

Oracle Fusion Field Service

**Oracle Fusion Inventory
Management Accelerator for Oracle
Fusion Field Service**



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Preface

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

Using Oracle Applications

To find guides for Oracle Applications, go to the [Oracle Help Center](#).

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1 Oracle Inventory Fusion Management Accelerator for Oracle Fusion Field Service

Overview

The Oracle Fusion Inventory Management accelerator synchronizes inventory item data from the Fusion Inventory management system to the Oracle Field Service resource inventory. This enables mobile workers to use these items for repairs and installations during their service activities. The accelerator ensures that the available inventory quantity, both serialized and non-serialized items, is updated in Oracle Field Service, reflecting any changes from the Oracle Fusion Inventory Management.

The Oracle Fusion Inventory Management Accelerator for Oracle Field Service helps you

- Streamline the data flow from Oracle Fusion Inventory to Oracle Field Service.
- Make the process simple, independent, and reusable.

Available Item Synchronization from Inventory Management to Oracle Fusion Field Service

The Inventory Management orchestrates the end-to-end physical transactions of materials within Oracle Supply Chain Management.

As part of the Inventory Management integration flow, the accelerator can sync the available inventory items (available to transact quantities) required for processing the work order from the Inventory Management system to Oracle Fusion Field Service. These items are stored in the resource inventory pool in Oracle Fusion Field Service.

- In Inventory Management, storage facilities, warehouses, and distribution centers are implemented as inventory organizations, and subinventory is a section of inventory where items are physically stocked. The accelerator synchronizes the organization or subinventory as resources within Oracle Fusion Field Service.
- The accelerator updates the available (On Hand Available to Transact) quantities from Inventory Management and stores it in the resource inventory pool. The resource in Oracle Field Service can be of role Warehouse, Vehicle, or Bucket.
- Serialized items are updated with the Serial Numbers in the resource inventory.
- Non-serialized items are updated with the quantities within the resource inventory.
- The item quantities in the Inventory Management system can be defined at the organization, subinventory, or locator level. After updating the quantities in Oracle Fusion Field Service, mobile workers can view the quantities at the organization, subinventory, or locator level through the resource inventory pool.
- Inventory item synchronization is a scheduled integration that updates the items in bulk to Oracle Fusion Field Service.
- Inventory items deleted from the inventory management system are also removed from the Oracle Fusion Field Service resource pool.

- A new inventory property, "Inventory_identifier", is available as the model property for the inventory. The value of this property is a concatenation of subinventory, locator, and item names for non-serialized inventory types.

Sometimes, you may not need to sync all the inventory organizations or subinventories to Oracle Fusion Field Service. For example, you can keep an organization or subinventory for storing returned items. Items from this organization or subinventory may not be required in the resource pool in Oracle Fusion Field Service. You can configure the organizations and subinventories to be synced with Oracle Fusion Field Service as part of the accelerator setup configuration, as shown in [ORCL-BRT-INV-OFS-CONFIG Lookup](#) topic.

Oracle Fusion Inventory items to Oracle Field Service Inventory Items Field Mapping

| Inventory Data Model Field | Description | Oracle Field Service Field | Field Type | Description | Mandatory |
|--|--------------------------------|----------------------------|------------|--|-----------|
| Inventory Organization | code of Inventory organization | Resource id | String | ID of the parent bucket where the Inventory organization is mapped | M |
| - | - | Inventory Type | Enum | Type of Inventory to store in Oracle Fusion Field Service "part" - For non-serialised Inventory "part_sn" - For serialised inventory | M |
| On-Hand item SerialNumber | | Serial number | string | Serial number in case of a serialised inventory | O |
| On-Hand item ItemNumber | | Part Item Number | string | Unique number for the part item | M |
| On-Hand item ItemNumber | | Part Item Desc | string | Name / Description of the part item | O |
| On-Hand item Revision | | Part Item Revision | string | Revision of the inventory item, if present | O |
| concat (On-Hand item ItemNumber, On-Hand item Revision) | | part_item_number_rev | string | Unique number for the part item concatenated with the revision | O |

| Inventory Data Model Field | Description | Oracle Field Service Field | Field Type | Description | Mandatory |
|--|-------------|----------------------------|------------|--|-----------|
| concat (subinventory, locator, part_item_number_rev) | | inventory_identifier | string | Used as the unique identifier when syncing inventory items to inventory org in Oracle Fusion Field Service | M |
| PrimaryUOMCode | | part_uom_code | string | UOM Code associated with the part item coming from Inventory management | M |
| PrimaryQuantity | | quantity | number | | M |
| Locator | | mwo_locator | string | Locator from which the inventory item is obtained | M |
| SubInventory | | mwo_inventory_subInv | string | Subinventory from which the inventory item is obtained | M |

Inventory Management Using Warehouse

Oracle Fusion Field Service supports warehouse functionality to store inventory. For more information, refer *Inventory Management with and without a Warehouse*.

To use this feature as part of the accelerator, ensure the following steps are followed:

- Create a warehouse resource in Oracle Fusion Field Service.
- Map the ORCL-BRT-INV-TYPE-MAPPING with the Fusion inventory organization/sub-inventory to the Oracle Fusion Field Service warehouse resource where you want to sync the inventory items.

Once these setup configurations are in place, accelerator will update the inventory from the corresponding inventory org or sub-inventory to the warehouse resource configured in the mapping table.

Inventory Reservation in Fusion

When a field resource performs an installation or de-installation as part of an activity, the Accelerator triggers the inventory reservation process. If a field resource installs an item, the corresponding quantities in Fusion Inventory Management will be updated for reservation. Similarly, when an item is de-installed, the corresponding quantities in the

Fusion Inventory will be unreserved. This helps maintain consistency between the available quantities for transactions in the back office and the mobile worker.

Inventory Update Flow

Within this integration flow, the initial process involves the accelerator retrieving all inventory items that have changed within the last 2 days. These updated inventory items are then synchronized with OrganizationID, SubinventoryCode, Locator, Item, and Serial Numbers in Oracle Fusion Field Service.

During subsequent executions of this integration, the accelerator ensures to retrieve only the changes made since the last update (based on the time of the last synchronization run). For comprehensive information regarding the field-level mapping details within this integration, refer to the section: *Oracle Fusion Inventory items to Oracle Field Service Inventory Items Field Mapping*.

2 Enable the Accelerator

Oracle Integration Configuration

The new version of the business accelerator is available as the Oracle Integration Project. For more information, refer *Design and Monitor Integrations in Projects*.

Install the Accelerator

An accelerator provides an end-to-end business process or use case (for example, marketing to lead, hire to retire, or concept to launch). Installing an accelerator is an integration that you can configure and activate quickly.

To install the accelerator

1. Log in to **Oracle Integration**.
2. Search for the Oracle Inventory Management Accelerator for Oracle Fusion Field Service.
3. Click **Install**.

For more information, refer to *Find Recipes and Accelerators*.

Prerequisites for the Accelerator

Make sure the following prerequisites are met before you configure the accelerator.

1. Make sure inventory organization / sub-inventory / inventory locator configurations are present in Oracle Inventory Fusion Management as per your business requirement.
2. Make sure item quantity is present as "On Hand Available to Transact" in Oracle Inventory Fusion Management.

Set Up the Oracle Inventory Management Accelerator for Oracle Fusion Field Service

This topic shows you how you can set up the Oracle Inventory Management accelerator for Oracle Fusion Field Service.

Step 1 - Create Applications in Oracle Fusion Field Service

To establish a connection between Oracle Fusion Field Service and OIC, the you must create these applications in Oracle Fusion Field Service.

1. OIC application with details about the OIC endpoint.

The screenshot shows the 'Add Application' form in the Oracle Fusion Field Service interface. The form is titled 'Add Application' and has a sub-header 'Applications'. The 'Application Type' is set to 'Oracle Integration'. Below this, there is a description: 'You can integrate with Oracle Integration platform to create integrations with cloud and on-premise applications.' The form contains five required fields: 'Application Name', 'OIC Host', 'User Name', 'IDCS URL', and 'Client ID'. Each field has a 'Required' label next to it. The 'OIC Host' field has a description: 'Host name of your Oracle Integration instance. Sample format: 'servername.oraclecloud.com''. The 'IDCS URL' field has a description: 'Base URL of Oracle Identity Cloud Service Admin console. Must have the format 'https://servername.oraclecloud.com''. The 'Client ID' field has a description: 'Client ID of the Client application that you have created in IDCS'.

↑ Applications

Add Application

Application Type
Oracle Integration

You can integrate with Oracle Integration platform to create integrations with cloud and on-premise applications.

Application Name
Required

OIC Host
Required
Host name of your Oracle Integration instance
Sample format: 'servername.oraclecloud.com'

User Name
Required

IDCS URL
Required
Base URL of Oracle Identity Cloud Service Admin console
Must have the format 'https://servername.oraclecloud.com'

Client ID
Required
Client ID of the Client application that you have created in IDCS

2. REST/SOAP API application which would be used on OIC to send data from OIC to Oracle Fusion Field Service. Make sure these Oracle Fusion Field Service APIs are configured with appropriate access privileges.

Applications

Add Application

Application Type
Applications using REST/SOAP API

You can consume Oracle Field Service REST/SOAP APIs by adding a new application.

Application Name
Required

Application ID
Required

Dismiss Add

Oracle Fusion Field Service API Roles and Permissions

You must set required permissions in the Oracle Fusion Field Service Core Rest API and Metadata Rest API.

For the Core REST API for this application, configure the following methods:

- o Business Events - Read-Write
- o Inventory - Read-Write
- o Resource - Read-Write

For the Metadata REST API, configure the following methods:

- o Properties - Read-Write
- o Inventory Types - Read Only

Step 2 - Fusion API User Duty Roles, Privileges, and Data Security

Create Oracle Fusion user account

Create a user account with the following duty roles and data security policies:

Duty Roles

You must configure the duty roles in Fusion API as mentioned in the following table:

| Duty Role | Description |
|------------------------------------|--|
| Maintenance Management Web Service | Provides service access to maintenance asset management and work execution using the REST services. |
| Inventory Administration | Configures all setup-related activities for inventory management. |
| Inventory Transaction Management | Manages inventory transactions. Tasks include managing reservations and picks, editing pending transactions, and submitting transaction-related processes. |
| Inventory Management Web Service | Provides web service access to inventory management to perform activities such as creating inventory transactions, recording cycle counts, and performing pick transactions. |
| Supply Chain Common Web Service | Provides web service access to supply chain common to perform activities such as viewing inventory organizations, plant parameters, carriers, and units of measure list of values. |
| SOA operator Role | The SOA operator role. |

Data Security Policies

You must configure the Data Security Policies as given in this table.

| Business Object | Policy Description | Policy Store Implementation |
|------------------------|--|---|
| Installed Base Asset | A Maintenance Manager can manage installed base asset for all installed base assets. | Privilege: Manage Installed Base Asset; Read; Update Resource: Installed Base Asset |
| Manufacturing Plant | A Manufacturing Engineer can manage the manufacturing plant for the manufacturing plants in which they can operate. | Privilege: Manage Production Resource; Manage Standard Operation; Manage Work Center; Manage Work Order; Manage Work Order Material Transaction; Manage Work Order Resource Transaction; Manage Work Order Operation Transaction; Resource: Manufacturing Plant |
| Inventory Organization | An Inventory Manager can manage item and inventory organization parameter for the inventory organizations in which they can operate. | Privilege: Manage Maintenance Organization; Manage Inventory Transfer Order; Manage Inventory Reservation; Manage Inventory Transaction; Manage Item Locator; |

Navigate to **Setup and Maintenance > Manage Inventory Organization Data Access for Users** to give access to the Maintenance Organization for users with the roles mentioned earlier.

ORACLE

Step 3 - Configure Accelerator Connections

Make sure these accelerator connections are configured in Oracle Integration.

1. **Oracle OFS REST Connection** - Enter the details from Oracle Fusion Field Service application that you have created.

The screenshot shows the 'Oracle OFS REST Connection' configuration page. At the top, there is a header bar with a back arrow, the title 'Oracle OFS REST Connection', and a menu icon. Below the header, there is a table with columns: Role, Identifier, Updated on, Used in, Share with other projects, and Project. The table contains one row with the following values: 'Trigger and invoke', 'ORCL-BRT-INV_OFS_REST_CONN', '2 Jul 2024, 04:49:35 PM IST', '7 integrations', 'Off', and 'Oracle Inventory - Field Service Sync'. Below the table, there is a section titled 'Configure a connection'. Under 'Properties', there is a 'Connection Type' dropdown menu set to 'REST API Base URL' and a 'Connection URL' text field containing a long URL. Below this, there is a section titled 'Optional properties'. Under 'Security', there is a 'Security policy' dropdown menu set to 'Basic Authentication', a 'Username' text field containing a long string, and a 'Password' text field with a masked password and a toggle icon.

2. **Oracle OFS Adapter Connection** - Enter the details from Oracle Fusion Field Service application that you created earlier.

The screenshot shows the 'Oracle OFS Adapter Connection' configuration page. At the top, there is a header bar with a back arrow, the title 'Oracle OFS Adapter Connection', and a menu icon. Below the header, there is a table with columns: Role, Identifier, Updated on, Used in, Share with other projects, and Project. The table contains one row with the following values: 'Trigger and invoke', 'ORCL-BRT-INV_OFS_ADAPT_CONN', '2 Jul 2024, 04:51:55 PM IST', '8 integrations', 'Off', and 'Oracle Inventory - Field Service Sync'. Below the table, there is a section titled 'Configure a connection'. Under 'Properties', there is a 'Field Service Cloud API URL' text field containing a long URL and an 'Instance ID' text field containing a long string. Below this, there is a section titled 'Security'. Under 'Security policy', there is a dropdown menu set to 'Client Credentials'. Below this, there is a 'Client Id' text field containing a long string and a 'Client Secret' text field with a masked password and a toggle icon.

- 3. Oracle Fusion Inventory REST Connection** - Enter the details from Oracle Fusion that were created in Create Fusion user account.

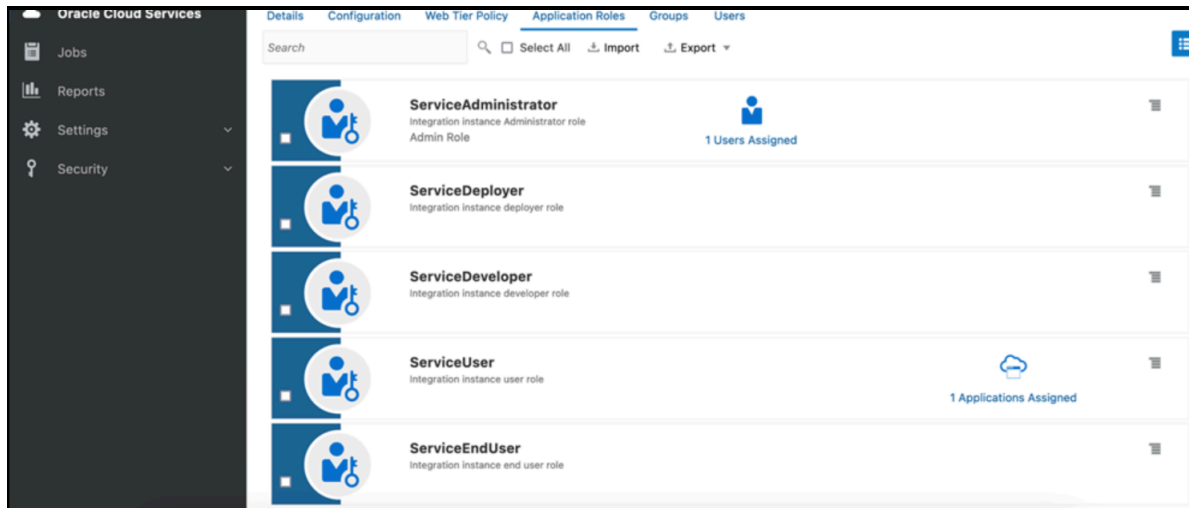
The screenshot shows the 'Oracle Fusion Inventory REST Connection' configuration page. At the top, there is a header bar with a back arrow, the title, and a menu icon. Below the header, a table lists connection details: Role (Trigger and invoke), Identifier (ORCL-BRT-INV_REST_CONN), Updated on (2 Jul 2024, 04:46:41 PM IST), Used in (6 integrations), Share with other projects (Off), and Project (Oracle Inventory - Field Service Sync). The main content area is titled 'Configure a connection' and contains two sections: 'Properties' and 'Security'. The 'Properties' section has a 'Connection Type' dropdown set to 'REST API Base URL' and a 'Connection URL' text field containing a placeholder URL. The 'Security' section has a 'Security policy' dropdown set to 'Basic Authentication', a 'Username' text field, and a 'Password' text field with a toggle icon.

- 4. Oracle Fusion Inventory Adapter Connection** - Enter the details from Oracle Fusion that were created in Create Fusion user account.

The screenshot shows the 'Oracle Fusion Inventory Adapter Connection' configuration page. At the top, there is a header bar with a back arrow, the title, and a menu icon. Below the header, a table lists connection details: Role (Trigger and invoke), Identifier (ORCL-BRT-INV-ADAPTER_CONN), Updated on (2 Jul 2024, 04:50:36 PM IST), Used in (6 integrations), Share with other projects (Off), and Project (Oracle Inventory - Field Service Sync). The main content area is titled 'Configure a connection' and contains two sections: 'Properties' and 'Security'. The 'Properties' section has an 'ERP Cloud Host' text field containing a placeholder URL. The 'Security' section has a 'Security policy' dropdown set to 'Username Password Token', a 'Username' text field, and a 'Password' text field with a toggle icon. Below the 'Security' section, there is an 'Access type' section.

- 5. Oracle Inventory OAuth REST Connection** - Enter the IDCS credentials of the OIC instance where this accelerator has been installed.

For more information about the steps to configure a trusted application in IDCS, click [here](#).
 Assign this Application Role to get the write access to the OIC Factory API:



Step 4 - Create Resource Types in Oracle Fusion Field Service

Make sure to create these resource roles within Oracle Fusion Field Service:

- 1. Vehicle:** This resource type is used to store inventory items from the Oracle Fusion Inventory Management system.
- 2. Bucket:** This resource type is used to map the Inventory Organization bucket in Oracle Fusion Field Service.
- 3. Warehouse:** This resource type is used to map the Inventory Organization Warehouse in Oracle Fusion Field Service.

Note: You can skip this step if the above-mentioned resource roles are already available in Oracle Fusion Field Service.

Step 5 - Configure Parent Resource in Oracle Fusion Field Service

1. Create a parent resource in Oracle Fusion Field Service that will encompass all other resources.

Note: You can skip this step if the parent resource is already available in Oracle Fusion Field Service.

2. Configure the External ID of the resource in the Oracle Integration lookup ORCL-BRT-INV-OFS-CONFIG → ParentResourceId. Based on this configuration, the accelerator will sync the values into Oracle Fusion Field Service.









The accelerator will then sync:

1. Inventory Organization as a bucket under this parent resource.
2. Inventory Organization/Sub-inventory as vehicles or buckets under the created Inventory Organization resources based on the configuration in *ORCL-BRT-INV-TYPE-MAPPING Lookup*.

Step 6 - Create Properties Used by Integration

1. Activate the **Oracle Inventory OFS Property Create Helper** and run the **Oracle Inventory OFS Property Setup** integration. The properties listed in *ORCL-BRT-PROPERTY-MAPPING* will be automatically installed in Oracle Fusion Field Service.

2. Unit of Measure values needs to be configured in the enumeration property **part_uom_code** under inventory entity in Oracle Fusion Field Service.

| Enumeration values | | | |
|---|---|--|---|
| | | | Add |
| Index  | Value  | Status  | Actions |
| Ea | Ea | Active |  |
| ea | ea | Active |  |
| in | in | Active |  |
| m | m | Active |  |
| zzu | ea | Active |  |

3. After the Field Service properties get created, the **mwo_inv_sync_orgs** custom property needs to be enabled in the **Configuration → User Types → Administrator role → Edit Resource** page of the administrator user.

The screenshot shows the 'Edit Resource/User' page for a 'Privileged Administrator'. The page has a sidebar on the left with a 'Back' button and a search bar. The sidebar contains a 'New element' section with a search bar and a list of properties. The main area displays a grid of property configuration boxes. The 'Inventory Organisations' property is highlighted with a blue border.

| Property Name | Value |
|----------------------------|-------|
| Organization | |
| Time format | |
| Date format | |
| Long Date Format | |
| Message Language | |
| Time zone | |
| User Type | |
| MNT Instance resource code | |
| Resource Instance Id | |
| Work Order Organisations | |
| Resource Organisations | |
| Inventory Organisations | |

4. The administrator needs to configure the Fusion inventory organizations in the property that needs to be filtered for syncing with Oracle Fusion Field Service. Customers can use this property to filter the inventory

organizations by configuring the organization code(s) that must be synced with Oracle Fusion Field Service, e.g., M001, M122.

↑ Sunrise Organization
Edit Resource

Time zone
Eastern

Work Order Organisations
M001, M121, 10023

Resource Organisations
All

Inventory Organisations
10023

Note: You can either provide a specific organization code, a comma-separated list of organization codes, or use "All" to synchronize data across all organizations. An empty value in this field will result in no data being synchronized.

Step 7 - Configure the Lookups for the Accelerator

Lookups help you map similar entities of and Oracle Fusion Inventory Management Cloud that have different values. You can configure these lookup tables according to your business needs and run them in Oracle Integration.

1. ORCL-BRT-INV-OFS-CONFIG Lookup

The ORCL-BRT-INV-OFS-CONFIG lookup contains the metadata used by the integration. This lookup must be configured for the integration to function properly. Since all the lookup configurations come with default values, make sure you have configured appropriate values as per the business requirements for the lookups mentioned below:

| Name | Description |
|-----------------------------|--|
| ParentResourceId | The external ID of the parent resource in Oracle Fusion Field Service (Created in Configure Parent Resource in Oracle Fusion Field Service). |
| BucketResourceType | The resource type of buckets. It is used for resource, Inventory Organization creation. |
| ReservationSupplySourceType | Value of SupplySourceType of the inventory reservation. This value should be "On hand". |
| SupplyInventoryDelimiter | Delimiter used in the required inventory model. |

OICInstanceName

This field is required to get the instance details to invoke the OIC factory API. You can get this value from **About > Service Instance**.

2. Business Unit of the Inventory Organizations must be configured in *ORCL-BRT-INV-TYPE-MAPPING* lookup.

You can configure *other lookup tables* according to your business needs.

To configure lookups:

1. Sign in to **Oracle Integration**.
2. On the Home page, click **Integrations > Lookups**.
3. Click the name of the lookup that you want to configure and click the '+' icon to add more values. These lookups are available in the accelerator.

Step 8 -Activate and Run the Integrations

1. Run the **Oracle Inventory OFS Bulk Sync** integration. This integration is responsible for syncing the inventory organizations and the associated inventory items from Oracle Fusion Inventory Management Cloud to Oracle Fusion Field Service.
2. Run the **Oracle Inventory OFS Incremental Sync** integration. This integration is responsible for syncing only the incremental inventory items from Oracle Fusion Inventory Management Cloud to Oracle Fusion Field Service. This can also be run at a scheduled short interval of time(> 10 mins recommended by OIC).

3 API Mappings

Inventory Sync to Oracle Fusion Field Service: Real-Time Available Information Sync

| Sl. No. | URL | Query Params or Payload | Fields Used from API | Integrations Using this API |
|---------|---|---|---|--|
| 1 | <i>Get all organizations</i> | limit=1000 | OrganizationId, OrganizationCode, OrganizationName, ManagementBusinessUnitName | Oracle Maintenance OFS Inventory Sync |
| 2 | <i>Get all subinventories</i> | onlyData=true& limit=1000& expand=itemSubinventories,locators& q=OrganizationCode={OrganizationCode} | SubinventoryGroup, SecondaryInventoryName, locators | Oracle Maintenance OFS Inventory Sync |
| 3 | <i>Get all inventory balances</i> | onlyData=true& limit=1000& q=OrganizationCode={OrganizationCode}& SubinventoryCode={SubinventoryCode}& expand=serials | ItemNumber, Revision, Locator, PrimaryQuantity, Serials | Oracle Maintenance OFS Inventory Sync Helper |
| 4 | <i>Inventory Available Quantity Details</i> | { "OrganizationCode": {OrganizationCode}, "ItemNumber": {ItemNumber}, "Subinventory": {SubinventoryCode}} | AvailableToTransact | Oracle Maintenance OFS Inventory Sync Helper |

| | | | | |
|----|---|--|--|--|
| | | {Subinventory}, "Locator": {Locator} } | | |
| 5 | <i>Get Inventory Serial Numbers</i> | onlyData=true& q=OrganizationId={Organiza Reserved=No;UsageCode=3; ItemNumber={ItemNumber}; SubinventoryCode={Subinve | SerialNumber | Oracle Maintenance OFS Inventory Sync Helper |
| 6 | <i>Get Work Order Operation Materials</i> | | <i>MaterialSequenceNumber,</i> <i>Quantity,</i> <i>WoOperationMaterialId</i> | Oracle OFS Maintenance Inventory Reserve Helper |
| 7 | <i>Create Operation materials</i> | <pre>{ "MaterialSequenceN 30, "InventoryItemNumber "Gasket Set", "Quantity": 1, "UnitOfMeasure": "Each", "SupplyType": "1", "RequiredDate": "2017-08-08T00:00:00</pre> | | Oracle OFS Maintenance Inventory Reserve Helper |
| 8 | <i>Update Operation Materials</i> | <pre>{ "RequiredQuantity" 1 }</pre> | | Oracle OFS Maintenance Inventory Reserve Helper |
| 9 | <i>Get all reservations</i> | q=OrganizationCode={ORGA CODE};DemandSourceType= order';SupplySourceType='O hand';ItemNumber={ITEM_ NUMBER}&expand=all | | Oracle OFS Maintenance Inventory Reserve Helper |
| 10 | <i>Delete one reservation</i> | | | Oracle OFS Maintenance Inventory Reserve Helper |

| | | | |
|----|-----------------------|---|--|
| 11 | Create a reservations | <pre>{ "OrganizationCode" "M001", "ItemNumber": "Axis Cable", "DemandSourceType": "Work order", "DemandSourceHeaderN "MNT1WO-1902", "DemandSourceLineId" "300000259262849", "SupplySourceType": "On hand", "SubinventoryCode": "LocSubInv", "Locator": "Aisle...", "ReservationQuantity "1", "ReservationUOMCode" "zzu" }</pre> | Oracle OFS Maintenance Inventory Reserve Helper |
|----|-----------------------|---|--|

4 Integrations and Lookups

Integrations

| Integration Name | Integration Identifier | Parent Integration | Description |
|--|----------------------------------|--|--|
| Oracle Inventory OFS Bulk Sync | ORCL-BA-INV_OFS_BULK_SYNC | | <p>Scheduled <i>integration to sync Inventory Items in Bulk from Maintenance Cloud to Oracle Fusion Field Service.</i></p> <p>Note: This is a mandatory pre-requisite to set up and sync all the existing items from Fusion inventory to Oracle Fusion Field Service. Make sure this integration runs before any inventory-related integrations are executed.</p> |
| Oracle Inventory OFS Resource Helper | ORCL-BRT-INV_OFS_RES_HLPR | Oracle Inventory OFS Bulk Sync | Helper integration that would help to create Resource associated with inventory in Oracle Fusion Field Service and assign the appropriate properties |
| Oracle Inventory OFS Create Resource Helper | ORCL-BA-INV_OFS_CREATE_RES_HLPR | Oracle Inventory OFS Resource Helper | This is a helper integration which is used to create Inventory resources like Org/Sub-inventory/Warehouse bucket in Oracle Fusion Field Service. |
| Oracle Inventory OFS Inventories Sync Helper | ORCL-BRT-INV_OFS_INV_SYNC_HELPER | Oracle Inventory OFS Bulk Sync | Helper integration that would sync inventory items from a given subinventory to a resource in Oracle Fusion Field Service |
| Oracle Inventory OFS Item Helper | ORCL-BA-INV_OFS_ITEM_HLPR | Oracle Inventory OFS Inventories Sync Helper | This is a helper integration to get the details of an inventory item from Oracle Fusion Inventory Management. |
| Oracle Inventory OFS Incremental Sync | ORCL-BA-INV_OFS_INCR_SYNC | | Scheduled Integration that iterates over inventory orgs, and triggers incremental sync based on completed transactions. |

| | | | |
|--|----------------------------------|--|---|
| Oracle OFS Inventory Resource Trigger | ORCL-BA-OFS_INV_RES_TRIG | | This is App driven integration which gets triggered when a technician installs an inventory item in Oracle Fusion Field Service. |
| Oracle OFS Inventory Install Helper | ORCL-BA-OFS_INV_INST_HELPER | Oracle OFS Inventory Resource Trigger Oracle OFS Inventory Activity Trigger | This is a helper integration which has the inventory installation/ reservation flow. |
| Oracle OFS Inventory List Helper | ORCL-BA-OFS_INV_LIST_HELPER | Oracle OFS Inventory Install Helper | Helper Integration which would return all the inventory items associated with an operation when an activity associated with the operation is provided |
| Oracle OFS Inventory Reserve Helper | ORCL-BA-OFS_INV_RESERV_HLPR | Oracle OFS Inventory Install Helper | Helper integration to create inventory reservation in Oracle Maintenance cloud. |
| Oracle OFS Inventory Activity Trigger | ORCL-BA-OFS_INV_ACTY_TRIG | | This is App driven integration which gets triggered when a technician installs an inventory item in Oracle Fusion Field Service. |
| Oracle Inventory OFS Property Setup | ORCL-BRT-INV_OFS_PROP_SETUP | | Property SetUp integration to create all required properties for Inventory Integrations. |
| Oracle Inventory OFS Property Create Helper | ORCL-BRT-INV_OFS_PROP_CREAT_HLPR | Oracle Inventory OFS Property Setup | Helper Integration that would create a property in Oracle Fusion Field Service if it doesn't already exist. |
| Oracle Inventory OFS Serialized Items Helper | ORCL-BA-INV_OFS_SERIAL_ITEMS_HLP | Oracle Inventory OFS Incremental Sync | Helper integration that helps to sync the completed serialized transaction from inventory management to Oracle Fusion Field Service. |
| Oracle Inventory OFS Non-Serialized Items Helper | ORCL-BA-INV_OFS_NONSER_ITEMS_HLP | Oracle Inventory OFS Incremental Sync | Helper integration that helps to sync the completed Non-serialized transaction from inventory management to Oracle Fusion Field Service. |

Integration Properties

| S.No | Integrations | Property Name | Default Value | Remarks |
|------|-------------------------------------|-----------------|---------------|--|
| 1 | Oracle OFS Inventory Reserve Helper | totalRetryCount | 3 | Retry configuration added to handle concurrent update issue with Fusion API. |

Lookups

Number of Lookups are available in Oracle Fusion Inventory Management Accelerator for Oracle Field Service. These Lookups help you map similar entities of Oracle Field Service and Oracle Fusion Inventory Management Cloud that have different values.

ORCL-BRT-INV-OFS-INV-DFF-FIELD_MAPPING

This integration is used to map DFF Fields of Inventory Items in Inventory Management against Oracle Fusion Field Service custom properties in Oracle Fusion Field Service.

- ITEM_FLEX_CONTEXT:** This value represents, for which context will the current ITEM_FIELD_NAME be active.
- ITEM_FIELD_NAME:** This value represents the API Name of the flex field segment of Item in Inventory Management.
- INVENTORY_PROPERTY_LABEL:** This value represents the property label associated with the DFF field in Oracle Fusion Field Service.

Sample Mapping:

ORACLE Integration

ORCL-BRT-MNT-OFS-INV-DFF-FIELD_MAPPING

Lookup

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Create a lookup to associate the different values used by your applications. When you create an integration, you can use this lookup to auto-map these values.

| | ITEM_FLEX_CONTEXT | ITEM_FIELD_NAME | INVENTORY_PROPERTY_LABEL | |
|--|-------------------|-----------------|--------------------------|--|
| | ___GLOBAL___ | vmrcode | vmrcode | |
| | ___FLEX_Context | (Add a Value) | Item Type | |
| | Item Type | code | Item Type Code | |
| | Item Type | value | Item Type Value | |

| ITEM_FLEX_CONTEXT | ITEM_FIELD_NAME | INVENTORY_PROPERTY_LABEL |
|-------------------|-----------------|--------------------------|
| visionCategory1 | vision_field1 | vision_field1 |

ORCL-BRT-INV-OFS-INV-FIELD_MAPPING

Any other Inventory fields which is not mapped by default in the accelerator (INV Type, Inventory Identifier, Inventory Organisation, Subinventory, Serial Number, Locator, Inventory source, part Item, Part Item Description, Quantity) can be mapped using this lookup with Oracle Fusion Field Service properties.

1. **ITEM_FIELD_NAME:** This value represents the API Name of the standard field of Inventory item
2. **INVENTORY_PROPERTY_LABEL :** This value represents the Inventory property label associated with the DFF field in Oracle Fusion Field Service.

Sample Mapping:

| ITEM_FIELD_NAME | INVENTORY_PROPERTY_LABEL |
|----------------------|--------------------------|
| Itemid | InventoryItemid |
| ForecastControlValue | ForecastControlValue |
| LifecyclePhaseValue | LifecyclePhaseValue |

| ITEM_FIELD_NAME | INVENTORY_PROPERTY_LABEL |
|-----------------|--------------------------|
| vision_itemcode | vision_itemcode |

ORCL-BRT-INV-OFS-INV-GLOBAL-DFF-FIELD_MAPPING

This integration is used to map Global DFF Fields of Inventory Items in MNT against inventory custom properties in Oracle Fusion Field Service.

1. **ITEM_FLEX_CONTEXT:** "__GLOBAL__" value to be set for all the Global context fields.
2. **ITEM_FIELD_NAME:** This value represents the API Name of the flex field segment of Item in Inventory Management.

3. **INVENTORY_PROPERTY_LABEL:** This value represents the property label associated with the DFF field in Oracle Fusion Field Service.

Sample Mapping:

| ITEM_FLEX_CONTEXT | ITEM_FIELD_NAME | INVENTORY_PROPERTY_LABEL |
|-------------------|----------------------|--------------------------|
| __GLOBAL__ | global_vision_field1 | vision_inv_field1 |

ORCL-BRT-INV-OFS-CONFIG Lookup

The ORCL-BRT-MNT-OFS-CONFIG lookup contains the metadata used by the integration. This lookup must be configured for the integration to function properly. Since all the lookup configurations come with default values, make sure you have configured appropriate values as per the business requirements for the lookups mentioned below:

| Name | Description |
|-----------------------------|--|
| ParentResourceId | The external ID of the parent resource in Oracle Fusion Field Service (Created in Configure Parent Resource in Oracle Fusion Field Service) |
| BucketResourceType | The resource type of buckets. It is used for resource, Inventory Organization creation |
| ReservationSupplySourceType | Value of SupplySourceType of the inventory reservation. This value should be "On hand" |
| SupplyInventoryDelimiter | Delimiter used in the required inventory model |
| OICInstanceName | This field is required to get the instance details to invoke the OIC factory API. You can get this value from About > Service Instance . |

ORCL-BRT-INV-TYPE-MAPPING Lookup

Lookup Name: ORCL-BRT-INV-TYPE-MAPPING

Default Values:

- List of business units to be tracked as part of the integration
- Subinventory groups and whether they must be tracked, or if they're to be treated as trucks for road call scenarios

Sample Mapping:

| MAINTENANCE_ENTITY_NAME ▼ | MAINTENANCE_ENTITY_TYPE ▼ | OFS_RESOURCE_TYPE ▼ |
|--|--|---------------------|
| <<Replace with Business Unit or SubInventory Group Name> | <<Replace with Business Unit or SubInventory Group>> | |
| US1 Business Unit | BUSINESS_UNIT | WH01 |
| Group1 | SUBINVENTORY_GROUP | WH01 |

This mapping table provides an option to configure the name of the business unit under which the organization is defined in Oracle Fusion Inventory Management, or the name of the inventory group that's used to group the sub inventories in Oracle Fusion Inventory Management and map that to the Oracle Fusion Field Service resource type (Truck, Warehouse or Bucket).

| Maintenance_Entity_Name | Maintenance_Entity_Type | OFS_Resource_Type |
|-------------------------|-------------------------|-------------------|
| Business Unit (US1) | BUSINESS_UNIT | Truck |
| SRVTruck | SUBINVENTORY_GROUP | Truck |

Note:

- Maintenance_Entity_Name is the name of the business unit or subinventory group.
- Maintenance_Entity_Type is the type of entity (business unit or subinventory group). Maintenance_Entity Type must be either a SUBINVENTORY_GROUP or BUSINESS_UNIT (be sure the values provided are in all uppercase, separated by underscores).

OFS_Resource_Type represents the type of resource to be created in Oracle Fusion Field Service.

This mapping table provides an option to configure the name of the business unit under which the organization is defined in Oracle Maintenance, or the name of the inventory group that's used to group the subinventories in Oracle Inventory Management and map that to the Oracle Fusion Field Service resource type (Truck, Warehouse or Bucket).

- To sync inventories from specific inventory organizations, you can configure the mapping table with business units under which this inventory organization is configured and map that to the Oracle Fusion Field Service resource type. The accelerator gets the inventory organization under the business unit and creates a resource of the type defined (Truck, Warehouse or Bucket) in Oracle Fusion Field Service.
- To sync quantities from specific subinventories alone, you can configure the mapping table with the subinventory group name and the resource type. The accelerator gets the subinventories that are under the subinventory group and creates the corresponding resources of the type defined (Truck or Bucket) in Oracle Fusion Field Service.

ORCL-BRT-INV-OFS-SUBINT-VERSION

This lookup is to map different major versions between the parent and child integrations.

For example: If the parent integration is 1.0.0 and if it wants to connect to the child integration of version 2.1.0, you can define the child integration identifier name in the first column and the corresponding version of the integration required. By default the parent will connect to the same major version child integration. If that is the expected behavior, the lookup can be left blank.

| INTEGRATION_IDENTIFIER | VERSION |
|----------------------------------|---------|
| ORCL-BRT-INV-OFS_PROP_CREAT_HLPR | 2.1.0 |

ORCL-BRT-PROPERTY-MAPPING

The ORCL-BRT-PROPERTY-MAPPING lookup contains the properties used by the integration.

| Property Label | Name | Entity | GUI | Type |
|--------------------------|---|-----------|----------|-------------|
| mwo_subinventory | SubInventory | inventory | text | string |
| mwo_inventory_subInv | Inventory Source | inventory | text | string |
| mwo_locator | Locator | inventory | text | string |
| part_item_number_rev | item number with revision | inventory | text | string |
| mwo_inventory_org | Inventory Organisation | inventory | text | string |
| inventory_identifier | Inventory Identifier | inventory | text | string |
| part_item_number | Item Number | inventory | text | string |
| part_item_rev_serial_num | Item Number with Revision and Serial Number | inventory | text | string |
| part_item_revision | Revision | inventory | text | string |
| part_uom_code | UOM Code | inventory | combobox | enumeration |
| part_item_desc | Part Item Description | inventory | text | string |

Libraries

- Oracle Inventory OFS Common
- Oracle Maintenance Split String
- Oracle Inventory DFF Sync Helpers
- Oracle Inventory OFS Serial Item Helper
- Oracle OFS Inventory Helpers

Revision History

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

| Date | What's Changed | Notes |
|--------------|-----------------|-------|
| January 2025 | Initial Release | |

