

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

(Also applicable to Oracle Utilities Customer To Meter)

Configuration Guide

Release 19.1

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Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud Configuration Guide, Release 19.1

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# Preface

Welcome to the Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud Configuration Guide.

## Audience

This document is intended for anyone implementing the integration of the following products with Oracle Field Service Cloud:

- Oracle Utilities Customer Cloud Service
- Oracle Utilities Customer To Meter

## Documentation and Resources

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

### Product Documentation

Topic	Description
Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud Configuration Guide	Refer to the Oracle Utilities applications documentation page: <a href="http://docs.oracle.com/cd/E72219_01/documentation.html">http://docs.oracle.com/cd/E72219_01/documentation.html</a>
Oracle Utilities Customer To Meter documentation	
Oracle Utilities Customer Cloud Service documentation	
Oracle Field Service Cloud documentation	<a href="https://docs.oracle.com/en/cloud/saas/field-service/19b/index.html">https://docs.oracle.com/en/cloud/saas/field-service/19b/index.html</a>

## Additional Documentation

Resource	Location
Oracle Support	Visit My Oracle Support at <a href="https://support.oracle.com">https://support.oracle.com</a> regularly to stay informed about updates and patches.  Access the support site for the Edge Application Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1) or refer to the Oracle Utilities Integrations page at <a href="http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm">http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm</a>
Oracle Technology Network (OTN) Latest versions of documents	<a href="http://www.oracle.com/technetwork/index.html">http://www.oracle.com/technetwork/index.html</a>
Oracle University for training opportunities	<a href="http://education.oracle.com/">http://education.oracle.com/</a>

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## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	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.

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# Acronyms

The following terms are used in this document:

<b>Term</b>	<b>Expanded Form</b>
OFSC	Oracle Field Service Cloud
OIC	Oracle Integration Cloud
ICS	Integration Cloud Service
SOM	Oracle Utilities Service Order Management
DVM	Domain Value Map (Lookup)
C2M	Oracle Utilities Customer to Meter
CCS	Oracle Utilities Customer Cloud Service
SP	Service Point
CIS	Customer Information System



# Chapter 1

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## Introduction

**Important!** This integration is applicable to both on-premises version of the solution (Oracle Utilities Customer To Meter (C2M)) and SaaS version (Oracle Utilities Customer Cloud Service (CCS)).

Oracle Utilities Customer Cloud Service is used to reference the product in the document.

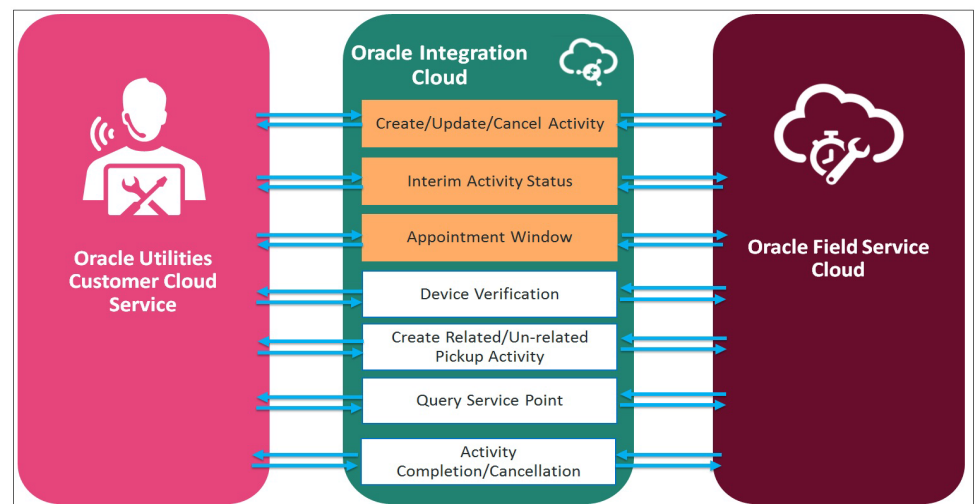
This chapter provides an overview about Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud using Oracle Integration Cloud. It focuses on software requirements, Oracle Integration Cloud, and business standpoint of the integration. It focuses on the following:

- [Overview of the Integration](#)
- [About Oracle Utilities Customer Cloud Service](#)
- [About Oracle Field Service Cloud](#)
- [About Oracle Integration Cloud](#)
- [Software Requirements](#)

## Overview of the Integration

Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud helps to manage a fieldwork originated in the Oracle Utilities Customer Cloud Service solution in Oracle Field Service Cloud. The integration can be leveraged to create appointments and initiate/update/cancel activities in the field using the Oracle Field Service Cloud solution.

The major business flows revolve around activities, appointments, devices, and service points. The activities are created in Oracle Utilities Customer Cloud Service and sent to Oracle Field Service Cloud for the mobile worker to perform the activity. The field activity completion information is sent from Oracle Field Service Cloud to Oracle Utilities Customer Cloud Service where it is processed by Service Order Management (SOM). In addition, the integration supports item/device verification, an ability to request for Oracle Utilities Customer Cloud Service interim status of a field activity being processed by Oracle Field Service Cloud, create the related pick-up orders and Oracle Field Service Cloud queries for service point information from Oracle Utilities Customer Cloud Service in order to create an unrelated pickup order.



## About Oracle Utilities Customer Cloud Service

It is a customer information system (CIS) combined with Oracle Utilities Meter Data Management System 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.

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## About Oracle Field Service Cloud

Oracle Field Service Cloud 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.

## About Oracle Integration Cloud

Oracle Integration Cloud is a unified platform to integrate the applications, automate processes, and create applications.

Using the Process Builder the business processes can be rapidly designed, automated, and managed in the cloud. Using integrations connect the applications into a continuous business flow. The integrations can be quickly developed and activated between both the applications that live in the cloud; and the applications still live on premises. The lookups help to match application specific codes between the two applications.

Integration Insights and Stream Analytics helps to simplify and extract business metrics and create custom dashboards.

## Software Requirements

The application supported versions are:

- Oracle Utilities Customer To Meter - v2.7.x or higher (On-premises)
- Oracle Utilities Customer Cloud Service - 19B or higher
- Oracle Integration Cloud - v19.3.1.0.0 or higher
- Oracle Field Service Cloud - 19B or higher

# Chapter 2

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## Solution Architecture

This chapter provides an overview of the application architecture used by the integration, including:

- [Solution Diagram](#)
- [Business Flows](#)

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## Solution Diagram

The technical aspects involved in Oracle Utilities Customer Cloud Service Integration to Oracle Field Service Cloud are:

- An integration between Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud.
- The integration layer is made up of integration processes deployed on Oracle Integration Cloud.
- It uses web services and REST APIs to facilitate communication between the two applications.
- In the Oracle Utilities Customer Cloud Service initiated processes, outbound messages are sent and Oracle Field Service Cloud uses REST API to receive the messages.
- In the Oracle Field Service Cloud initiated processes, events are triggered and Oracle Utilities Customer Cloud Service uses inbound web services (IWS) to receive the messages.

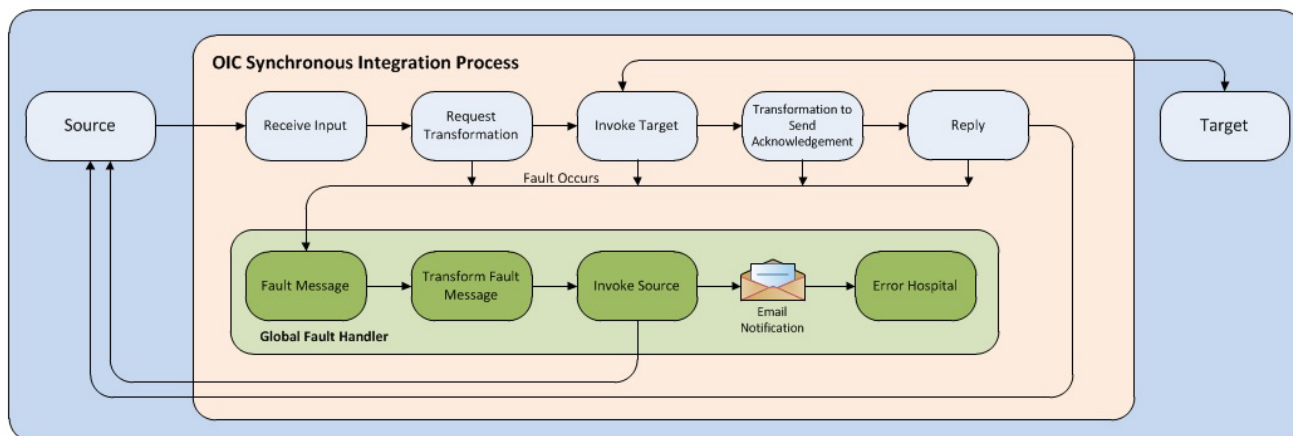
The integration patterns used in this solution are:

- [Synchronous](#)
- [One-way Asynchronous](#)

### Synchronous

The synchronous integration process:

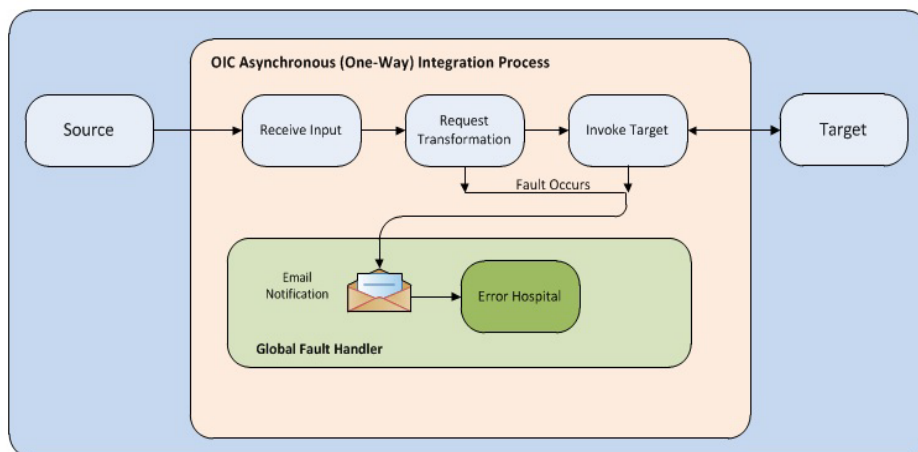
1. Receives request message from the source application.
2. Transforms the message from source format to the target format. Lookups are used for data translations.
3. Invokes the target application.
4. Transforms the message (after invoking the target application) from the target format back to the source format. It sends back an acknowledgment/synchronous response.
5. In case of any error, the global fault handler catches them and sends the transformed error message to the source application.
6. An optional email notification is sent to the respective users as configured.



## One-way Asynchronous

The one-way asynchronous integration process:

1. Receives request message from the source application.
2. Transforms message from the source to the target format. Lookups are used for data translations.
3. Invokes target application to send the request message.
4. In case of any error, the global fault handler catches them.
5. The error instance can be re-submitted from Oracle Integration Cloud. Refer to the [Error Handling](#) section in [Chapter 6: Configuring Lookups, Error Handling, and Email Notifications](#) for more details.



# Business Flows

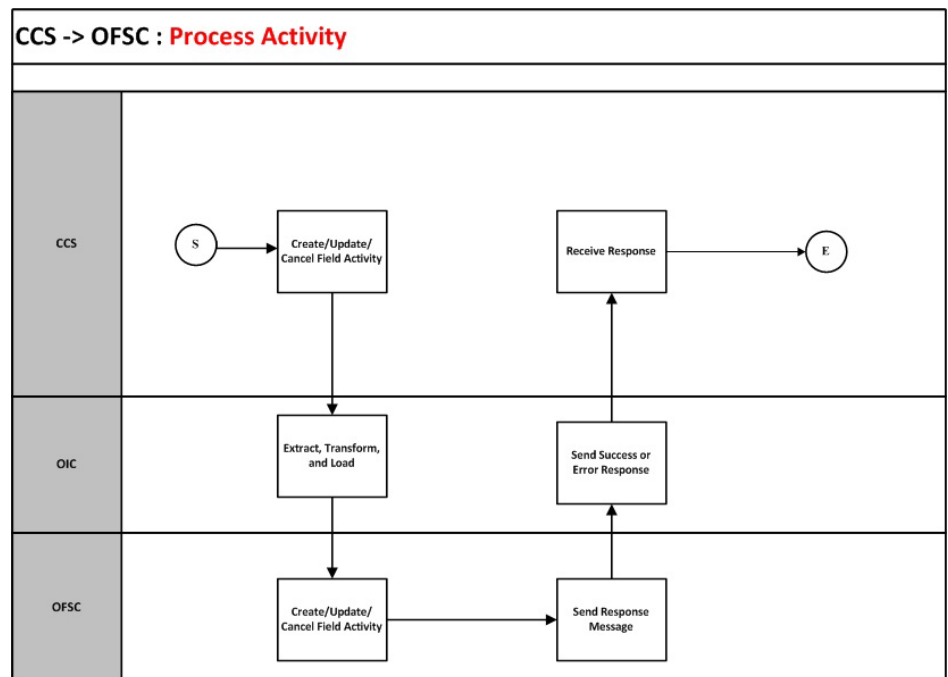
The integration scope supports the following business processes:

- [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 \(Oracle Field Service Cloud Initiated\)](#)
- [Create Activity \(Oracle Field Service Cloud Initiated\)](#)
- [Activity Completion/Cancellation \(Oracle Field Service Cloud Initiated\)](#)
- [Query Service Point \(Oracle Field Service Cloud Initiated\)](#)

## Process Activity (Oracle Utilities Customer Cloud Service Initiated)

This integration process is used to accept request from Oracle Utilities Customer Cloud Service to create, update, or cancel activities in Oracle Field Service Cloud. The information is sent synchronously from Oracle Utilities Customer Cloud Service, regardless of the activity type, and Oracle Field Service Cloud sends back a response.

The following diagram shows a graphical representation of the Process Activity integration process.



## Business Processing

The integration process includes the following activities:

1. Oracle Utilities Customer Cloud Service sends the create/update/cancel activity request to the Process\_Activity\_SOMToOFSC integration process deployed on Oracle Integration Cloud.
2. The Process\_Activity\_SOMToOFSC process transforms the create/update/cancel activity request message from Oracle Utilities Customer Cloud Service to the request message format in Oracle Field Service Cloud and invokes bulkUpdate API.
3. Oracle Field Service Cloud sends the success or failure response to the integration transformed and sent to Oracle Utilities Customer Cloud Service.
4. Any errors are reported back to Oracle Utilities Customer Cloud Service through the global fault handler.
5. An optional email notification with error details is sent to the users configured in the SOMOFSC\_Email\_ID lookup.

## Technical Details

The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Process_Activity_SOMToOFSC
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC BO/Operation	Activity/Bulk Update Activity
OFSC API	bulkUpdate
CCS BO	D1-FieldActivityOBComm D1-ActivityModifyOBComm

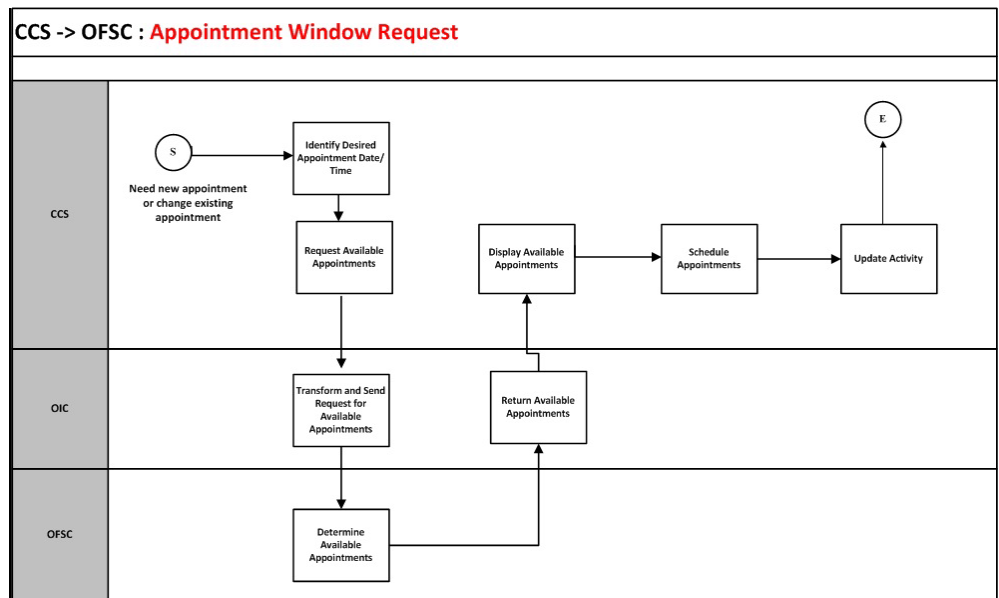
## Appointment Window Request (Oracle Utilities Customer Cloud Service Initiated)

This integration process provides a list of available appointments.

Oracle Utilities Customer Cloud Service sends the activity start and end date times from the **Appointment** portal and Oracle Field Service Cloud sends back the list of appointments available during that time window.



The following diagram shows a graphical representation of the Appointment Window Request integration process.



## Business Processing

The integration process includes the following activities:

1. Oracle Utilities Customer Cloud Service sends the get available appointment request to Get\_Appointment\_SOMToOFSC integration process deployed on Oracle Integration Cloud.
2. The Get\_Appointment\_SOMToOFSC process transforms the request message from Oracle Utilities Customer Cloud Service to the request message format in Oracle Field Service Cloud and invokes the activityBookingOptions REST API.
3. Oracle Field Service Cloud sends the success or failure response to the integration transformed and sent to Oracle Utilities Customer Cloud Service.
4. Any errors are reported back to Oracle Utilities Customer Cloud Service through the global fault handler.
5. An optional email notification with error details is sent to the users configured in the SOMOFSC\_Email\_ID lookup.

**Note:** Make sure the fix for Bug 28474403 is applied on to the Oracle Utilities Customer Cloud Service environment. Also, in Oracle Field Service Cloud make sure the employee-based activities have 'Break' in the time slot label.

For example: Lunch Break, Second Lunch Break, and more

### Technical Details

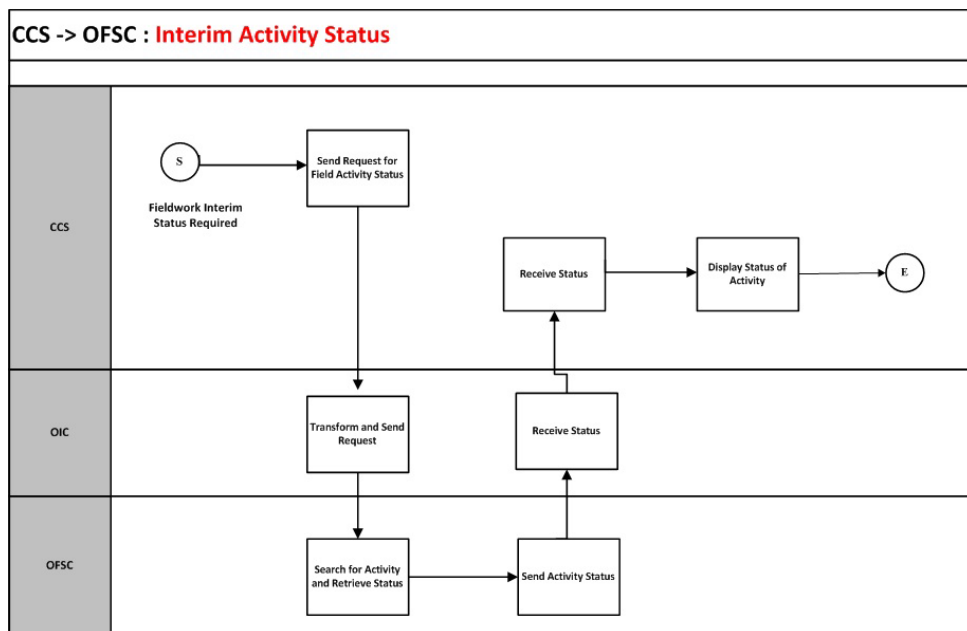
The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Get_Appointment_SOMToOFSC
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC API/Method	activityBookingOptions/GET
CCS BO	D1-ApptOBMessage

### Interim Activity Status (Oracle Utilities Customer Cloud Service Initiated)

Oracle Utilities Customer Cloud Service synchronously sends the requests for the interim activity status of the field activities and Oracle Field Service Cloud sends back the status.

The following diagram shows a graphical representation of the Interim Activity Status integration process.



### Business Processing

The integration process includes the following activities:

1. Oracle Utilities Customer Cloud Service sends the interim activity status request to the Get\_ActivityStatus\_SOMToOFSC integration process deployed on Oracle Integration Cloud.
2. Oracle Field Service Cloud sends the success or failure response to the integration that is transformed and sent to Oracle Utilities Customer Cloud Service.
3. Any errors are reported back to Oracle Utilities Customer Cloud Service through the global fault handler.

- An optional email notification with error details are sent to the users configured in the SOMOFSC\_Email\_ID lookup.

### Technical Details

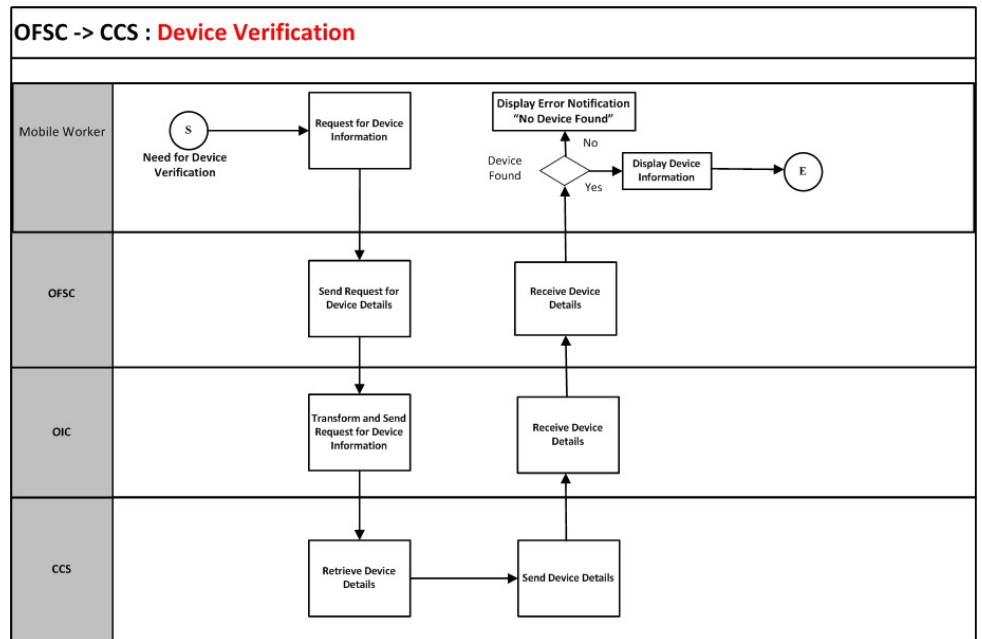
The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Get_ActivityStatus_SOMToOFSC
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC BO/Operations	Activity/Bulk Update Activity Activity/Get Activity
CCS BO	D1-InterimStatusRequest

## Device Verification (Oracle Field Service Cloud Initiated)

This integration process is used to verify if the item/device is present in Oracle Utilities Customer Cloud Service. Oracle Field Service Cloud 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.

The following diagram shows a graphical representation of the Device Verification integration process.



## Business Processing

The integration process includes the following activities:

1. Oracle Field Service Cloud sends the device verification request to the Device\_Verification\_OFSCToSOM integration process deployed on Oracle Integration Cloud.
2. The Oracle Field Service Cloud mobile worker has the option to request for device information using the badge number and serial Number. The serial number is optional.
3. The Device\_Verification\_OFSCToSOM process transforms the request message from Oracle Field Service Cloud to the request message format in Oracle Utilities Customer Cloud Service and invokes either D1-DeviceVerificationService or D1-ItemVerificationService inbound web service if the device type is Meter or Item respectively.
4. Oracle Utilities Customer Cloud Service sends the success or failure response to the integration transformed and sent to Oracle Field Service Cloud.
5. Any errors are handled by the custom plug-in hosted on Oracle Field Service Cloud. A pop-up blocker appears in Oracle Field Service Cloud with the respective error details.

## Technical Details

The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

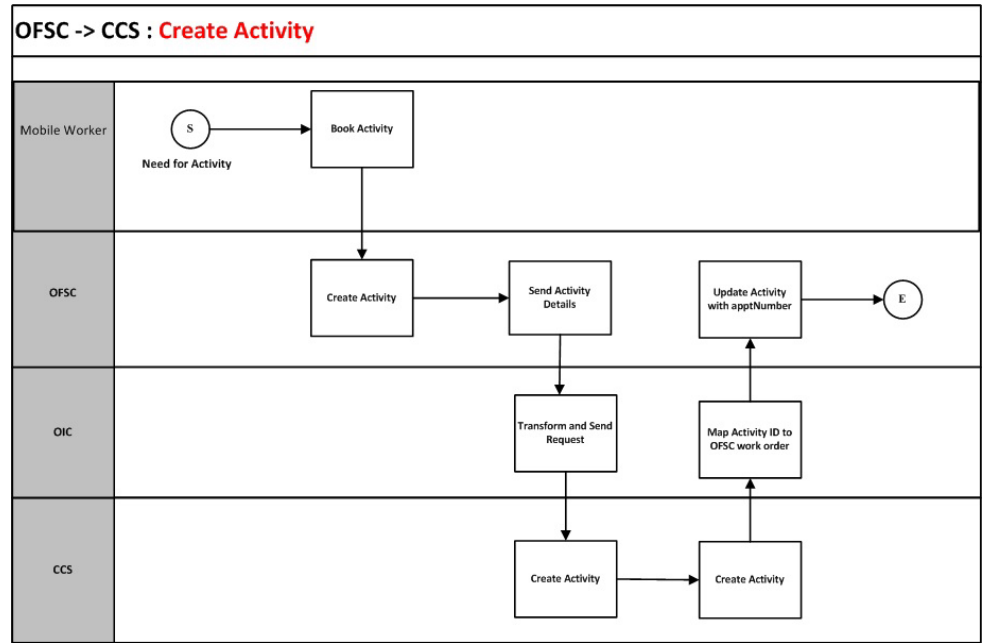
Process	Value
Integration Process Name	Device_Verification_OFSCToSOM
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC Entity	Custom Plugin: Device Verification
CCS IWS	D1-DeviceVerificationService D1-ItemVerificationService

## Create Activity (Oracle Field Service Cloud Initiated)

This integration process is used to create an activity in an external system. Oracle Field Service Cloud sends a request to create activity in Oracle Utilities Customer Cloud Service.

The same flow is used to create both related and unrelated pickup activities from Oracle Field Service Cloud.

The following diagram shows a graphical representation of the Create Activity integration process.



### Business Processing

The integration process includes the following activities:

1. Oracle Field Service Cloud sends the create activity request to the Create\_Activity\_OFSCToSOM integration process deployed on Oracle Integration Cloud.
2. The Create\_Activity\_OFSCToSOM process transforms the request message from Oracle Field Service Cloud to the request message format in Oracle Utilities Customer Cloud Service and invokes the D1-FARRequestSynchronous inbound web service.
3. The integration process sends the Oracle Utilities Customer Cloud Service Activity ID from Oracle Utilities Customer Cloud Service response to Oracle Field Service Cloud work order using Update\_Patch.
4. Any errors are captured through the global fault handler.
5. An optional email notification with error details are sent to the users configured in the SOMOFSC\_Email\_ID lookup.

### Technical Details

The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

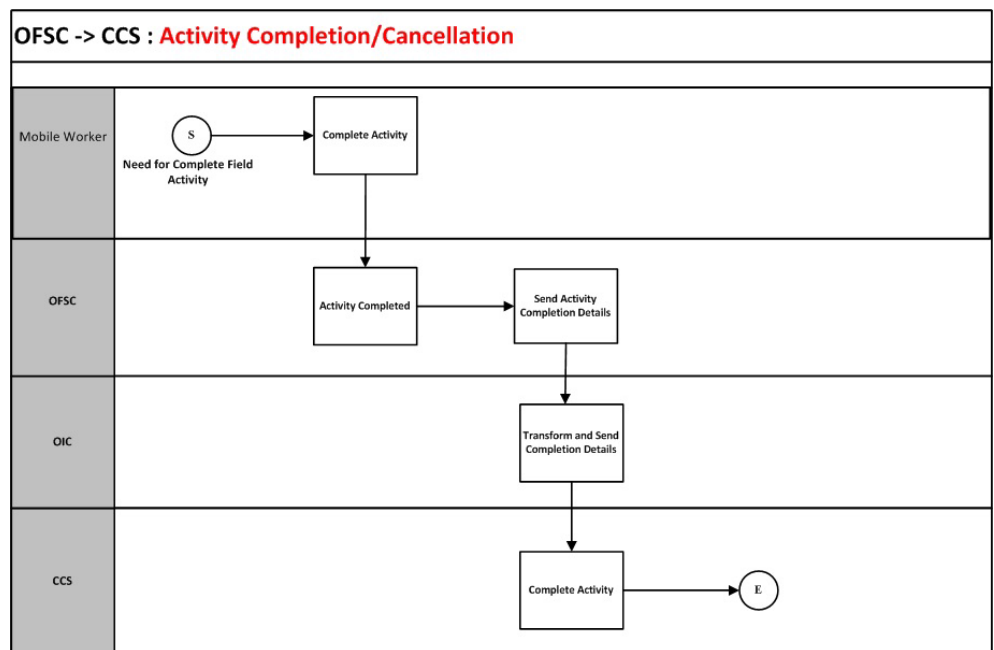
Artifacts	Value
Integration Process Name	Create_Activity_OFSCToSOM
Integration Package Name	oracle.util.somofsc.fieldwork

Artifacts	Value
OFSC BO/Events	Activity/Activity Created
	Activity/ Update Activity
CCS IWS	D1-FARequestSynchronous

## Activity Completion/Cancellation (Oracle Field Service Cloud Initiated)

This integration process is used to send the field activity completion/cancellation details from Oracle Field Service Cloud to Oracle Utilities Customer Cloud Service. Oracle Field Service Cloud sends the activity completion/cancellation details, along with the completion/cancellation status, to complete/cancel the activity in Oracle Utilities Customer Cloud Service.

The following diagram shows a graphical representation of the Activity Completion integration process:



### Business Processing

The integration process includes the following activities:

1. Oracle Field Service Cloud sends the activity completion details to the Complete\_Activity\_OFSCToSOM integration process deployed on Oracle Integration Cloud.
2. The Complete\_Activity\_OFSCToSOM process transforms the message from Oracle Field Service Cloud to the message format in Oracle Utilities Customer Cloud Service and invokes the D1-FieldActivityIBComm inbound web service.
3. When the Activity Not Done event is triggered, the data is not processed further from Oracle Integration Cloud to Oracle Utilities Customer Cloud Service. And, the

'Not Done' status update is handled in the [Interim Activity Status \(Oracle Utilities Customer Cloud Service Initiated\)](#) integration flow.

4. Any errors are captured through the global fault handler.
5. An optional email notification with error details are sent to the users configured in the SOMOFSC\_Email\_ID lookup.

### Technical Details

The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

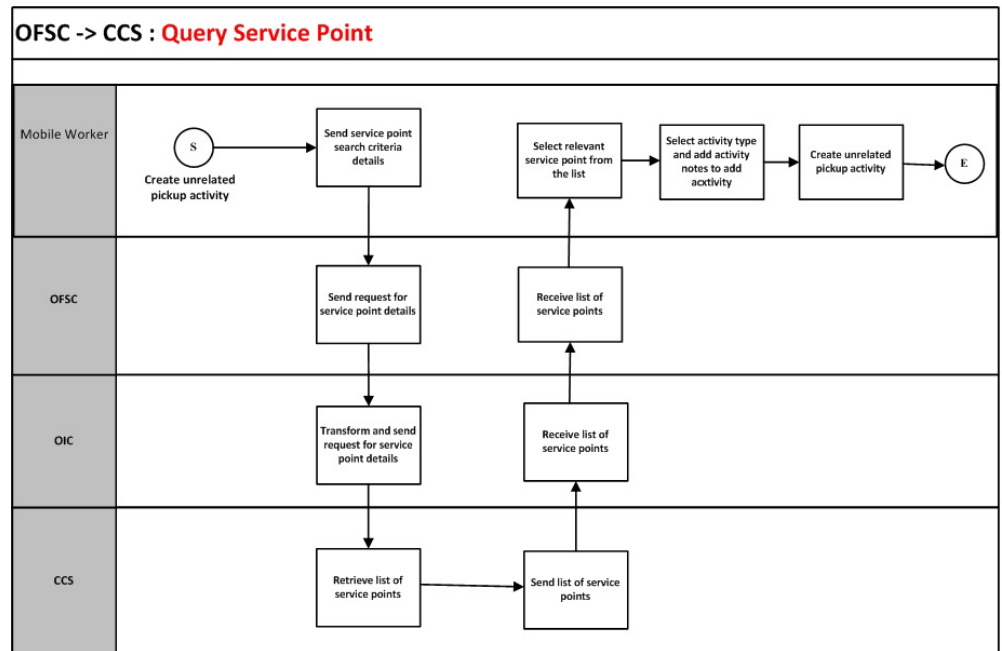
Artifacts	Value
Integration Process Name	Complete_Activity_OFSCtoSOM
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC API/Event	Activity/Activity Completed
	Activity/Activity Cancelled
	Activity/Activity Not Done
OFSC BO/Operation	Activity/Get Activity
CCS IWS	D1-FieldActivityIBComm

## Query Service Point (Oracle Field Service Cloud Initiated)

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

The integration process sends request from Oracle Field Service Cloud to Oracle Utilities Customer Cloud Service to identify a service point. Oracle Field Service Cloud 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.

The following diagram shows a graphical representation of the Query Service Point integration process.



## Business Processing

The integration process includes the following activities:

1. Oracle Field Service Cloud mobile worker requests for service point information to create an unrelated pickup activity.
2. Oracle Field Service Cloud sends the query service point request to the Query\_ServicePoint\_OFSCToSOM integration process deployed on Oracle Integration Cloud.
3. The Query\_ServicePoint\_OFSCToSOM process transforms the request message from Oracle Field Service Cloud to the request message format in Oracle Utilities Customer Cloud Service and invokes the D1-FieldWorkSPQuery inbound web service.
4. Oracle Utilities Customer Cloud Service sends the success or failure response to the integration transformed and sent to Oracle Field Service Cloud.
5. In case of success response, a list of service points is returned to Oracle Field Service Cloud.
6. Oracle Field Service Cloud mobile worker selects the relevant service point from the list, selects the activity type, and adds activity notes to create an activity.
7. This creates an unrelated pickup activity in Oracle Field Service Cloud and a text message with the Oracle Field Service Cloud activity ID is displayed on mobile screen.
8. If Oracle Utilities Customer Cloud Service invocation fails due to invalid input data, the global fault handler captures the invocation error and the error details are returned to Oracle Field Service Cloud using Unrelated Pickup custom plugin.



9. Other errors are handled by the Unrelated Pickup custom plug-in hosted on Oracle Field Service Cloud. A text message appears on Oracle Field Service Cloud mobile screen with the respective error details.

### Technical Details

The following table describes the integration processes and the respective Oracle Utilities Customer Cloud Service and Oracle Field Service Cloud artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Query_Service_OFSCToSOM
Integration Package Name	oracle.util.somofsc.fieldwork
OFSC Entity	Custom Plugin: Unrelated Pickup
CCS IWS	D1-FieldWorkSPQuery

# Chapter 3

---

## Configuring Oracle Utilities Customer Cloud Service

This chapter elaborates about the configuration of about various data, messages and catalog for the integration used by Oracle Utilities Customer Cloud Service. It includes the following sections:

- [Configuring Admin Data](#)
- [Adding Oracle Integration Cloud Certificates](#)
- [Managing Catalog Services](#)

# Configuring Admin Data

To configure the Oracle Utilities Customer Cloud Service setup for the integration:

1. Login to Oracle Utilities Customer Cloud Service.
2. Create message senders. Refer to the [Message Senders](#) section for details.
3. Create outbound message types. Refer to the [Outbound Message Types](#) section for details.
4. Create an external system. Refer to the [External System](#) section for details.
5. Create an external application. Refer to the [External Application](#) section for details.
6. Complete the master configuration. Refer to the [Master Configuration](#) section for details.
7. Create activity types. Refer to the [Activity Types](#) section for details.
8. Generate certificates. Refer to the [Adding Oracle Integration Cloud Certificates](#) section for more details.

## Message Senders

This section provides the message sender configuration details in Oracle Utilities Customer To Meter and Oracle Utilities Customer Cloud Service.

- [Configuring Message Sender in Oracle Utilities Customer To Meter](#)
- [Configuring Message Sender in Oracle Utilities Customer Cloud Service](#)

### Configuring Message Sender in Oracle Utilities Customer To Meter

Create a new message sender for each integration service initiated from Oracle Utilities Customer To Meter.

To create a message sender:

1. Navigate to the **Message Sender** page from the **Admin** menu or from the **Search** menu.
2. Enter a unique message sender and its description.
3. Populate the following values:
  - Invocation Type - Real-time
  - Message Class - SOAPSNDNR
  - Active - Select the checkbox.
  - MSG Encoding - UTF-8 message encoding
4. Select the **Context** tab and set values for the following context types:
  - HTTP Header - SOAPAction:"<operation name in OIC Activated Integration wsdl url>"
  - HTTP Login User - User ID to access the Oracle Integration for Cloud (OIC) flow
  - HTTP Password - Password to access the OIC flow
  - HTTP Method (POST/GET) - POST

- HTTP Timeout - 60
- HTTP Transport Method - SendReceive
- HTTP URL 1 - Set the Activated Integration end point URL by removing the ?wsdl from the URL.

If the URL value does not fit, use the additional HTTP URL types to set the complete URL.

- Message Namespace URI - Provide the namespace of the schema in the respective integration process.
- SOAP Insert Timestamp (Y/N) - Y
- Sender Security Type - TEXT

**Important!** Make sure the namespace does not include any extra spaces. Copy the namespaces into Notepad to check for any extra spaces.

**Message sender configuration for integration services**

Message Sender	Description	Message Namespace URI	HTTP Header	HTTP URL
<b>Process Activity (create/update/cancel)</b>				
INT_OFSC_PA	INT Process Activity-Message Sender-OFSC	http://xmlns.oracle.com/SRHUB/Message	SOAPAction:"ICS_OFSC_ProcessActivity	"https://OIC_Host:OIC_Port/ic/ws/integration/v1/flows/oracleutilities/PROCESS_ACTIVITY_SOMTOOFS/1.0/
<b>Get Appointment</b>				
INT_OFSC_GAP	INT Get appointment-Message Sender-OFSC	http://ouaf.oracle.com/outbound/D1-ApptOBMessage	SOAPAction:"OIC_OFSC_OIC_OFSC_GA	"https://OIC_Host:OIC_Port/ic/ws/integration/v1/flows/oracleutilities/GET_APPOINTMENT_SOMTOOFS/1.0/
<b>Interim Status</b>				
INT_OFSC_STA	INT Interim Status-Message Sender-OFSC	http://xmlns.oracle.com/SRHUB/Message	SOAPAction:"ICS_OFSC_GetStatus	"https://OIC_Host:OIC_Port/ic/ws/integration/v1/flows/oracleutilities/GET_ACTIVITYSTATUS_SOMTOOFS/1.0/

## Configuring Message Sender in Oracle Utilities Customer Cloud Service

Create a new message sender for each integration service initiated from Oracle Utilities Customer Cloud Service.

To create a message sender:

1. Navigate to the **Message Sender** page from the **Admin** menu or from the **Search** menu.
2. Enter a unique message sender and its description.
3. Populate the following values:
  - Invocation Type - Real-time
  - Message Class - RTHTTPSNDR
  - Active - Select the checkbox.
  - MSG Encoding - UTF-8 message encoding
4. Select the **Context** tab and set values for the following context types:
  - HTTP Header - SOAPAction:"<operation name in OIC Activated Integration wsdl url>"
  - HTTP Login User - User ID to access the Oracle Integration for Cloud (OIC) flow
  - HTTP Password - Password to access the OIC flow
  - HTTP Method (POST/GET) - POST
  - HTTP Timeout - 60
  - HTTP Transport Method - SendReceive
  - HTTP URL 1 - Set the Activated Integration end point URL by removing the ?wsdl from the URL.

If the URL value does not fit, use the additional HTTP URL types to set the complete URL.

### Message sender configuration for integration services

Message Sender	Description	HTTP Header	HTTP URL
<b>Process Activity (create/update/cancel)</b>			
INT_OFSC_PA	INT Process Activity-Message Sender-OFSC	SOAPAction:"ICS_OFSC_ProcessActivity	@EXT_PUB@OIC_Host:OIC_Port/ic/ws/integration/v1/flows/oracleutilities/PROCESS_ACTIVITY_SOMTOOFSC/1.0/
<b>Get Appointment</b>			
INT_OFSC_GAP	INT Get appointment-Message Sender-OFSC	SOAPAction:"OIC_OFSC_OIC_OFSC_GA	@EXT_PUB@OIC_Host:OIC_Port/ic/ws/integration/v1/flows/oracleutilities/GET_APPOINTMENT_SOMTOOFSC/1.0/

Interim Status			
INT_OFSC_STA	INT Interim Status- Message Sender-OFSC	SOAPAction:"ICS_OFSC_Get Status	@EXT_PUB@OIC_Host:OIC _Port/ic/ws/integration/v1/ flows/oracleutilities/ GET_ACTIVITYSTATUS_SO MTOOFSC/1.0/

## Outbound Message Types

To create a new outbound message type for each integration process:

1. Navigate to the **Outbound Message Type** page from the **Admin** menu or from the **Search** menu.
2. Enter an outbound message type, description, and detailed description.
3. Select the outbound message business object created for a specific service.

### Outbound message types for integration services

Integration Service	Outbound Message Type	Description	Business Object
Process Activity(create)	INT_OFSC_PA	INT Process Activity request to OFSC	D1-FAAddOBMsg
Get Appointment	INT_OFSC_GAP	INT Get appointment from OFSC	D1-ApptOBMessage
Interim Status	INT_OFSC_STA	INT Interim Status in OFSC	D1-InterimStatusRequest
Process Activity(update/ cancel)	INT_OFSC_UA	INT Update Activity request to OFSC	D1-FAModifyOBMsg

## External System

To create a new external system to support the integration:

1. Navigate to the **External System** page from the **Admin** menu or from the **Search** menu.
2. Enter a unique external system and description.

For example: Name = INT\_OFSC\_ES, Description = OFSC External System

3. Set the **Our Name in Their System** field to C2M.
4. Associate the outbound message types and message senders created to the external system.

For each outbound message type, set the following:

- Outbound Message Type - Outbound message type created for the respective integration service
- Processing Method - Real-time
- Message Sender - Set the message sender created for the integration service

- Date/Time Format - XSD
- Namespace Option - Configured on sender

For more information about message senders and outbound message type for each integration service, refer to the [Message Senders](#) and [Outbound Message Types](#) sections respectively.

### External system configuration for integration services

Example External System - INT\_OFSC\_ES

Integration Service	Outbound Message Type	Message Sender
Process Activity(create)	INT_OFSC_PA	INT_OFSC_PA
Process Activity(update/ cancel)	INT_OFSC_UA	INT_OFSC_PA
Get Appointment	INT_OFSC_GAP	INT_OFSC_GAP
Interim Status	INT_OFSC_STA	INT_OFSC_STA

## External Application

Create an external application with the respective external system reference and add processing roles to invoke each integration service.

To create a new external application to support the integration:

1. Navigate to the **External Application** page from the **Admin** menu or from the **Search** menu.
2. Enter a unique external application and description.

For example: Name = INT\_OFSC\_EA, Description = INT\_OFSC External Application - Field Work System

3. Set the **Our Name in Their System** field to **C2M**.
4. Select the External System as <external system> created for this integration. For details about external system, refer to the [External System](#) section.

For example: INT\_OFSC\_ES

5. Select **Utility Device ID Type** as **Badge Number**.
6. Click **Save**.
7. Under **Processing Method List**, add **Processing Method** for each integration service.
8. Associate the outbound message types and message senders to the external system. For each outbound message type, set the following:
  - **Processing Role** - Select the relevant processing role.
  - **Business Object** - Select the business object to generate the outbound message.
  - **Description** - Describe the processing method
  - **Status** - Active

- **Default Business Object** - Select the business object for the respective outbound message type.
- **Default Outbound Message Type** - Outbound message type for the respective integration service.

Integration Service	Processing Role	Description	Default Business object	Default Outbound Message Type
Process Activity(create)	Field Activity	INT OFSC Process activity Processing Role	D1-FieldActivityOBComm	INT_OFSC_PA
Appointment Request	Appointment Request	INT OFSC Appointment Processing Role	n/a	INT_OFSC_GAP
Interim Status	Interim Status Update	INT OFSC Interim Status Processing Role	n/a	INT_OFSC_STA
Process Activity(Update)	Update Activity	INT OFSC Update activity Processing Role	D1-ActivityModifyOBComm	INT_OFSC_UA
Process Activity(Cancel)	Cancelation Activity	INT OFSC Cancel activity Processing Role	D1-ActivityModifyOBComm	INT_OFSC_PA

## Master Configuration

The master configuration has the necessary information to support this integration.

1. Navigate to the **Master Configuration** page from the **Admin** menu or from the **Search** menu.
2. Select **Service Order Management Master Configuration**.
3. Click + next to **Service Order Management Master Configuration**.
4. In the **Master Configuration Details** zone, configure the following values.
  - a. In the **Main** section:
    - a. Field Work System = Refer to the external application created in the [External Application](#) section. <External Application name>  
  
For example: INT\_OFSC\_EA
    - b. Near Schedule Meter Read Search (Days) = 5
  - b. In the **Completion Event Exception Handling** section:
    - a. To Do Type = Activity To Do Type
    - b. To Do Role = System Default Role
    - c. Maximum Retries = 2
    - d. Retry Frequency = 00:05:00
  - c. In the **Management Dashboard Configuration** section:
    - a. Number of Days to Consider for Snapshot = 7
    - b. Weekends/Holidays Inclusion in Activity Duration = Exclude from Activity Duration



- c. Work Calendar = US Bank Work Calendar
- d. Default Expected Activity Completion Time (Hours) = 3
- d. In the **Appointment Handling** section:
  - a. Appointment Slot Request (Hours) = 360
  - b. Default Appointment Handling System = <External Application name>  
Example: INT\_OFSC\_EA
- e. In the **Cut for Non-Payment Service Restrictions** section:
  - a. Life Support/Sensitive Load Option = Allow Cut Service
- f. In **Override Expected Completion Time Configuration** section:
  - a. Activity Type = SOM\_FIELD\_ACTIVITY\_TYPE
  - b. Task Type = Read Meter
  - c. Expected Completion Time (Hours) = 60
- g. In the **Hours Beyond Expected Activity Completion Time** section:
  - a. On Time Completion Tolerance = 8
  - b. Late Completion Tolerance = 16
  - c. Very Late Completion Tolerance = 24
  - d. Normal In Progress Time = 8
  - e. Long In Progress Time = 16
  - f. Very Long In Progress Time = 24
- h. In the **Update Statistics** section:
  - a. Batch Control = D1-ACTAG
- i. In the **Chart Options** section:
  - a. Number of Historical Days to Include in Summary Charts = 12
- j. In the **Summary To Do Types** section:

To Do Type	To Do Role
Activity To Do Type	System Default Role
Inbound Communication To Do Type	System Default Role
Outbound Communication To Do Type	System Default Role

- k. In the **FA Cancelability Criteria** section:
  - a. FA Cancellable Script = Determine FA Cancellability

Interim Status	FA Cancelability
Canceled	Not Cancellable
Completed	Not Cancellable
Declined	Cancellable
Dispatched	Cancellable

Interim Status	FA Cancellability
Enroute	Not Cancellable
Error	Cancellable
On Hold	Cancellable
Started	Not Cancellable
Queued for Dispatch	Cancellable
Scheduled	Cancellable
Suspended	Cancellable

**Note:** The values configured in the above master configuration section are the sample values for reference.

## Activity Types

An activity type defines the properties common to a specific type of activity.

To create an activity type:

1. Navigate to the **Activity Type** page from the **Admin** menu or from the **Search** menu.
2. Enter the activity type and its description as appropriate.

The activity type includes the following:

Activity Type	Description
Field Activity	<p>Record Information:            Business Object = Field Activity Type            Related Transaction BO = Field Activity            Activity Type Category = Field Activity</p> <p>To Do Information:            Crew Request To Do Type = Activity To Do Type            Crew Request To Do Role = System Default Role            Appointment To Do Type = Appointment Notification            Appointment To Do Role = System Default Role            Field Cancellation To Do Type = Activity To Do Type            Field Cancellation To Do Role = System Default Role</p> <p>Exception Handling:            To Do Type = Activity To Do Type            To Do Role = System Default Role            Retry Frequency = 00:10:00            Maximum Retries = 2</p>

The Field Task types are available as part of the following extendable lookup.

Business Object: D1-FieldTaskTypeLookup

Description: Field Task Type

The following activity types are supported in this integration:

- 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

## Adding Oracle Integration Cloud Certificates

Add the Oracle Integration for Cloud (OIC) certificate to the Oracle Utilities Customer Cloud Service stores where ever applicable to send transactions to the OIC layer.

## Managing Catalog Services

The catalog service is used by Oracle Integration Cloud to communicate with the respective application. It is configured in Catalog URL in the Oracle Integration Cloud connection.

To configure the catalog service in Oracle Utilities Customer Cloud Service:

1. Login to Oracle Utilities Customer Cloud Service.
2. Navigate to the **Web Service Catalog** page either from the **Admin** menu or the **Search** menu.

The external system and inbound web services mentioned in the table in step 3 are added to the catalog.

3. To get the catalog URL, append “webservices/builtin/ServiceCatalog?wsdl” to the Oracle Utilities Customer Cloud Service URL.

For example: `http(s)://<CCS_HOST>:<CCS_PORT>/<ContextRoot>/webservices/builtin/ServiceCatalog?wsdl`

Following is the list of artifacts to be included in web service catalog:

Service Type	Service Name	Device Verification
External System	INT_OFSC_ES	INT_OFSC External System - Field Work System
Inbound Web Service	D1-DeviceVerificationService	Device Location Verification
Inbound Web Service	D1-FARequestSynchronous	Field Activity Synchronous Req Inbound
Inbound Web Service	D1-FieldActivityIBComm	Field Activity Inbound Communication
Inbound Web Service	D1-FieldWorkSPQuery	Field Work Service Point Query
Inbound Web Service	D1-ItemVerificationService	Item Verification

For more information about configuration, refer to the Oracle Utilities Customer Cloud Service documentation.

# Chapter 4

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## Configuring Oracle Field Service Cloud

The necessary Oracle Field Service Cloud configuration information is available in the Oracle Field Service Cloud Configurations for Oracle Utilities Customer Cloud Service to Oracle Field Service Cloud v19.1 whitepaper at:

[https://docs.oracle.com/cd/F20963\\_01/index.htm](https://docs.oracle.com/cd/F20963_01/index.htm)

# Chapter 5

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## Importing, Configuring, and Testing Integration Connections

This chapter explains in details the process for importing the connections, packages, and files needed for the integration and the configuration of these connections imported through the packages. After a successful import and configuration the chapter lists out steps to help test the connections. It includes the following sections:

- [Importing the Oracle Integration Cloud Package from Oracle Cloud Marketplace](#)
- [Verifying the Package Import](#)
- [Configuring Connections in Oracle Integration Cloud](#)
- [Configuring Agent \(if applicable\)](#)
- [Setting up Certificates for Security](#)

# Importing the Oracle Integration Cloud Package from Oracle Cloud Marketplace

All integration points are shipped as part of single package (.par) file.

To import a pre-built integration from Oracle Cloud Marketplace:

1. Launch the Oracle Cloud Marketplace portal.

[https://cloudmarketplace.oracle.com/marketplace/en\\_US/homePage.jspx](https://cloudmarketplace.oracle.com/marketplace/en_US/homePage.jspx)

2. Click **Applications**.
3. Search for “Oracle Utilities Customer Cloud Service”.
4. Browse through the list of applications and select the pre-built integration package to import.
5. Click **GetApp**.
6. Review and accept “Oracle Standard Terms and Restrictions”.
7. Click **Next**. MyOracle Support portal opens.
8. Download the integration package from MyOracle Support.
9. When prompted, select the server where the pre-built integration file should be uploaded.

The pre-built integration is imported as a package file that is visible on the **Packages** page in Oracle Integration Cloud.

10. On the **Integrations** page, the individual integrations of the imported package file that are designated with a BUILT BY ORACLE message are displayed.

To import a package in Oracle Integration Cloud:

1. Login to Oracle Integration Cloud.
2. Navigate to **Integrations > Designer > Packages**.
3. Click **Import**.
4. Select the .par file downloaded from Oracle Cloud Marketplace.
5. Verify if the package is imported is successfully.

## Verifying the Package Import

To verify the package import was successful:

1. Verify whether the following integrations are imported successfully.
  - Process\_Activity\_SOMToOFSC
  - Get\_Appointment\_SOMToOFSC
  - Get\_ActivityStatus\_SOMToOFSC
  - Device\_Verification\_OFSCToSOM
  - Create\_Activity\_OFSCToSOM

- Complete\_Activity\_OFSCToSOM
  - Query\_ServicePoint\_OFSCToSOM
2. Verify if the following connections are in place.
    - UAC\_SOM
    - OFSC
    - REST\_SOMOFSC\_OB
    - REST\_SOMOFSC\_APPT
  3. Make sure that the following look ups are imported successfully.
    - SOMOFSC\_ActivityType.dvm
    - OFSCSOM\_Appt\_Timeslots.dvm
    - SOMOFSC\_LifeSupport.dvm
    - SOMOFSC\_ConfigProps.dvm
    - SOMOFSC\_Email\_ID.dvm
    - SOMOFSC\_CountryCode.dvm
    - SOMOFSC\_Model.dvm
    - OFSCSOM\_MeterStatus.dvm
    - SOMOFSC\_MeterLocation.dvm
    - SOMOFSC\_ServiceInstructions.dvm
    - SOMOFSC\_ServiceWarnings.dvm
    - SOMOFSC\_DisconnectLocation.dvm
    - SOMOFSC\_Manufacturer.dvm
    - OFSCSOM\_ActionCode.dvm
    - SOMOFSC\_MeterConfigurationType.dvm
    - SOMOFSC\_InterimStatus.dvm
    - SOMOFSC\_TimeZone.dvm
    - OFSCSOM\_StatusReason.dvm
    - OFSCSOM\_SQI.dvm
    - OFSCSOM\_TOU.dvm
    - OFSCSOM\_TimeZone.dvm
    - OFSCSOM\_Decimal.dvm
    - OFSCSOM\_UOM.dvm
    - OFSCSOM\_ReadSequence.dvm
    - OFSCSOM\_Dials.dvm



# Configuring Connections in Oracle Integration Cloud

After the packages are imported and verified, the respective connections have to be configured.

This section describes the procedure to set up the following connections:

- [Configuring UAC\\_SOM Connection](#)
- [Configuring REST\\_SOMOFSC\\_OB Connection](#)
- [Configuring OFSC Connection](#)
- [Configuring REST\\_SOMOFSC\\_APPT Connection](#)

## Configuring UAC\_SOM Connection

This connection is used to communicate with Oracle Utilities Customer Cloud Service/Oracle Utilities Customer To Meter/Oracle Utilities Service Order Management using the Oracle Utilities adapter.

To configure the UAC\_SOM connection:

1. Add the Oracle Utilities Customer Cloud Service/Oracle Utilities Customer To Meter/Oracle Utilities Service Order Management catalog to the **catalogURL** section.
2. On the **Security policy** tab, select the **User Name and Password** token policy.  
**Note:** If using Oracle Utilities Customer Cloud Service, make sure to change the policy to “Basic Authentication”.
3. In case of Oracle Utilities Customer To Meter on-premises, configure the agent in the connection.
  - a. In the **Agent Group** section, click **Configure Agents**.
  - b. Select the agent group from the list created in [Creating an Agent Group](#).
4. On the **Connection** page, enter the user name and password. Click **Test** at the upper-right corner.
5. After the connection is tested successfully, click **Save**.

## Configuring REST\_SOMOFSC\_OB Connection

This connection is used to communicate with Oracle Field Service Cloud using the REST adapter. It is used in the [Device Verification \(Oracle Field Service Cloud Initiated\)](#) and [Query Service Point \(Oracle Field Service Cloud Initiated\)](#) flows triggered by Oracle Field Service Cloud.

Edit the REST\_SOMOFSC\_OB connection and test it to make sure it is successful. Click **Save**.

## Configuring OFSC Connection

This connection is used to communicate with Oracle Field Service Cloud using the Oracle Field Service Cloud adapter.

Configure the Oracle Field Service Cloud connection with the required details:

1. Enter the API URL in the **Field Service Cloud API URL** field.
2. Enter the **Instance ID**.
3. From the **Security Policy** drop-down list, select **Basic Authentication**.
4. On the **Connection** page, enter the user name and password. Click **Test** at the upper-right corner.
5. After the connection is tested successfully, click **Save**.

## Configuring REST\_SOMOFSC\_APPT Connection

This connection is used to communicate with the ActivityBooking API using the REST adapter. It is used in the Appointment Request flow inbound to Oracle Field Service Cloud.

Configure the REST\_SOMOFSC\_APPT connection with required details:

1. From the **Connection Type** drop-down box, select **REST API Base URL**.
2. Select the **TLS Version** as **TLSV1.2**.
3. Enter **https://api.etadirect.com/rest/ofscCapacity/v1/** in the **Connection URL** field.
4. From the **Security Policy** drop-down list, select **Basic Authentication**.
5. On the **Connection** page, enter the user name and password. Click **Test** at the upper-right corner.
6. After the connection is tested successfully, click **Save**.

## Configuring Agent (if applicable)

Create an agent group in Oracle Integration Cloud and install agent on the on-premises server before creating/activating an integration in which messages are exchanged between the on-premises applications and Oracle Integration Cloud. The agent related configurations are needed only if the server points to an on-premises application.

This section includes:

- [Possible Combinations](#)
- [Creating an Agent Group](#)
- [Downloading Agent Installer](#)
- [Installing On-Premises Agent](#)

### Possible Combinations

The possible combination of an agent group is:

- Oracle Utilities Customer To Meter on-premises and Oracle Field Service Cloud

## Creating an Agent Group

Create an agent group in Oracle Integration Cloud before running the agent installer. When the on-premises agent is installed in the environment, the on-premises agent is associated with the agent group identifier. Only one on-premises agent can be associated with an agent group.

For a single Oracle Integration Cloud instance, you can create up to five agent groups. Creating the agent group also creates the necessary queues required for message exchange.

To create an agent group:

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Agents**.
3. Click **Create Agent Group**.
4. Enter the following information:
  - Agent Group Name
  - Identifier

**Note:** The agent group name and identifier must be same.

- Agent Type: “Connectivity Agent”
  - Description
5. Click **Create**.

## Downloading Agent Installer

Download the agent installer from Oracle Integration Cloud and run the installer to install the on-premises agent in your local environment. During the installation, associate the agent with the Agent Group Identifier generated when creating an agent group in Oracle Integration Cloud.

For more information on agent installer, see:

<https://docs.oracle.com/en/cloud/paas/integration-cloud/integrations-user/downloading-and-running-premises-agentinstaller.html>

## Installing On-Premises Agent

To install an on-premises agent:

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Agents**.
3. Click **Download**.
4. Select **Connectivity Agent**.
5. Select **Save File** when prompted to save the file to a directory location on your on-premises host.
6. Navigate to that directory and unzip **oic\_connectivity\_agent.zip**.
7. Change the file permissions to be executable.

8. Download the Oracle Utilities Customer Care and Billing certificate and upload by running the below command from agent home directory.

```
keytool -import -file directoryPath/sample.crt -alias SampleCert -
keystore <Agent_Home>/agenthome/agent/cert/keystore.jks
```

9. Modify **InstallerProfile.cfg** to include the following information.

- a. Provide the oic\_URL value with the OIC SSL host name.

For example: `https://OIC_host:OIC_port`

- b. Provide the agent\_GROUP\_IDENTIFIER. It should be the agent group created in Oracle Integration Cloud.
- c. Set the proxy parameters if the connectivity agent is used with a proxy in the on-premises environment.
- d. Set the JAVA\_HOME property to the directory/folder where JDK is installed.

**Note:** Before running the connectivity agent installer, perform the steps in the link below.

<https://docs.oracle.com/en/cloud/paas/integration-cloud/utilities-adapters/you-begin-setting-oracle-utilities-adapter.html#GUID-7F770AD1-5B87-4C62-968A-3AB30D043835>

- e. Run the connectivity agent installer from the command prompt.

```
java -jar connectivityagent.jar
```

- f. Provide the Oracle Integration Cloud credentials when prompted.
- g. Wait for a successful installation message to appear.

After the installation is complete, an agent instance is created to interact with Oracle Integration Cloud.

To verify if the agent instance was created:

1. Navigate to the **Agents** page in Oracle Integration Cloud.
2. Check if the agent count for your **Agent Group** is increased by one.
3. Click the number to view the agent details.

For more details, refer to Oracle Integration Cloud documentation at <https://docs.oracle.com/en/cloud/paas/integration-cloud-service/index.html>.

## Setting up Certificates for Security

**Important!** Skip this section if there are valid CA certificates for the integration.

If there no valid certificates for this integration, download the Oracle Utilities Customer To Meter/Oracle Utilities Customer Cloud Service certificates and upload them to Oracle Integration Cloud to handshake with Oracle Utilities Customer To Meter/Oracle Utilities Customer Cloud Service.

To download the Oracle Utilities Customer To Meter/Oracle Utilities Customer Cloud Service certificate:

1. Login to Oracle Utilities Customer Cloud Service/Oracle Utilities Customer To Meter.
2. Click the URL on the top-left corner.
3. On the **Security** tab, click **View Certificate**.
4. On the **Details** tab, click **Export**.
5. Save the certificate.

To upload the certificate to Oracle Integration Cloud:

1. Login to Oracle Integration Cloud with Admin credentials.
2. Navigate to **Settings > Certificates**.
3. On the **Certificate** window, click **Upload**.
4. Select **Certificate Type** as **Trust Certificate**.
5. Provide the **Certificate Alias Name**.
6. Select the certificate to upload.
7. Click **Upload**.

# Chapter 6

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## Configuring Lookups, Error Handling, and Email Notifications

This chapter focuses on the lookups configuration, handling business and technical errors, sending email notifications, and customizations in this integration. It includes the following sections:

- [Configuring Lookups](#)
- [Error Handling](#)
- [Email Notifications](#)

## Configuring Lookups

The following table lists the lookups that are part of this integration.

Lookup Name	Integration Name	Purpose
OFSCSOM_ActionCode	Complete_Activity_OFSC ToSOM	Translates the OFSC status to corresponding SOM action Code
SOMOFSC_ActivityType	Complete_Activity_OFSC ToSOM	Translates SOM Activity type to OFSC Activity type
	Get_Appointment_SOMT oOFSC	
	Process_Activity_SOMTo OFSC	
	Create_Activity_OFSCToS OM	
SOMOFSC_ConfigProps	Complete_Activity_OFSC ToSOM	Used for configurable properties
	Get_Appointment_SOMT oOFSC	
	Process_Activity_SOMTo OFSC	
	Get_ActivityStatus_SOMT oOFSC	
	Create_Activity_OFSCToS OM	
SOMOFSC_ InterimStatus	Get_ActivityStatus_SOMT oOFSC	Translates activity status in OFSC to status in SOM/C2M/CCS
SOMOFSC_TimeZone	Process_Activity_SOMTo OFSC	Translates SOM time zone to OFSC time zone
SOMOFSC_ MeterConfigurationType	Process_Activity_SOMTo OFSC	Translates SOM meter configuration type to OFSC meter configuration type
	Complete_Activity_OFSC ToSOM	
SOMOFSC_ Manufacturer	Complete_Activity_OFSC ToSOM	Translates SOM Manufacturer to OFSC Manufacturer
	Process_Activity_SOMTo OFSC	
SOMOFSC_ DisconnectLocation	Process_Activity_SOMTo OFSC	Translates SOM disconnect location to OFSC disconnect location
	Complete_Activity_OFSC ToSOM	

Lookup Name	Integration Name	Purpose
SOMOFSC_ ServiceWarnings	Process_Activity_SOMTo OFSC	Translates SOM Service Warnings to OFSC Warnings
	Complete_Activity_OFSC ToSOM	
SOMOFSC_ ServiceInstructions	Complete_Activity_OFSC ToSOM	Translates SOM Service Instruction to OFSC Instruction
	Process_Activity_SOMTo OFSC	
SOMOFSC_ MeterLocation	Process_Activity_SOMTo OFSC	Translates SOM Meter Location to OFSC Meter Location and vice versa
	Complete_Activity_OFSC ToSOM	
OFSCSOM_MeterStatus	Complete_Activity_OFSC ToSOM	Translates SOM Meter Status to OFSC Meter Status and vice versa
SOMOFSC_Model	Process_Activity_ SOMToOFSC	Translates SOM Meter Model to OFSC Meter Model and vice versa
	Complete_Activity_ OFSCToSOM	
SOMOFSC_ CountryCode	Process_Activity_ SOMToOFSC	Translates SOM Country Code to OFSC Country Code and vice versa
	Create_Activity_ OFSCToSOM	
SOMOFSC_Email_ID	Process_Activity_ SOMToOFSC	Configures the email IDs of respective user
	Complete_Activity_ OFSCToSOM	
	Get_Appointment_ SOMToOFSC	
	Create_Activity_ OFSCToSOM	
SOMOFSC_LifeSupport	Process_Activity_ SOMToOFSC	Translates the life support codes from SOM to OFSC
OFSCSOM_Appt_ Timeslots	Process_Activity_ SOMToOFSC	Translates OFSC time slots to SOM time slots and vice versa
	Get_Appointment_ SOMToOFSC	
OFSCSOM_StatusReason	Complete_Activity_ OFSCToSOM	Translates OFSC cancel reason to SOM.StatusReason field



Lookup Name	Integration Name	Purpose
OFSCSOM_SQI	Complete_Activity_OFSC ToSOM	Maps the SOM SQI to OFSC SQI and vice versa.
	Device_Verification_OFSC ToSOM	
OFSCSOM_TimeZone	Complete_Activity_OFSC ToSOM	Maps the OFSC time zone value to offset value.
OFSCSOM_ ReadSequence	Complete_Activity_OFSC ToSOM	Transforms the SOM Read sequence to OFSC Read sequence and vice versa.
	Device_Verification_OFSC ToSOM	
OFSCSOM_TOU	Device_Verification_OFSC ToSOM	Maps SOM Time of Usage to OFSC Time of usage and vice versa.
	Complete_Activity_OFSC ToSOM	
OFSCSOM_UOM	Complete_Activity_OFSC ToSOM	Maps SOM Unit of Measure to OFSC Unit of Measure and vice versa.
	Device_Verification_OFSC ToSOM	
OFSCSOM_Decimal	Complete_Activity_OFSC ToSOM	Maps the SOM Decimals to OFSC Decimals and vice versa.
	Device_Verification_OFSC ToSOM	
OFSCSOM_Dials	Device_Verification_OFSC ToSOM	Maps the SOM Dials to OFSC Dials and vice versa
	Complete_Activity_OFSC ToSOM	

## Editing Lookups

To edit a lookup:

1. Login to Oracle Integration for Cloud.
2. Navigate to **Integrations > Designer > Lookups**.
3. Select the look up to edit.
4. Make the necessary changes.
5. Click **Save** and **Close**.

# Configuration Properties

SOMOFSC\_ConfigProps contains the properties that can be defaulted in the integration. It also contains a flag to enable email notifications.

Property Name	Sample Value	Description	Used in Integration Process Name
ofsc.bucket	OHMeter	Configures the bucket name available in Oracle Field Service Cloud to assign the tasks.	Process_Activity_SOMToOFSC
email.flag	false/true	Configures optional email notification. If the value is set to true, email notification will be sent to the configured users.	Create_Activity_OFSCtoSOM Process_Activity_SOMToOFSC Complete_Activity_OFSCtoSOM Get_ActivityStatus_SOMToOFSC Get_Appointment_SOMToOFSC
source.system	C2M	Defines Oracle Utilities Customer Care and Billing product code	Process_Activity_SOMToOFSC Complete_Activity_OFSCtoSOM
som.offset	-07:00	Provides offset for SOM/C2M/CCS timezone.	Create_Activity_OFSCtoSOM Get_Appointment_SOMToOFSC
pickuporder.apptneeded	N	Defines if the appointment is necessary or not for pickup order/ book activity	Create_Activity_OFSCtoSOM
som.externalsystem	INT_OFSC_ES	Defines the external system created in CCS/C2M/SOM	Create_Activity_OFSCtoSOM
som.statusreasonusage	INCOMPLETE	Defines the status reason usage	Complete_Activity_OFSCtoSOM
sp.maximumrowstoreturn	15	Configures the number of SPs to be returned in each transaction of SP query, from SOM	Query_ServicePoint_OFSCtoSOM
ofsc.offset	-05:00	Configures offset as per the OFSC time zone	Process_Activity_SOMToOFSC
som.includeabolishflag	D1YS	Retrieves all SPs from SOM	Query_ServicePoint_OFSCtoSOM
ofsc.event.timezone	UTC	Configures the OFSC event Timezone	Create_Activity_OFSCtoSOM

# Error Handling

This section provides information about the different ways used to handle errors in the integration and also resubmitting the instances after rectifying the errors.

- [Error Handling Ways](#)
- [Resubmitting the Error Instances in Oracle Integration Cloud](#)

## Error Handling Ways

In this integration, the errors are handled in different ways due to the limitation of Oracle Integration Cloud.

- [Synchronous Flow Error Handling](#)
- [Asynchronous Flow Error Handling](#)

### Synchronous Flow Error Handling

As part this error handler the errors are sent back to the respective system in the same flow.

#### Technical Fault

This fault occurs when there is a data mismatch or any Xpath related error. On this error, the flow immediately goes to global fault handler and the fault is sent back to the respective system.

#### Remote Fault

This fault occurs when the target system is down. When this error occurs the flow immediately goes to global fault handler and the fault is sent back to the respective system.

#### Business Fault

This fault occurs only when the business fault occurs in the target system due to invalid data. When this error occurs the fault is sent back to the respective system as part of immediate response.

### Asynchronous Flow Error Handling

#### Technical Fault

This fault occurs when there is a data mismatch or any Xpath related error. When this error occurs, the flow immediately goes to global fault handler and an optional email to the respective user is sent.

#### Remote Fault

This fault occurs when the target system is down. When this error occurs, the flow immediately goes to global fault handler and an optional email is sent to the respective user.

**Business Fault**

This fault occurs only when the business fault occurs in the target system due to invalid data. When this error occurs the flow immediately goes to global fault handler and an optional email is sent to the respective user.

**Resubmitting the Error Instances in Oracle Integration Cloud**

In this integration, the flows initiated by Oracle Field Service Cloud are asynchronous flows, and the resubmit option is available only for asynchronous flows.

To resubmit the error instances in Oracle Field Service Cloud:

1. Login to Oracle Field Service Cloud.
2. Navigate **Integrations > Monitoring > Errors**.
3. Select the integration to resubmit.
4. Click the **Resubmit** icon.

**Email Notifications**

This pre-built integration includes a configurable email notification.

To receive an email notification:

1. Login to Oracle Integration Cloud.
2. Navigate to **Integrations > Designer > Lookups**.
3. Edit the **SOMOFSC\_ConfigProps** look up.

Change the **email.flag** property value to 'true'.

4. Edit the **SOMOFSC\_Email\_ID** look up.
  - a. In the **from** field, enter the email ID to receive an email from.
  - b. In the **to** field, enter the email ID to send the email to.
  - c. In the **Email\_Id** field, provide the comma separated email IDs.

**Note:** In the SOMOFSC\_Email\_ID lookup, do not edit the values provided under the **Recipient** column.

# Chapter 7

## Extension Libraries in Oracle Integration Cloud

The extension libraries provide a means to register and organize JavaScript for use in integrations. Library functions are automatically available for you to drag from the **Actions** palette to your orchestration integrations.

This integration includes the following extension libraries:

Extension Library	Function	Description	Used in Integration Process
SOMOFSC_addressFormat	SOMOFSC_addressFormat	Concatenates all address fields from C2M/CCS and map it to single address field in OFSC.	Process_Activity_SOMToOFSC  Query_ServicePoint_OFSCToSOM
SOMOFSC_DateTimeConversion	SOMOFSC_DateTimeZoneConversion	Converts datetime value from one time zone to another timezone.	Process_Activity_SOMToOFSC  Complete_Activity_OFSCToSOM
SOMOFSC_AppointmentSlots	SOMOFSC_Appt_StartTime	Derives the start datetime value in XSD datetime format based on the values from OFSC input and the values configured in OIC lookups.	Get_Appointment_SOMToOFSC
SOMOFSC_AppointmentSlots	SOMOFSC_Appt_EndTime	Derives the end datetime value in XSD datetime format based on the values from OFSC input and the values configured in OIC lookups.	Get_Appointment_SOMToOFSC
SOMOFSC_CountNoOfOccurances	SOMOFSC_NoOfOccurances	It counts the number of occurrence of the strings comma and space.	Create_Activity_OFSCToSOM

The same extension libraries can be accessed from the **Libraries** page in Oracle Integration Cloud.

For more information regarding extension libraries, refer to the Oracle Integration Cloud documentation at <https://docs.oracle.com/en/cloud/paas/integration-cloud-service/icsug/using-libraries-manage-functions-integrations.html>.

# Chapter 8

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## Customizations

This chapter describes options for customizing the integration to meet specific business requirements, including:

- [Adding New Mappings](#)

## Adding New Mappings

To add a new mapping for the elements available in the Oracle Integration Cloud application schema, the pre-built integration provides a customization template for all the integration flows.

The supported cases are:

- Case1: In the Oracle Utilities Customer Cloud Service application schema, elements exist but are not mapped in the Oracle Integration Cloud pre-built integration.
- Case2: In Oracle Field Service Cloud, the properties exist but are not mapped in the Oracle Integration Cloud pre-built integration.

This section provides the steps to add a new mapping using the import xsl.

In this integration, Oracle Utilities Customer Cloud Service is the source and Oracle Field Service Cloud is the target.

To add custom mappings in Oracle Integration Cloud layer:

1. Login to Oracle Integration Cloud.
2. Identify the integration to add custom mappings.
3. Export the respective integration from Oracle Integration Cloud to your local machine.
4. Unzip the .jar file and identify the mapping/xsl file in which the custom mappings have to be added.
5. This integration has all mappers as import xsls. To add any new mapping, edit the respective mapper/xsl file.

**Note:** Mappings cannot be added using the Mapper Design view.

6. In all integration mappings, a template is added under every complex element. Any custom elements under that complex element can be added directly in the template provided.
7. Add the mapping under the respective customization template. Save the changes.
8. In Oracle Integration Cloud, click the integration to add the mapping for an extra element. Select the respective map activity.
9. Click **Import** and upload the updated mapper/xsl file.
10. Save and close and activate the integration to reflect the custom mappings.



Following is the list of integrations and the respective mappers/xsls with customization templates defined.

Integration Name	Location of XSL File
PROCESS_ACTIVITY_SOMTOOFSC	PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\icspackage\project\PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\resources\processor_430\resourcegroup_433\req_d6b0de6e354d44cf8e0768249b5fa66c.xsl
	PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\icspackage\project\PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\resources\processor_469\resourcegroup_472\req_2c143905deba4c4891091d048bfc28.xsl
	PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\icspackage\project\PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\resources\processor_474\resourcegroup_477\req_ae404868fb9e4907a86975bbdb75e1fa.xsl
	PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\icspackage\project\PROCESS_ACTIVITY_SOMTOOFSC_01.00.0000\resources\processor_464\resourcegroup_467\req_29b57e613bbe4c8eb2850866951ce1da.xsl
DEVICE_VERIFICATION_OFSC2OSOM	DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\icspackage\project\DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\resources\processor_177\resourcegroup_180\req_05949e2168eb499d9027b4aca4fd370b.xsl
	DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\icspackage\project\DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\resources\processor_19\resourcegroup_22\req_9de4224508dc47c49bea25adef82afcb.xsl
	DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\icspackage\project\DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\resources\processor_197\resourcegroup_200\req_7d0bb46fb32b4509969797a1d3576012.xsl
	DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\icspackage\project\DEVICE_VERIFICATION_OFSC2OSOM_01.00.0000\resources\processor_44\resourcegroup_47\req_f5c009a3b2bb47d881aaf31b65a269db.xsl

Integration Name	Location of XSL File
CREATE_ACTIVITY_OFSCITOSOM	CREATE_ACTIVITY_OFSCITOSOM_01.00.0000\icspackage\project\CREATE_ACTIVITY_OFSCITOSOM_01.00.0000\resources\processor_417\resourcegroup_420\req_9f90c963e5d94ff98b38b2ab22107d63.xsl
COMPLETE_ACTIVITY_OFSCITOSOM	COMPLETE_ACTIVITY_OFSCITOSOM_01.00.0000\icspackage\project\COMPLETE_ACTIVITY_OFSCITOSOM_01.00.0000\resources\processor_509\resourcegroup_512\req_358b3cdb3d5745fb8e082acd6659bb2.xsl
GET_APPOINTMENT_SOMTOOFSC	GET_APPOINTMENT_SOMTOOFSC_01.00.0000\icspackage\project\GET_APPOINTMENT_SOMTOOFSC_01.00.0000\resources\processor_80\resourcegroup_83\req_3636a98aa4a44cae8cdb99ef4f5d5f55.xsl
GET_ACTIVITYSTATUS_SOMTOOFSC	GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\icspackage\project\GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\resources\processor_18\resourcegroup_21\req_93d5d20a9bbc4a51800246d1af17262c.xsl
	GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\icspackage\project\GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\resources\processor_35\resourcegroup_38\req_3b615b7222fc48648a2a594ee69c797a.xsl
	GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\icspackage\project\GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\resources\processor_65\resourcegroup_68\req_ea1951b8286e459a92eab6c39b42d525.xsl
	GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\icspackage\project\GET_ACTIVITYSTATUS_SOMTOOFSC_01.00.0000\resources\processor_82\resourcegroup_85\req_2770ed549fbe410eb3f0f7d87a56f2a5.xsl
QUERY_SERVICEPOINT_OFSCITOSOM	QUERY_SERVICEPOINT_OFSCITOSOM_01.00.0000\icspackage\project\QUERY_SERVICEPOINT_OFSCITOSOM_01.00.0000\resources\processor_36\resourcegroup_39\req_8acd527b3f724df0a3c783ee1a1b6ce2.xsl
	QUERY_SERVICEPOINT_OFSCITOSOM_01.00.0000\icspackage\project\QUERY_SERVICEPOINT_OFSCITOSOM_01.00.0000\resources\processor_87\resourcegroup_90\req_0b406d5cf3734306b7f5afd49ec8c0d6.xsl

# Chapter 9

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## Activating and Testing the Integration Flows

This section provides an overview of how integration flows are activated and tested. It includes the following sections:

- [Prerequisites](#)
- [Activating Integration Flows](#)
- [Testing the Integration Flows](#)

## Prerequisites

Make sure the catalog in Oracle Utilities Customer Cloud Service is configured completely to activate an integration process.

## Activating Integration Flows

To activate the integration flows:

1. Navigate to the integration to activate.
2. Drag the slider for that integration. When prompted to enable tracing, click **Yes** to view the instances.
3. Click **Activate**.

The integration takes time to get activated. The activated integration appears at the top of the integrations list.

## Testing the Integration Flows

The following table lists the end point URLs for respective applications in which these endpoints need to be configured. Configure the same and perform an end-to-end testing.

Integration Name	End Point URL to be Configured	Application to be Configured
Process_Activity_SOMToOFSC	https://hostname:port/ic/ws/integration/v1/flows/oracleutilities/PROCESS_ACTIVITY_SOMTOOFSC/1.0	C2M/CCS
Create_Activity_OFSCToSOM	https://hostname:port/ic/api/integration/v1/flows/ofsccloudadapter/CREATE_ACTIVITY_OFSCToSOM/1.0/notify	As OFSC is event based, there is no need to configure the integration endpoint URLs. Subscription for the event will be created once the respective integration is activated.
Complete_Activity_OFSCToSOM	https://hostname:port/ic/api/integration/v1/flows/ofsccloudadapter/COMPLETE_ACTIVITY_OFSCToSOM/1.0/notify	As OFSC is event based, there is no need to configure the integration endpoint URLs. Subscription for the event will be created once the respective integration is activated.
Get_Appointment_SOMToOFSC	https://hostname:port/ic/ws/integration/v1/flows/oracleutilities/GET_APPOINTMENT_SOMTOOFSC/1.0/	C2M/CCS
Get_ActivityStatus_SOMToOFSC	https://hostname:port/ic/ws/integration/v1/flows/oracleutilities/GET_ACTIVITYSTATUS_SOMTOOFSC/1.0/	C2M/CCS

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<b>Integration Name</b>	<b>End Point URL to be Configured</b>	<b>Application to be Configured</b>
Device_Verification_OFSCToSOM	https://hostname:port/ic/api/integration/v1/ flows/rest/ DEVICE_VERIFICATION_OFSCToSOM/1.0/	OFSC
Query_ServicePoint_OFSCToSOM	https://hostname:port/ic/api/integration/v1/ flows/rest/ QUERY_SERVICEPOINT_OFSCToSOM/1.0/	OFSC

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# Chapter 10

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## Monitoring and Troubleshooting

This section provides information about monitoring and troubleshooting the integration. It includes the following:

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

# Oracle Utilities Customer Cloud Service

This section provides information about monitoring Oracle Utilities Customer Cloud Service.

## Oracle Utilities Customer Cloud Service Error Logs

Monitoring the error logs is possible only in on-premises applications. Applications on cloud cannot access the error logs.

The following error logs can be monitored for Oracle Utilities Customer Cloud Service:

- Errors related to the online integration invocation from Oracle Utilities Customer Cloud Service are stored in the `CCS_ENVIRONMENT_NAME/logs/` or `C2M_ENVIRONMENT_NAME/logs/system` folder.

For example: `V27_C2M_ORA_WLS/logs/system\`

For more information about errors and notifications, see the Oracle Utilities Customer To Meter documentation.

## Oracle Integration Cloud

This section focuses on the monitoring Oracle Integration Cloud and troubleshooting any issues that occur during the integration activation.

### Monitoring Integration Flows

Integration flows are monitored using the following:

- Dashboard
- Cloud Logs

**To monitor the integration flows from the Oracle Integration Cloud dashboard:**

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Monitoring**.
3. Select any of the following as required:
  - **Dashboards** - To monitor the complete dashboard of integration.
  - **Integrations** - To monitor each integration.
  - **Tracking** - To monitor instance and flow trace/activity stream of the integration.
  - **Error** - To monitor the integrations in 'error' state. Re-submit the asynchronous integration flows.

**To monitor the integration flows using Oracle Integration Cloud logs:**

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Monitoring**.

3. On the navigation pane, click **Dashboards** to view the overall success/failure rate of the integration.
4. Navigate to the **Logs** menu.
5. In the right pane, click the link to show options for downloading the Oracle Integration Cloud logs or diagnostics logs.
6. In case of any issues, attach the diagnostic logs to a service request for help.

## Troubleshooting

If an activation fails, the Integrations page displays an error message.

To troubleshoot the activation error:

1. Click **Download Diagnostic Logs** to download the logs for diagnosing the issue.
2. Select **Enable Tracing**.

TRACE ENABLED is displayed next to ACTIVE.

Some of the sample cases are as follows:

- For any connectivity errors while activating the integration, make sure the trigger connection is successful. Test the connection and refresh the metadata, and then activate the integration.
- If the integration (Oracle Utilities Customer Care and Billing initiated flows) is activated for the first time, ensure the Oracle Utilities Customer Care and Billing catalog is configured accurately.



# Appendix A

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## Known Issues

This appendix focuses on the known issues in this integration and in the respective applications.

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

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## Oracle Field Service Cloud

The known issues pertaining to Oracle Field Service Cloud in this integration are:

- While trying to update the datetime from Oracle Utilities Customer Cloud Service after moving an activity to a resource in Oracle Field Service Cloud, the activity is still with the resource and not moved to the bucket. It should be moved back to the bucket and is a known limitation in this integration.
- On the **Meter Details** page in Oracle Field Service Cloud mobility, there is no error when the **Reading** field is empty. It is a known issue and applicable for all meter related activities.

## Oracle Utilities Customer Cloud Service

The known issues pertaining to Oracle Utilities Customer Cloud Service in this integration are:

- The appointment time slots are returned only for “From” and “To” dates specified in Oracle Utilities Customer Cloud Service Appointment Request.
- The Oracle Utilities Customer Cloud Service field activity cannot be canceled when the reopened activity in Oracle Field Service Cloud is in “pending” status.
- While rescheduling a canceled appointment in the **Appointment Booking** page, the expected result should be “No update is sent to the external system”. But, the actual result is “FA sync request is created”.
- The read sequence in the **Reading Details** page is not in proper order in the message sent to Field work system as part of device verification.

# Appendix B

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## Validation Algorithms

This appendix focuses on the algorithms in inbound communication and completion events.

- [Inbound Communication](#)
- [Completion Events](#)

## Inbound Communication

The inbound communication algorithm details are as follows:

Algorithm	Validations	Lifecycle
D1-VALCOMTP	Communication Type should be populated.	Validate
D1-OBCOMST	Activity ID is populated in inbound communication.  Outbound communication identification	
D1-RESSPDVC	Service Point populated in inbound communication  Device ID should be present  Existing Badge Number from inbound should match outbound communication  New Badge Number to be populated  Activity not a pass through one to be validated	
D1-VALIDDCT	Device Configuration Type on Service Point needs to match that received from inbound communication	
D1-EVDEFKAN	Activity Type needs should be populated  Outbound communication should be populated	
D1-EVALRESP	Validate whether SOAP fault is present	

## Completion Events

The completion events in this integration are as follows:

Activity Type	Completion Events	Required	Algorithm	Description
Install Meter	Install Device Completion Event	Yes	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device

Activity Type	Completion Events	Required	Algorithm	Description
Install Meter	Create FA IMD Completion Event	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device
Update SP - Field Work Completion		No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details
Update Device - Field Work Completion		No	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised
			D1-UPDDVCCI (executed)	checks that the badge number / device ID combination in the completion information matches the device data recorded in the system. If there is a discrepancy, the algorithm throws an error
Connect Meter - Field Work Completion		No	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.

Activity Type	Completion Events	Required	Algorithm	Description	
Read Meter	Create FA IMD Completion Event	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.	
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.	
	Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.	
	Update Device - Field Work Completion	No	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.	
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.	
			D1-UPDDVCCI (executed)	checks that the badge number / device ID combination in the completion information matches the device data recorded in the system. If there is a discrepancy, the algorithm throws an error.	
	Exchange Meter	Remove Device - Field Work Completion	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
				D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
		Install Device - Field Work Completion	Yes	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
D1-VALCEDVC				Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.	

Activity Type	Completion Events	Required	Algorithm	Description
Exchange Meter	Install Device - Field Work Completion	Yes	D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
	Create FA IMD Completion Event	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
	Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.
	Update Device - Field Work Completion	No	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
D1-UPDDVCCI (executed)			Checks that the badge number / device ID combination in the completion information matches the device data recorded in the system. If there is a discrepancy, the algorithm throws an error.	
Item - Connect SP at Device	Connect SP - Field Work Completion	Yes	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
	Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.
	Update Item - Field Work Completion	No	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.

Activity Type	Completion Events	Required	Algorithm	Description
Item - Connect SP at Device	Update Item - Field Work Completion	No	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCEDUPD	Validates existing and new badge number, manufacturer, model.
Disconnect SP at Meter and Remove Meter	Disconnect SP at Device-Field Comp	Yes	D1-VALCESPDL	Validates that the Service Point ID and Disconnect Location have both been provided. If not an error will be raised.
	Create FA IMD Completion Event	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
Remove Device - Field Work Completion	Yes	D1-VALCEDVC	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.	
Update Device - Field Work Completion	No	D1-VALCESP	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.



Activity Type	Completion Events	Required	Algorithm	Description
Disconnect SP at Meter and Remove Meter	Update Device - Field Work Completion	No	D1-UPDDVCCI (executed)	Checks that the badge number / device ID combination in the completion information matches the device data recorded in the system. If there is a discrepancy, the algorithm throws an error.
Disconnect SP at Device and Remove Device	Disconnect SP at Device-Field Comp	Yes	D1-VALCESPDL	Validates that the Service Point ID and Disconnect Location have both been provided. If not an error will be raised.
	Remove Item - Field Work Completion	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
	Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.
	Update Item - Field Work Completion	No	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
D1-VALCEDVC			Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.	
D1-VALCEDUPD			Validates existing and new badge number, manufacturer, model.	
Item - Exchange Device	Remove Item - Field Work Completion	Yes	D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.

Activity Type	Completion Events	Required	Algorithm	Description
Item - Exchange Device	Install Item - Field Work Completion	Yes	D1-VALCESP	Validates that a Service Point ID has been provided in the completion details, if not an error is raised.
			D1-VALCEDVC	Ensures that either a Device ID is populated in either the new or existing Device portions of the Completion Event schema. If no Device ID is found an error is raised.
			D1-VALCERD	Validates that the Reading Date Time is provided and at least one entry exists in the Reading Detail List for either the New Device or Existing Device.
Trim Tee	Pass-Through Field Completion Results		D1-VALFACI	Validates the Field Activity Completion Information is populated.
Service Investigation	Update SP - Field Work Completion	No	D1-VALCESPD	Validates that the Service Point ID and at least one of the following fields has been provided: Service Point Warning, Service Point Instructions, or Service Point Instruction Details.
Turn on Pilot Light	Pass-Through Field Completion Results	Yes	D1-VALFACI	Validates the Field Activity Completion Information is populated.

# Appendix C

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## Data Mapping

This appendix provides mapping details for each integration point, including the following:

- [Activity Completion \(Oracle Field Service Cloud Initiated\)](#)
- [Activity Status \(Oracle Utilities Customer Cloud Service Initiated\)](#)
- [Appointment Request \(Oracle Utilities Customer Cloud Service Initiated\)](#)
- [Device Verification \(Oracle Field Service Cloud Initiated\)](#)
- [Pickup Orders Create \(Oracle Field Service Cloud Initiated\)](#)
- [Process Activity \(Oracle Utilities Customer To Meter Initiated\)](#)

## Activity Completion (Oracle Field Service Cloud Initiated)

This section describes data mapping for the following:

- [Activity Completion Request Mapping](#)
- [Activity Completion Response Mapping](#)

### Activity Completion Request Mapping

Request Mapping details for the Activity Completion integration point are as shown in the table below:

Oracle Field Service Cloud Complete Request Message			Oracle Field Service Cloud Get Activity Request Message			DVM Mapping	
Element Name	Parent Element	Type	Element Name	Parent Element	Type	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
notify_POST		Outermosttag	canonical_GET		Outermosttag		
events.definitions.activityEvent	notify_POST	Group	TemplateParameters	canonical_GET	Group		
activityDetails	events.definitions.activityEvent	Group					
activityId	activityDetails	String	activityId	TemplateParameters	String		

### Activity Completion Response Mapping

Response Mapping details for Activity Completion integration point are as shown in the table below:

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
activities.definitions.getActivitySchema	activities.definitions.getActivitySchema	Outermosttag	D1-FieldActivityIBComm	D1-FieldActivityIBComm	Outermosttag			

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			communicationId	D1-FieldActivityIBComm				
			communicationType	D1-FieldActivityIBComm				
			bo	D1-FieldActivityIBComm				
			boStatus	D1-FieldActivityIBComm				
			statusReason	D1-FieldActivityIBComm				
			sender	D1-FieldActivityIBComm				
			statusDateTime	D1-FieldActivityIBComm				
			creationDateTime	D1-FieldActivityIBComm				
			version	D1-FieldActivityIBComm				
			initiatingOutCommunication	D1-FieldActivityIBComm				
			amiDeviceIdentifierNumber	D1-FieldActivityIBComm				
			deviceId	D1-FieldActivityIBComm				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			retryDetails	D1-FieldActivityIBComm	Group			
			retryDateTime	retryDetails				
			numberOfRetries	retryDetails				
			currentErrorState	retryDetails				
			isToDoEntrySuppressed	retryDetails				
			transactionId	D1-FieldActivityIBComm				
			spId	D1-FieldActivityIBComm				
			completionDetail	D1-FieldActivityIBComm	Group			
			completionEventId	completionDetail				
			bo	completionDetail				
			activityId	completionDetail				
			boStatus	completionDetail				
			sequence	completionDetail				
			inboundCommunicationId	completionDetail				
			outboundCommunicationId	completionDetail				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			createDateTime	completionDetail				
			updateStatusDateTime	completionDetail				
			statusReason	completionDetail				
			completionEventDataArea	completionDetail				
			version	completionDetail				
			spId	completionDetail				
			eventDateTime	completionDetail				
			servicePointCompletionDetails	D1-FieldActivityIBComm				
			disconnectLocation	servicePointCompletionDetails				
			servicePointDataDetails	servicePointCompletionDetails				
			spId	servicePointDataDetails				
			disconnectLocation	servicePointDataDetails				
			spInstruction	servicePointDataDetails				
			spWarning	servicePointDataDetails				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			spInstructionDetails	servicePointDataDetails				
			messageCompletionInformation	messageCompletionInformation				
			completionStatus	messageCompletionInformation				
			statusReason	messageCompletionInformation				
			completedByCrew	messageCompletionInformation				
			statusReasonDescription	messageCompletionInformation				
			statusReasonUsage	messageCompletionInformation				
			existingDevice					
			deviceCompletionDetails	existingDevice				
			deviceDataDetails	deviceCompletionDetails				
			deviceConfigurationType	deviceDataDetails				
			deviceLocation	deviceDataDetails				
			meterId	deviceDataDetails				



Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			badgeNumber	deviceDataDetails				
			manufacturer	deviceDataDetails				
			model	deviceDataDetails				
			readingCompletionDetails		Group			
			readingDateTime	readingCompletionDetails				
			readingDetails	readingCompletionDetails				
			readingDetailsList	readingDetails				
			seqNo	readingDetailsList				
			uom	readingDetailsList				
			tou	readingDetailsList				
			reading	readingDetailsList				
			newDevice	completionDetail				
			deviceCompletionDetails	newDevice				
			deviceDataDetails	deviceCompletionDetails				
			deviceConfigurationType	deviceDataDetails				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			deviceLocation	deviceDataDetails				
			meterId	deviceDataDetails				
			badgeNumber	deviceDataDetails				
			manufacturer	deviceDataDetails				
			model	deviceDataDetails				
			readingCompletionDetails					
			readingDateTime	readingCompletionDetails				
			readingDetails	readingCompletionDetails				
			readingDetailsList	readingDetails				
			seqNo	readingDetails				
			uom	readingDetails				
			tou	readingDetails				
			reading	readingDetails				
			itemCompletionDetails	newDevice				
			itemDataDetails	itemCompletionDetails				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			deviceConfigurationType	itemDataDetails				
			deviceLocation	itemDataDetails				
			responseDetail					
			message	responseDetail				
			taskId	responseDetail				
apptNumber	activities.definitions.getActivitySchema		hostExternalId	responseDetail				
activityType	activities.definitions.getActivitySchema		taskType	responseDetail		SOMOFSC_ActivityType.dvm	OFSC_ActivityType	SOM_TaskType
status	activities.definitions.getActivitySchema		completionStatus	responseDetail		OFSCSOM_ActionCode.dvm	OFSC_ActivityStatus	SOM_ActionCode
CANCEL_REASON	activities.definitions.getActivitySchema		statusReason	responseDetail				
endTime	activities.definitions.getActivitySchema		completionDateTime	responseDetail				
resourceId	activities.definitions.getActivitySchema		completedByCrew	responseDetail				
			messageId	responseDetail				
			language	responseDetail				
			completionInformation	responseDetail	Group			

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
ACTIVITY_NOTES	activities.definitions.getActivitySchema		comments	completionInformation				
			dispatchDateTime	completionInformation				
			enrouteDateTime	completionInformation				
			onsiteDateTime	completionInformation				
			arriveDateTime	completionInformation				
			customerContactDetails	completionInformation				
c2m_cust_contact_type	activities.definitions.getActivitySchema	String	customerContactType	customerContactDetails				
			customerContactComments	customerContactDetails				
			ToDoMessage					
			remarkTypes		Group			
			remarkTypesList	remarkTypes	List			
			remarkType	remarkTypesList				
			utilityCompletionInformation					

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			servicePointCompletionDetails	utilityCompletionInformation				
			disconnectLocation					
			modifyButtonClicked					
			servicePointDataDetails					
c2m_disconnect_location	activities.definitions.getActivitySchema	String	disconnectLocation	servicePointDataDetails				
c2m_SP_warnings	activities.definitions.getActivitySchema	String	serviceWarnings	servicePointDataDetails				
c2m_SP_instructions	activities.definitions.getActivitySchema	String	serviceInstructions	servicePointDataDetails				
c2m_SP_instruction_details	activities.definitions.getActivitySchema	String	instructionDetails	servicePointDataDetails				
			serviceAgreementStatus	servicePointDataDetails				
c2m_service_pt_id	activities.definitions.getActivitySchema	String	servicePointId	servicePointDataDetails				
			serviceAgreementId	servicePointDataDetails				
			premiseId	servicePointDataDetails				
			existingDevice	utilityCompletionInformation				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			meterCompletionDetails	existingDevice	Group			
			verificationDetails	meterCompletionDetails				
			verificationOverride	verificationDetails				
			response	verificationDetails	Group			
			verificationStatus	response				
			meterConfigurationType	response				
			errorCode	response				
			errorText	response				
			readingDetails	response				
			readingDetailsList	readingDetails	List			
			readSequence	readingDetailsList				
			unitOfMeasure	readingDetailsList				
			timeOfUse	readingDetailsList				
			numberOfDials	readingDetailsList				
			numberOfDecimals	readingDetailsList				
			upperLimit	readingDetailsList				
			lowerLimit	readingDetailsList				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
overrideReading	readingDetailsList							
			meterDataDetails	meterCompletionDetails				
c2m_meter1_number	activities.definitions.getActivitySchema		badgeNumber	meterDataDetails				
c2m_meter1_mfg	activities.definitions.getActivitySchema		deviceManufacturer	meterDataDetails		OFSCSOM_Manufacturer.dvm	OFSC_Manufacturer	SOM_Manufacturer
c2m_meter1_serial	activities.definitions.getActivitySchema		deviceId	meterDataDetails				
c2m_meter1_model	activities.definitions.getActivitySchema		deviceModel	meterDataDetails		SOMOFSC_Model.dvm	OFSC_Model	SOM_Model
c2m_meter1_type	activities.definitions.getActivitySchema		meterConfigurationType	meterDataDetails		OFSCSOM_MeterConfigurationType.dvm	OFSC_MeterConfigurationType	SOM_MeterConfigurationType
c2m_meter1_location	activities.definitions.getActivitySchema		meterLocation	meterDataDetails		OFSCSOM_MeterLocation.dvm	OFSC_MeterLocation	SOM_MeterLocation
c2m_Status_Found	activities.definitions.getActivitySchema		deviceStatusFound	meterCompletionDetails				
c2m_Status_Left	activities.definitions.getActivitySchema		deviceStatusLeft	meterCompletionDetails		OFSCSOM_MeterStatus.dvm	OFSC_MeterStatus	SOM_MeterStatus
			stockLocation					
			readingCompletionDetails	meterCompletionDetails				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
endTime	activities.definitions.getActivitySchema		readingDateTime	readingCompletionDetails				
			readingDetails					
			readingDetailsList	readingDetails				
c2m_existing_meter_read_seq	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_existing_meter_uom	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_existing_meter_TOU			timeOfUse	readingDetailsList		SOMOFSC_TOU.dvm	OFSC_TOU	SOM_TOU
c2m_existing_meter_sqi	activities.definitions.getActivitySchema		sqi					
c2m_existing_meter_dials	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				
c2m_existing_meter_numberofDecimals	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_existing_meter_current_index			reading	readingDetailsList				
c2m_meter1_override_reading	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
			modifyButtonClicked					
			itemCompletionDetails					



Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			verificationDetails	itemCompletionDetails				
			verificationOverride	itemCompletionDetails				
			response	itemCompletionDetails				
			verificationStatus					
			meterConfigurationType					
			errorCode					
			errorText					
			readingDetails					
			readingDetailsList		List			
c2m_existing_meter_read_seq2	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_existing_meter_uom2	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList				
c2m_existing_meter_TOU2			timeOfUse	readingDetailsList				
c2m_existing_meter_sqi2			sqi					
c2m_existing_meter_dials2	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_existing_meter_numberofDecimals2	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
			upperLimit	readingDetailsList				
			lowerLimit	readingDetailsList				
c2m_existing_meter_current_index2	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading2	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
c2m_item_nbr	activities.definitions.getActivitySchema		badgeNumber	itemDataDetails				
c2m_item_manufacturer	activities.definitions.getActivitySchema		deviceManufacturer	itemDataDetails		SOMOFSC_Manufacturer	OFSC_Manufacturer	SOM_Manufacturer
c2m_item_id	activities.definitions.getActivitySchema		deviceId	itemDataDetails				
			c2m_item_model	activities.definitions.getActivitySchema		SOMOFSC_Model	OFSC_Model	SOM_Model
c2m_Status_Found	activities.definitions.getActivitySchema		deviceStatusFound	itemDataDetails				
c2m_Status_Left	activities.definitions.getActivitySchema		deviceStatusLeft	itemDataDetails		OFSCSOM_MeterStatus		
			stockLocation	itemDataDetails				
			modifyButtonClicked	itemDataDetails				
			newDevice					

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			meterCompletionDetails	newDevice				
			verificationDetails	newDevice				
			verificationOverride					
			response					
			verificationStatus	response				
			meterConfigurationType	response				
			errorCode	response				
			errorText	response				
			readingDetails	response				
			readingDetailsList		List			
c2m_existing_meter_read_seq3	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_existing_meter_uom3	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList				
c2m_existing_meter_TOU3			timeOfUse	readingDetailsList				
c2m_existing_meter_sqi3			sqi					
c2m_existing_meter_dials3	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_existing_meter_numberofDecimals3	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
			upperLimit	readingDetailsList				
			lowerLimit	readingDetailsList				
c2m_existing_meter_current_index3	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading3			overrideReading	readingDetailsList				
			readingCompletionDetails	meterCompletionDetails				
endTime	activities.definitions.getActivitySchema		readingDateTime	readingCompletionDetails				
			readingDetails	readingCompletionDetails				
			readingDetailsList	readingDetails	List			
c2m_existing_meter_read_seq4	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_existing_meter_uom4	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		SOMOFSC_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_existing_meter_TOU4			timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_existing_meter_sqi4			sqi					

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_existing_meter_dials4			numberOfDials	readingDetailsList				
c2m_existing_meter_numberofDecimals4			numberOfDecimals	readingDetailsList				
c2m_existing_meter_current_index4	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading4			overrideReading	readingDetailsList				
			modifyButtonClicked	readingDetailsList				
			itemCompletionDetails					
			verificationDetails					
			verificationOverride	verificationDetails				
			response	verificationDetails				
			verificationStatus	response				
			meterConfigurationType	response				
			errorCode	response				
			errorText	response				
			readingDetails	response				
			readingDetailsList	readingDetails				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_existing_meter_read_seq5			readSequence	readingDetailsList				
c2m_existing_meter_uom5			unitOfMeasure	readingDetailsList				
c2m_existing_meter_TOU5			timeOfUse	readingDetailsList				
c2m_existing_meter_sqi5			sqi					
c2m_existing_meter_dials5			numberOfDials	readingDetailsList				
c2m_existing_meter_numberofDecimals5			numberOfDecimals	readingDetailsList				
			upperLimit	readingDetailsList				
			lowerLimit	readingDetailsList				
c2m_existing_meter_current_index5			reading	readingDetailsList				
c2m_meter1_override_reading5			overrideReading	readingDetailsList				
			modifyButtonClicked					
			statusReasonUsage					
			statusReason	statusReasonUsage				
			statusReasonDescription	statusReasonUsage				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			fault					
			faultCode	fault				
			faultString	fault				
			faultActor	fault				
			detail	fault				
			customElements					
			dateTimeTagFormat					
			newDevice					
c2m_meter2_number	activities.definitions.getActivitySchema		badgeNumber	meterDataDetails				
c2m_newmeter_manufacturer	activities.definitions.getActivitySchema		deviceManufacturer	meterDataDetails		OFSCSOM_Manufacturer.dvm	OFSC_Manufacturer	SOM_Manufacturer
c2m_new_meter_serial	activities.definitions.getActivitySchema		deviceId	meterDataDetails				
c2m_newmeter_model	activities.definitions.getActivitySchema		deviceModel	meterDataDetails		SOMOFSC_Model.dvm	OFSC_Model	SOM_Model
c2m_new_meter_type	activities.definitions.getActivitySchema		meterConfigurationType	meterDataDetails		OFSCSOM_MeterConfigurationType.dvm	OFSC_MeterConfigurationType	SOM_MeterConfigurationType
c2m_newmeter_location	activities.definitions.getActivitySchema		meterLocation	meterDataDetails		OFSCSOM_MeterLocation.dvm	OFSC_MeterLocation	SOM_MeterLocation
			deviceStatusFound					

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_newMtr_status_left	activities.definitions.getActivitySchema		deviceStatusLeft					
endTime	activities.definitions.getActivitySchema		readingDate	readingCompletionDetails				
			readingDetails					
			readingDetailsList	readingDetails				
c2m_meter1_read_seq	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_meter1_uom	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_meter1_TOU1	activities.definitions.getActivitySchema		timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_meter1_sqi	activities.definitions.getActivitySchema		sqi					
c2m_meter1_dials	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				
c2m_meter1_decimals	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_meter1_current_index	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
c2m_meter1_read_seq2	activities.definitions.getActivitySchema		readSequence	readingDetailsList				



Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_meter1_uom2	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_meter1_TOU2	activities.definitions.getActivitySchema		timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_meter1_sqi2	activities.definitions.getActivitySchema		sqi					
c2m_meter1_dials2	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				
c2m_meter1_decimals2	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_meter1_current_index2			reading	readingDetailsList				
c2m_meter1_override_reading2			overrideReading	readingDetailsList				
c2m_meter1_read_seq3	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_meter1_uom3	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_meter1_TOU3	activities.definitions.getActivitySchema		timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_meter1_sqi3	activities.definitions.getActivitySchema		sqi					
c2m_meter1_dials3	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_meter1_decimals3	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_meter1_current_index3	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading3	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
c2m_meter1_read_seq4	activities.definitions.getActivitySchema		readSequence	readingDetailsList				
c2m_meter1_uom4	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_meter1_TOU4	activities.definitions.getActivitySchema		timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_meter1_sqi4	activities.definitions.getActivitySchema		sqi					
c2m_meter1_dials4	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				
c2m_meter1_decimals4	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_meter1_current_index4	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading4	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
c2m_meter1_read_seq5	activities.definitions.getActivitySchema		readSequence	readingDetailsList				

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_meter1_uom5	activities.definitions.getActivitySchema		unitOfMeasure	readingDetailsList		OFSCSOM_UOM.dvm	OFSC_UOM	SOM_UOM
c2m_meter1_TOU5	activities.definitions.getActivitySchema		timeOfUse	readingDetailsList		SOMOFSC_TOU	OFSC_TOU	SOM_TOU
c2m_meter1_sqi5	activities.definitions.getActivitySchema		sqi					
c2m_meter1_dials5	activities.definitions.getActivitySchema		numberOfDials	readingDetailsList				
c2m_meter1_decimals5	activities.definitions.getActivitySchema		numberOfDecimals	readingDetailsList				
c2m_meter1_current_index5	activities.definitions.getActivitySchema		reading	readingDetailsList				
c2m_meter1_override_reading5	activities.definitions.getActivitySchema		overrideReading	readingDetailsList				
c2m_new_item_nbr	activities.definitions.getActivitySchema		badgeNumber	itemDataDetails				
c2m_newitem_manufacturer	activities.definitions.getActivitySchema		deviceManufacturer	itemDataDetails		SOMOFSC_Manufacturer	OFSC_Manufacturer	SOM_Manufacturer
c2m_new_item_id	activities.definitions.getActivitySchema		deviceId	itemDataDetails				
c2m_newitem_model	activities.definitions.getActivitySchema		deviceModel	itemDataDetails		SOMOFSC_Model.dvm	OFSC_Model	SOM_Model
c2m_Status_Found	activities.definitions.getActivitySchema		deviceStatusFound					

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
c2m_newMtr_status_left	activities.definitions.getActivitySchema		deviceStatusLeft	itemCompletionDetails				

## Activity Status (Oracle Utilities Customer Cloud Service Initiated)

This section describes data mapping for the following:

- [Request Mapping for Find Activity](#)
- [Response Mapping Find Activity Result](#)
- [Request Mapping for Get Activity](#)

## Request Mapping for Find Activity

Request Mapping for Find Activity details for each integration point are as shown in the table below:

Oracle Field Service Cloud Request Message (Bulk Update)			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			responseDetails		Outerm osttag			
			statusDetails	responseDetails	Group			
			statusForHostDesc	statusDetails	String			

## Response Mapping Find Activity Result

Response Mapping for Find Activity Result details for each integration point are as shown in the table below:

Oracle Field Service Cloud Request Message (Bulk Update)			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
canonical_GETResponse	canonical_GETResponse	Outerm ostTag	responseDetails		Outerm ostTag			
activities.definitions.getActivitySchema	canonical_GETResponse		statusDetails	responseDetails				
status	activities.definitions.getActivitySchema		statusForHostDesc	statusDetails		SOMOFSC_InterimStatus	SOM_InterimStatus	OFSC_InterimStatus

## Request Mapping for Get Activity

The Request Mapping for Get Activity details for each integration point are as shown in the table below:

Oracle Field Service Cloud Request Message (Bulk Update Post Response)			Oracle Utilities Service Order Management - Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
bulkUpdate_POSTResponse		Outerm ostTag	canonical_GET		Outerm ostTag			
activities.definitions.customActionActivityBulkUpdateSchemaResponse	bulkUpdate_POSTResponse							
results	activities.definitions.customActionActivityBulkUpdateSchemaResponse							

Oracle Field Service Cloud Request Message (Bulk Update Post Response)			Oracle Utilities Service Order Management - Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
activityKeys	results	Group	TemplateParameters	canonical_GET	Group			
activityId	activityKeys	String	activityId	TemplateParameters	String			

# Appointment Request (Oracle Utilities Customer Cloud Service Initiated)

This section describes data mapping for the following:

- [Appointment Request Mapping](#)
- [Appointment Response Mapping](#)

## Appointment Request Mapping

Request mapping details for Appointment Request integration point are as shown in the table below:

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message (Activity Booking Options)			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
sendDetail	sendDetail	outermosttag	QueryParameters		outermosttag			
startDateTime	sendDetail		dates	QueryParameters				
endDateTime	sendDetail		dates	QueryParameters				
criteria	sendDetail							
appointmentBookingGroup	sendDetail							
maxAppointmentWindowCount	sendDetail							
maxCostUnits	sendDetail							
timeZone	sendDetail							
taskType	sendDetail		activityType	QueryParameters		SOMOFSC_ActivityType.dvm	SOM_ActivityType	OFSC_ActivityType
serviceArea	sendDetail							
geocodeLatitude	sendDetail							
geocodeLongitude	sendDetail							
duration	sendDetail							



Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message (Activity Booking Options)			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
address1	sendDetail							
address2	sendDetail							
address3	sendDetail							
address4	sendDetail							
crossStreet	sendDetail							
city	sendDetail							
stateProvince	sendDetail							
suburb	sendDetail							
postal	sendDetail		postalCode	QueryParameters	string			
country	sendDetail							
matchQuality	sendDetail							
siteDelay	sendDetail							
hostExternalId	sendDetail							

## Appointment Response Mapping

The response mapping details for Appointment Request integration point are as shown in the table below:

Oracle Field Service Cloud Request Message (Activity Booking Options)			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
activityBookingOptions			responseDetail		outerm osttag			

Oracle Field Service Cloud Request Message (Activity Booking Options)			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
dates	activityBookingOptions	List						
areas	dates	List						
timeslots	areas	List	appointmentBookingsList	responseDetail	list			
label	timeslots	string	shiftId	appointmentBookingsList	string			
date	dates		arrivalDateTime	appointmentBookingsList		OFSCSOM_Appt_Timeslots	SOM_TimeSlots	OFSC_TimeSlots
date	dates		completionDateTime	appointmentBookingsList		OFSCSOM_Appt_Timeslots	SOM_TimeSlots	OFSC_TimeSlots
			rank	appointmentBookingsList				
remainingQuota	timeslots		units	appointmentBookingsList				
date	dates		appointmentWindowDateTime	appointmentBookingsList		OFSCSOM_Appt_Timeslots	SOM_TimeSlots	OFSC_TimeSlots
date	dates		appointmentWindowDuration	appointmentBookingsList		OFSCSOM_Appt_Timeslots	OFSC_TimeSlots	Duration_InSeconds
			action	appointmentBookingsList				
			messageText	responseDetail				
			messageCategory	responseDetail				
			messageNumber	responseDetail				

Oracle Field Service Cloud Request Message (Activity Booking Options)			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			messageParameters		responseDetail			

## Device Verification (Oracle Field Service Cloud Initiated)

This section describes data mapping for the following:

- [Meter Request Mapping](#)
- [Meter Response Mapping](#)
- [Item Request Mapping](#)
- [Item Response Mapping](#)

## Meter Request Mapping

Meter Request mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
QueryParameters		outermosttag	D1-DeviceVerificationService		outermosttag			
			requestMessage	D1-DeviceVerificationService				
c2m_meter2_number	QueryParameters	string	badgeNumber	requestMessage				
c2m_service_pt_id	QueryParameters	string	servicePointId	requestMessage				
c2m_SerialNumber	QueryParameters	string	serialNumber	requestMessage				

# Meter Response Mapping

The Meter response mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
D1-DeviceVerification Service	D1-DeviceVerification Service	outerm osttag	response-wrapper		outerm osttag			
responseMessage		Group						
verificationStatus	responseMessage							
meterConfigurationType	responseMessage	string	c2m_meter1_type	response-wrapper	Enumeration	SOMOFSC_Meter ConfigurationType	SOM_MeterConfigurationType	OFSC_MeterConfigurationType
errorCode	responseMessage	string						
errorText	responseMessage	string	c2m_verifyStatusFlag	response-wrapper	String			
readingDetails	readingDetails	Group						
readingDetailsList	responseMessage	List						
meterConfigurationType	readingDetailsList[1]	string	c2m_new_item_type	response-wrapper	Enumeration			
readSequence	readingDetailsList[1]	string	c2m_meter1_read_seq	response-wrapper	Enumeration	OFSCSOM_ReadSequence	SOM_ReadSequence	OFSC_ReadSequence
unitOfMeasure	readingDetailsList[1]	string	c2m_meter1_uom	response-wrapper	Enumeration	OFSCSOM_UOM	SOM_UOM	OFSC_UOM
numberOfDials	readingDetailsList[1]	string	c2m_meter1_dials	response-wrapper	Enumeration	OFSCSOM_Dials	SOM_Dials	OFSC_Dials

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
lowerLimit	readingDetailsList[1]	string	c2m_meter1_lower_limit	response-wrapper	Integer			
upperLimit	readingDetailsList[1]	string	c2m_meter1_upper_limit	response-wrapper	Integer			
timeOfUse	readingDetailsList[1]	string	c2m_meter1_TOU1	response-wrapper	Enumeration	OFSCSOM_TOU	SOM_TOU	OFSC_TOU
sqi	readingDetailsList[1]	string	c2m_meter1_sqi	response-wrapper	Enumeration	OFSCSOM_SQI	SOM_SQI	OFSC_SQI
numberOfDecimals	readingDetailsList[2]	string	c2m_meter1_numberofDecimals	response-wrapper	Enumeration	OFSCSOM_Decimals	SOM_Decimal	OFSC_Decimal
readSequence	readingDetailsList[2]	string	c2m_meter1_read_seq2	response-wrapper	Enumeration	OFSCSOM_ReadSequence	SOM_ReadSequence	OFSC_ReadSequence
unitOfMeasure	readingDetailsList[2]	string	c2m_meter1_uom2	response-wrapper	Enumeration	OFSCSOM_UOM	SOM_UOM	OFSC_UOM
numberOfDials	readingDetailsList[2]	string	c2m_meter1_dials2	response-wrapper	Enumeration	OFSCSOM_Dials	SOM_Dials	OFSC_Dials
lowerLimit	readingDetailsList[2]	string	c2m_meter1_lower_limit2	response-wrapper	Integer			
upperLimit	readingDetailsList[2]	string	c2m_meter1_upper_limit2	response-wrapper	Integer			
timeOfUse	readingDetailsList[2]	string	c2m_meter1_TOU2	response-wrapper	Enumeration	OFSCSOM_TOU	SOM_TOU	OFSC_TOU
sqi	readingDetailsList[2]	string	c2m_meter1_sqi2	response-wrapper	Enumeration	OFSCSOM_SQI	SOM_SQI	OFSC_SQI

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
numberOfDecimals	readingDetailsList[3]	string	c2m_meter1_numberofDecimals2	response-wrapper	Enumeration	OFSCSOM_Decimals	SOM_Decimal	OFSC_Decimals
readSequence	readingDetailsList[3]	string	c2m_meter1_read_seq3	response-wrapper	Enumeration	OFSCSOM_ReadSequence	SOM_ReadSequence	OFSC_ReadSequence
unitOfMeasure	readingDetailsList[3]	string	c2m_meter1_uom3	response-wrapper	Enumeration	OFSCSOM_UOM	SOM_UOM	OFSC_UOM
numberOfDials	readingDetailsList[3]	string	c2m_meter1_dials3	response-wrapper	Enumeration	OFSCSOM_Dials	SOM_Dials	OFSC_Dials
lowerLimit	readingDetailsList[3]	string	c2m_meter1_lower_limit3	response-wrapper	Integer			
upperLimit	readingDetailsList[3]	string	c2m_meter1_upper_limit3	response-wrapper	Integer			
timeOfUse	readingDetailsList[3]	string	c2m_meter1_TOU3	response-wrapper	Enumeration	OFSCSOM_TOU	SOM_TOU	OFSC_TOU
sqi	readingDetailsList[3]	string	c2m_meter1_sqi3	response-wrapper	Enumeration	OFSCSOM_SQI	SOM_SQI	OFSC_SQI
numberOfDecimals	readingDetailsList[3]	string	c2m_meter1_numberofDecimals3	response-wrapper	Enumeration	OFSCSOM_Decimals	SOM_Decimal	OFSC_Decimals
readSequence	readingDetailsList[4]	string	c2m_meter1_read_seq4	response-wrapper	Enumeration	OFSCSOM_ReadSequence	SOM_ReadSequence	OFSC_ReadSequence
unitOfMeasure	readingDetailsList[4]	string	c2m_meter1_uom4	response-wrapper	Enumeration	OFSCSOM_UOM	SOM_UOM	OFSC_UOM
numberOfDials	readingDetailsList[4]	string	c2m_meter1_dials4	response-wrapper	Enumeration	OFSCSOM_Dials	SOM_Dials	SOM_Dials

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping			
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column	
lowerLimit	readingDetailsList[4]	string	c2m_meter1_lower_limit4	response-wrapper	Integer				
upperLimit	readingDetailsList[4]	string	c2m_meter1_upper_limit4	response-wrapper	Integer				
timeOfUse	readingDetailsList[4]	string	c2m_meter1_TOU4	response-wrapper	Enumeration	OFSCSOM_TOU	SOM_TOU	OFSC_TOU	
sqi	readingDetailsList[4]	string	c2m_meter1_sqi4	response-wrapper	Enumeration	OFSCSOM_SQI	SOM_SQI	OFSC_SQI	
numberOfDecimals	readingDetailsList[4]	string	c2m_meter1_numberofDecimals4	response-wrapper	Enumeration	OFSCSOM_Decimals	SOM_Decimal	OFSC_Decimal	
readSequence	readingDetailsList[5]	string	c2m_meter1_read_sequence5	response-wrapper	Enumeration	OFSCSOM_ReadSequence	SOM_ReadSequence	OFSC_ReadSequence	
unitOfMeasure	readingDetailsList[5]	string	c2m_meter1_uom5	response-wrapper	Enumeration	OFSCSOM_UOM	SOM_UOM	OFSC_UOM	
numberOfDials	readingDetailsList[5]	string	c2m_meter1_dials5	response-wrapper	Enumeration	OFSCSOM_Dials	SOM_Dials	SOM_Dials	
lowerLimit	readingDetailsList[5]	string	c2m_meter1_lower_limit5	response-wrapper	Integer				
upperLimit	readingDetailsList[5]	string	c2m_meter1_upper_limit5	response-wrapper	Integer				
timeOfUse	readingDetailsList[5]	string	c2m_meter1_TOU5	response-wrapper	Enumeration	OFSCSOM_TOU	SOM_TOU	OFSC_TOU	
sqi	readingDetailsList[5]	string	c2m_meter1_sqi5	response-wrapper	Enumeration	OFSCSOM_SQI	SOM_SQI	OFSC_SQI	



Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
numberOfDecimals	readingDetailsList[5]	string	c2m_meter1_numberofDecimals5	response-wrapper	Enumeration	OFSCSOM_Decimals	SOM_Decimal	OFSC_Decimals
manufacturer	responseMessage	string	c2m_newmeter_manufacturer	response-wrapper	Enumeration			
model	responseMessage	string	c2m_newmeter_model	response-wrapper	Enumeration			

## Item Request Mapping

Item Request mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Request Message			Oracle Utilities Service Order Management Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
QueryParameters		outermosttag	D1-ItemVerificationService		outermosttag			
			requestMessage	D1-ItemVerificationService				
c2m_new_item_nbr	QueryParameters	string	badgeNumber	requestMessage	string			
c2m_service_pt_id	QueryParameters	string	servicePointId	requestMessage	string			
c2m_SerialNumber	QueryParameters	string	serialNumber	requestMessage	string			

# Item Response Mapping

Item response mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
D1-ItemVerificationService		outermosttag	response-wrapper		outermosttag			
responseMessage	D1-ItemVerificationService	Group						
verificationStatus								
errorCode								
errorText	responseMessage	string	c2m_verifyStatusFlag	response-wrapper	string			
manufacturer	responseMessage	string	c2m_newitem_manufacturer		string	SOMOFSC_Manufacturer	SOM_Manufacturer	OFSC_Manufacturer
model	responseMessage	string	c2m_newitem_model		string	SOMOFSC_Model	SOM_Model	OFSC_Model

## Pickup Orders Create (Oracle Field Service Cloud Initiated)

This section describes data mapping for the following:

- [Pickup Orders Create Request Mapping](#)
- [Pickup Orders Create Response Mapping](#)

## Pickup Orders Create Request Mapping

Pickup Orders Create request mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
sendDetail	D1-FieldActivityOBComm	OutermostTag	bulkUpdate_POST		OutermostTag			
			activities.definitions.customActionActivityBulkUpdateSchema	bulkUpdate_POST	Group			
			updateParameters	activities.definitions.customActionActivityBulkUpdateSchema	Group			
			activities	activities.definitions.customActionActivityBulkUpdateSchema	List			
			identifyActivityBy	updateParameters	string			
			ifInFinalStatusThen	updateParameters	string			
			ifExistsThenDoNotUpdateFields	updateParameters	string			
			resourceId	activities	string	SOMOFSC_ConfigProps	PropertyName	Value
			accessSchedule	activities	string			
			resourceInternalId	activities	integer			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
startDateTime	D1-FieldActivityOBComm/sendDetail/activities/activity/timeWindows/timeWindowsList		date	activities	string	SOMOFSC_ConfigProps	PropertyName	Value
hostExternalId	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	apptNumber	activities	string			
taskType	D1-FieldActivityOBComm/sendDetail/activities/activity		activityType	activities	string	SOMOFSC_ActivityType.dvm	SOM_ActivityType	OFSC_ActivityType
estimatedDuration	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	duration	activities	integer			
			timeDeliveredStart	activities	string			
			timeDeliveredEnd	activities	string			
			timeSlot	activities	string	OFSCSOM_Appt_Timeslots		
customerName	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerName	activities	string			
accountId	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerNumber	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
mainPhone	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerPhone	activities	string			
			customerEmail	activities	string			
cellPhone	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerCell	activities	string			
address1	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address2	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address3	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address4	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			streetAddress	activities	string			
city	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	city	activities	string			
postal	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	postalCode	activities	string			
state	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	stateProvince	activities	string			
timeZone	D1-FieldActivityOBComm/sendDetail/activities/activity/location	Field	timeZone	activities	string			
geocodeLongitude	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	longitude	activities	double			
geocodeLatitude	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	latitude	activities	double			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
country	D1-FieldActivityOBComm/sendDetail/activities/activity/location/serviceAddress	Field	country_code	activities	string			
deviceId	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_serial	activities	string			
badgeNumber	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_number	activities	string			
meterLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_location	activities	string			
meterConfigurationType	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_type	activities	string			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	Unit_of_Measure	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
payoffAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails	Field	payOffAmount	activities	string			
currentAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails	Field	currentAmount	activities	string			
lessThanThirtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	lessThan30	activities	string			
thirtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	thirtyDaysAmount	activities	string			
overSixtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	over60DaysAmt	activities	string			
criteria	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	c2m_service_pt_type	activities	string			



Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
servicePointId	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_service_pt_id	activities	string			
disconnectLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_disconnect_location	activities	string			
newCharges	D1-FieldActivityOBComm/sendDetail/activities/collectionDataDetails/arrearsDataDetails	Field	c2m_new_charges	activities	string			
badgeNumber	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_nbr	activities	string			
deviceId	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_id	activities	string			
deviceManufacturer	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_manufacturer	activities	string			
deviceModel	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_model	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
disputedAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	disputedAmount	activities	string			
activityComments	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	c2m_activity_comments	activities	string			
siteInstructions	D1-FieldActivityOBComm/sendDetail/activities/activity/location	Field	c2m_site_instructions	activities	string			
instructionDetails	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_instruction_details	activities	string			
serviceWarnings	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_warnings	activities	string			
premiseId	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_premise_id	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
serviceInstructions	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_instructions	activities	string			
deviceManufacturer	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_mfg	activities	string			
meterLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_loc	activities	string			
deviceModel	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_model	activities	string			
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals	activities	integer			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit	activities	string			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU	activities	string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading	activities	enum			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials	activities	Integer			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq 2		integer			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU2		string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading2	activities	enum			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom2	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials2	activities	integer			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit2	activities	string			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit2	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index2	activities	string			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi2	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU2	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals2	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq3	activities	integer			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom3	activities	string			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials3	activities	integer			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi3	activities	string			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit3	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit3	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index3	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU3	activities	string			
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_number_ofDecimals3	activities	integer			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading3	activities	enum			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_sequence4	activities	integer			



Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom4	activities	string			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials4	activities	integer			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi4	activities	string			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit4	activities	string			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit4	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index4	activities	string			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU4	activities	string			
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals4	activities	integer			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading4	activities	enum			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq5	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials5	activities	integer			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU5	activities	string			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi5	activities	string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading5	activities	enum			

Oracle Field Service Cloud Activity Created Event Message			Oracle Utilities Service Order Management Inbound Field Activity Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals5	activities	integer			
lifeSupport	D1-FieldActivityOBComm/sendDetail/activities/activityutilityCommonActivityDetails	Field	c2m_life_support	SOMOFSC_LifeSupport	SOM_LifeSupport			
hostExternalSystem	D1-FieldActivityOBComm/sendDetail/hostExternalSystem	Field	c2m_xa_product	SOMOFSC_ConfigProps	SOM_ConfigProps			

## Pickup Orders Create Response Mapping

Pickup Orders Create response mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Process Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
bulkUpdate_POSTResponse		OutermostTag	responseDetail		OutermostTag			
			dispatcherNotified	responseDetail				
			failedCancellation	responseDetail	Group			
			tasks	responseDetail/failedCancellation	List			

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Process Activity Response Message			DVM Mapping		Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM			
			messageId	responseDetail	Field				
operationsPerformed	results	String	messageStatus	responseDetail	Field				
activityId	results	String	messageText	responseDetail	Field				
			messageData	responseDetail	Group				
			messageCategory	responseDetail/ messageData	Field				
			messageNumber	responseDetail/ messageData	Field				
			messageParameters	responseDetail/ messageData	Group				
			parameters	responseDetail/ messageData/ messageParameters	List				
			parameterType	responseDetail/ messageData/ messageParameters/ parameters	Field				
			parameterValue	responseDetail/ messageData/ messageParameters/ parameters	Field				
			fault	responseDetail					
operationsFailed	results	String	faultCode	responseDetail/fault					
errorDetail	errors	String	faultString	responseDetail/fault					
			faultActor	responseDetail/fault					
			detail	responseDetail/fault	RAW				

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Process Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
activities.definitions.customerActionActivityBulkUpdateSchemaResponse	bulkUpdate_POSTResponse	Group						
results	activities.definitions.customerActionActivityBulkUpdateSchemaResponse	List						
errors	results	List						
activityKeys	results	Group						
operation	errors	String						
apptNumber	activityKeys	String						
customerNumber	activityKeys	String						

## Process Activity (Oracle Utilities Customer To Meter Initiated)

This section describes data mapping for the following:

- [Process Activity Request Mapping](#)
- [Process Activity Response Mapping](#)
- [Cancel Activity Request Mapping](#)
- [Cancel Activity Response Mapping](#)

## Process Activity Request Mapping

Process Activity request mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			activities.definitions.customActionActivityBulkUpdateSchema	bulkUpdate_POST	Group			
			updateParameters	activities.definitions.customActionActivityBulkUpdateSchema	Group			
			activities	activities.definitions.customActionActivityBulkUpdateSchema	List			
			identifyActivityBy	updateParameters	string			
			ifInFinalStatusThen	updateParameters	string			
			ifExistsThenDoNotUpdateFields	updateParameters	string			
			resourceId	activities	string	SOMOFSC_ConfigProps	PropertyName	Value
			accessSchedule	activities	string			
			resourceInternalId	activities	integer			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
startDateTime	D1-FieldActivityOBComm/sendDetail/activities/activity/timeWindows/timeWindowsList		date	activities	string	SOMOFSC_ConfigProps	PropertyName	Value
hostExternalId	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	apptNumber	activities	string			
taskType	D1-FieldActivityOBComm/sendDetail/activities/activity		activityType	activities	string	SOMOFSC_ActivityType.dvm	SOM_ActivityType	OFSC_ActivityType
estimatedDuration	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	duration	activities	integer			
			timeDeliveredStart	activities	string			
			timeDeliveredEnd	activities	string			
			timeSlot	activities	string	OFSCSOM_App_t_Timeslots		
customerName	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerName	activities	string			
accountId	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerNumber	activities	string			



Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
mainPhone	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerPhone	activities	string			
			customerEmail	activities	string			
cellPhone	D1-FieldActivityOBComm/sendDetail/activities/activity/customerInformation	Field	customerCell	activities	string			
address1	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address2	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address3	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					
address4	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	streetAddress					

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			streetAddress	activities	string			
city	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	city	activities	string			
postal	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	postalCode	activities	string			
state	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	stateProvince	activities	string			
timeZone	D1-FieldActivityOBComm/sendDetail/activities/activity/location	Field	timeZone	activities	string	SOMOFSC_TimeZone.dvm		
geocodeLongitude	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	longitude	activities	double			
geocodeLatitude	D1-FieldActivityOBComm/sendDetail/activities/activity/location/siteAddress	Field	latitude	activities	double			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
country	D1-FieldActivityOBComm/sendDetail/activities/activity/location/serviceAddress	Field	country_code	activities	string	SOMOFSC_Country_code.dvm		
deviceId	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_serial	activities	string			
badgeNumber	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_number	activities	string			
meterLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_location	activities	string	SOMOFSC_MeterLocation.dvm		
meterConfigurationType	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_type	activities	string	SOMOFSC_MeterConfigurationType.dvm		
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	Unit_of_Measure	activities	string	SOMOFSC_UnitOfMeasure.dvm		

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
payoffAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails	Field	payOffAmount	activities	string			
currentAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails	Field	currentAmount	activities	string			
lessThanThirtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	lessThan30	activities	string			
thirtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	thirtyDaysAmount	activities	string			
overSixtyDaysAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	over60DaysAmt	activities	string			
criteria	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	c2m_service_pt_type	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
servicePointId	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_service_pt_id	activities	string			
disconnectLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_disconnect_location	activities	string	SOMOFSC_DisconnectLocation	SOM_DiscLoc	OFSC_DiscLoc
newCharges	D1-FieldActivityOBComm/sendDetail/activities/collectionDataDetails/arrearsDataDetails	Field	c2m_new_charges	activities	string			
badgeNumber	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_nbr	activities	string			
deviceId	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_id	activities	string	SOMOFSC_Manufacturer.dvm		
deviceManufacturer	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_manufacturer	activities	string	SOMOFSC_Manufacturer	SOM_Manufacturer	OFSC_Manufacturer
deviceModel	D1-FieldActivityOBComm/sendDetail/activities/activity/itemDataDetails	Field	c2m_item_model	activities	string	SOMOFSC_Model	SOM_Model	OFSC_Model

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
disputedAmount	D1-FieldActivityOBComm/sendDetail/activities/activity/collectionDataDetails/arrearsDataDetails	Field	disputedAmount	activities	string			
activityComments	D1-FieldActivityOBComm/sendDetail/activities/activity	Field	c2m_activity_comments	activities	string			
siteInstructions	D1-FieldActivityOBComm/sendDetail/activities/activity/location	Field	c2m_site_instructions	activities	string			
instructionDetails	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_instruction_details	activities	string			
serviceWarnings	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_warnings	activities	string	SOMOFSC_ServiceWarnings.dvm	SOM_ServiceWarnings	OFSC_ServiceWarnings
premiseId	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_premise_id	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
serviceInstructions	D1-FieldActivityOBComm/sendDetail/activities/activity/servicePointDataDetails	Field	c2m_SP_instructions	activities	string	SOMOFSC_ServiceInstructions.dvm	SOM_ServiceInstructions	OFSC_ServiceInstructions
deviceManufacturer	D1-FieldActivityOBComm//sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_mfg	activities	string	SOMOFSC_Manufacturer	SOM_Manufacturer	OFSC_Manufacturer
meterLocation	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_loc	activities	string	SOMOFSC_MeterLocation	SOM_MeterLocation	OFSC_MeterLocation
deviceModel	D1-FieldActivityOBComm/sendDetail/activities/activity/meterDataDetails	Field	c2m_meter1_model	activities	string	SOMOFSC_Model	SOM_Model	OFSC_Model
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals	activities	integer			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit	activities	string			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU	activities	string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading	activities	enum			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials	activities	Integer			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index	activities	string			



Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq 2		integer			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU2		string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_ reading2	activities	enum			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom2	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials2	activities	integer			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit2	activities	string			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit2	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index2	activities	string			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi2	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU2	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numero fDecimals2	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq 3	activities	integer			
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom3	activities	string			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials3	activities	integer			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi3	activities	string			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_li mit3	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit3	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index3	activities	string			
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU3	activities	string			
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_number_ofDecimals3	activities	integer			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading3	activities	enum			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_sequence4	activities	integer			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
unitOfMeasure	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom4	activities	string			
numberOfDials	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials4	activities	integer			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi4	activities	string			
lowerLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit4	activities	string			
upperLimit	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit4	activities	string			
reading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index4	activities	string			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
timeOfUse	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU4	activities	string			
numberOfDecimals	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals4	activities	integer			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading4	activities	enum			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_read_seq5	activities	integer			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_uom5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_dials5	activities	integer			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_lower_limit5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_upper_limit5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_current_index5	activities	string			
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_TOU5	activities	string			
sqi	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_sqi5	activities	string			
overrideReading	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_override_reading5	activities	enum			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
readSequence	D1-FieldActivityOBComm/sendDetail/activities/activity/readingDetails/readingDetailsList	Field	c2m_existing_meter_numberofDecimals5	activities	integer			
lifeSupport	D1-FieldActivityOBComm/sendDetail/activities/activityutilityCommonActivityDetails	Field	c2m_life_support	SOMOFSC_LifeSupport	SOM_LifeSupport	OFSC_LifeSupport		
hostExternalSystem	D1-FieldActivityOBComm/sendDetail/hostExternalSystem	Field	c2m_xa_product	SOMOFSC_ConfigProps	SOM_ConfigProps	OFSC_ConfigProps		

## Process Activity Response Mapping

Process Activity response mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
bulkUpdate_POSTResponse		OutermostTag	responseDetail		OutermostTag			
			dispatcherNotified	responseDetail				
			failedCancellation	responseDetail	Group			



Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
			tasks	responseDetail/ failedCancellation	List			
			messageId	responseDetail	Field			
operationsPerformed	results	String	messageStatus	responseDetail	Field			
activityId	results	String	messageText	responseDetail	Field			
			messageData	responseDetail	Group			
			messageCategory	responseDetail/ messageData	Field			
			messageNumber	responseDetail/ messageData	Field			
			messageParameters	responseDetail/ messageData	Group			
			parameters	responseDetail/ messageData/ messageParameters	List			
			parameterType	responseDetail/ messageData/ messageParameters/ parameters	Field			
			parameterValue	responseDetail/ messageData/ messageParameters/ parameters	Field			
			fault	responseDetail				
operationsFailed	results	String	faultCode	responseDetail/fault				

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Field Service Cloud Column	Oracle Utilities Service Order Management Column
errorDetail	errors	String	faultString	responseDetail/fault				
			faultActor	responseDetail/fault				
			detail	responseDetail/fault	RAW			
activities.definitions.customerActionActivityBulkUpdateSchemaResponse	bulkUpdate_POSTResponse	Group						
results	activities.definitions.customerActionActivityBulkUpdateSchemaResponse	List						
errors	results	List						
activityKeys	results	Group						
operation	errors	String						
apptNumber	activityKeys	String						
customerNumber	activityKeys	String						

## Cancel Activity Request Mapping

Cancel Activity Request mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
sendDetail	D1-FieldActivityOBComm	OutermostTag			OutermostTag			

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			activities.definitions.customActionActivityBulkUpdateSchema	bulkUpdate_POST	Group			
			updateParameters	activities.definitions.customActionActivityBulkUpdateSchema	Group			
			activities	activities.definitions.customActionActivityBulkUpdateSchema	List			
			identifyActivityBy	updateParameters	string			
			ifInFinalStatusThen	updateParameters	string			
			ifExistsThenDoNotUpdateFields	updateParameters	string			
			resourceId	activities	string			
			accessSchedule	activities	string			
			resourceInternalId	activities	integer			
			date	activities	string			
hostExternalId	D1-FieldActivityOBComm/sendDetail/activities/activity	send Detail	apptNumber	activities	string			
			status	activities	string			
			c2m_xa_cn	activities	string			

# Cancel Activity Response Mapping

Cancel Activity Response mapping details for each integration point are as shown in the table below:

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
bulkUpdate_POSTResponse		OutermostTag	responseDetail		OutermostTag			
operationsPerformed	results	String	dispatcherNotified	responseDetail				
			failedCancellation	responseDetail	Group			
			tasks	responseDetail/failedCancellation	List			
			messageId	responseDetail	Field			
operationsPerformed	results	String	messageStatus	responseDetail	Field			
operationsPerformed	results	String	messageText	responseDetail	Field			
			messageData	responseDetail	Group			
			messageCategory	responseDetail/messageData	Field			
			messageNumber	responseDetail/messageData	Field			
			messageParameters	responseDetail/messageData	Group			
			parameters	responseDetail/messageData/messageParameters	List			
			parameterType	responseDetail/messageData/messageParameters/parameters	Field			

Oracle Field Service Cloud Process Activity Response Message			Oracle Utilities Service Order Management Activity Response Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			parameterValue	responseDetail/ messageData/ messageParameters/ parameters	Field			
			fault	responseDetail				
operationsFailed	results	String	faultCode	responseDetail/fault				
errorDetail	errors	String	faultString	responseDetail/fault				
			faultActor	responseDetail/fault				
			detail	responseDetail/fault	RAW			
activities.definitions.cust omActionActivityBulkU pdateSchemaResponse	bulkUpdate_POSTResp onse	Group						
results	activities.definitions.cust omActionActivityBulkU pdateSchemaResponse	List						
errors	results	List						
activityKeys	results	Group						
operation	errors	String						
apptNumber	activityKeys	String						
customerNumber	activityKeys	String						

## Query Service Point (Oracle Field Service Cloud Initiated)

This section describes data mapping for the following:

- [Query Service Point Request Mapping](#)
- [Query Service Point Response Mapping](#)

## Query Service Point Request Mapping

Query Service Point Request mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
QueryParameters		outermosttag	D1-FieldWorkSPQuery		outermosttag			
			input	D1-FieldWorkSPQuery				
			maximumRowsToReturn	input	SOMOF SC_Con figProps		PropertyName= sp.maximumrow storeturn	Value = 15
			lastSPIDReturned	input				
streetAddress	QueryParameters		address1	input				
city	QueryParameters		city	input				
postalCode	QueryParameters		postal	input				
			customerName	input				
			badgeNumber	input				
acoord_x	QueryParameters		latitude	input				
acoord_y	QueryParameters		longitude	input				

Oracle Utilities Service Order Management Request Message			Oracle Field Service Cloud Request Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
			includeAbolishFlag	input		SOMOFSC_ConfigProps	PropertyName=som.includeabolishflag	Value=D1YS

## Query Service Point Response Mapping

Query Service Point response mapping details for each integration point are as shown in the table below:

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
D1-FieldWorkSPQuery			response-wrapper					
output	D1-FieldWorkSPQuery							
servicePoints	output	group						
servicePointsList	servicePoints	List	resultSet	response-wrapper	List			
servicePointQueryData	servicePointsList	group						
customerInformation	servicePointQueryData	group						
customerName	customerInformation	field	customer_name	resultSet				
location	servicePointQueryData	group						
siteAddress	location	group						
address1	siteAddress	field	address	resultSet				
address2	siteAddress	field	address	resultSet				
address3	siteAddress	field	address	resultSet				
address4	siteAddress	field	address	resultSet				

Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
city	siteAddress	field	city	resultSet				
suburb	siteAddress	field						
crossStreet	siteAddress	field						
state	siteAddress	field	state_province	resultSet				
county	siteAddress	field						
country	siteAddress	field	country_code	resultSet		SOMOFSC_CountryCode	SOM_CountryCode	OFSC_CountryCode
postal	siteAddress	field	postal_code	resultSet				
serviceArea	location	field						
timeZone	location	field	timeZone	resultSet		SOMOFSC_TimeZone.dvm	SOM_TimeZone	OFSC_TimeZone
servicePointDataDetails	servicePointQueryData	group						
servicePointId	servicePointDataDetails	field	service_point_id	resultSet				
meterDataDetails	servicePointQueryData	group						
badgeNumber	meterDataDetails	field	meter1_number	resultSet				
meterConfigurationType	meterDataDetails	field	meter1_type	resultSet		SOMOFSC_MeterConfigurationType	SOM_MeterConfigurationType	OFSC_MeterConfigurationType
itemDataDetails	servicePointQueryData	group						
badgeNumber	itemDataDetails	field	item_nbr	resultSet				
servicePointTypeCode	servicePointQueryData	field	service_pt_type	resultSet				
servicePointTypeDescription	servicePointQueryData	field	sp_type_desc					
servicePointStatusCode	servicePointQueryData	field	sp_status_code					



Oracle Utilities Service Order Management Response Message			Oracle Field Service Cloud Message			DVM Mapping		
Element Name	Parent Element	Type	Element Name	Parent Element	Type	DVM	Oracle Utilities Service Order Management Column	Oracle Field Service Cloud Column
servicePointStatusDescription	servicePointQueryData	field	sp_status_desc					
servicePointSourceStatusCode	servicePointQueryData	field	sp_src_status_code					
servicePointSourceStatusDescription	servicePointQueryData	field	sp_src_status_desc					
moreRowsAvailable	output	field	moreRowsAvailable	response-wrapper				
errorCode	output	field						
errorText	output	field	errorText	response-wrapper				