
Field Service Lightning Managed Package Guide

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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 the 32 Salesforce supported languages and includes the following features.

Scheduling and optimization

A robust toolbox of work rules and scheduling policies optimizes resource assignments, taking skills, location, and your business objectives into account.

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

The console's appointment lists, scheduling actions, Gantt chart, and interactive map give dispatchers and supervisors a bird's-eye view of all service appointments. Dispatchers can ensure that the right job is routed to the right mobile employee and immediately see alerts for issues that need attention and take action. Schedule bulk jobs with just one click, 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](#)

If your Salesforce org has Field Service Lightning enabled, you can install the managed package and build on standard field service features.

2. [Guided Set up for Field Service Lightning](#)

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

3. [Set up the Field Service Lightning Managed Package](#)

After you install the Field Service Lightning managed package, you must create and permission sets and ensure page layouts, geocodes, and data integration rules are configured correctly.

4. [Field Service Lightning Managed Package Customization](#)

Learn the concepts behind the features in the Field Service Settings tab and how to adjust them to your needs.

5. [Field Service Lightning Dispatcher Console](#)

The Field Service Lightning Managed Package includes the Dispatcher Console, which is the main working space for dispatchers.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Install the Field Service Lightning Managed Package

If your Salesforce org has Field Service Lightning enabled, you can install the managed package and build on standard field service features.

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

1. Click the appropriate installation link on the download page <https://fsl.secure.force.com/install>.
You can install on a production org or a 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 addresses so that the service scheduling optimizer can function.
3. If you get a message notifying you 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, two new apps are included in the Apps Launcher. The Field Service app is for dispatchers, and the Field Service Admin app is for administrators. You can also add the Field Service and Field Service Settings tabs to other existing apps.

Guided Set up for Field Service Lightning

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

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 your user doesn't have the FSL Admin permission Set you are assigned the permission.

 **Note:** When editing details of a record in guided setup, your changes are saved immediately, there is no **Save** button.

The guided setup home page has icons at the bottom of the page showing the number of each related object in your org. Click on an icon to go to its guided setup page.

[Define Field Service Territories with Guided Setup](#)

Define your service territories. This can represent a geographical and/or functional area of the organization. Try to create territories with no more than 50 resources to allow your dispatchers to focus on a reasonable amount of resources.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

Define your service territories. This can represent a geographical and/or functional area of the organization. Try to create territories with no more than 50 resources to allow your dispatchers to focus on a reasonable amount 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**.
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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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.

EDITIONS

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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.

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

EDITIONS

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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.

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

EDITIONS

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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**.

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.

EDITIONS

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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's 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

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

Set up the Field Service Lightning Managed Package

After you install the Field Service Lightning managed package, you must create and permission sets and ensure page layouts, geocodes, and data integration rules are configured correctly.

It is recommended your [service territories](#) are set up with their [operating hours](#) and [members assigned](#). For faster set up, your [work types](#) and [service resource skills](#) should also be configured.

[Create Permission Sets with the Field Service Lightning Managed Package](#)

Configure and update permission sets with a click of a button.

[Assign Permissions with the Field Service Lightning Managed Package Permission Sets](#)

Give your users the permissions they need to complete their field service tasks.

[Service Crews with the Field Service Managed Package](#)

You can assign predefined teams of workers to service appointments, saving time and ensuring that every appointment is handled by the right workers.

[Efficiency with the Field Service Managed Package](#)

Some of your Resources work faster or slower than the Work Order estimated duration due to different skills, experience and seniority. Measure how fast service resources complete work orders and ensure that your work type duration estimates are accurate. FSL consider the resources efficiency when scheduling, and adjusting the appointment Scheduled End accordingly. This feature is available in Salesforce Classic and Lightning Experience.

[Assign Page Layouts from the Field Service Lightning Managed Package](#)

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

[Enable Map Polygons](#)

Setup and configure map polygons, so you can draw your own territories directly on the map.

[Manage Geocodes and Data Integration Rules for the Field Service Lightning Managed Package](#)

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

EDITIONS

Available in: Salesforce Classic 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](#)

Create Permission Sets with the Field Service Lightning Managed Package

Configure and update permission sets with a click 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. Click **Create Permissions** on the **FSL Admin** tile.

Two permission sets are created: FSL Admin License and FSL Admin Permissions. These permissions allow users to access and manage all Field Service Lightning objects, including the Field Service Lightning Visualforce pages and logic services.

6. Click **Create Permissions** on the **FSL Agent** tile.

Two permission sets are created: FSL Agent License and FSL Agent Permissions. These permissions allow users to view all global actions and their related objects to create, book, and schedule service appointments.

7. Click **Create Permissions** on the **FSL Resource** tile.

Three permission sets are created: FSL Mobile License, FSL Resource License, and FSL Resource Permissions. These permissions allow users to view and manage service appointments and their related parent objects.

8. Click **Create Permissions** on the **FSL Dispatcher** tile.

Two permission sets are created: FSL Dispatcher License and FSL Dispatcher Permissions. These permissions allow users to access and manage the dispatcher console, global actions and their related objects, and schedule optimize and dispatch service appointments.

The app updates this permission sets for you. If you have extended the permissions sets, they are not overridden. You must assign these permission sets to your users according to their requirements.

For FSL to function properly users must be assigned with the needed FSL permission sets. Each role needed to be assigned with the appropriate permission sets.

- **Agents** need FSL Agent Permissions. This permission set holds the minimum permissions for FSL's chatter actions such as the Appointment Booking, Candidates and Emergency.
- **Mobile Workers (Technicians)** need:
 - FSL Resource Permissions, this permission set holds the minimum permissions needed for the user to be able to change status and update its last known location.
 - FSL Resource License, this permissions sets assigns the user with the needed Permission Set License for it to be scheduled by the scheduling engine and optimizer.
 - FSL Mobile License, this permissions sets assigns the user with the needed Permission Set License for it to be able to log in to the Field Service Mobile app.
- **Dispatchers** need:
 - FSL Dispatcher Permissions, this permission set contains the permissions of both the FSL Agent Permissions and the FSL Resource Permissions and in addition permissions needed to operate the Dispatcher Console and to run optimization.
 - FSL Dispatcher License, this permissions sets assigns the user with the needed Permission Set License needed to be able to load the dispatcher console.

EDITIONS

Available in: Salesforce Classic 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

- **FSL Admins** need FSL Admin Permissions. This permissions set contains the permissions the FSL Dispatcher Permissions contains and in addition permissions to configure FSL's configuration data such as Operating Hours and Scheduling policies.

FSL managed package has three major releases each year, following Salesforce's release cadence, Winter, Spring or Summer, within 72 hours.


As new versions require new permissions, it is critical that FSL's permission sets are updated with the new required permissions. This feature, introduced in Winter 18', ensures that once a new managed package version is pushed to your org, the FSL permission sets are automatically updated.

-  **Note:** When FSL updates these permission sets, every permission, which is part of the minimal definition and was removed, is added back. Every permission that was added by the customer is respected it is not removed.

The event that triggers the automatic update is when a user launching one of the managed package Visualforce pages. Once a user is opening one of the below pages, FSL checks to see if the permission sets were updated after the last upgrade, and if not, the permission sets are automatically updated, ensuring FSL functions properly

FSL Visualforce pages that trigger the automatic updates:

- The Dispatcher Console (vf001_ServiceExpert)
- The Appointment Booking chatter action (AppointmentBookingVf and AppointmentBookingCommunitiesVf)
- The Candidates chatter action (GetCandidates)
- The Emergency Chatter action (EmergencyWizard)
- The Admin Settings (vf066_settings)

-  **Important:** The action of permission set update is logged on the behalf of the user who triggered the update, even if this user is not holding the necessary permissions to update permission sets. If this is something you want to avoid, you can open a case with Salesforce support and ask to disable the Auto Update of FSL permission sets feature.

Assign Permissions with the Field Service Lightning Managed Package Permission Sets

Give your users the permissions they need to complete their field service tasks.

Field service players are generally sorted 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 Salesforce 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.

1. From Setup, enter *Manage Users* in the Quick Find box, then select **Manage Users > Users**.
2. Click a field service 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**.

EDITIONS

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USER PERMISSIONS

To enable 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

Tasks	Required Standard Profile	Permission Sets
Administrator: Manage all Field Service Lightning objects, including the Field Service Admin app, Field Service Lightning Visualforce pages, and logic services.	System Administrator	<ul style="list-style-type: none"> • FSL Admin License • FSL Admin Permissions
Agent: Access all global actions and their related objects to create, book, and schedule service appointments.	Standard User or System Administrator	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • FSL Dispatcher License • FSL Dispatcher Permissions
Manage service appointments and their related parent objects.	Standard User or System Administrator	<ul style="list-style-type: none"> • FSL Mobile License • FSL Resource License • FSL Resource Permissions

6. Click **Permission Set License Assignments** at the top of the page or scroll down to the Permission Set License Assignments related list.
7. Click **Edit Assignments**.
8. 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](#)

Set custom user permissions to control access to actions and views for certain users.

Set Custom Permissions

Set custom user permissions to control access to actions and views for certain users.

Custom permissions are applicable to:

- Bulk actions such as dispatch, optimize, and schedule
- Console list views such as appointments for various statuses (canceled, flagged, scheduled, unscheduled, in jeopardy), contractors, Gantt chart, to do, etc.
- Resource scheduling actions, such as fill-in and fix overlaps
- Appointment scheduling actions, such as schedule, reshuffle, and group nearby
- 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

For example, if you'd like only a few dispatchers to be able to optimize your schedule, so the system isn't bogged down with too many optimization requests, you can create custom permissions for bulk actions in the dispatcher. For instance:

- `FSL.Bulk Dispatch`
- `FSL.Bulk Optimize`
- `FSL.Bulk Schedule`

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

EDITIONS

Available in: **Salesforce Classic and Lightning Experience**

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

Service Crews with the Field Service Managed Package

You can assign predefined teams of workers to service appointments, saving time and ensuring that every appointment is handled by the right workers.

[Create Service Crews in the FSL Managed Package](#)

Create teams that 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.

[Setup Service Crews in the FSL Managed Package](#)

A step by step guide for setting up service crews to work with the Field Service Lightning Managed Package.

[Minimum Service Crew Size](#)

The minimum crew size allowed for a crew assigned to the work order.

[Resource Availability for Service Crews](#)

In Spring '18, a new Work Rule was introduced to support crew scheduling based on the crew size. For new organizations installing the managed package this rule will be part of the out of the box set of work rules, existing organizations would need to create the rule and add it to their Scheduling Policies.

[Scheduling Service Crews with the Field Service Lightning Managed Package](#)

When the scheduler is looking for candidates to perform a job, it will disregard technicians which are part of a crew. Only individual technicians or Service Resource of type Crew will be considered as candidates. If a Service Resource was manually assigned to a Service Appointment during a period of time when it is allocated to a crew, a rule violation will be displayed on the Dispatcher console.

[Service Crew Skills](#)

Enable Field Service Lightning to consider Service Resource Members Skills.

[Service Crew Sharing](#)

Users associated to Service Resources who are crew members get sharing access to Service Appointments and their parent once the appointment is being Dispatched.

[Service Crew Considerations with the Field Service Managed Package](#)

When enabling service crews for the field service managed package, review the considerations.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Create Service Crews in the FSL Managed Package

Create teams that 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. Click **Save**.
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.
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.
- f. Service resources that are crews can't be activated unless the crew has at least one active member.
- g. Click **Save**.

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.

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

You can't setup a Service Resource of Type crew as a capacity-based resource.



Tip: Set Field-level Security:

- Service Crew Lookup on Service Resource.
- Service Crew Lookup on Assigned Resource.
- Minimum Crew Size & Recommended Crew Size on Work Types.
- Minimum Crew Size & Recommended Crew Size on Work Order and Work Order Line Item

Adjust Page Layouts:

- Service Resource Layout
 - Add the Service Crew Lookup field to Layout.
 - Ensure the User Lookup field is NOT required on Layout.
 - Add the Service Crews Related List.
- Assigned Resource Layout:
 - Add the Service Crew Lookup field to Layout.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

USER PERMISSIONS

To configure the Field Service Lightning managed package:

- Customize Application

- Optional: Gantt Label field on Service Crew Member - Set Field-level Security and add to the Service Crew Member Layout.

App Manager:

- Add the Service Crews Tab (=Item) to the the relevant Field Service Apps.

Setup Service Crews in the FSL Managed Package

A step by step guide for setting up service crews to work with the Field Service Lightning Managed Package.

1. Create Service Resources for individuals.
2. Create STM (Service Territory Members) for Service Resources.
3. Create Service Crews
 - a. Define crew size.
4. Create SCM (Service Crew Members) for resources created in step 1.
 - a. Only Active Resources of Type = Technician can be added as Crew Members.
 - b. Define allocation time frame
 - SCM cannot overlap with other SCM with the same time period.
 - Resource must have a Primary STM for the time period defined.
 - c. Designate a leader.
5. Create Service Resource of Type = Crew.
 - a. Associate with the relevant Service Crew.
6. Create Service Territory Members for the Crew Service Resource.


Minimum Service Crew Size

The minimum crew size allowed for a crew assigned to the work order.

The scheduling optimizer either counts the number of service crew members on a service crew or compare the Service Crew Size field on the Service Crew record, to determine whether it fits a work order's minimum crew size requirement (configurable on the Service Crew Resources Availability work Rule

Add a Minimum Crew Size to indicate the desired size of a service crew assigned to the work. For example, specify that the work should be done with at least 2 technicians (minimum crew size). You can specify the Minimum Crew Size directly on the Work Order or Work Order Line Item or on the Work Type. When you add a work type, the work order or work order line item inherits the work type's settings. If the Minimum Size is set to null or 1 the scheduler may assign the work to technicians or to crews.

 **Note:** The scheduler does not consider the Recommended Crew Size field.

 **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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

USER PERMISSIONS

To configure the Field Service Lightning managed package:

- Customize Application

EDITIONS

Available in: Salesforce Classic and Lightning Experience


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

Resource Availability for Service Crews

In Spring '18, a new Work Rule was introduced to support crew scheduling based on the crew size. For new organizations installing the managed package this rule will be part of the out of the box set of work rules, exiting organizations would need to create the rule and add it to their Scheduling Policies.

The Work Rule Record Type "Field Service - Service Crew Resources Availability" is configured in two ways:

- Compare Service Appointment parent record Minimum Crew Size field (either on the Work Order or the Work Order Line Item) and the Crew Size field on the Service Crew.
- Compare Service Appointment parent record Minimum Crew Size field (either on the Work Order or the Work Order Line Item) and the actual number of allocated Service Crew Members at the time of the assignment. Check 'Consider Service Crew Membership' on the Work Rule.

 **Note:** If Minimum Crew Size is null or 1 on the parent record then all Service Resources (Crews / Technicians) can be considered as candidates. Optimization is following this logic as well with an exception - a crew will not be a candidate for a period of time where the crew has no valid crew members if the 'Consider Service Crew Membership' checkbox is set to TRUE in the Service Crew Resources Availability work rule.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Scheduling Service Crews with the Field Service Lightning Managed Package


When the scheduler is looking for candidates to perform a job, It will disregard technicians which are part of a crew. Only individual technicians or Service Resource of type Crew will be considered as candidates. If a Service Resource was manually assigned to a Service Appointment during a period of time when it is allocated to a crew, a rule violation will be displayed on the Dispatcher console

If the work is scheduled to a crew, the Service Resource of type Crew and the Service Crew Members will be added as assigned resources to the service appointment. Only service crew members which their crew membership matches the assignment period will be added as assigned resources. Every change to the Service Appointment Scheduled Start will trigger this calculation again to update the list of assigned resources and to update the sharing if needed (depends on the appointment status, see below in the Service Crews: Sharing section).

Re-calculation of Assigned Resources occurs when:

- ServiceAppointment.SchedStartTime is updated
- The Assigned Resource of type Crew is changed

A change in a Service Crew Membership record will not trigger the assigned resource re-calculation.

 **Tip:** If you prefer to schedule appointments that don't require crews to technicians (individual resources), use the Resource priority objective in your scheduling policies and give your technicians a lower priority so the scheduler will prefer to assign the work to them. If you want to forbid the above, add a 'No Crew' skill to your individual technicians and add this skill as requirement to the Work Type, Work Order or the Work Order Line item.

 **Note:** Service Resources that are allocated to a Crew are not considered for scheduling.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Service Crew Skills

Enable Field Service Lightning to consider Service Resource Members Skills

By default FSL will only match the skills related directly to the Service Resource of type Crew when looking for candidates to perform work. Ignoring any of the skills the individual Service Crew Members may have.

For FSL to include the cumulative set of skills of the Service Crew Members you will need to enable 'Resource Skill Grouping'.

Once enabled, FSL will use the skills related to the Service Resource type Crew plus the skills related to the Service Crew Members for scheduling.

Go to the **Field Service Settings tab > Scheduling > General Logic** and check the 'Enable resource skill grouping' box. If the checkbox is not ticked, FSL will only match the skills related directly to the Service Resource of type Crew.

Considerations

- When enabling Resource Skill Grouping, FSL is calculating the skill set the crew has for the relevant time slot. This is calculated at run-time and is not saved to the database as it is dynamic in nature and depends on the time of the assignment and the Service Resource Members allocation.
- When enabling Resource Skill Grouping, the highest skill level will be considered if a skill is related to more than one Service Crew Member.

Service Crew Sharing

Users associated to Service Resources who are crew members get sharing access to Service Appointments and their parent once the appointment is being Dispatched.

Crew Leaders get Read/Write access as they will usually be the only technician who will do work debriefing. By Default, non leaders will get Read access only, which grants them with view access to the work details they need. This default sharing access can be opened up to Read/Write access on the Field Service Settings tab under **Sharing > Automation**.

Service Crew Considerations with the Field Service Managed Package

When enabling service crews for the field service managed package, review the considerations.

- Resource non-availability (Resource Absence) is only considered for the Crew Service Resource, not for the individual Crew Members.
- The Required Resource and Excluded Resource Work Rules and the Preferred Resource Service Objective do not apply on Service Crew Members, as Service Resource allocated to a crew are not considered as candidates for assignments at the time of their allocation period.
- When scheduling an appointment to a crew, the efficiency factor used for calculating the appointment Schedule End is taken from the Service Resource of type Crew Efficiency field (the crew members efficiency is not taken into consideration).
- Capacity based scheduling is not supported for Service Crews (A Service Resource of type Crew can not be set up as a capacity based resource).

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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- Geolocation Tracking - "Last Known Location" is tracked for Leaders only. If the Crew has more than a single Leader, then the most updated location is displayed on the map.
- If a Service Resource is relocated to another Service Territory while it is allocated to a crew, its Service Resource Membership record will be drawn on the Relocation territory only.
- Service Crew Member's homebase, for the time of the allocation, is considered to be the Homebase defined for the Service Resource of type Crew they are allocated to.
- When calculating utilization for the utilization view and metrics shown on the Dispatcher console, a Service Crew Member is considered to be utilized like the Service Resource of type Crew it is allocated to.
- When dispatching work for a crew using the Emergency chatter action, the chatter post will not mention the crew members (no user will be mentioned).
- When scheduling a Multi Day Work for a technician which has an upcoming SCM (Service Crew Membership) record, FSL will expand the work to span across the duration of the SCM.
- Follow/unfollow feature is not supported for Service Crews - when a Service Appointment is dispatched to a crew, the related users will not be added as followers to the appointment and its parent.

Efficiency with the Field Service Managed Package

Some of your Resources work faster or slower than the Work Order estimated duration due to different skills, experience and seniority. Measure how fast service resources complete work orders and ensure that your work type duration estimates are accurate. FSL consider the resources efficiency when scheduling, and adjusting the appointment Scheduled End accordingly. This feature is available in Salesforce Classic and Lightning Experience.


Efficiency is a measure of a technician's relative working speed. An efficiency of 1 means that the technician works at a typical or average speed. An efficiency > 1 means that the technician works faster than average, and < 1 means that the technician works slower than average.

The efficiency scale is between 0.1 and 10.0. A default value of 1 means "regular speed".

FSL uses the efficiency value 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, if the appointment has a nominal Duration of 3 hours and the technician has an Efficiency of 1.5, the engineer is expected to complete the appointment in $3/1.5 = 2$ hours.

For example, the Estimated Duration for Battery Replacement is one hour.

- Alexander Raneri is an Expert, 'efficiency' is set to 2.00 -> the service appointment will be scheduled to end 30 minutes after Scheduled Start ($60/2=30$).
- Jane Austin is a Technician, 'efficiency' is set to 1.00 -> the service appointment will be scheduled to end one hour after Scheduled Start ($60/1=60$).
- Janice Gonzales is a Junior Technician, 'efficiency' is set to 0.50 -> the service appointment will be scheduled to end 2 hours after Scheduled Start ($60/0.5=120$).

 **Tip:** Factor in Efficiency in the priority field used in the 'Resource priority' Service Objective to prefer Service Resources that are more (or less) efficient.


EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Assign Page Layouts from the Field Service Lightning Managed Package

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


 **Important:** If you created 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. Change all the page layouts by selecting all the profiles and selecting **FSL Operating Hours Layout**.
5. Click **Save**.
6. Repeat the steps for the following objects.
 - Service Appointment (select FSL Service Appointment Layout)
 - Service Resource (select FSL Service Resource Layout)
 - Work Order (select FSL Work Order Layout)
 - Work Order Line Item (select FSL Work Order Layout)
 - Work Type (select FSL Work Type Layout)
7. Click **Save** and repeat for the Standard User profile.

Enable Map Polygons

Setup 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 only a selection of your users, create custom permission sets and assign these permissions to those users.
7. In the Field Service Admin app, go to the Field Service Settings tab.
8. Click **Service Appointment Lifecycle > Creation**.
9. Enable *Classify* service to the territory based on polygon.
10. Set the territory classification policy to **Highest**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

USER PERMISSIONS


To configure the Field Service Lightning managed package:

- Customize Application

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.

Considerations

- The dispatcher console supports loading up to 200 polygons.
- A single polygon cannot have more than 3,200 coordinates.
- If the service appointment geolocation matches more than one polygon, the appointment is assigned to the top-level territory or to the lowest territory in the hierarchy.

 **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). Middle tier territories are never assigned service appointments.

Manage Geocodes and Data Integration Rules for the Field Service Lightning Managed Package

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


When you enable Field Service Lightning, data integration rules are added to your org to update your field service objects with geolocation information. The geolocation information is used to calculate service resource travel times.

1. From Setup, enter *Data Integration Rules* in the Quick Find box, then select **Data Integration Rules**.
2. Click **Geocodes for Resource Absence Address**.

 **Note:** Resource absences without addresses, are considered at the resource's homebase.

3. Click **Edit Rule Settings**.
4. Ensure **Bypass triggers** is deselected.
5. Click **Save**.
6. Repeat these steps for the following Field Service Lightning objects:

- Geocodes for Service Appointment Address

 **Note:** Service appointments without addresses, are considered at the resource's homebase.

- Geocodes for Service Territory Address
- Geocodes for Service Territory Member Address
- Geocodes for the Address field of Address
- Geocodes for Work Order Address
- Geocodes for Work Order Line Item Address

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

Field Service Lightning Managed Package Customization

Learn the concepts behind the features in the Field Service Settings tab and how to adjust them to your needs.

[Service Appointment Lifecycle in the Field Service Lightning Managed Package](#)

A service appointment lifecycle is the sequence of stages that a service passes through. The lifecycle covers the time when the service appointment is created until it is completed. You can configure each status to meet your business needs.

[Global Actions in the Field Service Lightning Managed Package](#)

Use derivations to map the fields on Field Service objects to fields required for scheduling service appointments.

[Scheduling Policies in the Field Service Lightning Managed Package](#)

A scheduling policy is a set of rules used in a scheduling operation. You can set the scheduling logic for Field Service Lightning, including work priorities, travel speed, and geocoding, and add company scheduling policies and time zone details to the dispatcher interface.

[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.

[Dispatch Policies in the Field Service Lightning Managed Package](#)

Manage how field service technicians receive jobs, either one at a time, hourly, daily, weekly, or monthly.

[Sharing for the Field Service Lightning Managed Package](#)

You can limit access to field service objects so that your service team members only see information relevant to them. Field Service Lightning includes out-of-the-box sharing tools to give team members access to the right information. For these tools to function, you need to change objects' default Public Read/Write sharing settings.

[Customize the Dispatcher Console with Field Sets](#)

The Field Service Lightning Managed Package uses Fields Sets as a tool for administrators to control which fields appear on some of the Visualforce pages of the managed package. This allows administrators to change the default setup of the information displayed on some key UI elements. For example, by changing a field set the admin can select which fields will appear as columns in the Dispatcher console service Appointment list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Service Appointment Lifecycle in the Field Service Lightning Managed Package

A service appointment lifecycle is the sequence of stages that a service passes through. The lifecycle covers the time when the service appointment is created until it is completed. You can configure each status to meet your business needs.

Field Service Lightning includes these statuses to indicate an appointment's state in a cycle.

- None
- Scheduled
- Dispatched
- In Progress

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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- Completed
- Cannot Complete
- Canceled

Field Service Lightning offers a predefined list of service appointment statuses. This status reflects the state of the appointment in the system and follows its whole lifecycle – from creation to completion.

A service appointment lifecycle is the sequence of stages or statuses that a service passes through. The lifecycle covers the time when the service appointment enters the system until the time it reaches its final status. Field Service Lightning offers a predefined status transition of service appointment statuses.

To configure status settings:

1. Open the Field Service Admin app from the Field Service app menu.
2. On the Field Service Settings tab, click **Service Appointment Lifecycle**.
3. Click **SA Status**.

Each row represents a flow or transition in the lifecycle. To modify a flow, click a status or select a new status. The values are based on the Service Status picklist. Click the tool icon to:


- Limit transitions to specific profiles or leave it blank to remove any restriction
- Select a custom Visualforce page for a status transition when using the Chatter action for Change Status.

To create a flow, click **Add Flow**. To disable a flow, click the trash can at the far right of the transition road.

The status flow diagram shows your status flows, but it doesn't show your profile-based restrictions.

When a service appointment is unscheduled, either manually or automatically, its status changes to None.

- **When scheduling a service appointment, change its status to Scheduled**—When a service appointment is assigned to a resource, either manually or automatically, its status changes to Scheduled.
- **Unschedule the service appointment when its status is changed to Canceled or New**—When a service appointment's status is changed to Canceled or New, the service is unscheduled and removed from the Gantt chart.

 **Important:** If you change the service appointment lifecycle, sharing rules for the Service object also change.

- When a service appointment is created and assigned, it's visible only to the creator of the record (for example, a dispatcher, customer, or resource) and the relevant dispatchers based on user-territory sharing.
- When a service appointment's status is changed to Dispatched, the record is automatically shared with the user of the assigned resource.
- Canceled service appointments remove all sharing rules from the service. A Canceled service appointment is visible only to the owner of the service appointment and the relevant dispatchers based on the user-territory object.

 **Tip:**

- Activate or deactivate transitions based on your business needs.
- Change the status names to fit your business needs. Changing the name doesn't change a status's automatic transition behavior.

Global Actions in the Field Service Lightning Managed Package

Use derivations to map the fields on Field Service objects to fields required for scheduling service appointments.

The Book Appointment global action uses these mappings to get the correct information in the service appointment.

- Service Territory (where)
- Start and End Times (when)
- Scheduling Policy (how)
- Work Type (what)

You can also configure appointment and emergency booking behavior, such as policies and grading thresholds.

If automatic following for assigned resources is enabled, field technicians automatically follow records associated to their service appointments when the appointment's status category is changed to Dispatched or In Progress. Also, once the appointment is no longer in the Dispatched or In Progress categories, the assigned technician is automatically removed as a follower of all associated records.

You can enable automatic following for assigned resources in the Field Service Admin app. Under Sharing, check `Assigned resources to automatically follow service appointments upon Dispatch \ In-progress states`.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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Scheduling Policies in the Field Service Lightning Managed Package

A scheduling policy is a set of rules used in a scheduling operation. You can set the scheduling logic for Field Service Lightning, including work priorities, travel speed, and geocoding, and add company scheduling policies and time zone details to the dispatcher interface.

Field Service Lightning includes the following scheduling policies.

- **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 the business is focusing on employee productivity first and customer preferences as the second priority.
- **Soft Boundaries**—Identical to the Customer First policy but allows sharing employees between different territories to enhance service coverage.
- **Emergency**—Used with the Emergency Chatter action to dispatch emergency service appointments.

You can change the weights of the predefined scheduling policies. You can also copy a predefined scheduling policy and adjust the rules, objectives, and objective weights to match the needs of your company.

To add a service objective to a scheduling policy:

1. Navigate to the scheduling policy that you want to add the resource objective to.
2. In the Scheduling Policy Objectives related list, click **New Scheduling Policy Objective**.
3. For **Service Goal**, select an objective.
4. Enter the weight that the objective should use in the policy.
5. Click **Save**.

To add a work rule to a scheduling policy:


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1. Navigate to the scheduling policy that you want to add the rule to.
2. Click **New Scheduling Policy Work Rule**.
3. Use the lookup to select the work rule you created.
4. Click **Save**.

 **Note:** A scheduling policy must include a resource availability rule. The Field Service Lightning managed package automatically adds one resource availability rule to each 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.

[Street Level Routing for Accurate Travel Times](#)

Street level routing improves travel calculation drastically as real turn-by-turn information is being considered.

[Reserve Time Slots for Designated Work](#)

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

[Control Which Absences Appear on the Resource Gantt](#)

Enable approval confirmation so only approved absences block your technician's availability and appear on the resource gantt chart. Unapproved resource absences are not considered in scheduling nor shown on the Gantt until they are approved.

Street Level Routing for Accurate Travel Times

Street level routing improves travel calculation drastically as real turn-by-turn information is being considered.

One of the most important KPI's 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, lower carbon footprint and reach the customer on time! Accurate route planning greatly contributes to the ability of your field force to perform at the highest level.

Routing allows you to calculate the following:

- Travel time – meaning how long it will take the worker to arrive at a location.
- Travel distance – from one location to another.

Field Service Lightning uses the routing service to help minimize the worker travel time and distance from one work order to another. And to calculate travel time and distance and make it visible for 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. It provides an accurate calculation, thus enabling a better optimization of schedule.

To Enable SLR simply go to the Field Service Settings app>Scheduling>Routing and tick the Enable Street Level Routing box - that's it! From now on FSL will use SLR for travel calculation. SLR calculation takes a bit longer than Aerial routing calculation.

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.

EDITIONS

Available in: **Salesforce Classic and Lightning Experience**

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- 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.

Reserve Time Slots for Designated Work

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

Specify time slots on your calendar reserved for predefined 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 the fields to the service appointment in Salesforce Classic.

1. Scroll over your profile picture, under Options select Switch to Salesforce Classic.
2. From the 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 check box 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 in your profile dropdown.
6. From the Field Service Admin app, click the Schedule Policies tab.
7. Click the policy where 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 Word work rule to the policy.
10. Click **Save**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Control Which Absences Appear on the Resource Gantt

Enable approval confirmation so only approved absences block your technician's availability and appear on the resource 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, select 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. Check the **Activate approval Confirmation on resource absences** checkbox.
6. Click **Save**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

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

Optimization Service Limits

- 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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

- Maximum number of objects passed to the optimization service in 1 request (For example, service appointments + related objects such as required skills, resources) = 45,000

max number of objects passed to the optimization service in 1 request (i.e. SAs + related objects such as required skills, resources) - 45,000

[Building Blocks of Field Service Lightning Optimization](#)

Work rules, service objectives and scheduling policies explained

[Activate the Field Service Lightning Optimizer](#)

Activate the service scheduling optimizer to set up the most efficient schedule possible for your business.

[Create a Field Service Lightning Optimization User](#)

To activate the scheduling optimizer, you create an optimization profile and optimization user. You then log in as the optimization user to complete activation.

[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 un-schedules them. This frees up your technician for the more important job.

Building Blocks of Field Service Lightning Optimization

Work rules, service objectives and scheduling policies explained

[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.

[Optimization Limits and Considerations](#)

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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.

Service Objectives

Every company has its own set of business goals and priorities. Field Service Lightning allows to modify its scheduling behavior and adjust it to individual company needs. As many field service objectives might conflict with one another (cost vs service at its base), these objectives can be 'balanced', and automatically 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

 **Important:** In order for the scheduling logic to function, Service Appointments must be parented by Work Order or Work Order Line Items.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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 first and foremost based on the default 'Operating Hours' record of each 'Service Territory' (default) or on individual 'Operating Hours' assigned to resources via their 'Service Territory Member' object (overrides 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 times, customers will have specific demands with regards to service delivery times (for example a shopping mall will only agree to maintain its elevators after hours). This rule assures the service scheduling optimizer will only schedule appointments for customers within their visiting 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.

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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


[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 first and foremost based on the default 'Operating Hours' record of each 'Service Territory' (default) or on individual 'Operating Hours' assigned to resources via their 'Service Territory Member' object (overrides default).

This rule takes into account travel time (known as the "gap" between appointments, previously scheduled services, as well as additional constraints as per the table below.

Field Name	Description
Over Time	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.
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

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

It is very common for Service Resources to differ one from 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 at the beginning and end of his/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’. Important to define where the Service Resource should be at the beginning and at the end of his/her daily availability.

- Be On Site: If one’s availability starts at 9AM, 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 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 9AM, 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 when 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.

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

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

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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	<ul style="list-style-type: none"> • 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.

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 $\text{Early Start} \leq \text{start}$ 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 $\text{Due Date} \leq \text{finish}$ 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.

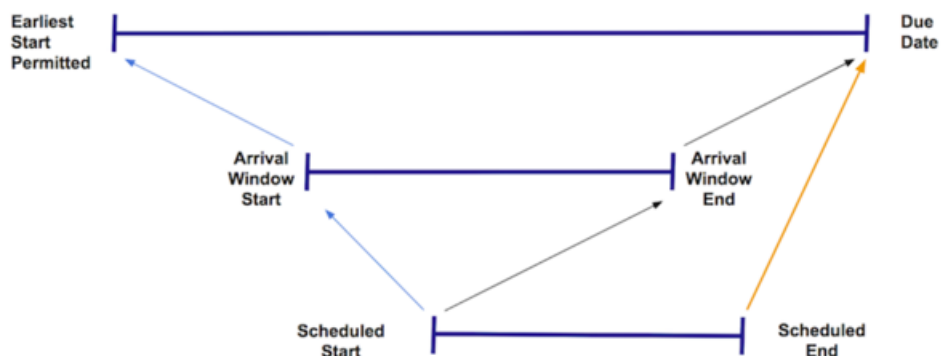
These two rules are essential for the system to be able to function in a time space, and so they are always automatically included in every scheduling policy.

- **Arrival Window Start:** ensures that the resource will not arrive to the service site before the promised Appointment Start by validating that the equation $\text{Appointment Start} \leq \text{Start}$ 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 $\text{Start} \leq \text{Appointment finish}$ is true.

The second set of rules looks after the appointment booking functionality, and enforces scheduling within the much more constrained (usually two/four hour time windows).

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

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

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

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

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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.

Component	Definition
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.

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 times, customers will have specific demands with regards to service delivery times (for example a shopping mall will only agree to maintain its elevators after hours). This rule assures the service scheduling optimizer will only schedule appointments for customers within their visiting hours.

Dispatchers can manually schedule appointments outside customer's visiting 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.

Simply create a new 'Operating Hours' record with the correct time intervals in which service delivery is possible for the customer, and reference this record via the 'Operating Hours' lookup field on the Account (add to layout, available by default). When done, don't forget to add the rule to your scheduling policy.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

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

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.

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.

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

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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EDITIONS

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EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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.

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.

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.

- You must use work orders or work order line items as the service appointment parent.
- Maximum of 5000 SAs in one optimization request.
- Maximum of 50,000 SAs optimized per org per rolling 24 hours
- Maximum of 21 days for the time horizon
- Maximum of 500 resources per optimization request
- Total of up to 50,000 objects sent to the optimization service in each request
- The optimization service will treat objects without geolocation as if they are located at the Resource's home base


EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Activate the Field Service Lightning Optimizer

Activate the service scheduling optimizer to set up the most efficient schedule possible for your business.

1. As a system administrator with the “Modify All Data” user permission, navigate to the Field Service Settings tab.
2. Click **Create Optimization Profile** in the left-hand navigation bar.
 -  **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, click **Users** 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 to see your full list of tabs.
6. Click the Field Service Settings tab.
7. Click **Activate Optimization**.
8. Click **Allow** to allow remote site access and be redirected back to the settings tab.

Optimization is now active in your org, as seen by the **Optimization Active** message in the left-hand navigation bar on the Field Service Settings page. You can log out as the optimization user and log back in with your regular username and password.

To have the optimizer run on repeat, open the **Field Service Admin** app from the Field Service app menu. Click the Field Service Settings tab, then click **Scheduled Jobs**. Select the job and adjust the settings as needed. When the optimizer is active, a status bar appears on the left-hand side of the Field Service Settings page.

To manually run the optimizer — for instance, for a particular geographical area using a certain scheduling policy — click **Optimize** in the Service drop-down menu on the Gantt chart and 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

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

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

Create a Field Service Lightning Optimization User

To activate the scheduling optimizer, you create an optimization profile and optimization user. You then log in as the optimization user to complete activation.

Create an FSL optimization profile, create an optimization user, and then log in as the user and activate the optimization.

[Create a Field Service Lightning Optimization Profile](#)

After activating the optimizer, create an optimization profile.

[Create an Optimization User](#)

After creating an optimization profile, create an optimization user.

[Log In as the Optimization User and Activate Optimization](#)

Once creating an optimization profile and a user, log in to active optimization.

Create a Field Service Lightning Optimization Profile

After activating the optimizer, create an optimization profile.

1. Select a standard platform user profile from **Setup > Manage Users > Profiles**, and then click **Clone**.
2. Set the profile name to *FSL Optimization*. You must use this name.
3. Set the following settings.
 - Custom App settings—Remove all settings, except **Field Service**.
 - Tab settings—Hide all tabs, except **Field Service Settings** – Default On.
 - Administrative permissions
 - Enable **API Enabled**.
 - Enable **Chatter Internal User**.
 - Enable **View Help Link**.
 - Enable **Allow View Knowledge**.
 - Disable all remaining fields.
 - Standard Object permissions—Remove all permissions from all objects.
 - Custom Object permissions—Keep defaults (no permissions).
 - Field Service app—**Visible**.
 - Field Service Settings tab—**On** (the default).
 - Enabled Visualforce Page Access—**Vf066_settings**, and remove all other settings.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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”

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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”

- Enabled Apex Class Access—Include **OASRestService** and **AuthServices**, and remove all other settings.

4. Click **Save**.

Create an Optimization User

After creating an optimization profile, create an optimization user.

1. Select **Setup** > **Company Profile**, and then click **Company Information**.
2. Find your Salesforce Org ID, and copy the 15-character string to your clipboard.
3. Select Setup Manage UsersUser, and then click **New User**.
4. Set the following values.
 - First Name—Leave blank.
 - Last Name—Enter *FSL Optimization*.
 - Alias—Enter *optUsr*.
 - Email—Enter the email address where you can receive the activation email.
 - Username—This name must follow this format: *FSL.[org id]+@[domain.name]*. For example, if your org ID is "00D58000000Plve" and your domain name is "optimization.com," enter *fsl.00D58000000PIve@optimization.com*.
 - Nickname—Accept the default.
 - Role—Select **None Specified**.
 - User License—Select **Salesforce License**.
 - Profile—Enter *FSL Optimization*.
 - Select **Generate new password and notify user immediately**. Make sure this option is selected.
5. Click **Save**.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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"

Log In as the Optimization User and Activate Optimization

Once creating an optimization profile and a user, log in to activate optimization.

1. When you receive a password reset email, click the link and complete the steps to log in to your org as the optimization user.
2. When logged in, click the + icon to see a list of all your tabs.
3. Click the **Field Service Settings** tab.
4. Select **Optimization > Activation**.
5. Click **Activate Optimization**.
6. To allow remote site access and be redirected back to the Settings tab, click **Allow**.

After you complete these steps, the scheduling optimizer operates in your org. You can log out as the optimization user and log back in with your regular username and password.

 **Note:** If you deactivate the optimization user, scheduling optimization no longer operates.

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 uncheduling 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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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"

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

- 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**.

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.
- **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.

EDITIONS

Available in: **Salesforce Classic and Lightning Experience**

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

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 un-schedules 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)

1. 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.

EDITIONS

Available in: **Salesforce Classic and Lightning Experience**

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

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 un-schedules 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 un-scheduled 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:
 - 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 un-scheduled. 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 un-scheduling) 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 un-scheduled 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 unchedules 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

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

Dispatch Policies in the Field Service Lightning Managed Package

Manage how field service technicians receive jobs, either one at a time, hourly, daily, weekly, or monthly.

You can determine how far out appointments can or must be made. You can enable drip feed, which dispatches service appointments to technicians as they finish current appointments. You can set for each territory or enterprise-wide.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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


Sharing for the Field Service Lightning Managed Package

You can limit access to field service objects so that your service team members only see information relevant to them. Field Service Lightning includes out-of-the-box sharing tools to give team members access to the right information. For these tools to function, you need to change objects' default Public Read/Write sharing settings.

1. Select **Setup > Security Controls > Sharing Settings**.
2. Change the sharing settings for the for the Work Order, Service Appointment, Service Territory, and Service Resource objects to **Private**.
3. Click **Save**.

You can also give dispatchers access to the objects they need by sharing information across territories and syncing calendars to include absences and other events.

To change sharing rules for the Appointment object, you must change the service appointment lifecycle. When a service is created and assigned, the service is visible only to the record's creator and relevant dispatchers based on user-location sharing. When you change a dispatching service's status to Dispatched, the record is shared with the user of the assigned resource.

 **Note:** When a service is canceled, all sharing rules are removed, and the service is visible only to the service owner and the relevant dispatchers based on the User-Location object.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Customize the Dispatcher Console with Field Sets

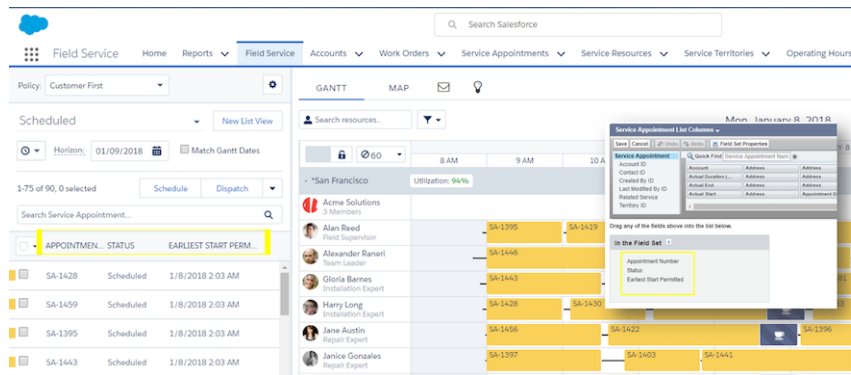
The Field Service Lightning Managed Package uses Fields Sets as a tool for administrators to control which fields appear on some of the Visualforce pages of the managed package. This allows administrators to change the default setup of the information displayed on some key UI elements. For example, by changing a field set the admin can select which fields will appear as columns in the Dispatcher console service Appointment list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

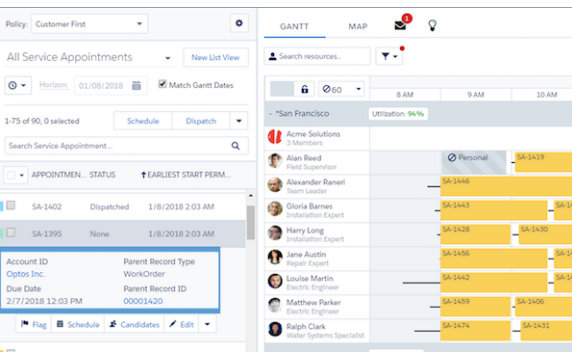
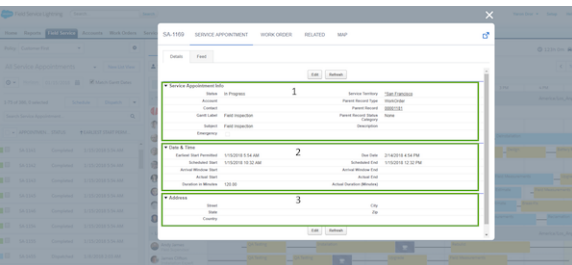
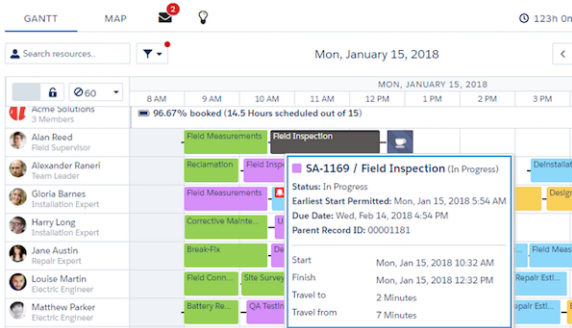
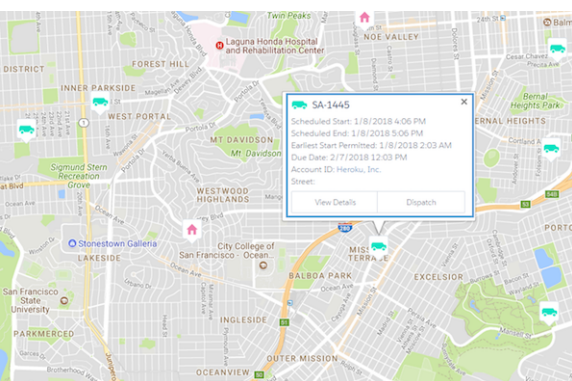
Note: Field sets in the Field Service Lightning managed package Number, Text, Date , DateTime, Formula. Currency, and Reference (lookup), fields.

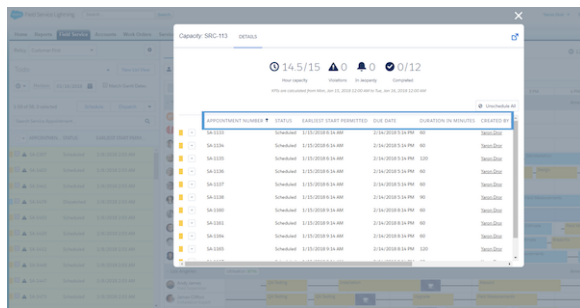
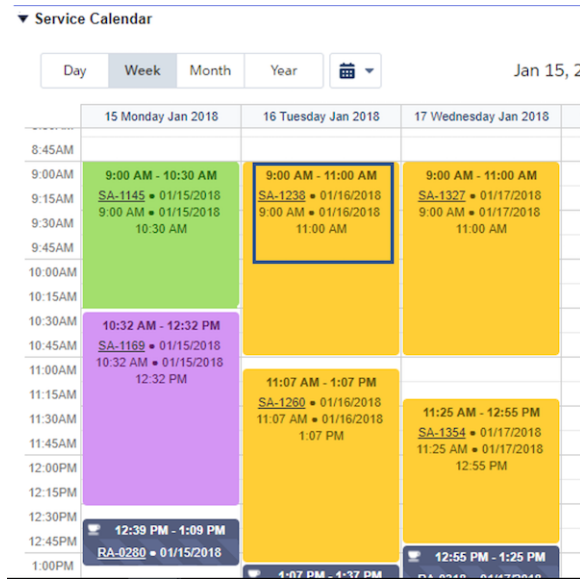
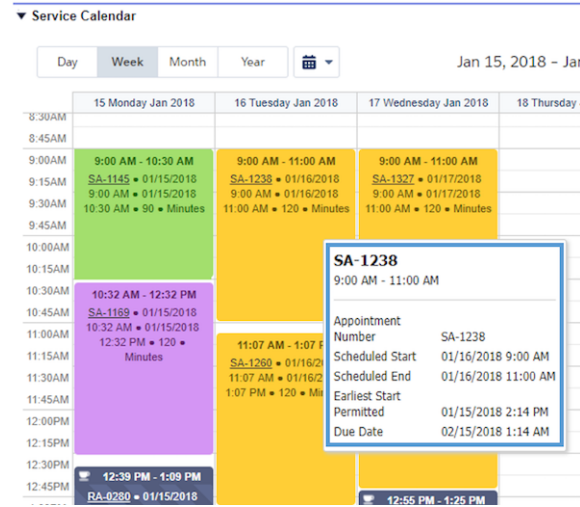


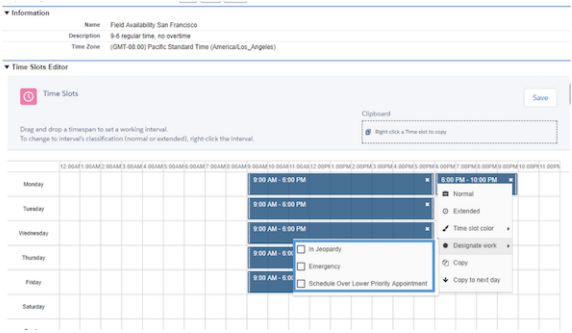
Important: Supported field types in Field Service Lightning field sets are Number, Text, Date , DateTime, Currency, and Reference(Lookup Fields).

Service Appointment Field Sets

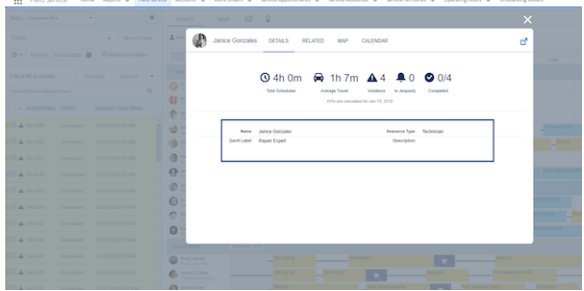
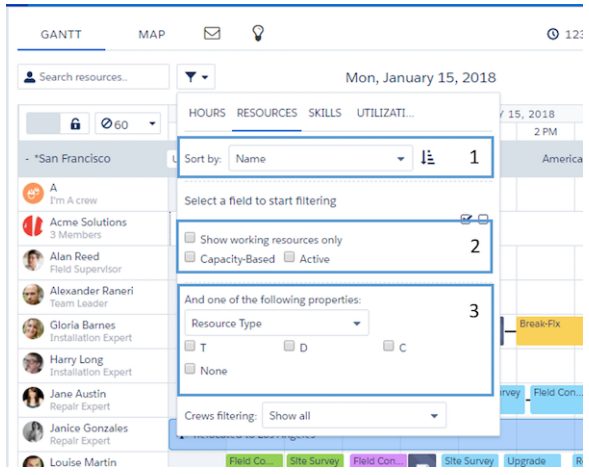
Field Set	Description	Placement in Dispatcher Console
Service Appointment List Columns	Controls the fields that appear on the appointment list columns. Up to six fields can show up as a service list column.	

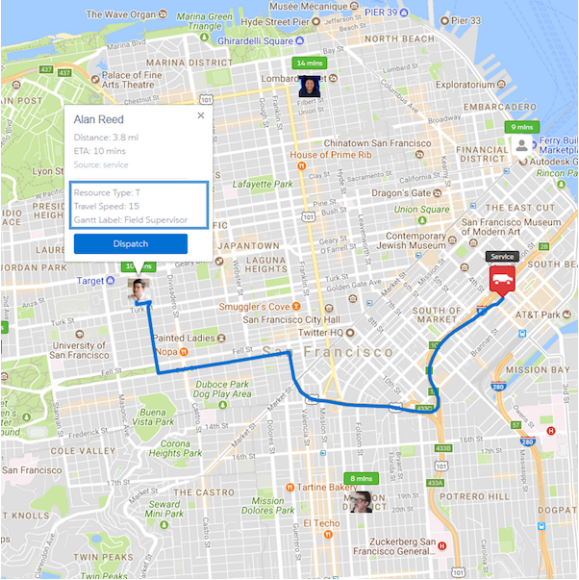
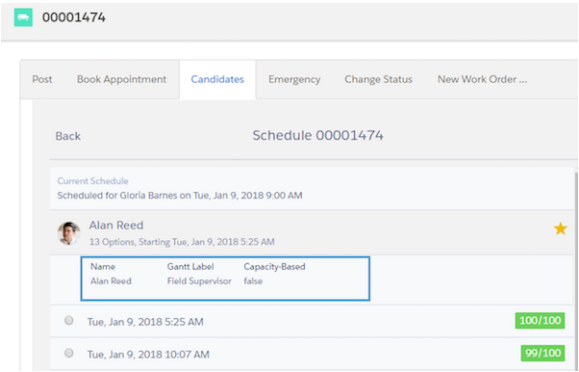
Field Set	Description	Placement in Dispatcher Console
Service Appointment Expanded	Controls the mini layout displayed when the user clicked on an appointment on the list. Up to 12 fields can show up on the mini layout.	
Service Lightbox	<p>The below Field Sets control the layout of the dialog screen displayed when the user is double clicking on an appointment on the Gantt.</p> <ul style="list-style-type: none"> • Service Lightbox • Service Lightbox Time • Service Lightbox Address 	
Service Tooltip Gantt	Controls the tooltip layout when hovering above an appointment on the Gantt.	
Service Info Window Map	Controls the layout of the dialog screen displayed when the user is double clicking on an appointment on the map.	

Field Set	Description	Placement in Dispatcher Console
Capacity Service Columns	Controls the column headers on the dialog screen which opens when double clicking a capacity record on the Gantt. Up to nine fields can show up as a capacity service column.	
Service Appointment Resource Calendar Display	Controls the fields displayed on the appointments on the service resource calendar Visualforce page.	
Service Appointment Resource Calendar Tooltip	Controls the fields displayed on the tooltip when you hover over an appointment on the service resource.	

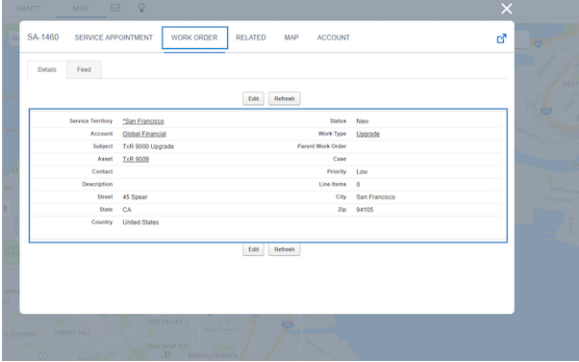
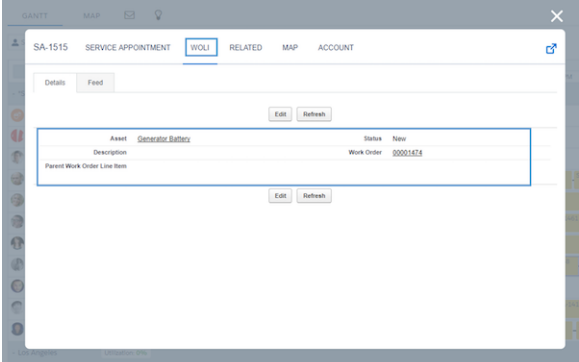
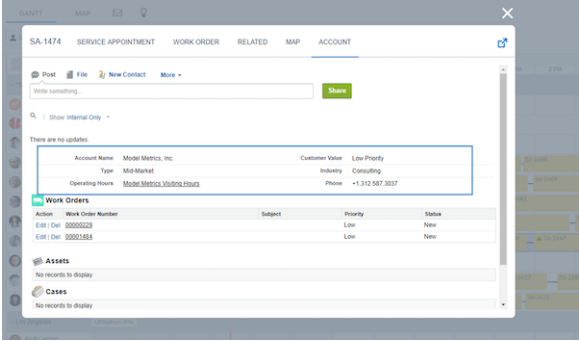
Field Set	Description	Placement in Dispatcher Console
Designated Work Fields	Controls the available fields when defining a time slot as a designated time slot from the time slots editor Visualforce page on the operating hours record.	

Service Resource Field Sets

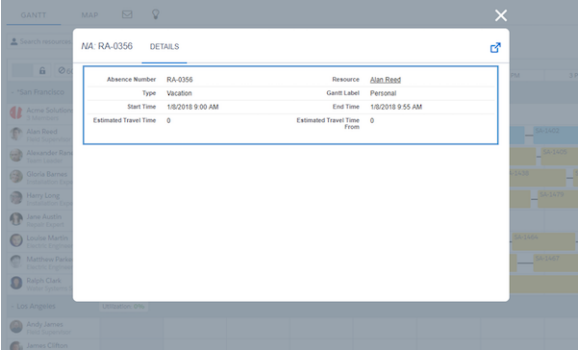
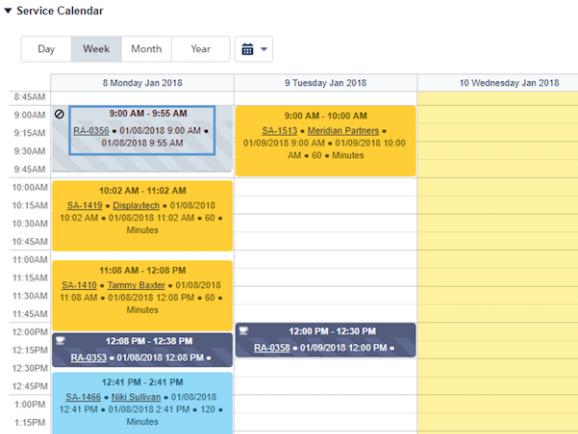
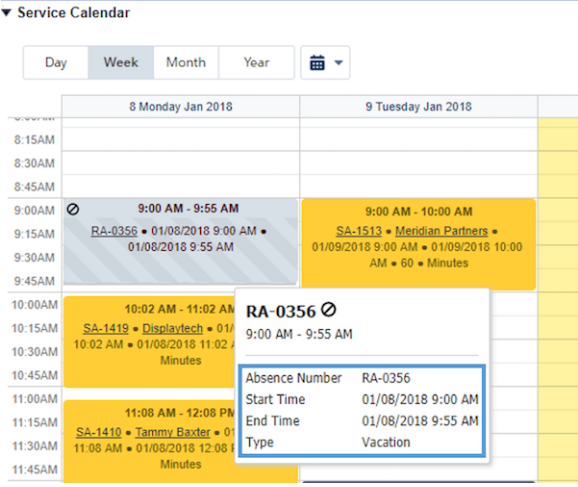
Field Set	Description	Placement in Dispatcher Console
Resource Lightbox	Controls the layout of the dialog screen displayed when the user is double clicking on a service resource on the Gantt.	
Resource Gantt Filter	Controls the available fields on the Gantt Resource Filters. The fields are available in: <ul style="list-style-type: none"> Sort by picklist Checkbox filters (if the field is of type checkbox) One of the following properties picklist (if the field is of type Picklist) 	

Field Set	Description	Placement in Dispatcher Console
Emergency Fields	Controls the fields displayed on the service resource in the emergency chatter action.	
Get Candidates Resource Details	Controls the fields which appear when expanding a resource row on the candidates chatter action.	

Gantt Lightbox

Field Set	Description	Placement in Dispatcher Console
Work Order	Controls the layout of the dialog screen displayed when the user is double clicking on an appointment on the Gantt, and clicks on the Work Order tab (when the service appointment parent is a work order).	
Work Order Line Item	Controls the layout of the dialog screen displayed when the user is double clicking on an appointment on the Gantt, and clicks on the WOLI tab (when the service appointment Parent is a Work Order Line Item).	
Account	Controls the layout of the dialog screen displayed when the user is double clicking on an appointment on the Gantt, and clicks on the account tab.	

Resource Absence Field Sets

Field Set	Description	Placement in Dispatcher Console
Resource Absence Lightbox	Controls the layout of the dialog screen displayed when the user is double clicking on a resource absence on the Gantt.	
Resource Absence Resource Calendar	Controls the fields displayed on the absences on the service resource calendar Visualforce page.	
Resource Absence Calendar Tooltip	Controls the fields displayed on the tooltip when you hover over an absence on the service resource calendar Visualforce page on the Service Resource record.	

 **Note:** Field sets in the Field Service Lightning managed package Number, Text, Date, DateTime, Formula, Currency, and Reference (Lookup), fields.

Field Service Lightning Dispatcher Console

The Field Service Lightning Managed Package includes the Dispatcher Console, which is the main working space for dispatchers.

From the Field Service tab, the Dispatcher Console contains the appointments list, the resources Gantt chart, the map, and other features.

[Search in the Dispatcher Console](#)

Field Service Lightning offers search options for both the Service list and the Resource list.

[Dispatcher Console Service Appointment List](#)

The Service Appointment list is located on the left side of the dispatcher console and contains a list of relevant appointments. Users can filter, sort, and search within the list. You can also perform actions on selected services 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 map displays the location of appointments from the service appointments List, the resource's home base, and the resource's last known position.

[Scheduling Policy Picker](#)

A scheduling policy is a set of rules and objectives that are used in a scheduling operation. The scheduling policy you select will be used in every scheduling action.

[Managing Service Resources](#)

Resources represent technicians that are assigned to complete a service appointment.

[Service Crews in the Dispatcher Console](#)

If Service crews are enabled in the Field Service Lightning managed package, the Resources Gantt displays Service Resources of type Crew and Service Resource Memberships.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Search in the Dispatcher Console

Field Service Lightning offers search options for both the Service list and the Resource list.

[Search the Dispatcher Console Service Appointment List](#)

You can search for appointments from the service appointment list.

[Search the Dispatcher Console Resource List](#)

You can search for a resource from the service resource list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Search the Dispatcher Console Service Appointment List

You can search for appointments from the service appointment list.

To search for an appointment in the service appointment list, enter at least two characters in the list search box.

The search process takes into account the following service appointment fields:

- Service Appointment Number
- Gantt Label
- Account Name
- Assigned Resource Name
- Service Appointment ID
- 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 (AND logic condition is applied on all search items).

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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Search the Dispatcher Console Resource List

You can search for a resource from the service resource list.

To search for a resource on the service resource list, type at least one character into the search box.

The search process filters based on the resource name.

You can also use the Gantt Filter to filter resources by additional options, including their skill set or by any checkbox or picklist field included in the filter field set.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Service Appointment List

The Service Appointment list is located on the left side of the dispatcher console and contains a list of relevant appointments. Users can filter, sort, and search within the list. You can also perform actions on selected services in the list.

To change the order of the bulk action buttons in the service list, navigate to Dispatcher Settings and select Bulk actions order. Then, drag and drop the actions to fit your preference.

You can use field sets to control:

- Which fields appear in the service list
- Which fields appear when viewing a single service within the service list

You can also drag fields in the list to adjust their width and reveal additional fields.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

[Dispatcher Console Scheduling Horizon](#)

The Scheduling Horizon takes into account the selected date properties, and shows the relevant appointments up to and including the horizon date.

[Dispatcher Console Service Appointment List Views](#)

List Views control which service appointment are shown in the list on the left hand side of the FSL dispatcher console. The filtered service appointments also depend on the dates chosen (horizon and date fields) and search values.

[Dispatcher Console Service List Search](#)

Use keywords to filter service appointments.

[Dispatcher Console Service List Customization](#)

You can customize service lists.

[Dispatcher Console Appointment List Bulk Actions](#)

You can perform mass actions on an appointment list.

Dispatcher Console Scheduling Horizon

The Scheduling Horizon takes into account the selected date properties, and shows the relevant appointments up to and including the horizon date.

For example:

- **Number of services to show:** 500 (amount configurable)
- **Selected date property:** Due Date
- **Scheduling horizon:** 05/30/2015

If you select **Match Gantt Dates**, this changes the scheduling horizon to match the dates the Gantt shows.

EDITIONS

Available in: Salesforce Classic and Lightning Experience


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

Dispatcher Console Service Appointment List Views

List Views control which service appointment are shown in the list on the left hand side of the FSL dispatcher console. The filtered service appointments also depend on the dates chosen (horizon and date fields) and search values.

Below are the predefined list views. All list views consider Status category and there conditions have an "OR" statement between them.

- Todo
 - Status category - None
 - Rule violations
 - In Jeopardy service appointments which are not Canceled or Completed



 **Note:** The Todo filter shows services that are waiting for the dispatcher's next action. For example: unscheduled services, services with a rule violation, services in jeopardy, etc.

- All Service Appointments
 - Yes, all of them
- Selected
 - Only service appointments which the user selected on the list.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

- Flagged
 - Only service appointments which the user marked as flagged - notice flagged services are not saved between sessions.
- Recent
 - Service appointments which were recently interacted with: schedule, drag, post to chatter, change status, get candidates, show on gantt, open details.
 -  **Note:** Recently used services are not saved between sessions.
- Unscheduled
 - Service appointments without any assigned resource and are not canceled.
- Rules Violating
 - Service appointments with rule violations and are not canceled.
- In Jeopardy
 - Service appointments marked as in jeopardy and are not canceled.
- Scheduled
 - Service appointments with an assigned resource.
- Gantt
 - Service Appointments which are currently on the Gantt chart view; assigned and between the viewable times.
 -  **Note:** The Gantt filter shows the same services seen on the Gantt.
- Contractors
 - This view will show only service appointments which are scheduled to a capacity based resources.
- Canceled
 - Service appointments with status category canceled.

You can also create custom list views to filter the service appointments. The following properties are considered when filtering.

- Status Only SAs with the selected statuses will be shown (notice- not status category)
- Dates A time window that will be checked with all selected time fields
- Minimum Service Appointment Priority Only SAs with priority higher than selected will be shown. (notice - services with no priority will automatically be assigned with priority 10000)
- Violations \ In jeopardy Show\ Don't show SAs with rule violations or In jeopardy
- Territory Filter SAs by Service Territory

Dispatcher Console Service List Search

Use keywords to filter service appointments.

Use the Appointment List Search to filter appointments displayed on the list by keywords. You can search for many keywords by separating each word with a comma (applying the AND logic condition).

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Service List Customization

You can customize service lists.

There are two components you can customize for the service list:

- **Appointment list columns:** Use the *appointment list columns* Field Set to configure which fields you want to appear at the service appointment list header. You can select up to 6 fields.
- **Appointment mini view:** When you click an appointment in the list, the row extends to expose the mini view. Use the *Appointment Expanded* Field Set to configure up to 12 fields 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

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

Dispatcher Console Appointment List Bulk Actions

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. Check out the Field Service Setting tab in the Field Service Admin app for more details.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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.

- The resource list displays all active resources whose locations are selected in *territory Filtering*.
- The *Resource Filter* lets you control which resources appear in the Gantt.

You can customize which fields are available in the filter by editing the Resource Gantt Filter field set. Only picklists and checkbox fields can be added. Select **Show working resources only** in the filter box to show only resources who are scheduled to perform services in the calendar interval shown on the Gantt.
- The *Gantt Filter* lets you filter resources by skill, properties, and the hours/days displayed on the Gantt.
- The *notifications area* shows you details about scheduling actions that you took such as Schedule, Unschedule, etc.
- The *Lock Gantt* button lets you switch between a read-only and read/write view of the Gantt.
- The KPI Monitor gives you your schedule highlights, including the total work load, average travel time, number of completed services, number of rules violating services, and number of services which are In Jeopardy.
- The *Date view and Resolution* controls the date range that is displayed on the Gantt, and offers several options:
 - Jump to a specific date
 - Scroll one day to the left/right
 - Jump to Today
 - Gantt resolution: The number of days to display on the Gantt
- The *Territory's time zone* displays each territory's current date and time.
- If approval confirmation on resource absences is enabled, only approved absences appear on the Gantt.

[Dispatcher Console Option Button](#)

The Options button lets you customize the Gantt data and gives you access to viewing and other dispatcher console settings.

[Dispatcher Console Territory Filtering](#)

You can filter appointments by service territories.

[Dispatcher Console Gantt Chart Settings](#)

Customize your Gantt chart to display details you want to see.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Option Button

The Options button lets you customize the Gantt data and gives you access to viewing and other dispatcher console settings.

The Options button is located above the service appointment List and includes several settings:

- **Territory filtering:** Filter the locations seen on the Gantt.
- **Gantt Settings:** Configure the Gantt data set, behavior, and layout.
- **Open full screen:** Open the Dispatcher Console in full screen with four available tabs: Accounts, Services, Resources, and Absences.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Territory Filtering

You can filter appointments by service territories.

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 secondary service territory memberships on the Gantt.

1. From the Field Service Admin app, click the Field Service Settings tab.
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 are using the Get Candidates action, the secondary territory membership candidate has a green mark to show it is 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 timezones, only secondary territory membership with the same time zone are visible. If the primary is filtered out, the other secondary territory memberships are still visible.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Gantt Chart Settings

Customize your Gantt chart to display details you want to see.

To configure your Gantt chart settings, clicking the Settings icon, and then click **Dispatch console settings**.

- **Filter candidates after get slots action:** Show only resources that come up as candidates when using the Get Candidates service list or Gantt action.
 - When enabled, only the available resources for scheduling will be seen on the Gantt.
 - When disabled, all the resources will be seen on the Gantt without any filtering.
- **Scheduling horizon limit:** Set the number of days to show before the selected scheduling horizon.
- **Services per page:** Set the maximum number of services per page in the Service list. The available options are 50, 75, 100, 125, and 150.
- **Resource row height:** Set the height of the resources row in the Gantt. The available options are XSmall, Small, Medium, and Large.

[The Gantt Filter](#)

Filter resources by skills and other features, and set hours and days to display on the Gantt chart.

[KPI Monitor](#)

The KPI (Key Performance Indicator) monitor provides important insight on your services.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

The Gantt Filter

Filter resources by skills and other features, and set hours and days to display on the Gantt chart.

The Gantt Filter in the top left lets you filter resources by their skills and other features. You can also set the available hours and days to display on the Gantt chart.

- The **Hours** filter lets you select a range of hours that you would like to see across all dates resolution (daily, 2 days, 3 days and weekly). It also lets you select whether to display weekends on the Gantt.
- The **Resources** filter lets you specify which resources are shown. Selecting a field activates the filter. You can customize which fields are available in the filter by editing the Resource Gantt Filter field set. Only picklists and checkbox fields can be added. In addition, you can select **Show working resources only** in the filter box to show only resources who are scheduled to perform services in the calendar interval shown on the Gantt.
- The **Skills** filter ensures that only resources with the selected skills are visible on the Gantt.
- The **Monthly** filter lets you select how a resource's monthly capacity is calculated. Deselect any fields that you don't want to be included in the calculation.
- The **Priority** filter sorts the resources by highest priority service appointments.


By default the Gantt is being sorted by the resource name, ascending. You can add any field to the "Resource Gantt Filter" Field set on the Service Resources object, and it shows as an option on the Gantt Filter settings under the Resources tab.

1. To add a new field to the selection, go to **Field Service > Service Resource > Field Sets**.
2. Edit the Field Set layout Fields.
3. Change to sort by the desired field.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

 **Note:** Lookup fields are not supported. All other field type are supported.

KPI Monitor

The KPI (Key Performance Indicator) monitor provides important insight on your services.

The KPI Monitor can be found on the top right side of the Gantt.

The available indicators are:

- Total scheduled time (workload) of all loaded service territories.
- Average travel time per service of all service shown on the Gantt.
- Number of completed services out of all services shown on the Gantt.
- Total number of rules violating services.
- Total number of services in jeopardy.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Dispatcher Console Map

The map displays the location of appointments from the service appointments List, the resource's home base, and the resource's last known position.


You can also add any location-based object to the map.

- **Schedule services:** Click the service icon and click Schedule to auto-assign the service to an available resource.
- **Display Google traffic data:** Select the Traffic checkbox at the base of the map.
- **View a resource's daily route at street level:** Open the Resource section in the Gantt and click the right-hand tab.
- **View all location-based standard or custom objects as separate map layers:** Set up a tabular report for any object with latitude and longitude values. Click **Map Layers** in the top left corner of the map to view reports and resources.
 - In the Reports tab, you can select layers to add to the map. 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.
 - The map shows all resources by default. Type a name in the Resources tab and click **Show on map** to view a single resource's markers.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

 **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.

[Dispatcher Console Map Views](#)

The Map view shows you all resources' home bases, assigned service appointments, and last known positions. You can view one or more items by selecting the checkboxes below the map.

[View Resource Availability](#)

You review and plan out your resource capacity. Gain insight into your workforce's work time, travel, and absences.

[Map Polygons](#)

Draw your own territories directly on the map, then link them to your service territories.

[Display Travel Routes on Map](#)

The scheduling engine uses street level routing to schedule your technician's day appropriately. On the day of service, the Field Service Lightning Mobile App tracks the actual route taken. You can see both routes together on the resource map view.

Dispatcher Console Map Views

The Map view shows you all resources' home bases, assigned service appointments, and last known positions. You can view one or more items by selecting the checkboxes below the map.

Select a resource name in the drop-down list to filter the Map to display only:

- **Service Appointment:** All assigned appointments to the selected resource and which appear in the Service list.
- **Home base:** Resources' home base, according to the home base coordinates specified in the resource details.
- **Live positions:** When resources update service appointment status from their mobile device, their coordinates are automatically recorded. Live Position shows the latest coordinates saved in the system.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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


View Resource Availability

You review and plan out your resource capacity. Gain insight into your workforce's work time, travel, and absences.

The Gantt filter lets you select how a resource's capacity is calculated. Deselect any fields that you don't want to be included in the calculation.

You can also customize the capacity-based color coding in the 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.

 **Note:** Capacity must be set in hours. For example, you can't set the capacity to 5 work items per day. If you want to set capacity by work items, to put a large number of hours in addition to the real capacity by work item.

On the utilization resource view, you can:

- 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.

Utilization percentage calculation

$(SA + Absences + Breaks + Travel Time) / (Overtime Hours + *Normal Hours*)$

When:

- SA = Service Appointments
- Absences = Resource Absence of type Absence

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

- Breaks = Resource Absences of type Break
- Overtime Hours = Time Slots of type Extended of the Resource Operating hours of its Primary Service Territory
- Normal Hours = Time Slots of type Normal of the Resource Operating hours of its Primary Service Territory

Using the checkbox on the Resource Filtering > Utilization section you can remove all parts of the equation except for Normal Hours, which must stay as an argument.

Map Polygons

Draw your own territories directly on the map, then link them to your service territories.

Once [map polygons are enabled](#), you can draw polygons straight on the map or import them in KML (Keyhole Markup Language) format through API. Draw a polygon on the Field Service map and then associate it to a Service Territory by selecting it in the drop down. When a new Service Appointment is created the service territory field is auto populated based on the Appointment's address.

When a service appointment address is changed and the service territory is blank, the address is matched to a polygon and that polygon's territory. You can use map polygons to apply bulk actions to all the Service Appointments in that polygon, straight from the field service map view.

View, create, or update polygons on the map from the dispatcher console.

1. From the Field Service app, 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 go back to the Polygons tab in the map tab of the dispatcher console.

1. Select your polygon from the tree view.
2. Click **Edit**.
3. Make your desired changes.
4. Click **Save**.

You can make the following bulk actions on a map polygon.

- **Schedule / Unschedule / Dispatch:** Schedule, Unschedule or Dispatch all the Service Appointments that are in the Polygon in the current view.
- **In Jeopardy:** Set the In Jeopardy checkbox field as true for every Service Appointment which is shown on the polygon.
- **Delete Polygon:** Delete the polygon.
- **Cut Intersections:** Select a polygon and cut its intersections with other polygons.
 1. Select the relevant polygons.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

2. Click **Go**. The polygons are altered so they no longer intersect.

The polygons are trimmed and there are no intersections.

Considerations

- The dispatcher console supports loading up to 200 polygons.
- A single polygon cannot have more than 3,200 coordinates.
- If the service appointment geolocation matches more than one polygon, the appointment is assigned to the top-level territory or to the lowest territory in the hierarchy.



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). Middle tier territories are never assigned service appointments.

Display Travel Routes on Map

The scheduling engine uses street level routing to schedule your technician's day appropriately. On the day of service, the Field Service Lightning Mobile App tracks the actual route taken. You can see both routes together on the resource map view.

If history tracking is set on the last known location field on the service resource, both routes are displayed on the map. The actual route is based on the history of the resource's 'Last Known Location' field, which is updated by the mobile app.

The planned route is in blue and the actual route is pink. This way you can tell if the technician made a small detour, perhaps for a quick lunch break. When opening the resource details from the Gantt, go to the 'Map' tab and select a specific day.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

Scheduling Policy Picker

A scheduling policy is a set of rules and objectives that are used in a scheduling operation. The scheduling policy you select will be used in every scheduling action.

From the **Policy** dropdown, select a scheduling policy.

[Appointment Booking](#)

Field Service Lightning lets you book service appointments for different Salesforce objects, including Work Orders, Work Order Line Items, Accounts, Assets, and Opportunities. To book an appointment, follow the steps below (for convenience, we'll use a Work Order)

[Rescheduling an Appointment](#)

You can reschedule appointments from their service appointment pages.

[Set Visiting Hours](#)

Create "visiting hours" for your customers to ensure that services are scheduled during a business's operating hours.

[Scheduling Service Appointments](#)

There are multiple options for scheduling service appointments.

[Unscheduled Service Appointments](#)

In Field Service Lightning there are different ways to schedule service appointments.

EDITIONS


Available in: Salesforce Classic and Lightning Experience

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

Appointment Booking

Field Service Lightning lets you book service appointments for different Salesforce objects, including Work Orders, Work Order Line Items, Accounts, Assets, and Opportunities. To book an appointment, follow the steps below (for convenience, we'll use a Work Order)

To book an appointment, follow the steps below (for convenience, we'll use a Work Order):

1. Open a work order.
 2. In the Chatter feed, select **Book Appointment**. If this action isn't available, you can add it to the layout.
 3. Service Appointments can be booked for parent records, like a work order. These parent records can have many service appointments booked against to reflect different trips. The Book Appointment action gives you the opportunity to create a new appointment or reschedule an existing one.
 4. Let's create a new appointment. Select a Work Type from the drop-down list. Work Types provide key inputs to the scheduling optimizer, including an estimated duration, plus skill requirements for the resource. The address is automatically populated using the Work Order's address (this is configurable through the Global Actions).
 5. Select the Service Territory from the drop-down list, again to provide this input for scheduling purposes. Click **Show more options** if you want to change the Early Start and Due Date default range.
 6. Click Get Appointments to view a graded list of available slots for this service. The list considers all scheduling constraints such as the current schedule, work rules, and service objective. Slots may be indicated with an 'Ideal' or 'recommended' icons. Clicking the information icon opens the Appointment Insights window, which shows how each slot ranks against the Company KPIs as defined in the Scheduling policy.
 7. Click **Extend Dates** to show a wider range of service appointment dates.
 8. Select an appointment window. A service appointment will be created and automatically allocated to a resource, taking into consideration all scheduling constraints.
 9. To view the details, click View Service Appointment.
-  **Note:** Booking from objects other than work orders or work order line items creates a work order and the service appointment is created for that work order. For instance, an agent opens the appointment booking action from the Asset page and select a time slot. In doing this, a work order and a service appointment are created.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

Rescheduling an Appointment

You can reschedule appointments from their service appointment pages.

Once an appointment is booked, you can reschedule it from the service appointment detail page.

1. Open a parent record, like a Work Order, that has a booked appointment.
2. In the Chatter feed, select the **Book Appointment** quick action. If this action is not available, you can add it to the layout.
3. Review and adjust inputs for the Work Type, Address, and Service Territory, if desired.
4. Click Get Appointments to view a list of available slots.
5. Select the suitable appointment window, and the service appointment is automatically rescheduled.

Set Visiting Hours

Create “visiting hours” for your customers to ensure that services are scheduled during a business’s operating hours.

Respect the operating hours of your business customers by creating “visiting hours” for them. For example, if a customer only wants technicians to visit on weekdays between noon and 4 PM, you can use visiting hours to ensure that any services for that customer are scheduled within those hours. The service scheduling optimizer will only schedule appointments for customers within their visiting hours. Dispatchers can manually schedule appointments outside a customer’s visiting hours, though they’ll be alerted that they’re doing so.

To set visiting hours:

1. Confirm that your profile has access to the “Field Service - Service Visiting Hours” work rule record type. If you don’t have access, click **Edit** next to Work Rules and add this record type to the “Selected Record Type” list.
2. Navigate to the Work Rules tab, and create a work rule by selecting “Field Service - Service Visiting Hours.”
3. Click **Continue**.
4. Add a name, such as “Service Appointment Visiting Hours,” and a description.
5. Click **Save**.

To add your new visiting hours work rule to a scheduling policy:

1. Navigate to the Scheduling Policies tab.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

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

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

2. Select the scheduling policy you want to use.
3. Click **New Scheduling Policy Work Rule**.
4. Select the work rule.
5. Click **Save**.

 **Note:**

- You can attach one calendar per service.
- The calendar is effective until you remove or replace it on the service.
- Calendars use the timezone of the service they're attached to. The service inherits its service location's time zone. If the location has no time zone specified, GMT is used.
- The scheduling optimizer respects visiting hours.
- You can map a lookup field from a custom object to the Service Object 'Visiting Hours Calendar' field to auto-populate the Visiting Hours Calendar field.

Scheduling Service Appointments

There are multiple options for scheduling service appointments.

You can schedule service appointments in several ways:

- Manual drag and drop
- Click Schedule from the appointment mini view
- Click Schedule from the appointment list mass actions
- Use the Book Appointment quick action
- Use the Candidates Chatter quick action
- Use the Emergency Chatter quick action

[Scheduling a Service Appointment Manually](#)

A dispatcher can manually schedule service appointments.

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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.

EDITIONS

Available in: Salesforce Classic and Lightning Experience

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

[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](#)

The Service Appointment status can be changed automatically or manually by the dispatcher or the field resource.

[Scheduling Policies](#)

Field Service Lightning includes scheduling policies.

[Checking Rule Violations](#)


Rule violations occur when Field Service Lightning recognizes that 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.

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.

1. 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.

EDITIONS

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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.

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

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USER PERMISSIONS

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To create a permission set:

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- Scheduling from the Gantt or the quick 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.

Schedule Work Dependencies with Complex Work

Stay on top of project dependencies by scheduling time for them between appointments.


To ensure everything is ready for a complicated work order, define a chain of appointments with time dependencies such as appointments that must start at the same time or appointments that can be scheduled to start only after the completion of another appointment. To enable dependencies with 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** check the **Enable complex work** checkbox.

The Complex Work Visualforce page helps easily define dependencies. Schedule any size chain of appointments right from from the complex work page or use the scheduling actions, dispatcher console and optimization to schedule chains of two appointments. You can schedule the following dependencies:

- **Same start:** the service appointments must start together.
- **Start after finish:** service appointment B starts after service appointment A is finished.
- **Same resource:** both service appointments are assigned to the same resource.

Considerations

- You can view the related work of an service appointment by right-clicking the service appointment on the Gantt and selecting **Show related**.
- To control the available fields in the search result, modify the service appointments service list columns field set.
 -  **Note:** This also controls the service list columns on the Gantt.
- Complex work is not supported for capacity based resources.

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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**.

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 in just a few clicks with the help of a real-time map view. Clicking the Emergency Chatter action on a service reveals a map view of your closest field resources so you can dispatch work immediately.

Emergency Chatter action

The Emergency Dispatch Settings include several ways to customize your approach to emergency services.

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 then

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Setting Name	Description
	calculates the resource's ETA based on the location of the last appointment they completed, or if they did not complete any appointments that day, their home base, which is either their Service Territory Member address, or if not applicable their Service Resource address.
Idea/Good Availability Grade	The grading of candidates (color-coded). In the breadcrumbs example: <ul style="list-style-type: none"> • Resources who can reach the service in less than 30 minutes are ideal candidates. • Resource who can reach the service between 30 and 60 minutes are good candidates. • Resources who can reach the service after 60 minutes are bad candidates.
Emergency Search Timeframe	The amount of time you have to resolve the emergency, not counting the service duration. The <i>Earliest Start</i> Permitted on the appointment is set to the current time, and the <i>Due Date</i> = current time + appointment duration + Emergency Search Timeframe. For example, if an appointment will require one 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.

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 send them a customizable 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

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.

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To create a permission set:

- Manage Profiles and Permission Sets

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.

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.

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Automatic Appointment Status Change

The Service Appointment 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.

Scheduling Policies

Field Service Lightning includes scheduling policies.

A scheduling policy is a set of rules and objectives that are used in a scheduling operation. Typically, the scheduling policy is used when requesting an appointment and on various Gantt operations such as Schedule, Candidates etc.

The following scheduling policies are included in Field Service Lightning:

- **Customer First:** This policy balances objectives such as great customer service with travel minimization. Appointments are graded first by the customer's selection of a preferred employee and by the ability to provide the service as soon as possible. Travel minimization is considered as a second priority.
- **High Intensity:** This policy is typically used in times of high service volumes, in emergencies like a storm scenario, where the business focuses on employee productivity first and customer preferences are considered as a second priority.
- **Soft Boundaries:** This policy is identical to the Customer First policy, but allows the sharing of employees between different territories in order to enhance service coverage.
- **Emergency:** This is the default policy for the emergency quick action, which lets you quickly dispatch a resource to the emergency site with as few constraints as possible. To see resource information while using the emergency quick action, add the emergency fields to the service resource object and they will show on the tooltip.

You can create additional scheduling policies to reflect your business needs. The dispatcher can select different scheduling policies while using the Gantt scheduling operations. The list of scheduling policies is located above the appointments list on the Dispatcher Console.

Checking Rule Violations

Rule violations occur when Field Service Lightning recognizes that 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.

Rule violations will not occur when using the Automatic Scheduling (such as Schedule action or Candidates action). The system will automatically choose schedules that do not violate any rules.

The Rule Violation list is displayed on your screen, listing the rules that have been violated.

If rule violations are incurred, a service appointment is marked with a yellow triangle. Hovering over the service appointment space shows the details and the list of the rules that have been violated.

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The set of rules taken into consideration on the Dispatcher Console is taken from the configured scheduling policy (located above the service list).

Unschedulering Service Appointments

In Field Service Lightning there are different ways to schedule service appointments.

You can unchedule service appointments from several places:

- Dispatcher Console – Service Appointment list mass Actions menu
- Service Appointment on the Gantt – Right click, then select **Unschedule**
- Changing service appointment status to **None**

[Unschedulering an Appointment with Mass Actions](#)

By using the unchedule option from the Service Appointment List Mass Actions menu, you can unchedule one or more service appointments at the same time.

[Unschedulering an Appointment from the Gantt Chart](#)

While you're viewing a Gantt chart, you can unchedule service appointments.

[Unschedulering an Appointment by Changing the Status to None](#)

Changing a service appointment status to None automatically unchedules it and removes it from the Gantt. You can change the status to None by simply editing the status field.

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Unschedulering an Appointment with Mass Actions

By using the unchedule option from the Service Appointment List Mass Actions menu, you can unchedule one or more service appointments at the same time.

To unchedule an appointment with mass actions:

1. In the Service Appointment list, select the appointments(s) you want to unchedule.
2. On the list mass schedule menu, click Unschedule. The progress bar will appear on the bottom right.

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Unschedulering an Appointment from the Gantt Chart

While you're viewing a Gantt chart, you can unscheduler service appointments.

1. On the Gantt chart, select the service appointment(s) you want to unscheduler. You can select more than one appointment by holding CTRL / CMD while clicking appointments.
2. Right-click on the selection to display the Gantt actions.
3. Click **Unscheduler**.

Unschedulering an Appointment by Changing the Status to None

Changing a service appointment status to None automatically unscheduler it and removes it from the Gantt. You can change the status to None by simply editing the status field.

Managing Service Resources

Resources represent technicians that are assigned to complete a service appointment.

[Creating and Deleting Service Resources](#)

You can create and delete resources in Field Service Lightning.

[Viewing 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.

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[Assign a Resource Skill for a Given Time Period](#)

Often, technicians earn certifications that must be renewed periodically to ensure that their skills remain up-to-date. You can specify a time period for a resource's skill to make it easier to track active certifications and skill levels.

Creating and Deleting Service Resources

You can create and delete resources in Field Service Lightning.

- To create a resource, go to the [Service Resources](#) tab and click **New**. Update the necessary details and save your changes.
- To delete a resource, open the resource and click Delete.


Viewing 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.

Follow these steps to control which information appears in the calendar:

1. Manage which fields appear in calendar entries for Service Appointments:
 - a. From Setup, enter Appointment in the Quick Find box, then click **Field Sets** under Service Appointments.
 - b. You can customize two field sets:
 - *Service Appointment Resource Calendar Display*: Controls what information appears on the calendar entry.
 - *Services Appointment Resource Calendar Tooltip*: Controls what information appears in a tooltip when you hover over the calendar entry.
2. Manage which fields appear in calendar entries for Resource Absences:
 - a. From Setup, enter Absence in the Quick Find box, then click **Field Sets** under Resource Absence.
 - b. You can customize two field sets:
 - *Resource absence Resource Calendar*: Controls what information appears on the calendar entry.
 - *Absence Resource Calendar Tooltip*: Controls what information appears in a tool tip when you hover over the calendar entry.
3. Use the Absence Color field to change the Resource Absence color displayed on the Gantt chart.

Sometimes you want to represent different absences with different colors. For instance you might want to color a car break with Red and internal meeting with green. You can populate the gantt color field on the resource absence object with a 6 digit Hex code (in the format of #xxxxxx) and the absence block on the Gantt chart is colored in accordance.

 **Tip:** Use the Process Builder to automate coloring of resource absence.

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When you navigate to the Service Resources tab and click a resource name, you can now see their calendar. 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 resource page layout.

Assign a Resource Skill for a Given Time Period

Often, technicians earn certifications that must be renewed periodically to ensure that their skills remain up-to-date. You can specify a time period for a resource's skill to make it easier to track active certifications and skill levels.

For example, suppose a networking technician passed the networking certification exam, which grants him Level 2 router repair skills for one year. To reflect this time period on the resource record:

1. Navigate to the resource record.
2. Select the skill that the resource has gained. The Level and Phase fields appear next to the skill.
3. Under Phase, click **Add**. The skill phase options appear to the right.
4. Enter a start and finish date. If you don't specify a start date, the skill is considered valid since the beginning of time. If you don't specify an end date, the skill phase never expires.
5. Enter a skill level.
6. Click **Save**.
7. If desired, add additional skill phases by clicking **Add Phase**.

 **Note:** Users can define several skill phases for each resource, and skill phases can be assigned to different skill levels. For best results, keep all skill levels between 1 and 10, and don't create more than 50 time phases per skill.

Service Crews in the Dispatcher Console

If Service crews are enabled in the Field Service Lightning managed package, the Resources Gantt displays Service Resources of type Crew and Service Resource Memberships.

The Resource Gantt displays the Gantt Label text on the Service Resource Membership drawn on the Gantt. The default value if the field is null is the Service Crew Name + 'Crew Member', for instance Alpha Team Crew Member.

'Show Crew' is an option in the Service Resources menu. It only appears for Service Resource of type Crew. Click **Show Crew** to leave only the Crew and its members on the Gantt and hide the rest of the resources. Click **Hide Crew View** to go back to the regular display.

Filter the resources on the Gantt

- Hide Crews and Service Crew Members: Show only Service Resource of type Technician which are not allocated to a crew in the time frame opened on the Gantt.
- Show only Crews: Show only Service Resource of type Crew.
- Show Crews and Their Service Crew Members: Show only Service Resource of type Crew and Service Resource of type technicians who are allocated to these crews in the time frame opened on the Gantt.

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- Hide Service Crew Members: Show only Service Resource of type Crew and Service Resource of type Technician which are not allocated to cves on the time frame opened on the Gant.
- Show all: Do not filter based on Crews properties.

There is a service list filter that shows Service Appointments which are either assigned to a Service Resource of type Crew or that their parents Minimum Crew Size field 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, make sure to add this custom permission to your users. For instance, if you would like all of your dispatchers to access the Crews view, you can add the custom permission to the FSL Dispatcher Permissions permission set.