Oracle Field Service Cloud
Using Core Manage Cloud Service
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Preface

This preface introduces information sources that can help you use the application and this guide.

Using Oracle Applications

To find guides for Oracle Applications, go to the Oracle Help Center.

Documentation Accessibility

For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website. Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

Contacting Oracle

Access to Oracle Support
Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit My Oracle Support or visit Accessible Oracle Support if you are hearing impaired.

Comments and Suggestions
Please give us feedback about Oracle Applications Help and guides. Please take one of the following surveys:

- For web-based user guide, Web-based User Guide Survey
- For tutorial feedback, Tutorial Survey
1 Understanding Browser Support

Supported Browsers

Oracle Field Service Cloud customers are required to remain on supported web browser platforms to ensure expected functionality and technical support.

The Oracle Software Web Browser Support Policy defines Oracle Global policy. The specific details for Oracle Field Service Cloud supported browsers apply to customers on the latest generally available (GA) release and are available at Oracle Field Service Cloud Browser Support Policy.
2 Using Core Manage Cloud Service

Log in to the Core Manage Interface

You can access Oracle Field Service Cloud from any computer with an internet connection and a Web browser.

1. Open your Web browser.
2. In the address bar, enter https://login.etadirect.com/{company name}.
   Depending on the defined login policy, the URL may be appended with the login policy, such as for openidconnect.
3. Press Enter.
   The login window displays.
4. Enter your user name and password, and click Login.
5. Set this page as a favorite or bookmark so that you can access it easily.

   Note: Do not use a shortcut. If you use a shortcut, opening another window will overwrite your Oracle Field Service Cloud screen.

Change Your Password

You can change your password at any time. However, you cannot change your password if you have logged in using Single Sign On (SSO).

1. Click your username on the menu.
   A drop-down menu displays.
2. Select Change Password.
3. Enter the old password and then enter the new password twice.
   You must follow your company’s password requirements.
4. Click OK to save the new password.

Reset Your Password

You can reset your password without any assistance from the administrator or someone in the back-office.

1. Click Can't sign in on the Login screen.
   The Let's find your account screen is displayed.
2. Enter your user name.
   If your user name is valid, the following password recovery email is sent to your email address:
"Password request for Oracle Field Service Cloud 
Your password reset request has been received. Please reset your password by clicking this secure link: <link>

If you did not request a password reset, you can ignore this email and continue logging in with your current password.

Thanks,
The Oracle Field Service Cloud team

3. If you do not get the email, click **Resend email**.
4. Open the email and click the link to recover the password.
   The **Reset your password** screen appears.
5. Type the new password twice and click **Submit**.
   A confirmation that your password is reset appears.
6. Click **Back to sign in**.
   The **Login** screen appears, where you can log in using the new password.

Accessibility

We recommend that you use the accessibility features provided by your operating system, browser, or your mobile device. People who are visually impaired can use a screen reader to interpret the user interface components. Further, you can use your device settings to change the color contrast and font size. The following table lists the applications that are rich in graphics and/or text, so you can adjust the color contrast (in your operating system or browser) or font size to view these screens:

<table>
<thead>
<tr>
<th>Module</th>
<th>Text rich</th>
<th>Graphic rich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Field Service Core Manage Cloud Service</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Mobility Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Routing Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Collaboration Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Forecasting Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Capacity Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Smart Location Cloud Service</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Oracle Field Service Reporting Cloud Service</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oracle Field Service Cloud ETAWorkforce</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Oracle Field Service Administration Cloud Service</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
3 The Core Manage Interface

Getting to Know the Interface

The Core Manage interface can have a modern style or a classic style look and feel. The modern style header displays icons to access the most frequently used screens in Manage and Mobility. All other themes use the classic look, which is, using tabs with text instead of icons, and no navigation (hamburger) menu. When you first log in, the Activities tab is active. This is where most of the dispatch work is performed.

To use the Core Manage interface:

- Expand the groups and select a resource from the tree and the application displays the resource’s schedule in the work area.
- Take that display down another level in the Lower Work Area where workloads can be reviewed and tasks dragged and dropped from one resource to another.

The following figure shows the Core Manage interface with the Classic theme:

<table>
<thead>
<tr>
<th>Number</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Resource tree</td>
<td>Provides a hierarchical view of the organization’s resources, both personnel and equipment, typically sorted by geographical region. Resources are grouped into bucket and group. When you select a resource from the resource tree, that resource’s activities are displayed in the work area to the right.</td>
</tr>
<tr>
<td>2</td>
<td>Resource tree filters/</td>
<td>Used to choose or find resources. When you select a resource, their activities are displayed in the work area.</td>
</tr>
<tr>
<td></td>
<td>search</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Calendar</td>
<td>Use the calendar to choose the date for the activities that you want to view in the work area.</td>
</tr>
<tr>
<td>4</td>
<td>View button</td>
<td>Used to view filters and to choose activities that you want to see in the work area. The View button is available in the list, time and map views.</td>
</tr>
<tr>
<td>5</td>
<td>Action button</td>
<td>Use to view available actions. Click this button to display a list of available actions that can be performed on the resource that you selected in the resource tree. The action button is available in the list, time and map views.</td>
</tr>
<tr>
<td>6</td>
<td>Screen switch buttons</td>
<td>Use these buttons to switch between the time view, list view, and map view views.</td>
</tr>
<tr>
<td>7</td>
<td>Activity search button</td>
<td>Use this to search all of the activities in the application.</td>
</tr>
<tr>
<td>8</td>
<td>Collaboration button</td>
<td>Use this to communicate in real time with resources or other system users. This button is available only if you have purchased Oracle Field Service Collaboration Cloud Service.</td>
</tr>
</tbody>
</table>
### The Core Manage Interface

<table>
<thead>
<tr>
<th>Number</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Work area</td>
<td>This is where you view activities for the resource you have selected. The work area is the main display area to the right of the resource tree. Items selected from the resource tree and the dashboard are displayed here. Search results are also displayed here.</td>
</tr>
</tbody>
</table>

#### The Vanilla Theme

The Vanilla theme displays header icons to access the most frequently used screens in Manage and Mobility. All other themes use the classic look, which is, using tabs with words instead of icons and no navigation (hamburger) menu.

You can configure the header icons for your choice of the most frequently used screens. However, remember that only four icons will be shown regardless of the number of icons you choose. You can access the remaining screens by clicking the hamburger icon in the top-left corner, next to Oracle logo. The four header icons are separated from the icons for search, collaboration, and user by a marker ‘|’. The search, collaboration, and user icons appear on the right of the | marker. You can configure the menu in the Configuration > User Types > Main menu items screen. The following figure shows the Vanilla theme header:

The legends are:

1. Menu items, which can be hidden or opened
2. Hamburger icon (next to Oracle logo) to open the menu items
3. Header with icons for most frequently used screens or actions

You can configure the header icons on the Main Menu Items context layout screen. The item that is placed first in the list becomes the Home icon. The following figure shows the Main Menu Item context layout screen:
In the previous figure, if Daily is moved to the top of the list, it becomes the home page and is shown with the Home icon. Oracle logo and the header icons adapt to the screen size. For wide screens all the header icons are present, for smaller screens the application name disappears, and for the smallest the application name and header icons disappear. In such cases the menu is accessible using the left pane. The following figure shows the icons that you can use in the header:
The Resource Tree

The **resource tree** provides a hierarchical view of your organization’s resources, typically sorted by geographical region. It displays on the left side of the screen.

You can click the **toggle button** to show or hide the resource tree. When you select a **resource** from the resource tree, the resource’s activities display in the work area on the right. Click the plus sign (+) next to an entity in the resource tree to expand and view the entities under that group or bucket. Click the minus (-) sign to collapse that view.

The resource types and the overview of the roles performed by each item in the resource tree are:

- **Field resource**: This resource can perform work, has work skills, work zones associated, and has a related user that is an actual person performing work or a crew or people.
- **Vehicle**: This resource can have work skills, inventory, and geolocation tracking enabled. When assigned to a team it may add the required work skills and inventory to be used by the team.
- **Tool**: This resource represents specific tools such as 30-feet ladder and excavator. This resource can have work skills, inventory, and geolocation tracking enabled. When assigned to a team it may add the required work skills and inventory to be used by the team.
- **Bucket**: This resource is used to accumulate work that is not yet distributed to field resources. Only the application can assign activities to this resource. This resource is used for Quota Management.
- **Organization unit**: This resource aggregates field resources, vehicles, and tools in the tree-like hierarchy to simplify management and reporting. This resource is used for Quota Management.

The Resource Tree Icons

The shape of the icons in the **resource tree** indicate whether the entity is a bucket, group, or **resource** as shown in the below:

- **double silhouette**: This designates a **bucket** or an **organization unit**. Buckets generally have numbers to the right of them, while groups do not.
- **single silhouette**: This designates a mobile employee, a resource, a truck or equipment. Technician resources also have numbers to the right of them indicating the pending activities remaining, and the total activities assigned.

The color of the icons indicates the status of the resource’s queue:

<table>
<thead>
<tr>
<th>Icon colors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[image] 👥</td>
<td>Yellow – Resource does not have a route or the route is inactive.</td>
</tr>
<tr>
<td>[image] 👤</td>
<td>Blue – The route is activated. (The resource is working.)</td>
</tr>
</tbody>
</table>
Icon colors

Grey – Route is deactivated or completed. (Resource has finished working for the day).

You can display the type of icon and the queue status in the resource hint box, which can be configured in the Screen Configuration screen. Additional symbols appear for certain exception situations. For example, a grey box indicates a non-working resource.

Related Topics
- Resource Tree Alerts

Work Area

The work area displays the details about the resource selected in the resource tree. The information changes, depending on the tab selected in the menu. Across the top of the work area are several buttons. These buttons let you access various features and are described in detail below.

The work area is shown in the following figure:

The Date field

The date displays next to the resource name:

Select the time interval to view. Then select the start date on the calendar. Use the arrows to move forward or back in time on the calendar, as shown in the following figure:
The View button

The View button allows you to fine-tune the information you see in the work area. It contains a list of configured filters as shown in the following figure:

Choose a configured filter from the drop-down list or sort the data using the check boxes. You can create custom filters. To view all activities and resources below the selected Resource Type in the resource tree, select the Apply Hierarchically check box. The Show on-call, Show non-working, Show resource trace check boxes are displayed only if you have purchased Oracle Field Service Cloud Smart Location.

Action links

The Action button (gear icon) gives you access to a list of actions that affect the contents of the work area, as shown in the following figure:
Your User Type determines the actions that you can see in the drop-down menu. The Actions you see depend on the screen you are viewing and your settings. Depending on your configuration, these same links can be visible in the Hints boxes.

Viewing Resources and Activities

You can use Oracle Field Service Cloud to identify, at a glance, the location of your resources and the status of their routes. You can view this information in three ways.

- **Time view** - A Gantt table that displays the activities for the selected resource, group, or bucket in timelines, with activities shown as blocks of time.
- **List view** - A chronological list of the day’s activities for the selected resource, group, or bucket. Activities are ordered by estimated start time.
- **Map view** - A map that shows the day’s activities.

About Color Codes in the Views

The activities displayed in the work area are classified by color, which provides you with a quick view of the status of the day’s schedule.

The table below explains the default colors and their corresponding statuses:

<table>
<thead>
<tr>
<th>Color code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>Pending activity (on time)</td>
</tr>
</tbody>
</table>

*Note:* Color codes can be changed during implementation to reflect the colors your company prefers for representation of the various activities.
<table>
<thead>
<tr>
<th>Color code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Blue]</td>
<td>Completed activity</td>
</tr>
<tr>
<td>[Pink]</td>
<td>Pending activity (in jeopardy of being late)</td>
</tr>
<tr>
<td>[Turquoise]</td>
<td>Suspended activity or teamwork</td>
</tr>
<tr>
<td>[Light orange]</td>
<td>Not done activity</td>
</tr>
<tr>
<td>[Green]</td>
<td>Started activity or teamwork</td>
</tr>
<tr>
<td>[Humming Bird]</td>
<td>Canceled activity or teamwork</td>
</tr>
<tr>
<td>[Travel time]</td>
<td>Pending internal activity or teamwork</td>
</tr>
</tbody>
</table>
The colors are consistent throughout all the views. For example, started activities are always green whether you are in List view, Time view or Map view.

### The Time View

The Time view is a Gantt table that displays the activities for the selected resource, group or bucket in time lines with activities shown as blocks of time. Dispatchers and managers often use this view because it displays multiple routes in one view. The length of a travel bar on the Time view is based on the travel time between two consecutive activities in a route (‘travel’ field).

You can access the Time view by clicking the **Time View button**. It provides an instant picture of the day in real time, as shown in the following figure:

![Time View](image)

In the example mentioned earlier:

- **Zoom In/Out**: Under **View**, slide the slider to the right to zoom in and to the left to zoom out. Then click Fit.
- **Time Scale**: Shows the distribution of time and activities over the hours of the workday.
- **Current Time**: The current time is represented by a dotted red line and the time is displayed at the top end of the line. You can move your mouse along the time scale to identify specific times that an activity started or ended. A blue line appears at the mouse pointer, called the inspect line. The current time reference line is displayed based on the following guidelines:
  - Time View does not scroll, if the current time reference line is available when a screen opens. The visible part of Time View starts at the start of the day.
  - Time View scrolls to the right, if the current time reference line is not available when a screen opens and the current time falls within a range of ‘start’ and ‘end’ parameters. The visible part of Time View is scrolled to a position in which the current time reference line is shown at the right side of screen.
Time View does not scroll, if the current time reference line is not available when a screen opens and the current time is later than 'end' parameter.

- **Activation Time**: The orange triangles at the beginning of each shift represent the actual times that resources activated their routes.
- **Deactivation Time**: The orange triangles at the end of each shift represent the actual times that resources deactivated their routes.
- **Non-working Time**: The grey blocks of time at the beginning and end of each route represent the non-working time based on the hours set in the resource’s calendar.

The colors indicate the status of each activity. Pending (and on time) activities are yellow, while green means the activity has started. Pink indicates a risk that the resource will now be late. These colors are consistent from one view to another as well as on the resource’s mobile device. The colors in the figures given here are default colors, they can be changed per your organization’s requirements. Further, the status that the corresponds to can be displayed in the activity hint. The activity hint can be configured in the **Screen configuration** screen.

An exclamation point on a resource silhouette indicates an alert, and the activities in pink are the activities that are in jeopardy as shown in the following figure:

Five of the routes shown above include activities that are currently in jeopardy.

### Related Topics
- Activity Alerts
- Resource Tree Alerts

### The Month View

The Calendar in the Time View includes the Day, 2 Days, 3 Days, Week, and Month options, to view activities for a day, two days, three days, a week, and a month respectively. By default, the Day view is displayed.

The Month view displays the activities scheduled for 30 or 31 days, depending on the month, starting from the selected day. The shape and colors of activities are same in the Week and Month views. In the Month view, the daily activities are shown at the work day/work schedule level, instead of the time level. So, if two resources have different start times, their starting activities are shown at the same level.

**Note**: Accessing all 30 days in a single view requires a 4K display or a multi-monitor configuration. When smaller screens are used, it is expected behavior that the user will have to scroll for the Week or Month views.

Activities that are shorter than 1/4th of the resource schedule length, or don’t fit to either 1/4th, ½, or 3/4th of the resource schedule length are shown in the condensed activity view as striped bars. Click the condensed activity view to see the activity details and the activity hint. A multi-day activity that ends at the end of the previous day and starts at the beginning of the
next day is shown as a single activity over multiple days. You can move activities in the Month view by dragging and dropping them. If the activity is hidden inside the striped bar, open the hint and then drag the activity to the required place. Or you could drag-and-drop the whole multi-activity block.

Displaying the Month view for large buckets or where routes have more than 20 activities per resource per day may take additional time to render. It is recommended that you use this view when there are few resources that will be presented. The rules for displaying activities in the Month view are:

- Mass repeating activities (for example, lunches) are not shown.
- Non-ordered activities are not shown.
- Multi-day activities that end at the end of the work day and continue the beginning of the next day are shown as a single activity over multiple days.
- If there are more then 10 activities, "and ‘n’ more" link is displayed.
- When a resource has non-working days, they’re shown as dotted pattern.
- When you split the panels, it is possible to configure each panel with a different start date for the Month view.
- When the period covers different months, the month names are shown at the very top row.
- Activities that do not fit into \( \frac{1}{4} \), \( \frac{1}{2} \), or \( \frac{3}{4} \) of the workday length are shown as a multi-activity (striped bar) using the following rules:
  - If there is a single activity that has a duration between 70% and 100% of \( \frac{1}{4} \)th of the day, it is shown as \( \frac{1}{4} \)th of the day activity, as a solid bar.
  - If there is a single activity that has a duration between 70% and 100% of \( \frac{1}{2} \) of the day, it is shown as \( \frac{1}{2} \) of the day activity, as a solid bar.
  - If there is a single activity that has a duration between 70% and 100% of \( \frac{3}{4} \) of the day, it is shown as \( \frac{3}{4} \)th of the day activity, as a solid bar.
  - Otherwise the activity is shown as a part of a striped bar.

For example: Suppose that a work day for a technician starts at 8:00 AM and the work day duration is 8 hours. In this case, the activities starting at 8:00 AM and finishing at 10:00 AM (2h = \( \frac{1}{4} \) of the work day duration), starting at 10:00 AM and finishing at 2:00 PM (4h = \( \frac{1}{2} \) of the work day duration), or starting at 10:00 AM and finishing at 4:00 PM (6h = \( \frac{3}{4} \) of the work day duration) are shown as single activities. But the activities starting at 9:00 AM and finishing at 10:00 AM (1h = 50% of \( \frac{1}{4} \)th of 8h work day) and starting at 11:00 AM and finishing at 1:30 PM (2.5h is more than 100% of \( \frac{1}{4} \)th of 8h work day, but less than 70% of \( \frac{1}{2} \)nd of 8h work day) are shown as a multi-activity.

## Configure the List View

List view is a chronological list of the day’s activities for the selected resource, group or bucket. Activities are ordered by estimated start time. This view provides a detailed view of the resource’s schedule in one screen. The length of a travel bar on the List view is based on the ‘Continuous traveling time’. It is useful when you want to see both the daily schedule and the related details all at once. You can configure the organization of the columns in List view so that it is easier to read and understand. Specifically, you can rearrange as well as show and hide the columns.

1. Open List view and click the wrench icon in the upper right corner.

   The **Grid Preferences** dialog displays and shows the options configured for your user type.
2. Check the boxes for the columns you want to see. To hide a column, clear the check box.
3. Use drag and drop to change the order of the columns.
4. Use the blue double-headed arrow to disable word wrapping in a particular column.

The Map View

The **Map** tab displays the day’s activities on a map. Activities for the selected resource appear on the map in the center of the screen and are also displayed in a chronological list on the right side of the screen.

This figure shows the **Map view** for a resource. This view shows not only the activities the resource needs to perform, it also shows the route the resource can take to reach the activity location.
The map view uses the same color codes as the other views.

The map view displays the activities for addresses that can be found. Resolved addresses are assigned either a letter (as shown above) or a plus (+) sign. If the address cannot be found, the activity appears in the list without a letter, or a plus sign next to it. The GPS travel related complaints and alerts are disabled for activities that have multiple traveling time segments. If the Google maps service is enabled at the time of setting up the instance, the satellite view layer icon is shown.

Activities for the selected resource appear on the map in the center of the screen and are also displayed in chronological order on the right side of the screen. This is useful when you want to see the activities in relation to the route. The map view shows you the distribution of activities within a geographical region so that you can picture how the resource will get to each stop on the route.

Resource Track Highlighting

There are two ways to analyze a resource track in the Map View—by viewing the route between resources and by highlighting a specific part of a track. Hovering over a breadcrumb on the map highlights the part of the track that contains the selected breadcrumb. When hovered over any activity marker on the map, the track between the previous and selected activities is highlighted and the non-related tracks are muted. This lets you see the track between two locations.

The tracks are highlighted as described below:

- When hovering over any activity marker on the map for at least half-a-second, or clicking the activity icon on the right panel:
  - The part of the track between the previous and selected activities is highlighted.
  - The selected and previous activity markers are highlighted.
  - The remaining activity markers and breadcrumbs are grayed out.
• When hovering over a point from the track for at least half-a-second:
  ◦ The part of the track and the activity markers from the previous activity to the next one are highlighted.
  ◦ The remaining activity markers and breadcrumbs are grayed out.

The following rules are followed while highlighting:
• The highlighting described in the earlier bullet points are applied only for non-clustered points.
• Both resolved and unresolved activities are considered when highlighting the route. If activity B is highlighted and there is an unresolved activity (for example, Lunch) before it, then the track is rendered from Lunch to B.
• Breadcrumbs between the selected part of the route are highlighted gradually, one after another. The order of highlighting is based on the timestamp, starting from the earliest one.

Hint for a clustered point: When you click a clustered breadcrumb (resource track point) the hint 'Zoom in' appears near it. It displays the timestamps of the points that the cluster contains. Upon clicking Zoom in, the map is zoomed in to the area with breadcrumbs. The following figure shows a clustered breadcrumb with the hint:
View a Group or Bucket in Map View

You can see the location of all the resources for a particular group or bucket in the map view.

1. Select a group or bucket from the resource tree.
2. Click Map View.
3. Click View.
   The View menu opens.
4. Select the Apply Hierarchically check box.
5. Click Apply.
   The map displays and shows the location of 1000 scheduled and 1000 non-scheduled activities on all of the routes for the resources in the selected group or bucket.
View an Individual Resource in Map View

When viewing an individual resource in Map View, you can see his or her location as well as the location of nearby resources. The application plots the suggested route, provides driving directions, and traces the actual route taken by the resource (Resource Trace).

 وغير ملاحظة: مسار القيادة للملاحة والإحصاء يكون متاحًا فقط للمانحين لغة (افتراضيًا)، العربية، الإيطالية، الفرنسية، الألمانية، الإسبانية.

1. Select the resource from the resource tree.
2. Click Map view.

The screen shows a map and a list. The map shows the resource’s route pertaining to scheduled activities and the list includes scheduled and non-scheduled activities for the day. If the Google maps service is enabled at the time of setting up the instance, the satellite view layer icon is shown. The following figure shows the Map view for a resource and the activities assigned to the resource:
3. Click **View**.

The **View** menu opens:

4. Click the Show resource trace check box in the **View** menu.

   The screen resets and the route is indicated by dots. See the Oracle Field Service Cloud Smart Location Cloud Service user guide for more details.

---

**Find Nearby Resources**

If you want to move an activity, you can view nearby bucket resources to find someone who can take the job.

1. Select a resource from the resource tree.
2. Click **Map View**.
The map shows the resource’s route for the day and a list of the scheduled and non-scheduled activities. If the Google maps service is enabled at the time of setting up the instance, the satellite view layer icon is shown.

3. Click **View**.

The view menu opens.

4. Select the **Show Nearby Resources** check box.

The screen resets to show the other bucket resources in the area.

5. Click any icon to see details about that bucket resource, including name and contact information.
View the Traffic Layer

You can view the real-time traffic data on Map View to determine the best route to take to reach your destination.

**Note:** The real-time update is available to users of Oracle Field Service Enterprise Cloud when Oracle Field Service Standard Map Cloud Service with Google Maps or Baidu Maps is part of your subscription.

To view the real-time traffic data:

1. Click Map View.
2. Click View and select the Show Traffic check box.

The Show Traffic check box is displayed if the Use real-time traffic data check box is selected on the General tab of the User Type screen. If you select a past date or a future date on Layer Switcher, the Traffic layer caption becomes inactive. After selecting the Traffic option, if you navigate to another screen from the Map View and navigate back to the Map View, the Traffic option will be deselected.

**Note:** Traffic information will vary based on the map provider’s data availability, which may not be available in all countries/areas/states/provinces/localities. Check the map provider’s website for data availability. When the traffic data is available, the application uses the most recent information available from the map provider, which may not always be the current information.
View Resources and Activities in Two Panels

Both the upper and lower panels within the *Time view* have their own controls and can be operated independently. Since the resource tree can be accessed independently from each panel, you can compare availability in two sections of the Tree at the same time.

1. Open the resource tree.
2. Click the resource that you want to view in the top panel.
   The resource’s schedule displays in the work area.
3. Click the plus icon to open the bottom panel.
   The initial display in the bottom panel reflects the top panel.
4. Use the search fields and horizontal and vertical bars to manipulate the display in each panel to meet your needs.
5. Use the bottom panel to drill down while retaining the "bigger picture" in the upper panel or operate the two panels independently by simultaneously investigating availability in more than one section of the tree, as shown in the following figure:

![Image](image-url)

If you want to find an available resource for an unassigned activity, view the bucket in the top panel and the resource’s scheduled activities in the bottom panel.

View the Lower Work Area Panel

The lower work area panel displays drill-down details for entities selected from either the upper panel or directly from the Resource Tree.

When used as a drill-down, the lower panel can display route information for any resource, bucket or group selected in the upper panel. For example, if a resource is selected in the upper panel, the lower work area panel can display the scheduled or non-scheduled activities for that resource.
Since the Resource Tree can be accessed directly from the lower work area, that panel can also be used to search and display information independent of the display in the upper panel. This facilitates detailed comparison of resource availability in two panels.

Follow these steps to view the lower panel screen:

1. Navigate to Time view.
2. Select an entity from the Resource Tree.
3. View the resources displayed in the upper panel.
4. Select a resource from the upper panel.
5. Click the [+ ] to view that resource’s schedule in the bottom panel.
6. Optional: Drag and drop the display in the lower panel to the upper panel.
7. Optional: Repeat steps 2-4 in the lower work area to select and view the schedule of a second resource in the bottom panel.
8. Optional: Compare the two panels to identify the resource that meets your requirements.

Use Filters in Daily View

The Daily View helps dispatchers or managers manage resource calendars efficiently. It provides a weekly calendar snapshot for the selected resource, bucket or group.

You can view a separate calendar by day for each resource or you can view a calendar for an entire organization unit or a bucket. Use the check boxes on the View drop-down to display additional information in the Daily calendar view, as shown in the following figure:
Options available in the View drop-down list:

- **Apply hierarchically**: Shows all data within the hierarchy.
- **Shifts**: The *shift* in which the resource is working.
- **On-call**: Filters out resources available for on-call activities, if used.
- **Points**: Displays the points available during that shift, if used.
- **Routes**: Displays two numbers underneath each day of the resource’s calendar. The first number indicates the number of pending activities for the day and the second number indicates the total number of activities for the day.
- **Zones**: This shows the *Work Zone* that a resource is able to work in for the given day.
- **Inactive Resource**: This is used if you are viewing a group or bucket. When checked, it displays resources that have the week off for vacation, leave of absence, etc.
- **Work Skills**: Displays the work skills of technicians.

### The Menu Tabs

The menu tabs that run across the top of your screen contain a number of functions that can be used to manage your workforce.

Dispatchers typically perform most of their work in the **Activities** tab. The items you see listed for your company’s configuration may be different based on your **user type**. You can configure the items that appear in the menu tab on the **Main Menu Items context layout structure** screen.

The following figure shows the menu tabs, which include Activities, Dashboard, Daily, and Configuration:
Note that the menu tabs at the top are in the same order as the menu on the left. The first four items in the menu on the left are displayed as the menu tabs on top, so you can decide which items you want to display.

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Access the Core Manage screen to perform most of the dispatch work.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>Access the reports Dashboard to generate reports.</td>
</tr>
<tr>
<td>Daily</td>
<td>Access the Daily view of a resource, bucket, or organization unit.</td>
</tr>
<tr>
<td>Configuration</td>
<td>Access the configuration menus for Oracle Field Service Cloud</td>
</tr>
</tbody>
</table>

Resource Settings

The Resource Settings tab contains a variety of menu items related to the resources in the field. The items that you can see on this tab depend on your user type.

The Resource Settings tab includes:

- **Resource Info**: Use to view and manage resources, buckets and groups. Only administrators can add new resources.
- **Resource Calendars**: Use to set up recurring resource calendars. Do not use it to set up one-time schedule adjustments (vacations, training, etc.).
- **Resource Work Zones**: Use to assign areas, individual resources, groups or buckets to particular geographic regions.
- **Inventories**: Use to view the inventory serial numbers assigned to a resource.
- **Locations**: Use to view the Start and End locations as well as Home Zone Centers (if applicable) of selected resources on a day-by-day basis.
- **Users**: Use to create and manage individual user accounts.

The Reports Tab

The Reports tab provides access to a number of reports that gather information about your mobile workforce. The reports available for you depend on your user type. To see the reports tab in the header, you must configure it in the Main Menu Items context layout screen. If not, click the hamburger menu to the left of Oracle Field Service Cloud logo to see the list of reports.

The following figure shows a partial list of the reports that you can generate:
The following list defines the menu selections under the Reports tab.

- **Activities by statuses**: Displays the number of activities by statuses for the specified day.
- **Average number of calls per customer**: Provides statistics about the voice messages that were sent to customers during the reporting period.
- **File Storage usage**: Displays the list of previously stored files available for use. You can get details such as when the file was stored, file format or type, back-end application, name of the bucket, requests, and size in Bytes.
- **GPS alerts per resource**: Displays the status of resources from the GPS alerts per resource report. It includes details such as name of the provider, total number of activities, percentage of activities that had started (or completed) outside the location, percentage of resources that left the activity location, and percentage of Idless.
- **In Time/Late/Early activities**: Shows you the percentage of activities that were started on time and those that were started late, started early, not started or cancelled for either the individual resource or the bucket. Activities started on time, late, or early are calculated by comparing the actual start time to the Service Window. This report can be used to measure on time performance.
- **Inactive users**: Lists the users that have been inactive for a designated period of time. Administrators can use this report to monitor system use.
- **Inventory report**: Displays the list of inventories with details such as model, type, required installed overuse and status whether available or missing for each inventory.
- **Last message window size**: Shows the percentage of customers whose last successfully sent notification included an estimated delivery time window of a specific duration.
- **Messages Report**: Displays the messages sent through the notification engine for a specific group, bucket or resource over a selected time period.
- **Notification Summary**: Displays a summary of the notification sent to resources.
• **Number of active users**: Shows the number of User Types in use on any day that you select.

• **Percent of accurate last messages**: Shows the percentage of Last Notification calls in which the service window boundaries communicated to the customer were accurate. An accurate call is one where the actual start time of the activity appears to be within the boundaries of the time window specified by the call (±10 minutes). A last notification call is the last voice message that the customer received before the activity was started.

• **Percent of contacted customers**: Shows the total number and percentage of customers who received at least one message containing either a service or delivery window.

• **Print Route**: View the routes of resources selected from the resource tree. The **Actions** pane contains options to **Print** or **Export** selected routes. The print and export route options in both **List** and **Time** view.

• **Post activity survey calls-Total**: Provides statistics about the number of generated calls, whether successful or failed and the percentage of answered customers.

• **Route Statistics**: Shows you the percentage of activated routes, the percentage of completed routes, the average number of activities per route and a summary of the time spent on actual activities.

• **Route time parameters**: Calculates the average time parameters, in hours, for one route.

• **Routing Report**: Analyzes the quality of routes and measures the performance of the routing group over time. The routing report provides route statistics, such as travel time, work time, and number of completed jobs, and is used to measure both productivity and drive time.

• **SOAP**: Logs the actions performed through the SOAP interface.

• **Transferred calls**: Shows the number of voice calls that were transferred to the Call Center (when a customer selected the corresponding automatic option).

• **Travel statistics**: Provides the historical information about travel to and from service locations.

• **Work Order statistics**: Displays the status of work orders for each day.

• **Work Statistics**: Measures the work performed against company standards defined for certain types of activities under Configuration. Work statistics can be based on work performed by a single resource or a group of resources selected from the resource tree.

For detailed information about individual reports, see the Oracle Field Service Cloud Reporting User Guide.

### The Activity Details Screen

The **Activity details** screen provides detailed information about an activity. The tabs that run across the lower portion of the screen organize these details based on the needs of your configuration.

The following figure shows the Activity details screen with the Customer info, Service info, PAS, Equipment, Resource Preferences, Message, History, and Links tabs:
The lower section of the activity details screen is a set of tabs containing specific information about Preferences, Messages, History and Links. This section can be configured to your company’s requirements and may include additional custom tabs, such as Customer and/or Service Info, Inventory, Required inventory and others designed to meet the special needs of your configuration.

The Inventory Tab

For configurations that use inventory, the Inventory tab displays the serial numbers of any equipment that is either installed at the service address or required to complete the activity. This screen can also be used by the dispatcher to change (increment or decrement) equipment on behalf of the resource working at the service location.

The Inventory tab may include the following information:

- **Serial Number**: A unique number that identifies a piece of equipment and (usually) its manufacturer. A house icon indicates the equipment is located on the customer’s premises; a truck icon indicates it is in the resource’s truck.

- **Pool**: A grouping of inventory by location and/or condition, such as installed/deinstalled. The term “pool” is fluid and may sometimes be used to indicate ownership, such as a resource pool.

- **Actions**: Links for the types of actions that may relate to this specific inventory. These links will vary based on your company’s configuration.

The Resource Preferences Tab

The Resource Preferences tab lists any preferences or restrictions regarding the resource that should complete this activity.

Resources listed here will be in one of three categories:

- **Required**: Only one of these resources can be assigned the job.

- **Preferred**: If no Required resources are listed, then Preferred resources will have priority over everyone else.

- **Forbidden**: Resources that cannot be assigned to the activity.
The Messages Tab

Messages that can be seen in this tab include:

- **notification**: messages sent to the customer and/or resource.
- Messages sent to or received from an external system.

Obsolete messages and messages in final statuses are removed from the message queue. No 'day of event' or 'day of route' messages are generated for non-scheduled activities. Messages that use the set property delivery channel (method) are shown in this view only if they were generated less than one (1) hour ago. The only exception from this rule is for messages having the Failed status. Such messages are important for troubleshooting, so they do not have the one (1) hour expiration time.

You can filter the types of messages that are visible by using the **Message Status**, **Message Type**, and **Recipient** drop-down menus.

Follow these steps to view all of the messages associated with this activity:

1. Select the word “any” from a drop-down to view all messages.
2. Click **Search**. The screen resets, displaying all messages, as shown in the following figure:

   ![Message Tab Example](http://example.com/message-tab-example.png)

   - **Time**: Indicates the day and time that the message was issued. If it is in the future, then the time listed indicates when the message will be sent to the customer.

   - **Method**: The method by which the message is sent. For example:
     - Voice – telephone or voice call.
     - SMS – SMS text message.

   - **Trigger**: Indicates the previous action that triggered the message.

   - **Scenario (Step)**: Details on the message sent.

   - **Status (Description)**: Indicates whether the message was successfully sent or not. If a message was successfully sent, this column displays **Delivered** or **Sent**. If not, the column displays **Failed** and a reason will be included.

   - **Address**: The phone number or e-mail address where the message was sent. If this column says **External system**, it means the message was sent to the external billing system.

   - **equipment S/N**: The serial number of any equipment referenced.

   - **Time Delivered**: The time the message was delivered.
The History Tab

This tab displays all the events associated with this activity from the time it was received through completion. This is not an address history but a record of the changes and movement of the activity, time stamped with the user ID. The changes and movement are recorded automatically by the application. This tab is useful for dispatch when researching issues or problems with an activity. The filter and search options available in the column header help you sort quickly. The user name links to a dialog that shows the interface in which the action was performed and the details of the device with which the action was performed.

The Links Tab

Some activities depend on the timing of others that may be performed by different resources in a different location. For example, before one resource can activate a telephone, another resource that he or she has never met may have to flip a switch at a remote location. The options under the Links tab can enable these activities to be connected and sequenced chronologically.

The following figure shows the Links tab with the existing links:

If you click Add link, you will have the option to link that activity to another in chronological order, as shown in the following figure:

Search for the other activity by selecting a search option from the drop-down list and entering at least three characters.
The Required Inventory Tab

For configurations that use inventory, the Required Inventory tab displays the equipment, if any, that is necessary to complete this activity. This screen can also be used to add, delete, or edit required inventory.

<table>
<thead>
<tr>
<th>Model</th>
<th>Inventory Type</th>
<th>Quantity</th>
<th>Qty Available</th>
<th>Qty Installed</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet</td>
<td>Internet</td>
<td>1</td>
<td>25 qty</td>
<td>2 qty</td>
<td></td>
</tr>
<tr>
<td>HDMI Cable 12ft</td>
<td>HDMI Cable 12ft</td>
<td>30 qty</td>
<td>1080 qty</td>
<td>20 qty</td>
<td></td>
</tr>
<tr>
<td>RG6 - WHT</td>
<td>RG6 - WHT</td>
<td>150 ft</td>
<td>1080 ft</td>
<td>20 ft</td>
<td></td>
</tr>
</tbody>
</table>

Search Filters

You can use the default search filters to narrow down search results. You can also create custom filters.

For example, suppose that managers must be able to view a list of completed activities where the customer could potentially be a “detractor” of the business. The conditions for this would be that the customer entered a score of 2 or less on their post-activity survey for this question: “Based on this visit, how likely would you be to recommend our company to friends or family?”

Add a Filter to the Filter List

You can add a filter to use customized words in search filters.

1. Click Configuration, Filters.
2. Click Add new in the upper left corner of the screen, as shown in the following figure:

3. Fill in the fields in the Add Filter pop-up window.
   The following figure shows the Add filter dialog:
Field name | Action
---|---
**Filter** | Enter the name of the filter. This name is what users will see when they select the **Filters** drop-down menu.

**Language** | Select the appropriate language from the drop-down menu.

**Applicable to entity** | Select **Activity** or **Resource**.

**List/Time/Map/Daily** | Check this box if you want the filter to appear in the **Filters** drop-down list in the **Actions** pane.

**Routing** | Check this box if you want the filter to appear in the **Routing Filters** list associated with a route plan.

**Restriction** | Check this box to prevent activities from appearing if routes have not been activated or the work day has not yet begun. It also provides the ability to hide some activities in buckets.

**User Type** | Select the user types that have access to this filter. For example, if this filter is used for routing, the user type for the person who performs routing must have permission to access the filter.

4. Click **Add**.

The new filter appears in the **Filters** list.

Add a filter condition for the newly created filter. A filter does not work if there is no condition specified.
Related Topics

- Add a Filter Condition

Delete a Filter

When you do not need a filter anymore, you can remove it from the application.

1. Click Configuration. Click Filters from the Displays section.
2. Select the check boxes next to the filters that you want to delete.
3. Above the list of filters, click Delete.
4. Click OK.

Add a Filter Condition

Use conditions to define the activity you are searching for.

1. Click Configuration, Filters.
   The Filters screen is displayed.
2. Locate the filter you want to add a condition to.
3. Click Conditions in the Actions column.
4. Click Add New at the top of the screen.
   The Add filter condition dialog appears.
5. Complete the following fields:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>Choose one or more activity or resource-based criteria on which to base the filter.</td>
</tr>
<tr>
<td>Dynamic</td>
<td>Select the box if you want the user to type a value for the field that the condition is for.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Select one or more options to represent how the field selected above relates to the Value entry.</td>
</tr>
<tr>
<td>Value</td>
<td>These are the options that can be associated with the Field chosen for this condition. If multiple values are applicable for this condition to be met, then add them to the Selected column. From the list of available values, click to select and then click the &gt;&gt; button. The selected item moves to the Selected column.</td>
</tr>
</tbody>
</table>

6. Click Add.
7. Navigate to the Work Area and verify that the filter is listed in the View drop-down menu.
8. Test the filter to ensure that it meets your requirements.
Alerts

This section includes the following topics:

- Activity alerts
- Resource tree alerts

Activity Alerts

You see alert messages when you move activities. These messages guide you through the process. The following alerts are available:

Overtime Alert: This alert notifies you that the estimated completion time of the activity extends beyond the end of a resource’s working day.

Soft Skill Mismatch Alert: This alert displays when you move an activity to a resource that does not have the preferable qualification level of an activity skill.

*Work skill* Mismatch Alert: This alert displays when you move an activity to a resource that does not have the required and preferred qualification level of an activity skill. Depending on your settings, the *Work Skill Mismatch Alert* either prevents you from moving the activity, or gives you the option to move it or to cancel the move.

Do Not Move Alert: This alert displays when you try to move an activity type that is not allowed to move between resources. Activity types are configured in the *Add activity type* page.

Resource Tree Alerts

Resource tree alerts give you information about the status of a resource or route. Alerts appear next to the resource icon in the resource tree.

Alerts are displayed for all parent items in the resource tree up to the root resource (bucket or group). If the root resource has an exclamation mark, this means that at least one child resource has an alert. After the issue is resolved, all of the related alerts are removed.

Pointing to a resource’s icon displays a *Hint* that provides a list of all warnings.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>There is a problem with the resource or the route. Possible reasons:</td>
</tr>
<tr>
<td></td>
<td>• The resource has not activated his or her route on time.</td>
</tr>
<tr>
<td></td>
<td>• A pending activity is very close to the end of the <em>serviceWindow</em> and the resource is likely to be late.</td>
</tr>
<tr>
<td></td>
<td>• A pending activity has an <em>ETA</em> that occurs in the past.</td>
</tr>
<tr>
<td></td>
<td>• The resource has stopped reporting.</td>
</tr>
</tbody>
</table>
The Core Manage Interface

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
</table>
| ✗    | The resource is not configured and cannot be used properly. Possible reasons:  
  • The Time zone is not set correctly for this resource.  
  • The calendar is not configured properly for this resource. |
| 🚨   | There is a problem with one or more of the resources located within this bucket. Possible reasons:  
  • One or more resources have not activated his/her route on time.  
  • One or more pending activities is close to the end of the service window and the resource is likely to be late.  
  • One or more pending activities has an ETA that occurs in the past. Resource is not reporting.  
  • The resource has stopped reporting. |
| 🚨   | There is a problem with one or more of the resources located within this bucket. Possible reasons:  
  The Resource has a non-working calendar, or is inactive with pending activities on the route. |

Pointing to a bucket/group’s icon displays a **Hint** providing a list of all warnings.

Click on the icon next to the resource name to see a detailed list of all warnings, which are displayed in a **Hints** window.

The following resource tree alerts are available:

- Losing service window: This alert can mean one of two things:  
  - The activity is scheduled after the end of service window.  
  - The activity has not been started within the predefined amount of time before the service window expires.

- Stopped reporting: This alert indicates that the activity did not start on time. It appears for pending ordered activities in activated queues that belong to the current working day.

- Not activated on time: This alert indicates that the resource did not activate his or her queue on time.

- Misconfigured calendar: This alert appears if a resource’s calendar is configured incorrectly, for example when the resource is assigned two working calendars.

- Smart Location Alert: This alert indicates that the current location for a resource has not changed in a predefined amount of time.
4 Working With Users

Managing Users

You can set up users and maintain their accounts through the Users screen that opens from the Resource Settings drop-down menu. Much of the information that you enter will be standard, based on your company’s login and password policies, but some will be unique to the user and to the role they will play in your configuration. The options included in this section of the Guide include one-time activities as well as those that are updated periodically to conform to changes in the user’s role as well as company policy. For example, if users persist in attempting to log in with an incorrect password, they will be locked out of their accounts. This section describes how to unlock the account and reset the password.

Add a User

All system users must have user accounts.

The part of the resource tree that you choose when you create a user determines what the user can or cannot see when they log in. For example:

- If you are adding a dispatcher who manages a bucket and the resources under the bucket, select the bucket to place the dispatcher under so that the user can see only bucket and resources under that bucket.
- If you are creating a manager who may see entire enterprise, select the parent level of the resource tree to add the manager under.
- If you are adding a technician resource, select just the technician in the resource tree so that the user will see only his or her individual routes.

To add a user:

1. From the resource tree, select the bucket or group to which you want to add the new user.
2. Click Resource Settings and select Users from the drop-down menu item.
   The User table displays in the work area.
3. Click Add new.
   The Add new user window displays add window.
4. Complete the fields on the form.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Type</td>
<td>Choose a user type for this user. The user type determines what the user can access within the application, the layout and screen configuration.</td>
</tr>
<tr>
<td>Self-Assignment</td>
<td>Select this check box to enable this resource to add new activities to his or her individual route.</td>
</tr>
<tr>
<td>Resource</td>
<td>Select the organization unit or bucket that the resource is in.</td>
</tr>
</tbody>
</table>
Oracle Field Service Cloud
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<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field name</td>
<td>The option you select here determines which resources, groups, and buckets the resource can view. This field is automatically populated with the group, or bucket that you selected in the first step, but you can add or change the list of viewable resources, groups, and buckets here. You must assign a user who has self-assignment permission directly to a bucket. Users who can assign activities to themselves cannot be in groups.</td>
</tr>
</tbody>
</table>

Main resource

Login

User name

Password

Confirm password

Status

Select active or inactive. Only active users can use the application.

Force password change at next login

Select this option to require the user to create a new password when he or she logs in for the first time.

Language

Phone Number

Time format

Date format

Choose the time format that the user will see and use in the interface. This can be either 12-hour or 24-hour.

Choose the date format that the user will see and use in the interface. This can be either month-day-year or day-month-year. The date format controls the display of dates in numeric format.

Long date format

Choose how to display the long date to the user. A long date is a date that includes words. For example, Wednesday, February 20, 2013.

Time zone

Design Theme

Default export format

Choose a UI theme for this user.

Choose the default data export format for this user. Options are CSV, XML and XLS.

5. Click OK.

If this user is also a resource, you must create a corresponding resource.

Add a User to an Existing Resource

All resources must be associated with at least one user.

1. Select a resource from the resourceTree.
2. Click Resource Settings.
3. Select Users from the drop-down menu.
4. Click Add New.

The User screen displays. The user name appears in the Technicians field.
5. Enter the rest of the resource’s information.
6. Click OK.

Activate, Deactivate, or Delete a User

You can control whether a user has access to the application by activating or deactivating them. Active users can log in and use the application. Deactivated users can be re-activated when needed. Deleted users are no longer available in the resource tree.

1. In the resource tree, select the user that you want to change the status for.
2. Click Resource Settings > Users.
   The User screen displays.
3. Select the check box next to the user that you want to change the status for.
4. Click the Activate, Deactivate, or Delete link located above the list of users.
5. Click OK.

Unlock a User Account

When a user has unsuccessfully logged in too many times, the account will be locked.

The following color codes are used to indicate locked and unlocked users:

- When a user is active and logged in successfully, the account displays a green check mark in the Locked column of the user account screen.
- When a user has unsuccessfully logged in a few times but has not yet locked the account, a yellow X displays in the Locked column of the user account screen.
- When a user has unsuccessfully logged in too many times, the account will be locked. A red X displays in the Locked column of the user account screen.

If the user forgot their password, you might also have to change their password.

1. In the resource tree, select the name for the user whose account is locked.
2. Click Resource Settings and then select Users in the drop-down menu.
   The User screen displays.
3. Check the box next to the user whose account you want to unlock.
4. Click the Unlock link above the list of users.
5. Click OK.

Change User Account Settings

You can update a number of user account settings. You can also update the resource records that a user can see and manage.

1. In the resource tree, click the user’s name.
Use the Search field above the resource tree to find the user.

2. Click Resource Settings and select Users in the drop-down menu.
   The Users screen displays.

3. In the Actions column, click Modify.
   The User screen displays.

4. Make the changes.

5. Click OK.
Managing Resources

Resources are the people who perform the activities and the items that are paired with those people. Examples of resources include technicians and trucks. You can use Oracle Field Service Cloud to keep track of resources and their activities. The term "resources" can be applied to individuals that perform activities as well the tools and equipment they use.

Search for a Resource

You can use the search function to find a particular resource or group of resources.

1. Do one of the following:
   - Type the name or ID in the search field and then click the magnifying glass
   - Click Filter and select a filter from the drop-down menu.

   The search results are displayed.

Finding an Available Resource

Activities can be added or moved at anytime and resources may sometimes ask for help in completing an activity. You can locate an available resource through several different ways.

- Let the application propose the available resources. Use the List view to move the activity. The application will evaluate the activity and propose a number of resources that can take the activity.
- Identify resources with idle time. Look in resource tree to find a resource that does not have a full workload.
- Identify open time slots. Look in the time view for white spaces in schedules. White spaces indicate free time.
- Identify nearby resources. In the map view, turn on the Nearby Resources filter to see resources that are working near the location of the activity that needs to be moved.
Add a Resource

When a user is also a resource, you must create both a user account and a resource.

By default, the data in the Status, language, time zone, time format, and date format fields are copied to the Add User for New Resource dialog when the resource type, Field Resource, Tool, or Vehicle is selected.

Difference between resource, user, and child resource: A resource can be a field resource (a human being), a vehicle, or a tool. All resources are elements of the resource tree. A user is a field resource or any other user that has access to Oracle Field Service Cloud. A child resource is a resource that is added to a bucket or an organization unit element of the resource tree. In the hierarchy of the resource tree, the bucket or the organization unit appears at a higher level than the child resource. A child resource can be a field resource (a human being), a vehicle, or a tool.

To add a resource:

1. In the resource tree, click the organization unit or bucket to which you want to add this resource.
2. Click Resource Settings and then select Resource Info from the drop-down menu. The Resource Info screen displays.
4. Fill in the fields:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter the resource name the way you want it to appear in the resource tree.</td>
</tr>
<tr>
<td>External ID</td>
<td>Enter the ID number from an external system, such as the employee ID number. These IDs are optional. If you use them, each resource must have a unique ID.</td>
</tr>
<tr>
<td>Phone</td>
<td>Enter the resource's telephone number.</td>
</tr>
<tr>
<td>Email address</td>
<td>Enter the resource's email address.</td>
</tr>
<tr>
<td>Status</td>
<td>Select active or inactive. Active resources can use the application. Inactive resources cannot use the system.</td>
</tr>
<tr>
<td>Resource Type</td>
<td>Select a resource type. Resource types are configured by your organization. Typical resource types are Bucket, Group, Technician, and Tool. For the resource types Technician and Tool, the Add User for New Resource dialog displays.</td>
</tr>
<tr>
<td>Organization</td>
<td>The organization to which the resource belongs. If you are adding a bucket or an organization unit, select the organization or organization unit that the bucket or group belongs to. You cannot select the organization for a technician; it is derived from the parent bucket or group.</td>
</tr>
<tr>
<td>Time format</td>
<td>Choose the time format that the resource will see and use in the interface. This can be either 12-hour or 24-hour.</td>
</tr>
</tbody>
</table>
**Working With Resources**

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date format</strong></td>
<td>Choose the date format that the resource will see and use in the interface. This can be either <strong>month-day-year</strong> or <strong>day-month-year</strong>. The date format controls the display of dates in numeric format.</td>
</tr>
</tbody>
</table>
| **Initial ratio for activity duration**         | Indicates the percentage by which the company-wide estimations will be multiplied to get the estimated duration at the resource level for new activities. This ratio will be applicable only for those activities that are relatively new to the resource and there is no significant past data. The field is displayed only if the following conditions are met:  
  - The Personalize the estimation of activity duration field is selected in the Add/Edit Resource Type screen.  
  - The field is added for your user type from the Configuration, User Types, Screen Configuration tab.  

The following conditions apply to this field:  
- You can edit this field only if the resource has not completed any activity. Once activities are reported, the ratio gets modified based on the reported durations.  
- For existing resources for which this field was not set during resource creation, this field is read-only with an initial value of 100%.  
- The value of this field is modified regularly based on the durations reported for relatively new types of activities. The updated value displays as read-only. |
| **Working days left for reported data to start impacting company level duration estimation** | This field displays the number of days left until the resource starts affecting the company averages, and it is based on the settings on resources type. This is a countdown value and it decreases by one everyday. The resource starts affecting the company average only when the value of this field reaches 0 (zero). This field can be edited till the value reaches 0 (zero), after that the field is not displayed. This field is displayed only if the Use durations reported to enhance company-wide estimations field is selected in the Add resource type screen. |

**Related Topics**

- Associate a Resource with a User Account

**Associate a Resource with a User Account**

Adding a resource to the Resource Tree does not automatically give login access to the user. To activate their routes and provide status for their work, these new users must log in like any other user. This procedure describes how to associate a new resource with its corresponding user account.

If you are adding a child resource of type Technician (or something similar configured by your organization), the fields listed in step 3 are displayed on the New resource info dialog itself. In that case, you can skip steps 1 and 2.

1. Select the appropriate Resource level in the Resource Tree that contains the user that you want to modify.
2. Click Resource Settings > Users.
3. Complete the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Type</td>
<td>Select the user type associated with this resource. The user type is group of rules and visibilities that can be applied to a user or group of users.</td>
</tr>
<tr>
<td>Login</td>
<td>This is the name that appears when the user logs in.</td>
</tr>
<tr>
<td>User Name</td>
<td>Name used for login (company standard should be defined).</td>
</tr>
<tr>
<td>Password</td>
<td>Type a new password that meets your company’s standards.</td>
</tr>
</tbody>
</table>
4. Click **OK**.

The resource is added, synchronized with a user record, and displayed on the Resource Tree within its parent location.

After you have added a new resource, you must add the work skills, work zones, and Calendar.

**How Activity Duration Is Calculated**

Activity duration can be either defined manually or calculated using statistics that are obtained from learned durations.

![Note:](image)

You can specify durations for specific activities and technicians through APIs. For more information, see the REST API for Oracle Field Service Cloud guide.

The manually-defined and statistical methods work as follows:

- **Manually-defined:** If the **Calculate activity duration using statistics** check box is not selected in the **Add activity type** or **Modify activity type** screen, the duration specified at the time of creating the activity is used. If the duration is not specified in the activity, the default duration for that activity type is used.

- **Statistical:** If the **Calculate activity duration using statistics** check box is selected in the **Add activity type** or **Modify activity type** screen, the duration of the activity is calculated based on statistical methods. If the history is not enough to calculate using statistics, the duration entered manually (if entered) at the time of creating the activity is used. If neither history nor a manually entered value is present, then the default duration for that activity type is used. The default duration is specified at the time of creating the activity type.

**Calculation of activity duration using statistics**

Activity duration estimations are calculated by the application based on the historical data of completed activities. The application analyses new data, compares it against previous estimations, and corrects the previous estimations, based on the new data, to obtain updated estimations for future usage. For this, the application uses two main statistics: company profile and personal profile. The application learns how each technician performs tasks and updates these statistics daily.

- **Company profile:** The activity duration is calculated at the company level based on the **Activity duration stats fields** configured in the **Statistics** screen. All activities belonging to the same field value are grouped together for calculating the duration. The key is typically something that identifies similar activities as a single entity including fields such as **Activity Type**. When a technician performs tasks and reports the time against them, the company level estimate is derived for each task type based on the stats field values. The application gives more importance to more recent data for computation, rather than historic data. This increases the estimation accuracy and allows the application to respond to changes in trends in a timely manner. The default duration specified in the **Add activity type** screen is used as the starting point for estimating the duration. The application:
  - Refers to the previous experiences of similar tasks.
  - Calculates the estimate based on the summary of experiences.
  - Learns from new experiences.
  - Updates and remembers the updated experiences for future use.
Every day the estimate is modified by a small amount, based on the durations reported on the previous day for similar activities. The correction applied is controlled to ensure that there isn’t too much deviation from the previous estimation and the estimated durations do not keep fluctuating on a daily basis; but is significant enough to respond to any trend change within a few days.

The formula to calculate the new estimate is:

\[ \text{New estimate} = \text{Previous estimate} \pm \text{Correction} \]

where correction is based on previous estimates and the differences between the estimated and reported durations.

- **Personal profile:** Along with the company level estimate, the estimated time for the activity for the technician is computed in the form of a ratio. This ratio is calculated based on the company level estimate for the activity. The final estimate at the technician level is the product of the personal profile ratio and the company level estimate. Each technician may have different ratios for different types of activities, based on their performance. Similar to the correction applied to the Company level estimates, the Personal profile ratio is also updated by a small controlled amount every day, based on the durations reported by the particular technician on the previous day for similar activities. When a technician performs an activity for the first time, the default ratio is used.

Some more important points about activity durations:

- If the personal profile is not available for an activity key value, the default ratio for the technician is used.
- The default ratio has an initial value that is specified in the **Initial Ratio for Activity Duration** field. This value will be updated each time the technician performs a relatively new activity.
- You can specify which type of resources use personal profile. If this setting is not selected, such resource types will not use the personal profile and will use only the company wide estimations.
- You can specify whether a resource affects the company level estimates. If it does, you can also specify the number of days to be skipped. The duration reported by only those resources that satisfy these two conditions is used to modify the company level estimates.
- You can set upper and lower limits for activity durations. The values will always remain within the set limits.

The fields that affect activity duration are:

<table>
<thead>
<tr>
<th>Field</th>
<th>Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum and maximum relevant duration time in minutes</td>
<td>Statistics</td>
</tr>
<tr>
<td>Lower/Upper limit for personal ratio for duration calculation</td>
<td></td>
</tr>
<tr>
<td>Default duration</td>
<td>Add activity type and Modify activity type</td>
</tr>
<tr>
<td>Calculate activity duration using statistics</td>
<td></td>
</tr>
<tr>
<td>Personalize the estimation of activity duration</td>
<td>Add resource type</td>
</tr>
<tr>
<td>Use durations reported to enhance company-wide estimations</td>
<td></td>
</tr>
<tr>
<td>Do not consider reported data of the first x working days</td>
<td></td>
</tr>
</tbody>
</table>
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Working With Resources

<table>
<thead>
<tr>
<th>Field</th>
<th>Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial ratio for Activity Duration</td>
<td>Resource Info</td>
</tr>
<tr>
<td>Working days left for reported data to start impacting duration estimations</td>
<td></td>
</tr>
</tbody>
</table>

Configuration examples

Example 1: Application uses the duration that is provided at the time of creating the activity

- Activity Type screen:
  - Default duration = 30
  - Calculate activity duration using statistics = not selected

If the activity created has a duration of 50 minutes, that value (50) is used, if no value is provided at the time of creating the activity, 30 minutes is used.

Example 2: New resource in the application has no historic data. The administrator wants to provide 20% more time than the estimated duration at the company level.

- Resource Type screen: Personalize the estimation of activity duration = selected
- Resource Info screen: Initial Ratio for Activity Duration = 120%
- Activity Type screen: Calculate activity duration using statistics = selected
- Assume company-wide estimation for the activity to be 45 minutes

Since the resource does not have previous records for this kind of activity the initial (default) ratio is used for calculations. The estimated duration for the resource is: 45 * 120% = 54 minutes

Example 3: Application uses technician’s learned duration with limits. Resource has performed activities of this type in the past and, hence, has a personal activity key ratio.

- Statistics screen:
  - Lower limit for personal ratio to calculate duration = 50%
  - Upper limit for personal ratio to calculate duration = 200%
- Resource Type screen: Personalize the estimation of activity duration = selected
- Activity Type screen: Calculate activity duration using statistics = selected
- Assume personal profile to be 90% and company-wide estimation for the activity to be 50 minutes.

Since the personal activity key ratio falls within the set limits, it is used for estimations. The estimated duration for the resource is 50 * 90% = 45 minutes.

Example 4: Application uses company duration without using personal profile

- Statistics screen:
  - Minimum relevant duration time in minutes = 3
  - Maximum relevant duration time in minutes = 1440
- Resource Type screen: Personalize the estimation of activity duration = not selected
• Activity Type screen: Calculate activity duration using statistics = selected
• Assume company-wide estimation for the activity to be 45 minutes

Since the personal profile is not configured and the company-wide estimation is within the set limits, the estimated duration for the resource is same as the company wide estimation = 45 minutes.

Favorite Resources

Use the **Favorite** option to get quick access to the most frequently used resources such as Bucket, Field Resource, Organization unit, Tool, or Vehicle.

Both Oracle Field Service Core Manage Cloud Service and  interfaces support the favorite resources option. The favorite resources that a user marks in Oracle Field Service Core Manage Cloud Service are displayed automatically in in the Supervisor view. When a user marks a resource as Favorite, a star appears next to it. In Oracle Field Service Core Manage Cloud Service, favorites are shown as a separate group on top of the resource tree. Favorites are saved for a specific user (not a company level configuration).

The Favorite resources and the Favorites group have the following characteristics:

• You can create the Favorites group only in the Oracle Field Service Core Manage Cloud Service interface.
• You can collapse the root element in the resource tree to view only the Favorites group.
• Favorite resources in the group are displayed regardless of the selected resource filters.
• All warnings shown on the resource icon and resource hint in the resource tree are supported for favorite resources.
• Actions available in the main resource tree such as drag-and-drop and filter are supported for the Favorites group as well.
• When searched for a resource, Favorites and the main resource tree resources are searched.
• When searched by activity, the main resource tree resource is considered, and the Favorites group is avoided.
• Favorites are available on the following screens in the Oracle Field Service Core Manage Cloud Service interface:
  o Activities
  o Daily
  o Dashboard
  o Reports
  o Resource info
  o Resource calendars
  o Inventories
  o Locations
  o Resource work zones
  o Users

• Favorites are not available on the following screens in the Oracle Field Service Core Manage Cloud Service interface:
  o Quota
  o Forecasting
  o Routing
Mark a Resource as Favorite

Favorites provides quick access to the Bucket, Field Resource, Organization unit, Tool or Vehicle that are important to you.

The Administrator must configure the Resource hint screen context for the required User Type with the Set as favorite and Remove from favorites actions. If you are using the Oracle Field Service Mobility Cloud Service interface, ensure that you have created the Favorites group in the interface.

To mark a resource as Favorite:

1. Click the resource that you want to mark as Favorite in the resource tree.
2. Click Set as favorite in the resource hint.
   A star appears next to the resource in the resource tree. A group by name Favorites is created at the top of the resource tree, and the favorite resource is added to it.
3. To remove a Favorite resource, click the resource and click Remove from favorites in the resource hint.

Manage Resource Locations

A resource location denotes the location at which the resource works. You can configure multiple locations and indicate the day on which the resource operates from a location. If you have configured a Group Location, it is available under the Shared Locations column on the Locations screen. You can manage locations from Oracle Field Service Mobility Cloud Service as well.

To add, modify, or delete a resource location:

1. Log in to Oracle Field Service Core Manage Cloud Service.
2. Select the field resource for which you want to set the location in the resource tree.
3. Click Resource Settings > Locations.
   The Locations screen is displayed for the selected resource. This screen displays the existing locations for this resource, and the locations that are inherited by the resource based on its organizational hierarchy.
4. Click Add location.
   The Add location dialog appears.
5. Fill up the following fields:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>A unique label for the location you are adding.</td>
</tr>
<tr>
<td>Address</td>
<td>Address of the location.</td>
</tr>
<tr>
<td>City</td>
<td>City in which the address is located.</td>
</tr>
<tr>
<td>Country</td>
<td>Country in which the address is located.</td>
</tr>
<tr>
<td>ZIP/Postal Code</td>
<td>Zip or postal code of the location.</td>
</tr>
<tr>
<td>State</td>
<td>State in which the address is located.</td>
</tr>
</tbody>
</table>

6. Click Resolve address.
   The address is resolved and the Latitude and Longitude fields are filled up.
7. Click OK.
   The location is added to the Resource Locations list on the Locations screen.
8. Optionally, if you have added a Group Location, drag and drop it on the day of the week on which the resource wants to work from that location.
9. To modify a location, click the location in the Resource Locations list. Click Modify in the hint pop-up.
The Edit location dialog appears.

10. Modify as required and click OK.
11. To delete a location, click the location in the Resource Locations list. Click Delete in the hint pop-up.
    The location is deleted.

Manage Shared Locations

A Shared Location is configured at the bucket level and is available for assignment to any child resource.

1. Log in to Oracle Field Service Core Manage Cloud Service.
2. In the resource tree, select the bucket or organization for which you want to set the location.
3. Click Resource Settings > Locations.
   The Locations screen is displayed for the selected resource. This screen displays the existing locations for this resource, and the locations that are inherited by the resource based on its organizational hierarchy.
4. Click Add location.
   The Add location dialog appears.
5. Complete the following fields:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>A unique label for the location you are adding.</td>
</tr>
<tr>
<td>Address</td>
<td>Address of the location.</td>
</tr>
<tr>
<td>City</td>
<td>City in which the address is located.</td>
</tr>
<tr>
<td>Country</td>
<td>Country in which the address is located.</td>
</tr>
<tr>
<td>ZIP/Postal Code</td>
<td>Zip or postal code of the location.</td>
</tr>
<tr>
<td>State</td>
<td>State in which the address is located.</td>
</tr>
</tbody>
</table>

6. Click Resolve address.
   The address is resolved and the Latitude and Longitude fields are filled up.
7. Click OK.
   The location is added to the Group Locations list on the Locations screen.
8. To modify a Shared Location, click the location in the Group Locations list. Click Modify in the hint pop-up.
   The Edit location dialog appears.
9. Modify as required and click OK.
   The changes are applied to all the users assigned to this location.
10. To delete a location, click the location in the Resource Locations list. Click Delete in the hint pop-up.
    The location is deleted.

Determining Resource Location for Use in Routing

When a resource is in the field, the application sends the GPS coordinates of the resource to the routing engine, if they are available. This helps Routing determine the location of the resource.

The following rules are used:
If the route is not yet started or no activity is started on the route, the coordinates sent to the routing engine are as follows:

- If the resource’s GPS coordinates are obtained between 0–20 minutes, the GPS coordinates are used.
- If no GPS coordinates are available, or if GPS coordinates are greater than 20 minutes, the resource’s Start Location is used if it is available.
- If no GPS coordinates are available, or if GPS coordinates are greater than 20 minutes, and no Start Location is assigned to the resource then the resource’s location remains undefined.

If the route has a started or a completed activity:

- If the resource’s GPS coordinates are newer than the address of the started or completed activity and the resource is at a distance more than 20 minutes from the address of the started or completed activity (using airline distance and default company airline distance speed), the GPS coordinates are used.
- If no GPS coordinates are available, or if GPS coordinates are older than the address of the started or completed activity, or the resource is at a distance less than 20 minutes from the address of the started or completed activity (using airline distance and default company airline distance speed), the address of the started or completed activity is used.

Add an Organization Unit or a Bucket

You can use organization units to sort and organize the other items in the resource tree. You can use buckets to hold the activities that are not assigned to field resources.

Difference between resource, user, and child resource: A resource can be a field resource (a human being), a vehicle, or a tool. All resources are elements of the resource tree. A user is a field resource or any other user that has access to Oracle Field Service Cloud. A child resource is a resource that is added to a bucket or an organization unit element of the resource tree. In the hierarchy of the resource tree, the bucket or the organization unit appears at a higher level than the child resource. A child resource can be a field resource (a human being), a vehicle, or a tool.

Organization units are typically used to group resources by location. Organization units cannot be route owners and activities cannot be assigned to them. Buckets can have activities, and they are assigned only by Routing Cloud Service. To add an organization unit or a bucket:

1. In the resource tree, select the organization unit or bucket to which you want to add the new organization unit or bucket.
2. Click Resource Settings.
3. Select Resource Info from the drop-down menu.
4. Click Add Child Resource.
The **New resource info** screen displays.

5. Complete the fields.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter the resource name the way you want it to appear in the resource tree.</td>
</tr>
<tr>
<td>External ID</td>
<td>Enter the ID number from an external system, such as the employee ID number. These IDs are optional. If you use them, each resource must have a unique ID.</td>
</tr>
<tr>
<td>Status</td>
<td>Select <strong>active</strong> or <strong>inactive</strong>. Active resources can use the application. Inactive resources cannot use the system.</td>
</tr>
<tr>
<td>Email address</td>
<td>Enter the resource’s email address.</td>
</tr>
<tr>
<td>Phone</td>
<td>Enter the resource’s telephone number.</td>
</tr>
<tr>
<td>Time format</td>
<td>Choose the time format that the resource will see and use in the interface. This can be either <strong>12-hour</strong> or <strong>24-hour</strong>.</td>
</tr>
<tr>
<td>Date format</td>
<td>Choose the date format that the resource will see and use in the interface. This can be either <strong>month-day-year</strong> or <strong>day-month-year</strong>. The date format controls the display of dates in numeric format.</td>
</tr>
<tr>
<td>Resource Type</td>
<td>Select Group or Bucket. The available fields on the screen change to display the relevant fields.</td>
</tr>
<tr>
<td>Credence</td>
<td>Enter information about the resource that you want to provide to a customer.</td>
</tr>
</tbody>
</table>

6. Click **OK**. The new organization unit or bucket appears in the Resource Tree.
Use a Bucket for Capacity and Quota Management

If you want to use a bucket for quota calculation, you must configure the option in the Resource & Bucket Info screen. Typically, the buckets that you send activities to are also used for Capacity and Quota Management.

1. Click the name of the bucket in the Resource Tree that you want use for Capacity and Quota Management. The Resource & Bucket Info screen displays.
2. Select the check box next to Quota Management under Other Attributes. The Capacity Categories and the Time Slots fields display, as shown in the following figure:

3. Select the routing profile that you want to use for this bucket.
4. Click the pencil icon next to the Capacity Categories field.
5. Select the categories that you want to use for this bucket and then click Save.
6. Select the time slots that you want to use for this bucket.
7. Click the pencil icon next to the Time Slots field.
8. Select the time slots that you want to use for this bucket and then click Save.
9. Click OK.

Move a Resource to Another Group or Bucket

You can reorganize resources within the Resource Tree by moving them to different groups or buckets.

1. In the Resource Tree, select the resource that you want to move.
2. Drag and drop the resource on the group or bucket that you want to move it to. A confirmation window displays.
3. Click OK.
Assign a Resource to a Team

The Teamwork feature allows two or more resources to work together on an activity, either for a single day or on an on-going basis.

You might use teamwork to assign one resource to work with another by assigning a truck to a technician, or to assign a new employee to a more experienced employee for training. The teamwork feature assigns each resource a role of either team leader or assistant. When resources are assigned teamwork, they are displayed next to each other in the Resource Tree. The arrow between the resources shows which resource is assisting and which resource is leading. The arrow points toward the Team Leader. In the picture below, Billy Holm is assisting Kathleen Disney:

Further, in the assistant’s schedule, time is blocked out because the teamwork action generates an internal activity marked as Assisting which is assigned to the assistant’s route. To assign a resource to a team:

1. In the Resource Tree, select the resource that you want to be the assistant.
2. Drag the assistant to the resource that you want to be the team leader.
   - When you drag a resource over another resource, Hints might be displayed to indicate whether or not the selected resource can participate in Teamwork. When you drop the resource onto the other resource, a green box displays around the team leader.
   - The Teamwork assignment box displays.
3. Complete the required fields and then click OK.
   - Teamwork appears in the assistant’s work queue and the Resource Tree indicates that the team leader is being assisted.
Assign Work Skills to a Resource

Work skills are the competencies that each resource is qualified to perform. You can assign work skills to resources through the Resource Info screen.

1. In the resource tree, click on the group or bucket that you want to add the new resource to.
2. Click Settings > Resource Info from the drop-down menu.
   The Resource Info screen displays.
3. Click the plus icon in the Work skills field.
   The Add work skills window opens.
4. Assign a preference level for each work skill using a scale of 1 to 100.
   A higher number means that the resource has a higher chance of being allocated the task. If a resource performs this task only occasionally, enter a lower number.
5. Click Save.
   The resource is now assigned the skills and will be considered for work only if their qualification level meets or exceeds the level in the activity record. The following guidelines are applicable:
   - If no individual skills are defined for a resource, then the application interprets that the resource is qualified to perform all of the skills at the highest qualification level. This is the default setting.
   - When qualification levels are set for at least one work skill, then the resource is considered to have only that specific skill. The resource is not considered for work requiring any of the other skills.
   - A higher ratio number increases the likelihood that this resource will be assigned activities with this work skill. If the ratios are conflicting, the application uses the higher ratio. If the work skill group ratio conflicts with the individual work skill ratio, the application uses the individual work skill ratio.

Add Work Zones to a Resource

Work zones define the regional areas in which technicians are permitted to work. When you add a work zone to a resource, any work zone shape or custom map layer that is added to the work zone is displayed on the map. Work zone shapes and custom map layers help you visualize your work area better.

1. Select the resource from the Resource Tree.
2. Click Resource Settings and then select Resource Work Zones from the drop-down menu.
   The Resource Work Zones screen displays for the selected resource.
3. Click Add new.
   The Add Resource Work Zone for <resource name> window appears.
4. Complete the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work zone</td>
<td>Select the work zone from the drop-down menu.</td>
</tr>
<tr>
<td>Display additional zones in the drop-down list</td>
<td>Select the box to view all the active work zones. For the group or bucket that this resource is in.</td>
</tr>
</tbody>
</table>
Field | Description
---|---
Ratio | Type a value between 1 and 100. A higher number increases the likelihood that this resource will be assigned activities in this work zone. If this is a work zone the resource works in daily, or if it is a preferred zone for the resource, enter a higher number. If this resource only works in this work zone occasionally or only by exception, enter a lower number. You can assign multiple work zones with different ratios to one resource.

Schedule Section

Temporary | Select this check box to create a temporary work zone for a specified period of time.
Date Start | Enter the date that this work zone assignment starts.
Date End | [Optional] If this is a temporary assignment, enter the date that this work zone assignment ends.
Recurrence | Set the schedule for the work zone if the resource is alternating between work zone assignments. Resources can cover different work zones on different days of the week. Use this feature to change a resource’s work area on certain days of the week. Select the frequency of recurrence and the days on which to recur.

5. Click **Add**. The work zone is added to the resource. If any work zone shapes are added to this work zone, they are displayed on the map.

### Managing Resource Calendars

Calendars identify the hours that the resource works. This information is used to route activities and calculate arrival times. If a resource’s schedule changes, you must update their working hours in the Calendar.

You can interact with a resource’s calendar in two ways:

- **Daily View**: Use the *Daily view* to see the calendar of a resource, group or bucket for a whole week. This view is also useful for making small changes to individual calendars in the current week.
- **Resource Calendars View**: Use the *resource calendar* view to see the details about an individual resource’s schedule. This view is also useful for making changes that involve more than one day or more than one resource.

### View a Resource’s Calendar in the Daily View

The Daily view shows the calendar of a resource, group, or bucket for a whole week. This view is useful for making small changes to individual calendars in the current week.

1. In the **Resource Tree**, select the **Resource**, **Group** or **Bucket** that you want to see in the calendar.
2. Click **Daily** in the **Menu** bar.
   The calendar displays.
3. Click the arrow buttons on either side of the date to change the date.
4. Click the **View** button to filter the information displayed.
Modify a Calendar in Daily View

Use **Daily View** to make small changes to an individual calendar such as adding shifts and working time. You can also add a working time override to the calendar.

1. Click the **Daily** tab.
2. Select the bucket, group or resource you want to change from the **Resource Tree**.
   The calendar screen displays.
3. Click the day for which you want to adjust the details.
   You can change only days that occur in the future. Past days cannot be changed. The pop-up to adjust the shift details appears, as shown in the following figure:

   ![Calendar Screen](image)

   A time entry dialog displays.
4. Click the arrow next to the drop-down menu of choices.
   If shift is chosen, then the **time** and **points** edit boxes that display the values of this shift are disabled, because the value is determined by shift.
5. If the change includes non-working time, then select one of the reasons from the list, as shown in the following figure:

   ![Time Entry Dialog](image)
6. Select the time range.
   You can select a particular shift from the drop-down list on the left, or you can choose Manual and enter the actual
time and points (if used).
7. Enter the new schedule for the resource by typing a new time range.
   For example: 0830 – 1630.
8. Enter any comments, if needed.
9. When you are finished, click Apply.
10. If you want this resource to inherit the calendar from the parent group or bucket, choose Default.
    Setting to Default clears the calendar and applies the parent calendar.

View a Resource’s Calendar in Resource Calendar View

The Resource Calendar view displays the details about an individual resource’s schedule. This view is useful for making
changes that involve more than one day or more than one resource.

1. Select the Resource that you want to see in the calendar from Resource Tree.
2. Click Resource Settings and then select Resource Calendars from the drop-down list.
   The calendar displays.

Modifying a Calendar in the Resource Calendars View

Use the Resource Calendars View to make big changes to calendars for Groups, Buckets or Resources.

You can perform the following tasks in this view:

- Adding a Work Schedule to a Calendar
- Adding a Shift to a Calendar
- Adding a Shift Override to a Calendar
- Adding Working Time to a Calendar
- Adding a Working Time Override to a Calendar
- Adding Non-Working Time to a Calendar
- Deleting Items from a Calendar

Add a Work Schedule to a Calendar

You can assign a workSchedule to a resource, bucket or group.

1. Select a resource from the resource tree.
2. Click Resource Settings > Resource Calendars.
   The Resource Calendars screen displays.
3. Click the gear icon and select Add work schedule from the drop-down menu.
   The Add Work Schedule window displays.
4. Select the work schedule from the drop-down list.
5. Enter a Start date and an End date, and any Comments.
6. Click OK.

Add a Shift to a Resource's Calendar

Shifts are standard patterns of working time. They determine when a resource is available for work. Shifts applied at the resource level override the shifts applied at a higher level in the resource tree.

1. Select a resource from the resource tree.
2. Click Resource Settings > Resource Calendars.

   The Resource Calendars screen displays.

3. Click the gear icon and select Add shift from the drop-down menu.

   The Add Shift window displays.

4. Complete the fields.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift</td>
<td>Select a pre-configured shift from the drop-down list.</td>
</tr>
<tr>
<td>Start date</td>
<td>Select the start date of the shift.</td>
</tr>
<tr>
<td>End date</td>
<td>Select the end date of the shift, if applicable.</td>
</tr>
<tr>
<td>Comments</td>
<td>Enter comments, if any.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Daily</td>
<td>Apply to schedules such as every other day or every 3rd day, if you select this option, add the frequency of occurrence in the field Days between occurrences.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Everyday</td>
<td>Applies to every day schedules that repeat without exception and without any modification options.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Weekly</td>
<td>Apply calendars that have a regular weekly pattern. Select the days that apply to this shift using the check boxes for the individual days. Indicate the frequency of this pattern weekly by adding a value to the Weeks between occurrences field.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Yearly</td>
<td>Occurs every year from the selected date entered in the From day until the date entered in the To day field.</td>
</tr>
</tbody>
</table>

5. Click OK.

Add a Shift to Override a Calendar

You can add a shift to a resource’s calendar that will override any other shifts that are assigned. A shift override is typically used to make a temporary change to a calendar. Shift overrides do not change previously created shifts. Overrides can take effect for specific periods of time and always take precedence over other shifts that occur during the same time frame.

1. Select a resource from the resource tree.
2. Click Resource Settings.
3. Select Resource Calendars from the drop-down menu.
4. Click Actions.
5. Select Add Shift Override from the drop-down menu.

   The Add Shift Override window displays.
6. Select the **Shift** from the drop-down list.
7. Enter a **Start date** and an **End date**, if applicable, for the shift override.
8. Click **OK**.

### Add Working Time to a Calendar

Working time differs from shifts in that it represents start and stop times that may differ from the pre-defined shifts. You might use working time when a resource works a different number of hours than he or she normally does or when the resource works at a different time of the day than the other resources.

1. Select a resource from the resource tree.
2. Click **Resource Settings > Resource Calendars**.
   
   The **Resource Calendars** screen displays.
3. Select **Add Working Time** from the drop-down menu.
   
   The **Add Working Time** window displays.
4. Fill up the following fields:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift Type</td>
<td>Select <strong>Regular</strong> or <strong>On Call</strong> from the drop-down menu.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You can create only one on-call shift per day. If you create a second on-call shift, the first one is deleted.</td>
</tr>
<tr>
<td>Time From</td>
<td>Enter the time when the resource’s work is to begin.</td>
</tr>
<tr>
<td>Time</td>
<td>Enter the time when the resource’s day ends.</td>
</tr>
<tr>
<td>Points</td>
<td>If you are using points to cap activity assignments, you can enter them here. These points work the same way as points associated with a shift.</td>
</tr>
<tr>
<td>Start date</td>
<td>Select the date when this working time begins for the resource.</td>
</tr>
<tr>
<td>End date</td>
<td>Select the date (if applicable) when this working time ends for the resource.</td>
</tr>
<tr>
<td>Comments</td>
<td>Enter any comments about this working time.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Daily</td>
<td>Apply to schedules such as every other day or every 3rd day. If you select this option, add the frequency of occurrence in the field <strong>Days between occurrences</strong>.</td>
</tr>
</tbody>
</table>
### Recurrence-Repeats-Everyday
Applies to every day schedules that repeat without exception and without any modification options.

### Recurrence-Repeats-Weekly
Apply calendars that have a regular weekly pattern. Select the days that apply to this shift using the check boxes for the individual days. Indicate the frequency of this pattern weekly by adding a value to the **Weeks between occurrences** field.

### Recurrence-Repeats-Yearly
Occurs every year from the selected date entered in the **From day** until the date entered in the **To day** field.

## Add a Working Time Override to a Calendar

Use a working time override to make a change to the working time in a calendar without modifying the calendar. Overrides are typically temporary changes to a calendar that take effect for a specific period after which the resource returns to their regular schedule. Overrides can take effect for specific periods of time and always take precedence over other shifts that occur during the same time frame.

1. Select a resource from the resource tree.
2. Click **Resource Settings** and select **Resource Calendars** from the drop-down menu.
   The **Resource Calendars** screen displays.
3. Click **Actions**.
4. Select **Add Working Time Override** from the drop-down menu.
   The **Add Working Time Override** window displays.
5. Fill in the following fields:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift Type</td>
<td>Select <strong>Regular</strong> or <strong>On Call</strong> from the drop-down menu.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> You can create only one on-call shift per day. If you create a second on-call</td>
</tr>
<tr>
<td></td>
<td>shift, the first one is deleted.</td>
</tr>
<tr>
<td>Time From</td>
<td>Enter the time when the resource’s work is to begin.</td>
</tr>
<tr>
<td>Time</td>
<td>Enter the time when the resource’s day ends.</td>
</tr>
<tr>
<td>Points</td>
<td>If you are using points to cap activity assignments, you can enter them here. These points</td>
</tr>
<tr>
<td></td>
<td>work the same way as points associated with a shift.</td>
</tr>
<tr>
<td>Start date</td>
<td>Select the date when this working time begins for the resource.</td>
</tr>
<tr>
<td>End date</td>
<td>Select the date (if applicable) when this working time ends for the resource.</td>
</tr>
<tr>
<td>Comments</td>
<td>Enter any comments about this working time.</td>
</tr>
</tbody>
</table>

6. Click **OK**.
Add Non-Working Time to a Calendar

Use non-working time to identify times when a resource, an organization unit, or a bucket is not available for work.

1. From the resource tree, select the resource, group or bucket to which you want to apply non-working time.
2. Click Resource Settings > Resource Calendars.
   The Resource Calendars screen displays.
3. Click the actions button and select Add Non-Working Time.
   The Add Non-Working Time window displays.
4. Complete the fields as described below:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift Type</td>
<td>Select Regular or On Call from the drop-down menu.</td>
</tr>
<tr>
<td>Reason</td>
<td>Choose a non-working reason from the drop-down menu.</td>
</tr>
<tr>
<td>Start Date</td>
<td>Choose a start date for the non-working time.</td>
</tr>
<tr>
<td>End Date</td>
<td>Choose an end date for the non-working time.</td>
</tr>
<tr>
<td>Comments</td>
<td>Enter comments about this non-working time.</td>
</tr>
</tbody>
</table>

5. Click OK.
   If the non-working time can be applied, the resource is marked as a non-working resource for the selected date range. If the non-working time can’t be applied, a warning message appears. If you click OK, the non-working time is applied, but a warning message appears on the resource tree for that resource on that day. Non-working time can’t be applied if the technician has anything other than repeating, shift, or mass type of activities assigned on this route. The activities on the resource’s route, other than mass and repeating activities, are rerouted or assigned to the bucket, if the following conditions are met:
   o The routing plan has the Enable reoptimization check box selected.
   o The resource meets the routing plan filter conditions.

Delete Items from a Calendar

When you want to remove a work schedule, shift, working time, non-working time or override from a resource’s calendar, you can delete it.

>Note: Once you delete an item from a resource calendar, the resource re-acquires any like items that are set at a higher level. For example, if you delete a work schedule from a calendar, the resource reacquires the work schedule of it’s bucket or group.

1. Select a resource from the resource tree.
2. Click Resource Settings > Resource Calendars.
   The Resource Calendars screen displays.
3. Click the check box next to the item that you want to delete and then click Delete.
4. Click OK.

Time Zones

When you configure the application, it is possible to set different time zones for a user and for a resource. These time zones are used in different contexts on different screens. This topic gives an overview of how time zones are displayed throughout Oracle Field Service Cloud.

Today's date

The time zone of the currently logged in user is used when determining the today's date. For example, if it is 1:00 PM, Jun 10 in a UTC+00:00 time zone and you log in as a user who is in UTC+12:00 time zone, then after logging in you will see that the current date is set to Jun 11. This is because, in the user's time zone it is already 01:00 AM, Jun 11. Today's date is used as the initial date on the following screens in Oracle Field Service Core Manage Cloud Service: Activities, Daily, Offline synchronization, Dashboard, and Print route. For example, on the "Activities" screen, it is the date for which the activities will be shown after you log in to the application. You can change the date on these screens to see the information for another date. Nevertheless, when you click the date field, the calendar widget shows you today's date in light blue color. The following figure shows the calendar with today's date highlighted:

The same behavior is present in Oracle Field Service Mobility Cloud Service. When a field resource logs in, today's date is marked with light red color on the date selection panel in the header, as shown in the following figure:
When a field manager looks at the **Calendars** screen in Oracle Field Service Mobility Cloud Service, then today’s date is marked in blue, as shown in the following figure:
The same date is used in Oracle Field Service Core Manage Cloud Service when searching for activities "starting today".

Current date of the resource

The current date of the resource is always determined in the time zone of the resource. You can activate the route and start an activity only on the current date of the resource time zone.

Changing past activities

Every instance has a specific time when all the data that is related to the previous day is frozen and can't be changed any more. This time is configured on the Business Rules screen in the Overnight work section, shown in the following figure:

For example, you have configured that the working time is 5 hours since midnight in the Eastern time zone. This means that at 5:00 AM in the Eastern time zone all data for the previous day becomes frozen.

⚠️ Important: If you configure an instance to use in several time zones, you must set the time zone on the Business Rules screen to the most "western" time zone. If the work is performed several hours after midnight in this most "western" time zone, then you must also specify the number of hours after midnight.
Time view in Oracle Field Service Core Manage Cloud Service

The screen **Activities > Time** can display aggregated information for the hierarchy of resources. The information is presented in the same time zone to look consistent on the time line. The time zone is determined as the time zone of the resource selected in the resource tree on the left of the screen. The current time which is shown as a red vertical line is also in the time zone of the selected resource, shown in the following figure:

![Time view in Oracle Field Service Core Manage Cloud Service](image)

**Note:** The only exceptions are the resource hint, activity hint, and activity label. Information on the resource hint is displayed in the time zone of the resource this hint belongs to. Information on the activity hint and activity label is displayed according to the rules described in the Activity related information section later in the topic.

Manage screen in Oracle Field Service Mobility Cloud Service

The **Manage** screen in Oracle Field Service Mobility Cloud Service shows the information similar to the **Activities > Time** screen. The difference is that there is no resource selected in Oracle Field Service Mobility Cloud Service. The information is shown for the list of resources identified as a group, and the group is configured by a user. Since it is not possible to identify which resource time zone should be used as the primary time zone, the time zone of the currently logged in user is used instead.

**Note:**

- The only exceptions are the resource hint, activity hint, and activity label. Information on the resource hint is displayed in the time zone of the resource this hint belongs to. Information on the activity hint and activity label is displayed according to the rules described in the Activity related information section later in the topic.
- When a user opens the non-scheduled or non-ordered activities on the right of the screen, the activity identifier shows information according to the rules described in the Activity related information section later in the topic.

Organizations with multiple time zones

If your organization operates in multiple time zones, it is important that you configure both, the field resource and activity time zones correctly. Configuring these time zones is even more important if they are different. A field resource sees all the data in their own time zone, but when the activity (customer) is in a different time zone, both times are shown as appropriate. The
activity time zone is used for notifications and can be used in APIs (for example, for sending messages). Typically, the time zone of a physical location is used for notifications, but you may use your preferred time zone, such as your headquarters time zone or any other in which you prefer to get notifications.

Resource related information

Information that is related to a resource and the resource’s route is entered in the resource time zone. It includes:

- Route Status (queue_status) which includes the time when route was activated
- Reactivated (reactivated)
- Resource working hours (calendar)
- Resource on-call hours (oncall_calendar)

Time view shows this information differently in Oracle Field Service Core Manage Cloud Service and Oracle Field Service Mobility Cloud Service. See the earlier sections for more details.

Activity related information

Time related information on an activity is displayed and entered in the time zone of the resource for which the activity is assigned. This information includes:

- Start (ETA)
- End (end_time)
- Start - End (eta_end_time)
- Delivery window (delivery_window)
- Activity Time of Booking (atime_of_booking)
- Activity Time of Assignment (atime_of_assignment)

The only exceptions are:

- Time slot or service window (depending on what is used for the particular activity type)
- SLA window

These properties are either in the resource time zone or in the customer time zone. It depends on the SLA and Service window use customer time zone field set on the activity type. Time view shows this information differently in Oracle Field Service Core Manage Cloud Service and Oracle Field Service Mobility Cloud Service. See the earlier sections for more details.

User related information

All user related information is shown in the time zone of the user. It includes:

- When the user was registered
- When the user was updated
- When the user logged in last time
- When the user changed his password
- Date and time till when the user is blocked

Field Collaboration

Each message in Field Collaboration includes the time when it was sent. This time is shown in the time zone of the currently logged in user.
6 Working with Activities

Search for an Activity

The activity search field is located in the upper right corner. It is represented by a magnifying glass.

1. Click the magnifying glass to open the search box.
2. Enter at least three characters of the word or the numerical value you want to search.

3. Click the result to view the Activity Details.

Narrow the Activity Search Results

You can use Search Preferences to narrow and order the search results. Search Preferences are pre-configured by your administrator.

1. Click the gear icon to view the search preference.
2. Click the check boxes next to the options that you wish to search by from the Search Preferences menu, as shown in the following figure:
3. Drag and drop the categories in the list to change the priority of the preferences in the search results.
4. Select the date range for the search results from the drop-down menu.
5. Click Back to search and enter the search value.

Moving an Activity

When you identify an activity or group of activities that are in jeopardy, you can move the activities to another resource or to a bucket for re-assignment at a later time.

You can move activities from three different locations in the interface:

- **List view**: You can move one activity or multiple activities at once. The application proposes resources that might be a good match for the activity. You can also choose where a new activity will fall in the new resources schedule.

- **Time view**: From this view, you can drag an activity from one resource to another. You can move only one activity at a time. The application chooses the best time in the resource’s schedule and automatically moves the job to that time slot.

- **Map view**: From this view, you can drag an activity from one resource to another. You can move only one activity at a time. The application chooses the best time in the resource’s schedule and automatically moves the job to that time slot.

**Related Topics**

- Move an Activity in the List View
- Move an Activity in the Time View
- Move an Activity in Map View
Move an Activity in the List View

When you are in the List view, you can move an activity between resources using the Move link in the Hints box.

1. Click List on the Switch View tab.
2. Select the group or bucket that contains the activity.
   All of the resource’s activities are displayed in the Work Area.
3. Select the activity that you want to move. If you want to move multiple activities at once, select all of the activities now.
   The Hints box displays.
4. Click Move.
   The Move activity dialog appears. The address of the activity and the work order number displays at the top of the screen. A list of available resources displays to the left.
5. Select the new owner from that list.
   - Choose a resource if you want to assign the activity now.
   - Choose a bucket if you want the activity to be reassign during the next batch assignment.

On the right side of the screen, the moved activity displays in the new resource’s route.

If the activity displays in green or there is no comment in the Comments column, the new resource is projected to arrive at the customer’s location within the service window. If the activity displays in red or a comment is displayed in the Comments column, the new resource might miss the service window. If other activities are showing in red, the new activity jeopardizes the red activities; the Comments column displays the reason. When activities turn red, another resource may be a better choice.

6. Click OK when you are satisfied with the move.
Move an Activity in the Time View

You can move activities between resources in the Time view using drag and drop.

1. Click Time view.
2. Select the resource from the resource tree that you want to move the activity from.
   The resource’s schedule displays in the work area.
3. Find the activity that you want to move, then drag it onto the new resource.

When you drag the activity onto a new resource, the application checks the move against the route to identify potential problems. If the application does not detect any potential problems with the move, the activity is added to the timeline. The application chooses the time slot automatically based on system information. If the application detects a problem, a Move dialog displays an alert. You can either move the activity anyway, or move it to another resource.

When you drag the activity over the resource, a box appears around the resource’s name. If the box is red, the resource is not available for work. If the box is green, the resource is available to take the job. The box displays some text indicating whether the activity can be moved, as shown in the following figure:

The following figure shows a red box around the resource who is not available for work, and the reason for the activity not being moved:

Move an Activity in Map View

When you are in Map View, you can move an activity between resources using drag and drop.
1. Click the **Map** tab.
2. Select the resource from the **Resource Tree** that you want to move the activity from.
   The resource’s schedule displays in the **Work Area**.
3. On the route list on the right side of the screen, select the activity that you want to move.
4. Drag and drop the activity onto the new resource in the **Resource Tree**.
   If the box is red, the resource is not available for work.
   When you drag the activity over the resource, a box appears around the resource’s name. If the box is green, the resource is available to take the job.

### Moving Activities Back to the Bucket

You might want to move activities from resources back to the bucket for a number of reasons.

- A resource called in sick and you have already assigned him or her a route.
- A resource is assigned activities that might place him or her in an overtime situation.
- An activity is in jeopardy after routing.
- A resource requested a particular day off, but the calendar does not reflect it as a non-working day and a route has already been assigned to him or her.

### Warnings When Moving Activities

This topic describes the warning messages that you would encounter while moving activities.

You may encounter the following types of warning messages:

- Service window warning
- SLA warning
- Overtime warning
- Linked activity warnings
  - Has successor scheduled earlier
  - Has predecessor scheduled later
  - Has simultaneous activity
- Work zone mismatch
- Work skills mismatch
- Soft skill mismatch

**Linked activity warnings**

The warnings related to linked activities are as follows:

- Has successor scheduled earlier: This warning appears for a pending activity linked to another activity that should be started after but is scheduled before its estimated completion.
• Has predecessor scheduled later: This warning appears for a pending activity linked to another activity that should be finished before but is scheduled after its estimated start.

• Has simultaneous activity: This warning appears for a pending activity linked to another activity that should be started simultaneously but is scheduled to a different time.

Overtime alert: This alert notifies you that the estimated completion time of the activity extends beyond the end of a resource’s working day.

Work Zone mismatch alert: The application doesn’t allow you to assign an activity to a resource without a required work zone. The only exception is when the All check box is selected. In this case, the resource is shown in red and the "Work zone mismatch" alert appears in its hint.

Work skill mismatch alert: This alert displays when you move an activity to a resource that does not have the required and preferred qualification level of an activity skill. The only exception is when the All check box is selected. In this case, the resource is shown in red and the "Work skill mismatch" alert appears in its hint. Depending on your settings, the Work skill mismatch alert either prevents you from moving the activity, or gives you the option to move it, or let you cancel the move.

Soft Skill mismatch alert: If an activity is to be moved to a resource and a work skill level of this resource is more than (or equal to) the level 'required' to complete this activity, but less than the 'preferred' level, the ‘Soft skill mismatch’ alert appears. In case of the ‘Soft skill mismatch’ warning, the resource is not removed from the list of available resources on the Move activity screen (the All check box doesn’t affect this behavior). But, it is shown in a different color (blue) than a regular one and the ‘Soft skill mismatch’ text is shown in its hint message. The ‘preferable’ skill level is ignored by the ‘Self assignment’ constraint that is used to filter activities in bucket. In this case the ‘required’ level is only checked. The ‘Soft skill mismatch’ warning is shown on attempt to move an activity to a technician with an insufficient 'preferred' skill level.

Do not move alert: This alert displays when you try to move an activity type that is not allowed to move between resources. Activity types are configured in the Add activity type page.

Resource preferences

• If an activity has a list of Forbidden resources, the application doesn’t allow to assign it to one of these resources. They are not shown in the GUI (regardless of the "All" option).

• If an activity has a list of Required resources, these resources are only shown in GUI (regardless of the "All" option).

• If an activity has a list of Preferred resources, these resources are shown in GUI by default. Other resources are returned if the All option is set. In this case such resources are shown in red and the Resource is not preferred message appears for the activity to be moved.

If several activities are selected to be moved at the same time, the following rules are used to merge their lists of preferred resources:

• Forbidden
  o The resulting list of the Forbidden resources is a union of the original activity lists.

• Required
  o If activities to be moved have the Required resources, the result is an intersection.
  o Activities without the Required list are not processed. If only one of the two activities has the Required list, this list is only used in the restriction.
  o If two activities have the Required lists and these lists are not intersected, all the activities cannot be assigned together to the same resource.

• Preferred
  o If any of the activities has the Required list, the Preferred resources are ignored.
Add an Activity to a Route

While activities are usually added to routes through the routing process, you can manually add an activity to a route. This feature is helpful when you must set aside some time for a resource so that the application does not route any activities during that time.

1. Select a resource from the resource tree.
2. Click the actions button.
3. Select Add Activity from the drop-down menu.

The Add Activity window displays.

4. Select the activity type from the Activity Type drop-down list.

If this activity is an internal activity, the layout of the screen changes. Otherwise, the screen stays the same.

5. Complete the applicable fields.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Type</td>
<td>Select the activity type from the Activity Type drop-down list.</td>
</tr>
<tr>
<td>Name</td>
<td>Enter the customer’s name. Used for customer-facing activities only.</td>
</tr>
<tr>
<td>Work Order</td>
<td>Enter the work order number associated with this activity.</td>
</tr>
<tr>
<td>Duration</td>
<td>Enter the amount of time that the activity lasts. Select the hours and minutes in the respective drop-down lists.</td>
</tr>
<tr>
<td>Field name</td>
<td>Action</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Position in Route</td>
<td>Choose an option to decide whether this activity is to be performed in a particular order.</td>
</tr>
<tr>
<td></td>
<td>- Not Ordered means that the activity is not ordered, and appears as scheduled/not ordered the lower portion of the time view interface.</td>
</tr>
<tr>
<td></td>
<td>- Ordered means that the activity is displayed on the resource’s route. If you specify a time slot, the activity displays in that time slot. Otherwise, it displays as pending at the beginning of the route.</td>
</tr>
<tr>
<td>Time Slot</td>
<td>Select the period of time within which this activity can be started.</td>
</tr>
<tr>
<td>Access Hours</td>
<td>Select the time interval during which the related asset is accessible. Click the pencil icon to select the access hours.</td>
</tr>
<tr>
<td>Access Schedule</td>
<td>Select the days of the week during which the related asset is accessible. Click the pencil icon to define the access schedule. You can schedule two intervals per day.</td>
</tr>
</tbody>
</table>

6. Click **OK**.

**Related Topics**
- About Access Hours

---

**Working with Non-Travel Activities**

When an activity does not require travel (Calculate travel check box is cleared for the Activity type), the idle time before that activity is considered as travel to the next activity requiring travel in the route.

The travel between activities can be split into two (or more) pieces by inserting non-travel activities in between. As a result, in Time View, non-travel activities are placed over the travel time for activities that require travel. Non-travel activity may have a different location when compared to the previous travel-required activity (or provider start location), if a non-travel activity is placed over a travel-required activity.

To understand the concept better, consider the following sequence of activities:
- First activity: For example, installation requires travelling, ends at 10:00
- Second activity: For example, phone call doesn’t require travelling starts at 17:00 and ends at 17:10
- Third activity: For example, upgrade requires travelling; service window starts at 17:30 and ends at 18:00

Assume that the travel time between First activity and Third activity is 3 hours. The time line would be:

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>First activity is finished</td>
</tr>
<tr>
<td>10:00 to 14:20</td>
<td>Idle time</td>
</tr>
<tr>
<td>14:20 to 17:00</td>
<td>Travel toward third activity</td>
</tr>
<tr>
<td>17:00 to 17:10</td>
<td>Second activity (phone call)</td>
</tr>
<tr>
<td>17:10 to 17:30</td>
<td>Continue travel toward third activity</td>
</tr>
<tr>
<td>17:30</td>
<td>Third activity started without any overdue and as early as the service window allows</td>
</tr>
</tbody>
</table>
Note: When you place a non-travel activity manually on a time interval that is occupied by the travel bar of a non-movable (for example, due to service window) travel-required activity, it can happen that the travel bar is partially placed before the actual time. In this case, we recommend that you place the non-travel activity to another place in the route.

About Access Hours

Access Hours define the intervals in which an asset such as a building or equipment is accessible for resources. Access Schedule is the exact time interval and the days on which the asset is accessible. Access Schedule is always set up in the activity time zone and the Access Hours field is calculated in the time zone of the Activity Provider. So, the Access Hours field is recalculated every time an activity is scheduled or assigned.

Access Hours consist of a set of access schedule intervals (up to two intervals per week day), and a set of exception dates. The exception dates are treated as non-working. For Example: You can set the following Access Schedule:

- Mon-Fri: 8AM-12PM, 13PM-17PM
- Sat: 10AM-12PM
- Exceptions: 2018-01-01, 2018-05-01

This means that the asset is accessible from 8 AM till 12 PM and from 13 PM till 17 PM, Monday to Friday and from 10 AM till 12 PM on Saturday. It is closed on Sundays. The non-working days are January 1st and May 1st next year.

The Access Hours and Access Schedule fields affect routing. When activities are created, routed, and moved, the Access Hours and Access Schedule are taken into consideration. If the access hours and access schedule are not within the activity schedule, the application displays an alert. If the activity is within the Access Schedule, it is assigned to a free slot in the provider queue adjusting the Access Schedule if possible. Otherwise an alert that the asset may not be accessible beyond the defined access hours is shown.

Access Hours are recalculated when there is a change in the access schedule or the schedule of the activity. Access Hours are always shown in the provider time zone with respect to overnight settings. For example, if a company has overnight set to 5 hours and no access schedule is defined (that is, 24x7 access), Access Hours is calculated as 05AM-12PM, 12PM-05AM. If tomorrow is the exception date, only the today’s segment is shown (that is, 05AM-12PM). If the exception date is today, only the tomorrow segment is shown (that is, 12PM-05AM).

Note: Access Hours are not supported for multi-day activities. They are neither followed for the first segment nor inherited for any multi-day activity segment.

Interpreting Access Hours

The following rules are used to interpret a schedule:

- Empty schedule (or no schedule at all) and empty exception dates (or no exception dates at all) means no restriction, or 24x7 availability.
- Empty schedule (or no schedule at all) and some exception dates filled means 24x7 availability except exception dates, and not available on exception dates.
- Schedule includes all seven days (and may be some exception dates filled) means the availability is defined by the schedule for the given week day, and the asset is not available on exception dates, if any.
• Schedule includes some, but not all seven days (and may be some exception dates filled) means the availability is defined by the schedule for the given week day, if it is defined. The asset is not available on the week days for which no schedule is defined; also, the asset is not available on exception dates, if any.

Set an Access Schedule to an Activity

While Access Schedules are usually added to an activity during the activity creation process, you can manually set an Access Schedule to an activity.

1. Open the Activity details screen for the activity for which you want to add an Access Schedule.
2. Click the pencil next to the Access Schedule field.
   The Access Schedule editor opens.
3. Choose the days of the week for which you want to set the Access Schedule. Use the "+" and "-" icons to add and delete Access Schedule Intervals.
   You can set up to two Access Schedule Intervals per day of the week. If multiple days of the week have the same Access Schedule, you can set up the Access Schedule Intervals for all of them at once.
4. To add the days on which the asset is not accessible, click the "+" icon in the Exception Days section and then choose a date in the calendar. To delete an Exception Day, use the "-" icon.
   For Example: You can set the following Access Schedule:
   - Mon-Fri: 8AM-12PM, 13PM-17PM
   - Sat: 10AM-12PM
   - Exceptions: 2018-01-01, 2018-05-01
   This means that the asset is accessible from 8 AM till 12 PM and from 13 PM till 17 PM, Monday to Friday and from 10 AM till 12 PM on Saturday. It is closed on Sundays. The non-working days are January 1st and May 1st next year.
5. Click Apply.
   The Access Schedule is saved.

Add a Mass Activity

When you create an activity for one resource that you would like to use for other resources, you can create a mass activity. For example, if all the technicians are required to attend a training, you add a mass activity.

1. Add an activity to a resource as you normally would.
2. Complete the Activity Notes, Position in Route, Duration, SLA Start, SLA End, and Time Slot fields.
3. Click Mass activity.
   The Mass activity check box is displayed only for the activity types for which it is configured.
4. Click Add new.
   The resource tree displays.
5. Select the resources that you want to be part of this activity.
6. Click OK.
   The activity is assigned to all the selected resources.
Add a Repeating Activity

You can create activities that appear on a resource’s route repeatedly for a specified period of time. Examples of repeating activities include meetings and lunch breaks.

1. In the resource tree, select the resource that you want to assign the repeating activity to.
2. Click Actions.
3. Select Add Activity from the drop-down menu.
4. On the next screen, select the Activity Type and the Duration.
5. Select the Repeating activity check box.

6. In the Repeating activity section,
   a. Specify how frequently you want the activity to repeat in the Recurrence field.
   b. Depending on your selection in the Recurrence field, fill up the Days between occurrences or the Weeks between occurrences fields.
   c. Enter a start date for the activity in the From field.
   d. Optionally, enter an end date in the To field.
   e. If you have selected Repeat weekly, select the day of the week on which you want the activity to repeat.
      The days displayed here are based on the First day of the week setting in the General section of the Display Configuration screen.
7. Click OK.

Add a Pre-Work Activity

You can add a pre-work activity for work that you want to complete in advance of another activity.

1. In the resource tree, click on the resource that you want to assign pre-work to.
2. In the work area, click on the activity that requires pre-work.
   The Hints box is displayed.
3. Click Prework in the Hints box.
   The Start Prework dialog box displays.
4. Select the time required to complete the pre-work activity in the Duration field.
   The duration of the pre-work is the duration you have added here and not the one calculated automatically.
5. Click OK.
The pre-work activity is added to the route.
Duration for Suspended, Reopened, and Pre-Work Activities

You can set the duration for suspended, reopened, and pre-work activities manually. This helps while estimating the remaining duration—it shows the additional work that is needed to complete the activity.

The Administrator must add the **Duration** field for the **Suspend activity**, **Reopen activity**, and **Start prework**, context layout screens with a Read-Write or Mandatory visibility. When the user opens these screens, the application populates the **Duration** field with the activity’s initial value. Users can manually modify this value, which has the following impact:

- The new pending activity is populated with the value submitted on the **Suspend activity** screen.
- Prework is populated with the value submitted on the **Start prework** screen.
- The reopened activity is populated with the value submitted on the **Reopen activity** screen.

Add an Activity to a Shift

When you add an **activity** to a **shift**, the activity is added to the calendars of all of the resources that have that shift assigned to them.

1. Click **Configuration, Work Schedules, Shifts**.
   The **Shifts** list displays.
2. Click the **Activities** link in the row of the shift that you want to add the activity to.
3. Click **Add Activity**.
   The **Add Activity** screen displays. If this activity is an internal activity, the layout of the screen changes. If it is a customer-facing activity, the layout stays the same.
4. Complete the applicable fields.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Type</td>
<td>Select the <strong>activity type</strong> from the <strong>Activity Type</strong> drop-down list.</td>
</tr>
<tr>
<td>Name</td>
<td>Enter the customer’s name. Used for customer-facing activities only.</td>
</tr>
<tr>
<td>Work Order</td>
<td>Enter the work order number associated with this activity.</td>
</tr>
<tr>
<td>Duration</td>
<td>Enter the amount of time that the activity lasts.</td>
</tr>
<tr>
<td>Position in Route-Not Ordered</td>
<td>The activity is not ordered, and appears in the <strong>Not Ordered</strong> column in the Time view.</td>
</tr>
<tr>
<td>Position in Route-Ordered</td>
<td>The activity is displayed on the resource’s route. If you specify a time slot, the activity displays in that time slot. Otherwise, it displays as <strong>pending</strong> at the beginning of the route.</td>
</tr>
<tr>
<td>Time Slot</td>
<td>Select the period of time within which this activity can be started.</td>
</tr>
<tr>
<td>Activity Notes</td>
<td>Enter any notes associated with this activity.</td>
</tr>
<tr>
<td>Recurrence-Repeats-Daily</td>
<td>Apply to schedules such as every other day or every 3rd day. If you select this option, add the frequency of occurrence in the field <strong>Days between occurrences</strong>.</td>
</tr>
</tbody>
</table>
### Recurrence-Repeats-Everyday
Applies to every day schedules that repeat without exception and without any modification options.

### Recurrence-Repeats-Weekly
Apply calendars that have a regular weekly pattern. Select the days that apply to this shift using the check boxes for the individual days. Indicate the frequency of this pattern weekly by adding a value to the **Weeks between occurrences** field.

### Recurrence-Repeats-Yearly
Occurs every year from the selected date entered in the **From day** until the date entered in the **To day** field.

5. Click **OK**.

## Linking Activities

The concept of linking activities applies to a variety of situations in which jobs and resources must be linked and sequenced together over time.

The following examples illustrate the diversity of linking activities:

- When a technician is assigned an activity that takes more than a day to complete, how do you make sure that activity continues to be assigned to him or her until it has been completed?
- A group of workers may be assigned to a series of activities related in such a way that the first one must be completed before the second can be started, and so on. What’s the most efficient way to keep that big job moving efficiently?
- And what about a necessary break in a task that creates a corresponding gap in a technician’s schedule? What can you do to make sure your resources remain productive while “waiting for the paint to dry”?

When activities are related serially over time or when routing relationships cause a break in the schedule, linking activities can be used to manage the link and restore efficiency.

The first step in linking activities is to create link types that correspond to the four linking relationships represented graphically on the **New Link** template. The next is to use those link types to link actual activities for Routing.

### Linking activities automatically
Oracle Field Service Cloud can link two activities together based on the information you send to the application using APIs.

## About Activity Link Types

Activity link types identify the way that two or more activities can be linked together and specify the constraints, if any, that should be placed on assigning and scheduling resources.

Before you can link activities, you must create activity link types.

Activity link types are generic. You can reuse a link type to link various activities over time. In addition to the type of linkage (start-to-finish, etc.) consider more specific characteristics such as the interval between activities and any rules you want to make about assigning and scheduling those activities.

There are two types of activity links:

- Regular link type: This link type places the first activity in the schedule before the second activity.
• Reverse link type: This link type places the second activity in the schedule before the first activity.

The links that you create – both regular and reverse – will be available in the drop-down list that displays when you link activities.

The activity link type template shown below features four different linkages:

- Start-to-Start: Second activity starts after the first has been started.
- Finish-to-Start: Second activity starts after the first one has been finished
- Simultaneous: Both activities start at the same time.
- Related: The relationship between these two activities is not sequential.

Because each of these link types generates two different linking options — regular and reverse — your linkage "library" could begin with at least 8 different link types, further differentiated by the amount of time between activities and any assignment and scheduling constraints — such as same technician over two days, different technicians on the same day that you want to place on them.

Create an Activity Link Type

Before you can link activities, you must create activity link types. Activity link types define how the activities are linked for example, the minimum interval between activities, the constraints for scheduling activities, constraints for assigning activities, and so on.

1. Click Configuration > Link Templates.
   The Link Templates screen appears.
2. Click Add Link Template.
   The New Link Template screen displays.

3. Select the graphic at the top of the screen that represents the way that you want to link the two activities.

4. Enter the Minimal Interval of time between the two activities in minutes (min).

5. Enter the Maximal Interval of time between the two activities.
   For example, if the minimal interval is five minutes, the maximal might be ten or more minutes.

6. Enter any Assignment Constraints that you want to place on assignments.
   There are two options: Different resources requires that the linked activities be assigned to two different resources.
   Same resource requires that both activities be assigned to the same resource.

7. Enter any Scheduling Constraints that you want to place on the days for which the activities are scheduled.
   There are two options: Different Days requires the activities to be scheduled for two different days. Same day requires they be scheduled for the same day.

8. Enter a Name and a Label for this link type.
   The name is what is displayed in the Web interface. The label is used by external systems when they submit information through the API.

9. Check the Active box in the Status field to make this link type available for use.

10. Click Save.

Link Activities Manually

You can link activities to make sure that they occur in a certain order when the routing is run. Activities you might want to link include a trip to the depot to pick up a piece of non-standard inventory prior to an installation or a job that involves multiple workers performing related tasks in a certain sequence. You can automatically link activities using the Inbound API.

Link Types must be created before you can link activities.

To link activities manually:

1. Open the Resource Tree.
2. Select the resource that has the first activity assigned to it.
   The resource’s activities display.

3. Select the first activity that you want to link.
   The Hints box displays.

4. Click Details to view the activity details.
5. Click the Links tab at the bottom of the Activity details screen.
6. Click Add link.
Chapter 6

Working with Activities

The **Add link** window displays.

1. Select the type of link that you want to use from the drop-down list, that is, **Start after**.
2. Use the next field to search for the activity that you want to link to the first.
3. Click **Link**.

The new link displays.

4. If an error message displays, hover over the error icon to review the error messages and make changes as necessary.

   Error messages may relate to the maximum and minimum intervals required by the link type you have chosen or to other scheduling and assignment constraints. You may have to create a new link type.

### Cancel an Activity

You can only cancel pending activities.

1. In the resource tree, select the resource that you want to cancel the activity for.
2. In the list view, select the activity or activities that you want to cancel.
3. Click **Cancel** in the blue box above the list.
4. In the **Cancel Activity** box, complete all required fields and select a **Cancellation Reason** from the drop-down list.
The fields on this dialog vary based on the way the application is configured for your organization.

5. Click **OK**.

The activity is removed from the time view, but still appears in the list view with a small block of time.

### Changing Activity Status on Behalf of a Resource

This section includes the following topics:

- **Activate a queue or route**
- **Start an activity**
- **Add time to an activity**
- **Complete an activity**
- **Suspend an activity**
- **Assign not-done status to an activity**
Activate a Queue or Route

For the application to monitor delivery in real time and respond to updates, a resource must activate his or her queue, or route. In the event that the resource forgets to activate his or her queue on time, you can activate the queue and reset the actual time for the resource.

To re-set the queue activation time, the user type for the user performing the re-set must have this permission. You can only reset the queue activation time if the queue is not activated. To activate a queue or route:

1. Select the appropriate resource from the resource tree.
2. Click the gear icon and click **Activate Route**.
3. The **Activate route** dialog appears.
4. Change the time to the actual time that the resource started the queue.
5. Click **OK**.

Start an Activity

Typically, resources mark activities as started when they begin to perform the activities. As a dispatcher, you can start an activity on behalf of a resource if necessary.

⚠️ **CAUTION:** You must start activities on time in the application. Oracle Field Service Cloud relies on past activity data to project activity durations, travel times, and distances. If activities are not started on time, these projections are not accurate and routing is not optimized.

Prerequisites: You can start an activity only under the following circumstances:

- The route that the activity is assigned to is activated.
- All previous ordered activities are completed, suspended, marked not done, or cancelled.

A dispatcher can adjust the start time of an activity, but cannot set a start time that would begin before a prior activity’s end time. Resources cannot adjust start times. To start an activity:

1. In the resource tree, select the resource that you want to start the activity for.
2. Click **Time view**.
3. Click on the activity to view the hints box.
4. Click the **Start** link.
The **Start activity** dialog appears. The start time defaults to the current time.

5. If necessary, change the time.

6. Click **OK**.

Once the activity starts, it appears in green status in all views.

**Add Time to an Activity**

If the resource cannot complete the activity by the estimated end time, then they can add time to the activity through their mobile interface. If necessary, you can add time to the activity on behalf of the resource. You can add time only to an activity that is started.

1. Select the resource in the **Resource Tree**.
2. From **List** or **Time** tab, locate the activity in **Started** status that you want to add time to.
3. Click **Adjust time** in the Hint.

4. In the **Adjust time** dialog, enter the new estimated end time.
5. Click **OK**.

   The application automatically recalculates the activities that follow according to these changes.

**Complete an Activity**

Typically, resources mark activities as complete when they complete the actual activities. If necessary, you can mark the activity as complete on behalf of the resource.

1. In the resource tree, select the resource that you want to complete the activity for.
2. From the **Time** tab or **List** tab, select the **actions button** and then click **Complete**.
The **End activity** dialog appears. The fields on this dialog vary based on the way the application is configured for your organization.

3. At a minimum, complete the required fields (those with an asterisk *).
4. Click **OK**.

## Suspend an Activity

When resources must return to activities at a later time and they do not want to cancel the activity, they can suspend the activity. If necessary, you can suspend the activity on the resource’s behalf.

Suspending an activity captures the time that a resource has already spent working on it and creates a new, duplicate activity that can be started at any time throughout the day.

> **Note:** You can suspend only started or pending activities.

1. In the Resource Tree, select the resource that you want to suspend the activity for
2. On the Time tab, click on the activity that you want to suspend.
3. In the Hints box, click **Suspend**.
   
   The Suspend activity dialog is displayed:

   ![Suspend Activity Dialog]

4. Select the time required to complete the remaining part of the activity in the **Duration** field. Click **OK**.
   
   The duration of the pending activity is the duration you have added here and not the one calculated automatically. When you suspend a started activity, a duplicate of the original activity is created in a suspended status. If you suspend a pending activity, it is converted to a not-ordered pending activity. A duplicate of the activity is created only when you start working on it.

5. In the Work Area, the current portion of the activity closes. It displays as a suspended activity (scheduled, but not ordered) in the lower half of the screen.
Assign Not Done Status to an Activity

When resources discover that they cannot complete activities, they mark the activity as **not-done status**. If necessary, you can change the status for them. Unlike suspend, which creates a duplicate copy of the activity to be completed by the technician the same day, the not done status is considered to be a final status, like completed. For example: the customer was not home, or the customer asked to reschedule.

1. Select a resource from the resource tree.
2. From any view, click **Actions**.
   
   The **Close as Not Done** dialog box appears.
3. Select **Not Done** in the drop-down list.
4. Select a **Not Done Reason**.
5. Click **OK**.

Deactivate a Route or Queue

At the end of their shifts, resources must deactivate their routes. You can deactivate the route on behalf of the resource if necessary.

1. In the resource tree, select the resource that you want to deactivate the route for.
   
   The resource’s route displays.
2. Click **Deactivate Queue**.
   
   The **Deactivate queue** dialog appears.
3. Enter the necessary information and then click **OK**.
Group Operations

The Group Operations feature makes it easy to perform the same action on multiple activities simultaneously. For example, this feature could be used when a resource calls in after routing has run for the day. The activities for that day can be placed back into the bucket all at once to be routed to other resources.

Move a Group of Activities

When a group of activities is at risk, you can move it to avoid the service window being missed.

You must work in List view.

1. Select the resource or bucket from the Resource Tree.
2. Select multiple activities in the first column of the Work Area or select the Select All check box.
3. Click Move from the top of the Work Area.
4. To see a list of all resources and buckets, select the check box next to All.

The Move dialog appears, and the screen populates with resources and buckets available. The items to be moved will display in the selected resource’s/bucket’s route.
If moving the activities will cause either them or subsequent activities on the route to jeopardize their service window, the activities display in red. Such activities also have appropriate comments in the Comments column. If moving the activities does not cause any jeopardy, then the activities appear in green.

- If the desired resource or bucket is visible, select it.
- If not, then search for the resource or bucket from the Find box.

5. Once you are satisfied with the proposed changes, click OK to complete the move.

Change Activities in Groups

You can make changes to multiple activities at once.

The Group Change option must be enabled for your user type.

1. Open the List view.
2. Select a resource or bucket from the resource tree.
3. Select the items that you would like to change.
4. Click Change link from the top of the Work Area.

The Change group of activities dialog displays a list of parameters that you can edit.
5. Once you have confirmed your changes, click **OK**.

### Cancel Activities by Group or Team

If a customer has canceled a site visit, you can cancel the activities that was assigned to the team that was scheduled to visit the customer.

1. Select the items that you want to cancel.
   Ensure that all items can be cancelled. Only pending and started items can be cancelled.
2. Click **Cancel** from the top of the **Work Area**.
   The **Cancel group of activities** dialog appears.
3. Use the drop-down menu to select a **Cancellation Reason** and then add any pertinent notes.
   The following figure shows the **Cancel group of activities** dialog:

4. Click **OK** to complete the cancellation of the selected items.
   Cancelling a repeating activity or teamwork will only cancel it for the current day.
Multi-Day Activities

Multi-day activities are activities that can be carried over to the next day. They are normal activities that are split into segments and managed individually. In other words, a multi-day activity comprises a set of activities, each representing a single-day task with definite start and end times.

You create a multi-day activity based on the total duration of the activity, number of segments, and the duration for each segment. You must also identify the route or the sequence of the segments in the activity. Multi-day activities can be represented graphically and can be assigned to one or multiple resources. These activities also respond to events that occur as the activity progresses. Technicians receive segments of multi-day activities in their routes and can handle them as single-day activities. Multi-day activities are represented as separate bars on the Time view, can be assigned to buckets or technicians, and support time monitoring and status changes.

Multi-Day Activities and Their Segmentation

A multi-day activity comprises a set of activities, each representing a single-day task with definite start and end times. You can assign each single-day activity to a different resource. A single-day activity is also known as a segment. Further, you can start and complete a segment or the entire activity. Before you create a multi-day activity, you must create a multi-day activity type.

Multi-day activities progress through a similar lifecycle as single-day activities – they are created in the pending status, then can be started, canceled or deleted. Multi-day activities cannot be Suspended. A started multi-day activity can be completed or set to not done. A canceled, completed or not-done activity can be reopened if necessary. However, as opposed to single-day activities, actions with scheduled multi-day activities are performed at the level of their segments and may either affect only the current segment or involve the entire activity. For non-scheduled activities having no segments, there is the Cancel action which always affects the entire non-scheduled activity. If a segment of a multi-day activity is longer than four hours, its bar is shown with a break in the list view. Non-scheduled multi-day activities are displayed in the similar manner.

Note: Single day activities that are longer than four hours are also shown as a bar with a break.

In the following example, the actual length of a segment or activity bar is shorter than the duration of the segment or activity for better visual representation:

<table>
<thead>
<tr>
<th>MCCUNE, Kelli</th>
<th>Tuesday, May 19th, 2015</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Start</td>
<td>End</td>
</tr>
<tr>
<td></td>
<td>09:30 AM</td>
<td>12:20 PM</td>
</tr>
<tr>
<td></td>
<td>12:20 PM</td>
<td>12:20 PM</td>
</tr>
<tr>
<td></td>
<td>12:50 PM</td>
<td>05:00 PM</td>
</tr>
</tbody>
</table>

Multi-day activity segments can be distinguished from single-day activities on the screen displaying multiple routes. When the mouse hovers over a segment of a multi-day activity, all segments of the same activity are highlighted by diagonal lines, as shown in the following figure:
This helps to find all segments of the same multi-day activity quickly, especially when they are assigned to different resources.

Non-Scheduled Multi-Day Activities

Non-scheduled multi-day activities are the activities that do not have the performance date specified in a route.

A multi-day activity can be created in or moved to the non-scheduled pool of a bucket or a route. When you create a non-scheduled activity, the segments are not generated and only the total duration of the multi-day activity is displayed.

If a multi-day activity is moved from the scheduled to non-scheduled pool, all the segments are deleted and the activity is merged into a single entity with a definite duration.

Not-Ordered Multi-Day Activities

If the position of an activity is not defined in a route, it is referred to as a not-ordered activity.

If you enable Support of not-ordered, a multi-day activity is marked as not-ordered. A default segment is created on the first day of the activity even if the time duration is not specified. This default segment with minimal duration always remains even after modification so that you can monitor the not-ordered activity in the current route.

The duration of the not-ordered multi-day activity segment is a value in between Minimal duration of a single segment parameter and Maximal total duration of segments created for a particular day parameter. The actual duration of a segment can also be equal to the available time period in the route. This setup allows you to perform not-ordered multi-day activities in between other activities.

Other Specifications

This section includes the specifications for multi-day activities in areas such as property inheritance, activity search, travel time calculation, work zone and work skill support, inventory and required inventory support, capacity management and routing, and so on.

Property inheritance from a multi-day activity to its segments

In a pending multi-day activity all fields and custom properties are inherited by the segments from the multi-day activity with the exception of the Duration and Position in route fields which are determined for each segment. If a file property is added to a multi-day activity, the content of such property is not cloned to each segment. Instead, reference to the file property is
created for segments. If a new file is uploaded to a started segment, the new File ID will be used only for the segment for which it was created. All other segments will refer to the file uploaded to the entire activity, if any.

Activity search

The search is performed both in the activities and in their segments. Therefore, the search results may include the following:

- All existing segments of a scheduled multi-day activity. The activity itself is not returned.
- Non-scheduled multi-day activities.

There is no visual difference between multi-day activities and single-day activities in the list of search results.

Support of Work Zones, Work Skills, and preferred resources

If the Support of work zones, Support of work skills, and Support of preferred resources features are enabled for the multi-day activity type, they will be determined for all activities of such type. The work zone, work skills, and preferred resources are determined for the entire multi-day activity and retrieved for each segment on demand. The same work zone, the set of work skills, and the same preferred resources are applied to all segments.

Travel time calculation

For multi-day activities with the ‘Calculate travel’ option enabled travel time is calculated for all segments of a multi-day activity. The calculation logic and usage for statistical purposes is the same as for single-day activities.

Support of inventory and required inventory

Any inventory added to a multi-day activity is added for the entire activity. Each segment shows the same set of inventory. Any inventory action (install, deinstall, add, and so on) can only be performed on a specific segment. However, these operations will update the inventory list for the entire multi-day activity and, consequently, the inventory list shown for all other segments. Similarly, any required inventory is also assigned to the multi-day activity rather than its segments. The same required inventory is shown for all segments. All required inventory actions are performed for the multi-day activity and update the required inventory list for all segments. Note: Required inventory added to a multi-day activity sets no assignment restrictions. No alerts are shown when the resource’s inventory does not match the required inventory.

Capacity management and routing

Multi-day activities are not included in capacity and quota calculation. No capacity categories are calculated for multi-day activities and neither are they included in the Used values. However, segments of multi-day activities are added to the Other activities value, therefore, the capacity is still consumed. Also, they are included in the start-time statistics. Multi-day activities can be assigned manually or through Immediate Routing plans. The following rules apply for Quota Management:

- Multi-day activities are handled as "internal" activities.
- Multi-day activities cannot be booked with the "get_capacity" function. This function doesn’t calculate capacity categories for such activities.
- Multi-day activities are not included in the Used quota values on the Quota view. Instead, they are added to Other activities.

Activity links

If the Support of links feature has been enabled for the multi-day activity type, it can be linked with other activities. When a link to a multi-day activity is created, it is always made to the entire activity and never to a particular segment. Therefore, not all types of activity links can be used for multi-day activities. Links defining the sequence of activities make no sense with multi-day activities which can be split between different days and resources, when their separate segments are moved, rescheduled, canceled, and place in the non-scheduled pool. Multi-day activities can be linked to other activities on the basis of assignment constraints defining whether activities must be assigned to the same resource or to different resources. The link template for multi-day activities should be created using the Related link type. If another link type has been selected for
a multi-day activity, the error message, ‘Unable to create link of this type for multi-day activity.’ is displayed. If a multi-day activity is linked to another activity, an alert informing of the existing link appears as follows:

- Manage—in the Links tab of the Activity details screen
- Manage—in the Move confirmation dialog
- Mobility—on the Linked activities screen

The link data displayed for a particular segment relates to the entire multi-day activity. Adding or deleting a link for a segment actually adds or deletes a link for the entire activity.

Nearby activities search

The Nearby Activities function does not show either multi-day activities or their segments. Therefore, none of them can be found among the Nearby Activities search results.

Activity history

You can retrieve history from both, a non-scheduled multi-day activity and a segment of a scheduled multi-day activity. The history for a non-scheduled activity contains records for the activity itself. The history for a segment contains records for the current segment and for the entire activity. Some actions relate both, the multi-day activity and one of its segments. In this case, the history contains two records, the one for the entire activity marked with (multi-day activity) in the Action column.

Processing of multi-day activities by Daily Extract

Daily Extract stores multi-day activities and their segments together with activities of other types and extracts them into the Activity Fields file. Multi-day activities can be identified by their type—‘multiday_activity’ for the entire multi-day activity and ‘multiday_activity_segment’ for individual segments of a multi-day activity. If a multi-day is still in progress, each daily extraction contains the completed segments of the activity in the current day routes. As soon as the entire activity is completed, the extracted file contains the data of both, the individual segments and the entire multi-day activity.

Add a Multi-Day Activity

You can segment a complex task to create a multi-day activity. A multi-day activity can be created in a pool of a bucket or a route. You can also mark the activity as scheduled activity or non-scheduled activity once created.

Before you create a multi-day activity, ensure that you have created an activity type for multi-day activities.

1. Click Add Activity from a route or a bucket.
   The Add Activity page appears.

2. Enter the appropriate information in the following fields:
   a. Select the order of the activity from the Position in Route drop-down list.
      This option is available only when you create a multi-day activity in a route.
   b. Enter the customer name for the customer facing activities.
   c. Enter the Duration of the activity.
      The duration of a multi-day activity can be set in between 5 minutes and 999 hours.
   d. Enter the Work Order number associated with the activity.
   e. Select the type of work order from the W/O Type drop-down list.
   f. Enter the appropriate SLA start and SLA end dates.
   g. Optionally, you can also add the following information in the tabs:
3. Click **OK**.

The multi-day activity is created in the **pending status**.

4. To segment a multi-day activity:

   Depending on the requirement, you can create a single activity, mass activity, or a repeating activity type of a segment.
   
   a. Click **Actions** in the list view.
   
   b. Click **Add activity**.

   The **Add Activity** window opens.

   c. Select the **Activity Type** and enter the **Duration** and **Time to complete** for the segment.

   The segment added appears under the **Links** tab.

   In List view of the multi-day activity, a hint pops open for each segment denoting the status, duration, time, and details. You can also start, complete, cancel, reopen and view the directions of a segment.

### Constraints on Creating a Multi-Day Activity

When a multi-day activity is created, its segments are generated automatically. In generating the segments the functionality takes into account various constraints ensuring efficient tasks distribution and compliance with the customer agreements.

The following constraints are applied when a multi-day activity is created for a particular date (a scheduled activity):

- When a scheduled multi-day activity is assigned to a certain route, its segments are always generated starting from the date of the route. The first segment is always inserted on the day which the activity is scheduled, regardless of whether a corresponding free time interval is available in the route.

- The minimum duration of a single segment is always observed. If the route for a particular day has no time interval for a minimal single segment, no segment is created for that day, except the first segment of a scheduled multi-day activity which is always created on the selected date.

- If for the period of 31 days after the creation of the last assigned segment there is no available interval for assigning the remaining duration of the multi-day activity, the remaining duration is moved to the non-scheduled pool of the same resource making the activity partially scheduled.

- The service window constraint applies only to the first segment of a multi-day activity in the route.

- When creating a multi-day activity, the application should observe the service window constraint not only for the multi-day activity but also for other activities in the route. However, the less time that remains from ETA to the service window end, the higher is the probability of service window overdue. To reduce the overdue probability, the
application reserves 20% of the service window scheduling the activity only to the first 80% of the service window interval.

- In addition to the service window reservation, the **Service Window Warning** parameter defined on the **Display** screen also controls the service window compliance.

- If the **SLA start** corresponds to the day on which the multi-day activity is started, this value is used as the minimum ETA for the first created segment of such activity.

- No multi-day activity segments are created on non-working days. If a non-working calendar has been assigned to the resource after the multi-day activity creation, the segment assigned to that day is not moved automatically. An alert is generated indicating that a manual action is required. Such behavior is intended to prevent unnecessary segment changes or removals when the calendar is changed only temporarily.

- On-call calendar is ignored in multi-day activity segment creation.

- When a multi-day activity is non-scheduled, no segments are created. Segments will be created as soon as the activity is scheduled to a particular day.

### Multi-Day Activity Hint

Multi-day activities display the hint pop-up dialog, similar to single-day activities. Hint appears on both, the scheduled and the non-scheduled segments. The hint content is defined in the **Visible hint** columns for activities context layout. At the same time, hints of multi-day activities or their segments always contain the **Multi-day status** property regardless of the context layout settings.

The **Multi-day status** property has different formats depending on the activity status. The following are possible:

- Segments of scheduled, pending, complete, and not done activities: The hint contains the activity status, the total duration of the multi-day activity and the total number of segments into which the multi-day activity is split. The **Duration** field shows the duration of the selected segment.

- Canceled activities: The hint contains the activity status (canceled).

- Segments of started activities: The hint contains the activity status, the total duration of the multi-day activity, the activity progress in percent, the number of segments in a final status in the total number of segments. The **Duration** field shows the duration of the selected segment. The progress value is calculated as the combined duration of all finished segments divided by the total duration of the multi-day activity. In this case, the total number of segments does not include canceled and deleted segments.

- Non-scheduled activities: The hint contains the activity status (pending) and the total duration of the multi-day activity with the non-scheduled duration shown separately. As opposed to scheduled activity segments, the **Duration** field shows the duration of the entire multi-day activity. The hint also contains the number of segments created out of the non-scheduled Multi-day activity, which for fully non-scheduled activities is always ‘0’.

- Partially-scheduled activities and their segments: When a part of a non-scheduled multi-day activity has been moved to the route(s) generating one or more segments and the rest of the multi-day activity remains in the non-scheduled pool, the hints of both the scheduled segments and the non-scheduled part of the multi-day activity contain the activity status and the total duration of the multi-day activity with the non-scheduled duration shown separately. The hint also contains the number of segments created out of the non-scheduled multi-day activity. The **Duration** field of a scheduled segment shows the duration of such segment, while the **Duration** field of the non-scheduled part of the activity shows the total activity duration. Multi-day activity hints appear on Time, List, and Map views containing the same information.
Multi-Day Activity Status

A multi-day activity has its own status which in some cases may be different from the status of its segments. The status of a multi-day activity is determined by the activity progress and by the statuses of its segments.

The status of multi-day activities is as follows:

- A multi-day activity is created in the pending status and remains pending if all its segments are in the pending, cancelled or deleted status, or if it has no segments at all (non-scheduled multi-day activities).
- As soon as one of the segments is started, the status is changed to started.
- When one or more segments of a multi-day activity are in the completed or not done status, and there are no other started or pending segments, the activity has the completed status.
- A multi-day activity is in the completed or not done status when one or more segments of a multi-day activity are in the completed or not done status, respectively, and there are no other started or pending segments.
- A multi-day activity changes its status to cancelled when all its segments have been canceled or when the entire activity is canceled together with one of the segments. At the same time no segments must be in the completed or not done status.
- If the canceled activity is in a not-activated route, it can also be deleted. For an activity to be deleted, it must have no canceled segments or segments in activated routes.

Assigning Multi-Day Activity to a Bucket

You can assign an activity to the route of the bucket and reassign it to the resource route.

Multi-day activities can be created both in buckets and routes. Be aware of the following points:

- When a scheduled multi-day activity is created in a bucket, it is split into segments and mapped for capacity management processing.
- When the activity is created in a bucket, only one segment is created for each day. The duration of such segment is equal to the value of the Maximal total duration of segments created parameter of the activity.
- If a multi-day activity is created in a bucket that doesn’t have a working calendar, the first segment is created on the day the activity is created. The duration of such segment is equal to the value of the Maximal total duration of segments created for a particular day of the activity. No other segment is created and the rest of the multi-day activity is marked as non-scheduled.
- Segments are not created for the non-working days in the bucket.

View and Edit a Multi-Day Activity

You can see the overview of a multi-day activity in the Time, List, and Map views. To view or edit the details of the activity, you must go to the Activity details screen. When you access the activity details from a started segment or a segment in a final status, the Activity details screen shows data of the current segment only. When you update the details of a started segment only the current segment is updated.

1. Click Dispatch > Activities.
The list of activities is displayed for the selected bucket.

2. Click the bucket or resource for which you want to view the activities.

3. Hover over the multi-day activity for which you want to view the details. All segments of the activity are highlighted by diagonal lines. This highlighting helps you find the segments quickly, especially when they are assigned to different resources.

   The hint pop-up box appears.

4. Click Details.

   The **Activity details** screen appears, as shown in the following figure:

   ![Activity details screen](image)

5. Complete the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position in route</td>
<td>The position of the current segment. You can move the segment to a different position by selecting it from the drop-down menu.</td>
</tr>
<tr>
<td>Duration</td>
<td>The duration of the current segment. However, there is always the <strong>Time to complete</strong> field displaying the duration of the entire multi-day activity.</td>
</tr>
<tr>
<td>Note: <strong>Time to complete</strong></td>
<td>When you update the details of a segment, the details of the entire multi-day activity and other pending segments are updated. If a multi-day activity has any segments in the past, their details are not updated, though.</td>
</tr>
<tr>
<td>Time to complete</td>
<td>The remaining duration of a multi-day activity. This field is pre-filled with a value, which is calculated as follows:</td>
</tr>
<tr>
<td></td>
<td>- In <strong>Cancel activity</strong> and <strong>Activity details</strong>: multi-day activity duration – duration of finished segments</td>
</tr>
<tr>
<td></td>
<td>- In <strong>Complete activity</strong> and <strong>Close as Not Done</strong>: multi-day activity duration – duration of finished segments – (current time – start time)</td>
</tr>
<tr>
<td></td>
<td>- In <strong>Reopen multi-day activity</strong>: minimum duration of a single segment (according to the <strong>Activity type</strong> settings)</td>
</tr>
<tr>
<td></td>
<td>This field is always present in the details of a multi-day activity. It is added automatically and cannot be configured as part of the context layout. You see this field in the following screens as well:</td>
</tr>
<tr>
<td></td>
<td>- Activity details (both for a multi-day activity segment and for an entire activity)</td>
</tr>
<tr>
<td></td>
<td>- Cancel activity (in case of only one segment cancellation)</td>
</tr>
<tr>
<td></td>
<td>- Complete activity (in case of only one segment completion)</td>
</tr>
<tr>
<td></td>
<td>- Close as Not Done (in case of closing only one segment as Not Done)</td>
</tr>
<tr>
<td></td>
<td>- Reopen multi-day activity</td>
</tr>
</tbody>
</table>
The minimal allowed value of the **Time to complete** field is determined as the greater of the minimal duration of a single segment and the total duration of the existing started segments. The **Time to complete** value can be changed, if necessary. This is the only way to change the duration of the entire multi-day activity.

### The Multi-Day Activity Links Tab

The **Details** screen of a multi-day activity shows all its segments in one place. The **Links** tab contains a list of all the segments. The list is organized as a table showing the segment date, status, start time and duration. The list also contains the **Details** and **List view** links allowing you to quickly switch between the details of activity segments and find them on the **List View**.

The following image shows the **Links** tab:

![Multi-day activity segments table]

**Note:** For multi-day activities, the **Links** tab is always visible, regardless of the **Support of links** feature setting.

If several segments of a multi-day activity have been assigned to multiple resources, the table has the **Resource** column showing the name of the resource to which a particular segment is assigned, as shown in the following figure:

![Multi-day activity segments with resources]
If the activity or a part of it is non-scheduled, such activity has **Non-scheduled** in the **Date** column, as shown in the following figure:

![Multi-day activity segments table](image)

**Start a Multi-Day Activity**

You start a multi-day activity the same way you start a single-day activity. However, the multi-day activity starts when its first **pending status** segment is started. Further, you can start each segment separately.

1. Select the first pending segment of the multi-day activity.
2. Click **Start** in the list view.

   The **Start activity** screen opens indicating that the multi-day activity started and the status of the entire activity changes from pending to started.

   > **Note:** The **Multi-day Status** field always shows the status of the entire multi-day activity. When the first segment of a multi-day activity is started, the **Multi-day status** field of all remaining segments also displays **Started**, regardless of the actual status of the specific segment.

**Related Topics**

- Complete a Multi-Day Activity
- Cancel a Multi-Day Activity
- Reopen a Multi-Day Activity

**Complete and Not Done Activities**

You can mark an activity status as **completed** at the end of a task. Activities or segments that are started but cannot be completed due to various reasons can be marked as **not-done**.
The activity status is marked complete or not done based on the following constraints:

- You can complete or incomplete the entire activity or a single segment of the activity.
- When the time to complete and the last segment complete simultaneously, then the activity is marked Complete.
- If the segment completes before the time to complete, the remaining duration is moved to non-scheduled pool and the activity is marked as Started.
- The Multi-day activity is finished check box is selected by default for the last segment of the activity. This check box is disabled for all other segments.
- If you complete an entire activity with a segment, which is not the last segment, all the remaining segments are deleted and the activity is marked complete/not done. Further, all subsequent segments are deleted from the route(s).

**Related Topics**

- Complete a Multi-Day Activity

**Complete a Multi-Day Activity**

You can mark either a segment or an entire activity as complete. For a segment to be marked as complete, it must be in Started status. You can also mark an activity as complete, after you finish the last segment of the activity. You can also mark the incomplete activity as not done.

1. Open the activity in the List view.
2. Select the segment with Start status and click End from the hint.

   The End Segment window appears.

3. To complete the segment, follow these steps:
   - Enter the time that is remaining to complete the activity, in the Time to complete field.
     
     Initially, the Time to complete value is calculated according to the following formula: multi-day activity duration – duration of finished segments – (current time – start time). The time to complete can be adjusted simultaneously with completing a segment.

     **Note:** The Time to complete value is automatically calculated only when the form is opened and is not automatically adjusted with the adjustment of the segment completion time (the Ending at field). This prevents unnecessary automatic changes to other segments of a multi-day activity.

4. To complete the entire activity, follow these steps:
   - Select the Multi-day activity is finished check box.
     
     The Multi-day activity status drop-down list appears.

   - Select the final status for the activity from the Multi-day activity status drop-down menu.
     
     Complete: Denotes that the activity is complete.
     
     Not Done: Denotes that the activity is incomplete due to various reasons.

     The selected segment along with the entire activity is marked as complete/not done. The final status of a segment may be different from the final status of the entire multi-day activity. For example, you can close a segment as Not done while the activity will have the Completed status, and vice versa.

5. To set an activity as Not done, follow the steps described in Step 4.
Cancel a Multi-Day Activity

You can cancel a pending multi-day activity or a pending segment within the activity.

1. Select the segment or the activity that you wish to cancel in List view.
2. Click Cancel.
   
The Cancel Segment window opens for a segment and Cancel Activity window opens for a non-scheduled activity.
3. If you wish to cancel the entire activity with the current segment, then select the Multi-day activity is finished check box.
   
   If you select this check box, the Time to complete field is hidden. You can delete an activity that has all its segments in the Pending status in an inactive route, and has no canceled segments. In such case the Cancel Segment window displays the Multi-day activity status field to select the final status of the activity as deleted or canceled.
4. Select the Multi-day activity status from the drop-down list and click OK.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleted</td>
<td>Denotes that the activity is deleted.</td>
</tr>
<tr>
<td>Cancelled</td>
<td>Denotes that the activity is cancelled.</td>
</tr>
</tbody>
</table>

If the multi-day activity has at least one segment in start status, the remaining pending segments can only be canceled individually. You must first change the started segment to a final status. You also cannot cancel the entire activity. You can adjust the time to complete to cancel / delete the activity.

The activity is marked canceled/ deleted.

5. Adjust the Time to complete and click OK.

The selected segment is cancelled based on the following constraints:

- If you cancel the last segment of an activity and the time to complete expires simultaneously, then the activity is marked complete.
- When the segment is cancelled before the completion of the time to complete, the remaining duration is moved to non-scheduled pool and the activity is marked as canceled.
- The Multi-day activity is finished check box is marked by default for the last segment of the activity.
- If you want to cancel the entire activity along with the current segment, which is not the last segment of the activity, all the segments are merged to form a single entity and is marked as canceled.
- If you cancel only the current segment and not select the Multi-day activity is finished check box, the Cancel segment window shows the Time to complete field with the remaining duration of the activity.
- When a multi-day activity has a started segment, all subsequent pending segments can only be canceled individually. In this case there is no option in the Cancel activity window to cancel the entire activity. The selected segment can be canceled and, optionally, deleted, by changing the Time to complete field, if needed.

Follow the same procedure to cancel a non-scheduled multi-day activity. This activity is created as a single entity without splitting into segments, and can, therefore, be canceled only entirely.
Reopen a Multi-Day Activity

You can reopen a canceled segment or a cancelled activity or an activity in the final status. You cannot reopen a single segment in a final status. When you reopen a multi-day activity, the same activity is recreated. The reopened multi-day activity will have the same list of segments in its Links tab as well as other attributes.

1. Select the activity that you wish to reopen.
2. Click Reopen multi-day activity in the Activity details screen. Or, click Reopen multi-day activity from the hint. The Reopen activity window opens.
3. Enter Time to complete to define the duration of the reopened activity.
   The field is pre-filled with the value of the minimal duration of a single segment defined for the activity type. This duration can be different from the initial activity duration.
   The reopened activity is created with in the same route and allocated to the same resource associated with the initial activity. If the initial activity is not started, the reopened activity is created in the Pending status. If the activity is started, the reopened activity is created in the Started status.

Moving Multi-Day Activities

You can move and reschedule all the segments or a single segment of an activity to a specific date.

You can drag and drop an activity or a segment on a resource or route to move the activity. The duration on the hint allows you to estimate if the destination time slot is enough to move the activity or segment.

For the scheduled multi-day activities, the hint displays the duration of the particular segment and for the non-scheduled activities the duration of the entire activity is displayed.

You can use this feature to:

- reassign segments to another resource
- reschedule a segment to another day
- reassign multiple segments to another resource
- reschedule multiple segments to another day
- move multi-day activity or segment to/from buckets
- move multi-day activity or segment to the non-scheduled pool
- move multi-day activity from non-scheduled pool and create scheduled segments for a single day only or generate segments for the entire duration of the activity

You can drag-and-drop activities to perform all these actions, and some others, in the Activities View. The Move link is not supported for multi-day activities. When you drag an activity or a segment, a hint prompts you to drop the activity on a resource or route to which you want to move the activity. The hint also contains the activity or segment duration, so that the you can estimate if the destination time slot is enough to move the activity or segment. For scheduled multi-day activities, the hint shows the duration of the particular segment, while for non-scheduled activities it shows the duration of the entire activity.
Related Topics
- Move a Multi-Day Activity Between Resources or Dates
- Move a Multi-Day Activity Between Non-Scheduled Pool
- Move a Multi-Day Activity in a Bucket
- Reorder Multi-Day Activity Segments Within a Route

Move a Multi-Day Activity Between Resources or Dates
When a scheduled activity is moved to another resource or rescheduled to another date, all its pending segments are deleted and recreated in the new location. The recreated activity segments can have different destination route, date, and duration from the initial activity. In addition, number of segments may also differ.

1. Select the multi-day activity or segment that you wish to move.
2. Drag and drop the multi-day activity to another resource /date.
   The Move multi-day window opens.
3. Select one of the following move options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move only selected segment</td>
<td>Only the segment dragged is moved to the new destination.</td>
</tr>
<tr>
<td>Move all segments assigned to this resource for date</td>
<td>All the segments that are assigned to the resource on the same date are moved.</td>
</tr>
<tr>
<td>Move all segments starting from date</td>
<td>All the remaining segments of the multi-day activity on and after the selected date are moved.</td>
</tr>
</tbody>
</table>

When only one segment of the multi-day activity is assigned on a selected date, the move all segments assigned to this resource for date option is not available. When the selected segment is the last in the multi-day activity and is the only segment assigned on the selected date, only move only selected segment is available.

The segments are moved. If the move action violates any of the applied constraints, a warning message appears indicating the violation.

Move a Multi-Day Activity Between Non-Scheduled Pool
When you drag-and-drop a multi-day activity from a non-scheduled pool to the route of a resource, an activity with its segments is generated according to the route constraints. You can also move an activity from a route to the non-scheduled pool.

1. Select the activity that you wish to move.
2. Drag and drop the multi-day activity to another route.
   The Move multi-day window opens.
3. Select one of the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate all segments starting from date</td>
<td>Moves the entire activity and creates its segments from the current date. The resulting segments are placed into the resource’s route according to the constraints.</td>
</tr>
</tbody>
</table>
The sequence of segments in a multi-day activity is not important. If one or more segments are moved to different resources, the segments (activities) are performed independently.

The activity is moved.

### Move a Multi-Day Activity in a Bucket

If a multi-day activity is created in a bucket, it can be moved to the route of a resource based on the time available in the route. If the destination route has no available time intervals, one segment of the minimal duration set for the activity type is still created.

1. Select the multi-day activity that you want to move.
2. Drag and drop the multi-day activity to another route.

   The **Move multi-day** window opens.
3. Select one of the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move all segments starting from date</td>
<td>All the segments of the selected multi-day activity are moved to the selected route</td>
</tr>
</tbody>
</table>
| Create segments only for date              |  - Segments are created only for the current date. The remaining multi-day activity is left in the bucket.  
  - A segment with minimal duration is inserted if the destination route does not have available time interval for that day.  
  - One or more feasible segments are inserted if the time is available and the segments with higher duration are removed from the bucket.  
  - The remaining duration of the multi-day activity is redistributed in the bucket, creating new segments if necessary. For example, if a seven-hour segment is moved from a bucket to a resource and the resource’s route only has time for one 1-hour segment and one 2-hour segment, the remaining four hours of the activity will be added to the last segment in the bucket or created as a new segment. No multi-day activity segments remain in the bucket for the current date. |

### Reorder Multi-Day Activity Segments Within a Route

A segment of a multi-day activity can be moved to a different place in the same route.

1. Select the activity that you wish to move.
2. Drag and drop the multi-day activity to another route.

   The **Move multi-day** window opens.
3. Select one of the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move only selected segment</td>
<td>The selected segment is moved to a different position in the route.</td>
</tr>
<tr>
<td>Recreate all segments in this route</td>
<td>Segments are reordered and the duration and the number of segments are recalculated in the route.</td>
</tr>
</tbody>
</table>
If you select **Recreate all segments in this route**, the segments are automatically calculated and adjusted as per the constraints.

The segments are reordered in the route.

**Manage Group Actions**

When the **Activities** screen is set to the **List** View, you can select the segments of scheduled multi-day activities for group actions together with other activities in the route. In this case only **Change** and **Cancel** actions are available. When you select only multi-day activity segments, the **Move** action is not shown.

1. Open the multi-day activity in the **List** view and select the activities you want to move.

   If you select other activities with multi-day activity segments, the **Move** link is shown, but the move action is applicable only to the other activities. Further, the count of activities denotes the number of other activities.

   The hint appears denoting the number of segments available to change and cancel and the other activities to move.

2. Select the appropriate option:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>When you apply this option to one or more pending segments, the details of the entire multi-day activity are updated. If you change the segment with start status, the updates are visible only to the selected segment. If you change a pending segment, the entire activity is updated.</td>
</tr>
<tr>
<td>Cancel</td>
<td>You can cancel only the pending segment and not the entire activity. You also cannot update the time to complete the segment when you cancel the segments. When you cancel a group of activities, the route is not recalculated until all activities selected for the operation are cancelled. This reduces the time required for the operation and increases the system performance.</td>
</tr>
</tbody>
</table>

The selected segments are changed / cancelled.

**Adjust Activity and Segment Duration**

You can adjust the duration of activities and the individual segments that comprise them. The duration of the complete task is set up while creating a multi-day activity. You must adjust the **Time to complete** value to adjust the activity and segment durations.

When you first create a scheduled multi-day activity, it is automatically split into segments. The duration of each segment is calculated according to the constraints and the actual time available in the route of the resource. You can adjust the activity and segment duration based on these constraints, however, the purpose, procedure and results of such adjustments may be different.

**Related Topics**

- Adjust Activity Duration
- Adjust Segment Duration
Adjust Activity Duration

The duration of a scheduled multi-day activity is the sum of durations of all its segments. You can adjust the time to complete the activity to manage its duration.

1. Select the scheduled activity and open the Activity Details page from a route or a bucket.
   The Time to complete value is the total duration of the multi-day activity minus the duration of the already finished segments.

   The Duration and Time to Complete fields appear.

2. Adjust the Time to complete under the following conditions:

<table>
<thead>
<tr>
<th>Option</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancel a multi-day activity segment</td>
<td>If only one segment of a multi-day activity is canceled, the total activity duration can be changed simultaneously.</td>
</tr>
<tr>
<td>Complete a multi-day activity segment</td>
<td>If only one segment of a multi-day activity is canceled, the total activity duration can be changed simultaneously.</td>
</tr>
<tr>
<td>Set a multi-day activity segment 'not done'</td>
<td>If only one segment of a multi-day activity is set not-done, the total activity duration can be changed simultaneously.</td>
</tr>
<tr>
<td>Reopen a multi-day activity</td>
<td>If a multi-day activity in a final status is reopened, its duration can be changed at the same time.</td>
</tr>
</tbody>
</table>

The activity duration is changed.

*Note:* If you change the Time to complete value, the remaining pending segments are recalculated; the number of segments and their duration may be changed.

Adjust Segment Duration

Although activity segments are initially generated automatically, you can change their parameters manually. Such manual changes are preserved during further automatic recalculations. Also, you change a segment manually in a route that contains other segments of the same multi-day activity, such other segments will also be protected against automatic recalculations.

1. Select the segment started in an activity and click the Adjust Time link.
   The Duration and Time to Complete fields appear.

2. Adjust the Time to complete value under the following conditions:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start a segment</td>
<td>If the route contains pending segments of the same multi-day activity, they are not adjusted automatically with the time adjusted to the started segment. This action causes recalculation of the activity segments in the routes of next days. The routes may be adjusted so that the total duration of the multi-day activity is preserved. If all remaining segments of the multi-day activity are located in today’s route, and the started segment adjustment causes their total duration to exceed the total duration of the activity, you must increase the duration of the activity accordingly.</td>
</tr>
<tr>
<td>Cancel a segment</td>
<td>If one of the segments of a multi-day activity is canceled, no other segment in the same route is affected. The total duration of the multi-day activity (the Time to complete) can be changed, though.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mark the segment as cancel/not done</td>
<td>You can adjust the duration of a specific canceled/not done segment. The adjusted duration of a segment does not modify other segment duration.</td>
</tr>
<tr>
<td>Reorder segment within a route</td>
<td>You can adjust the duration of the reordered segment. No other activities and/or segments in the same route are affected.</td>
</tr>
</tbody>
</table>
| External events                 | The following external events cause recalculation of all segments of the existing activities of such type:  
|                                 |   - Adding an activity to the route                                           |
|                                 |   - Canceling an activity in the route                                        |
|                                 |   - Starting and completing an activity before the multi-day activity segment in the route |
|                                 |   - Changing the time slot, duration, or other parameters affecting the ETA  |
|                                 |   - Calendar changes such as working and non-working hours, shifts, and so on |

The duration is adjusted according to the new settings and, consequently, may change the total number of segments. However, any changes made to the segments manually are preserved even if the activity type parameters change.

The segment duration is adjusted. If you change the basic parameters of the activity type such as the **Minimal duration of a single segment** and **Maximal total duration of segments created for a particular day**, the segments of the existing activities of such type are recalculated. The duration of such activities is adjusted according to the new settings, and this in turn may change the total number of segments. However, any changes made to the segments manually are preserved even if the activity type parameters change.

**Teamwork**

Teamwork is a feature that allows a resource or group of resources to assist each other either on a specific job or on an ongoing basis.

There are two roles to be aware of when setting up a teamwork situation:

- **team leader** – This is the resource who is being assisted.
- **assistant** – The resource who is assisting.

The team leader and assistant(s) are visible in the **resource tree**. The assistant is shown with an arrow pointing to the team leader. In the figure below, Billy Holm is assisting Kathleen Disney:

```
| DISNEY, Kathleen ← HOLM, Billy (2/4) |
| HOLM, Billy → DISNEY, Kathleen (4/5) |
| ISENBERG, Mamie (0/0)                  |
```

In the assistant’s work order queue, time will be reserved and marked as assisting (the team leader). The arrow points to the person who is in need of assistance.
Teamwork can be assigned in multiple ways:

- Use the Assign to Team link in the Actions menu.
- Use the Assign to team link in the hints box.
- Drag and drop into the resource tree.

Teamwork functions are very similar to regular activities. The team leader does not have to do anything different that they would normally do since it is the job(s) on the team leader’s route in which the resources are assisting. The following rules apply for teamwork:

- Both the team leader and individual resources can start and complete teamwork on their mobile device. If any resources cannot do this, the team leader can do it for them.
- The assistant can open a teamwork activity and see the route of the team leader in Oracle Field Service Mobility Cloud Service on the day of the teamwork.
- The assistant can reschedule a scheduled regular activity assigned to the team leader within the day(s) of teamwork, but can’t reschedule it to other day(s) when there is no teamwork.
- The assistant can’t reschedule a scheduled regular activity assigned to the team leader to a non-scheduled pool.
- If the assistant tries to perform actions that are not permitted with a scheduled regular activity assigned to the team leader, the message, “You are not authorized to move the activity” appears.

Use the Assign to Team Function

To use the Assign Team function using the Actions menu:

1. Select the Resource who will be the assistant from the Resource Tree.
2. Click Assign to Team.

   The Assign (assists) dialog box appears.

3. Select the pencil icon to display the Resource Tree.
4. Choose one.
   - Use desired filters if necessary.
   - Type the resource name or ID in the search field.

5. Select your desired resource.

   Descriptions of the fields in the **Assign resource to team** dialog box is listed below:
   - **Assists to**: Select the pencil to search for your desired resource. Start typing the name of the resource in the search field that the selected resource will be assisting (the Team Leader), the application will search and bring up resource options as you are typing. Or you can click the name of the resource in the resource tree and it will fill in the **Assists to** field.
   - **Position in Route**: Select the position this activity will fall in the route. You can select beginning of route, in between other scheduled activities; end of route, or as a not ordered activity.
Duration: Enter the length of time this teamwork assignment will last by using the drop down menus for hours and minutes. The initial duration is based on the assistant’s calendar for that day, without consideration for what other activities may already be on the route (that is, it’s maximum amount of whole hours for the shift). This time is rounded up to the equivalent of whole hours. The duration can be adjusted as needed.

Time Slot: Time Slot refers to a time window that the teamwork should begin within. If a time slot is configured, the duration begins within that window, unless a prior activity on the route pushes the teamwork to start past the defined window. The default is all day, but you can change to reflect a specific time slot. Click the Time Slot check box to select the time slot you want this activity to be performed.

Activity type: Select the teamwork Activity Type from the drop down list.

Repeating Activity: If this is repeating Teamwork, select the box next to Repeating activity to open repeat options. You can indicate if this Teamwork should repeat daily or weekly and which days/weeks on which it should repeat. The days and duration of repeating teamwork is based on when the activities were created. Changes made to a team leader’s calendar or shift do not update the assistant’s repeating teamwork activities.

6. Once you have completed all required information, click OK or Close to Cancel.

The Assists to field populates.

Teamwork appears in the Assistant’s work queue, and the Resource Tree indicates that the Team Leader is being assisted.

Assign Teamwork Using the Drag-and-Drop Function

You can assign teamwork using multiple ways and drag and drop is one of the ways. Be aware that there are two roles involved in teamwork—Team Leader and Assistant.
The second way to assign Teamwork is to drag and drop one Resource to another.

1. In the **Resource Tree**, select the Resource who will be the assistant.
2. Drag the **Assistant** to the **Resource** who will be the **Team Leader**.
   
   When dragging over names in the Resource Tree, hints may appear to indicate whether or not the selected Resource can participate in Teamwork.

3. Once the **Team Leader** is selected (visible by a green box appearing around the Resource’s name) drop the **Assistant** onto the **Team Leader**.

   The Teamwork assignment box appears.
7 Working Offline

Synchronization and Its Conflicts

When you do not have Internet access while using Mobility Cloud Service, you still can manage your route and continue to perform many of your activity-related tasks. When the Internet connection is restored, your data is synchronized with Oracle Field Service Cloud.

Mobility Cloud Service checks for the connection either periodically or when you perform some action. When your Internet connection is restored, Mobility Cloud Service sends data about all the performed actions to Oracle Field Service Cloud and updates the data in the browser. All the actions performed offline are transferred in their chronological order, and the changes you made in the offline mode are merged with the changes in the application. This way, data in your mobile device browser is synchronized with the data in Oracle Field Service Cloud.

Synchronization conflicts

Offline functionality constraints may cause some conflicts during the synchronization. Conflict occurs if the changes you have made in the offline mode contradict the relevant changes made in Oracle Field Service Cloud in the online mode (automatically or manually). Some examples of conflicts are as follows:

- You deactivated the route while offline, while a new activity was added to the route.
- You created an activity while offline, while the your route was deactivated.
- You started and completed an activity in the offline mode, while this activity was moved to another user or rescheduled.
- You completed the same activity in the offline mode and set to not done in Oracle Field Service Cloud.

Resolve a Conflict

If a synchronization conflict occurs, you cannot synchronize some changes. In addition, some actions performed in the offline mode can be rejected. In this case, the error 'Internal error. Please review your route.' message is displayed in Mobility Cloud Service. You can view the details of the conflict and resolve it only through Oracle Field Service Core Manage Cloud Service. You can track synchronization conflicts in the activity history in both, Oracle Field Service Core Manage Cloud Service and Mobility Cloud Service. Look for the label, sync error.

1. Log in to the Oracle Field Service Core Manage Cloud Service application.
2. Click **Tools > Offline Synchronization**.

The Offline Synchronization screen is displayed. If there are no conflicts, the message, No conflicts found is displayed. If there are any conflicts, the conflicts are displayed in a table. The following figure shows an action that was rejected while synchronizing; it also shows the reason for rejection:
3. Review the information in the conflict data table.

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>The icon for the entity in which conflict has occurred:</td>
</tr>
<tr>
<td></td>
<td>○ Route</td>
</tr>
<tr>
<td></td>
<td>○ Activity</td>
</tr>
<tr>
<td></td>
<td>○ Inventory</td>
</tr>
<tr>
<td></td>
<td>○ Service request</td>
</tr>
<tr>
<td>Identifier</td>
<td>The activity identifier in which conflict has occurred.</td>
</tr>
<tr>
<td>Rejected action</td>
<td>The failed action.</td>
</tr>
<tr>
<td>Field Value</td>
<td>The list of fields with corresponding values in which conflict has occurred.</td>
</tr>
<tr>
<td>Time</td>
<td>The time at which the operation was rejected.</td>
</tr>
<tr>
<td>User</td>
<td>The user that performed the activity.</td>
</tr>
<tr>
<td>Reason</td>
<td>The reason for which conflict has occurred.</td>
</tr>
</tbody>
</table>

4. [Optional] To view the conflicts that have occurred on a specific date, use the calendar and pick the date.
5. [Optional] To filter conflicts, use the View drop-down menu and specify the filter.
6. Resolve the conflict manually by adding the appropriate details either in Oracle Field Service Cloud or in your external application such as CRM, Billing, or Provisioning.
7. After the conflict is resolved, select the check box in the first column and click Mark resolved.
Managing Inventory

The term inventory describes equipment that is used – or in the language of inventory – consumed by activities. Inventory items can be located at the customer’s home or business or carried in a technician’s truck. Modems, faceplates, wire, cable and electrical tape are all examples of inventory.

Inventory includes both serialized and non-serialized items. Serialized inventory consists of individual pieces with serial numbers that identify both the type of equipment and the manufacturer/distributor.

Non-serialized inventory, such as faceplates, wire and electrical type do not have serial numbers. This type of inventory is generic. One manufacturer’s supply can be exchanged for another based on a model number.

Non-serialized inventory is often accounted for in bulk by units of measure, such as feet, pounds, dozen, etc. These items are usually carried in the technician’s truck, although the amounts required for individual activities are recorded along with serialized inventory on the Activities Detail screen and on the Inventories List in the technician’s mobility device.

The following figure shows the Add inventory type screen:
Add an Inventory Type

You can create `serializedInventory` and `nonSerializedInventory` types.

1. Click **Configuration**.
2. Select **Inventory Types** from the **Resources, Activities and Inventories** section of the menu.
3. Select **Add New**.
   The application displays the **Add inventory type** window.
4. Complete the fields.

<table>
<thead>
<tr>
<th>Field name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>Enter a unique identifier for this inventory type.</td>
</tr>
<tr>
<td>Active</td>
<td>Check this box to make the inventory type available in drop-down menus.</td>
</tr>
<tr>
<td>Non Serialized</td>
<td>Check this box if the inventory type is non-serialized.</td>
</tr>
<tr>
<td>Supports required inventory</td>
<td>Check this box to make the inventory type required for selected activities.</td>
</tr>
<tr>
<td>Model Property</td>
<td>If desired, select additional characteristics for this inventory type from the drop-down menu.</td>
</tr>
<tr>
<td>Name</td>
<td>Enter a name for this inventory type in each appropriate language field.</td>
</tr>
<tr>
<td>Unit of measurement</td>
<td>If this inventory type is non-serialized, enter a unit of measure. Use a language and a unit of measure appropriate for the country in which this inventory type will be used.</td>
</tr>
</tbody>
</table>

**Note:** In Oracle Field Service Mobility Cloud Service, users can upload images using the `File inventory capture image` property. This capability is not available in Oracle Field Service Core Manage Cloud Service, as it is read-only. If the property is defined in Oracle Field Service Mobility Cloud Service, Oracle Field Service Core Manage Cloud Service users can see the image. If the property is not defined in Oracle Field Service Mobility Cloud Service, the field is not displayed in Oracle Field Service Core Manage Cloud Service.

5. Click **Save**.

Working with Required Inventory

You can list both, serialized and non-serialized inventory as Required for a particular activity on the **Activity Details** screen in Manage and on the **Inventories List** in Mobility.

The following figure shows the **Required Inventory** tab on the **Activity details** screen:
The application monitors the required inventory that resources carry in their trucks against the quantities required for the day’s activities and warns them if they have run out of an item needed to complete their route.

The following figure shows the warning that a required inventory is missing with a resource:

---

**Introduction to the Parts Catalog**

Mobile personnel use the Parts Catalog to remotely access and search their company’s spare parts inventory when working on maintenance and repair jobs.

While technicians assigned to installation jobs usually know fairly well which inventory they are going to install and load on their trucks accordingly, they can determine the parts necessary for replacement only when at the customer’s site after tests and diagnostics. The Parts Catalog enables the technician to look up the spare part required for replacement, discuss the replacement terms (price, period, etc.) with the customer, place an order for the spare part, find an alternative if the customer does not accept the initial offer, and issue an invoice.

The Parts Catalog updates automatically every 30 minutes after the application is launched, and supports both online and offline operation.

**Restrictions and Permissions for Parts Catalog**

A resource must have the permission to use the Parts Catalog.

The permission enables or disables access to the Parts Catalog functionality in the Manage and Mobility applications. Select the Parts Catalog check box in the General tab of the User Types screen for the required user type.

With permission to use the Parts Catalog, the resource can access only catalogs in the language that was set for that resource in the Manage or Mobility applications.
Searching the Parts Catalog

Parts Catalog is one of the search categories in the **Search preferences** window.

The search key that you enter must contain a minimum of 3 symbols. Leading and trailing spaces are not included in the search key. The key is then matched against all searchable text fields defined in the Parts Catalog.

Search results are organized in a list containing the Parts Catalog item models and other previously defined properties.
The Parts Catalog displays a list of item models, for example inventories that match the searched keyword. If the results list is longer than the window length, the window contains the **Show more results link** that will display 10 more search results. Scroll the search results using the vertical scroll bar. Click any search result item to display the details of that item.

Click one of the item models. The Parts Catalog displays the details of the selected item model.

The image displays the Parts Catalog window.
Inventory Scenarios

Manage users have the ability to perform inventory transactions on behalf of a technician, if the user type permissions are enabled.

Inventory actions are performed on the **Inventory** tab under activity details.

*Note:* Some inventory actions (that is, install, deinstall, exchange) only appear when the activity is in a Started status.
Common inventory actions are listed in this section. The actual configuration may differ based on the way the application is implemented.

**Install Inventory**

The install inventory action provides the ability to track equipment or inventory that is moved from the technician inventory pool to the customer inventory pool. Typically, technicians install new equipment as part of the activity completion process and the **Install** action tracks the inventory consumed during the activity.

1. Click the **Install** link for the equipment in the technician pool.
   The Install inventory dialog appears, as shown in the following figure:

   ![Install inventory dialog](image)

   2. Click **OK**.
   3. Optionally, click **Deinstall**.
      This allows the ability to undo an install if, for example, a device was installed in error.

**Deinstall Inventory**

Use the **Deinstall** action to track equipment or inventory removed from the customer pool. For example, if a technician removes an existing cable box at the customer premise because the service is cancelled, the **Deinstall** action tracks the removal of the equipment.

1. Click the **Deinstall** link for the equipment in the customer pool.
   The Deinstall inventory dialog appears, as shown in the following figure:

   ![Deinstall inventory dialog](image)

   2. Click **OK**.
   Equipment now shows as **Deinstalled**, as shown in the following figure:
Exchange Inventory

The exchange action allows a technician to replace equipment on the customer’s premises with a piece of equipment from the technician inventory pool.

A common example of an inventory exchange is a DVR set top box is being upgraded to a new model. The tech initiates an exchange action, which removes the customer premise equipment from the customer pool and installs the upgraded box from his technician inventory pool.

1. Click on the **Exchange** action link.

   A pop-up appears, allowing user to select another serialized equipment to exchange it with from the technician inventory pool, as shown in the following figure:

   ![Inventory exchange](image)

2. Click **OK**.

   Once exchanged, the original equipment in customer pool shows as **Deinstalled** and the newly swapped device is now shown as **installed**, as shown in the following figure.

![Inventory exchange](image)
Change Inventory Properties

You can change the inventory properties on an existing customer pool inventory item.

1. Open the Activity details screen for the activity that has the inventory to be modified.
2. Navigate to the Inventory tab and click the Edit link.
   The Edit inventory dialog appears:

   ![Edit inventory dialog]

3. Modify the appropriate properties.
4. Click OK to save changes.

Delete Inventory

Use the Delete action to delete customer pool inventory line items.

> **Note:** Inventory items can only be deleted when the activity is in Pending status. When the activity is started, the delete option is not available.

1. Click the Delete link in the inventory grid, as shown in the following figure:
A confirmation message appears.

2. Select **OK**.
   
The inventory item is removed from the customer pool.

---

**Send a Hit**

Some customers configure a **Send Hit** request option to allow for the provisioning of equipment and services (that is, initialize device or refresh services). It allows the technician to send a message, for example, to the external system and pass certain information to allow for the provisioning of that device. Send hit is usually configured as a **send request** or a **manual message** in Oracle Field Service Cloud.

1. Click **Send Hit**.

   ![Send击界面](image)

2. Select the **Hit Type**.
3. Click **Send**.

   The manual message will be triggered and sent as appropriate.
Monitoring

Monitoring the Field

You can get a clear view of what is happening in the field in real time.

With one glance, you can tell who is currently working on which activity, whether resources have the right amount of work, and whether activities are in jeopardy of losing their service window. You get the information you need to address before they become problems.

Monitoring First Thing in the Morning

At the beginning of the day, dispatchers and supervisors will want to verify that the resources’ routes have been activated on time, the routes are efficient, and manual routing of new activities has been performed.

Perform the following tasks:

- Check for route activation
- Identify available capacity

Check for Route Activation

At the beginning of the day, dispatchers and supervisors will want to verify that the resources’ routes have been activated on time, the routes are efficient, and manual routing of new activities has been performed. At the start of the shift, you can check the resource tree to verify that all of the resources have activated their routes.

1. In the resource tree, expand the bucket or buckets to see all of your resources.
2. Look for orange arrows at the beginning of the routes.
   The start route indicator should be visible at the resource’s scheduled start time, as shown in the following figure:

```
<table>
<thead>
<tr>
<th>Resource</th>
<th>Route Start</th>
<th>Route End</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIANCHI, Daniel</td>
<td>005</td>
<td>005</td>
</tr>
<tr>
<td>CHILDS, Eugene</td>
<td>002A</td>
<td>002A</td>
</tr>
<tr>
<td>CROWELL, Shawn</td>
<td>006</td>
<td>006</td>
</tr>
<tr>
<td>FINLEY, Leah</td>
<td>003</td>
<td>004</td>
</tr>
<tr>
<td>HAMEL, Henry</td>
<td>007</td>
<td>001</td>
</tr>
<tr>
<td>KINBRELL, Russell</td>
<td>003</td>
<td>001</td>
</tr>
<tr>
<td>NUGENT, Temara</td>
<td>001</td>
<td>001</td>
</tr>
<tr>
<td>ROTH, Rita</td>
<td>004</td>
<td>006</td>
</tr>
<tr>
<td>VEAL, Mildred</td>
<td>002</td>
<td>008</td>
</tr>
</tbody>
</table>
```

3. Use the resource tree search filters to narrow the list to only the resources that have not activated their routes. Investigate the resources that do not have orange arrows at the starts of their routes.
4. For routes that should be active, contact the resources and ask them to activate their routes. Alternatively, you can activate the route on the resource’s behalf.

**Identify Available Capacity**

To make schedules more efficient, you can identify resources with available capacity on their schedules and then fill the *idle time* with activities.

1. In the **Resource Tree**, expand the bucket or buckets to see all of your resources.
2. Look for icons that are both white and blue.

   Icons that are completely blue indicate full loads. Icons that have some white space indicate less than full loads.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>1/3 – resource has a low or no loading of activities.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>1/2 to 2/3 – resource has an average load of activities.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Solid – resource has a load equal to or above the full load threshold and cannot take any additional work.</td>
</tr>
</tbody>
</table>

**Monitoring During the Day**

When monitoring routes, the most important thing to pay attention to is the vertical red line that travels across the screen.

The red line represents the current time of day; the time is displayed at the top end of the line. Items to the left of the red line are in the past; items to the right of the red line are in the future. Consider the actions mentioned later to identify activities that might be in jeopardy of missing the service window. Look for blocks under the red line that are not dark green started activities or aqua green driving time. If the activity is any other color, there is a chance that the resource will not arrive in time to meet the service window. The following figure shows the Time view screen:
Actions to consider:

- Contact the resource to identify why the activity is not on schedule.
- If the resource forgot to start the activity, ask the resource to start the activity. If necessary, you can start the activity on behalf of the resource.
- If more time is necessary, ask the resource to add time to the activity. If necessary, you can add time to the activity on behalf of the resource.
- If necessary, move the activity to another resource.
- If the resource starts the activity late or if adding time is necessary, review the route to look for future activities that may be affected.
- If Oracle Field Service Cloud Smart Location is available, turn on **Show Resource Trace** and monitor employee compliance.

**Related Topics**

- Add Time to an Activity
- Start an Activity
- Move an Activity in the Time View
- Identify Jeopardy Situations

**Identifying an Add-Time Situation**

When an activity takes longer than projected, the resource must add time to the activity.

Look for green **Started** activities that do not extend to the red line (current time), which indicates the end of day or shift, as shown in the following figure:
Actions to consider:

- Contact the resource to find out if a delay is necessary. If so, ask the resource to add time to the activity. If necessary, you can add time on behalf of the resource.
- If adding time to an activity is necessary, review the route to look for future activities that may be affected.

Related Topics

- Add Time to an Activity
- Identify Jeopardy Situations

Identifying a Late-Start Activity

There are several reasons why the application may show an activity as starting late, and several options for resolving it.

If a yellow or red Pending order appears underneath the timeline, and the order before it is Completed (blue), one of the following situations is likely:

- The resource is still driving to the activity, but the drive is taking longer than predicted.
- The resource is at the activity, but has forgotten to start the activity in the application.
- The resource has started an activity, but forgotten to record the activity in the application.
Actions to consider:

- Contact the resource to determine why the activity is not started. If the resource forgot to start the activity, ask the resource to start the activity. If necessary, you can start the activity on behalf of the resource.
- If more time is necessary, ask the resource to add time to the activity. If necessary, you can add time to the activity on behalf of the resource.
- Move the activity to another resource.
- If the resource starts the activity late or if adding time is necessary, review the route to look for future activities that may be affected.

Related Topics

- Add Time to an Activity
- Start an Activity
- Move an Activity in the Time View
- Identify Jeopardy Situations

Identify Jeopardy Situations

A jeopardy situation means that the activity will miss its promised service window. Jeopardy situations are easily identified by the pink blocks on the list view or time view screen. You can change the colors per your organization’s requirements, and you can display the status in text in the activity hint.

List View: Activity in jeopardy:

![List View of an Activity in Jeopardy](image)

Time View: Activity in jeopardy:

![Time View of an Activity in Jeopardy](image)
To identify situations that are in jeopardy:

1. Identify activities that are in jeopardy.
2. Do one of the following:
   - Move the activity to a resource that has idle time.
   - Move the activity back to the bucket to be re-routed later.
   - If the resource can arrive on time despite the warning, do nothing.

Related Topics

- Move an Activity in the List View
- Move a Resource to Another Group or Bucket

Identify Resources That have Stopped Reporting

When the start time for an activity has passed and the activity is not started in Oracle Field Service Cloud, the resource has stopped reporting.

1. Change your view to Time view.
2. In the resource tree, select the bucket or group that contains your resources.
   
   The routes are displayed.
3. Look for activities that have start times before the current time of day and are pink.
   
   Pink indicates that the activity is still pending and is late.
4. Contact the resource to identify why the activity is not yet started. If the resource forgot to start the activity in the application, ask him or her to start it now.
   
   If necessary, you can also start the activity on the resource’s behalf.

Monitoring at the End of the Day

At the end of the day, dispatchers and supervisors will want to verify that the resources’ routes have been deactivated on time, that all pending activities have been allocated for re-routing and that overtime situations are minimized.

Perform the following tasks:

- Identify pending activities
- Identify overtime situations
- Check for route deactivation

Identify Pending Activities

At the end of the day, dispatchers and supervisors will want to verify that the resources’ routes have been deactivated on time, that all pending activities have been allocated for re-routing and that overtime situations are minimized. At the end of the day, any activities that are still pending must be allocated either to a new route or back to the bucket to be routed automatically.

1. Change your view to Time View.
2. In the Resource Tree, select the bucket or group that contains your resources.
   
   The routes are displayed.
3. Look for activities that are yellow (pending activity, on time), pink Pending activity (in jeopardy of being late), or lime green (Pending internal activity or teamwork).

4. Choose one of the following options.
   - Move the activities back to the bucket so that they can be re-routed.
   - Manually move the activities to another route.
   - Change the activity status to Not Done.

Some companies run a script that automatically moves activities with Not Done status back to the bucket.

Identify Overtime Situations

When resources have activities scheduled outside of their normal working hours, you might want to move those activities to another resource or another time slot.

1. Click **Time View**.
2. In the resource tree, select the bucket or group that contains your resources.
   
   The routes are displayed
   
   ![Time View Image]

3. Look for activities that extend beyond the white area into the grey area.
4. Choose one of the following:
   - Move these activities to other resources or other time slots.
   - Move them back to the bucket so that the system can re-route them.

The white area represents the resource’s shift. The grey area represents time before or after the shift.

Check for Route Deactivation

At the end of the shift, you can check the resource tree to verify that all of the resources have deactivated their routes. Routes must be deactivated so that calculations are accurate.

Before you can deactivate a route, you must reconcile any pending activities remaining on the route.

1. In the resource tree, expand the bucket or buckets to see all of your resources.
2. Check the color of the icons for each of your resources.
   
   The default color coding is as follows:
   - Blue icons indicate that the resource has activated the route.
   - Yellow icons indicate that either the route is inactive, or that the resource does not have a route.
   - Gray icons indicate that the route is deactivated.

   **Note:** The resource tree search filters search only for resources that have active routes.

3. Contact resources that have yellow and blue icons and ask them to deactivate their routes.
   
   If necessary, you can deactivate the route on behalf of the resource.
Related Topics

- Deactivate a Route or Queue
- Identify Pending Activities
# Revision History

This document will continue to evolve as existing sections change and new information is added.

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<th>Date</th>
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<th>Notes</th>
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<td>The following topics are updated:</td>
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<td>• Add Non-Working Time to a Calendar</td>
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<td>• Duration for suspended, reopened, and pre-work activities</td>
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<td>• Reorder multi-day activity segments within a route</td>
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<td>• Move multi-day activity between resource or dates</td>
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<td>• Manage group actions</td>
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<td>• About moving multi-day activity</td>
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<td>• Understanding browser support</td>
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<td>August 2016</td>
<td>Working with resources and Working with activities chapters</td>
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<td>Added or updated information about calculating activity duration and native language support.</td>
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<td>March 2016</td>
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<tr>
<td></td>
<td>The content of the Activity Segmentation Guide is now merged with the appropriate topics in this guide.</td>
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