

**Oracle Utilities Customer Cloud Service
Integration to Oracle Field Service**

User's Guide

Release 22C

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Oracle Utilities Customer Cloud Service Integration to Oracle Field Service User's Guide, Release 22C

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Oracle Utilities Customer Cloud Service Integration to Oracle Field Service User's Guide

Welcome to the Oracle Utilities Customer Cloud Service Integration to Oracle Field Service User's Guide for release 22C.

This user's guide includes the information required for the integration to work effectively. It describes how to use the features in Oracle Utilities Customer Cloud Service. It provides instructions for completing common tasks and provides descriptions of the fields, windows, buttons, and menus used to perform those tasks. The instructions and descriptions in this guide are based on the default product configuration for a user with full authority to use all functionality.

Note: The screenshots and images provided in this document are sample references based on the current release of Oracle Utilities Customer Cloud Service Integration to Oracle Field Service. They may change based on changes to UI in the future releases.

Quick Links

- [Overview](#)
- [Supported Features](#)
- [User Operations](#)
- [Data Relationships](#)
- [Additional Information - Integration Concepts](#)

For more information, refer to the integration documentation available on Oracle Help Center at: <https://docs.oracle.com/en/industries/energy-water/integrations-index.html>

Have a question? Contact your Delivery Team or visit [My Oracle Support](#).

Preface

Welcome to the Oracle Utilities Customer Cloud Service Integration to Oracle Field Service User's Guide for release 22C.

This user's guide includes the information required for the integration to work effectively. It describes how to use the features in Oracle Utilities Customer Cloud Service. It provides instructions for completing common tasks and provides descriptions of the fields, windows, buttons, and menus used to perform those tasks. The instructions and descriptions in this guide are based on the default product configuration for a user with full authority to use all functionality.

Note: The screenshots and images provided in this document are sample references based on the current release of Oracle Utilities Customer Cloud Service Integration to Oracle Field Service. They may change based on changes to UI in the future releases.

The preface includes the following:

- [Audience](#)
- [Documentation and Resources](#)
- [Updates to Documentation](#)
- [Documentation Accessibility](#)
- [Conventions](#)
- [Acronyms](#)

Audience

This document is intended for anyone implementing the integration between Oracle Utilities Customer Cloud Service and Oracle Field Service.

Documentation and Resources

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

Product Documentation

Resource	Location
Oracle Utilities Customer Cloud Service Integration to Oracle Field Service documentation	https://docs.oracle.com/en/industries/energy-water/integrations-index.html
Oracle Utilities Customer to Meter documentation	https://docs.oracle.com/en/industries/energy-water/c2m/
Oracle Utilities Customer Cloud Service documentation	https://docs.oracle.com/en/industries/energy-water/customer-cloud-service/index.html
Oracle Field Service documentation	https://docs.oracle.com/en/cloud/saas/field-service/22d/index.html

Additional Documentation

Resource	Location
Oracle Integration Cloud Service documentation	Refer to the OIC documentation at: https://docs.oracle.com/en/cloud/paas/integration-cloud/index.html
Oracle Support	<p>Visit My Oracle Support at https://support.oracle.com regularly to stay informed about updates and patches.</p> <p>Refer to the <i>Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)</i> on My Oracle Support to determine if support for newer versions of the listed products is included.</p> <p>For more information, refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm</p>
Oracle University for training opportunities	http://education.oracle.com/

Updates to Documentation

The complete Oracle Utilities Customer Cloud Service Integration to Oracle Field Service documentation set is available from Oracle Help Center at <https://docs.oracle.com/en/industries/energy-water/index.html>.

Visit [My Oracle Support](#) for additional and updated information about the product.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs>

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Acronyms

The following terms are used in this document:

Term	Expanded Form
OUCCS/CCS	Oracle Utilities Customer Cloud Service
OUC2M	Oracle Utilities Customer to Meter
OFS/OFSC	Oracle Field Service
OIC	Oracle Integration Cloud
DVM	Domain Value Map (Lookup)

Chapter 1

Overview

This chapter provides an overview about Oracle Utilities Customer Cloud Service, Oracle Field Service, and Oracle Integration Cloud. It focuses on the functionality and business standpoint of each part and in the integration.

The chapter provides detailed information about the following:

- [Background](#)
- [Integration Overview](#)

Background

The pandemic has forced utilities to rethink their digital transformation strategy to meet ever-changing customer expectations.

No other industry has placed the same level of burden on its operations personnel, as the utility industry has. Utilities around the world continue to navigate disruption - from new asset types across a smarter grid, to record breaking weather events. Layer in unpredictable hurdles, like keeping crews safe amidst a pandemic, and meeting increasingly challenging regulatory and financial demand, and its clear utility operations personnel are under growing pressure to adapt, and perform under increasingly extreme conditions.

Customer expectations are higher than ever now with real-time access to services being the norm (food delivery, parcel services, ride sharing, etc.). Utilities need to keep their customers informed on appointments and other crew activity, and across the board need to be as efficient as possible getting their crews to their jobs throughout the day. Extreme weather events continue increase in both frequency and magnitude, so utilities need to adapt operations accordingly. During, and after, any large outage scenario, such as an extreme weather event, it is critical to be able to adapt quickly, have total visibility of your crews, and get them to the right location fast to restore service for your customers.

Legacy providers and legacy systems that simply were not designed for today's complexities, have left utilities to address these challenges in silos. Data sets become isolated, processes become disconnected, and cost overruns become a certainty, with utility operations left even further behind.

Our out-of-the-box integrated solution between Oracle Utilities Customer Cloud Service and Oracle Field Service addresses these challenges by providing advanced activity and crew management, comprehensive collaboration, and other tools for efficient utility operations.

Integration Overview

Oracle Utilities Customer Cloud Service integration to Oracle Field Service manages fieldwork (activities between Oracle Utilities Customer Cloud Service and Oracle Field Service). This integration can be leveraged to create/update/cancel/ complete activities in the field using the Oracle Field Service solution.

Major business flows revolve around activities. Activities are created in Oracle Utilities Customer Cloud Service and sent to Oracle Field Service for the mobile crews to perform the activity. The field activity completion information is returned from Oracle Field Service to Oracle Utilities Customer Cloud Service where it is processed by Oracle Utilities Customer Cloud Service. In addition, the integration can send interim statuses of a field activity to Oracle Utilities Customer Cloud Service and synchronize data between the systems.

The three major components in this implementation are:

- [Oracle Utilities Customer Cloud Service](#)
- [Oracle Field Service](#)
- [Oracle Integration Cloud](#)

Oracle Utilities Customer Cloud Service

Oracle Utilities Customer Cloud Service processes the trouble calls from customers and analyzes those to determine the probable outage locations. It generates Estimated Restoration Times (ERTs) that can be provided back to the customers. Also, it keeps a history of all the customer calls that were entered in the system, as well as a history of all events that were known to affect a customer even if the customer did not call in.

In addition to responding to unplanned outages and non-outage problems, Oracle Utilities Customer Cloud Service assists the utility planned maintenance work, or new construction that may impact existing customers. When Oracle Utilities Customer Cloud Service generates detailed switching plans, customers are informed about planned outages that might impact them.

Oracle Field Service

Oracle Field Service is built on time-based, self-learning, and predictive technology, empowering to solve business problems while evolving the field service organization. It has various modules to choose, such as forecasting, routing, capacity, mobility, collaboration, core manage, smart location, customer communication, and more. It leverages the performance pattern profiles to create optimal daily routes and schedules and continues to learn as employee work patterns change over time.

The Oracle Field Service functionality is based on user privileges to support the business case. There are two primary types of users:

- Users who use the manage aspect. Example: dispatchers and field managers
- Field service resources who use the mobile application. Example: field service personnel

The screens are different for administrator, dispatcher, crew, etc. For more information, refer to [Appendix A: Additional Information - Integration Concepts](#).

Oracle Integration Cloud

Oracle Integration Cloud is a business accelerator package with pre-built interactions to facilitate Oracle Utilities Customer Cloud Service and Oracle Field Service communications.

Oracle Integration Cloud ensures that the Oracle Utilities Customer Cloud Service requests are being forwarded to Oracle Field Service and vice versa. Oracle Utilities Customer Cloud Service are sending direct requests when the operator makes changes on the user interface. On the other hand, Oracle Field Service is an event-based applications and Oracle Integration Cloud is listening to incoming event changes.

To implement certain business logic, Oracle Integration Cloud is using properties stored configuration files named lookups to:

- Translate Oracle Utilities Customer Cloud Service into Oracle Field Service understandable values
- Preset default values
- Pre-defined field names

Chapter 2

Supported Features

Oracle Utilities Customer Cloud Service integration to Oracle Field Service helps to manage a fieldwork originated in Oracle Utilities Customer Cloud Service using Oracle Field Service. This pre-built integration represents significant business value for utilities that need to manage their field operations.

For more information about the functionality, refer to the *Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Configuration Guide* included in this release. The documentation is available on Oracle Help Center at: <https://docs.oracle.com/en/industries/energy-water/integrations-index.html>

The following topics are included in this chapter:

- [Business Terms](#)
- [Business Flows](#)
- [Business Processes](#)
- [Functional Overview](#)
- [Use Cases](#)

Business Terms

The following terms are used throughout this document:

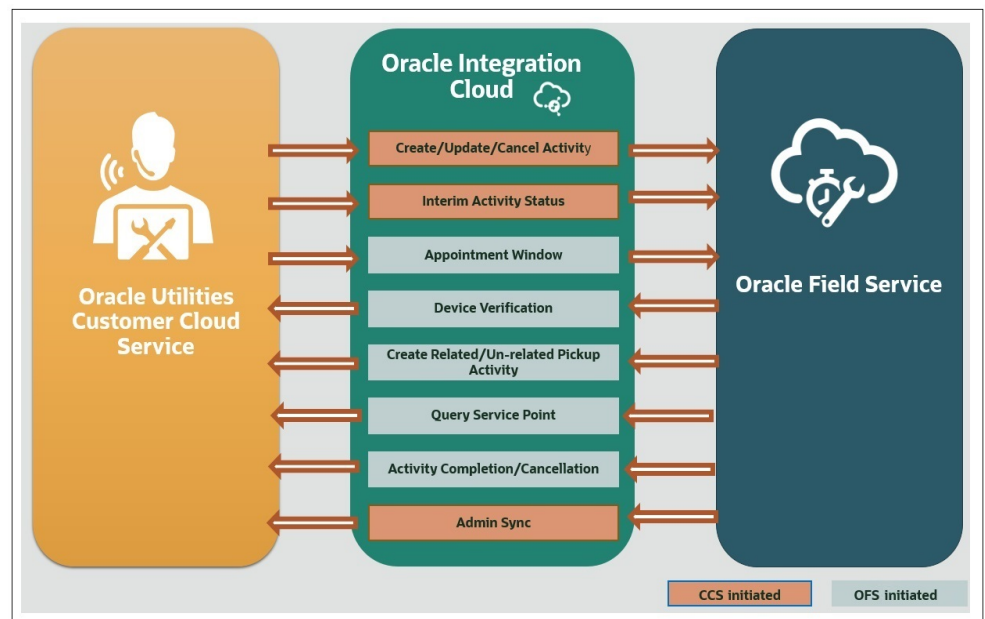
- **Premise:** A premise is where a customer consumes the services supplied by the company.
- **Service Point:** Service points are physical locations at which a company supplies service. Devices are installed at service points.
- **Service Order:** Service orders manage the activities that are required to enable service, disable service, and perform other operations.
- **Service Agreement:** A Standard Service Agreement is a legal contract between a client and a service provider. The agreement outlines important details about the business relationship and the duties owed to one another. It may include information like pricing, ownership and much more.
- **Activities:** Activities are specific types of tasks performed by field personnel. Examples include installing meters, repairing or replacing meters, and so on.
- **Item:** Where there exists some type of badged (that is, uniquely identified) item that impacts billing and dispatching (streetlights or a security camera, for example). We refer to these types of service points as item-based. An item-based service point may have zero or one badged item installed at any instant in time.
- **Measuring Component:** Measuring components are single points for which data will be received and stored in the system.
- **Buckets:** Use organization units to sort and organize the items in the Resource Tree. Buckets hold the activities that are not yet assigned to the field resources.
- **Organization Units:** Organization units are typically used to group resources by location. They cannot be route owners and you cannot assign activities to them. Buckets can have activities. However, dispatchers can assign activities to buckets manually and routing can assign activities to buckets automatically.
- **Control Zones:** Discrete, hierarchical sections of a utility's distribution system. The control zone configuration requires defining zones, assigning devices to zones and, optionally, creating zone sets (or groups) that assist in assigning crews to multiple zones and to filter crews.
- **Crews:** A collection of one or more resources in Oracle Field Service and can include field resources, vehicles, and so on.
- **Work Skills:** The job-specific skills necessary to perform an activity. These act as a defining criteria to match activities with the resources.
- **Work Zones:** The defined geographical area within which a resource can perform activities. Work zones are defined within the work zone dictionary, and are then assigned to resource records.
- **Work Queues:** A queue is the collection of activities that are assigned and can be in different states of completion. Each workday the crew will activate, deactivate its queue according to its works schedule.

Business Flows

This integration supports the following business flows:

- Process Activity (Oracle Utilities Customer Cloud Service Initiated)
- Appointment Window Request (Oracle Utilities Customer Cloud Service Initiated)
- Interim Activity Status (Oracle Utilities Customer Cloud Service Initiated)
- Device Verification (Oracle Field Service Initiated)
- Create Activity (Oracle Field Service Initiated)
- Activity Completion/Cancellation (Oracle Field Service Initiated)
- Query Service Point (Oracle Field Service Initiated)
- Admin Sync (Oracle Integration Cloud Initiated)

The following diagram illustrates the business processes supported in this integration:



Business Processes

This integration supports the following business processes:

- Activity Management
- Appointment Management
- Device Verification
- Service Point Query
- Status Update
- Pickup-Work
- Admin Sync

Activity Management

This feature accepts the send activity data request from Oracle Utilities Customer Cloud Service and sends status updates from Oracle Field Service to Oracle Utilities Customer Cloud Service. The following activity updates are supported in this flow:

- Activity Created
- Activity Updated
- Activity Canceled
- Activity Completed

When an activity is created/updated/canceled

Oracle Utilities Customer Cloud Service sends the activity details message to Oracle Field Service, which includes the service point details, registers information, appointment details, meter/item details, equipment details if any. The information is sent synchronously from Oracle Utilities Customer Cloud Service, regardless of the activity type, and Oracle Field Service sends back a response.

When an activity is completed

Oracle Field Service sends the activity completion details, device/item details if any, service history details, attachment details attached at both activity and meter/equipment level along with the completion status, to complete the activity in Oracle Utilities Customer Cloud Service.

Additionally, status updates on the activity can be achieved. In the integration, a status update request needs to be invoked from Oracle Utilities Customer Cloud Service and status of the activity is updated in Oracle Utilities Customer Cloud Service after getting response from Oracle Field Service.

Appointment Management

Oracle Utilities Customer Cloud Service provides an option to the customers to book their appointment to perform the respective activity. List of available appointment dates from Oracle Field Service are sent to Oracle Utilities Customer Cloud Service upon appointment query on the selected time window. After appointment is booked, the appointment start and end date details are sent along with other activity details to Oracle Field Service through Oracle Utilities Customer Cloud Service outbound.

Device Verification

This verification process is used to verify if the item/device/equipment is present in Oracle Utilities Customer Cloud Service. Oracle Field Service synchronously sends the requests for device verification with the device's badge number and Oracle Utilities Customer Cloud Service sends back the details, such as device configuration type and verification status.

Service Point Query

The Query Service Point process is used to query the service point information.

The integration process sends request from Oracle Field Service to Oracle Utilities Customer Cloud Service to identify a service point. Oracle Field Service crew sends either the address and city, or latitude and longitude, or postal code, or all of them to Oracle Utilities Customer Cloud Service. Oracle Utilities Customer Cloud Service performs the service point search based on the above criteria and sends back the list of service points and other details, such as service point type and service point source status.

Status Updates

When the user hovers on the **Activity** screen in Oracle Utilities Customer Cloud Service, the Interim Activity Status Oracle Integration Cloud flow will be invoked and the status of the activity is updated in Oracle Utilities Customer Cloud Service after getting response from Oracle Field Service.

Pick Up Work

This feature is used to create a related or an unrelated activity in an external system. Oracle Field Service sends a request to create activity in Oracle Utilities Customer Cloud Service.

Administration Synchronization

The Admin Sync integration process is used to get the admin data from Oracle Utilities Customer Cloud Service and send it to Oracle Field Service.

The integration process sends request from Oracle Integration Cloud to Oracle Utilities Customer Cloud Service to get the admin data which includes service point data, activity data, activity types, device data and register data and sends these data to Oracle Field Service.

Functional Overview

This section focuses on the functionality of the business processes in this integration:

- [Creating an Activity](#)
- [Assigning the Activity to Crew](#)
- [Starting the Activity](#)
- [Device Verification](#)
- [Equipments](#)
- [Attachments](#)
- [Service Histories](#)
- [Unrelated Pickup Work](#)
- [Completing the Activity](#)

Creating an Activity

Activities are specific types of tasks performed by field personnel. Examples include installing meters, repairing/replacing meters, etc.

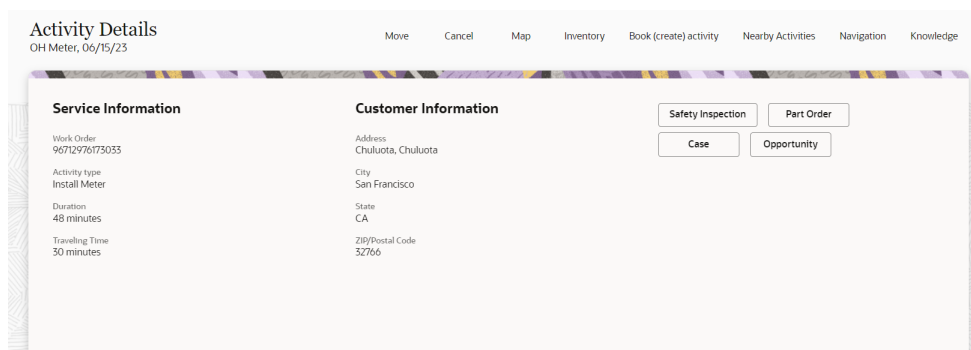
Activity types supported in Oracle Utilities Customer Cloud Service are:

- Turn on Pilot Light
- Service Investigation
- Trim Tree
- Disconnect SP at Device and Remove Device (Item)
- Item Exchange
- Connect SP at Item
- Meter Exchange
- Meter Read
- Disconnect SP at Meter and Remove Meter
- Connect SP
- Meter Install
- Disconnect Warning
- Maintain SP and Meter at Equipment
- Meter Inspect
- Meter Test

Assigning the Activity to Crew

For further processing, the work activity created in Oracle Utilities Customer Cloud Service is sent to the default bucket configured in Oracle Field Service. In return, Oracle Field Service sends a success or failure acknowledgement to Oracle Utilities Customer Cloud Service. Through Oracle Utilities Customer Cloud Service ActivityID we can identify the activity in the Oracle Field Service dispatch console. The dispatch console is used to monitor the field and assign activities to technicians/crew based on their work skills.

In the dispatch console, click the activity to view the **Activity Details** screen. It displays activity information, including service information such as activity type, activity duration, and customer information.



Starting the Activity

After assigning an activity to the crew, it is presented to the mobile user in read only mode in Oracle Field Service mobile. To enter service histories, crew needs to activate the route and start the activity. However, crew can add service point details, perform device verification, and upload attachments without starting the activity. But then, only these details are sent to Oracle Utilities Customer Cloud Service after starting and completing the activity successfully.

Depending on the activity type, the crew can perform the following operations:

- [Device Verification](#)
- [Equipments](#)
- [Attachments](#)
- [Service Histories](#)
- [Unrelated Pickup Work](#)
- [Completing the Activity](#)

Device Verification

For activities (such as Install Meter, Exchange Meter, or Exchange Item) where a new meter/item has to be attached at a service point, a device verification needs to be performed to cross-check whether the new meter/item that should be attached is valid and exists in Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service.

Device verification is also performed when the crew performs equipment operations to verify if the equipment exists in Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service or not.

Note: If an equipment is attached to the meter in Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service, it is categorized as 'existing' and the respective details are displayed on the Oracle Field Service mobile screen. Initially, service histories attached to the existing equipment are not displayed on Oracle Field Service mobile screen. To get these service history details, the crew should use the Get Service History option that internally invokes the Device Verification flow to verify the existing equipment and retrieve the service history details from Oracle Utilities Customer Cloud Service.

Equipments

The typical equipment operations are:

- Attach Equipment
- Undo Attach
- Replace Equipment
- Move Equipment (For Exchange Meter Activity)

The equipment support is provided at the following levels:

- Meter Level

- Service Point Level
- Measuring Component Level

The crew can perform these equipment operations on any of the above mentioned levels and additionally can add service histories to these equipment if they have valid service history types attached in Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service.

Crew can either move all equipment attached to the existing meter to the new meter or attach new equipment to the new meter. Attaching new equipment to the new meter functionality is same as attaching equipment to the meter functionality.

Note: To undo moving the equipment, click **Undo Equipment Move**.

Attachments

To capture images/files, crew can use the attachment support provided in the following menu options:

- Attachments at Service point
- Attachments at New Device
- Attachments at Existing Device
- Attachments at Activity

Crew can save, edit, or delete attachments at any of these levels before completing the activity.

Note: Devices include meter, item, and equipment. The file type should be specific and its size should be a maximum of 5MB.

Service Histories

Service history is used to capture and record relevant information regarding service or maintenance on device/activity. Typically, it is used to record inspection feedback, pass/fail details, downtime, parts failure information, maintenance or service logs, or other information regarding service on the device/activity.

Service history types are linked to meter/item/equipment and activity types while creating activity in Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service, control which service history can be created for assets or activity. There are dedicated service history types for each kind of service towards device/activity.

The Service History plugin is introduced to support the service history data at the Activity level, Meter/Item, and Equipment level to Oracle Field Service.

Unrelated Pickup Work

Crew can create an unrelated pickup work which invokes the Create Activity flow from Oracle Field Service. To create a new activity, crew needs to identify on top of which service point the activity has to be created. When crew enters the service point details, a Service Point Query flow is invoked that verifies and fetches the service point details from Oracle Utilities Customer to Meter/Oracle Utilities Customer Cloud Service. In addition, crew can create a new activity on top of the selected service point.

Note: Currently, the activity type supported for unrelated pickup work is Service Investigation.

Completing the Activity

After reaching the requirement of the activity, crew can complete the activity. In addition, there are some validations performed before crew can complete the activity. They include:

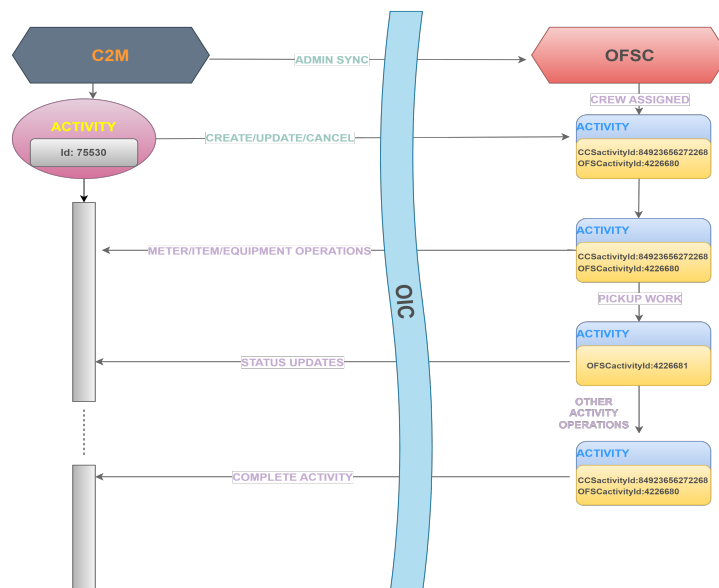
- Required service histories at all levels (activity, meter/item and equipment) are entered or not.
- Saved service histories are completed or not.

Only after these validations are successful, crew is directed to the **End Activity** screen to complete the activity.

After completing the activity, the following details are sent to Oracle Utilities Customer Cloud Service to trigger complete the event in Oracle Utilities Customer Cloud Service:

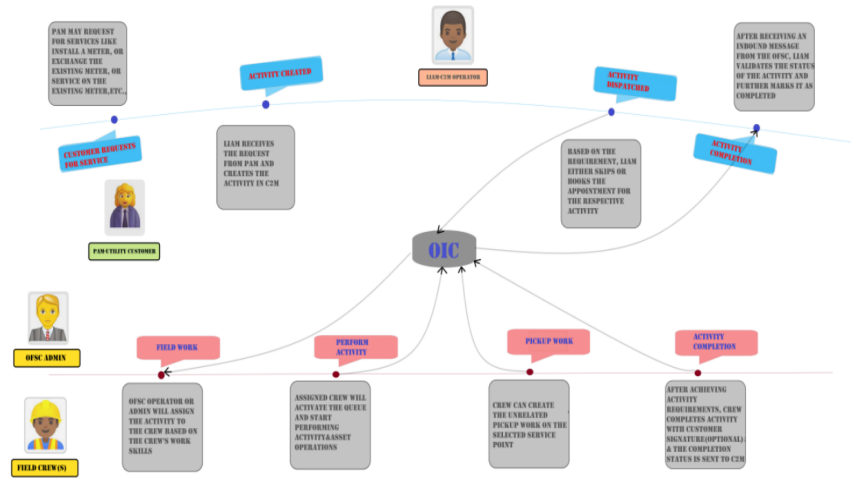
- Service history details added at all levels
- Attachment details
- Customer signature as an attachment
- Completion status
- Time taken to process the activity (activity duration)

Completion events are used to capture closeout information against activities received from an external application. To confirm if an activity process is successful or not, check the completion event status in Oracle Utilities Customer Cloud Service.



Use Cases

The following scenario illustrates a mix of use cases for this integration:



Chapter 3

User Operations

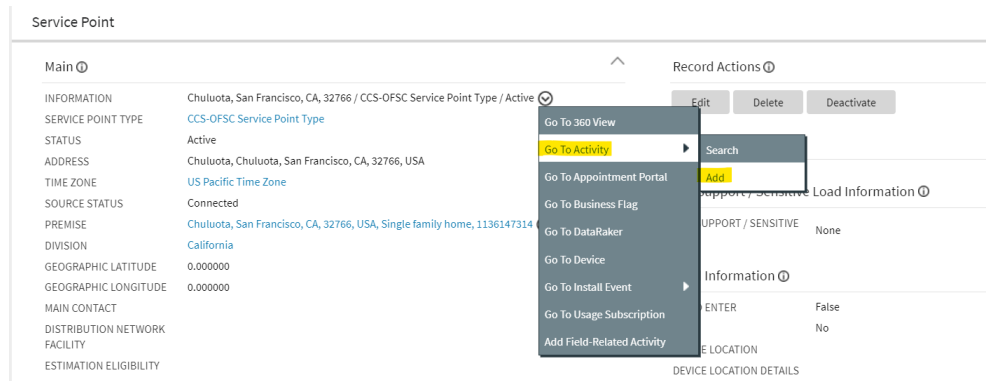
This chapter describes the various user operations and provides instructions to perform those operations. It focuses on the following:

- [Creating an Activity in Oracle Utilities Customer Cloud Service](#)
- [Appointment Booking](#)
- [Assigning a Crew](#)
- [Crew Operations on the Activity](#)

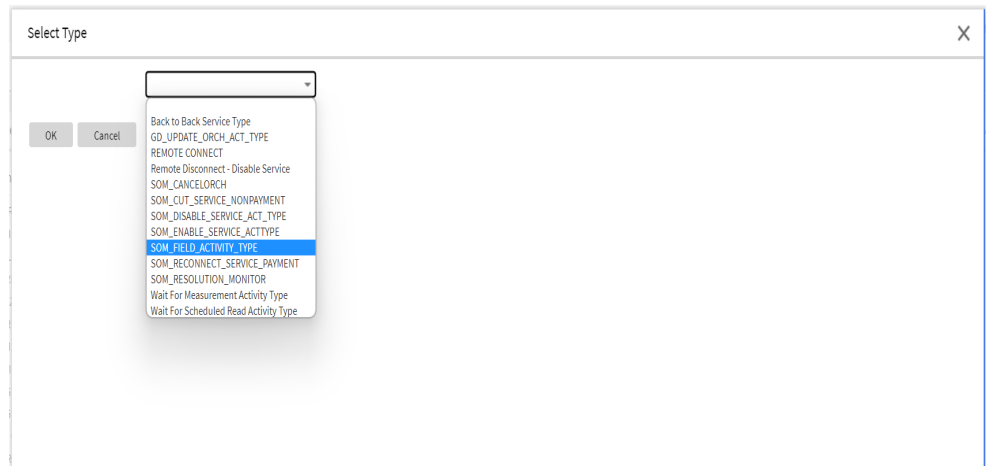
Creating an Activity in Oracle Utilities Customer Cloud Service

To create an activity:

1. Login to Oracle Utilities Customer Cloud Service.
2. Configure the premise, service point, and service agreement details and navigate to the **Service Point Details** screen.
3. In the **Activity Info** section, click **Go To Activity**, and then click **Add**.



4. Select the activity type.



5. Enter the required fields for the activity.

Main

ACTIVITY TYPE SOM_FIELD_ACTIVITY_TYPE

SERVICE DATE TIME * 06-14-2023 12:00AM PDT

PARENT ACTIVITY

SERVICE POINT 387908738838 Chuluota, San Francisco, CA, 32766 / CCS-OFSC Service Point Type / Active

EXTERNAL SERVICE POINT ID

FIELD TASK TYPE * Install Meter

APPOINTMENT WINDOW DATE TIME

APPOINTMENT END DATE TIME

TAKEN BY

TAKEN DATE

COMMENTS

RECIPIENT INT_OFSC External Application - Field Work System

6. Save the details and a new activity will be created.

Activity

Main

Field Activity / Install Meter / / Waiting for Appointment / Create Date Time: 06-14-2023 10:22:44

INFORMATION SOM_FIELD_ACTIVITY_TYPE

ACTIVITY TYPE SOM_FIELD_ACTIVITY_TYPE

STATUS Waiting for Appointment

SERVICE DATE TIME 06-14-2023 12:00AM PDT

SERVICE POINT Chuluota, San Francisco, CA, 32766 / CCS-OFSC Service Point Type / Active

FIELD TASK TYPE Install Meter

RECIPIENT INT_OFSC External Application - Field Work System

DEVICE ID

Record Actions

Edit Skip Appointment Discard Book Appointment

Record Information

Request Information

Contact Details

Address Information

ADDRESS Chuluota

ADDRESS 2 Chuluota

CITY San Francisco

COUNTY San Francisco

POSTAL 32766

COUNTRY United States of America

STATE CA

GEOSPATIAL LATITUDE 0.000000

GEOSPATIAL LONGITUDE 0.000000

Now, an appointment can be booked or skipped based on the requirement.

Appointment Booking

To book an appointment:

1. Navigate to the activity in Oracle Utilities Customer Cloud Service and click **Book Appointment**.

Record Actions

Edit Skip Appointment Discard **Book Appointment**

2. Select the start and end date time for the appointment.

3. Select the respective time slot and click **Book Appointment**.

The screenshot shows the 'Appointment Booking' interface. At the top, there are search filters for 'START DATE/TIME' (06-14-2023 01:00AM PDT) and 'END DATE/TIME' (06-15-2023 01:00AM PDT). Below the filters is a 'Search' button. A 'Hide Filters' button and a filter summary are also present. The main content is a table with 10 rows of appointment slots. Each row includes an appointment ID, start and end dates/times, a cost of 922.00, and a 'Book Appointment' button.

	APPOINTMENT START DATE/TIME	APPOINTMENT END DATE/TIME	APPOINTMENT COST	ACTION
1	06-14-2023 02:00PM PDT	06-14-2023 04:00PM PDT	922.00	Book Appointment
2	06-14-2023 07:00AM PDT	06-14-2023 09:00AM PDT	922.00	Book Appointment
3	06-14-2023 07:00AM PDT	06-14-2023 10:00PM PDT	922.00	Book Appointment
4	06-14-2023 09:00AM PDT	06-14-2023 11:00AM PDT	922.00	Book Appointment
5	06-14-2023 12:00PM PDT	06-14-2023 02:00PM PDT	922.00	Book Appointment
6	06-15-2023 02:00PM PDT	06-15-2023 04:00PM PDT	922.00	Book Appointment
7	06-15-2023 07:00AM PDT	06-15-2023 09:00AM PDT	922.00	Book Appointment
8	06-15-2023 07:00AM PDT	06-15-2023 10:00PM PDT	922.00	Book Appointment
9	06-15-2023 09:00AM PDT	06-15-2023 11:00AM PDT	922.00	Book Appointment
10	06-15-2023 12:00PM PDT	06-15-2023 02:00PM PDT	922.00	Book Appointment

Assigning a Crew

To assign a crew:

1. Login to Oracle Field Service.
2. Navigate to the **Administrator Dispatch Console** page and open the mobile activity to view the **Activity Details** page.
3. Click **Move** to view the **Move Activity** page.

The screenshot shows the 'Dispatch Console' interface. The main header displays 'OH Meter' and the date 'Wednesday, June 14th, 2023'. Below the header is a search bar and a list of activities. A 'Pending' modal is open, showing details for an 'Install Meter' activity. The modal includes fields for 'Traveling Time' (00:30), 'Address' (Chuluota, Chuluota), 'Work Order' (55626720976603), 'Service Window' (01 PM - 03 PM), 'Start - End' (12:00 AM - 12:48 AM), 'Duration' (00:48), and 'Time Zone' (Central). A map shows the location of the activity. At the bottom of the modal, there are buttons for 'Details', 'Cancel', 'Directions', 'Move', and 'Select Technician'.

- Search for the crew member you want this activity to be assigned and click **Move**.

Move Install Meter - Chuluota, Chuluota - 32766

Search: OH002 All John, Reese (Hide) Wednesday, June 14th, 2023

Resources (1)
John, Reese [OH002]

Buckets (0)

Calendar: 12 PM - 05 PM

ETA	Service window	Activity	Comments
Ordered			
× 02:00 PM	02 PM - 04 PM	Install Meter - Chuluota, Chuluota - 32766	
Not Ordered			
Drag here to set activity as not ordered			

Dismiss Move

This activity is now moved to the crew's queue.

My Route
John, Reese

26% 1 Pending

Life Time: 1:30

Travel Time: 0:30

Chuluota, Chuluota Install Meter 0-15
Life Time: 2:0

Activities (2) Add Activity

Start Activity Nearby Activities

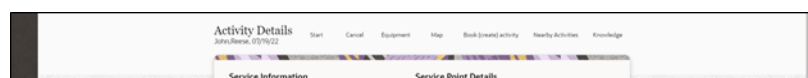
Unrelated Pickup

Crew Operations on the Activity

This section provides step-by-step instructions for user operations from starting the activity to completing it.

- Login to the Oracle Field Service Mobility application.

Note: You can access the application by adding '/m' to the Oracle Field Service URL <ofsc_link/m>.
- Access the **Mobility** page using the worker/technician's credentials. The page shows activities in the queue of the worker. To start working on the activity, the crew's queue has to be activated.
- Click **Start** to start the activity in the worker's queue.
- Click ">" against the activity. The options **Start**, **Cancel**, **Suspend**, **Map**, and **Book Activity** are displayed.



5. Click **Start** to start the activity in worker's queue.
6. Enter the odometer details and click **Submit**.

7. Click **Meter Details** and then click **Verify Device**.

8. Enter the badge number and click **Submit**.

After the verification is successful, meter reading information is displayed in the **Registers Information** section.

9. Enter the respective details in the **Meter Information** and **Registers Information** sections. Click **Submit**.

This section includes the following:

- [Adding Service Histories](#)
- [Viweing Equipment-Level Service Histories](#)
- [Adding Planned Service Histories](#)
- [Adding Attachments](#)
- [Adding Equipment](#)

Adding Service Histories

Service History Data is supported at the Meter/Item and Equipment level in Oracle Field Service. Hence, the end user need not configure any data on the Oracle Field Service side.

Meter/Item-Level Service Histories

Service history types are synchronized to Oracle Field Service when the activity is created successfully with added Service History Data to asset from Oracle Utilities Customer to Meter. The Oracle Field Service input properties are updated with activity level service history data.

Existing Meter

For an existing meter, the **Service History** button is displayed if the asset has valid service history types in Oracle Utilities Customer Cloud Service.

Meter Information
Existing Meter Details

Badge Number
 Asset2_BN

Configuration Type
 INT-Electric Device Configuration Type1 with REGT Valid MCT for O FSC

Meter Location
 Garage

Manufacturer
 C2M - Electric Manufacturer

Model
 C2M - Electric Model

Device Type
 CCS OFSC Integration device type 1

Status Found Required

Status Left Required

Existing Meter Attachments Service Histories

Click **Service History**. It loads the Service History plugin and displays the **Service History** page with the list of supported service history types of this asset.

New Meter

1. Click **Verify Device** to verify the details of the new device/item.

If the device has valid service history types in Oracle Utilities Customer to Meter, the **Service Histories** button is displayed along with the device details.

2. Click **Service Histories** to display the list of service histories of this asset.

Meter Information
New Meter Details

Device Verification

Manual Entry
 No
 Yes

Badge Number
 4415

Status
 Verification Successful

Configuration Type
 Electric Scalar Residential

Meter Location

Manufacturer
 C2M - Electric Manufacturer

Model
 C2M - Electric Model

Device Type
 Electric Manual Read Meter - Analog

Status Left
 On

New Meter Attachments Service Histories

The Service History plugin is loaded and the details are displayed on the **Service History** screen.

The screenshot displays the Service History interface for asset A-nb88, INT-Electric Manual Meter Type1 for OFSC, INT-OFSC-DC-MANUALMTR. It features a 'Service History List' with four expandable sections: Downtime Service history, Failure Service History, INT-Questionnaire Service History Type, and ODM-Service History Type. Each section shows 'Required: No', 'Entered: 0', and 'Planned: No' counts. To the right, an 'Entered' section indicates 'No items to display.' At the bottom, a 'Quick Links' section contains buttons for 'Meter Details', 'Activity Details', and 'Complete All'.

3. Add the service history details related to the service history types as shown in step 2.
4. **Complete All** to save and complete the service histories.

Viweing Equipment-Level Service Histories

The service history types are synchronized to Oracle Field Service when the crew queries for it. Equipment data will not be synchronized to Oracle Field Service when the activity is created, even though the equipment from Oracle Utilities Customer to Meter has the service history data. In Oracle Field Service, the input property is updated with equipment level service history data.

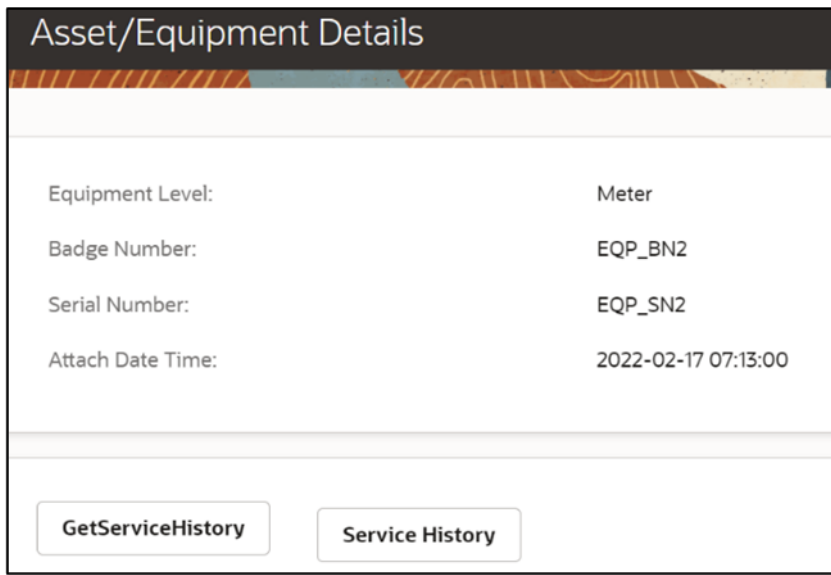
Existing Equipment

This section focuses on fetching service history data for the existing equipment (sent from Oracle Utilities Customer Cloud Service as part of activity create/update message).

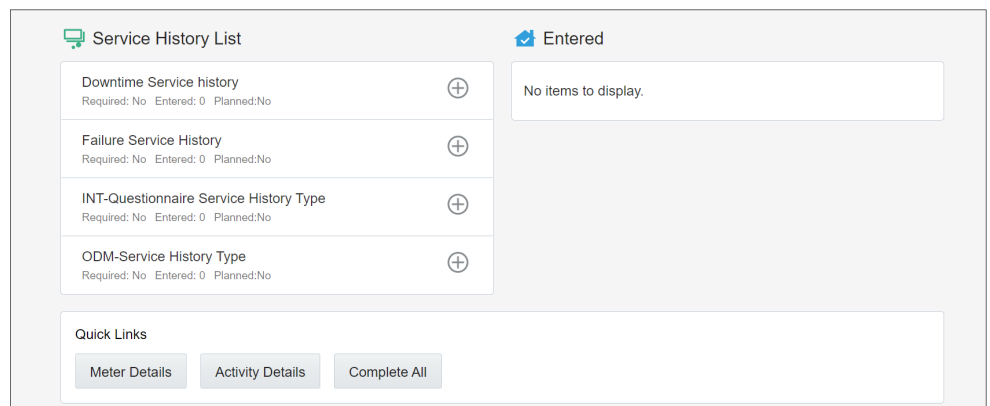
As Oracle Utilities Customer Cloud Service sends the equipment's service history data only on a need basis, crew has to fetch the service history data explicitly.

1. For an existing equipment, **Get Service History** is displayed by default.
2. Click **Get Service History** to request for the service history data from Oracle Utilities Customer Cloud Service.

- If Oracle Utilities Customer Cloud Service returns any service history data for this equipment, **Service History** is enabled.



- Click **Service History** to load the service history plugin. The following **Service History List** screen is displayed.



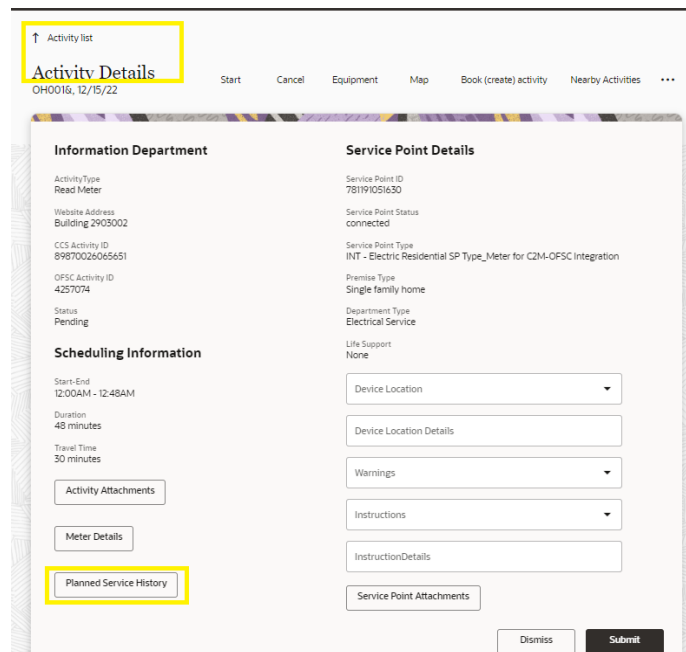
- Add service histories related to above service history types. Click **Complete All** to save and complete them.

New Attached/Installed Equipment

- When the crew attaches or installs new equipment, if that equipment has service history types added in Oracle Utilities Customer to Meter, **Service History** is displayed.
- Click **Service History** to load the service history plugin.
- Add service histories related to above service history types. Click **Complete All** to save and complete them.

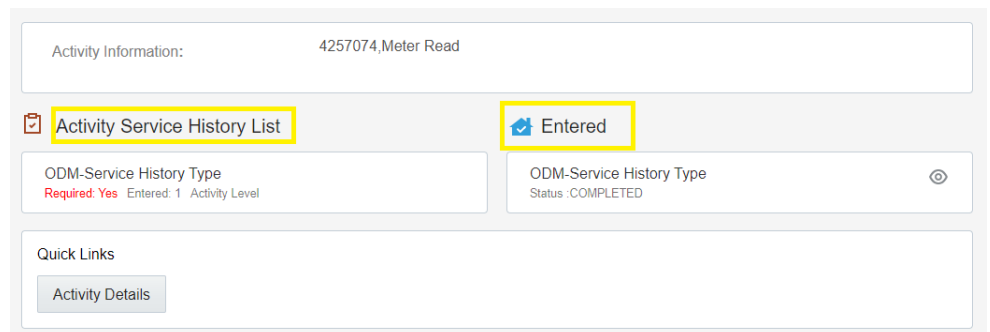
Adding Planned Service Histories

The **Planned Service History** button is displayed if the activity has valid service history types in Oracle Utilities Customer to Meter.



Click **Planned Service History**. It loads the **Planned Service History** plugin and displays the **Activity-level Service History** screen with a list of supported service history types of this activity.

When service histories are added for different services history types for this activity, and are completed in the Planned Service History plugin, the activity level service history data is saved to the respective output property.



Adding Attachments

The Oracle Field Service screens are enhanced to support attachments at service point level, existing meter/item/equipment level, new meter/item/equipment level, and activity level.

Attachment Screens

A technician can upload the attachments at the following levels.

- Attachments at Service point

- Attachments at New Device
- Attachments at Existing Device
- Attachments at Activity

Note: Devices include meter, item, and equipment.

Supported Mime Types for Attachments

The technician can upload the attachments of the following mime types at service point/new device/existing device/activity level in Oracle Field Service.

- image/gif
- image/jpeg
- text/plain
- text/html
- video/mpeg
- audio/x-wav
- application/zip
- application/vnd.ms-excel
- application/pdf
- application/msword

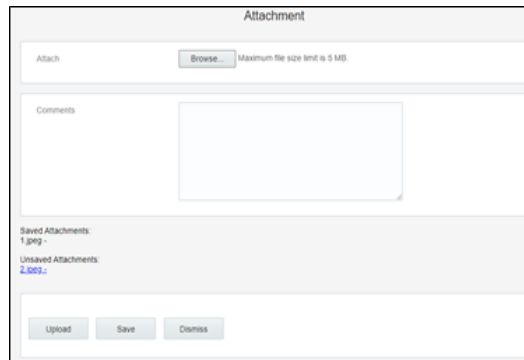
Attachments at Service Point

The following figure shows the **Attachment** option available in the **Service Point** section.

The screenshot displays the 'Service Point Details' form. The form contains the following fields and options:

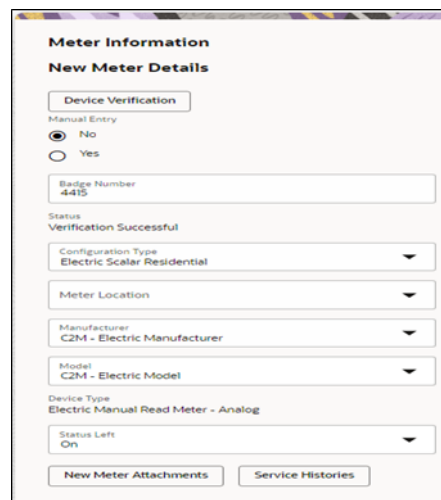
- Service Point ID: 166422677988
- Service Point Status: Connected
- Service Point Type: CCS-OFSC Service Point Type
- Brand Type: Apartment
- Service Type: Electric Service
- Life Support: None
- Device Location: (Dropdown menu)
- Device Location Details: (Text input field)
- Warnings: (Dropdown menu)
- Instructions: (Dropdown menu)
- Instruction Details: (Text input field)
- Service Point Attachments: (Text input field)
- Buttons: Dismiss and Submit

After uploading the attachments, saved and unsaved attachments can be viewed as shown below.

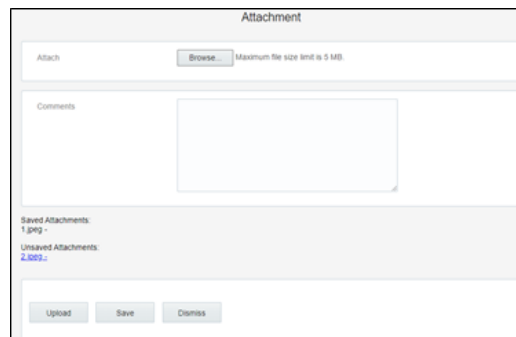


Attachments at New Device

The following figure shows the **Attachment** option available at the **New Device** section.



After uploading attachments, saved and unsaved attachments can be viewed as below.



Attachments at Existing Device

The following figure shows the **Attachment** button in the **Existing Device** section.

Existing Meter Details

Budget Number
Asset2_BN

Configuration Type
INT-Electric Device Configuration Type1 with REGT Valid MCT for O FSC

Meter Location
Garage

Manufacturer
CZM - Electric Manufacturer

Model
CZM - Electric Model

Device Type
CCS OFSC Integration device type 1

Status Found Required

Status Left Required

After uploading attachments, both saved and unsaved attachments can be viewed.

Attachment

Attach Maximum file size limit is 5 MB.

Comments

Saved Attachments:
1 .png -

Unsaved Attachments:
2 .PDF -

Attachments at Activity

The figure below shows the **Activity Attachments** button.

Service Information

Go back to Activities list, wait 10 seconds and come back to see newly populated information below

Activity Type
Install Meter

Site Address
ohio *

CCS Activity ID
04864195927631

OFSC Activity ID
4226597

Status
Started

Scheduling Information

Start - End
01:10 AM - 01:58 AM

Duration
48 minutes

After uploading attachments, both saved and unsaved attachments can be viewed.

Customer Signature

As part of the 20C changes, Oracle Field Service is enhanced to allow technicians to take the customer signature before completing an activity and Oracle Integration Cloud sends the customer signature to Oracle Utilities Customer Cloud Service as part of activity completion information.

After the customer signs in the **Customer Signature** field, the technician clicks **Submit** to complete the activity.

Note: Use **Clear** to clear the customer signature.

Customer Signature is also sent as an attachment in the Jpeg format to Oracle Utilities Customer Cloud Service as part of activity completion information.

Adding Equipment

The Oracle Field Service application is enhanced to support equipment that includes attaching, detaching, and replacing or exchanging which comes as part of activity from the source application.

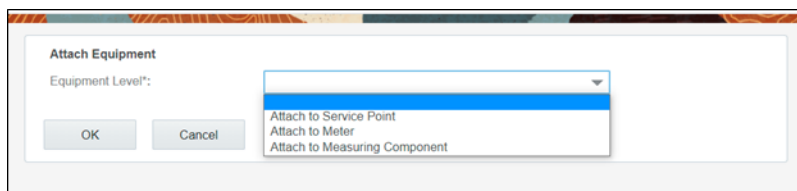
The equipment includes support at service point level, meter level measuring component level.

Equipment Screens

Oracle Field Service includes the following screens to attach an equipment:

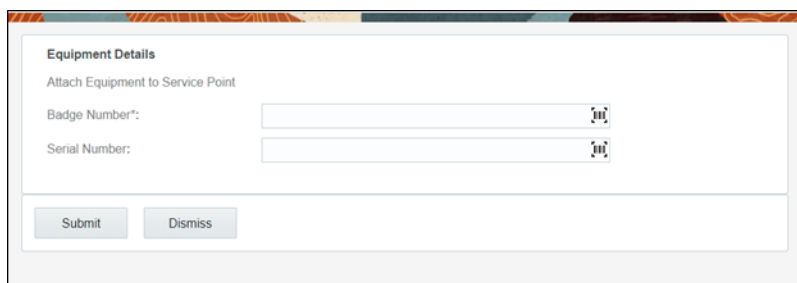
- [Attach Equipment to Service Point](#)

- [Attach Equipment to Meter](#)
- [Attach Equipment to Measuring Component](#)

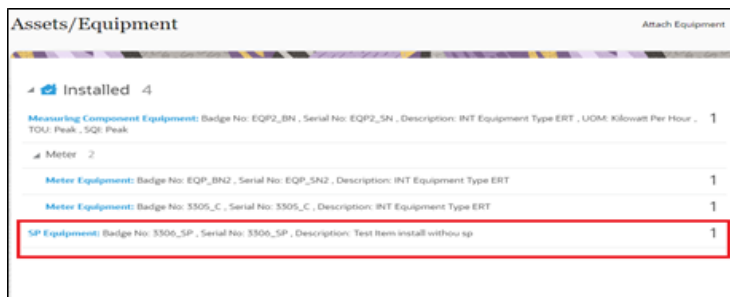


Attach Equipment to Service Point

This screen allows to attach an equipment to the Service Point.



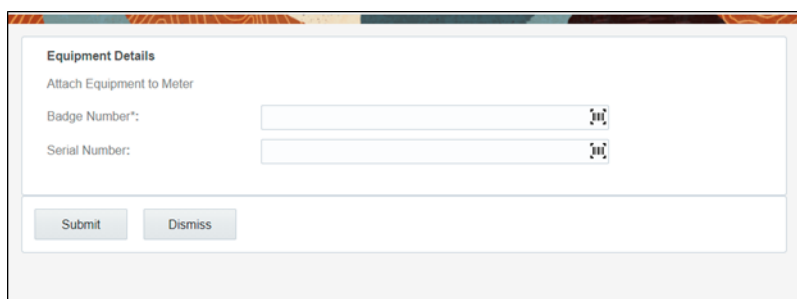
Provide the badge number or serial number to verify the equipment. After the verification is successful, the equipment appears on the screen labeled as 'SP'.



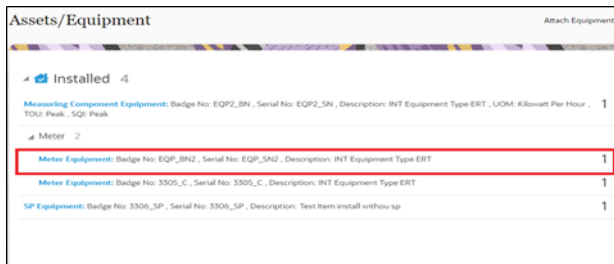
Attach Equipment to Meter

This screen allows to verify the attach. After the verification is successful, equipment will be attached to Meter.

Provide the badge number or the serial number and click **Submit**.



After the verification is successful, equipment navigates to the **Attached** screen labeled with Meter.

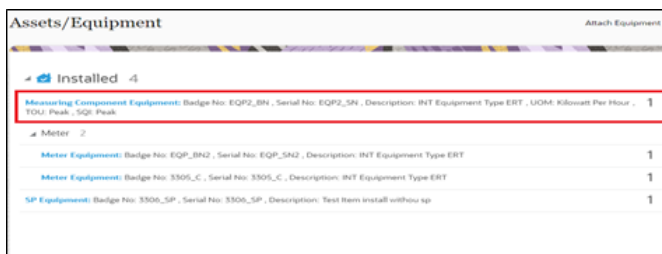


Attach Equipment to Measuring Component

This screen allows you to verify the attachment. After successful verification, equipment will be attached to Measuring Component.

The screenshot shows a form titled 'Attach Equipment to Measuring Component'. It is divided into two main sections: 'Measuring Component Details' and 'Equipment Details'.
 In the 'Measuring Component Details' section, there are three dropdown menus:
 - 'Unit Of Measure*': set to 'Kilowatt hour'
 - 'Time Of Usage': set to 'Peak'
 - 'Service Quantity Identifier': set to 'Peak'
 In the 'Equipment Details' section, there are two input fields:
 - 'Attach Equipment to Measuring Component'
 - 'Badge Number*': an empty text box with a barcode icon to its right.
 - 'Serial Number': an empty text box with a barcode icon to its right.
 At the bottom of the form, there are two buttons: 'Submit' and 'Dismiss'.

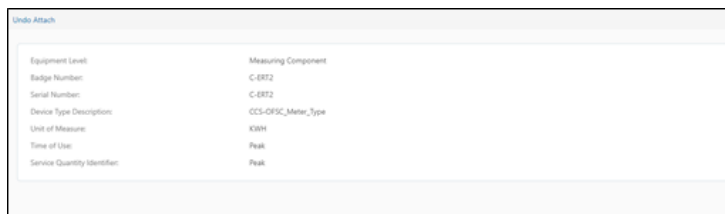
Enter the **Unit of Measure**, **Time of Usage**, **Service Quantity Identifier**, and **Badge Number or Serial Number**. Click **Submit**. After verification is successful, equipment navigates to the **Installed** screen labeled with **Measurement Component**.



Undo Attach

After attaching an equipment, it can be detached. To undo an equipment attach:

1. Click the attached equipment. The equipment details are displayed along with the **Undo Attach** option.



2. Click **Undo Attach**. A confirmation alert is displayed.
3. Click **Yes** to delete the equipment from the inventory.

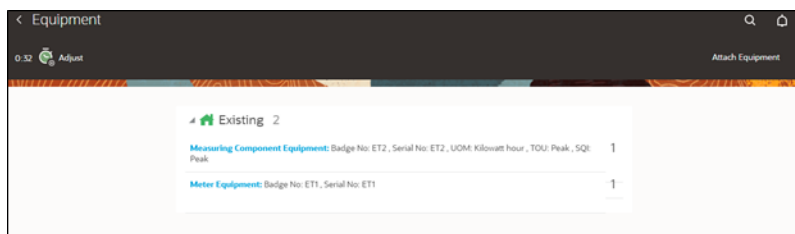


Replace Equipment

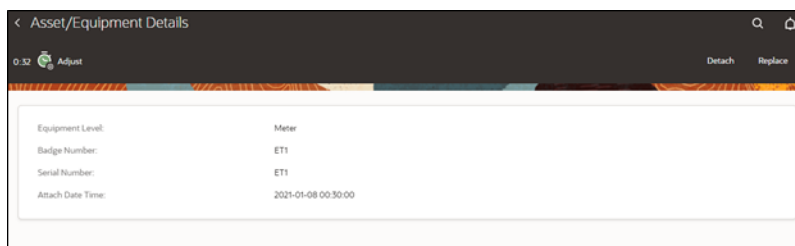
The existing equipment can be replaced from the Service Point or Meter or Measuring Component level.

To replace an existing equipment:

1. Navigate to the **Existing** screen and click the equipment.



2. Click **Replace**.



- Enter the badge number or the serial number values to verify. Click **Submit**.

The screenshot shows a web form titled "Equipment Details" with the subtitle "Replace Equipment at Meter". It contains two input fields: "Badge Number*" and "Serial Number:". Each field has a small icon to its right. At the bottom of the form are two buttons: "Submit" and "Dismiss".

The existing equipment is added to the **Detached** screen and the new equipment appears in the **Installed** screen.

The screenshot shows a mobile application screen titled "Equipment". It displays a list of equipment items categorized by status:

- Existing 1**: Measuring Component Equipment: Badge No: ET2, Serial No: ET2, UOM: Kilowatt hour, TOU: Peak, SQE: Peak
- Installed 1**: Meter Equipment: Badge No: ET2, Serial No: ET2, Description: INT Equipment Type ERT
- Detached 1**: Meter Equipment: Badge No: ET1, Serial No: ET1

Exchange Meter

Meter from the Service Point can be exchanged with a new meter. You can either move all equipment attached to the existing meter to the new meter or attach new equipment to the new meter.

After verifying the new device, the Equipment screen displays the following options:

- Attach Equipment
- Move Equipment to New Meter

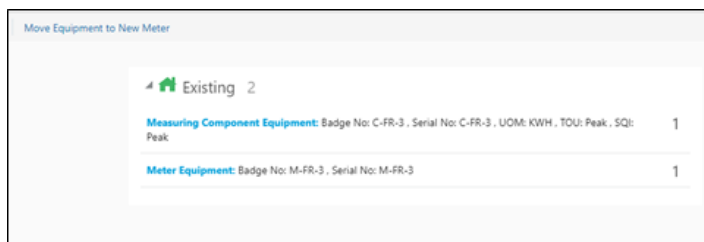
Attach Equipment

This **Attach** screen is similar to the **Attach Equipment** screen that is used to verify the equipment and install the equipment to a new meter.

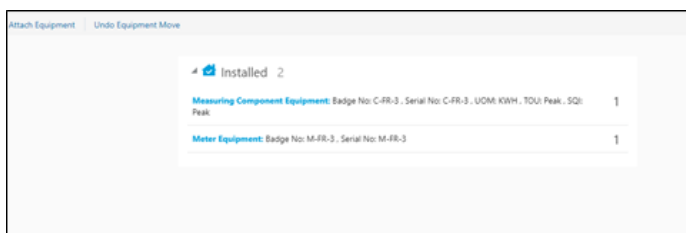
The screenshot shows a web form titled "Equipment Details" with the subtitle "Replace Equipment at Meter". It contains two input fields: "Badge Number*" and "Serial Number:". Each field has a small icon to its right. At the bottom of the form are two buttons: "Submit" and "Dismiss".

Move Equipment to New Meter

This screen allows you to move all equipment attached to the existing meter to the new meter.



Click **Move Equipment to New Meter** to move all the equipment of old meter to installed screen.



Note: We can undo the Equipment move by clicking **Undo Equipment Move**.

Custom Activities Support for Move Equipment to New Meter

Currently, the Exchange Meter and Meter Disconnect activities support the Move operation. It does not work for other operations.

To support custom activities:

1. Configure the Custom Activity property.
 - a. Login to Oracle Field Service.
 - b. Navigate to **Properties** and search for "c2m_ert_custom_move_act_types" property.
 - c. Click **Modify** and add the custom activity to the property.

Syntax: [description][Activity type label]

- d. In the **English** field, enter the description and activity type label.
Example: Move Registers[Move ERT Registers]
 - e. Click **Update**. The value is updated in the property list.
2. Add the **Condition** to the **Move Register** operation in Inventory Grid.
After adding the custom activity to property, add the custom activity type to the inventory grid condition.

1. Login to Oracle Field Service.
2. Navigate to **Configuration > User Type > C2M OFSC**.
3. Navigate to **Screen Configuration > Inventory Grid**.

4. Click **Move Equipment to New Meter** operation and add the condition.

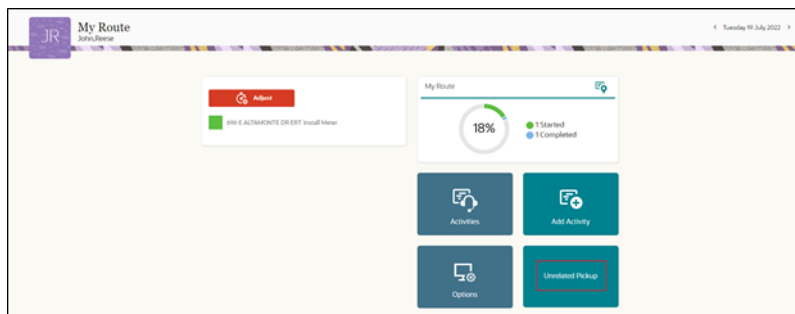
[Move Equipment to New Meter] visibility			
<input type="checkbox"/>	Access Mode	Conditions	Action
<input type="checkbox"/>	Read-only	Activity status in (equal) Started, 2Meter # is not empty, Activity Level Equipment Action not in (not equal) (Copy, Remove), Activity type in (equal) Exchange Meter	Modify
[Move Equipment to New Meter] parameters			
<input type="checkbox"/>	Field name	Value	Action
<input type="checkbox"/>	equipment_action	CPERT	Modify

5. Select the custom activity type from list of activity types available in the Oracle Field Service environment.

6. Click **Save**.
7. Add the same condition for the **Undo Equipment Move** operation.

Create unrelated pickup work:

1. On the **Mobility** page, select **Unrelated Pickup** to use this feature.



2. On the **Unrelated Pickup** page search for service points.

Search for Service Point

Street Address :

City :

Postal Code :

Latitude :

Longitude :

List of Service Points

Search Results

Select	Address	Service Point Type	Status
<input type="radio"/>	696 E ALTAMONTE DR_test_Appt. 696 E ALTAMONTE DR_test_Appt2, 696 E ALTAMONTE DR_test_Appt3	This is for SOM-OFSC Integration	Connected
<input type="radio"/>	696 E ALTAMONTE DR_test_Appt. 696 E ALTAMONTE DR_test_Appt. 696 E ALTAMONTE DR_test_Appt	This is for SOM-OFSC Integration	Connected

3. Select the desired service point from the list and click **Select**.
4. Click **Add Activity** to create the activity.

Add Activity

Activity Type :

Address :

City :

State :

Country :

Postal Code :

Service Point Type :

Service Point ID :

Activity Notes :

After successful creation of the activity in Oracle Field Service, the corresponding activity is created in Oracle Utilities Customer Cloud Service.

5. Click **Complete**.

The screenshot shows the 'Activity Details' page for a user named John Reese on 07/19/22. The page is divided into several sections:

- Service Information:** Includes fields for Activity Type (Install Meter), Site Address (416 E ALTAHONTE DR BPT, C13 Activity ID: U252D099A25, and GISC Activity ID: 432458). It also shows a status of 'Started'.
- Scheduling Information:** Shows Start/End times (07:44 AM - 10:52 AM), Duration (48 minutes), and Traveling Time (1 minutes). There are buttons for 'Activity Attachments' and 'Meter Details'.
- Service Point Details:** Includes Service Point ID (353442458), Service Point Status (Connected), Service Point Type (CCS-OPIC Service Point Type), Meter Type (Single Meter Name), Service Type (Electric Service), and Life Support Name. It also has dropdown menus for 'Device Location' and 'Warnings', and text input fields for 'Device Location Details' and 'Instructions Details'. There is a 'Service Point Attachments' button.

At the bottom right, there are 'Dismiss' and 'Submit' buttons. The 'Complete' button in the top navigation bar is highlighted.

6. On the **End Activity** page, enter the required details. Click **Submit**.

The screenshot shows the 'End Activity' page. It features the following fields:

- Completion Time:** Three dropdown menus for 'Hours' (07), 'Minutes' (43), and 'AM/PM' (AM).
- Activity Notes:** A large text area with a small icon in the bottom right corner.
- CRM User/Contact Page:** A dropdown menu.
- Customer Contact Comments:** A text input field with a small icon in the bottom right corner.
- Remarks:** A large text area with a small icon in the bottom right corner.
- Customer Signature:** A large text area.

At the bottom right, there are 'Dismiss' and 'Submit' buttons. The 'Submit' button is highlighted.

Chapter 4

Data Relationships

Both Oracle Utilities Customer Cloud Service and Oracle Field Service have to be initially synchronized to make sure the same data is reflecting in the user interfaces. This task needs to be done by the administrator after setting up the environment and schedule it periodically to maintain the data integrity.

This chapter focuses on the following:

- [Oracle Utilities Customer Cloud Service to Oracle Field Service Data Synchronizations](#)

Oracle Utilities Customer Cloud Service to Oracle Field Service Data Synchronizations

The Admin Sync flow is used to synch the service point data, activity types, activity data, device data and register data to Oracle Field Service. Hence, the end user need not configure any data on the Oracle Field Service side.

This section includes the following:

- [Service Point Data Sync](#)
- [Activity Types Sync](#)
- [Device Data Sync](#)

Service Point Data Sync

The service point data is synced to Oracle Field Service when the Admin Sync flow runs successfully. The Oracle Field Service enumeration properties shown below are updated with Admin data.

Property Description	Property Label
Premise Type	c2m_premise_type
Service Type	c2m_Service_type
SP Instructions	c2m_SP_instructions
SP Warnings	c2m_SP_warnings
Disconnect Location	c2m_disconnect_location

Activity Types Sync

The Activity Types in Oracle Utilities Customer Cloud Service automatically synchronizes to Oracle Field Service when the Admin Sync scheduler Oracle Integration Cloud flow runs successfully. Hence, there is no need to create the activity types manually in Oracle Field Service.

For more information, refer to the Admin Sync (Oracle Integration Cloud Initiated) section in Chapter 2: Business Flows in the *Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Configuration Guide* included in this release.

The end user can skip the activity types sync using config property in "SOMOFSC_ConfigProps" lookup.

- Configuration property: som.adminsync.activitytypes.sync

By default, the property value is delivered as 'false'. Change the property value to 'true' to sync activity types as part of Admin Sync. The activity type features/colors can be customized. These properties can be modified using the "SOMOFSC_ActivityTypeConfigProps" lookup.

Note: As part of Admin Sync all activity types in the **Field Task Type** extendable lookup will be synchronized to Oracle Field Service when

the “som.adminsync.activitytypes.sync” oracle Integration Cloud configuration property is set to 'true'.

Device Data Sync

The following device information will be synchronized in Oracle Field Service when the Admin Sync flow runs successfully. Hence, there is no need to add the data to the Oracle Field Service properties manually.

- [Device Manufacturer](#)
- [Device Model](#)
- [Device Configuration Type](#)
- [Device Types](#)
- [Device Head End System](#)
- [Register Data Sync](#)

Device Manufacturer

The following Oracle Field Service properties will sync with device manufacturer data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
New Item Manufacturer	c2m_newitem_manufacturer
Existing Item Manufacturer	c2m_item_manufacturer
New Meter Manufacturer	c2m_newmeter_manufacturer
Existing Meter Manufacturer	c2m_meter1_mfg

Device Model

The following Oracle Field Service properties will sync with device model data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
New Meter Model	c2m_newmeter_model
Existing Meter Model	c2m_meter1_model
New Item Model	c2m_newitem_model
Existing Item Model	c2m_item_model

Device Configuration Type

The following Oracle Field Service properties will sync with device configuration data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
New Meter Configuration Type	c2m_new_meter_type
Existing Meter Configuration Type	c2m_meter1_type
New Item Configuration Type	c2m_new_item_type
Existing Item Configuration Type	c2m_item_type

Device Types

The following Oracle Field Service properties will sync with device types data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
New Meter Device Type	c2m_newmeter_devicetype
Existing Meter Device Type	c2m_devicetype
New Item Device Type	c2m_newitem_devicetype
Existing Item Device Type	c2m_item_device_type

Device Head End System

The following Oracle Field Service properties will sync with device head end system data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
New Meter Head End System	c2m_newmeter_headend
Existing Meter Head End System	c2m_headendSystem

Register Data Sync

When the Admin Sync flow runs successfully, the following register data will be synced to Oracle Field Service. Hence, the data need not be entered manually at the Oracle Field Service side.

- [Unit of Measure](#)
- [Time of Usage](#)
- [SQI](#)

Unit of Measure

The following properties will be synchronized with unit of measure data in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
Unit of Measure 1	c2m_meter1_uom
Unit of Measure 2	c2m_meter1_uom2
Unit of Measure 3	c2m_meter1_uom3
Unit of Measure 4	c2m_meter1_uom4
Unit of Measure 5	c2m_meter1_uom5
ERT Unit of Measure	c2m_ert_uom

Time of Usage

The following properties will be synchronized with time of usage data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
Time of Usage 1	c2m_meter1_TOU1
Time of Usage 2	c2m_meter1_TOU2
Time of Usage 3	c2m_meter1_TOU3
Time of Usage 4	c2m_meter1_TOU4
Time of Usage 5	c2m_meter1_TOU5
ERT Time of Usage	c2m_ert_tou

SQI

The following properties will be synchronized with SQI data created in Oracle Utilities Customer Cloud Service.

Property Description	Property Label
SQI 1	c2m_meter1_sqi
SQI 2	c2m_meter1_sqi2
SQI 3	c2m_meter1_sqi3
SQI 4	c2m_meter1_sqi4
SQI 5	c2m_meter1_sqi5
ERT SQI	c2m_ert_sqi

Note: Customizations can be made to any of the service point data, activity types, activity data, device data and register data in Oracle Field Service. For detailed customizations, refer to *Oracle Field Service Configurations for Oracle Utilities Customer Cloud Service Integration to Oracle Field Service* included in this release.

Appendix A

Additional Information - Integration Concepts

This chapter includes additional information about terms and concepts required for this integration. It describes examples of several use cases and defines key terms for both Oracle Utilities Customer Cloud Service and Oracle Field Service respectively:

- [Oracle Utilities Customer Cloud Service](#)
- [Oracle Field Service](#)

Oracle Utilities Customer Cloud Service

Oracle Utilities Customer Cloud Service is a customer information system (CIS) combined with Oracle Utilities Meter Data Management System and Oracle Utilities Operational Device Management as one single solution. It has pre-built integration with head-end and AMI systems and captures data from multiple sources and has multi-channel communication. With smart meters, this solution is capable of managing any size of smart programs with varying maturity levels.

Various flows such as meter, person, service agreement, service points, meter reading, meter configuration are performed in a single application.

Oracle Field Service

This section includes the following:

- [Admin](#)
- [Dispatch Console](#)
- [Resource Tree](#)
- [Buckets](#)
- [Field Resources](#)

Admin

The Administrator plays an essential role in the application. The Administrator user type is assigned to an individual or group of individuals who oversee the regular maintenance and updates to users, resources, calendars, and the resource tree.

The Administrator is responsible for a combination of functions that can include:

- Managing users: Adding new users and deactivating existing users.
- Assigning user types to users.
- Resetting passwords.
- Managing the resource tree.
- Managing the resource calendars, shifts, and teamwork.
- Working with work zones, work skills, work conditions, and work skills groups.

As an administrator, one of your key responsibilities is to manage user information.

There are two primary types of users:

- Users who use the manage aspect
Example: dispatchers and field managers
- Field service resources who use the mobile app
Example: field service personnel

In either case, a user is someone who requires access to some part of the application's interface to act upon the incoming activities.

Many of these tasks are not daily tasks, but completed during setup of the application and management changes. Refer to the *Administer User Guide* at <https://docs.oracle.com/en/cloud/saas/field-service/22c/administer.html> for more details.

Dispatch Console

The dispatch console is a dashboard for the dispatcher who can see all the activities that are scheduled or non-scheduled. The assigned dispatcher has a variety of tasks it can perform.

Refer to the **Dispatch Console Activities** section at <https://docs.oracle.com/en/cloud/saas/field-service/22c/faaca/c-working-with-activities.html#ManagingActivities-A09A0581> for more information.

The screenshot shows the Dispatch Console interface for an 'OH Meter' resource. The interface includes a search bar, a sidebar with a resource tree, and a main table of activities. The table columns are: Activity, Start, Activity stat, End, Activity type, Work Order, Time, Work Skill, Work Zone, W/O, and Address. The activities listed are primarily 'Test Test ZZ-C2MO-ReadMeter' and 'Remove Meter'.

Activity	Start	Activity stat	End	Activity type	Work Order	Time	Work Skill	Work Zone	W/O	Address
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	51252410926680			ALTAMONTE SPRINGS		Chuluota, Chuluota
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	5567688773639			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	6021776645751			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	07773157035488			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	74215918075991			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	43286202084200			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	95694544489254			ALTAMONTE SPRINGS		lubbock user case
Remove Meter	12:00 AM	Pending	12:48 AM	Remove Meter	16168380422662		Meter Services(1/1)			7509 E. Delaware county
Remove Meter	12:00 AM	Pending	12:48 AM	Remove Meter	0699571421618					
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	97746471758354			ALTAMONTE SPRINGS		100 Main str 3
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	72249380591691			ALTAMONTE SPRINGS		696 E ALTAMONTE DR ERT
Trim Tree	12:00 AM	Pending	12:48 AM	Trim Tree	06129013889138		Meter Services(1/1)			123 Main St
Test Test ZZ-C2MO-ReadMeter	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	84102161688592			ALTAMONTE SPRINGS		100 Main str 3

Resource Tree

The resource tree provides a hierarchical view of your organization's resources, typically sorted by geographical region. It is shown on the left of the page.

Use the toggle button to show or hide the resource tree. When you select a resource from the resource tree, the resource's activities are displayed in the work area on the right.

Click the plus sign (+) next to an entity in the resource tree to expand and view the entities under that group or bucket. Click the minus (-) sign to collapse that view.

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

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

Buckets

Use organization units to sort and organize the items in the resource tree. In the following figure, you can note that buckets hold the activities that are not yet assigned to field resources.

The screenshot shows the 'Dispatch Console' interface for 'OH Meter'. It displays a list of activities with columns for Activity, Start, Activity stat, End, Activity type, Work Order, Time, Work Skill, Work Zone, W/O, and Address. The activities are mostly in a 'Pending' state. A search bar on the left shows 'OH Meter (40)'.

Activity	Start	Activity stat	End	Activity type	Work Order	Time	Work Skill	Work Zone	W/O	Address
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	51252410926680			ALTAMONTE SPRINGS		Chuluota, Chuluota
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	556798827173639			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	6021177645751			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	07773197035488			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	7421918075991			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	43286202084200			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:35 AM	Test Test ZZ-C2MO-ReadMeter	95696544489254			ALTAMONTE SPRINGS		Iublock use case
Read M	12:00 AM	Pending	12:48 AM	Read Meter_del	16168380422662			Meter Services(1/1)		7509 E. Delaware county
Remove	12:00 AM	Pending	12:48 AM	Remove Meter	0699571142618					
Test	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	97746471795354			ALTAMONTE SPRINGS		100 Main str 3
Test	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	72349380591691			ALTAMONTE SPRINGS		694 E ALTAMONTE DR ERT
Trim Tree	12:00 AM	Pending	12:48 AM	Trim Tree	06129015889158			Meter Services(1/1)		125 Main St
Test	12:00 AM	Pending	12:48 AM	Test Test ZZ-C2MO-ReadMeter	84102167688592			ALTAMONTE SPRINGS		100 Main str 3

Organization units are typically used to group resources by location. They cannot be route owners and cannot assign activities to them. Buckets can have activities. However, dispatchers can assign activities to buckets manually and Routing can assign activities to buckets automatically.

Field Resources

Resources are the people who perform the activities and the items that are paired with those people. Examples of resources include technicians, tools, and trucks.

Difference between resource, user, and child resource

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

Users are field resources that will login to the Oracle Field Service mobile application and work on activities. Depending on the user's role and permissions they will be able to have different responsibilities, such as a dispatcher, a manager, or an administrator user.