Oracle SCM Cloud

Integrating Service Logistics with Field Service

20A
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Preface

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

Using Oracle Applications

Help

Use help icons ? to access help in the application. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. Not all pages have help icons. You can also access the Oracle Help Center to find guides and videos.

Watch: This video tutorial shows you how to find and use help.

You can also read about it instead.

Additional Resources

- **Community**: Use Oracle Cloud Customer Connect to get information from experts at Oracle, the partner community, and other users.

- **Training**: Take courses on Oracle Cloud from Oracle University.

Conventions

The following table explains the text conventions used in this guide.

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<tr>
<th>Convention</th>
<th>Meaning</th>
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<tr>
<td>boldface</td>
<td>Boldface type indicates user interface elements, navigation paths, or values you enter or select.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates file, folder, and directory names, code examples, commands, and URLs.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than symbol separates elements in a navigation path.</td>
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Documentation Accessibility

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

Contacting Oracle

Access to Oracle Support

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

Comments and Suggestions

Please give us feedback about Oracle Applications Help and guides! You can send an e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.
1 About This Guide

Audience and Scope

This guide outlines the implementation and configuration steps required to integrate Oracle Fusion Service Logistics and Oracle Field Service to create a value-added business process and user experience. The administrator must enter the documented configurations and install the documented files to create the integration.

Each implementation of Oracle Field Service and Oracle Fusion Service Logistics is unique, and leads to the implementation of application customizations that support unique business requirements. While the steps in this document describe how to connect a non-customized Oracle Field Service instance to a non-customized Oracle Fusion Service Logistics instance, they can be combined with customizations that have already been applied to each instance.

Note: With release 20A (11.13.20.01.0), "Oracle Engagement Cloud" is now known as Oracle CX Sales and Oracle B2B Service. Existing Oracle Engagement Cloud users will retain access to Oracle CX Sales and B2B Service features under their preexisting licensing agreements. Any new users created within your current Oracle Engagement Cloud license count will also retain the same access to Oracle CX Sales and Oracle B2B Service. To obtain additional features or manage your subscription, refer to your Oracle Cloud Applications Console. This document describes features available to users under Oracle CX Sales, Oracle B2B Service, and Oracle Engagement Cloud licensing agreements.

Related Guides

To understand more about the information covered in this guide, refer to the following table for a list of related guides.

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<td>Getting Started with Service Logistics</td>
<td>Lists the steps required to configure Service Logistics</td>
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<td>Using Service Logistics</td>
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2 Introduction

Integration Component Architecture Between Service Logistics and Field Service

Service Logistics enables customers to optimize parts logistics, source and order service parts, record costs and invoice customers. Field Service offers time-based, self-learning, and predictive technology to dispatch field service technicians to resolve customer issues.

The Service Logistics to Field Service integration offers the following:

Field Service Technicians Sync: Field Service Technicians are set up as Person Parties in Oracle Fusion Trading Community Model. Whenever a usage of Field Service Technician is added to a person, this signals to Oracle Integration Cloud that a Field Service Technician has been created. A usage of 'Field Service Technician' can be associated with a Person Party from several Oracle Cloud User Interfaces (UIs) including the Service Logistics Manage Field Service Technicians setup UI. An Integration Cloud Service is then executed to create the technician in Field Service if the technician doesn't exist or update the technician if they already exist.

Stocking Locations and Inventory Balances Sync: Subinventories defined in Oracle Fusion Inventory Management can be set up as Stocking Locations in the Service Logistics Manage Stocking Locations setup UI. Once defined as Stocking Locations, these subinventories are assigned a type of Technician. Stocking Locations can then be assigned to technicians in the Service Logistics Manage Field Service Technicians setup UI. Stocking locations hold parts inventory that technicians use when fixing customer issues. A background process is executed on a periodic basis that syncs stocking locations and their inventory balances from Inventory Management to Field Service.

Part Item Numbers Synchronization: Field Service Technicians can use the Service Logistics UI to find, order and receive the parts required to complete a work order. Field Service Administrators can then view these part requirements in the Service Logistics application.

Field Service Debrief Integration: Field service activities are created when a service work order is created in the Oracle B2B Service UIs. Field Service Technicians use the Oracle Field Service debrief user interface on their mobile devices to report on the labor hours, parts used and recovered, and any expenses incurred on the activities assigned to them. These debrief transactions are automatically created in Service Logistics and are visible in the Edit Charges user interface. Field Service Administrators can then review these debrief transactions, make any adjustments or corrections and post the debrief transaction. This generates a customer invoice for billing, adjusts inventory balances, updates customer's asset configuration, and captures cost of service.
The following figure displays how Oracle Fusion Service Logistics components and Oracle Field Service components are integrated using Oracle Integration Cloud Service.

**Oracle Fusion Service Logistics Integration Services**

The following Service Logistics web services are used in this integration:

- `stockingLocations` REST API. Use this web service to get all subinventories identified as technician stocking locations.
- `trunkStocks` REST API. Use this web service to get inventory balances for technician stocking locations.
• partRequirementLines and requirementLineDetails REST APIs for Manage Part Requirements. Use these web service to create, edit, and delete part requirements.

Oracle Field Service Integration Services
The following Field Service web services are used in this integration:

• resources REST API. Use this web service to create and update Field Service Technician resources in the Field Service. The same REST API is also used to create or update resources of type Truck in Field Service.

• resources/custom-actions/bulkUpdateInventories REST API. Use this web service to update inventory balances in technician stocking locations in Field Service.

Oracle Integration Cloud
The prebuilt integrations are available through Oracle Marketplace. You can log in and install the package directly into your Oracle Integration Cloud instance. The installation includes the following:

• Connection: Service Logistics FA REST
• Connection: Service Logistics FA SOAP
• Connection: Service Logistics OFSC
• Connection: Service Logistics OFSC REST
• Connection: Service Logistics OSC
• Integration: Service Logistics Technician
• Integration: Service Logistics Inventory

To access the integrations in Oracle Marketplace, do the following:

1. Access Oracle Marketplace. In the Search field, enter criteria - Oracle Service Logistics Cloud to Oracle Field Service Cloud OIC recipe.
2. Or, use this alternate method - select PLATFORM (PaaS) from the Products drop down list.
3. Select Oracle Integration.
4. In the Oracle Integration window, scroll and select Oracle Service Logistics Cloud to Oracle Field Service Cloud OIC Recipe.
5. Click Get App.
6. Read and accept the Terms and click Next.

The My Oracle Support page Integrating Oracle Service Logistics Cloud with Oracle Field Service Cloud (Doc ID 2481359.1) opens. This is where you can download the file.

Note: If Oracle Marketplace isn't available, you can download the prebuilt files from My Oracle Support Document 2481359.1 In the Attachments section, select the appropriate attachment for your implementation.

For additional information, you can check the topic 'Integration Component Architecture Between Oracle B2B Service and Oracle Field Service' in the guide - Integrating B2B Service with Field Service.

Related Topics
• Integration Component Architecture Between Oracle B2B Service and Oracle Field Service
Requirements and Licensing

Subscriptions to the following cloud services are required for implementing the Service Logistics and Field Service integration using Oracle Integration Cloud Service:

- **Oracle Fusion Service Logistics:** The integration is designed to work with Oracle Fusion Service Logistics Release 19B or later.
- **Oracle Field Service:** The integration is designed to work with Oracle Field Service Release 19B or later.
- **Oracle Integration Cloud Service:** The integration is designed to work with Oracle Integration Cloud or Integration Cloud Service (ICS) version 18.4.5.0.0 or later.
3 Service Logistics Configuration

Configure Service Logistics

To configure Service Logistics for this integration, you must do the following:

1. Create the integration user that has the Field Service Administrator job role assigned.
2. Complete the following Service Logistics Setup:
   - Set profile option **Default Parent Resource Name** to match the top node in the resource hierarchy in Oracle Field Service. Note that the **Default Parent Resource Name** is a text field that must exactly match the external name of the resource in Oracle Field Service.
   - Set up field service technicians in the Manage Field Service Technicians user interface.
   - Setup stocking locations in the Manage Stocking Locations user interface.
4 Field Service Configuration

Configure Field Service

To configure Field Service for the integration with Service Logistics, do the following:

1. Set up API Access in the Configuration - Application user interface.
2. Set up the unit of measures for the items that have inventory balances in the technician stocking locations. To do this:
   a. In Field Service, navigate to Configuration > Properties.
   b. Search for the property called UOM. Enter values for Unit of Measure and UOM Code.
5 Oracle Integration Cloud Service Configuration

Configure Oracle Integration Cloud Services

Oracle Integration Cloud Services is used to synchronize Service Logistics field service technicians, stocking locations, and inventory balances with Field Service. The following tasks must be performed to set up the secure integration between customer-specific instances:

1. Create the Oracle Integration Cloud User.
2. Import the Oracle Integration Cloud integration flows:
   a. Login to Oracle Integration Cloud.
   b. Navigate to Packages.
   c. Click the Import button.
   d. Select the file downloaded from the Marketplace.
3. Specify connection url and credentials for all five Service Logistics connections.
4. Once all connections are defined, activate the two Service Logistics integrations.

Verify Integration Synchronization

Follow the steps listed below to verify the synchronization.

In Service Logistics:

1. Open the Manage Field Service Technicians user interface.
2. Add a new person as a field service technician and assign a stocking location to the user.
3. Monitor the integration in Oracle Integration Cloud. If integration is successful, login to Oracle Field Service and verify that the technician is available.

In Oracle Integration Cloud, run the Service Logistics Inventory batch program as described below:

1. To run on demand:
   a. In OIC, navigate to Integrations.
   b. Search for Service Logistics Inventory.
   c. Verify that it’s activated.
   d. Click on the menu icon to the right and select Submit Now.

2. To run on a schedule:
   a. In OIC, navigate to Integrations.
   b. Search for Service Logistics Inventory.
   c. Verify that it’s activated.
   d. Click on the menu icon to the right and select Schedule. Follow the instructions to schedule the job according to your business needs.
6 Integration Process Flow

Understand How the Integration Works

To understand how the Service Logistics to Field Service integration works, see the following sections:

**Technician Synchronization** - Field Service Technicians are synchronized to Field Service according to the following steps:

1. The Oracle Integration Cloud flow is triggered by the "Update Person" event.
2. A SOAP Service is called to check if the person is a technician (usage FS_TECH).
3. An OFSC (Oracle Field Service Cloud) REST Service is called to check if resource already exists.
4. If resource doesn't exist:
   - A Service Logistics REST Service is called to get the parent node for the resource from profile Default Parent Resource Name.
   - OFSC REST Service is called to create the resource. The field service technician resource being created will be assigned a parent resource as defined in the profile.
5. If resource exists:
   - OFSC REST Service is called to update the resource.
6. The technician details that are uploaded to OFSC include:
   - Person Party ID
   - Full Name
   - Email
   - Mobile Phone Number
   - Status(active/inactive)

**Inventory Balances Synchronization** - Inventory balances for technician stocking locations are synchronized to Field Service as per the following steps:

1. The ICS (Integration Cloud Service) flow is triggered by a Schedule.
2. A Service Logistics REST Service is called to get all technician stocking locations.
3. OFSC REST Service is called to check if the stocking location already exists.
4. If stocking location doesn't exist:
   - OFSC REST Service is called to create the stocking location as a trunk resource.
5. Service Logistics REST Service is called to get inventory balances for the stocking location.
6. OFSC REST Service is called to replace inventory balances in Field Service.
7. The stocking location details that are uploaded to OFSC include:
   - Stocking Location ID
   - Stocking Location Name (Organization Code + Subinventory Name)
   - Item Number
   - Item Description
Part Item Number Synchronization- Field Service Technicians need part item numbers to order replacement parts and to debrief usage and recovery. A batch program loads items from the Oracle Product Information Cloud to the Field Service using Oracle Integration Cloud. This integration downloads all items for the inventory organization defined in profile 'Default Inventory Organization'. Only items with Service Logistics Billing Type tied to Billing Category = Material are included. The item details downloaded include:

- Item Number
- Item Description
- Item Revision
- Primary Unit of Measure

Field Technicians can use the Service Logistics Parts UI to source and order parts as well as use the Service Logistics Receiving UI to receive parts orders.

Debrief Integration- Field Service Technicians can upload debrief transactions captured in Field Service to Supply Chain Cloud for review or corrections. Field service administrators can then post these transactions to generate sales invoice, update parts inventory and update asset configuration. The debrief information uploaded to Service Logistics include:

1. Labor Debrief
   - Service Activity
   - Labor Item
   - Start Time
   - End Time

2. Material Debrief
   - Service Activity
   - Item Number
   - Quantity
   - Unit of Measure

3. Expense Debrief
   - Service Activity
   - Expense Item
   - Amount
   - Currency Code