

Oracle

Field Service Cloud Release Notes

Release **16.8 Service Update 4**

Part Number:

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Preface

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

Oracle Applications Guides

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1 Understanding browser support

About browser support

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 Deprecations and Removals

Definitions

Deprecation means that although a feature or functionality is still available in the current Oracle Field Service Cloud release, Oracle plans to remove the feature or functionality in a future release. The release notes serve as notification that the feature or functionality will be removed in the specified future release. A deprecated feature or functionality will no longer be enhanced and generally does not receive bug fixes.

Removal means that the feature or functionality is removed from Oracle Field Service Cloud and is no longer available for use.

Deprecations

Functionality deprecation: New announcements

The following functionality deprecations are new announcements.

- The Oracle Field Service Cloud hosted outbound IVR solution using Aspect [formerly Voxeo] and Avaya and the associated Voice Agent, used for the integration between Oracle Field Service Cloud and the IVR provider, is deprecated with the August 2016 release (16.8). Oracle will continue to support this platform with the current configuration; however, no changes or updates to the solution will be approved. Legacy TOA customers using this solution are advised to partner with an IVR provider to deliver the notifications and use the Outbound API to perform the integration.
- The use of JavaScript in property formatting (XSLT) is deprecated with the August 2016 (16.8) release. Property formatting will continue to be available but without the use of JavaScript. Customers using JavaScript in property formatting are advised to develop functionality using a plugin; information can be found in Section 6 of Field Service Cloud New Features.
- The Routing Screen is deprecated with the August 2016 (16.8) release. Starting with the February 2017 (17.2) release, routing configurations will use the Smart Routing screen.
- Current Log View and File Management functionality is deprecated with the August 2016 (16.8) release.
- ETAWorkforce (that is, ETAWorkforce Cloud Service for Salesforce, ETAWorkforce Connector Cloud Service for Salesforce, ETAWorkforce for Field Technician, and ETAWorkforce for Call Center) is deprecated with the August 2016 (16.8) release. Oracle will continue to support this product until the end-of-life (with removal planned for the August 2019 (19.8) release); however, no additional functionality will be added to the product. Companies using ETAWorkforce are advised to transition their integration using Oracle Field Service Cloud APIs and/or Oracle Integration Cloud Service (ICS).
- The geocoding configuration options (that is, geocoding type, run from, run to, interval, and ignore coordinates with accuracy less than) found in the Map Parameters section under Business Rules is deprecated with the

August 2016 (16.8) release. Starting with the February 2017 (17.2) release, addresses will automatically be geocoded.

Functionality deprecation: Previously announced

The following functionality deprecations have been previously announced.

- Open ID authentication, used in Login Policies, was deprecated with the February 2016 (16.2) release. Clients should migrate to Open ID Connect. This option was removed with the August 2016 (16.8) release.
- The ability to obtain the Daily Extract Files (formerly known as Datawarehouse Files or DWH) from the Core Manage GUI (e.g. Log View), FTP/sFTP/FTPS or any alternative method was deprecated with the February 2016 (16.2) release. Clients are advised to migrate to the Core API. Documentation can be found in Section 3 of the Configuring Daily Extract document.
- The IVR Notification Method, used in Message Scenario configuration, was deprecated with the February 2016 (16.2) release. Clients can configure a new Notification Method to communicate with an external system and/or IVR.

API deprecation: New announcements

The following API deprecations are new announcements.

- The Activity Management API v3 is deprecated with the August 2016 (16.8) release. Clients are advised to use the Core API.
- The Mobile Client v3 is deprecated with the August 2016 (16.8) release. Clients are advised to use the Core API.
- The Resource Management API v3 is deprecated with the August 2016 (16.8) release. Clients are advised to use the Core API.
- The Parts Catalog API v1 is deprecated with the August 2016 (16.8) release. Clients are advised to use Parts Catalog API v2.

API deprecation: Previously announced

The following API deprecations have been previously announced.

- The External Trigger API was deprecated with the February 2016 (16.2) release. This API is used in conjunction with the IVR Notification Method used in Message Scenario configuration. Clients are advised to use Core API and/or configure a new Notification Method to communicate with an external IVR.
- Activity Management API v1 and v2 was deprecated with the August 2015 (15.8) release. Clients are advised to use Activity Management API v3
- Mobile Client API v1 and v2 was deprecated with the August 2015 (15.8) release. Clients are advised to use Activity Management API v3
- Resource Management API v1 and v2 was deprecated with the August 2015 (15.8) release. Clients are advised to use Resource Management API v3

Removals

Removal Announcements: August 2016

The following items were removed in the August 2016 release.

- **Functionality removal**—Open ID authentication, used in Login Policies, was deprecated with the February 2016 (16.2) release. Clients should migrate to Open ID Connect. This option was removed with the August 2016 (16.8) release.
- **API removal**—No API removals are scheduled in the August 2016 release.

Removal announcements: February 2017

The following items are scheduled to be removed in the February 2017 release.

- **Functionality removals**
 - The ability to obtain the Daily Extract Files (formerly known as Datawarehouse Files or DWH) from the Core Manage GUI (e.g. Log View), FTP/sFTP/FTPS or any alternative method will be removed with the February 2017 (17.2) release. Clients are advised to migrate to the Core API.
 - The use of JavaScript in property formatting (XSLT) will be removed with the February 2017 (17.2) release. Property formatting will continue to be available but without the use of JavaScript. Customers using JavaScript in property formatting are advised to develop functionality using a plugin; information can be found in Section 6 of Field Service Cloud New Features.
 - The Routing Screen will be removed with the February 2017 (17.2) release, routing configurations will use the Smart Routing screen.
 - The geocoding configuration options (that is, geocoding type, run from, run to, interval, and ignore coordinates with accuracy less than) found in the Map Parameters section under Business Rules will be removed with the February 2017 (17.2) release. Starting with the February 2017 (17.2) release, addresses will automatically be geocoded.
- **API removals**
 - The Activity Management API v1 and v2 will be removed in the February 2017 (17.2) release. Clients are advised to use the Core API.
 - The Mobile Client API v1, v2 and v3 will be removed in the February 2017 (17.2) release. Clients are advised to use the Core API.
 - The Resource Management API v1 and v2 will be removed in the February 2017 (17.2) release. Clients are advised to use the Core API.

Removal announcements: August 2017

The following items are scheduled to be removed in the August 2017 release.

- **Functionality removal**—No functionality removals are scheduled in the August 2017 release.
- **API removal**
 - The Parts Catalog API v1 is being removed with the August 2017 (17.8) release. Clients are advised to use Parts Catalog API v2.
 - The External Trigger API will be removed with the August 2017 (17.8) release. This API is used in conjunction with the IVR Notification Method used in Message Scenario configuration. Clients are advised to use Core API and/or configure a new Notification Method to communicate with an external IVR.

Removal announcements: February 2018

The following items are scheduled to be removed in the February 2018 release.

- **Functionality removal**
 - The Oracle Field Service Cloud hosted outbound IVR solution using Aspect [formerly Voxeo] and Avaya and the associated Voice Agent, used for the integration between Oracle Field Service Cloud and the IVR provider, will be removed with the February 2018 (18.2) release. Legacy TOA customers using this solution are advised to partner with an IVR provider to deliver the notifications and use the Outbound API to perform the integration.
 - The IVR Notification Method, used in Message Scenario configuration, is being removed with the February 2018 (18.2) release. Clients can configure a new Notification Method to communicate with an external system and/or IVR.
- **API removal**—No API removals are scheduled in the February 2018 release.

Removal announcement: August 2019

The following items are scheduled to be removed in the August 2019 release.

- **Functionality removal**—ETAworkforce (that is, ETAworkforce Cloud Service for Salesforce, ETAworkforce Connector Cloud Service for Salesforce, ETAworkforce for Field Technician, and ETAworkforce for Call Center) will be end-of-life and removed with the August 2019 (19.8) release. Oracle will continue to support this product until the end-of-life; however, no additional functionality will be added. Companies using ETAworkforce are advised to transition their integration using Oracle Field Service Cloud APIs and/or Oracle Integration Cloud Service (ICS).
- **API removal**—No API removals are scheduled in the August 2019 release.

Pre-announcements: deprecations and removals

Deprecation pre-announcements—No deprecation planning announcements are being made for functionality or APIs at this time.

Removal pre-announcements include the following:

- No removal pre-announcements are being made for functionality at this time.
- Removal pre-announcements are being made for the following APIs.
 - The Activity Management API v3 removal is planned with the August 2017 (17.8) release. Clients are advised to use the Core API .
 - The Resource Management Management API v3 removal is planned with the August 2017 (17.8) release. Clients are advised to use the Core API.

3 Core Manage

Resource configuration enhancements

The configuration of resource types has been significantly simplified in this release of Oracle Field Service Cloud. Starting with the August 2016 release, every active field resource is associated with an active user to help ensure that activities are assigned to resources that can complete them.

The concept of resource roles has been added to increase efficiency by allowing you to define the resource type at the role level. Each resource type is assigned to one of the following roles:

- **Field resource**—Requires a user, can execute work, and has associated work skills and work zones. The Group option is not available. A field resource is represented by the Tech icon.
Vehicle—Includes work skills, inventory, and/or geolocation tracking. When a vehicle resource is assigned to a team, the resource may also include added work skills and inventory required by the team. A vehicle does not require a user and can execute work when the route contains only teamwork activities. The Group option is not available for the Vehicle role, and it cannot be used for Quota Management. A vehicle resource is represented by the Vehicle icon.
- **Tool**—Represents a specific tool and is otherwise similar to the Vehicle role, in that it does not require a user, can execute work when the route contains only teamwork activities, does not have a Group option, and cannot be used for Quota Management. The Tool icon is used to indicate tool resources.
- **Bucket**—Accumulates work that has not yet been distributed to field resources. A bucket does not require a user, cannot execute work or activities, and is represented by the Double Tech icon. The Group option is available and activities can be assigned to a bucket.
- **Organization Unit**—Aggregates field resources, vehicles, and tools in a hierarchical structure to simplify management and reporting. An Organization Unit does not require a user, cannot execute work or activities, and is represented by the Double Tech icon. The Group option is available and activities can be assigned to an organizational unit.

Changes to adding a resource type

Although the concept of roles associated with resource types is updated in this release, and although the **Add resource type** window looks different, most of the fields on the window serve the same purpose they did in the previous release. In addition to the requirement that you select a **Role** option from the drop-down menu, the following changes exist between the **Add resource type** screens from the August 2016 and February 2016 releases.

- The **Role** drop-down menu replaces the following check boxes: **Resource can execute activities**, **Bucket**, and **Group of Resources**.
- The check box for **Users can be created at the level of this resource** has been eliminated.
- The check box for **Track geolocation in mobile interfaces** has been eliminated.

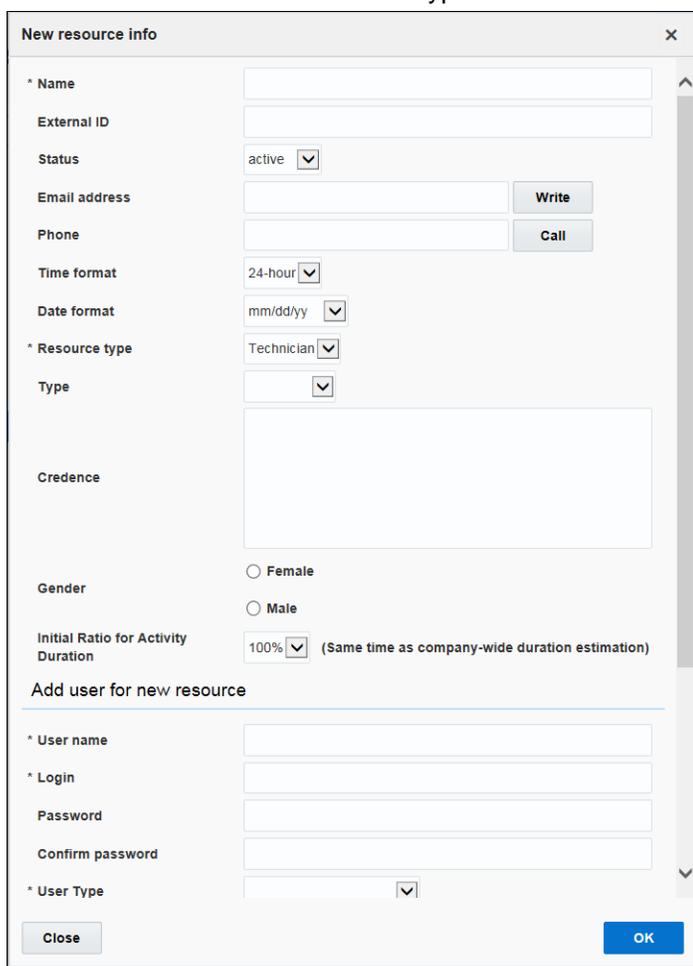
 **Note:** When your Oracle Field Service Cloud installation includes Smart Location, location data will be collected for activated routes.

- The icon selection is predefined in the August 2016 release and can be viewed in the **Role** drop-down menu.
- The **Load Threshold** controls are available for resource types with all roles except Organization Unit. Previously only buckets or resource types that could execute activities had these options available, but in the August 2016 release, all resource types except Organization Units can execute activities.

Changes to adding a resource

In earlier versions of Oracle Field Service Cloud, you created resources and then, if the resource was a technician resource type, you created a user for that resource. In the process, you were required to duplicate information, such as status, phone number, and time and date formats. There was also the risk that you overlooked adding a user to a resource, in which case it might be possible to assign an activity to a resource, even if the resource was not associated with a person who could accomplish the activity.

The August 2016 release remedies these concerns by combining the screens for adding a resource and adding the associated user. The combination screen is displayed whenever you select a resource type that has been assigned the **Field resource** role in the resource type definition.



New resource info

* Name

External ID

Status: active

Email address: [Write]

Phone: [Call]

Time format: 24-hour

Date format: mm/dd/yy

* Resource type: Technician

Type

Credence

Gender: Female Male

Initial Ratio for Activity Duration: 100% (Same time as company-wide duration estimation)

Add user for new resource

* User name

* Login

Password

Confirm password

* User Type

Close OK

Resource-user migration

When you upgrade to the August 2016 release, your existing resource types, resources, and users need to work as they have in the previous version. Toward that end, Oracle Field Service Cloud has developed a migration method that maps your existing resource types to the new resource type roles. The mapping method uses the features of the current resource types to map them to a resource type role. The migration process also includes verifying that all field resources have assigned users. When a user is missing from a field resource, the migration process creates a user automatically.

For additional details, refer to *Resource-user migration* on page 7 of the August 2016 [Oracle Field Service Cloud Features Guide](#).

Internal custom map layers

Custom map layers were implemented in the February 2016 release of Oracle Field Service Cloud. These were external map layers integrated with [Oracle MapViewer](#), where the layers are created and stored. External map layers are configured in business rules and defined by a URL to MapViewer, where the layer data is obtained.

The August 2016 release introduces the ability to display internal custom map layers on the following Mobility map screens:

- Team map—Mobility > Map
- Activity List map—Mobility > Activity List > Map
- Activity Details map—Mobility > Activity Details > Map

Custom map layers are subject to the following constraints:

- The size of a shapefile (zip archive) is limited to 2 GB.
- Each Oracle Field Service Cloud instance can have a maximum of ten internal custom map layers, which means that a maximum of ten different labels can be created in Metadata API request POST/mapLayers/custom-actions/populateLayers. (You can create an unlimited number of external custom map layers in the GUI when you select the **Use external data source** check box on the Add a Custom Map Layer window.)
- You can store a maximum of 1 GB of data in Oracle Field Service Cloud.

 **Note:** This does not contradict the 2 GB shapefile size because zip archives can contain extra data that will not be imported into the application.

- Internal custom map layers cannot be used in offline mode.

A new **mapLayers** resource in the Metadata API provides the ability to create, delete, and modify both internal and external custom map layers. The base URL for the new resource is <https://api.etadirect.com/rest/ofscMetadata/v1/mapLayers>.

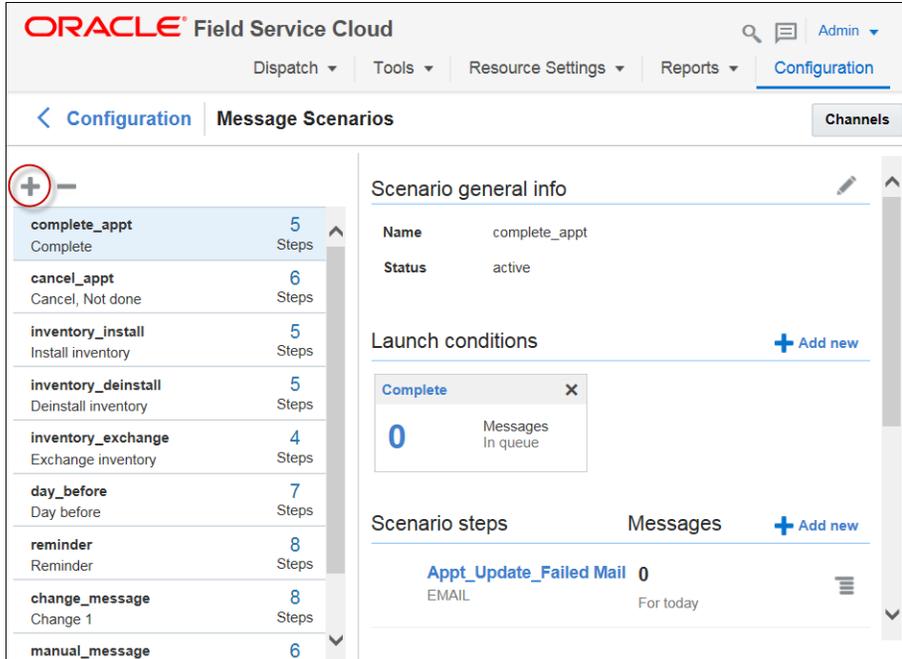
Message scenario configuration redesign

The August 2016 release offers simplified configuration for message scenarios and notifications. Terminology has been clarified, screens have been removed or redesigned, and system monitoring has been improved.

Table 1: Terminology changes

Previous terminology	New terminology	Description
Trigger / Notification trigger	Launch conditions	An event that initiates a scenario
Notification Method (on Settings tab of Add notification scenario step dialog)	Delivery channel (on Settings tab of Add scenario step dialog)	The parameters that connect to an external system in order to send messages
Events tab (in Add scenario step configuration dialog)	Next steps tab	Tab functionality remains the same. Use it to configure scenario execution flow, that is, the rules and conditions that are executed when the previous step has been executed.
Scenario From and Scenario To fields (on Add Message Scenario dialog)	Start Date and End Date	Date boundaries when the scenario is active.

When you click Configuration and select Message Scenarios under Subsystems and Integrations, the Message Scenarios screen opens. The message scenarios are listed on the left, and information about the selected scenario appears on the right.



Launch conditions

A launch condition is the event that triggers the message scenario. When the event defined as a launch condition occurs, the scenario steps are executed.

If you define more than one launch condition for a scenario, the first one that occurs launches the message scenario. And while a message scenario can have multiple launch conditions, each launch condition can be associated with only one message scenario. If you try to select a launch condition is already being used by another message scenario, you will see a message that includes the name of the scenario that is using the condition. If you select it anyway, the launch condition will be removed from the scenario that previously contained it. Even if you remove the launch condition from the new message scenario, it will not be added to the previous scenario unless you manually add it back.

The launch conditions section of the new Message Scenarios screen includes a numeric indicator that specifies the number of messages in the queue for that particular launch condition.

New Delivery Channels screen

The new Delivery Channels screen lets you configure all external system connectivity parameters on a single screen. To open the screen, click the **Channels** button on the Message Scenarios screen.

The screenshot displays the Oracle Field Service Cloud interface for configuring delivery channels. On the left, a list of six channels is shown with their respective message scenario counts and status: Channel 1 (0 scenarios, Inactive), Channel 2 (0 scenarios, Active), Channel 3 (1 scenario, Active), Channel 4 (1 scenario, Inactive), Channel 5 (0 scenarios, Missing credentials), and Channel 6 (1 scenario, Missing credentials). The main configuration area is divided into 'Channel general info' and 'End-point info'. The 'Channel general info' section includes fields for Name (Delivery channel 1), Status (Inactive), and Bulk Size (10). A note below Bulk Size states: 'The maximum number of messages per request. The range of values is 1 to 10,000. The recommended value is 10 which is the default value.' The 'End-point info' section includes fields for Host / Port (example.com : 8080), URL Path, User, Password, Confirm Password, a checked 'Disable weak password hash' checkbox, and a 'Connection' dropdown set to 'Not encrypted'. A 'Save' button is located at the bottom right of the configuration area.

Enhancements to activity duration calculations

In Oracle Field Service Cloud, you determine whether an activity's duration is defined manually or calculated statistically. The August 2016 release introduces significant enhancements to the statistical methods that are used to estimate activity

duration. The new natural learning method simulates the human learning process to greatly improve the applications self-learning capabilities.

Oracle Field Service Cloud estimates activity duration by using historical data for completed activities. The application analyzes new data and compares it to previous estimates. Then it corrects the earlier estimates with the new data to create updated estimates for future use.

Both company profile and personal profile statistics are used.

The activity duration is calculated at the company level based on the **Activity duration stats fields** configured in the **Statistics Parameters** 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 technicians perform tasks and report their time for tasks, Oracle Field Service Cloud derives a task duration estimate at the company level. Accuracy is enhanced because recent data is weighted more highly. 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 time the activity is performed, the existing estimate is modified slightly. The formula to calculate the new estimate is:

New estimate = Previous estimate +/- Correction

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

Besides using company profile statistics to estimate activity duration, Oracle Field Service Cloud also uses personal profile information. This information is a ratio that bases a technician's activity duration on the company's activity duration. 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. Every time a technician completes an activity, the ratio is updated. When a technician performs an activity for the first time, the default ratio is used.

Other important points about activity durations include the following:

- 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 types of resources use personal profile. If this setting is not selected, the 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 are 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.

Recalculate functionality

Clicking **Save** on several configuration screens in earlier versions of Oracle Field Service Cloud did not actually apply the changes until you clicked the **Recalculate structure** button. The August 2016 release removes the **Recalculate structure** button and applies changes automatically when you click **Save**.

The button has been removed from the following screens:

- Business rules
- User types (when changing Context Layouts)
- Work skill conditions
- Capacity categories
- Glossary
- Resource Types
- Activity Types

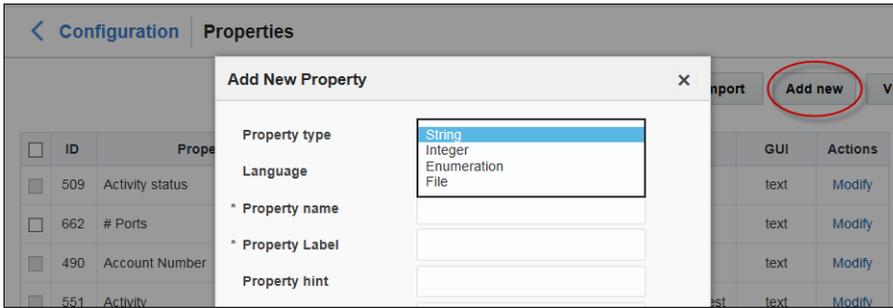
Recalculation is initiated when any of the following items are changed:

- Context Layout
- Visits bundling
- Company boundaries
- Work zones
- Work skill conditions
- Capacity categories
- Resource Types
- Activity Types

New properties button

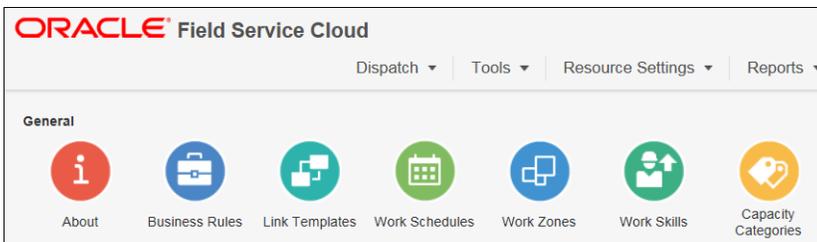
In earlier versions of Oracle Field Service Cloud, when you selected Properties on the Configuration screen, the Properties screen included four separate buttons for adding integer, string, enumeration, and file properties. The August 2016 release now includes a single **Add new** button. Clicking the button opens the Add New Property window where you

can select one of the four property types from a drop-down menu. The fields and selections related to each property type remain the same as in the previous version.

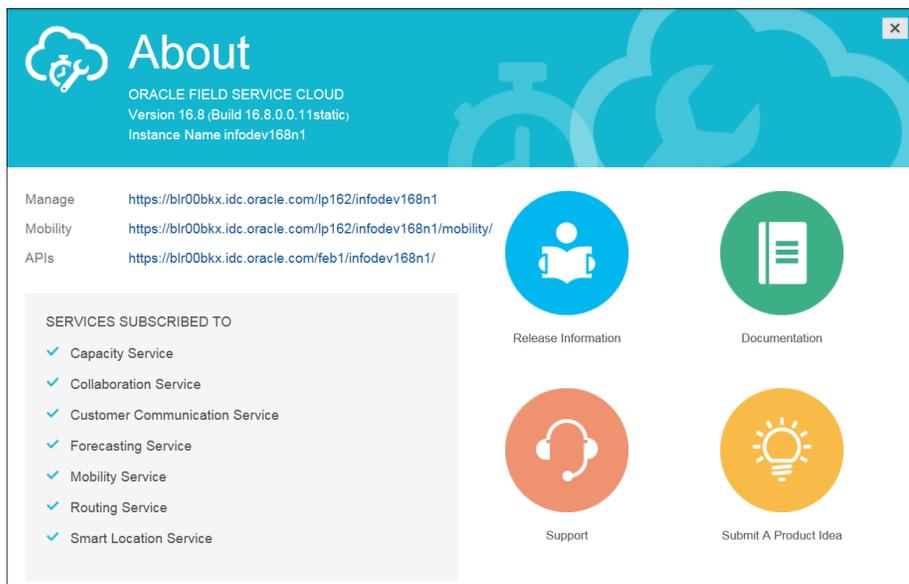


New About page

A new **About** page provides information about your installation. The **About** icon appears in the **General** section of the **Configuration** page.



Clicking the icon opens the **About** page, which offers links to release information, documentation, and support, as well as a link for submitting product ideas. It also lists your organization's URLs for the Manage, Mobility, and API interfaces and provides a list of services that your organization is subscribed to.



Highlighting non-visible Context Layout items

When you are configuring screens for a user type, you use the **Context Layout Structure** page to identify the elements that should appear on a particular page for that user type. In previous versions, you could add an item to a screen layout but if you failed to set a visibility for the item, it would not appear on the screen when accessed by the user. This release of Oracle Field Service Cloud provides an indicator on the **Context Layout Structure** page to prevent that oversight. Now when you add an item to the **Layout structure** column of the page, it appears in red until you add visibility to the field. After you define a visibility for the item, it is no longer highlighted in the **Layout structure** column.

Native language support

Support for three additional languages has been included in the August 2016 release of Oracle Field Service Cloud. They include:

- Hindi
- Korean
- Turkish

Time zone list updates

When you upgrade to the August 2016 release, all time zones that are newly supported by Oracle become available for use. However, they remain inactive until you select them by editing Time Zones on the Display screen.

When your instance of Oracle Field Service Cloud is new, only two time zones are selected by default:

- (UTC+00:00) Etc/UTC – Coordinated Universal Time (UTC)
- (UTC-05:00) New York – Eastern Time (ET)

Business rules simplification

The following parameters have been removed from the General section of the **Business Rules** screen.

- Default codepage
- Future days limit
- Default reply address

Multi-select enhancements

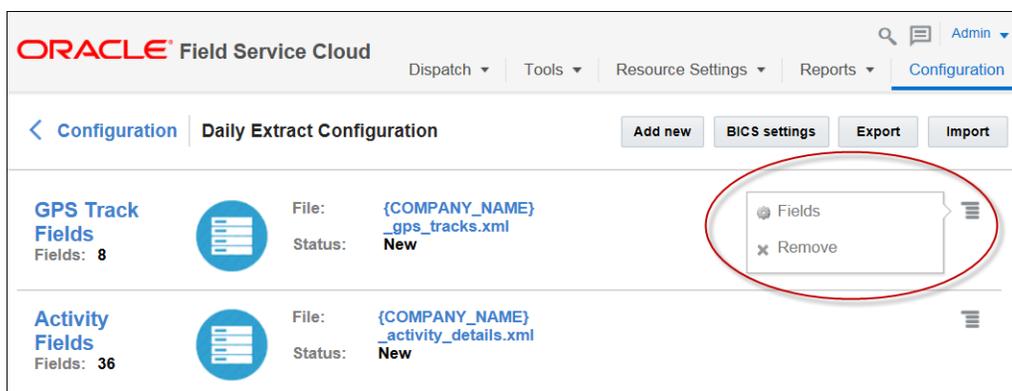
The ability to select multiple fields within Oracle Field Service Cloud has been enhanced in this release for the following features:

- Business rules
 - Visit bundling keys
 - Activity search fields
 - Inventory search fields
- Work zones
 - Modify (the work zone list, not individual work zones)
- Display
 - Time zones
 - Languages
 - Monitored activity fields
 - Monitored inventory fields
- Statistics parameters
 - Activity duration stats field

- Activity travel stats field
- Activity start-time stats field
- Resource travel stats fields
- Resource start-time stats fields

Daily Extract Configuration

The **Daily Extract Configuration** screen has been updated in the 16.8 release of Oracle Field Service Cloud. The new version lists the entity, number of entity fields, and the associated extraction file. The icon to the far right in the row lets you display the fields associated with the entity in the extraction file, and it also lets you remove the file.



Although the interface is different, the procedure to add a new configuration is similar to earlier versions.

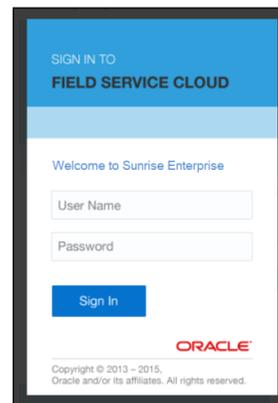
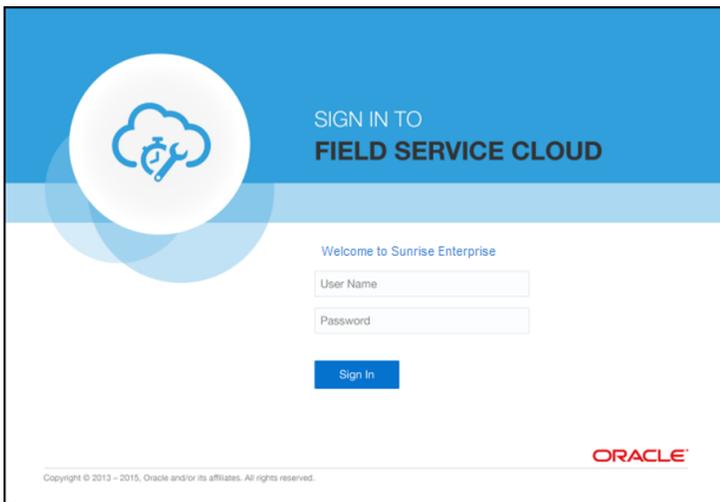
Simplified SAML configuration

This version of Oracle Field Service Cloud includes simplified configuration of SAML authentication for single sign-on. The authentication functionality is the same, but configuration options have been expanded to allow uploading a configuration file, specifying a URL, and authenticating with Oracle IDCS in addition to manual entry of SAML parameters.

4 Mobility

New Mobility login screen

The Mobility login screen has been redesigned in the August 2016 release of Oracle Field Service Cloud. Only the two-field page with Login and Password is affected. The three-field page (which includes the Company field too) remains the same. The Login field has been renamed to User Name on the new screen, and the company name appears in the Welcome message. The Oracle Field Service Cloud logo appears on the screen if the page width can accommodate it, but is hidden on narrower screens.



Resource management enhancements in Mobility

Earlier releases of Oracle Field Service Cloud introduced field management capabilities to the Mobility module. Field managers can monitor routes and activities of mobile resources from the Mobility interface and access basic resource data. The following table describes the resource information that you can view and edit.

Information block:	Information you can view and edit:	Associated screens and/or dialog box(es):
General information (name of the resource)	<ul style="list-style-type: none"> • Name • External ID • Phone • Email address • Status (active or inactive) • Resource type • Message language • Time zone • Time format (12- or 24-hour) • Date format 	<p>Screen</p> <ul style="list-style-type: none"> • Edit Resource Info
Additional information	<ul style="list-style-type: none"> • Name • External ID • Phone • Email address • Status (active or inactive) • Resource type • Message language • Time zone • Time format (12- or 24-hour) • Date format 	<p>Screen</p> <ul style="list-style-type: none"> • Edit Resource Info
Locations	<ul style="list-style-type: none"> • Daily locations <ul style="list-style-type: none"> • Start • End • Home • Days • Location assignment <ul style="list-style-type: none"> • Day • Start • End • Home • Shared locations (view only) 	<p>Screen</p> <ul style="list-style-type: none"> • Locations <p>Dialog box</p> <ul style="list-style-type: none"> • Daily Locations <p>Screen</p> <ul style="list-style-type: none"> • Locations <p>Dialog box</p> <ul style="list-style-type: none"> • Location Assignment <p>Screen</p> <ul style="list-style-type: none"> • Locations

Information block:	Information you can view and edit:	Associated screens and/or dialog box(es):
	<ul style="list-style-type: none"> Resource locations <ul style="list-style-type: none"> Label Address City ZIP/Postal Code State Latitude Longitude 	<p>Screen</p> <ul style="list-style-type: none"> Locations <p>Dialog box</p> <ul style="list-style-type: none"> Add Location
Resource Calendar	<ul style="list-style-type: none"> Shift <ul style="list-style-type: none"> Overnight First Second Non-working time Custom working time Number of repeating days Reason for non-working time Time frame for custom working time Points assigned to custom working time 	<p>Screen</p> <ul style="list-style-type: none"> Resource Calendar <p>Dialog box</p> <ul style="list-style-type: none"> Add Location
Work Skills	<ul style="list-style-type: none"> Work skills Level of expertise Temporary skill? (yes/no) 	<p>Screen</p> <ul style="list-style-type: none"> Resource Work Skills <p>Dialog boxes</p> <ul style="list-style-type: none"> Add work skill Edit work skill
Work Zones	<ul style="list-style-type: none"> Work zones Ratio Temporary? (yes/no) Start date End date Recurrence Days between occurrences 	<p>Screen</p> <ul style="list-style-type: none"> Work Zones <p>Dialog boxes</p> <ul style="list-style-type: none"> Add Work Zones Edit Work Zone

Changing resource locations

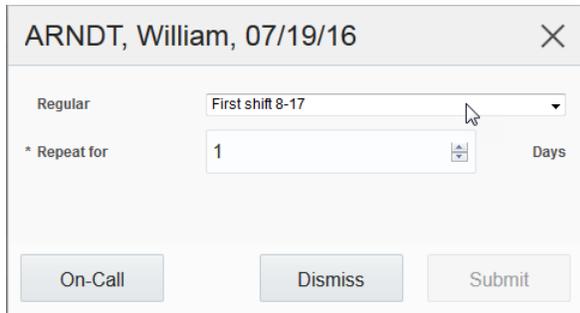
A field manager can now change a resource's default start, end, and home locations, and add new locations to existing ones. Clicking or tapping the **Locations** link from the **Resource Info** screen enables the field manager to perform the following tasks:

- Click or tap the pencil icon to add the start, end, and home locations for specific days or for an entire week
- Click or tap a day of the week to specify location assignments for that day
- Click or tap the plus sign to add new locations to an existing list of locations
- View shared locations (cannot be edited)

Changing resource calendars

If necessary, a field manager can update the calendar of any resource in the group. Clicking or tapping the **Resource Calendar** link from the **Resource Info** screen enables the field manager to perform the following tasks:

- Click or tap in any calendar cell to open the editing dialog box



ARNDT, William, 07/19/16

Regular

* Repeat for Days

On-Call Dismiss Submit

 **Note:** When no calendar has been set, the fields in the dialog box are blank.

- Select a shift and the number of days for which that shift applies
- Indicate if the shift is regular or on-call:
 - Regular/On-call button (toggles between the two options and indicates if the resource's working calendar is regular or on-call; always displays the non-selected value)
 - Regular/On-call drop-down list (contains all shifts of the selected type created for the company; when any shift is selected, the Regular/On-call button is disabled, meaning that you cannot set the other calendar type without saving or dismissing your current selection)

 **Note:** A telephone icon (📞) in a calendar cell indicates an on-call shift. Once created, an on-call shift cannot be deleted. You can, however, change it to a non-working or custom shift.

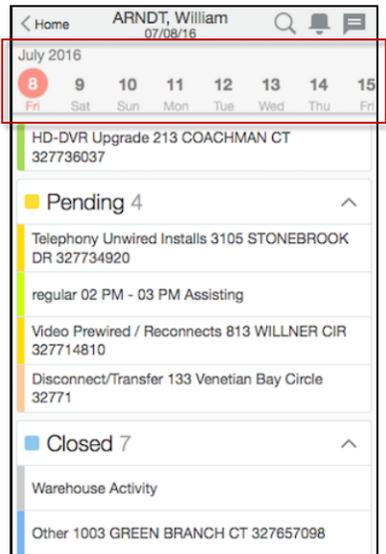
- Select the number of days for which the calendar is applicable (the default value is "1")
- Specify the reason for a non-working time; for example, holiday, vacation, illness, and so on
- Set the custom working time, start and end times for the custom calendar, and the number of points that correspond to it (if points are not used, the field does not display)

Any updates you make to a resource's calendar that result in a change in the working-time duration also updates the total figure in the header.

Switch date functionality

Previous versions of Oracle Field Service Cloud required you to open the Calendar link on the Activity list when you needed to see the resource route for a different day. This screen also let change working and on-call time for users.

This version lets you switch the date directly from the Activity list, eliminating the need to open multiple screens. When you tap the header containing the resource name and date, a date panel opens, letting you select a new date.



Today's date is highlighted in pale red, and the new date you select will be highlighted in blue.

 **Note:** The switch date functionality is available in online mode only.

Updating resource work skills

A field manager can add and assign a work skill to a resource, and specify a level of expertise for that skill. Clicking or tapping the **Work Skills** link from the **Resource Info** screen enables field managers to perform the following tasks:

- Click or tap the plus sign to select one or more new work skills and add them to a resource's list of skills
- Drag the slider to indicate the level of expertise (ratio) the resource has with the new work skill
- Indicate whether the new work skill is temporary or permanent
- Click or tap the work skill name or ratio bar and drag the slider to change the level of expertise for an existing work skill
- Click or tap the minus sign to delete an existing work skill

Updating resource work zones

A field manager can assign specific work zones to a resource. Clicking or tapping the **Work Zones** link from the **Resource Info** screen enables field managers to perform the following tasks:

- Click or tap the plus sign to select one or more work zones from a predefined list and add them to a resource's list of work zones
- Specify work zone details:

- Drag the slider to adjust the probability (ratio) of a resource being assigned activities in a work zone
- Indicate whether the new work zone is temporary or permanent
- Select a start date
- Select an end date
- Indicate if the work zone occurs daily or weekly
- Specify the number of days between occurrences
- From the **Resource Work Zones** screen, click or tap a percentage to adjust the probability slider
- Click or tap the minus sign to delete an existing work zone

5 Routing

Routing enhancements

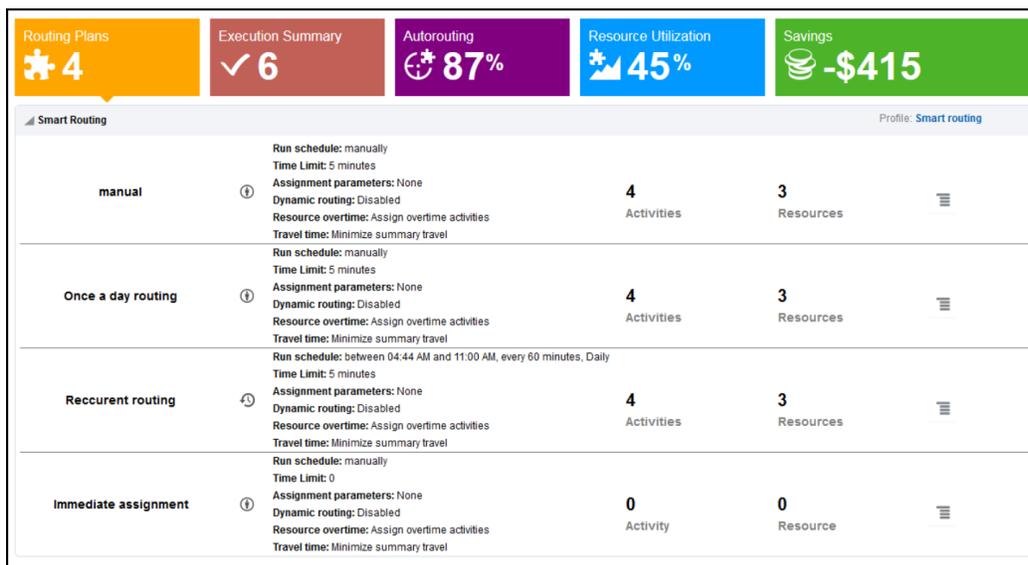
The August 2016 release contains enhancements to routing that are designed to simplify use by consolidating all routing-related processes on a single screen. In previous versions, Routing functionality occurred on multiple screens (Routing, Smart Routing, Routing Profile, and Routing Plan), but all of the following functionality is included on the Routing screen in this release:

- Calendar view—Lets you view routing plans for any date without having to switch pages.
- Simplified resource tree—Displays only resources that have been assigned the Bucket role.
- Display of routing plan configuration—Displays the routing plans assigned to the selected bucket and its child elements.
- Execution summary widget—Provides information about the number of successful and failed routing runs.
- Detailed reports for every run
- Compare option
- The ability to run routing plans from the routing screen

Routing widgets

The new Routing screen contains the following widgets at the top of the page:

- **Routing Plans widget**—Displays a hierarchical list of routing plans for the selected bucket and any child items. This release of Oracle Field Service Cloud displays only the number of assigned routing plans. Information about the number of Scheduled, Running, Completed, and Failed runs has been removed.



- **Execution Summary widget**—Provides information about the number of successful and failed runs. Successful runs are those that have been completed or rolled back, while failed runs are those that are incomplete.
- **Autorouting widget**—Displays statistics about the efficiency of automatic routing.
- **Resource Utilization widget**—Displays information about technician efficiency (comparing useful time to idle time).
- **Savings widget**—Displays information about total revenue savings.

Routing plan enhancements

In the August 2016 release, the view of Routing Plans is simplified. The view displays the number of routing plans that are assigned to the selected bucket and all of its child elements. The display no longer contains information about the number of Scheduled, Running, Completed, and Failed runs.

When you click the Routing Plans widget on the Routing screen, the screen displays a list of routing plans for the bucket. The top line for each plan displays the bucket name, the routing plan, and the routing profile. Selecting the line opens more detailed information about the plan, including:

- **Run schedule**—Whether the plan is run manually or on a defined schedule.
- **Time limit**—Maximum time for routing plan execution.
- **Assignment parameters**—Variety of factors that influence how routing is handled.

- Dynamic routing—Whether limits are placed on the routing run.
- Resource overtime—Whether and how overtime is considered in the routing plan.
- Travel time—Whether and how travel time is considered in the plan.
- Activities—The number of activities the routing plan can take based on the plan's filters.
- Resources—The number of resources that are available.
- Action icon—Options to modify the plan or run it manually.

If the selected resource has no assigned routing profile, an **Assign Routing Profile** link is displayed.

Changes to routing run list: Execution Summary

The routing runs list is displayed when you click the Execution Summary widget on the Routing screen. Several changes have been made to the Routing Runs list screen in this version of Oracle Field Service Cloud.

- The column previously called **Type** has been renamed **Initiated**. Instead of displaying the routing run type, it displays icons for the Recurrent, Once a day, Immediate, and Scheduled options. When the run is Manual, the column contains the name of the user who triggered the run.
- The column previously called **Activities** has been renamed **Assigned activities**. It now displays the quantity of resources used for all bucket resources.
- The **State** column has been renamed to **Status**. The following statuses are available:
 - Completed—Indicated by a check mark.
 - Failed—Indicated by an x.
 - Scheduled—Indicated by a clock icon.
 - Running—Indicated by the label **Running**.
 - Rolled back—Indicated by the label **Rolled back**.
 - Undone Rollback—Indicated by a check mark.

Changes to routing run details

When you view the details for a completed or rolled back routing run, the window displays four tabs:

- Summary—Displays the same detailed statistical information about the run as was displayed in the previous release of Oracle Field Service Cloud.
- Report—Displays a detailed report about the run, including which resource the activity was moved from, which resource it was moved to, the activity itself, and error and comment information. If multiple events are displayed (for example, completed run, a rollback operation, and an undo rollback), information is displayed for each event.
- Comparison—Allows you to compare any two routing runs from a list of up to the last ten runs.
- History—Appears only when rollback and undo rollback operations have been executed for a routing run.

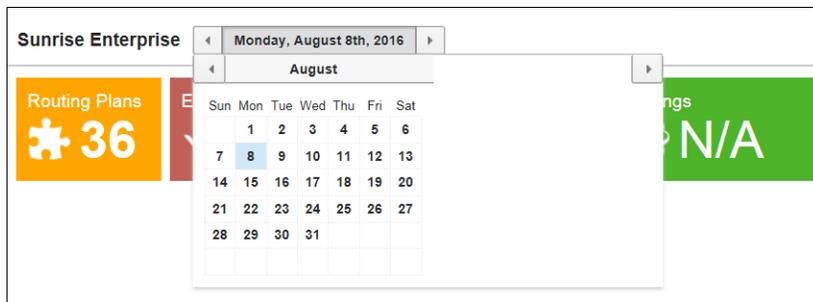
Changes to the rollback operation

In the August 2016 release, the **Rollback** operation can be performed only for routing runs that have the **Completed** status. After you have performed the rollback operation on a routing run, you cannot roll it back again. However, you can execute the **Undo rollback** operation instead, after which the routing run's status changes back to **Completed**.

The **Rollback** button appears on the details window for completed runs. After performing the rollback operation, the **Undo rollback** button appears.

Calendar view in Routing

Selecting a different date on the **Routing** screen refreshes the routing runs for the selected bucket. When you click the calendar icon on the Routing screen and select a date, the routing runs for the selected bucket and any child buckets are updated.



6 Collaboration

Group messaging in Collaboration

The previous version of Collaboration functionality included the ability for field users to chat with one another, conference with multiple users, and transfer activities and inventories. This release of Oracle Field Service Cloud offers significantly expanded functionality with the ability to communicate to multiple users simultaneously by either broadcasting to a group or initiating a group conference in either Core Manage or Mobility.

- **Broadcasting**—Sends a common message to a multiple users simultaneously. Recipients will not know who the other recipients are. They can acknowledge receipt of the message and initiate a one-to-one chat with the sender. In addition to broadcasting a message, senders can broadcast an activity that can be accepted by one of the recipients.
 - **Message broadcast**—Sends a message to a group of users simultaneously. The recipients can be a collaboration user group or users within a certain geographic radius. If the sender requests an acknowledgment that recipients have received the message, an **Acknowledge** button appears on the message. The sender can also set an expiration period after which the message will not be delivered to recipients who log on after that time. Up to a maximum of one hundred recipients can be selected.
 - **Activity broadcast**—Sends an activity transfer request to eligible technicians in the area near an activity that has pending status. Technicians who match the work skill, work zone, and service window of the activity are validated to identify broadcast recipients. Additional filtering considers recipient proximity to the activity. The first recipient who accepts the request will be assigned the activity. The sender must have **Allow Activity Move Between Resources** permission in order to broadcast an activity.
- **Conferencing**—Sends a common message to up to one hundred users simultaneously, initiating a conversation among the recipients, each of whom can see all recipients and all comments. Recipients can be a collaboration user group or users within a certain geographic radius.

Broadcasting messages by location

You can select users near a specific location in the map view to send a group message. You can adjust the radius to a maximum of 100 miles or 100 kilometers to filter for users near the location.

Broadcast an activity in Manage

When you have an activity with a status of Pending, you can broadcast that activity to qualified field personnel.

Broadcast an activity in Mobility

When you have an activity with a status of Pending, you can broadcast that activity to qualified field personnel.

Conferencing in Collaboration

You can launch a conference with up to one hundred users, selected by user groups or location. All recipients can participate in the discussion and see all other participants.

Location sharing enhancements

Previously when field technicians shared their location with another user, their latitude and longitude coordinates were shared with the user, who could then open a map and get directions to the location. In the August 2016 release, the shared location is sent as a micro map that also displays the distance from the location and the time to reach it. As in the previous version, the recipient of the shared location can click a link to get driving directions to the location.

 **Note:** The Smart Location module must be enabled for location sharing functionality.

You can change the display between miles and kilometers by changing the **Distance measurement units** option under **Map parameters** on the **Business Rules** screen.

Transfer non-serialized inventory

Collaboration Cloud Service lets field technicians transfer non-serialized inventory to another technician. Previous versions did not let the quantity of non-serialized inventory be specified during the transfer, but the August 2016 release now lets users enter the amount of material to be transferred. The interface shows the number of inventory units a technician has as well as the number that is required to perform the day's work. The amount of available inventory is updated after the transfer. A resource can transfer more inventories than what they have in the available quantity; in which case the available quantity is updated with a negative value.

Turning off message pop-ups

Dispatchers often have multiple windows open on multiple monitors simultaneously, which can result in distractions and potential oversight of incoming messages. This version of Oracle Field Cloud Service offers the ability to restrict pop-ups of incoming chat messages to a particular screen, even though new chats can be initiated and existing chats can be continued from the Collaboration window. Message pop-ups can be turned off only in the Core Manage application, not in Mobility.

7 Capacity

Enhancements to travel time estimation

Instead of using the average travel time within a travel area, the August 2016 release of Oracle Field Service Cloud now uses average travel time for a specific travel key. Travel time estimates are especially improved when travel areas contain multiple travel patterns, such as urban and rural or mountains and plains.

Travel keys are typically a portion of or an entire postal or ZIP code. When a resource records travel between two locations, the values are added to the statistics to produce a learned estimate of the travel between that set of travel keys. A statistical learned estimate is produced when both activities contain a value that is part of the travel key, and the travel keys contain enough historical data.

 **Note:**

- The travel time between two travel keys is adjusted over time as more data is collected.
- Travel time is generally considered to be the time between the end of the previous activity and the start of the current activity. If there is idle time between the two activities, the recorded travel time is not considered in the statistics.

To estimate the travel time accurately, Oracle Field Service Cloud Quota Management uses an algorithm that validates the following time intervals:

- Last week
- Last 4 weeks
- Last 12 weeks
- All data

 **Note:** A week starts on Monday and uses at least one travel value reported for the next week.

If the minimal number of travel records and minimal percent of used origin travel keys thresholds are met for a specific travel key, then the system uses the time period to estimate travel time duration in descending order (last week, last 4 weeks, last 12 weeks and all data). If both criteria are met for the last week, the value for the last week is used; if the criteria is met for the last 4 weeks, then the value for the last 4 weeks is considered, and so on.

- The minimal number of travel records value is based on the count of activities for a given key (such as started activities).
- The minimal percent of used origin travel keys value is based on the total number of actual origin locations for a given key. For example, in case of the 4 week time interval, the percent is calculated as:

$$\text{travel 4 weeks key count} / \text{travel key count} * 100$$

- If the total number of recorded travels for a given travel key is below the threshold, the system uses an average calculated based on the travel area level.

- If there are no records available on the travel area level, the system displays a default travel time value defined in the **Statistics parameters** screen.

Removal of the Total line

The **Total** line was introduced in early versions of the **Quota** view. Now that the view is shown in the **Capacity Category** mode, it can lead to misunderstanding. The **Total** value is aggregated for the following columns:

- Max available
- Quota
- Used

Most current configurations use multi-skill resources and/or multi-skill activities, which results in overcounting the total values. For that reason, the **Total** line has been removed from the **Capacity category** level of the **Quota** view.

8 Forecasting

Available Resources in Forecasting

The August 2016 release of Oracle Field Service Cloud includes an enhancement to Forecasting Cloud Service. Previously, the Available Resources trend line was displayed only at the bucket level. In this release, Available Resources will be displayed when capacity categories and time slots are selected in the **View** option. The Available Resources for a particular capacity category or time slot depends on the time shared with other capacity categories and time slots. Based on this information, Available Resources is displayed as three different values for each day:

- **Min. Available Resources**—Denotes the minimum available resources for a particular view, assuming that the resources shared with another view are not included in this view. This value is calculated based on the worst case scenario, where only resources that do not share their time with other capacity categories or time slots are included.
- **Max. Available Resources**— Denotes the maximum available resources for a particular view, assuming that all the shared and not-shared resources are available in this view. This value is calculated based on the best case scenario, where the entire time of all resources in that view are included.
- **Average Available Resources**— Denotes the actual number of resources available, assuming that the resource time is divided equally among each capacity category and time slot that the resource is associated with. This represents the most realistic quantity of resources available for that particular view.

9 Integrations

Integration with Oracle Business Intelligence Cloud Service

Oracle Field Service Cloud can now be integrated with Oracle Business Intelligence Cloud Service. This integration lets you use the comprehensive analytic tools and intuitive interface of Oracle Business Intelligence Cloud Service to process Oracle Field Service Cloud data. The results include powerful reporting and dashboard capabilities to review and analyze your organization.

 **Note:** Oracle Business Intelligence Cloud Service is a separate Oracle product distinct from Oracle Field Service Cloud. You must have a valid subscription to Oracle Business Intelligence Cloud Service to use the integration between the two applications.

The following features are supported in the integration:

- Synchronization of data with Oracle Business Intelligence Cloud Service to allow the creation of Oracle Field Service Cloud reports in Oracle Business Intelligence Cloud Service
- A total of 50 GB of data storage to use the Oracle Business Intelligence Cloud Service schema as an Oracle Field Service Cloud data source for data migration
- Daily push of data from Oracle Field Service Cloud to Oracle Business Intelligence Cloud Service using the Daily Extract
- Predefined data models and sample reports for exporting data to Oracle Business Intelligence Cloud Service

About Oracle Business Intelligence Cloud Service data models

A data model structures business information in such a way that it can be used to analyze and report on the business. Oracle Field Service Cloud provides predefined data models for use with Oracle Business Intelligence Cloud Service. Data models use fact tables, which contain numeric data for measuring business performance, and dimension tables, which contain values that represent the business entities you measure. Data from Oracle Field Service Cloud can populate both kinds of tables in Oracle Business Intelligence Cloud Service.

Oracle Field Service Cloud is planning to publish examples of predefined data models. Once they are available, you can use them as starting points for creating and configuring your own data models.

About Oracle Business Intelligence Cloud Service reports

Reports in Oracle Business Intelligence Cloud Service answer your business questions by querying your organization's data, including the data that is migrated from Oracle Field Service Cloud. Oracle Field Service Cloud is planning to publish examples of predefined reports. Once they are available, you can use them as starting points for creating and configuring your own reports.

10 Core API enhancements

Travel time update with Core API

Oracle Field Service Cloud now lets you set the predicted travel time for a pending ordered activity using the public API. When your business needs precise calculation of travel time, you can provide this information via the API instead of using automatic calculations from the application.

This feature supports only pending ordered activities. It does not support updating travel time for not-ordered and not-scheduled activities, nor does it support updating travel time for activities that are currently in buckets.

The functionality is available only in the Core API and is supported for the following operations:

- Create a single activity (POST .../v1/activities)
- Update a single activity (PATCH .../v1/activities/<activity ID>)
- Create/update multiple activities (POST .../v1/activities/custom-actions/bulkUpdate)

Additional Core API enhancements

Find matching resources

The `findMatchingResources` method was enhanced to get buckets separately, not among technician resources. A new filter criteria **includeResources** lets you filter on technicians, buckets, or all. The default value for the filter is **technicians** in order to maintain backward compatibility. The resource type for a resource must be **bucket** for the resource to match the filter.

Custom actions for activities

This version adds support for the following custom actions for activities:

- Delay activity—Use this operation to delay a started activity until a specified time (`delayUntilTime`) or for a specified duration (`delayMinutes`).
- Reopen activity—Use this operation to reopen a completed activity.
- Start activity prework—Use this operation to create a started prework activity.

Multi-day activity operations

This release supports changes to the activity status for multi-day activities segments and the multi-day activities parent.

Segments

The following operations are supported for multi-day activities segments.

- cancel
- complete
- delay
- delete
- notDone
- move
- start

The **suspend** and **reopen** operations are not supported.

Parent

The following operations are supported for the multi-day activities parent.

- cancel
- delete
- move

The following operations are not supported for the multi-day activities parent.

- start
- complete
- notDone
- reopen
- delay
- suspend
- prework

Inventory operations

The Core API now supports the following operations for inventories.

- Exchange inventory action

- Update inventory properties during install/deinstall
- Operations for inventories associated with multi-day activities
 - install
 - deinstall
 - undoInstall
 - undoDeinstall

Common pagination rules have also been implemented for inventory collections.

Resource calendars

The Core API now supports the ability to get resource calendars for a specific day.

PATCH resource method

A new PATCH method for the Resource object was added to the Core API in this version of Oracle Field Service Cloud. The method allows a partial update of an existing resource for specified fields.

Core API events

The August 2016 release includes enhancements to the Event API, which is part of the Core API. The Events API lets you subscribe to events within Oracle Field Service Cloud and get notifications almost immediately.

Support has been enhanced by adding events for two new objects:

- User events—The addition of user events provides bidirectional integration between Oracle Field Service Cloud and your user identity management solution. The following user events are monitored and published:
 - userCreated
 - userUpdated
 - userDeleted
- Resource events—The addition of resource events provides bidirectional integration between Oracle Field Service Cloud and your resource management system. The following resource events are monitored and published:
 - resourceCreated
 - resourceUpdated

 **Note:** Resources cannot be deleted so there is no resourceDeleted event.

Access to user and resource events is configured through the User Types screen and is available for users with access to the Core API and at least read-only access to business events.

11 Metadata API

Supported resources

The Metadata API has been enhanced in this release with the addition of work zones, work skills, properties, and languages. The new resources are listed in the following table and identified by their URI. (In the table, the common URI element (`https://hostname/rest/ofscMetadata/v1/`) is omitted.)

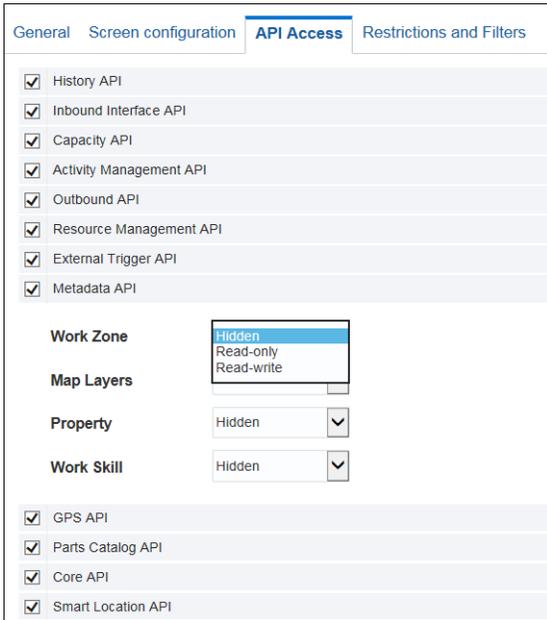
Resource	URI of resource	Allowed methods	Description
workZones	workZones	GET	Collections of work zones
workZone	workZones/{workZoneLabel}	GET, POST, PUT	Work zone resource
workSkills	workSkills	GET	Collection of work skills
workSkill	workSkills/{workSkillLabel}	GET, PUT, DELETE	Work skill resource
workSkillConditions	workSkillConditions	GET, PUT	Collection of work skills conditions
workSkillGroups	workSkillGroups	GET	Collection of work skill groups
workSkillGroup	workSkillGroups/ {workSkillGroupLabel}	GET, PUT, DELETE	Work skill group resource
properties	properties	GET	Collection of properties
property	properties/{propertyLabel}	GET, PUT, PATCH, DELETE	Property resource
languages	languages	GET	Collection of

Access to Metadata API resources

You can set access settings for all resources available through the Metadata API. This is done for each user type by expanding the Metadata API section on the API Access tab when you create or edit a user type. For each resource available through the API, you can select one of the following options:

- ReadWrite—Resource attributes can be updated.
- ReadOnly—Resource attributes can be viewed but not updated.
- Hidden—The resource will not be available via the API.

 **Note:** The languages list is necessary to work with the other collections. Any user that has general Metadata API access will also have read-only visibility for the languages list.



General Screen configuration **API Access** Restrictions and Filters

- History API
- Inbound Interface API
- Capacity API
- Activity Management API
- Outbound API
- Resource Management API
- External Trigger API
- Metadata API

Work Zone

Map Layers

Property

Work Skill

- GPS API
- Parts Catalog API
- Core API
- Smart Location API

12 Oracle Field Service Cloud 16.8 Service Update 1

Overview

Click a link to view the bugs fixed in that category:

- [API](#)
- [Collaboration](#)
- [Core Manage](#)
- [Routing](#)
- [Daily Extract Script](#)
- [Mobility](#)

API

PUT resource request erased default value

When the PUT resource request was sent for the second time to modify a resource, it erased the default value for 'durationStatisticsInitialPeriod'. This situation is corrected now and the default value for 'durationStatisticsInitialPeriod' is retained.

New parameter for resource functions

A new parameter resourceInternalId is now supported in API functions. For example, The POST findMatchingResources request returns "resourceInternalId" and "parentResourceInternalId" fields in the response, if they are set in 'fields' in the request. And the GET multidaySegments request returns "resourceInternalId" in the response.

'timeZoneDiff' is returned when not specified

When an API request was sent to find matching resources, the timeZoneDiff field was also returned although it was not included in the set fields list. Now the timeZoneDiff is not included in the response.

Incorrect error message for orderBy

An incorrect error message was displayed if the orderBy field had an incorrect value. The message was "Unknown field name '{field_name}' specified in 'fields' request parameter". Now the error message in this situation reads, "Invalid value of element: 'orderBy'".

GET_RESOURCES_CALENDARS API request

GET_RESOURCES_CALENDARS API request with include_children parameter did not retrieve calendars for the specified resource only. Now 'include_children' parameter in 'get_resources_calendars' request works correctly if it's set to 'no': only calendar for specified resource is received in response.

orderBy condition in API request

The orderBy condition could not be used in API requests. Now the ordering of parameters in an API response can be defined by the 'orderBy' parameter, using colon ":" as a separator.

PATCH activity request returns 500 Internal Server Error

When a PATCH activity request was sent to update the date, the request returned 500 Internal Server Error. Now the date field is ignored for the PATCH activity request.

Incorrect response for negative values

In the API request to find matching resources, if a negative value was provided for work zone or work skill fields, the application displayed the error message, "409 Conflict" "Property is not known in this context". In this situation, now the application displays the error message, "400 Bad Request" "Invalid value of element: 'criteria/workSkill'. Value: '{negative value}'. Value out of range: [0; 100]."

GET_RESOURCE did not return 'timeZoneIANA'

The GET_RESOURCE request did not return the 'timeZoneIANA' field. Now the GET_RESOURCE request includes the 'timeZoneIANA' field in the response.

POST request without activity date

When the "Allow non-scheduled" check box was cleared on the Activity Type screen, and there was an API POST request to create an activity without date, the response returned was "500 Internal Server Error". Now the API POST request returns "409 Conflict, Activity type does not support non-scheduled activities."

Empty custom property in GET requests

When the value of an activity or inventory custom property was made empty, the property was not returned in the GET request to get events. Now, if an activity or inventory custom property is changed to empty, the Events API returns: "activityChanges": {"property": null }.

Resource without External ID

When an API GET request was sent to retrieve events, the response did not include the resourceCreated and resourceUpdated events, if the resource was created or updated without providing the External ID. Now the GET request returns the resourceCreated and resourceUpdated events even when the resource is created without External ID.

Resource information not returned properly

Resource work skills were not returned by the API GET request. This has been fixed.

Unable to unassign user

When a user was created with a main resource, it could not be unassigned using the PATCH method. Now the main resource can be unassigned from the user using the PATCH method.

Incorrect allowed values for elements criteria, work skill, work zone

When an API request was sent to find matching resources with the criteria or workSkill (workZone) values other than 0 and 1, the application displayed the error message, "Invalid value of element: 'criteria/workZone'. Value: '100'. Valid values: '1','0'" for work zone value and "Invalid value of element: 'criteria/workSkill'. Value: '100'. Valid values: '1','0'" for work skill value. This has been fixed and the values in the 0..100 range are allowed.

Collaboration

Contact list not working

When there were multiple collaboration servers, contacts were missing after refreshing the page, or logging in again. Now the contacts are synchronized between the servers and are shown properly.

Core Manage

Wrong display of accents

On the Messages tab of the Activity Details screen, the French language accents were not displayed for certain alphabets. Now the accents are displayed properly.

Multiline property displayed incorrectly

The property value for a multiline property was displayed incorrectly in Internet Explorer 11, when the property was located on the Edit Activity screen. Now multiline properties are displayed properly in all browsers.

Resource trace for past days

Resource trace was not visible on the Map view for past days. Now the resource trace is visible for two previous days.

Label changes not saved

The Label field could be edited on the Edit Filter dialog, but the changes were not saved. As the labels are used only during the company transfer process, the Label field has now been made read-only on the Edit Filter dialog.

Wrong input element for Main Resource

The Main Resource field was displayed on the My Display screen with a HTML text input element. Now the Main Resource field is displayed with a resource selector element.

Pop-up window for input selection

The pop-up window did not appear for Activity Search Fields, Inventory Search Fields, and Visit bundling keys items in the Business Rules screen for a specific customer. Now the pop-up windows appear properly.

Import themes

Themes could not be imported. The error message, "Import file type must be zip" was displayed. In addition, C:\fakepath \'%ThemeName' was displayed instead of the real path to the selected zip file. Now themes can be imported successfully.

Error in displaying new message scenario

When a new message scenario was created in an empty Message Scenario screen, it was displayed in the Message Scenarios screen only after refreshing the screen. Now when a new message scenario is created, it is immediately displayed in the Message Scenarios screen.

Collaboration groups list

New collaboration group could not be added to a user on the Resource settings, Users screen. The list of existing collaboration groups did not display properly. Now collaboration groups can be added to users.

Wrong wording on screen

While adding a new launch condition for a message scenario, the word 'greated' was displayed for certain scenarios. The word is now changed to 'greater'.

Incorrect UTF8 characters

Some UTF8 characters were incorrectly shown in the Smart Routing screen. Now the characters are shown properly.

Filtering on collaboration group

Users could not be sorted based on their collaboration group. Now users can be sorted by collaboration group.

Drag and drop activities

It was not possible to drag and drop activities into the unscheduled and unordered sections of a resource's route if the resource was at the bottom most on the list. Now activities can be dragged and dropped to resources that are at the bottom of the list.

Cancel button on rejected activities

The Cancel button was displayed for an activity that was rejected. Now the Cancel button is not displayed for a rejected activity.

Empty close time history

When the Close Time History button was clicked on the Close time history screen, the screen was empty with the error message, "Records not found. Change criteria and try again". Now the screen displays the history properly.

Existing preferences displayed as undefined

When the activity search icon was clicked on the Business Rules screen, the existing preferences were shown as 'undefined' on the Search preferences dialog. Now the Search preferences dialog shows the existing preferences properly.

Buttons cropped

On the Add new property screen, the Add and Cancel buttons were either cropped or absent when the user's language was other than English. Now the buttons are displayed properly for all languages.

Delivery channel missing

A message scenario that was imported from an earlier version of the application displayed the message, "Delivery channel is missing" in the Scenario Steps list. Now the scenario steps display the delivery channel properly.

Custom names for other languages

Custom names could not be saved for different languages in the Visual Form Editor screen. Now separate custom names can be saved for different languages in Visual Form Editor.

Filter on Time, List, Map views

A filter applied in one activity view was not carried over or applied when the view was changed. Now filters are saved and displayed correctly after switching between Time / List / Map views.

Cannot add new work skills

For a specific customer, new work skills could not be added to an existing work skills group. Now new work skills can be added properly.

Filters not displayed properly

When two new filters were added, one with a visibility only for routing and another with a visibility for List view, a previously created filter with visibility for routing was displayed in the List view. Now only the relevant filters are shown on activity views.

SLA window warning trigger

Two similar activities with only a difference of position_in_route parameter (ordered/not ordered) behaved differently while triggering the SLA warning message. The unordered activity did not fire the trigger 'SLA window warning'. Now the unordered activity fires the trigger when 1 minute is left for the end of SLA window.

Multiple attempts to add skills to capacity categories

For a specific customer, work skills could be added to a capacity category or modified only after multiple attempts. Now work skills can be added and modified in the first attempt.

Business Rules changes are applied only after re-login

When search activity preferences were changed in the Business Rules screen, the changes were applied only after the user logged out and logged in. Now changes to the search activity preferences are applied immediately.

Unable to set visibility values

When the activity type property was dependent on another property, the visibility values and conditions set in the context layout screen was not applied. This situation has been corrected now.

Field not displayed per visibility conditions

When the visibility of a field depended on its own value, the field was not displayed based on the visibility conditions. Now the field is displayed properly based on the visibility conditions.

Incorrect data type

An incorrect type of data was returned for resource preference and work skill. The data returned was 1.00 and 100.00 instead of just 1 and 100. This situation has been corrected now.

Activity alert and Compliance alerts not exported

When 'Activity Alerts' and 'Compliance Alerts' properties were added to the List view and the fields to be exported, these fields were empty for all the activities in the exported CSV file. Now the 'Activity Alerts' and 'Compliance Alerts' fields are populated in the exported CSV file.

Visibility conditions for inventory fields

Visibility conditions based on inventory fields and custom properties, set for item actions on the Visible Inventory Grid Columns screen in Core Manage were ignored. Action links with visibility conditions for inventory are displayed correctly now.

Assign activities to buckets

Routing did not assign activities to buckets. Now Routing assigns activities to buckets, per the routing plan.

Mismatch in mass and repeating activities

When a non-activated route included mass and repeating activities, the number of activities was calculated and returned in the GET_ROUTE request. Now the GET_ROUTE request returns the total as zero, if a non-activated route contains repeating or mass activities.

SLA start and Time slot for future dates

When SLA start and Time Slot were set for future dates, the activities were not assigned to the SLA start date based on the bundling interval. Now the activities are assigned to the SLA start date within the bundling interval.

Search error

Sometimes, searching for activities by customer name failed with the error message, "Server Error: The server encountered a temporary error and could not complete your request. Please try again later". Now the search results are displayed without any errors.

Routing

Modify Baseline Settings

The Baseline Settings parameters were enabled for editing and the Save button was present on the screen when Smart Routing screen was read-only. Now the Baseline Settings parameters can be viewed, but the Save button is hidden so no changes can be made when the visibility of the Smart Routing screen is read-only.

Legacy routing settings in upgraded version

Legacy routing settings were still retained after upgrading the application to version 16.8, for a particular combination of visibility for old and new routing screens. Now the new routing settings are displayed per the new version.

Calendar icon not displayed consistently

When a user first visited the Smart Routing screen, the calendar icon was visible, but after navigating to a different screen and returning to the Smart Routing screen, the calendar icon was not visible. This situation is corrected now and the calendar icon is visible all the time.

Inconsistent routing permissions

Routing permissions for the Routing Screen (Smart Routing) were inconsistent with the configured permissions. For example, users could edit a routing plan although the permission was set to read-only, but users could not run the plan. This is fixed now.

Links on Routing Plans

When the visibility of Smart Routing and the Routing Profiles screens was set to read-only, the Routing Plans screen displayed the Modify and Start manually links for routing plans. The Start manually link had to be hidden and the View link was supposed to be shown instead of Modify. Now when the visibility is set to read-only the Routing Plans screen displays the appropriate action links.

Daily Extract Script

Symbols not displayed properly

The message_txt.xml file displayed '&' in place of '>' and '<'. Now the message_text.xml file displays the '<' and '>' characters properly.

Mobility

Wrong location of Submit button

Suppose a user had no value in the Offline Reauth field. If a user copied the product URL and pasted it in new window, the location of the Submit button on the Restore window was not aligned. This situation is corrected now and the Submit button is displayed properly.

Native application does not work

Native maps applications such as <https://maps.bing.com> for Windows and <https://maps.apple.com> for iOS were not opening after the first click in Mobility. Now the native applications for maps work properly in Mobility.

Create a resource with an existing external ID

You could create a resource with an external ID that is assigned to another resource. Now you cannot save a new resource with a duplicate external ID.

Incorrect Collaboration window

The Collaboration pop-up window was displayed incorrectly for a Supervisor and it was impossible for the Supervisor to start a chat. This situation has been corrected now.

Logging duplicate action_ids

There was no logging when a duplicate action_ids occurred in action stack in the browser. Now the duplicates of action_id are logged.

Unable to submit form

It was not possible to submit the Edit resource properties screen if the Resource type (ptype) field was not in RW mode or was absent on the screen. This situation is corrected now.

Validation for date format

Activities could not be added in Mobility if the SLA Start (sla_window_start) and SLA End (sla_window_end) fields were set as Read-write on the Add Activity screen and the date format was selected as yyyy/mm/dd. Now activities can be added in this situation.

Negative coordinates

When negative coordinates were captured in Mobility, the negative value was improperly validated by regular expression and failed. Now the coordinates are captured and saved.

Incorrect local storage

Sometimes, when browser events were logged in Mobility in version 16.2.5.11, the size of local storage was incorrectly determined and the code stopped with a JavaScript error message. However, this situation did not cause any visible inconvenience to the user. Now an additional verify type value was added in local storage and there is no JavaScript error in Mobility.

Quantity not displayed

The Quantity property was not displayed on the Install inventory screen in Mobility, despite selecting it as mandatory in the Context Layout screen. Now the property is displayed.

Does not switch to online

When a user performed actions such as starting or completing an activity and attached big files or used a slow connection in the offline mode, and then switched online, the application did not switch to online. Now the timeout value for synchronization is increased.

Unable to log in to iOS 8

Users could not log in to Mobility using iOS 8 mobile devices. Now users can log in to Mobility using iOS 8 mobile devices.

Reason for switching to offline

The `client_event_log_*` contained information about "AJAX request error", which provided details when the Mobility application went offline, but did not include the reason for which the application switched to offline. Now the log includes a new event, `net_status_change` that logs the reason for switching to offline.

Unable to log in

When a user logged in to Mobility, the error message, "Network instability detected" was displayed, as the server returned truncated data. Now users can log in to Mobility without any errors.

Not ordered activity is created as ordered

When a user created a not ordered activity from mobility, an ordered activity was created and placed the first in route. Now, if a position in route is selected during activity creation, the selected position is applied (ordered, first, after, last, not ordered). If a position in route is not visible on the Add activity screen, the activity is added to the beginning of the queue.

Active chat disappears

Active chat windows disappeared from the community window when the browser was refreshed and were not available in the history as well. Now the active chat windows stay when the browser is refreshed.

High memory consumption

After submitting a form that had the file and file image properties filled, the memory of Mobility increased by 2-3 MB. This situation is fixed now.

Submitting forms with custom properties

In Mobility, when a form included a large amount of activity custom properties, submission was slow. Now the form is submitted within a reasonable time.

13 Oracle Field Service Cloud 16.8 Service Update 2

Overview

Click a link to view the bugs fixed in that category:

- [API](#)
- [Core Manage](#)
- [Mobility](#)

API

Incorrect schema definition for enumeration list

There was an incorrect schema definition for enumeration lists that is, enumerationList (#/definitions/PropertyEnumeration). The schema now includes appropriate definition for single item and enumeration lists.

Documentation does not include details

In the documentation, the Start shape population process section does not mention that each next upload removes all the current data, so it's not possible to load data incrementally. It is required to upload all the shape data in a single file each time. Now the documentation includes, 'Ensure that you upload all the shape data at a time. Every time you upload data, the existing information is removed. Hence, incremental data upload is not supported.'

No extension for files uploaded using API

Files uploaded using REST API did not have the file extension when downloaded using Core Manage. Now the files have an extension, and it is also possible to set the filename through HTTP Header Content-Disposition: attachment; filename="filename.extension".

chatMessageSent event does not return the first message

The first message of a chat is now correctly included in the chatMessageSent event.

GET FILE request does not work with the "Accept" header

File data is now correctly returned instead of the incorrect JSON metadata when using the "Accept: application/octet-stream" header.

Core Manage

Inaccurate time to travel to first activity

The time to travel to the first activity was calculated inconsistently for Resource Types with the field 'Working time includes travel to first activity' cleared. Now the application calculates travel time according to the Activity Type setting or doesn't calculate travel time based on the Resource Type setting for all first activities.

Error when switching from Time to List or Map View

Switching from Time to List or Map View produced the error: Temporarily unavailable, please try later. This behavior is corrected and there is no error while switching from Time to List or Map view.

Unscheduled activities in immediate routing

Routing profiles with 'immediately' type of running did not include unscheduled activities. It included only scheduled activities. The immediately type of routing plans now works as follows:

- Non-scheduled activities are taken into account.
- Activities are not routed if their SLA start time is further in the future than the "Assignment and Bundling within" interval.
- Activities are bundled if they match the key.
- Activities are not bundled if the SLA prevents that from happening.

Exporting activities

Some customers were not able to export activities with a date in the past, this behavior has been corrected.

Delivery channel missing

A message scenario that was imported from an earlier version of the application, and had EXTERNAL_SYSTEM as the Notification Method, displayed the message "Delivery channel is missing" in the Scenario Steps list. Now the scenario steps display the delivery channel properly.

Incorrect state of delivery channel

When a Delivery Channel was edited, it was opened in an incorrect state. The field Encryption was set to "Default encryption", but there were no fields that could be filled with the certificate information. This situation is rectified now and the Delivery Channel screen is displayed properly.

Start Chat option in Time View

When a user tried to start a chat session from the Start Chat Action link in Time View, the chat window did not open. This behavior is corrected and the chat window opens properly from the action link.

Multi-day activity duration

While creating a multi-day activity, the duration could not be set to longer than 12 hours 55 minutes, but while editing it could be set up for a much longer time. Multi-day activity durations can now be set from the minimum value, which is set in the 'Minimum duration of a single segment' field on the 'Add/Modify activity type' screen to the maximum value, which is set by the 'Duration' field.

Sorting activities in List View

In the List View, activities were not sorted on start time. Now the activities are sorted on start time in the List View.

Show more link hides routing plans

The Routing Plans list was refreshed every 10 seconds and as a result all the changes (extend plan list by 'show more' link, scroll down to the list end) were lost. Now only the widgets are refreshed; the routing plan list stays untouched and all user actions are retained.

Incorrect routing run time

Incorrect run time was displayed in the Routing run time metric, toward the end of routing. Now the Routing run time metric displays the proper time.

Wrong translations

Translations for Time Format, Date Format, and Long Date Format properties now have the translation in the supported languages.

Moving activities in map view

An error that caused a persistent activity hint window in Mozilla Firefox on Map View where activities could be dragged has been resolved.

Incorrect validation of key length limit

Work zone key lengths are now correctly validated to prevent keys that exceed 50 characters. A notification message is displayed when a user sets the Work Zone key length value greater than 50 symbols.

Collaboration search not working

An issue that prevented helpdesk operators from searching in Collaboration has been resolved.

Incorrect warning in Message Scenario steps

Message scenario steps that use a configured delivery channel no longer display a "Delivery channel is missing" error.

Join chat not working properly

Sometimes a user will try to join a chat with another user, but the other user leaves before the user who is trying to join can do so. Now, the option to join chat is shown in Core Manage only if the user can join. In Mobility, an error message will be shown in such cases.

Chat count mismatch

An error that caused a different chat count for two operators on the same help desk was corrected. Now the chat count for operators on the same help desk will always be the same.

Some search results do not populate in the search field

Performance has been enhanced when searching for users on the Search Contact screen in Collaboration.

Messages getting lost when refreshed

The order of returned messages has been fixed when retrieving chat messages so that no messages are lost during page refresh.

Unable to edit or delete collaboration groups

An issue of duplication of updates caused failures when deleting and updated collaboration groups. The error has been corrected.

Travel time calculation

Travel time statistics were not applied for the activities located at the bucket level, the company default travel time value was used instead. Now the travel time statistics are applied to the activities at the bucket level.

Possible incorrect recalculation of linked activities

The possibility of an incorrect recalculation of activities that were linked twice with a simultaneous link has been corrected.

Mobility

Date not visible in iPhone 9

When a user logged in to Mobility using iPhone 9 and viewed the Resource Calendar, the selected date was not visible fully at the bottom of the screen. Also, the date could not be tapped. Now the date is visible properly in iPhone 9.3.2.

Inventory screen not opening

In Mobility, when a user clicked a date on the calendar and clicked Inventory that was missing the enum value, the application did not display anything. Now the application displays the inventory for any selected date.

Hide activity fields does not work

The "Hide activity fields" restrictions applied based on conditions, now work as expected.

Unable to submit new password

When the Force Password Change at Next Login field was set for Mobility users and the user changed their password, the password could not be submitted. The message, 'Old password is wrong' appeared. Now the password changes are submitted and the Change password screen is closed.

Saving is slow

In Mobility, when a form included a large amount of data for an activity, submission was slow. Data submission is now optimized.

Visual feedback is missing in Chrome browser

Visual feedback was added to the activity and inventory lists on the Mobility interface. Now tapping on rows, row headers, View More button display highlighting. Action links and navigation buttons also provide visual feedback when tapped.

Some search results do not populate in the search field

Performance has been enhanced when searching for users on the Search Contact screen in Collaboration.

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Overview

Click a link to view the bugs fixed in that category:

- [API](#)
- [Core Manage](#)
- [Data Extract Scripts](#)
- [Mobility](#)
- [ETAWorkforce](#)

API

Error message not JSON-encoded

401 Unauthorized' error message was not an encoded JSON message in a REST API method's response body. Now the message is an encoded JSON message and is displayed as, "{ \"type\": \"http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html#sec10.4.2\", \"title\" : \"Unauthorized\", \"status\": \"401\", \"detail\": \"Authentication failed\" }\".

Delete work skill request clears end date

The Delete work skill API request cleared the end date for all the work skills assigned to a resource, except for the one that was deleted. Now the API request does not clear the end date for all the work skills; it deletes the selected work skill.

POST request with label more than 255 characters

When a POST request was sent to create a work zone with more than 255 characters for the label, the work zone was created and the label was shortened to 255 characters. This defect is fixed now and the application displays the error message, \"\"status\": \"400\", \"detail\": \"Invalid property value. Property: workZoneLabel. Value: 0123....0123. Message: string length(256) > maxLength(255)\"\" is displayed.

CORS headers not returned properly

Access-Control-* headers were not returned for errors. Access-Control-* headers were not displayed for all the supported methods (GET,POST,PATCH,PUT,DELETE). Access-Control-Allow-Methods was returned for methods other than OPTIONS. It was to be returned for OPTIONS. Now Access-Control-* headers (Access-Control-Allow-Origin: {origin} and Access-Control-Allow-Credentials: true) are returned for errors and are returned for all the supported methods (GET,POST,PATCH,PUT,DELETE). Access-Control-Allow-Methods is only returned for the OPTIONS method.

GET USERS returns external resource ID

The GET request to get the list of users returned the external resource id instead of the internal id (PID) for the 'resourceInternalIds' field. Now the GET request returns the internal id (PID) for the 'resourceInternalIds' field.

Unable to set parent resource in the resources field

If the value of the mainResourceid was not a value in the resources field, the user details could not be created or updated using the PUT request. Setting the mainResourceid to the root didn't work either. The message, ""Value of 'mainResourceid' must be one of values in 'resources'"" was displayed. Now, it works as follows:

1. If selfAssignment is set, mainResourceid accepts values only from the resourceid list;
2. If selfAssignment is not set, 'resources' can have parent/root resource of mainResourceid;
3. If selfAssignment is not set and the user tries to update a group or bucket which is not the parent of mainResourceid, the 400 Bad Request response is returned with the error message: "The main resource has to be visible to at least one of the resources, when \"selfAssignment\" is false"

PUT ASSIGNED LOCATIONS function doesn't set resource locations

The resource location could not be set using the PUT ASSIGNED LOCATIONS function, if the target was a field resource. The function returned the response, "Cannot assign locations to group or bucket." Now PUT ASSIGNED LOCATIONS method sets the resource location for resources with 'Field resource' role without errors.

GET ROUTE function doesn't include activity tag

If a route was empty, the response for the GET ROUTE function in the activity management API did not include the activities tag. Now the response includes the activities tag.

Status property not displayed

The Status property of an activity was not exposed in the metadata catalog for bulk update operations. Now the Status property of an activity is included in the metadata catalog.

Core Manage

Max available field shows blank

For a specific customer, the Max Available values were blank on the Quota screen for some past days. Now the Max Available values are displayed for all the past days.

Start activity button not displayed

The Start Activity button was not displayed in the Activity details screens for a mass activity. It was just displayed in the hint. Now the Start Activity button is displayed in the Activity details screen.

Property value not saved

After installing inventory, a mandatory Property value was not saved despite filling it up. Now the Property value is saved without any errors.

Multi-threading in sequential routing

If a manual routing plan was run when a sequential routing plan was already running, the application became unresponsive. Now the application runs sequential routing plans without any errors.

No notification for submitting changes in read-only mode

There was no notification message when a user tried to save changes when the Core Manage application was in read-only mode. Now, the message, "This operation is temporarily unavailable. The system is currently running in the read-only mode." is shown. The data is still available and after the server becomes available, the user can resubmit the changes.

Canceled non-scheduled activity in non-scheduled queue

When an Inbound API request was sent to cancel a non-scheduled activity when "Allow re-schedule" was disabled, the activity was canceled, but retained in the non-scheduled queue. Now the Inbound API ignores the "Allow re-schedule" permission and moves the activity from the non-scheduled queue. If the inbound request is sent without a date, the activity is moved to current date and then is cancelled. If the request includes a date, the activity is rescheduled to the specified date.

Incorrect value for freeTimeWindows

Incorrect value was displayed for freeTimeWindows if a resource had their own calendar and activity inside the route. Incorrect value was displayed for freeTimeWindows if a resource inherited the calendar from the parent, and the findMatchingResources request did not return free time windows at all. If a resource inherits the calendar from the parent, the findMatchingResources request now returns correct free time windows. The response doesn't return morning time (for example 08:00 - 12:00) free time window availability for the resource, if the current time is more than 12:00. Mass/repeating activities (templates) are not ignored: If a future date is requested with 1 hour lunch break, freeTimeWindows shows an array of free time windows. First value: from start working day to lunch break. Second: from lunch break to the end of working day. If the route contains started or finished activities in time greater than "now", freeTimeWindows doesn't return the time before started or finished activities.

Activity duration increments automatically

If the statistic data for a provider was absent, the calculation of the duration underwent a geometric progression, as it used the initial ratio of the Technician as the multiplier. Now the recalculation is always done on the base value, and not the incremented value.

Changing shift doesn't adjust default activities

If the shift was changed for a resource, the instances of default activities associated with the shift were not adjusted. Now the instances of default activities are adjusted according to the change in the shift.

activityCompleted and activityNotDone do not include endTime

activityCompleted and activityNotDone events did not include the endTime field, they included only the startTime field. Now the events include the endTime field.

Options disabled for user type

After upgrading to 16.8, when a resource type was assigned to a user type, some options were disabled for one user type and not for other user types. It was impossible to select some of the check boxes. This problem cannot have a common solution for all customers, as the implementation differs from customer to customer. The problem is resolved by displaying a message for the number of users for which the user type is changed. When multiple user types are selected and the Set user type link is clicked on the Users screen, the application displays the number of users for which the user type has been changed.

Additional user created for resource without route

In 16.2, if a resource did not have a user associated with it, and did not have activities assigned to it, then, when the resource was migrated to 16.8, an additional user was created. Now, the additional user is deactivated, and the Main resource is set for the initial user after migration.

Smart Collaboration and Help Desk groups not displayed

After upgrading from version 16.2 to 16.8, the Smart Collaboration and Help Desk groups were not displayed in the Edit user screen. Now the groups are displayed properly based on the access permissions.

Method displayed instead of Delivery channel

The Messages tab on the Activity details screen displayed the filter label as message type instead of delivery channel. Now the filter label is displayed as delivery channel. The Messages report screen displayed the label Method instead of Delivery Channel. Now the label is displayed as Delivery Channel.

Empty Not Done activity layout

When a new property was added to the Not Done Activity layout and later the property was deleted, the Not Done Activity layout showed an empty screen. This situation is fixed now and the Not Done Activity layout shows the default screen.

Notification method displayed instead of Delivery channel

If the visibility for Notifications or Message step was set to read-only the label Delivery Channel was displayed as Notification Method. However, when the visibility was set to read-write, the label was displayed as Delivery Channel. Now the label is Delivery Channel, regardless of the visibility.

Daily extract looks different from other screens

The look and feel of the Daily Extract configuration screen was different from that of the Routing and Message Scenario screens. Now the Daily Extract configuration screen looks similar to Routing and Message Scenario screens.

View filters doesn't open properly

If the View filters drop-down list did not fit to the screen (that is, if it was too long for a small browser window), it was opened in the opposite direction and was displayed behind the screen. This situation is fixed now; if there is not enough space for a pop-up window to display, scroll bars are added.

Error when selecting a routing profile for a bucket

The error with selecting a different routing profile for a bucket on the Smart Routing screen when the Routing Profiles menu was read-only or hidden is fixed now. Assign or change routing profile action link is not available now if routing profile is read-only or hidden.

Undefined label for country codes

Country codes have the "(undefined)" label instead of the actual country name. Now the country codes have the Country Code label and the country name.

Disable weak password hash selected always

The Disable Weak Password Hash check box in the Delivery Channels screen was still selected despite being cleared before saving. Now the check box retains the status while saving the form.

Cannot edit visibility conditions

In some cases, Visibility conditions could not be edited for enumeration fields for the Edit/View Activity context layout screen for Mobility. Visual form editor ignored invalid conditions with invalid property_id. Now the visibility conditions can be edited without any errors.

Field list doesn't display properly

In the Field drop-down list in the Add filter condition dialog, when an alphabet was typed, the list only showed the first field starting with the alphabet and did not go to the list of fields starting with it. This error is fixed now. The first field Work order [appt_number] is displayed and highlighted correctly in the drop-down list.

Incorrect date for different timezone

Manual routing confirmation dialog showed incorrect date for users with different timezone settings on their computer. Now the date on the routing confirmation dialog is same as the one set in the application, and not the one set on the user's computer.

Number of activities different on different screens

The number of activities shown in the Activity view was different from the number in the resource tree in the Routing screen. This defect is fixed now and both, Activity and Routing screens show the same number of activities.

Activity details opens after delay

Activity details screen in Manage opened with significant delays for activities that had multiple attached files. Now the Activity details screen open within a reasonable time.

Execution summary shows incorrect figures

The Execution summary widget showed incorrect figures at the first attempt. The correct figures were displayed after a delay. The value of the Execution Summary widget refreshes when a different bucket is chosen in the resource tree.

Deleting tab moves properties up

When a tab or section that included properties was deleted in the layout editor, the tab or section was deleted, but the properties moved to the tab or section above the one deleted. Now the tab or section is deleted with its properties.

Activity type ID displayed

In the Add Activity and Edit Activity screens, Activity type ID was displayed for a few fields. Now the Activity type ID does not appear on the screens.

Color code doesn't change per status of activity

In Map view, if an activity in the Pending Jeopardy status was started, it still showed the activity in Pink, instead of changing to Green. Now, if an activity in the Pending Jeopardy status is started, it is shown in green in Time View, List View, and Map View in Manage and Mobility interfaces.

Show/hide resources with non-working day doesn't work

The filter "Show/hide resources with non-working day" was not working. It showed all the resources regardless of their non-working day assignment. Now, if the "Show/hide resources with non-working day" is cleared, the resources with non-working day are hidden in the resource tree.

ADFS metadata cannot be uploaded

Metadata from Active Directory Federation Service (ADFS) could not be uploaded. As a result, a SAML based login policy could not be created for ADFS. Now it is possible to create new SAML login policies using the upload metadata XML functionality, if all the required data is available.

Start manually option not available

The Start manually option was not available in the Routing screen, if the selected date was in the next month. Now the Start manually option is available when the selected date is in the next month.

Routing runs summary does not display reasons

Routing summary did not display the reason for which activities were not assigned when there was at least one unassigned activity. Now the summary includes the description for not assigning activities.

Property names displayed in English for Spanish interface

The error with displaying property names in English for a Spanish user interface, in the Visibility conditions section of the User Type context layout screen is fixed now. Property names are displayed in the language set for the user.

Connection to Core Manage times out

After switching Mobility to online, if multiple files were being synchronized with Core Manage, the connection timed out frequently. This situation is resolved now; the connection is restored automatically and the synchronization continues.

Coordinates differ between screens

The error where the coordinates of the last breadcrumb of the provider trace differed from the current resource location is fixed. Now the resource location has the same coordinates as the last breadcrumbs.

Activity Type creation doesn't work for French user interface

The error with adding activity types for users that had the default language as French is fixed now. Users who have French user interface can add activity types.

Routing doesn't display all buckets

In the Routing screen, the resource tree did not display all the available buckets. Now the Routing screen displays all the buckets, groups, and the buckets under the groups in the resource tree.

Adding time to activity changes start time

Adding time to the activity changed the activity's start time. This error is resolved and the start time does not change now.

Visibility conditions ignored

Section conditions configured in the context layout screen were not met in some cases. Now the sections are displayed according to their visibility algorithm based on the visibility of internal elements.

Validation log link missing

When Import was clicked on the User Types screen, the User Type Validation link was not displayed. Further, the User Type Import Details link was also not displayed. Now the User Type Validation link is displayed; a progress bar and the validation information are also shown.

'Working time includes travel to first activity' not considered

If the 'Working time includes travel to first activity' option was not selected for a resource, the travel time to the first activity was reserved by Routing for that resource and some activities were filtered out as unsuitable. The problem has been fixed and now routing does not calculate travel time to the first activities for such resources.

Work skills not returned

The Capacity API didn't return the available quota for a Capacity Category, if the category included a work skill group with terminated work skills. Now the quota is calculated if the work skill group of the corresponding Capacity Category contains at least one active work skill.

Unable to move resources in a split screen

When the screen was split, resources could not be moved between buckets that were present in different parts of the split screen. The messages, "Select active group or teamholder" and "Unable to move" were displayed. Now resources can be moved between buckets that are present in different parts of a split screen.

Restore screen after log in

When a user logged in to Mobility, closed the browser, and logged in again (within two days) with the same credentials after the cookies expired or were removed, and the log in was successful, the Restore screen was displayed instead of the Mobility home page. However, the Restore screen was displayed properly in other situations. This defect is fixed now and the Restore screen is displayed if the cookies are expired or removed, and the log in is not successful.

Property moved in Activity details

A property was not displayed in its location in the Activity Details screen. It was moved when a different activity was selected. Now the property is displayed in the same location for all activities.

Modifying login policy name

Editing the login policy's name for one language changed the new name for all languages. Now the policy name is changed only for the selected language.

Data extract scripts

Daily extract fails after upgrade

The Daily Extract script could not be run in CSV only mode immediately after upgrading from some 4.5 versions. Now the Daily Extract script runs in CSV mode without any errors.

Daily extract does not execute

It was not possible to add Daily Extract files to archive if there were white spaces in filenames. Now the white spaces are ignored and the files can be successfully added to the archive.

Mobility

Adding time to activity changes start time

Adding time to the activity changed the activity's start time. This error is resolved and the start time does not change now.

Visibility conditions ignored

Section conditions configured in the context layout screen were ignored in some cases. Now the sections are displayed according to their visibility algorithm based on the visibility of internal elements.

Screen doesn't scroll in landscape view

While adding work skills on the Resource Work Skills screen, the screen did not scroll in landscape view. Now the screen scrolls properly in landscape view.

Inventory quantity displays error in Core Manage

In the Activity Details screen in Mobility, if the quantity of an inventory item was increased or decreased, the quantity was saved in Mobility, but Core Manage displayed the error, "The inventory already exists." This issue is resolved now and the increased or decreased quantity is saved in both, Mobility and Core Manage without any errors.

Cyclic re-login error

When there is a situation of cyclic re-login to Mobility--that is, the user logs in, closes the tab, the session expires, and the user logs in again, sees the Restore screen and refreshes it, and then types the credentials and taps Enter, the application displays the Login screen instead of the Mobility home page. This situation is fixed now and the application displays the Mobility home page instead of the Login screen.

Network instability detected error

The message, "Network instability detected" was shown when logged in to Mobility after upgrading to a newer version. Now users can log into Mobility after upgrading to a newer version without any errors.

Cancelled and deleted activities in Mobility

Cancelled and deleted activities were loaded into the technician's Mobility, which consumed the Local Storage space. As a result, the user could not log in to Mobility. Now the user can log in to Mobility smoothly.

Spinning circle displayed continuously

When data was refreshed in Mobility, a spinning circle was displayed continuously on the Inventory list screen and on other screens, the call actions that are available through the More button could not be accessed. This situation is fixed now. The spinning circle is displayed till the time the equipment list is displayed and is hidden thereafter. The visible menu options are available.

Logout doesn't work

In Mobility, the Logout link did not work for a Supervisor user when there was data that was not synchronized. Now the user will be logged out when the data is synchronized.

Error after synchronization

When a user logged in to Mobility, the application displayed the 'Page not found' page immediately after synchronization. This defect is fixed now and the application displays the target page without any errors.

Information missing in activity hint

In the Map view in Mobility, the activity hint box showed the details in a short line, where most of the information was missing. The Details link was also not visible. Now the activity hint pop-up dialog is displayed with multiple rows and includes the Details link.

Restore screen after log in

When a user logged in to Mobility from a computer, closed the browser, and logged in again with the same credentials when the session expired, the Restore screen was displayed instead of the Mobility home page. This situation is fixed and now the Mobility home page is displayed.

ETAWorkforce

Connect to ETAdirect link doesn't work

The Connect to ETAdirect link in the ETAWorkforce Settings View screen did not work in the Chrome browser. Now the Connect to ETAdirect link works and the appropriate screen is displayed.

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Overview

Click a link to view the bugs fixed in that category:

- [API](#)
- [Core Manage](#)
- [Data Extract Scripts](#)
- [Mobility](#)

API

No response for yesterday's activity requests

The same activities scheduled for subsequent dates were not displayed. Now the Activity Management API returns correct response to yesterday's activities requests, without any errors.

Update activity method removes file properties

The Update activity method removed the existing file properties assigned to an activity. Now, the existing file properties assigned to the activity remain intact.

findMatchingResources ignores work skill mismatches

Resources with work skills mismatch were returned in the response. The fitness.workSkill field was always set to 100, regardless of the resource's work skills matching the work skills required for the activity. Now zero fitness.workSkill is returned, if a resource has no work skills required by activity, and has other work skills.

Activity actions erase values of custom properties

The activity actions of API methods Start, Complete, NotDone, Cancel, Suspend erased the values of custom properties. Now custom properties are not erased by the API methods.

Inventory does not return inventory pool in its response

Inventory did not display the status in the response when the inventory was in installed pool or deinstalled pools. Now, the status field shows the values 'installed' or 'deinstalled' for inventories residing in installed and deinstalled pools respectively.

Activity search by customer_number results in 400 error

Searching for activities by customer name did not work. Now it is possible to search activities by customerNumber. Response returns 200OK with the list of activities.

Automatically rectify layer data uploaded

Earlier, the upload process was updated to rectify work zones shapes data. Now you can successfully upload and work with geometry data exported from other sources, except Oracle Spatial and Graph. You cannot export from Oracle Spatial and Graph, as the raw data is unlikely to correspond to the Oracle Spatial and Graph standards.

Support data in SRIDs other than Oracle Maps JS library

Oracle Maps JS library has limited built-in support for certain SRIDs and if others are used in the uploaded data, then the data fails to be displayed in Oracle Field Service Cloud. The support of the conversion request from JS library is implemented and now, GIS data is displayed regardless of the SRID.

Core Manage

Label changes under Subsystems and Integrations

All occurrences of **Daily Extract Configuration** under **Subsystems and Integrations** are now referred as **Daily Extract**. All occurrences of **Statistics Parameters** under **Subsystems and Integrations** are now referred as **Statistics**.

Allow draw on image option is lost after property import

The **Allow draw on image** option was unavailable after exporting and importing a configured property. Now it is available after exporting or importing the file property.

Move screen - Distance-weight coefficient not taken into account

When an activity was moved, the resource list on **Move activity** screen in Manage showed the resources sorted by number of assigned activities. Now the resource having closer activity to the one being moved is displayed at the top of the resource list.

Travel time estimation changes

When a resource had the feature **Working time includes travel to first activity** disabled and the first activity in the resource's route was internal (the activity type which does not require travel time and has the feature 'Calculate travel' disabled), then the travel time to the second activity in the route was zero too. Now, if a resource has the feature **Working time includes travel to first activity** disabled, the travel time to the second activity in the route is calculated regardless of the type of the first activity in the route.

SLA start and end times not recalculated within activity time zone

SLA start and end times were set in the activity time zone. Now SLA start and end times are recalculated if activity and resource have different time zones. `sla_window_start` and `sla_window_end` are set in the time zone of the resource.

Required data is temporarily unavailable for past day routes

Data such as repeating, mass, and shift activities was temporarily unavailable for past day routes when only secondary server was running. Now, the required data is available for past day routes even if only the secondary server is running.

Contradiction between Baseline Settings and Business Rules

The values on the **Baseline settings** screen was always measured in miles regardless of the **Distance measurement units** selected on the **Business Rules** screen (kilometers or miles). Now the Baseline settings screen corresponds to the measure that is set on the **Business Rules** screen.

Some messages ignore launch conditions

The "Service_Window_Warning" and "Not Activated" messages ignored the launch conditions and triggered based only on the scenario steps. Now "Service_Window_Warning" and "Not Activated" messages take into account the launch conditions.

Issue with Copy to screen configuration between user types

Copying of context layout structure didn't work. Now the target user type's context layout structure is copied and is available immediately after the process of copying.

Activity List/Time View: Label is missed for some activities

The **List view** and **Time view** screens did not show the labels for the activities that were created externally. Now, the **List view** and **Time view** screens show appropriate labels for all activities according to their configuration.

Edit Message step: Unable to change time

The time zone showed as UTC+07:00 Jakarta regardless of selecting any other time zone. This problem is solved now, the **Time Zone** field displays correctly.

Time view: Provider history mask not visible

The resource trace did not display for past days in the **Time view**. Now the resource trace is displayed on the **Time view** for any day in the past.

Activity move via drag-and-drop does not work

The drag-and-drop action to move activities for **Week Time view** did not work correctly. Now you can move activities (between resources or any day in future) by dragging and dropping in the **Week Time view**. However, drag-and-drop actions are not allowed for past activities.

Start chat action link is missed on resource hint

Start chat action link is not displayed on resource hint in Manage while configured on corresponding context layout. Action link is now available on the resource hint.

Top bucket of resource tree shown incorrectly

The resource tree did not display the root bucket correctly when switching between **Routing** and **Configuration** screens. The bucket was displayed at the **Search** string level. Now, the root bucket is shown under the **Search** string level when switched between **Routing** and **Configuration** screens.

Sections in Mobility/Print Route screen not recognized

The **Print Route** screen in Mobility was a grid and not a form. Therefore, it was unable to handle section-based layouts created through the **Visual Form Editor** properly. This caused sections being added to the grid as table columns. Now the **Visual Form Editor** is with the legacy **Context layout structure**.

On-Call not displayed on Technician level

On-Call status is not displayed at the technician level in **Time View**; it is displayed at the bucket level only. Now on call status is displayed correctly.

Work Zones with Read-Only access creates error

Work zones were not displayed for users with Read-Only permissions. The Work zones screen now displays work zones for users with Read-Only permissions correctly.

Work skill group / capacity category label cannot be changed

Changing Workskill group or Capacity category label from uppercase to lowercase and vice-versa was not allowed. It is now possible to change Workskill group and Capacity category labels, if only uppercase is changed to lowercase and vice versa.

Manually added coordinates not used

The travel time to first activity appeared as the default travel time for resources' location. Any manually entered coordinates were ignored in defining the first day travel. Now the travel time is calculated from the start location to the activity address.

Ordering of Monitored activity fields

The order of **Monitored activity fields** in the **Display** screen did not match the fields listed in the edit box. Now the fields in the **Monitored activity fields** are consistent with the fields listed in the edit box.

"Resource duration stats fields" should not be shown

The **Resource Duration Stats field** section is empty on the **Statistics parameters** screen while others show as **no items selected**. Now, the **Resource Duration Stats** field is removed from the screen.

User Types export file format not compatible

Importing system export file from Oracle Field Service Cloud Release 16.8 Service Update 2 to Service Update 3 is now possible. The validation process displays the actual state of validation. The import process updates the user types with correct permission settings, context layouts configuration, valid data for visibility settings, and places it in the appropriate context.

Main Resource removed after updating My Display

Main Resource was unassigned from a user, if the user opened the **My Display** screen and clicked **OK**. Now the value for **Main Resource** remains intact when the **My Display** screen is opened and closed.

Map view shows different options

Different number of options (or check boxes) were visible for 'Map View' depending on what screen was previously opened. Now the check boxes that are displayed are not based on the screen that was previously opened.

Internal URL shown for APIs

Internal URL was displayed for APIs in the About page. Now the URL is displayed as <https://api.etadirect.com>.

Unable to edit Properties for French user-interface

When French was selected as the Company Language, Properties could not be created or edited. Now Properties can be added and modified when French is the language.

Routing plan start and end time show current time

For the routing plans in "scheduled" status, the "Routing plan start time" and "Routing plan end time" fields showed current time in GMT timezone, instead of the actual scheduled time. Now the routing plans show the actual scheduled time.

HTML character codes in French user-interface

The issue with displaying HTML character codes on the Routing Plan screen for users with French language is resolved now. All the characters are displayed properly in French.

User types configuration cannot be edited

If English was not added to the list of languages in the **Display** screen, **User Types** screen could not be edited. User types configuration can be edited without problems if English is not added to **Company Language**.

Elements added to top of screen

When an element was added to the **Context layout structure** screen, it was added somewhere in the top, instead of adding after the action link or at the end of the list. Now, if the new property is added after the selected property (or before the selected property, if the 'Add before selected' option was selected). If the new property is added at the **Add property** button, it is placed last in the property list.

Data extract script

Field format changed after upgrade to 16.8

In the Queue data set, the `calendar_start_time` and `calendar_end_time` formats did not display correctly after extraction. Now the `calendar_start_time` and `calendar_end_time` show the correct format after extraction.

Mobility

Data on the History tab from activity details is incomplete

Earlier some actions were not displayed on the **History** tab in the **Activity Details** screen. Now the entire activity history is displayed on the **History** tab.

Install Services not wrapping to screen in portrait mode

In the **Activity Details** screen, Install Services table did not display correctly earlier. Tables now appear better in landscape mode.

Unexpected GPS-alerts

Earlier, technicians received GPS alerts even when they were at the activity location. Alerts are now displayed only if the technician is far from activity location for more than 250 meters (the distance which is determined on the Business Rules screen).

Images uploaded in Mobility Offline are unavailable in Manage

Images uploaded in Mobility Offline were unavailable in Manage. File attachments are now available in Manage.

Work zone information is not displayed in Mobility

The **Resource Info** screen in Mobility did not display information about work zones. It just displayed 'No Restrictions'. Now the work zones assigned to a technician appear correctly.

Actions with file properties rejected if file storage is unavailable

If processing of the file failed or file storage was unavailable, actions that contain the file properties were rejected. Now file synchronization does not affect the actions. The offline synchronization screen displays the details about failed file properties.

Plugin action link opens link with same coordinates

Earlier, the Native application plugin action link in the **Activity details** screen in Mobility opened the link with same coordinates (the coordinates of the first opened activity) for different activities with different coordinates. Now, the Native application plugin action link opens with matched coordinates for the activity.

Add activity page is not loaded after pressing F5

The Add activity page was not displayed in offline mode after refreshing the page. Now the Add activity page is available in Offline mode.

Property not updated when creating inventory

Inventory properties were not saved during the insert inventory operation, if their conditions referred to appointment properties. This problem is fixed now. The inventory properties are saved properly.

Change password in mobility

After forced password change, the re-login screen and home page were displayed in Mobility. Now this defect is fixed and the user is redirected to the Login page.

Double tap in Google Chrome v55

On Windows touch devices that had Google Chrome version 55 or higher, it became impossible to select a check-box, or tap More. Now it is possible.

Parts catalog: Search in Mobility not working

Search for parts catalog items did not work in online mode in Mobility but worked in Manage. Now the search for parts catalog items works properly in online mode in Mobility.

Unresponsive More option

If a user swiped the **Equipment List** tab multiple times, navigated to the **Activity Details** tab, and then clicked the **More** option, the option became unresponsive. Now the More option is responsive on Android and iOS devices.

Unable to transfer inventory in Collaboration

Inventory could not be transferred through the **Transfer inventory** option in the **Collaboration** menu of Mobility. This happened if the **Inventory type** field was missing in the **Identify Inventory by** context layout screen. Now inventory can be transferred even if the **Inventory type** field is missing. In this case, the application uses the activity ID as the title text instead of Inventory type.

Revision History

This document will continue to evolve as existing sections change and new information is added. All updates are logged in the following table, with the most recent updates at the bottom.

Date	What's Changed	Notes
29 AUG 2016	Initial release	
27 SEP 2016	New chapter Oracle Field Service Cloud 16.8 Service Update 1: Added the bugs fixed in this release.	
11 OCT 2016	Updated Deprecations and Removals section	
25 OCT 2016	Additional changes to Deprecations and Removals	
01 NOV 2016	New chapter Oracle Field Service Cloud 16.8 Service Update 2: Added the bugs fixed in this release.	
02 DEC 2016	New chapter Oracle Field Service Cloud 16.8 Service Update 3: Added the bugs fixed in this release.	
27 DEC 2016	New chapter Oracle Field Service Cloud 16.8 Service Update 4: Added the bugs fixed in this release.	
