your Inventory.

Let users view the Inventory tab (Android and iOS)

Users view and update their inventory, log inventory consumption, and request parts from the Inventory tab. To see the Inventory tab, app users need to be active service resources who are associated with a mobile inventory location.

Locations represent physical areas where products are stored. Because field service workers typically bring products with them in their vehicle, you can create a special type of location to represent their inventory.

- 1. From the full Salesforce site, click the Service Resources tab.
- 2. Click **Edit** on the service resource associated with the user in question.
- 3. In the Location lookup field, enter a location on which both **Inventory Location** and **Mobile Location** are selected. These settings mean that the location is mobile, like a service vehicle or toolbox, and can be associated with inventory. If you don't see the Location field, add it to your service resource page layout.

Here's a location with **Inventory Location** and **Mobile Location** both selected.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

USER PERMISSIONS

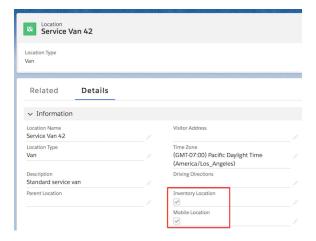
To update page layouts:

Customize Application

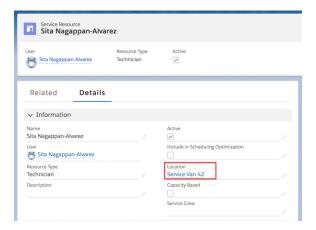
To update connected apps:

 Customize Application AND either Modify All Data OR

Manage Connected



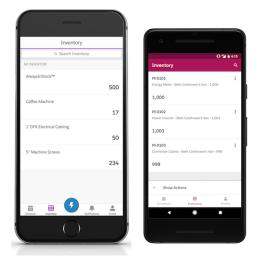
And here's a service resource associated with that location. Because this service resource is associated with the location, they'll see the Inventory tab in the app.



Let users manage their inventory (iOS and Android)

After a service resource is associated with a mobile inventory location, create *product items* to represent the stock in their service vehicle. Each product item is linked to a 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.

- 1. From the Product Items tab in the full Salesforce site, create product items whose Location is 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. For help creating product items, see Create Parts.
- 2. If you want your team to be able to create or update the product items representing their inventory, assign the object permissions listed in Create Parts.



Let users log product consumption (Android and iOS)

To allow your team to create product consumed records from the field service app, make the following configurations.

- 1. Ensure that the user is an active service resource who is associated with a mobile inventory location.
- 2. Add the Products Consumed related list to the work order page layout so it is visible in the Products and Related tabs of the work order carousel.
- **3.** Assign the user the object permissions listed in Track Consumed Parts.



Let users log product consumption from multiple locations (Android and iOS)

By default, the products consumed on a work order or work order line item must all be associated with the same location via the product item field. In other words, a work order can't have one product consumed linked to a product item associated with the Warehouse A location, and a second product consumed whose product item is associated with the Service Van 42 location. Users searching for product items when creating a product consumed just see product items associated with their mobile inventory location.

If you'd like remove this location limitation, change a setting in the Field Service Lightning connected app for iOS or Android.

- 1. From Setup, enter Connected Apps in the Quick Find box, then select Connected Apps.
- 2. Click Salesforce Field Service for iOS or Salesforce Field Service for Android.
- 3. Scroll to the custom attribute list near the bottom of the page and click **New**.
- **4.** Enter the attribute key *ENABLE_MULTIPLE_LOCATIONS*.
- **5.** To enable consuming parts from multiple locations, enter the attribute value *TRUE*. To disable this feature once you've enabled it, instead change the attribute value to *FALSE*.

When this setting is enabled, users see the following in their product item search results:

Product items in locations that belong to the same hierarchy as the user's own location

- Product items in locations that are associated with a work order on the user's schedule
- Product items in locations that are associated with the user's service territory

Note: Consuming products from multiple locations is a beta feature. It is supported for:

- Up to 10 hierarchical locations or up to 10 cross border locations, sorted by last modified date, and
- Up to 1,000 product items returned for each location

Let users request products (Android and iOS)

Allow your team to create product requests when their stock is running low.

- 1. Add the Product Requests related list to work orders and work order line items.
- **2.** Add the product request + icon to the Inventory tab:
 - **a.** From the Global Actions page in Setup, create an action with the following settings:
 - Action Type: Create a record
 - Target Object: Product Request
 - Standard Label Type: None
 - b. Add the action to the Quick Actions in the Salesforce Classic Publisher section of your global publisher layout.
 - **c.** Optionally, create a custom action to let users create product request line items.
 - i. From the Object Manager in Setup, select **Product Request**, then click **Buttons**, **Links**, **and Actions**.
 - ii. Create an action with the following settings:
 - Action Type: Create a record
 - Target Object: Product Request Line Item
 - Standard Label Type: New Record
- **3.** Assign the user permissions listed in Request Parts.

The app displays a visual indicator when a user's van stock has insufficient products to complete the appointment.

Let users add required products (iOS only)

If a particular product is needed to complete a work order or work order line item, add it as a required product. To let your team create product required records, make the following configurations.

- 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 Parts.

Customize the Field Service Lightning Mobile App

Learn how to customize the Field Service Lightning mobile app's screens, actions, and branding settings, and create unique mobile experiences for different user profiles.

Important:

- 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 the Field Service Lightning 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 Screens in the Field Service Lightning Mobile App

Control which fields users see in the Field Service Lightning mobile app by updating page and search layouts.

Brand the Field Service Lightning Mobile App

Give the Field Service Lightning 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.

Add a Profile Tab Background Image in the Field Service Lightning Mobile App

Add a Profile Tab Background Image in the Field Service Lightning Mobile App.

Track Service Resource Geolocation with the Field Service Lightning Mobile App

Use geolocation to get a bird's-eye view of your mobile workforce. You can exclude certain users from geolocation tracking.

Set Up Custom Actions in the Field Service Lightning 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Customize the Field Service Lightning 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 technicians versus supervisors. Alternatively, you can use the same settings configuration for all users.

- 1. 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.
 - To edit that configuration, click **Edit**.
 - 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.
 - Tip: 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

USER PERMISSIONS

To configure Field Service Mobile Settings:

Customize Application

Customize Screens in the Field Service Lightning Mobile App

Control which fields users see in the Field Service Lightning mobile app by updating page and search layouts.

Records in the Field Service Lightning mobile app display the first four 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.

Important:

- When you update metadata like a page layout, users must log out and log into the Field Service Lightning mobile app to see the changes.
- Not all field types are supported in the Field Service Lightning app. Review Supported
 Data Types in the Field Service Lightning 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 | (Android) Product item search layout iOS isn't controlled by the page layout. | 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 Let Users Manage Inventory from the Field Service Lightning Mobile App. |
| | | On iOS, the Inventory tab doesn't use the Product Item search layout and can't be customized. |
| Products | Product search layout | Users need to be able to find products to create product requests and product items. |

EDITIONS

Available in: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

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 |
|---------------------------------|--|--|
| | | Users viewing products in the app see the Product Name field and the top 3 fields in the search layout. |
| | | Tip: Consider adding fields like Product Description and Product Code to your search layout. The search terms your users enter are tokenized and searched for across the first four fields in the product search layout. |
| Products Consumed | Products Consumed related list on the Work Order page layout | 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. |
| Schedule | Layout selected in the Default List View Developer Name field on the Field Service Mobile Settings assigned to the user's profile. (If no list view is specified) Service Appointment search layout | The Schedule tab lists service appointments assigned to the user. For details, see Customize the Schedule Tab. Tip: 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 | | The service appointment screen includes the following fields in the following order: • First field in the service appointment list view (displayed as a title) • Scheduled Start (only visible if the field has a value) |

| Screen in the mobile app | Page Layout | Details |
|--------------------------|---|---|
| | | First three fields in the service appointment search layout Address (only visible if the field has a value) Scheduled End (only visible if the field has a value) |
| Work Order Overview | First field in Work Order compact layout is in bold in the app Description field can't be changed and shows a max of 3 lines. Has up to 5 fields (including the title) displayed in this layout | 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 Lightning 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 Work Order Overview Screen

When a user taps on a service appointment from the Schedule tab, they are taken to the work order overview. You can customize the highlights and cards shown on the work order overview screen.

Customize the Schedule Tab

The Schedule tab in the Field Service Lightning 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: Salesforce Classic and Lightning Experience

Field Service Lightning features, managed package, and mobile apps are available in **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions. Work orders are also available in **Professional** Edition.

Field Service Lightning mobile users must have the **Field Service Mobile** user license to access the app.

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, enter Field Service Mobile Settings in the Quick Find box, then select Field Service Mobile Settings.
- 3. Click **Edit** next to the mobile settings configuration you want to define the list view for.
- 4. In the Default List View Developer Name field, enter the API name of the list view you want to use.
 - Tip: 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. Click Save.

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
- Top field in the Service Appointment search layout (excluding the previous three).

Considerations for Customizing the Schedule Tab

- If the Schedule tab is based on a list view, including the Scheduled Start field in your list view 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 just see a single Schedule tab of the user's appointments based on your filter criteria, as it would appear on the full Salesforce site.
- Lookup fields, like Account, aren't supported on the Schedule tab and won't show up.
- The app prominently displays the top two fields of the service appointment search layout, so consider which fields your mobile workforce needs to see on the Schedule tab. Many users, for example, may 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
- 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 End but not a Scheduled Start, the appointment appears on the schedule every
 day until the Scheduled End date.
- 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.

Customize the Work Order Overview Screen

When a user taps on a service appointment from the Schedule tab, they are taken to the work order overview. You can customize the highlights and cards shown on the work order overview screen.

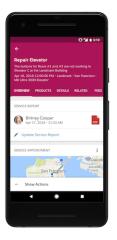
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Important:

• When you update metadata like a page layout, users must log out and log into the Field Service Lightning mobile app to see the changes.

• Not all field types are supported in the Field Service Lightning app. Review Supported Data Types in the Field Service Lightning Mobile App before you configure your layouts

Customize the work order highlights

A preview of the work order is anchored to the top of the work order overview screen. This preview shows the first five fields in the work order compact layout, though the Description field counts 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.

to update the work order 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.

Add cards

On the Overview tab in the work order carousel, users see information about the work order and its child records. The information appears in cards, which are discrete spaces for different kinds of information. The following cards can be added to the work order overview screen.

| Card | Description | How to display and customize it | Available in |
|-----------------------|--|--|-----------------|
| Asset Service History | Provides context about the maintenance history of an asset. It shows the asset associated with the current work order and lists the asset's three most recent work orders, with a link to view all associated work orders. | In iOS, if the work order lists an asset, the Asset card shows the first field in the asset detail page layout and the work order number. Normally, the first field is the asset name. In Android, this card displays the first four fields in the Work Orders related list on the asset page layout. The first field is displayed prominently. | Android and iOS |

| Card | Description | How to display and customize it | Available in |
|----------------------|---|--|-----------------|
| Contact | Shows the contact's name and photo and gives the option to call, message, or email the contact. | This card shows the following fields and options and can't be customized: Customer Name, Phone, Message, Email. If no contact is specified, this card is empty in iOS. | 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 |
| Service Appointment | Shows a map and the option to navigate to the address of the appointment. If the address is not 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. The following fields on this card cannot be removed from it: Start Time, End Time, Date, Address, ETA (estimated time of arrival). | Android only |
| 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 very top of the Overview tab, and there is no option to create a service report. If no service report has been generated, the card appears at the bottom of the Overview tab and includes an option to create a service report. | Android and iOS |
| 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 new line items. For details, see Let Users Create Work Order Line Items from the Field Service Lightning 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, followed by the first three fields in the Work Order Line Items related list on the work order page layout. In iOS, this card displays two fields for each line item, which are the first two fields in the | Android and iOS |

| Card | Description | How to display and customize it | Available in |
|------|-------------|---|--------------|
| | | Work Order Line Items related list on the work order page layout. | |

Brand the Field Service Lightning Mobile App

Give the Field Service Lightning 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 The table below lists default values and explains where each color is used.
 - Important: Each value must consist of the # symbol followed by six letters or numbers.
- **4.** 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 app users that enable the Dark Theme from the in-app settings override the custom branding colors for most UI elements.

| Token Name | Description | Default Value |
|--------------------------|--|---------------|
| Navbar Background Color | The color of the top bar in the app. | #FCFCFC |
| Navbar Inverted | The secondary color of the top bar in the app. | #000000 |
| Brand Inverted Color | The color of toasts and the contrast color for the floating action button. | #FFFFFF |
| Feedback Primary Color | The color of error messages. | #C23934 |
| Feedback Secondary Color | The color of success messages. | #007FAA |
| Feedback Selected | The color indicating the user's current selection. | #803ABE |
| Primary Brand Color | The main branding color used throughout the UI. | #803ABE |

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USER PERMISSIONS

To customize branding colors:

Customize Application

| Token Name | Description | Default Value |
|---------------------------|--|---------------|
| Secondary Brand Color | The color of action buttons. | #2F81B7 |
| 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 |
| Contrast Quaternary Color | The color of secondary lines that delineate different areas of the UI. | #E6E6EB |
| Contrast Quinary Color | The color of primary backgrounds in the UI. | #F8F8F8 |
| Contrast Inverted Color | The color of secondary backgrounds in the UI. | #FFFFFF |

Add a Profile Tab Background Image in the Field Service Lightning Mobile App

Add a Profile Tab Background Image in the Field Service Lightning 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.** 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.
 - ? Tip: If you named your static resource background_banner, your attribute value is "background banner".
 - f. Click Save.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

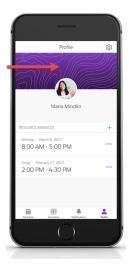
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USER PERMISSIONS

To set the company profile image:

Customize Application





Track Service Resource Geolocation with the Field Service Lightning Mobile App

Use geolocation to get a bird's-eye view of your mobile workforce. You can exclude certain users from geolocation tracking.

When service resource tracking is enabled, the Field Service Lightning mobile app uploads the geolocation of app users to Salesforce at regular intervals. Enable service resource tracking in Setup.

- 1. From Setup, enter *Field Service Settings* in the Quick Find box, and select **Field Service Mobile Settings**.
- 2. Click **Edit** next to the settings configuration you want to update.
- 3. Under Additional Settings, check Collect Service Resource Geolocation History.
- **4.** For Android, enter values in the following fields.

For iOS, your location is sent when your position changes by 500 meters or more but no more than once every 5 minutes.

- 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 while the app is in the background. To get an accurate position update, open the Field Service Lightning mobile app on your phone.
- **Geolocation Update Frequency in Minutes**: Controls how often geolocation is polled when the app is running in the foreground.
- **Geolocation Update Frequency in Minutes (Background Mode)**: Controls how often geolocation is polled when the app is running in the background.
- Geolocation Accuracy: Controls the accuracy of the geolocation data collected when the app is running in the foreground. Choose from the following values:

Fine: 10 metersMedium: 100 metersCoarse: 1 kilometer

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USER PERMISSIONS

To configure resource tracking:

Customize Application

To assign permission sets:

Assign Permission Sets

- **Geolocation Accuracy (Background Mode)**: Controls the accuracy of the geolocation data collected when the app is running in the background. Choose from the following values:
 - Medium: 100 metersCoarse: 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. Click Save.

Geolocation tracking is now enabled!

What if you want to exclude specific service resources from tracking? For example, if not all members of your workforce are legally protected against geolocation tracking.

Individual mobile users can turn off location tracking for the Field Service Lightning mobile app from their phone's operating system settings. To exclude them from tracking at the admin level:

1. From Setup, enter Permission Sets into the Quick Find box and select Permission Sets.

- **2.** Create a separate permission set for users that you wish to exclude from geolocation tracking. Clone your Field Service Standard permission set and give it a new name.
- 3. From the settings of your new permission set, click **System Permissions**.
- 4. Click Edit and select Exclude Technician from Geolocation Tracking.
- 5. Click Save.
- 6. Click Manage Assignments, and then click Add Assignment.
- **7.** Select the users that you wish to exclude from geolocation tracking, and then click **Assign**.

Set Up Custom Actions in the Field Service Lightning 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 Lightning Mobile

Learn which actions are visible in the Android and iOS app action launcher.

Create Quick Actions for the Field Service Lightning 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 Lightning 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 Lightning mobile app for iOS, but not for Android.

Create App Extensions for the Field Service Lightning Mobile App

Create app extensions to let users pass data from the Field Service Lightning app to another app.

Add Flows to the Field Service Lightning Mobile App

Guide your team through mobile flows in which they can view information, create and update records, and trigger input-based actions. Create, activate, and manage flows for the Field Service Lightning mobile app in the drag-and-drop Cloud Flow Designer.

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USER PERMISSIONS

To create quick actions and add them to page layouts:

Customize Application

Which Actions Appear in the Field Service Lightning Mobile

Learn which actions are visible in the Android and iOS app action launcher.

Actions on the Work Order Overview Screen

The work order overview screen has a consolidated action list for service appointments and work orders. When a user clicks the action button from the work order overview screen, they see a list of actions found on the page layouts of those objects. The action launcher displays actions in the following order:

- 1. App extensions and flows scoped to work orders (sorted alphanumerically).
- 2. First 8 quick actions in Salesforce Mobile and Lightning Experience Actions or Quick Actions in the Salesforce Classic Publisher on the work order page layout, following the order in the layout.
- 3. Hard-coded actions for work orders such as **Edit** and **View Detail**.

Actions on the Service Appointment Screen

On the service appointment screen, the action launcher includes a consolidated list of actions for service appointments, work orders, and work order line items. Actions appear in the following order:

- 1. **Create Service Report**: Only visible if an alternate service closure flow isn't configured and the service appointment page layout includes the Service Reports related list.
- **2.** Field service app extensions for service appointments.
- **3.** Field service app extensions for work orders.
- **4.** Quick actions for service appointments.
- **5.** Quick actions for work orders or work order line items, depending on whether the parent record is a work order or a work order line item.
- 6. Edit Work Order or Work Order Line Item, depending on whether the parent record is a work order or a work order line item
- 7. Open in Salesforce, only visible if the Salesforce app is installed on the mobile device.
- Tip: Think carefully about which actions to make available to your users.

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Create Quick Actions for the Field Service Lightning 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 guick action and add it to the work order overview screen.

- Tip: 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 Classic Publisher section.
- 8. Save your changes. The action will be visible in the app and on the full Salesforce site.
- **Note**: The app supports guick actions of the types Create a Record and Update a Record. Lightning Component, Visualforce, and custom override actions aren't supported.

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USER PERMISSIONS

To create quick actions and add them to page layouts:

Customize Application

Let Users Create Work Order Line Items from the Field Service Lightning 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 Lightning 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.

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USER PERMISSIONS

To create quick actions and add them to work order line item page layouts:

Customize Application

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.

Create App Extensions for the Field Service Lightning Mobile App

Create app extensions to let users pass data from the Field Service Lightning app to another app.

(1) Important: If **Use Salesforce Mobile Actions** is selected on the Field Service Settings page in Setup, app extensions aren't visible in the app.

| App Extension Type | Supported in Android | Supported in iOS |
|--------------------|----------------------|------------------|
| Android | Yes | Yes |
| iOS | No | Yes |
| Lightning Apps | Yes | Yes |
| Web apps | No | Yes |
| Workflow | No | Yes |

To set up an app extension follow the steps below.

- 1. Gather information about the app you want to connect.
 - **a.** From Setup, enter *Navigation* in the Quick Find box, then select **Salesforce Navigation**.
 - b. Note the exact name of the app from the list of Available and Selected Apps.You need to use this name as the Launch Value when creating your Lightning app extension.
- 2. Create your app extension.
 - **a.** From Setup, enter *Field Service Mobile Settings* in the Quick Find box, then select **Field Service Mobile Settings**.
 - **b.** Click **Edit** next to the mobile settings configuration that needs the app extension.
 - c. Under App Extensions, click Add.
 - d. Fill out the fields.
 - **Field Service Mobile Settings**: Automatically populated. The mobile settings configuration that uses the app extension.
 - **Type**: A picklist of app extensions types.
 - **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 <code>WorkOrder,ServiceAppointment</code>. To create a global app extension so users can activate it from any record, leave this field blank.
 - **Launch Value**: The name of the app as it appears on the Salesforce Navigation page. This field directs the app to the appropriate app extension.
 - e. Click Save.

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USER PERMISSIONS

To create and modify App Extensions:

Customize Application

Warning:

- The Salesforce app doesn't support parameters passed through Lightning app extensions. Therefore, when you can't pass parameters from Field Service Lightning with a Lightning app extension to the Salesforce app.
- 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.

Passing Tokens Into the Launch Value

The launch value supports static URLs for web addresses as well as dynamic values that you can represent with certain tokens. These tokens can pass field information from the record that the user is currently viewing. 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}**}.

Tip: The following example uses a token to dynamically pass a custom text field that is on a work order into to a Google search. The token is written in bold for clarity: https://www.google.com/#q={!\$WO_Custom_Text_Field__c}

The field name is case sensitive and must match the field name exactly on the object.

Configuring Lightning App Extensions

You can find all the Lightning apps that are configured in your org from inside Setup. Once you have found the name of the Lightning app that you wish to connect to Field Service Lightning Mobile App, you can create your app extension by using the name of a Lightning app on this list as the launch value of your Lightning app extension.

- **1.** From Setup, type *Navigation* into the Quick Find box, and select **Salesforce Navigation**.
- 2. Note the exact name of the Lightning App from the list of Available and Selected apps. You need to use this name as the Launch Value when creating your Lightning app extension for the Field Service Lightning Mobile App.

Add Flows to the Field Service Lightning Mobile App

Guide your team through mobile flows in which they can view information, create and update records, and trigger input-based actions. Create, activate, and manage flows for the Field Service Lightning mobile app in the drag-and-drop Cloud Flow Designer.

Connect a Flow to the Field Service Lightning Mobile App

Flows are connected to the Field Service Lightning mobile app using app extensions. Learn how to set up an app extension that leads to a flow.

Create a Flow to Capture Images in the Field Service Lightning Mobile App

Create a flow that your team can use to capture images from the Field Service Lightning mobile app. For example, make it easy for technicians to save photos of a customer's asset before and after service. Image capture flows are supported in both iOS and Android starting with version 4.0 of the app

Create a Flow to Capture Customer Signatures on Service Reports

You can specify a special type of flow for wrapping up a service appointment. This special flow appends a final step to capture a customer's signature, and is available only for the Field Service Lightning mobile app for iOS.

Considerations for Using Flows in the Field Service Lightning Mobile App

Review flow considerations and limitations before using flows in the Field Service Lightning mobile app.

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USER PERMISSIONS

To open, edit, or create a flow in the Cloud Flow Designer:

Manage Flow

To run flows from the app:

Run Flows

Connect a Flow to the Field Service Lightning Mobile App

Flows are connected to the Field Service Lightning mobile app using app extensions. Learn how to set up an app extension that leads to a flow.

1. Create your flow in the Cloud Flow Designer.

To make your flow actions easy and useful for your team, follow these best practices.

- Include help text on each screen to help users understand what is expected of them.
- Don't ask more than one question per screen, especially if a screen involves picklists.
- **2.** After the flow is created, connect it to the Field Service Lightning app.
 - **a.** From Setup, type *Field Service Mobile Settings* into the Quick Find box, and click **Field Service Mobile Settings**.
 - (1) Important: Only the user profiles assigned to the mobile settings configuration you select will have access to the flow. To manage user profile assignments, click **Manage**Assignments on the Field Service Mobile Settings page.
 - **b.** Click **Edit** next to the mobile settings configuration that needs the flow.
 - c. Under App Extensions, click Add.
 - **d.** Enter a label for your app extension. This label is what your users see in the user interface.
 - e. For Type, select Flow.
 - **f.** Enter a Name that expresses the purpose of the flow.
 - **g.** In the field Scoped to Object Types, which controls where users can find and activate the flow, enter the API name of the desired object.

If you want to scope the flow to multiple objects, add a comma between object names with no space. For example, entering <code>WorkOrder,Contact</code> means users can activate that flow from the detail page of a work order or contact.

To create an unscoped flow action in which users can activate the flow from multiple screens, leave this field blank.

- **h.** For Launch Value, enter the unique name of your flow.
- i. Click Save.

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USER PERMISSIONS

To view, edit, or create a flow in the Cloud Flow Designer:

Manage Flow

To run flows from the app:

Run Flows

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- **1.** Before building a flow, verify that Lightning Runtime is enabled for flows. Find this setting on the Process Automation Settings page in Setup.
- 2. In Setup, enter *Flows* in the Quick Find box and click **Flows**.
- 3. Click New Flow.
- **4.** Using the flow designer, drag a **Screen** element onto the canvas.
- 5. Name the screen and leave all other options with their default setting.
- **6.** Select the **Add a Field** tab, and double-click **Lightning Component** to add a Lightning component field.
- **7.** Click the newly created Lightning component field.
- 8. In Unique Name, enter a name for the field.
- 9. In the Lightning Component picklist select forceContent:fileUpload.
- 10. Select the Inputs tab and enter a value for the File Upload Label.
 This label appears for users in the flow above the image upload component.
- 11. For Related Record ID, select Create New > Variable.
- 12. In Unique Name Enter Id.
- 13. For Input/Output Type, select Input and Output.
- **14.** Click **OK**.
- 15. Click Add Row beneath Related Record ID.
- 16. For Select Attribute, select Allow Multiple Files.
- 17. Next to your newly created Allow Multiple Files attribute, in the values picklist, select GLOBAL CONSTANT > \$GlobalConstant.True.

This setting gives your users the option to upload multiple images.

- 18. Click Save.
- **19.** In the window that appears, enter a name for your flow.

Remember that the Unique Name that is automatically generated when you name your flow, because you need the unique name to connect the flow to the Field Service Lightning mobile app.

- 20. For Type, select Field Service Mobile Flow
- 21. To save your flow, click OK.

You can now connect the flow to the Field Service Lightning app with an app extension, just like any other flow.

EDITIONS

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USER PERMISSIONS

To view, edit, or create a flow in the Cloud Flow Designer:

Manage Flow

Create a Flow to Capture Customer Signatures on Service Reports

You can specify a special type of flow for wrapping up a service appointment. This special flow appends a final step to capture a customer's signature, and is available only for the Field Service Lightning mobile app for iOS.

This flow is included with the iOS app. To specify this special flow, create an app extension with the following settings:

- Label: The text you want to appear in the Actions tab. For example, My Service Report Flow.
- Type: Flow
- Name: Service_Report_Flow
- Scoped to Object Types: ServiceAppointment
- Launch Value: The API name of the flow that you want to conclude with signature capture.

Because of the unique API name of the service closure flow, only one of these flows can exist at a time

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Considerations for Using Flows in the Field Service Lightning Mobile App

Review flow considerations and limitations before using flows in the Field Service Lightning 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 the app launches a flow, it passes the following input parameters:

- (iOS and Android) **Id**: The record ID of the record that the flow is launched from.
- (iOS and Android) **UserId**: The ID of the current user.
- (Android) 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, this will be the ID of the parent work
 order or work order line item

Flow Limitations in the Field Service Lightning Mobile App

- Resources of the type Formula aren't supported.
- Actions in flows can't rely on the output parameters of an action.
- Returning to a previous screen is not allowed during a flow if the flow includes a loop or subflow.
- The wasSelected operator can't be used in decisions.
- Hardcoded ID values must be 18 digits long. 15-digit values aren't supported.

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- Apex classes aren't supported in flows.
- (Android only) Service closure flows aren't supported, so signature capture can't be included as the final step of a flow and must be performed separately.
- For uploading images in flows, the content document IDs parameter isn't supported, an admin must create a flow confirmation screen to show which images were uploaded, and videos and other files types aren't supported.

Using the Field Service Lightning 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 Lightning Mobile App

The Field Service Lightning 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.

Push Notifications in the Field Service Lightning Mobile App

Push notifications alert your mobile workforce to approaching appointments and scheduling changes.

Offline Priming in the Field Service Lightning Mobile App

Learn what data the Field Service Lightning mobile app downloads for offline work and how the app syncs with Salesforce.

In-App Profile Settings in the Field Service Lightning 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.

Chatter in the Field Service Lightning Mobile App

Chatter is available on work orders only as a way to collaborate on field service jobs. Feed tracking must be enabled to display the Feed tab.

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Service reports summarize the work that was performed by a customer, and can be signed by the technician, customer, and others involved in the work. Learn how to configure the Field Service Lightning mobile app to support service report generation and review important considerations about offline service reports and service report previews.

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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.

Resource Absences in the Field Service Lightning Mobile App

Learn about types of resource absences and how to empower your mobile workforce to log their time off from work.

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Get the Field Service Lightning Mobile App

The Field Service Lightning 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.

To get the app, search for *Field Service Lightning* in Google Play Store or App Store on your mobile device.

When the app is downloaded, tap it to launch it. Upon launching it for the first time, you'll receive several device permission requests. Approve any requests to let the app:

- Send you notifications
- Access your basic information
- Access your location, which is used in the app's mapping functionality and geolocation tracking for scheduling
- Access your camera



Tip: You can change the device permissions that your device gives the Field Service Lightning app at any time. To do so, navigate to your device's settings, then tap the Field Service Lightning app.

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Logging In

When given the option, log in to Salesforce from the app. If prompted, create a passcode for an added level of security. Depending on how your Salesforce org is configured, you may need to enter information for a custom domain, which can be done in two ways:

- Tap Use Custom Domain and enter your org's URL.
- Click the gear icon in the top right of the login screen to specify production or sandbox org, or press + to enter a custom domain.

If you're a community user, the first login is slightly different. On the initial login screen, click the settings button in the top right, then add a connection with the URL of your Salesforce community. The URL can be found in Setup under Communities. When entering the community URL, omit https://.

Push Notifications in the Field Service Lightning Mobile App

Push notifications alert your mobile workforce to approaching appointments and scheduling changes.

To enable push notifications for the iOS or Android app:

- 1. Ensure that the connected app (different from the app itself!) has been downloaded.
 - For iOS: https://sfdc.co/MobileFieldServicePackage
 - For Android: https://sfdc.co/MobileFieldServiceAndroidPackage
- **2.** Enable notifications in Setup.
 - **a.** From Setup, enter *Field Service Settings* in the Quick Find box, then select **Field Service Settings**.
 - b. Select Notify relevant users in Lightning Experience, the mobile app, and the Field Service Lightning mobile app about updates to work orders and service appointments.
 - **c.** Save your changes.

Users receive push notifications in the following circumstances.

- A Chatter text post is made on a work order that the user follows.
- A Chatter file post is made on a work order that the user follows.
- A feed-tracked change is made to a work order that the user follows.
- (iOS only) A feed-tracked change is made to a service appointment that the user follows.
- A service appointment is assigned to or away from the user.

Note: Technicians are not automatically added as followers to work orders and service appointment records that they are assigned to. Consider creating an Apex trigger on the service resource object to add or remove users as followers when assignments change.

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Offline Priming in the Field Service Lightning Mobile App

Learn what data the Field Service Lightning mobile app downloads for offline work and how the app syncs with Salesforce.

Syncing your data

When the app is connected to the internet, it regularly synchronizes data with the Salesforce server. If the app goes offline, users see a notification in the top navigation bar.

Any changes made while the app is offline are added to the pending uploads queue in order of occurrence. The queue shows the status of the app's attempts to upload changes to the Salesforce server. To view the queue, tap the top navigation bar when uploads are pending, or go to the in-app settings in the Profile tab. To delete a pending upload, swipe it left and confirm the deletion.

If an error occurs when the app is trying to upload a change to Salesforce, the Pending Uploads queue is paused at that particular upload. Changes further down in the queue may be dependent on a prior change, so the conflict must be resolved before the queue continues to be processed. There is currently no conflict resolution for conflicting changes in the pending uploads queue, so the most recent change uploaded to the Salesforce server takes precedence. Deleting a pending upload is the only way to resolve a conflict.

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What is data priming?

When a user logs in to the Field Service Lightning app, it automatically pre-downloads data related to the user's service appointment assignments. This process is known as *priming*, and it ensures that all the data that is relevant to a technician is available to them even if internet connectivity is lost. Priming can take a few moments from the initial launch of the app or when a new user logs onto the app, since the app may have to download a high volume of data.

What gets primed?

The data that the app primes for each user is based on the service appointments that are assigned to a user.

The app primes the following data, with a maximum priming depth of 2 records:

- Any work order that has a service appointment for which the user is an assigned resource
- All work order line items that are on the related list of a primed work order
- The records in the related lists on work orders, work order line items, and assets
- Quick actions for work orders, work order line items, service appointments, and assets
- Records that are referenced by a primed record's related list
- Field Service Mobile flows

Also, if a list view is specified under **Field Service Mobile Settings** > **Default Developer List View Name**, the work orders and service appointments from the list view are primed. Otherwise all work orders with service appointments assigned to the user get primed.

Priming rule exceptions

- A maximum of 25 records are primed from a related list. If a related list contains more than 25 records, the 25 most recently modified records are primed. This limit doesn't apply to the Articles related list, which has no limit.
- The Service Reports related list is always primed, even if the related list isn't on the service appointment page layout.

- The app only primes records that are up to two degrees of separation from a service appointment assigned to the user. This limit is called the priming depth, and the app has a priming depth of 2 records. For example, when a user is assigned to a service appointment, the service appointment, its parent record, and its parent record's related records are primed. However, related records on the parent record's related records aren't primed because they're more than two degrees separate from the appointment. So assets in the Assets related list on the appointment's parent work order would be primed, but work orders in the asset's Work Orders related list wouldn't be primed.
- Price books aren't primed for offline usage due to performance considerations.

In-App Profile Settings in the Field Service Lightning 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 will pause 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.

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Chatter in the Field Service Lightning Mobile App

Chatter is available on work orders only as a way to collaborate on field service jobs. 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.

The following Chatter actions are supported in the app.

| Action | Supported on Android | Supported on iOS |
|--|----------------------|------------------|
| Create a Chatter post | ~ | ~ |
| Comment on a Chatter post | ~ | 8 |
| Mention a user or group | ~ | 8 |
| Bookmark a Chatter post | ~ | 8 |
| Delete a Chatter post | ~ | 8 |
| Like a Chatter post | ~ | 8 |
| Edit a Chatter post | 8 | 8 |
| Attach a video, image, or PDF to a Chatter post or comment | ~ | 8 |
| View feed-tracked changes on records | ~ | 8 |

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USER PERMISSIONS

To customize fields tracked in feeds:

Customize Application

To view the field tracking setup page:

 View Setup and Configuration

Limitations

- Users can't edit Chatter posts or set Chatter profile images from within the app.
- The Feed tab in iOS is supported only on the work order, work order line item, and case objects. The Feed tab in Android is supported only on the work order and work order line item objects.
- (Android only) Chatter is disabled when the app doesn't have internet connectivity.

Create Service Reports in the Field Service Lightning Mobile App

Service reports summarize the work that was performed by a customer, and can be signed by the technician, customer, and others involved in the work. Learn how to configure the Field Service Lightning 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.

Service reports are translated in the language selected in the Service Report Language field on the associated work order. If that field is blank, they use the default language of the person generating the report.

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USER PERMISSIONS

To create or edit a Service Report Template:

Customize Application

Create a Service Report Offline

Users of the iOS app can create service report previews while offline. Since offline service reports may not have the latest data, they include a watermark indicating that they were created offline. To disable offline service report generation for all iOS users:

- 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

- If a work order has one or more service appointments, app users can create service reports only for the work order's service appointments, not for the work order itself. Clicking **Create Service Report** on the work order overview screen creates a service report that uses the Service Appointment for Work Order sub-template of the selected service report template. The same limitation applies to work order line items with service appointments: the line item's service reports use the Service Appointment for Work Order Line Item sub-template. Users in the full Salesforce site can generate service reports without issue for any work order or work order line item.
- (Android only) Service closure flows aren't supported. This means that signature capture can't be included as the final step of a flow and must be performed separately.

- Service report previews include the following limitations, which don't apply to non-preview service reports:
 - The data in service report previews may be out of date because the app doesn't automatically get the latest data before
 generating a preview.
 - Reference fields aren't populated if they exceed the maximum priming depth of 2.
 - If a service report template includes a related list, but the record that the service report is being generated for doesn't have the related list on its page layout, the related list isn't populated.
 - Formula field values may be inaccurate in a preview because they aren't dynamically calculated.
 - Roll-up summary fields are blank.
 - The following 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

View Knowledge Articles in the Field Service Lightning 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 Lightning mobile app users view knowledge articles:

- **1.** Ensure you have Salesforce Knowledge set up in your org. See Salesforce Knowledge Implementation Guide.
- 2. 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) Images in knowledge articles display normally if they are hosted outside of Salesforce.

 Articles that use images uploaded to Salesforce won't load those images. 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.
- (Android only) If a mobile app user's device is running in any of Salesforce's 26 supported languages, the app automatically translates the articles to the language of their mobile device's operating system. Otherwise, the app defaults to English.

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Resource Absences in the Field Service Lightning Mobile App

Learn about types of resource absences and how to empower your mobile workforce to log their time off from work.



Note: Read Only users with Read permission on service resources can create resource absences.

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.
 - 🁔 Tip: 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. Ensure that users have Read access to service resources so they can view, create, edit, and delete absences.



Note: Under the profile tab, only 10 resource absence records display.

Managing Absences in the App

View and manage absences from the Absences card on the Profile tab. Click the + icon to create a resource absence.

The Type field indicates the nature of the time off from work, and comes with the following values:

- Vacation (default)
- Meeting
- Training
- Medical

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USER PERMISSIONS

To view, create, or update resource absences:

Read on service resources

To delete resource absences:

Edit on service resources