

# Oracle Fusion Field Service

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**Oracle Maintenance 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.

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# 1 Overview and Use Cases

## What is Oracle Maintenance Accelerator for Oracle Fusion Field Service?

Oracle Maintenance accelerator for Oracle Fusion Field Service seamlessly integrates these business flows:

- Work order - Activity data flow
- Activity - Work order data flow
- Master data synchronization from Oracle Maintenance to Oracle Fusion Field Service
- Asset meter reading
- Creation of warehouse resource as a preferred resource in Oracle Fusion Field Service

The accelerator is a ready-to-use solution that streamlines scheduling and processing asset maintenance work. It is designed to cater to service models involving preventive, predictive, corrective, and urgent work in both field and depot repair scenarios. Oracle Fusion Field Service schedules and assigns these activities to the most suitable mobile resources through automated routing plans and optimization strategies. Mobile resources also get instant access to all the required activity details, allowing them to execute their work precisely, as defined by your company's business rules.

Resources use the same application to handle the asset execution work, including part installations, all while accurately tracking resource, labor and material consumption. Relevant captured data and work completion statuses are updated in Maintenance Cloud to ensure data accuracy and consistency.

## Use Cases

The Oracle Maintenance Accelerator for Oracle Fusion Field Service supports these use cases:

### Work order - Activity data flow

As part of the work order-activity workflow, the accelerator creates activities in Oracle Fusion Field Service based on the work order definition in Oracle Maintenance. A maintenance work order can contain multiple operations, and each operation can have multiple resources. Based on the operation-resource information, an activity is created in Oracle Fusion Field Service. If the operation is defined without any resource, the activity is created based on the operation-level information. The activities created in Oracle Fusion Field Service is linked to each other based on the operation and resource sequence defined.

### Activity - Work order data flow

Once the activity is scheduled in Oracle Fusion Field Service, the activity start date, end date, time, and mobile worker information is updated in the work order. When an activity is assigned to a mobile worker, the mobile worker can start working on the job and complete it using the Oracle Fusion Field Service mobile app. Upon completion of the activity

in Oracle Fusion Field Service, the accelerator automatically updates the labor hours (activity duration) and inventory items consumed by the mobile worker for the activity back to the work order.

## Master data synchronization from Oracle Maintenance to Oracle Fusion Field Service

The accelerator considers Oracle Maintenance to be the master system for defining all the master data associated with a work order. The accelerator updates the master definitions from Oracle Maintenance to Oracle Fusion Field Service and maps that into these Oracle Fusion Field Service entities:

1. Standard Operations defined in Oracle Maintenance are updated as activity types.
2. Organizations defined in Oracle Maintenance are mapped as resources. The best practice is to create this as the parent bucket.
3. Work centers defined in Oracle Maintenance are mapped as work zones.
4. Resources defined in Oracle Maintenance are mapped as work skills.
5. Resource instances defined in Oracle Maintenance are mapped as mobile workers.

## Asset meter reading

As part of the meter reading data flow, the accelerator gets the latest meter reading from the asset meter configured. This value can be shown in an activity so that mobile workers or dispatchers can see the data and take appropriate actions while working on the activity. Similarly, data updated by Oracle Fusion Field Service users gets updated in the asset meter automatically.

## Support for Warehouse Resources

Oracle Fusion Field Service facilitates the creation and management of warehouse resources, empowering mobile workers to install and uninstall inventory directly from warehouses. The latest version of Oracle Inventory - Field Service Sync accelerator has been updated to include support for warehouse resources. The updated workflows in the accelerator enable the update of inventory items to a warehouse type of resource in Oracle Fusion Field Service from the Oracle Fusion inventory organization or sub-inventory. Previously, inventory items configured in Fusion inventory could only be updated as a bucket or truck resource in Oracle Fusion Field Service. Now, with the recent update, inventory items can be updated as a warehouse resource. Additionally, when a new work order is created in the maintenance organization, Oracle Fusion Field Service - Maintenance Cloud accelerator ensures that the inventory organization or sub-inventory is configured as a preferred warehouse for the activity. When a specific field resource in Oracle Fusion Field Service is assigned this activity, they get access and visibility to the items from this warehouse and can install them directly from this warehouse.

## Resource Information Update

- **[Oracle Field Service only]** The synchronization process from Oracle Maintenance Cloud to Oracle Field Service guarantees that all resource instance including Oracle Human Capital Management employees created as 'resource instances' in Oracle Maintenance Cloud get updated as the field resources in Oracle Field Service.
- The synchronization process from Oracle Maintenance Cloud to Oracle Fusion Field Service guarantees that the work skill and work zones are updated against the Field resources in Oracle Fusion Field Service corresponding to the resource instances from Oracle Maintenance cloud.
- If a work order operation is created without a resource but assigned to a technician with a maintenance resource code mapped (e.g., "Maintenance Tech B"), the work order update flow from Oracle Fusion Field Service to Oracle Maintenance Cloud will update the operation with "maintenance tech B" as the resource.



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- Similarly, if a work order operation is created with a resource ("Maintenance Tech A") but the actual technician present in Oracle Fusion Field Service is mapped with a different maintenance resource code ("Maintenance Tech B"), the work order update flow will update the operation with "Maintenance Tech B" as the resource.



## 2 Feature Description

### Business Benefit

Here are some benefits of the Oracle Maintenance accelerator for Oracle Fusion Field Service:

- Optimizes your asset maintenance operations effectively
- Provides a better usability experience for the maintenance field workforce with the help of the Oracle Fusion Field Service mobile app
- Minimizes setup configurations required to use the workflows

### Work Order - Activity Data Flow

A Maintenance work order includes work definition details, work order operation, and the resource(s) required.

A typical work order definition consists of the following:

- Work order header data: Work order header information contains key attributes such as the status of the work order, details of the asset, work order operations, and items.
- Work order operations: Operations define the sequence of steps to maintain an asset and resource requirements.
- Operation resource: Operation resources define the pool of resources required for the operation; this identifies the skill required for an activity.
- Work order operation items: The items defined as part of an operation are required inventory/material for the activity in Oracle Fusion Field Service.

As part of the data flow, the accelerator reads the work order operation, resource, and item information defined in a work order and then creates an activity in Oracle Fusion Field Service. When you create an activity in Oracle Fusion Field Service, it can be scheduled with the right mobile worker using the routing plans configured in Oracle Fusion Field Service. The work order syncs the schedule information, including the activity start date, end date, and mobile worker information.

### Activity Creation in Oracle Fusion Field Service

Here's how activities are created in when you use the Oracle Maintenance accelerator:

- By default, when the status of a work order changes from unreleased to released, Oracle Fusion Field Service creates an activity. You can configure the look-up configuration 'WOStatusToSyncOFSActivity' in OIC with the appropriate work order statuses that the OIC accelerator could consider for creating the activity.

- In Oracle Maintenance, a maintenance organization creates work orders. Bucket resources in Oracle Fusion Field Service map the maintenance organizations. The system creates activities under the bucket in Oracle Fusion Field Service, corresponding to the maintenance organizations.
- You can configure appropriate routing plans for this bucket to schedule the activities for the right mobile workers.
- Operations defined in a work order map as activities in Oracle Fusion Field Service.
  - Operation items are the required inventory for the activity.
  - A resource and a 'resource instance' defines an operation. A resource in Oracle Maintenance represents the collection of labor users or equipment. An operation's 'resource instance' represents the labor user or equipment required to perform the job. The accelerator treats the resource instance as the 'preferred' resource for the activity.
- A work order might contain multiple operations; the accelerator creates multiple activities within Oracle Fusion Field Service in this case. Oracle Fusion Field Service links these activities by considering the sequence number of work order operations.
- The accelerator considers operation resources as the work skill requirement for an activity in Oracle Fusion Field Service.
- Multiple resources define an operation. The accelerator creates multiple activities in Oracle Fusion Field Service corresponding to each resource associated with the operation. These activities are linked in Oracle Fusion Field Service by considering the resource sequence number and operation sequence number.
  - 'Start Simultaneously' links to activities if the operations have the same sequence number.
  - 'Finish to Start' links to activities if the operations have different sequence numbers. Activities are scheduled one after the other in the ascending order of the operation sequence number.
- The work order operation's start and end dates are an activity's SLA start and end dates.
- When you define an operation without any resource, it creates the activity where the activity type can be used to define the work skill condition necessary to assign the activity to the right mobile worker in [Oracle Fusion Field Service.
- When you define an operation with a resource, it creates the activity with the resource information as the activity property `mwo_resource_code`. This property can then be used to define the work skill condition for assigning the activity to the appropriate mobile worker in Oracle Fusion Field Service.
- Resource-required usage maps the expected duration of the activity.
- Labor resource instances in Oracle Maintenance maps field mobile workers in Oracle Fusion Field Service. If a Labor resource instance defines an operation, the accelerator treats the resource instance as the preferred resource for the activity.
- When an operation item with the required quantity defines an operation, the accelerator creates an activity with the corresponding item quantity as the required inventory for the activity.

## Access Warehouse Items for Activity

Helps you retrieve inventory items from Fusion inventory management and store them in the Oracle Fusion Field Service warehouse. This capability supports both bulk & incremental updates from Fusion inventory management. When a mobile worker is assigned to an activity the inventory organization or sub-inventory configured as the warehouse resource will be added as a preferred resource. This will allow mobile workers to access the inventory and install it directly from the warehouse, this eliminates the need for teamwork between field and truck resources to share inventory. Overall this functionality ensures that inventory is effectively managed between Oracle Fusion inventory

and Oracle Fusion Field Service and proves especially useful for technicians who operate in a specific location where all inventories are available, for instance, the depot repair service.

The Oracle Fusion Field Service - Maintenance Cloud accelerator provide support for warehouse resources.

- When a new work order is created in the maintenance organization, the Oracle Fusion Field Service - Maintenance Cloud accelerator will make sure the inventory organization or sub-inventory is configured as a preferred warehouse for the activity.
- When this activity is assigned to a specific field resource in Oracle Fusion Field Service, the mobile worked will get access to the items from this warehouse and they can install these items from this warehouse.

Name	Value	Description
WareHouseResourceType		Warehouse Resource type label from Oracle Fusion Field Service. Mandatory if PreferredWarehouseEnabled is set to true
setOrgAsPreferredWarehouse		If true, Inventory Organization Warehouse will be assigned as Preferred Warehouse otherwise, the Subinventory warehouse will be assigned
PreferredWarehouseEnabled		If true, Preferred Warehouse feature will be enabled

## Multi-Segment Activity Creation in Oracle Fusion Field Service

You can create operations as multi-segment activities in Oracle Fusion Field Service, if you've configured the standard operation as a multi-segment activity type in the OIC mapping table 'ORCL-BRT-ACT-TYPE-MAPPING'.

**Note:**

- Ensure you've created a parent resource for the Maintenance organization in Oracle Fusion Field Service. The external ID is configured in the lookup 'ORCL-BRT-MNT-OFS-CONFIG' with the variable ParentResourceID. The accelerator creates the organization as a bucket in Oracle Fusion Field Service and maps it under this parent resource ID.
- By default, the system creates activities in the bucket's non-scheduled pool. Once routed, it schedules and assigns the activity to the right mobile worker. A configuration within the accelerator called 'ScheduledActivityEnabled' controls the creation of activities in a non-scheduled pool in Oracle Fusion Field Service. You can create activities in the bucket on a specific date by configuring this field as 'True'.
- When you create a work order with a non-standard operation, or if the "ORCL-BRT-ACT-TYPE-MAPPING" lookup table doesn't define the standard operation, the system creates an activity with a default activity type.
- You must configure these link templates in Oracle Fusion Field Service to create the link between activities:
  - start-after
  - start-together
  - start-before

## Activity - Work Order Data Flow

Here's how the activity schedule information from Oracle Fusion Field Service is updated in Oracle Maintenance using the accelerator.

After you've created the activities, Oracle Fusion Field Service can route the activities to appropriate mobile workers under the maintenance organization bucket with the help of routing. After running the routing plans, activities are scheduled and assigned to the right mobile workers. The accelerator updates the activity schedule information, which includes the activity start time, end time, and resource (mobile worker) to the work order operation.

- Activity start date is updated as the actual start date of the operation resource.
- Activity end date is updated as the actual end date of the operation resource.
- Mobile Worker is updated as Labor resource instance of the work order operation resource.
- When there are multiple resources associated with an operation, the operation's start date is the start date of the first operation resource (based on the sequence number). The end date of the operation is the end date of the last operation resource (based on the sequence number).

- If there's no resource associated with the operation, the activity start date is updated as the actual start date of the operation, and the activity end date is updated as the actual end date of the operation.
- When a resource instance is created in Maintenance Cloud without mapping HCM person ID, accelerator will sync the resource instance as Oracle Fusion Field service resource with labor instance ID as external ID.
- When a resource instance is created in Maintenance Cloud mapped with HCM person ID, accelerator will sync the resource instance as Field service resource with CRM-party ID as the external ID.
- When field service resource information is linked via the Oracle HCM-Oracle Field Service accelerator, the sync from Oracle Maintenance Cloud to Oracle Fusion Field Service ensures that corresponding field resource data is updated with the resource instance ID, preventing any duplication of information.
- The resource integration flow now supports the resource instance update to Oracle Field Service, even when the resource instance is mapped with an HCM Employee in the Oracle Maintenance Cloud.
- The integration will update Field service resource with the maintenance cloud resource instance id as a new resource separate property if the field service resource is created from HCM using partyID as external ID.
- For multi-segment activities:
  - The start date and time of the first segment are mapped as the operation/resource start date and time. Similarly, the end date and time of the last segment are assigned as the operation/resource end date and time.
  - The mobile worker assigned with individual segments is assigned as the resource instance of the work order operation resource. If different mobile workers are assigned to different segments, multiple resource instances are created in Oracle Maintenance against the same resource.
- If the activity was rescheduled or moved manually by a user in Oracle Fusion Field Service, the new start date, end date, and mobile worker information are updated to the work order operations.

### Optimization of Activity to Work Order Data Flow

A new lookup called **EventsForWOUpdate** has been introduced in the accelerator to manage updates to work orders based on various activity events in Field Service. This lookup accepts the following activity event values: activityCreated, activityStarted, activityUpdated, activityMoved, activityNotDone, and activityCanceled. By default, this lookup is empty, and the accelerator updates only the work order during the activity completion event. To receive updates based on other activity events, you can configure the lookup with the appropriate activity events.

For example, if you want to receive work order updates when an activity is created or started (in addition to completion event), you can add activityCreated and activityStarted to the lookup.

Additionally, another lookup called **ActivityMoveConditions** has been introduced to manage activity move scenarios. You can use this lookup to control work order updates for specific activity move conditions. If no value is specified in the lookup, the accelerator allows only bucketToResource and resourceToBucket conditions by default. This lookup accepts the following values:

- bucketToResource
- resourceToResource
- resourceToBucket
- bucketToBucket

For instance, if you want to receive work order updates when an activity is moved from one bucket to another, you can add the bucketToBucket value to the ActivityMoveConditions lookup. For details about supported activity events, see [Activity Events](#).

**Note:** If you are an existing user of the accelerator, ensure these lookups are present in the latest version. If these lookups are not available, the accelerator updates the work order only during the activity completion event.

To configure the events in the accelerator, create the following entries in the **ORCL-BRT-MNT-OFS-CONFIG** lookup and specify the required activity events and move conditions to enable work order updates:

Name	Description
EventsForWOUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityMoved, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated.
ActivityMoveConditions	Enter one or more move conditions, separated by commas. Supported values include, bucketToResource, resourceToBucket, resourceToResource, and bucketToBucket. If no value is specified, only bucketToResource and resourceToBucket will be handled by default.

#### Default behavior:

- The **EventsForWOUpdate** lookup does not contain any values by default. As a result, the accelerator updates the work order only during the activity completion event.
- The **ActivityMoveConditions** lookup also does not contain any values by default. In this case, the accelerator updates the work order only for the **bucketToResource** and **resourceToBucket** move conditions.

#### Optimization of Meter Reading Updates to Activity

Asset meter synchronization update from Maintenance Cloud to Field Service can be controlled using the **EventsForMeterUpdate** lookup. This lookup accepts the following activity event values:

- activityCreated
- activityStarted
- activityUpdated
- activitySuspended

For example, if you want to sync the latest meter readings from Maintenance Cloud only when an activity is created or started, you can update the lookup with the values activityCreated and activityStarted.

To configure the events in the accelerator lookup, create the following entry in the **ORCL-BRT-MNT-OFS-CONFIG** lookup and specify the required activity events to enable the work order updates:

Name	Description
EventsForMeterUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityCreated, and activityUpdated.

By default, meter readings are updated in Field Service as part of the activity creation event if the EventsForMeterUpdate lookup does not contain any values. For more information on supported activity events, see [Activity Events](#).

#### Optimization of Descriptive Flexfield (DFF) Updates to Work Orders



Descriptive Flexfield (DFF) updates from Field Service to Maintenance Cloud occur automatically as part of the activity completion process. If you want to receive DFF updates for other activity events, you can configure the **EventsForDFFUpdate** lookup. This lookup accepts the following activity event values:

- activitySuspended
- activityStarted
- activityNotDone
- activityCanceled
- activityCreated
- activityUpdated

To enable DFF updates for specific activity events, add the corresponding values to the lookup. For example, to receive updates when an activity is started or updated, set the lookup to include activityStarted and activityUpdated. For more information on supported activity events, see [Activity Events](#).

You can receive updates for both Work Order (header, operation, and operation resource levels) and Asset DFFs using this lookup. For more details on supported activity events, see OFSC Activity Events.

To configure the events in the accelerator lookup, create the following entry in the ORCL-BRT-MNT-OFS-CONFIG lookup and specify the required activity events:

Name	Description
EventsForDFFUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated. If the lookup is empty, DFF updates will occur only on the activityCompleted event.

By default, the EventsForDFFUpdate lookup does not contain any values. In this case, the accelerator updates DFF data in Maintenance Cloud only during the activity completion event.

#### Note:

- If multiple resource instances are scheduled as part of Oracle Fusion Field Service routing, but one or more resource instances aren't defined for that resource, then the integration doesn't update any resource instance details in the work order.
- If there is no value configured for this look up accelerator will take the value of the ORCL-BRT-MNT-OFS-CONFIG->SkipWOResInstanceUpdate as **false**. And the resource instance details will get updated into the work order when an activity is assigned to a field resource from Oracle Fusion Field Service.
- If you do not want to update the resource instance to a work order operation, for OIC Gen 2 or package customers, you can configure the flag SkipWOResourceReplace as **True** in the **ORCL-BRT-MNT-OFS-CONFIG** lookup table.

# Processing and Updating the Activity Information to Work Order

When a mobile worker receives an assignment for an activity, they can start working on the activity according to the schedule. Here are the actions that mobile workers or other users can perform on the activity once it is processed and the corresponding changes they can make to the work order:

- **Activity Started:** When the activity starts, the activity status changes from 'pending' to 'started'. The accelerator option allows configuring the work order status to display corresponding to Oracle Fusion Field Service status changes. You can change the work order status to an appropriate value based on the status configuration mapping table defined on the OIC accelerator. See the Work Order Status section for more details.
- **Item/Material Installation:** When a mobile worker or any other user installs an item or specific quantity of items, the accelerator reserves the corresponding quantity of items in the maintenance inventory management until the activity is complete. These items move to the 'installed' pool in Oracle Fusion Field Service. These items are not available qualities for Oracle Fusion Field Service. When the inventory items are synchronized, items in the reserved state don't sync to Oracle Fusion Field Service.
- **Activity Completed:**
  - The work order operation item updates with actual items installed, and the work order labor resource is updates with the labor usage (activity duration).
  - The accelerator updates the item master with actual quantities installed. Reserved item quantities are deducted from the actual quantities, and the item master is updated.
  - The accelerator performs the material transaction in Oracle Maintenance based on the total quantities of items installed for the final calculations.
  - The accelerator performs the actual labor transaction in Oracle Maintenance for the final calculations.
  - For a multi-segment activity, when individual segments are completed, the accelerator updates the labor resource usage and item consumption associated with that segment. When the segments are completed, the total labor usage is the sum of labor usage from individual segments. Similarly, the total item consumption is the sum of the items consumed by individual segments.
- **Activity Canceled:** If the work order contains a single operation resource and the corresponding activity is canceled, the work order is canceled with a cancellation reason, and the operation status remains as ready.
- **Activity Deleted:** When an activity is deleted in Oracle Fusion Field Service, the corresponding resource is deleted from Oracle Maintenance.

**Note:** Only Optional Operations (Count Point and Automatically Transact are false) can be deleted from a work order in Oracle Maintenance. The best practice is that all Standard Operations restrict the visibility of the delete/cancel button in Oracle Fusion Field Service based on the value of Count Point and Automatically Transact Flag. Deleting an activity from Oracle Fusion Field Service results in an error in the integration flow, and the corresponding operations aren't deleted from Oracle Maintenance.

- **Activity Suspended:** The 'suspend' action in Oracle Fusion Field Service creates a clone of the activity in the same queue as a not-ordered activity in 'pending status'. When the activity becomes a not-ordered activity, the start date/time of the maintenance operation resource/operation is updated with the SLA start and end dates of the not-ordered activity.
- **Activity Not Done:** The 'not done' action in Oracle Fusion Field Service indicates that the activity couldn't be completed that day for various reasons, such as unavailability of parts, lack of time to finish, and so on. Oracle

Fusion Field Service treats the 'not done' status as a 'complete' status, and the accelerator follows one of these flows:

- If the activity is started and has the duration, the labor resource usage corresponding to the resource is updated in the operation resource.
- If the installation/de-installation of materials is done before the 'not done' action, the material transactions are updated in Oracle Maintenance.
- The operation status is updated as 'completed' if all the activities corresponding to the operation resources in Oracle Fusion Field Service are 'Not Done'.
- To create a new work order, a new operation, or a new resource as part of the Not Done action, follow these steps:
  - i. Ensure that the activity properties "Maintenance Action Type" and "Maintenance Planned Date" are configured using the activity page.
  - ii. Provide the values of "New Work Order", "New Operation", or "New Resource" for the "Maintenance Action Type" property. Based on the value of this field, the accelerator creates a new work order, operation, or resource in the work order. The entry in the "Maintenance Planned Date" captures the due date on which the new work order, operation, or resource is created in Oracle Maintenance. Configure the "Maintenance Planned Date" field such that a user enters the due date in the format 'YYYY:MM:DD HH:mm:ss'.
- Create a New Activity: While working on an activity, the user can create a new activity or a follow-up activity from Oracle Fusion Field Service. The accelerator can then create a corresponding new work order, work order operation, or operation resource in Oracle Maintenance.
  - The accelerator creates a new activity property in Oracle Fusion Field Service called "Maintenance Action Type" (label 'mwo\_action\_type') of the enumeration type with a value of "New Work Order", "New Operation", or "New Resource".
  - Based on the value of "New Work Order", "New Operation", or "New Resource" property, the accelerator creates a new work order, a new operation under the same work order, or a new resource under the work order operation.
  - Make sure you mention the Parent Reference Work Order number whenever a new activity is requested, so that:
    - The accelerator creates a new work order by using the work order type, work order subtype, and organization information from the reference work order.
    - The accelerator creates a new work order operation under the reference work order if the request is to create a new operation.
    - The accelerator creates a new resource under the reference work order if the request is to create a new resource.

If the Parent Reference Work Order number isn't present, the accelerator can't create a new work order, operation, or resource in Oracle Maintenance.

## Activity and Work Order Status Update Work Flow

The predefined statuses associated with a work order include Unreleased, Released, On Hold, Completed, Closed, or Canceled. The work order operation has statuses of 'Ready' and 'Completed'. The accelerator can change the status of work order and work order operation based on the changes in the activity status.

By default:

- When an activity is in 'Pending' or 'Started' status in Oracle Fusion Field Service, the work order operation is in 'Ready' status, and there's no change in the initial work order status.
- When an activity is completed in Oracle Fusion Field Service, the corresponding operation status is changed to 'Completed'; when all the operations associated with the work order are completed, the status of the work order changes to 'Completed'.
- This table represents the work order and operation status when an activity is in 'Not Done', 'Suspended', or 'Canceled' status in Oracle Fusion Field Service.

Field Service Activity Status	Work Order Operation Status	Work Order Status
Not Done	Completed	Completed
Suspended	Ready	No change in status
Canceled	Ready	Canceled

Similarly:

- If the work order contains multiple operations and the corresponding activities in Oracle Fusion Field Service are in 'Canceled' status, the work order status changes to 'Canceled'.
- If the work order contains multiple operations and the corresponding activities in Oracle Fusion Field Service are in 'Completed' or 'Not Done' status, then the operation status is 'Completed', and the work order status is changed to 'Completed'.

## Adding New Work Order Status

You can add user-defined work order status in Oracle Maintenance corresponding to the standard activity status. The accelerator can update the current work order status with a user-defined status based on the mapping configured in the accelerator.

The following table (lookup table in Oracle Integration Cloud) provides you an option to map the user-defined status in Oracle Maintenance to the standard status in Oracle Fusion Field Service. You can define the Oracle Fusion Field Service standard status and map that to a new work order status. The accelerator provides a custom activity property 'mwo\_status\_change\_reason'. You can use the value of this field in the column "STATUS\_CHANGE\_REASON" to show different work order statuses against the same standard status in Oracle Fusion Field Service.

OFS_STATUS	STATUS_CHANGE_REASON	MNT_STATUS
Pending		Scheduled
Not Done	Awaiting parts	Awaiting parts
Not Done	Additional manpower	Additional manpower

For example:

- To display the work order status as 'Scheduled' (a user-defined status) in Oracle Maintenance when an activity is in 'Pending' status in Oracle Fusion Field Service, you can configure the OFS\_STATUS (representing the Oracle Fusion Field Service standard status) as 'Pending' and the column MNT\_STATUS (representing Oracle Maintenance status) as 'Scheduled' in the table.
- To display two different statuses ("Awaiting parts" or "Additional manpower") against the same activity status "Not Done" (Oracle Fusion Field Service status), configure the column OFS\_STATUS with "Not Done. Configure the "STATUS\_CHANGE\_REASON" property with the values expected from "mwo\_status\_change\_reason" in the mapping table. The accelerator updates the work order status per this configuration.

## Work Order Update

If you update the work order data, when the data is synced from Oracle Maintenance to Oracle Fusion Field Service, the accelerator updates the Oracle Fusion Field Service activities as mentioned below.

- When you create a new operation or resource, a new activity is created in Oracle Fusion Field Service corresponding to the new operation or new resource that was added.
- When you remove an existing operation resource from the work order operation, the corresponding activity is deleted from Oracle Fusion Field Service.

**Note:**

- Operational-level information updates aren't updated in the activity.
- Operation resource level information updates aren't updated in the activity.
- If a work order has an operation with no resource, when you add a new resource into the operation after the work order syncs with Oracle Fusion Field Service, this updates the existing activity with the resource information.
- Any update to a past-dated work order doesn't update the corresponding past-dated activity in Oracle Fusion Field Service.

This table explains the actions in Oracle Fusion Field Service when you update the work order status in Oracle Maintenance:

Work Order Status	Unreleased	Released	On hold	Completed	Closed	Canceled
Unreleased	Not Applicable	New Activity creation	Delete the activities associated with the work order	Not Applicable	Not Applicable	Cancel the activities associated with the work order

Work Order Status	Unreleased	Released	On hold	Completed	Closed	Canceled
		Note: Make sure released status is allowed to sync the work order data in Oracle Fusion Field Service.				
Released	Delete the activities associated with the work order	Not Applicable	Delete the activities associated with the work order	Not Applicable	Not Applicable	Cancel the activities associated with the work order
On Hold	New Activity creation - If unreleased status is configured to sync the work order data in Oracle Fusion Field Service.  No action - If the status isn't configured.	New Activity creation  Note: Make sure released status is allowed to sync the work order data in Oracle Fusion Field Service.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Completed	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Closed	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Canceled	New Activity creation - If unreleased status is configured to sync the work order data in Oracle Fusion Field Service.  No action - If the status isn't configured.	New Activity creation  Note: Make sure released status is allowed to sync the work order data in Oracle Fusion Field Service.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

## Field Mapping - Work Order to Activity

Work Order Field	Description	Field Service Field	Field Type	Description	Mandatory
Operation.WorkOrderNo Operation.OperationSeq Resource.ResourceSeq Resource.ResourceCode	Prefix_<running number> ; For example: MWO_00001  This is configured in Setup and Maintenance.	apptNumber	String	The logic to form the column is "<WO number>-<Operation Seq No.>-<Operation Resource Seq No. if available>-<Operation Resource Code if available> "  For example: MWO_00001-10; MWO_00001-20-10- BMW	M
Workorder.Organization	The organization or entity on which the maintenance operation is performed, which includes many work areas and return many work centers to perform the job.  Typically, inventory is maintained at this level.	resourceId	String	Parent level bucket <ul style="list-style-type: none"> <li>• Workcenters/ Resources created as child bucket</li> <li>• Inventory stored in this bucket (Resource Pool)</li> <li>• WO Activities are created under this bucket and assigned to Mobile Worker by routing plan</li> </ul>	M
Operation.WorkCenterCode	The physical area or location, where the maintenance activity is performed. The Labor and Equipment resources with capacity are maintained at this level.	mwo_work_zone	String	Work zone in Oracle Fusion Field Service	M
Operation.PlannedStartDate	Operation Start Date	slaWindowStart date	DateTime		M
Operation.PlannedCompletionDate	Operation Completion Date - derived based on the Duration, if the	slaWindowEnd	DateTime		M

Work Order Field	Description	Field Service Field	Field Type	Description	Mandatory
	Operation Start Date is specified.				
Resource.RequiredUsage	Duration of the work to be performed by Resource.	duration	Minutes	Mapped with the Resource's Required usage  (RequiredUsage * 60)	M
Operation.OperationSeq	The sequence number is defined in the operation, and it is to be performed in this order.	mwo_op_seq_number	String	NEW: store the sequence number of Operation	M
Operation.WorkOrderId		mwo_workorder_id	String		M
Resource.ProfileCode		mwo_work_skill	String		O
Resource.WoOperationId	Operation resource id	mwo_op_resourceid	String		O
Operation.OperationName		mwo_operation_name	String		M
Workorder.WorkOrderPriority		mwo_workorder_priority	String		O
WorkOrder.WorkOrderDescription		wo_case_note	String		O
Operation.OperationDescription		mwo_operation_note	String		O
Operation.WoOperationId		mwo_operation_id	String		M
Asset.AssetId		wo_asset_id	String		M
Asset.AssetIdNumber		mwo_asset_number	String		
Asset.SerialNumber		wo_asset_serial_number	String		
Asset.Description		wo_asset_name	String		
Asset.InstalledDate		wo_asset_install_date	String		
Operation.OperationCode		activityType	Enum		
Workorder.WorkOrderType		mwo_workorder_type	String		
Workorder.WorkOrderSubtype		mwo_workorder_subtype	String		
Resource.ResourceDescription		mwo_op_resource_note	String		



Work Order Field	Description	Field Service Field	Field Type	Description	Mandatory
Workorder.Organization		mwo_workorder_org_code	String		
Workorder.CancelReason		mwo_cancel_reason	String		
Operation.OperationCode		mwo_standard_op_code	String		
		<b>Preferred Resources:</b>			
ResourceInstance.Laborer		resourceId	String		
		<b>Required Inventory:</b>			
OperationMaterial.Inventory		model	String		
OperationMaterial.Quantity		quantity	Number		
		<b>Operation Completion:</b>			
		mwo_transaction_status	String	Value: FAILURE. It will capture if there is any transaction error [resource/ material] during activity completion/ cancel/not done/ suspend.	

## Field Mapping - Activity to Work Order

Oracle Fusion Field Service to Maintenance - Work order data with scheduled dates and resource instance assignments

Oracle Maintenance Field	Description	Field Service Field	Field Type	Description	Mandatory
Create New WO, New Operation or New Resource in Oracle Maintenance by accelerator	To create a work order, operation, or resource in Oracle Maintenance when a new activity is created in Oracle Fusion Field Service or when a users wants to create a work order, operation, or resource in Oracle Maintenance during notdone/ completed/ canceled.	mwo_action_type	enumeration	Values: newWO, newOperation, newResource  This can be configured in any scenario where we want a new work order, operation, or operation resource to be created in Oracle Maintenance.	Yes

Oracle Maintenance Field	Description	Field Service Field	Field Type	Description	Mandatory
				This can be configured in Book Activity/ Add Activity flows, or in any case where a follow-up activity needs to be created for a NotDone/Canceled/ Completed scenario.	
Create New WO, New Operation or New Resource in Oracle Maintenance by accelerator	To create a new work order, operation, or resource in Oracle Maintenance when a new activity is created in Oracle Fusion Field Service or when users wants to create a new work order, operation, or resource in Oracle Maintenance during notdone/completed/ canceled.	mwo_planned_date	string with reg expression  /^[0-9]{4}-(0[1-9] 1[0-2])-(0[1-9] 1[1-2] 0[0-9] 3[0-1]) (2[0-3] 01)[0-9]:[0-5][0-9]:[0-5][0-9]/	Date Format: YYYY-MM-DD hh:mm:ss  To capture the due date in which the work order, operation, or resource must be created.	Yes
Create New WO, New Operation or New Resource in Oracle Maintenance by accelerator	To create a new work order, operation, or resource in Oracle Maintenance when a new activity is created in Oracle Fusion Field Service or when users wants to create a new work order, operation, or resource in Oracle Maintenance during notdone/completed/ canceled.	mwo_parent_ref_wo_num	string	For Add activity/ Book activity/ Follow-up activity, make sure to have a value in this property which will be the reference activity to create a new work order, operation, or resource in Oracle Maintenance.	Yes
WO > Description	Sync the value captured in mwo_wo_desc to Oracle Maintenance work order description.	mwo_wo_desc	string	To capture the description for creating a new work order.	No
Custom WO Status	This can be configured in notDone scenario to capture the reason for notDone. Based on this value and Oracle Fusion Field	mwo_status_change_reason	enumeration	Can be configured based on customer use case.	No

Oracle Maintenance Field	Description	Field Service Field	Field Type	Description	Mandatory
	Service activity status, the accelerator can set custom work order statuses by configuring the values in ORCL-BRT-OFS-MNT-STATUS-MAPPING lookup.				

## Master Data Synchronization from Oracle Maintenance to Oracle Fusion Field Service

The maintenance organization defined in Oracle Maintenance is created as a bucket in Oracle Fusion Field Service as part of the integration. You can configure the organization codes in the Parent Resource's field `mwo_resource_sync_orgs`. Based on this configuration, the accelerator syncs the relevant Maintenance Organizations into Oracle Fusion Field Service, as follows:

- Maintenance Resources are created as work skills.
- Maintenance work centers are created as work zones.
- Maintenance labor resource instances are created as mobile worker.
- **[Oracle Field Service only]** The synchronization process from Oracle Maintenance Cloud to Oracle Fusion Field Service ensures that Human Capital Management (HCM) employees created as 'resource instances' in Oracle Maintenance Cloud are updated as field resources in Oracle Field Service.
- There are scenarios regarding work order operations and resource assignments between Oracle Fusion Field Service and Oracle Maintenance Cloud, where a technician is assigned in Oracle Fusion Field Service but not present as an instance in the Oracle Maintenance Cloud. Accelerator should update the work order operation resource as described below.
  - If a work order operation is created without a resource but assigned to a technician with a maintenance resource code mapped (e.g., "maintenance tech B"), the work order update flow from Oracle Fusion Field Service to Oracle Maintenance Cloud will update the operation with "maintenance tech B" as the resource, leaving the resource instance field blank.
  - Similarly, if a work order operation is created with a resource ("Maintenance Tech A") but the actual technician present in Oracle Fusion Field Service is mapped with a different maintenance resource code ("maintenance tech B"), the work order update flow will update the operation with "maintenance tech B" as the resource, leaving the resource instance field blank. The mapping table given here lists the mapping

between Labour Instance in Oracle Maintenance Cloud and Oracle Field Service as configured in the accelerator.

Fusion Object	Oracle Fusion Field Service Object
LaborInstance.PartyId	ExternalID
LaborInstance.LaborInstanceId	ExternalID (If partyID is absent), mwo_resource_instance_id
LaborInstance.ResourceCode	mwo_inst_resource_code

- Maintenance Operations sync as activity types in Oracle Fusion Field Service. This table describes the field-level mapping between operation and activity type.

A mapping table is available in the accelerator for configuring these attributes:

STANDARD_OPERATION_CODE	ACTIVITY_LABEL	ACTIVITY_NAME	SEGMENTABLE	SEGMENT_MIN_DURATION	SEGMENT_MAX_DURATION	Default_Flag
DRAIN_OIL	drain_oil	Drain oil	False			True
CHANGE_OIL	drain_oil	Drain oil	False			False
REP_ENG	repair_engine	Repair Engine	True	30	120	True

Here are the details for the table:

- STANDARD\_OPERATION\_CODE** - The Standard Operation Code defined in Oracle Maintenance.
- ACTIVITY\_LABEL** - Activity type label to be mapped in Oracle Fusion Field Service against the Operation Code.
- ACTIVITY\_NAME** - Name of the activity type to be created in Oracle Fusion Field Service if the activity type doesn't exist.
- SEGMENTABLE** - Whether this activity type is segmentable or not.
- SEGMENT\_MIN\_DURATION** - Minimum Duration for segmentable activity type.
- SEGMENT\_MAX\_DURATION** - Maximum duration for the segmentable activity type.
- Default\_Flag**: The accelerator uses this flag while creating a follow-up activity from Oracle Fusion Field Service. There can be scenarios where multiple operation codes are mapped against the same activity type. Based on the default flag value, the accelerator identifies the standard operation code and creates a new operation under the work order in Oracle Maintenance. Here's an example: The standard operation code 'DRAIN\_OIL & CHANGE\_OIL' is mapped to the activity type 'drain\_oil' as shown in the earlier table. When a user wants to create a follow-up activity from Oracle Fusion Field Service of type 'drain\_oil', they can select the activity type as 'drain\_oil'. The accelerator creates a new operation, 'DRAIN\_OIL', under the current work order in Oracle Maintenance, because the default flag for the standard operation, DRAIN\_OIL, is set to 'True'.

If the work order contains a new operation that isn't mapped in the earlier table, it's synced as a default activity.

## Field Mapping : Standard Operation to Activity Type

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Operation Description	Human readable description of Standard Operation Code, mapped against activity type group name	Activity type group name		Name of the activity type group	M
Operation Type	Classification of Standard Operations in Oracle Maintenance, mapped against activity type group which serves a similar purpose against activity types	Activity type group label		Label of activity type group	M
Standard Operation Code	Internal unique code used as identifier for activity types	Activity type label		Label of the activity type	M
Standard Operation Name	Readable name displayed in the user interface for activity types	Activity type name		Name of the activity type	M
	Status of the activity type can be identified based on the inactive date	Status		Status of the activity (active or not)	M

## Field Mapping : Resource Instance to Oracle Fusion Field Service Resource

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Resource Instance Id		Resource Id		The unique identifier of the resource in Oracle Field Service.	M
Resource Instance Name		Resource Name		The name of the resource.	O

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Resource Code		Work Skill Label		The label of work skill which is assigned to the mobile worker representing the Resource.	M
Resource identifier		user login		Identifier used for user sign in.	
Status		Status		Allowed Values: active , inactive	

## Field Mapping : Work Center to Oracle Fusion Field Service Resource

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Work Center code	Unique code of the work center	Resource Id		The unique identifier of the resource in Oracle Fusion Field Service.	M
Work Center Name	Name of the work center	Resource Name		The name of the resource.	O
	Status of the work center can be identified based on the inactive date.	Status		Allowed Values: active , inactive	M

## Field Mapping : Equipment to Oracle Fusion Field Service Resource

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Work Center code		Parent Resource Id		The unique identifier of the parent resource.	O

Oracle Maintenance Field	Description	Oracle Fusion Field Service Field	Field Type	Description	Mandatory
Resource instance name	Name of the resource instance (Equipment type)	Resource Name		The name of the resource (tool).	O
Resource instance identifier	Identifier of the resource (Equipment type)	Resource Id		The unique identifier of the resource in Oracle Fusion Field Service.	M
	Business Unit	Organization (Organization Unit)		The label of an organization unit under this resource that needs to be mapped.	O
		Resource type		The type of the resource - Tool.	M
	Status of the resource instance can be identified based on the inactive date.	Status		Allowed Values: active , inactive	M

## View and Update Asset Meter Readings

Meter readings present important information for mobile workers while they're working on assets. The accelerator provides an option to configure the meter reading associated with an asset and an option to update the readings while they're working on an activity associated with the asset.

The accelerator creates these properties in Oracle Fusion Field Service to capture the values of a meter definition associated with an asset within Fusion:

- Meter name with reading type [Absolute / Change]
- Unique code of the meter template
- Direction of the reading [Ascending / Descending]
- Net reading and UOM
- Reading date/time
- New reading [to be entered by the mobile worker upon completion]
- Comment [to be entered by the mobile worker upon completion]

The accelerator gets the values of these fields from the asset meter defined in Fusion and updates these properties as part of the activity start and activity update events. You can configure the Activity Details page and display the relevant properties for the Oracle Fusion Field Service users. The accelerator updates the latest meter reading values of the

asset from Fusion to the activity property. The accelerator updates the new meter reading value provided by the Oracle Fusion Field Service user to Fusion meters as part of the activity update event.

## Field Mapping : Asset Meter Reading to Activity Properties

Oracle Maintenance Field	Description	Field Service Field	Field Type	Description	Mandatory
MeterCode	Meter Code	meter_code_<<counter>>	string	Meter Code	M
MeterName, ReadingType		meter_name_<<counter>>	string	Meter name with reading type	M
NetValue, UnitOfMeasure		meter_last_reading_<<counter>>	string	The last net reading from meter with UOM	M
ReadingValue		meter_new_reading_<<counter>>	string	Latest captured reading from Oracle Fusion Field Service	M
Comments		meter_comment_<<counter>>	string	Latest comment from Oracle Fusion Field Service by the mobile worker	M
ReadingDirectionMeani		meter_direction_<<counter>>	string	The direction of the reading	M
ReadingDate		meter_last_reading_date_<<counter>>	string	Last reading date	M
		mwo_meter_count	string	Total number of meters synced to Oracle Fusion Field Service for the activity	M
		mwo_meter_info	string	All meter information concatenated with ~~	M



**Note:**

- The accelerator supports a maximum of two asset meters. Based on the number configured for the field 'MNTAssetMaxNoOfMeters' in the OIC lookup table 'ORCL-BRT-MNT-OFS-CONFIG', the accelerator creates the meter reading properties. The maximum value that can be configured for the field "MNTAssetMaxNoOfMeters" is 2.
- The accelerator gets meter templates defined with the "Record Meters at Work Order Completion" property as "Mandatory"/"Optional" in Oracle Maintenance.
- The meter reading value will get updated with "Displayed Meter" value from Asset Meter to Oracle Fusion Field Service, since assets can sometimes replace meter readers or acquire assets that already have meters recorded.



# 3 Enabling the Accelerator

## 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). An accelerator is an integration solution that can be quickly configured and activated.

To install the accelerator:

1. Log in to **Oracle Integration**.
2. Navigate to **Browse store** and then search for the **Oracle Field Service — Oracle Maintenance | Manage Assets and Mobility** accelerator for Oracle Fusion Field Service.
3. Click **Install**.  
For more information, refer to *Find Recipes and Accelerators*.

## Set Up the Oracle Maintenance Accelerator for Oracle Fusion Field Service

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

**Note:** After migration to Fusion all previous integrations are expected to work without need to migrate to new versions (basically Oracle Field Service and Oracle Fusion Field Service will have full compatibility from API standpoint).

## 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:

- OIC application with details about the OIC endpoint.

↑ 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

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

The screenshot shows a web interface for adding a new application. At the top, there is a breadcrumb '↑ Applications' and a title 'Add Application'. Below the title is a modal form. The form has a dropdown menu for 'Application Type' with the selected option 'Applications using REST/SOAP API'. Below this is a text input field for 'Application Name' and another for 'Application ID'. Both text fields are marked as 'Required' with a small red asterisk. At the bottom right of the form are two buttons: 'Dismiss' and 'Add'.

Configure these methods for the Core REST API for this application:

- Activity - RW
- Business Events - RW
- Inventory - RW
- Resource - RW
- User - RW

Configure these methods for the Metadata REST API for this application:

- Activity Types - RW
- Properties - RW
- Work Skills - RW
- Work Zones - RW,
- Inventory Types - RO

To connect Oracle Integration with Oracle Fusion Cloud, create an integration user in Oracle Fusion Field Service with the username **FFS\_APP\_INTEG\_ID**, and configure this user in the maintenance cloud connections of the accelerator.

**CAUTION:** Oracle recommends using the username **FFS\_APP\_INTEG\_ID** to connect Oracle Integration with Oracle Fusion Cloud. This specific username is referenced in the accelerator's echo suppression logic. If you use a different username, you must modify the prebuilt integration flows in Oracle Integration to ensure echo suppression works correctly.

Perform the following steps to create and configure a user in Accelerator:

**1. Create a custom Job Role**

- a. Sign in to Oracle Fusion Field Service.
- b. Navigate to the **Security Console** work area and click the **Roles** tab.
- c. Click **Create Role**.
- d. Specify the following and click **Next**.

Field	Value
Role Name	Field Service Integrator
Role Code	FFS_FIELD_SERVICE_INTEGRATOR_JOB
Role Category	CRM - Job Roles

- e. Navigate to the Role Hierarchy train stop Function Security Policies and add the following roles:

Role Name	Role Code	Description
Maintenance Management Web Service	ORA_MNT_MAINTENANCE_SERVICE_DUTY	Provides service access to maintenance asset management and work execution using the REST services
Inventory Administration	ORA_INV_INVENTORY_ADMINISTRATION_DUTY	Configures all setup-related activities for inventory management.
Inventory Transaction Management	ORA_INV_INVENTORY_TRANSACTION_MANAGEMENT_DUTY	Manages inventory transactions. Tasks include managing reservations and picks, editing pending transactions, and submitting transaction-related processes.
Inventory Management Web Service	ORA_INV_INVENTORY_MANAGEMENT_WEB_SERVICE_DUTY	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,	ORA_RCS_SCM_COMMON_WEB_SERVICE_DUTY

Role Name	Role Code	Description
	plant parameters, carriers, and units of measure list of values.	
Warehouse Manager	Manages and analyzes all warehouse activities including analyzing materials management and logistics performance, managing inventory transactions, managing cycle and physical counts, configuring warehouse setup, and reviewing inventory balances.	ORA_INV_WAREHOUSE_MANAGER_JOB

- f. Navigate to the Role Hierarchy train stop Data Security Policies and add the following policies:

Business Object	Policy Description	Policy Store Implementation
Installed Base Asset	A Maintenance Manager can manage installed base asset for all installed base assets.	<ul style="list-style-type: none"> <li>- <b>Privilege:</b> Manage Installed Base Asset; Read; Update</li> <li>- <b>Resource:</b> Installed Base Asset</li> <li>- <b>Data Set:</b> All values</li> </ul>
Manufacturing Plant	A Manufacturing Engineer can manage the manufacturing plant for the manufacturing plants in which they can operate.	<ul style="list-style-type: none"> <li>- <b>Privilege:</b> 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;</li> <li>- <b>Resource:</b> Manufacturing Plant</li> <li>- <b>Data Set:</b> All values</li> </ul>
Inventory Organization	An Inventory Manager can manage item and inventory organization parameter for the inventory organizations in which they can operate.	<ul style="list-style-type: none"> <li>- <b>Privilege:</b> Manage Maintenance Organization; Manage Inventory Transfer Order; Manage Inventory Reservation; Manage Inventory Transaction; Manage Item Locator; Manage Item Lot and Item Serial; Manage On-Hand Quantity; Manage Subinventory; Manage Unit of Measure Usage;</li> <li>- <b>Resource:</b> Inventory Organization</li> <li>- <b>Data Set:</b> All values</li> </ul>
Item for Table EGP_SYSTEM_ITEMS_B	Defines the details of a transactable object. For example, an item can be any part, material, product, or service that's unique as compared with other items by nature of its attributes.	<ul style="list-style-type: none"> <li>- <b>Privilege:</b> Maintain Item Basic; View Item Basic;</li> <li>- <b>Resource:</b> Item for Table EGP_SYSTEM_ITEMS_B</li> <li>- <b>Data Set:</b> All values</li> </ul>

- g. Navigate to the Role Hierarchy train stop and click **Add Role**.  
h. Search for the **SOA** operator role and click **Add Role Membership**.  
i. Click **Close**.

- j. Navigate to the Summary train stop and verify all the privileges and SOA operator role.
  - k. Click **Save and Close**.
  - l. Click **OK** on the confirmation message.
2. **Create an Integration user account in Oracle Fusion Field Service**
- a. Sign in to Oracle Fusion Field Service.
  - b. Navigate to the Security Console work area and click the **Users** tab.
  - c. Click **Add User Account**.
  - d. Enter the values in the required fields.

Field	Value
Last Name	FFS_APP_INTEG_ID
Email	Enter a valid email ID
User Name	FFS_APP_INTEG_ID
Password	<Enter password>
Confirm Password	<Re-enter password>

- e. Click **Add Role**.
- f. In the Add Role Membership dialog, search for the job role **Field Service Integrator(FFS\_FIELD\_SERVICE\_INTEGRATOR\_JOB)** and select the the role that you created in Step A.
- g. Click **Add Role Membership**.
- h. Click **OK** in the confirmation dialog.
- i. Repeat steps 6 through 8 to add the following additional roles. These roles are required to create leads from partner inquiries:
  - Resource (ORA\_HZ\_RESOURCE\_ABSTRACT)
  - Employee (ORA\_PER\_EMPLOYEE\_ABSTRACT)
- j. Click **Done**.
- k. Click **Save and Close**.



### 3. Create Password Expiry Policy

You can create the FFS\_APP\_INTEG\_ID user with a different password expiry policy. This ensures that the regular password expiry rules do not apply to this user. To achieve this, you need to assign the user to a separate user category.

- a. Sign in to Oracle Fusion Field Service.
- b. Navigate to the **Security Console** work area and click the **User Categories** tab.
- c. Click **Create**.
- d. Click **Edit** in the **User Category: Details** page.
- e. Enter a name in the **User Category Field**.
- f. Click **Save and Close**.
- g. Click **Password Policy**.
- h. Click **Edit**.
- i. Configure the fields for the **FFS\_APP\_INTEG\_ID** user password expiry policy.
- j. Click **Save and Close**.

**Note:** The maintenance workorder filtering logic in the accelerator works only based on the user name FFS\_APP\_INTEG\_ID.

### 4. Configure the User Credentials

Configure the user credential in the following connections:

- o Oracle Maintenance Adapter Connection
- o Oracle Maintenance REST Connection

## Step 2 - Configure Connections

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

The screenshot shows the 'Configure a connection' page for the 'Oracle Maintenance OFS Adapter Connection'. The page has a header with a 'Configured' status and a table with columns: Role (Trigger and invoke), Identifier (ORCL.BIT.MNT\_OFS\_ADAPT\_CONN), Updated on (4 Apr 2025, 04:23:55 PM IST), Used by (19 integrations), Share with other projects (Off), and Project (Oracle Maintenance - Field Service Sync). Below the header, the 'Properties' section contains fields for 'Connection URL' (https://...), 'Instance ID' (12345678901234567890), and 'Security' (Basic Authentication). The 'Security' section contains fields for 'Username' (username@domain.com) and 'Password' (password).

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

The screenshot shows the 'Configure a connection' screen for an 'OFS REST Connection'. The top bar includes a 'Configured' status, a 'Role' of 'Trigger and invoke', an 'Identifier' of 'ORCL-BRT-MNT\_OFS\_REST\_CONN', an 'Updated on' date of '4 Apr 2025, 04:22:56 PM IST', 'Used in' '29 Integrations', 'Share with other projects' set to 'Off', and a 'Project' of 'Oracle Maintenance - Field Service Sync'. The main configuration area is divided into 'Properties' and 'Security' sections. Under 'Properties', there is a 'Connection type' dropdown set to 'REST API Base URL' and a 'Connection URL' text field. Under 'Security', there is a 'Security policy' dropdown set to 'Basic Authentication', a 'Username' text field, and a 'Password' text field with a toggle for visibility.

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

The screenshot shows the 'Configure a connection' screen for an 'Adapter Connection'. The top bar includes a 'Configured' status, a 'Role' of 'Trigger and invoke', an 'Identifier' of 'ORCL-BRT-ADPT-MAINTENANCE\_CONN', an 'Updated on' date of '2 Apr 2025, 04:35:01 PM IST', 'Used in' '41 Integrations', 'Share with other projects' set to 'Off', and a 'Project' of 'Oracle Maintenance - Field Service Sync'. The main configuration area is divided into 'Properties' and 'Security' sections. Under 'Properties', there is an 'ERP Cloud Host' text field. Under 'Security', there is a 'Security policy' dropdown set to 'Username Password Token', a 'Username' text field, and a 'Password' text field with a toggle for visibility.

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

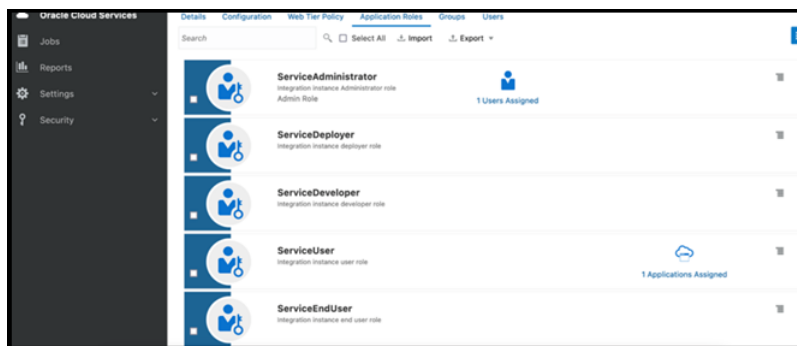
The screenshot shows the 'Configure a connection' screen for a 'REST Connection'. The top bar includes a 'Configured' status, a 'Role' of 'Trigger and invoke', an 'Identifier' of 'ORCL-BRT-REST-MAINTENANCE\_CONN', an 'Updated on' date of '2 Apr 2025, 04:34:28 PM IST', 'Used in' '24 Integrations', 'Share with other projects' set to 'Off', and a 'Project' of 'Oracle Maintenance - Field Service Sync'. The main configuration area is divided into 'Properties' and 'Security' sections. Under 'Properties', there is a 'Connection type' dropdown set to 'REST API Base URL' and a 'Connection URL' text field. Under 'Security', there is a 'Security policy' dropdown set to 'Basic Authentication', a 'Username' text field, and a 'Password' text field with a toggle for visibility.

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

The screenshot shows the 'Configure a connection' page for 'Oracle Maintenance OAuth REST Connection'. The page has a dark header with the title and a subtitle 'REST Connection to invoke OIC Factory API'. Below the header, there are tabs: 'Configured', 'Role', 'Identifier', 'Updated on', 'Used in', 'Share with other projects', and 'Project'. The 'Configured' tab is active. The main content area is divided into sections: 'Properties' and 'Security'. Under 'Properties', there is a 'Connection type' dropdown set to 'REST API Base URL' and a 'Connection URL' text field. Under 'Optional properties', there is a 'Security policy' dropdown set to 'OAuth Client Credentials'. Under 'Security', there is an 'Access Token URI' text field, a 'Client ID' text field, and a 'Client Secret' text field with a toggle for visibility. Under 'Optional security', there is a 'Scope' text field.

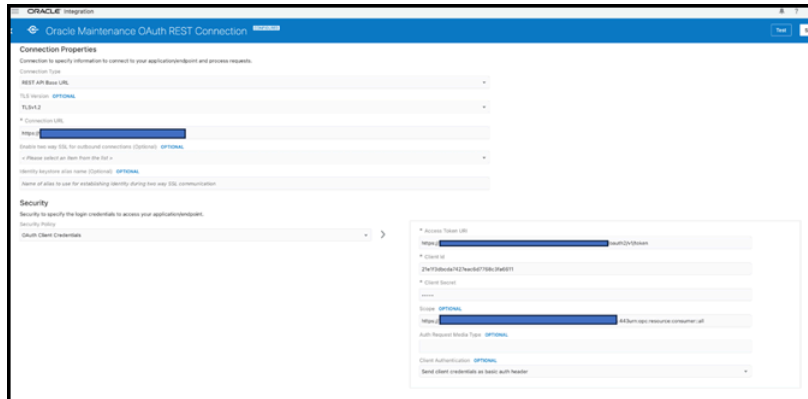
For more information about the steps to configure a trusted application in IDCS, click [here](#).

Assign this Application Role to get the write access to the OIC Factory API:



Oracle Maintenance OAuth REST Connection for Gen 2 version:

The OIC Factory API supports Basic Authentication in GEN 2 OIC instance.



## Step 3 - Create Resource Types and User Types in Oracle Fusion Field Service

The next step is to create these required resource types and user types within :

- A resource type with a role of 'bucket'. This is used to map the Maintenance Organization bucket in Oracle Fusion Field Service.
- A resource type with a role of 'Field resource'. This is used to map the mobile workers (resource instances from Oracle Maintenance) .

**Note:** Make sure you have created a user type that can be assigned to the field resources.

- Inventory types 'part' and 'part\_sn' must be created and mapped with the model property 'inventory\_identifier'.

## Step 4 - 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-MNT-OFS-CONFIG → ParentResourceId. Based on this configuration, the accelerator will sync the values into Oracle Fusion Field Service.

The accelerator will then sync:

- Maintenance Organization as a bucket under this parent resource.
- Resource Instances as mobile workers under the created maintenance organization resources.

## Step 5 - Create Properties Used by Integration

Activate the Oracle Maintenance OFS Property Create Helper and run the Oracle Maintenance OFS Property Setup integrations. The properties listed in this table are installed in Oracle Fusion Field Service automatically.

Property Label	Name	Entity	GUI	Type
mwo_op_seq_number	Operation Sequence Number	activity	text	string
mwo_workorder_id	Work Order ID	activity	text	string
mwo_workorder_type	Work Order Type	activity	text	string
mwo_operation_name	Work Order Operation Name	activity	text	string
mwo_workorder_priority	Work Order Priority	activity	text	string
mwo_operation_id	Work Order Operation ID	activity	text	string
mwo_workorder_subtype	Work Order SubType	activity	text	string
mwo_workorder_org_code	Maintenance Organization Code	activity	text	string
mwo_work_skill	Maintenance Work Skill	activity	text	string
mwo_work_zone	Maintenance Work Zone	activity	text	string
mwo_op_resourceid	Maintenance Resource ID	activity	text	string
mwo_resource_code	Maintenance Resource Code	activity	text	string
mwo_workorder_org_name	Maintenance Organization Name	activity	text	string
mwo_asset_number	Asset Number	activity	text	string
mwo_op_countpoint	Operation Count point	activity	text	string
mwo_subinventory	SubInventory	inventory	text	string
mwo_resource_organization	Maintenance Organization	resource	text	string
mwo_resource_subInventory	SubInventory	resource	text	string
mwo_appt_installed_inventory	Activity Installed Inventory	activity	text	string
mwo_inventory_subInv	Inventory Source	inventory	text	string
mwo_operation_note	WO Operation Note	activity	text	string
mwo_op_resource_note	Operation Resource Note	activity	text	string

Property Label	Name	Entity	GUI	Type
mwo_locator	Locator	inventory	text	string
mwo_status_change_reason	Status change Reason	activity	combobox	enumeration
mwo_planned_date	Maintenance Planned Date	activity	text	string
mwo_action_type	Maintenance WO Action	activity	combobox	enumeration  Expected values <ul style="list-style-type: none"><li>• New Operation</li><li>• New Resource</li><li>• New Work Order</li></ul>
mwo_parent_ref_wo_num	Parent Reference Work Order	activity	text	string
mwo_workcenter_id	Maintenance Work Center Id	activity	text	string
mwo_wo_desc	Maintenance Work Order Description	activity	text	string
mwo_resource_requirement	Resource Requirement	activity	text	string
mwo_wc_enum	Maintenance Work Center	activity	combobox	enumeration
mwo_transaction_status	Operation Transaction Status	activity	text	string
mwo_parent_apptnumber	Parent Work Order	activity	text	string
mwo_resource_orgid	Maintenance Organization ID	resource	text	string
mwo_inventory_org	Inventory Organisation	inventory	text	string
mwo_asset_status	Asset Status	activity	combobox	enumeration
wo_asset_purchase_date	Purchase Date	activity	text	string
wo_asset_status	Asset Status	activity	text	string
wo_asset_install_date	Install Date	activity	text	string
asset_view_translation_placeholders	Asset View Placeholders	activity	combobox	enumeration
wo_asset_id	Asset Id	activity	text	string

Property Label	Name	Entity	GUI	Type
wo_asset_products	Product	activity	text	string
mwo_meter_count	Meter Count	activity	text	string
mwo_meter_info	Meter Info	activity	text	string
mwo_resource_id	Resource ID	resource	text	string
part_item_number	Item Number	inventory	text	string
part_item_number_rev	Item Number with Revision	inventory	text	string
part_item_revision	Revision	inventory	text	string
part_item_rev_serial_num	Item Number with Revision and Serial Number	inventory	text	string
mwo_standard_op_code	Standard Operation Code	activity	text	string
wo_number	Work Order Number	activity	text	string
wo_asset_serial_number	Work Order Asset Serial Number	activity	text	string
wo_case_note	Work Order Case Note	activity	text	string
wo_asset_name	Work Order Asset Name	activity	text	string
mwo_cancel_reason	Cancel Reason	activity	text	string
mwo_repair_trans_code	Repair transaction code	activity	combobox	enumeration
mwo_work_accomp_code	Work to be accomplished code	activity	combobox	enumeration
mwo_inst_resource_code	Maintenance Instance Resource Code	resource	text	string
mwo_labour_identifier	Maintenance Labour Identifier	resource	text	string
external_id_identified_by	External ID Identified By	resource	text	string
mwo_inv_last_sync_time	Last Inventory Sync Time	resource	text	string
mwo_resource_instance_id	Resource Instance ID	resource	text	string
mwo_work_order_sync_orgs	Work Order Organisations	resource	text	string
mwo_resource_sync_orgs	Resource Organisations	resource	text	string

## Step 6 - Add Properties to be Indexed for Search

For the integration to function, add these properties as indexes for the activity search API in Oracle Fusion Field Service in the **Configuration > Business Rules Search > Activity Search Fields** section:

- Work Order Number (appt\_number)
- MWO Operation Id (mwo\_operation\_id)
- Asset Id (wo\_asset\_id)
- MWO WorkOrder Id (mwo\_workorder\_id)

## Step 7 - Configure Organizations filter properties in Oracle Fusion Field Service

1. After the Oracle Fusion Field Service properties get created, the below custom properties need to be enabled in the **Configuration → User Types → Administrator role → Edit Resource** page of the administrator user.

Property Label	Name	Description
mwo_work_order_sync_orgs	Work Order Organisations	Used to filter in the Maintenance workorder sync
mwo_resource_sync_orgs	Resource Organisations	Used to filter in the Resources, Activity Types and WorkCenter syncs

The screenshot shows the 'Edit Resource/User' page for a 'Privileged Administrator'. The page has a sidebar on the left with 'New element' and 'Content navigator' sections. The main area displays a list of properties for configuration. The 'Work Order Organisations' property is highlighted with a blue box.

Property Label	Name	Description
mwo_work_order_sync_orgs	Work Order Organisations	Used to filter in the Maintenance workorder sync
mwo_resource_sync_orgs	Resource Organisations	Used to filter in the Resources, Activity Types and WorkCenter syncs

2. The administrator needs to configure the Fusion maintenance organizations in the property that needs to be filtered for syncing with Oracle Fusion Field Service. Customers can use this property to filter the maintenance organizations by configuring the organization code(s) that must be synced with Oracle Fusion Field Service, e.g., M001, M122.



The screenshot shows the 'Sunrise Organization' configuration interface. At the top, there's a header with an upward arrow and the text 'Sunrise Organization' and 'Edit Resource'. Below this, on the left, is a 'Time zone' dropdown menu currently set to 'Eastern'. On the right side, there are two large text input areas. The top one is labeled 'Work Order Organisations' and contains the text 'M001, M121, 10023'. The bottom one is labeled 'Resource Organisations' and contains the text 'All'.

**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 8 - Configure the 'ORCL-BRT-MNT-OFS-CONFIG' Lookup

The ORCL-BRT-MNT-OFS-CONFIG lookup contains the metadata used by the integration. You must configure this lookup for the integration to function properly. Because all the lookup configurations have default values, be sure to configure appropriate values per the business requirements for these lookups:

Name	Value to be inserted
IntegrationUser	The clientId/user used in the <b>Oracle Maintenance OFS Adapter Connection</b> .
LaborResourceType	The Oracle Fusion Field Service resource type associated with "Labor" resource instances in Oracle Maintenance (Created in step 4).
EquipmentResourceType	The Oracle Fusion Field Service resource type associated with "Equipment" resource instances in Oracle Maintenance (Created in step 4).
UserType	The Oracle Fusion Field Service user type which must be associated with "Labor" resource instances in Oracle Fusion Field Service (Created in step 4).
ParentResourceId	The external ID of the parent resource in Oracle Fusion Field Service (Created in step 3).
TravelArea	The travel area associated with work zones in Oracle Fusion Field Service (This is optional and is used only if you select Work Center → Work Zone sync).
DefaultActivityTypeLabel	This configuration is used to map a default activity type in Oracle Fusion Field Service if no match is found in ORCL-BRT-ACT-TYPE-MAPPING lookup. This isn't created in Oracle Maintenance as a standard operation.
WOStatusToSyncOFSActivity	This configuration is used in the activity creation flow to filter the work orders by status to sync with Oracle Fusion Field Service.

Name	Value to be inserted
WO_STATUSES_ACTIVITY_CANCEL	This configuration is used to filter the work orders by status for Cancellation of Activities in Oracle Fusion Field Service.
WO_STATUSES_ACTIVITY_DELETE	This configuration is used to filter the work orders by status for Deletion of Activities in Oracle Fusion Field Service.
MNTSourceSystemCode	The Source System Code on Fusion. It is required for the transactions. This denotes the source system that started the transactions. This source system must be available in Fusion. Refer to the <a href="#">documentation</a> to create a source system reference.
MNTSourceSystemType	The type of the source system, that is, INTERNAL/EXTERNAL value configured in Fusion.
EventsForWOUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityMoved, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated.
ActivityMoveConditions	Enter one or more move conditions, separated by commas. Supported values include, bucketToResource, resourceToBucket, resourceToResource, and bucketToBucket. If no value is specified, only bucketToResource and resourceToBucket will be handled by default.
EventsForMeterUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityCreated, and activityUpdated.
EventsForDFFUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated. If the lookup is empty, DFF updates will occur only on the activityCompleted event.

## Step 9 - Activating and Running the Prerequisite Integrations

After the you create prerequisite configurations, you can start running the integrations. Some of these integrations are to be run first so that the required data is added to Oracle Fusion Field Service.

1. As the first step, you can activate all the integrations given in the package (activating the integrations is NOT the same as running them). This ensures that all the sub-integrations are active when you run the prerequisite integrations.
2. [ **Oracle Fusion Field Service only** ] The Field resource user creation and management in Fusion Field Service are defined as per the Fusion Standards described [here](#).
3. [ **Oracle Fusion Field Service only** ] Run the **Oracle Maintenance FFS Resource** integration to sync the below items.
  - a. The maintenance organization defined in Oracle Maintenance is created as a bucket in Oracle Fusion Field Service.
  - b. Maintenance Resources are created as work skills and associated to the corresponding Field resources
  - c. Maintenance work centers are created as work zones and associated to the corresponding Field resources
  - d. Maintenance equipment resource instances are created as tool resources
4. [ **Oracle Field Service only** ] Run the Oracle Maintenance OFS Resource Sync integration. This integration is responsible for syncing the resource instances and the maintenance organizations from Oracle Maintenance with Oracle Fusion Field Service.

5. Run the Oracle Maintenance OFS Activity Types Sync integration. This integration is responsible for syncing the Standard Operations to activity types in Oracle Fusion Field Service. Map the Standard Operation to Activity Type in the new lookup ORCL-BRT-ACT-TYPE-MAPPING where you can specify what activity type the standard operation is mapped to. The integration then creates the necessary activity types in Oracle Fusion Field Service
6. [ **Oracle Field Service only** ] Run the Oracle Maintenance OFS WorkCenter Sync integration. This integration syncs the work centers in Oracle Maintenance with the resource instance's work zone. You must set the work zone key as the mwo\_work\_zone property for this integration to work.

## Tips and Considerations

Here are some tips and considerations you must be aware of when you use the accelerator.

### Create the activity flow from Oracle Fusion Field Service to Oracle Maintenance

- While creating a new activity using the Book Appointment option, be sure that you always configure a different appointment number or keep the appointment number empty for the new activity.
- The **Add new resource** option selected while creating a new activity from Oracle Fusion Field Service creates a new resource under the operation of the parent reference work order mapped in the activity.

### Follow-up activity from Oracle Fusion Field Service upon cancellation

While cancelling an activity in Oracle Fusion Field Service, you can only use the 'newWO' creation action from Oracle Fusion Field Service.

### Mapping Descriptive Flexfields (DFF) in Oracle Maintenance

The accelerator supports adding DFF at Work order, Operation, Operation resource, Operation transaction, Resource transaction, and Asset levels, in addition to the standard fields. You must configure the DFF in Oracle Fusion Field Service with the 'string' datatype for the accelerator to work as expected.

You can add extension groups at appropriate calls and map the required fields using data stitch.

For more information about extension groups in Oracle Integration, see [Extend an Integration in an Accelerator Project](#).



## 4 API Mappings

### Oracle Fusion Field Service API Roles and Permissions

You must select some settings in the Oracle Fusion Field Service Core API and Metadata API for the accelerator to work.

Select these settings in the Core API:

- Activity: Read-Write
- Business Events: Read-Write
- Inventory: Read-Write
- Resource: Read-Write
- User: Read-Write

Select these settings in the Metadata API:

- Activity Type: Read-Write
- Property: Read-Write
- Work Skill: Read-Write
- Work Zone: Read-Write
- Inventory Type: Read-Write

### Fusion API Duty Roles, Privileges, and Data Security

You must configure the duty roles in Fusion API as given in this table.

#### 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.

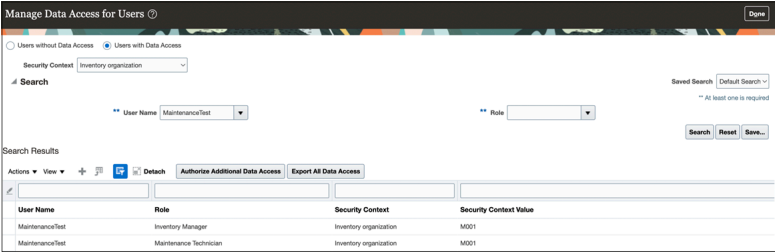
## Data Security Policies

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.	<b>Privilege:</b> Manage Installed Base Asset; Read; Update  <b>Resource:</b> Installed Base Asset
Manufacturing Plant	A Manufacturing Engineer can manage the manufacturing plant for the manufacturing plants in which they can operate.	<b>Privilege:</b> 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;  <b>Resource:</b> Manufacturing Plant
Inventory Organization	An Inventory Manager can manage item and inventory organization parameter for the inventory organizations in which they can operate.	<b>Privilege:</b> Manage Maintenance Organization;  Manage Inventory Transfer Order;  Manage Inventory Reservation;  Manage Inventory Transaction;  Manage Item Locator;  Manage Item Lot and Item Serial;  Manage On-Hand Quantity;  Manage Subinventory;  Manage Unit of Measure Usage;  <b>Resource:</b> Inventory Organization
Item for Table EGP_SYSTEM_ITEMS_B	Defines the details of a transactable object. For example, an item can be any part, material,	<b>Privilege:</b> Maintain Item Basic;  View Item Basic

	product, or service that's unique as compared with other items by nature of its attributes.	<b>Resource:</b> EGP_SYSTEM_ITEMS_B
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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 Maintenance to Oracle Fusion Field Service - Work Order Data

Use the table to map the header, operations, operation items, and operation resources of Oracle Maintenance with Oracle Fusion Field Service.

Sl.No	URL	Query Params/Payload	Fields Used from API	Integrations Using this API
1	<i>Get One Work Order</i>	expand=WorkOrderDFF  onlyData=true	WorkOrderNumber  WorkOrderId  WorkOrderDescription  OrganizationCode  OrganizationId  AssetNumber  WoAssetId  PlannedStartDate  PlannedCompletionDate	Oracle Maintenance OFS Upsert Activity Helper
2	<i>Get Asset</i>	expand=assetDFF  onlyData=true	AssetId  AssetNumber  AssetDescription	Oracle Maintenance OFS Upsert Activity Helper

			InstalledDate  SerialNumber	
3	<i>Get All Operations of Workorder</i>	expand="WorkOrderOperationDFF, WorkOrderOperationResource, WorkOrderOperationMaterial"  onlyData=true  limit=100  orderBy=OperationSequenceNumber:asc	WoOperationId  OperationName  OperationSequenceNumber  OperationDescription  OrganizationId  WorkCenterCode  PlannedStartDate  PlannedCompletionDate  InventoryItemNumber  InventoryItemId  RequiredQuantity  SupplySubInventory  SupplyLocator	Oracle Maintenance OFS Upsert Activity Helper  Oracle Maintenance OFS Delete Activity Helper
4	<i>Get Operation</i>	onlyData=true  expand=WorkOrderOperationResource, WorkOrderOperationMaterial  limit=100  orderBy=OperationSequenceNumber:asc	WoOperationId  OperationName  OperationSequenceNumber  OperationDescription  OrganizationId  WorkCenterCode  PlannedStartDate  PlannedCompletionDate  InventoryItemNumber  InventoryItemId	



			RequiredQuantity SupplySubInventory SupplyLocator	
5	<i>Update Operation Material</i>	{ "SupplyType": "1" }		
6	<i>GetAllItem</i>	ItemId=300000177306732 OrganizationId=300000152243516	ItemId SerialGenerationValue	
7	<i>GetAllOperationResources</i>	onlyData=true  expand=WorkOrderOperationResourceDFF, WorkOrderOperationResourceInstance  limit=100  orderBy=ResourceSequenceNumber:asc	WoOperationResourceId ResourceSequenceNumber ResourceCode StandardOperationCode RequiredUsage ResourceDescription ProfileCode LaborInstanceId	
8	<i>UpdateOperationResource</i>	{ "ChargeType": "MANUAL" }		
11	<i>Update WO. Op. Resource</i>	Workorder Id  WO Operation Id  WO Op Resource Id	Charge Type	Oracle Maintenance OFS Upsert Activity Helper

17	<i>Get WO. Op. Resource Instances</i>	Workorder Id WO Operation Id WO Op Resource Id		Oracle Maintenance OFS WO Status Update Helper
18	<i>Delete Wo. Op. Resource Instance</i>	Workorder Id WO Operation Id WO Op Resource Id WO Op Resource Instance Id		Oracle Maintenance OFS WO Status Update Helper
19	<i>Get all Work Centers</i>			Oracle Maintenance OFS WorkCenter Sync
20	<i>Get all Work Center Resources</i>			Oracle Maintenance OFS WorkZone Update Helper
21	<i>Get all labour resources</i>			Oracle Maintenance OFS WorkZone Update Helper
22	<i>Get all equipment resources</i>			Oracle Maintenance OFS WorkZone Update Helper
23	<i>Get all resources</i>			Oracle Maintenance OFS WorkZone Update Helper

## Oracle Fusion Field Service to Oracle Maintenance - Work Order Data with Scheduled Dates and Resource Instance Assignments

Sl.No	URL	Query Params/Payload	Fields Used from API	Integrations Using this API
1	<i>Get One Work Order</i>	OnlyData=true	PlannedStartDate PlannedCompletionDate	Oracle OFS Maintenance Activity WO Sync Helper
2	<i>UpdateWorkOrder</i>	{		Oracle OFS Maintenance Activity WO Sync Helper

		<pre>"WorkOrderStatusCode": "ORA_ RELEASED",  "PlannedStartDate" : "2023-12-12 12:00:00",  "PlannedEndDate" : "2023-12-12 14:00:00"  }</pre>		
3	<i>Get One Operation</i>	OnlyData=true	PlannedStartDate  PlannedCompletionDate	Oracle OFS Maintenance Activity WO Sync Helper
4	<i>Update One Operation</i>	<pre>{  "PlannedStartDate" : "2023-12-12 12:00:00",  "PlannedCompletionDate" : "2023-12-12 14:00:00"  }</pre>		Oracle OFS Maintenance Activity WO Sync Helper
5	<i>Update Operation Resource</i>	<pre>{  "PlannedStartDate" : "2023-12-12 12:00:00",  "PlannedCompletionDate" : "2023-12-12 14:00:00"  }</pre>		Oracle OFS Maintenance Activity WO Sync Helper
6	<i>Get all Operations</i>		PlannedStartDate  PlannedCompletionDate	Oracle OFS Maintenance Work Order Update Helper
7	<i>Get all Resources</i>		PlannedStartDate  PlannedCompletionDate	Oracle OFS Maintenance WO Operation Update Helper
8	<i>Delete Resource Instance</i>			Oracle OFS Maintenance Operation Delete

9	Create Resource Instance	<pre>{   "BasisType": 1,   "ResourceCode": "BR_Team",   "RequiredUsage": 1,   "ResourceSequenceNumber": 30,   "UsageRate": 1,   "PlannedStartDate": "2023-08-22   04:00:00",   "PlannedCompletionDate":   "2023-08-22 04:30:00" }</pre>		Oracle OFS Maintenance Res Instance Sync Helper
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## Oracle Fusion Field Service to Oracle Maintenance - Activity Sync from Oracle Fusion Field Service to Oracle Maintenance

Sl.No	URL	Query Params/Payload	Fields Used from API	Integrations Using this API
1	Create Work Order	<pre>{   "WorkOrderTypeCode":   "PREVENTIVE",   "WorkOrderSubTypeCode": "ORA_   PLANNED",   "AssetNumber": "FLTR01",   "OrganizationCode": "M001",   "SchedulingMethod": "NO_   SCHEDULING",</pre>		Oracle OFS Maintenance Work Order Create

		<pre> "PlannedStartDate": "2023-08-03 08:30:00",  "PlannedCompletionDate": "2023-08-03 08:30:00",  "WorkOrderOperation": [  {  "CountPointOperationFlag": true,  "OperationName": "Preventive Maintenance",  "OperationSequenceNumber": 10,  "PlannedStartDate": "2023-08-03 08:30:00",  "PlannedCompletionDate": "2023-08-03 08:30:00",  "WorkCenterCode": "BMWWC",  "StandardOperationCode": "DemoOP"  }  ]  } </pre>		
2	Create Operation	<pre> {  "CountPointOperationFlag" : true,  "OperationName": "Preventive Maintenance",  "OperationSequenceNumber" : 20,  "PlannedStartDate": "2023-08-18T17:58:00",  "PlannedCompletionDate": "2023-08-18T18:28:00",  "WorkCenterCode" : "EngineRepairCenter",  "StandardOperationCode" : "DO" </pre>		Oracle OFS Maintenance Operation Create Helper

		}		
3	Create Resource	{  "BasisType": 1,  "ResourceCode": "BR_Team",  "RequiredUsage": 1,  "ResourceSequenceNumber": 30,  "UsageRate": 1,  "PlannedStartDate": "2023-08-22 04:00:00",  "PlannedCompletionDate": "2023-08-22 04:30:00"  }		Oracle OFS Maintenance Op Resource Create Helper

## Asset Status Update from Oracle Fusion Field Service to Oracle Maintenance

Sl.No	URL	Query Params/Payload	Fields Used from API	Integrations Using this API
1	UpdateAssetStatus	NA	NA	<p>Oracle OFS Maintenance Work Order Update</p> <p>Oracle OFS Maintenance Update WO Status</p> <p>Oracle OFS Maintenance Followup Action Update</p> <p>Oracle OFS Maintenance Schedule Update Helper</p>

## Standard Operation Configurations to Oracle Fusion Field Service

Sl.No	URL	Query Params/Payload	Fields Used from API	Integrations Using this API
1	<i>Get all operations</i>	limit=1000&q=CountPointOf	StandardOperationCode	Oracle Maintenance OFS Activity Types Sync

## Work Center Configurations and Resource Instance to Oracle Fusion Field Service, Equipment and Equipment Instance to Oracle Fusion Field Service

Sl.No	URL	Query Params	Fields Used from API	Integrations Using this API
1	../productionResources? limit=100&q=OrganizationCo ="M001"&expand=LaborInst	limit=100&q= OrganizationCode  ="M001"&expand  =LaborInstance&onlyData=t		
2	https://xxx.com/ fscmRestApi/ resources/ipaddress/ inventoryCompletedTransac	expand = "expand"  q = OrganizationId=<value of OrgId>  TransactionDate= > Present date - 2 for new run,> LastSyncTime for subsequent runs  fields="SubinventoryCode, Item, Locator, OrganizationId,Quantity, serials"	SubinventoryCode  Item  Locator  OrganizationId  Quantity  serials	Oracle Maintenance OFS Inventory Increment Helper

		onlyData=true  limit=500  offset=<changes based on iteration within integration>		
--	--	---	--	--

## APIs for Operation Completion

Sl.No	API Name	Query Params / Payload	Fields Used from API	Integrations Using this API
1	<i><a href="#">maintenanceresourcetransaction</a></i>	<pre>{   "SourceSystemCode" :   "OFS",   "SourceSystemType" :   "EXTERNAL",   "ResourceTransactionDate":   [     {       "LaborInstanceId" :       1111,       "ResourceCode" : "Engine",       "ResourceActivityCode":       "OperationSequenceNumber",       "TransactionDate" :       "2023-06-23       04:58:00",       "OrganizationCode": "M001",       "TransactionTypeCode":       "TransactionQuantity":       1,       "WorkOrderNumber": "MN001",       "ResourceSequenceNumber":       }     ]   } }</pre>		Oracle OFS Maintenance Operation Completion Helper
2	<i><a href="#">maintenancematerialtransaction</a></i>	<pre>{   "SourceSystemCode" :   "OFS",   "SourceSystemType" :   "EXTERNAL",   "InterfaceBatchStatus":   "VALID",   "MaterialTransactionDate":   [ {     "OrganizationCode" :     "M001",     "TransactionQuantity":     1,   }   ] }</pre>		Oracle OFS Maintenance Operation Completion Helper



		<pre> "TransactionDate" : "2023-06-15 08:38:00", "TransactionTypeCode" "MATERIAL_ISSUE", "WoOperationSequenceN 10, "WorkOrderNumber" : "MNT1WO-1375", "InventoryItemNumber" "RS Bushing" // "SubinventoryCode": "Stores" } ] } </pre>		
3	<i>maintenanceoperationtransac</i>	<pre> { "SourceSystemCode" : "FUSION_MOBILE", "SourceSystemType" : "EXTERNAL", "OperationTransactionI [ { "OrganizationCode" : "M001", "WoOperationSequenceN 10, "TransactionDate" : "2023-06-23T06:19:00-0 "TransactionNote" : "REST Testing Maintenance Operation Txn", "WorkOrderNumber" : "MNT1WO-1442" , "FromDispatchState" : "READY", "ToDispatchState" : "CANCEL" } ] } </pre>		Oracle OFS Maintenance Operation Completion Helper

## APIs for Meters

Sl.No	API Name	Query Params/Payload	Fields Used from API	Integrations Using this API
1	<i>assetMeters</i>	q=MeterUsageCode='ORA_ ASSET';RecordAtWoComplC MANDATORY' or 'ORA_	MeterCode MeterDefinitionId	Oracle Maintenance OFS Meters Sync Helper

		OPTIONAL';ActiveEndDate> currentDateTime or is null		
2	<i>getMeterTemplate</i>	MeterDefinitionId	MeterName  MeterCode  UnitOfMeasure  MeterType  ReadingType  ReadingDirectionMeaning  RecordAtWoCompletion  ResetAllowedFlag  RolloverAllowedFlag	Oracle Maintenance OFS Meters Sync Helper
3	<i>getAllMeterReadings</i>	finder=MetersByAssetMeter Number>, MntMeterCode=<MeterCode	ReadingDate  NetValue  ReadingValue	Oracle Maintenance OFS Meters Sync Helper
4	<i>createMeterReading</i>	<pre>{   "AssetId": xxxxxx,   "MeterCode": "TEST",   "ReadingDate":     "2023-08-29T09:48:55.8   "MeterUsageCode":     "ORA_ASSET",   "ReadingValue":     "230",   "Comments": "XXXX     XXXX XXXXX" }</pre>		Oracle OFS Maintenance Meter Reading Update

# 5 Integrations and Lookups

## Integrations

### Integration Properties

S.No	Integrations	Property Name	Default Value	Remarks
1	Oracle OFS Maintenance Activity WO Sync Helper	DelayInMilliseconds	5000	Retry configuration added to handle concurrent update issue with Fusion API
	Oracle OFS Maintenance WO Operation Update Helper	RetryCount	3	
	Oracle OFS Maintenance Work Order Update Helper			
	Oracle OFS Maintenance Create Res Copying Helper			
	Oracle OFS Maintenance Update WO Status			
	Oracle Maintenance Op Material Update Helper			

### Oracle Maintenance to Oracle Fusion Field Service Metadata Sync

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle Maintenance FFS Resource Sync	ORCL-BA-MNT_FFS_RESRCE_SYNC		Scheduled	<b>[Oracle Fusion Field Service only]</b> Schedule integration to sync resource information from Oracle

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
					Maintenance to Oracle Fusion Field Service
2	Oracle FFS Maintenance Get Labor Instance Helper	ORCL-BA-FFS_MNT_GT_LAB_INS_HELP	Oracle OFS Maintenance Operation Completion Helper	Sub Integration	Sub Integration to get the labor instance details from Fusion for both normal and Cross-Org Scenario
3	Oracle Maintenance OFS Resource Sync	ORCL-BA-MNT_OFS_RES_SYNC		Scheduled	<b>[Oracle Field Service only]</b> Schedule integration to sync resource from Oracle Maintenance to Oracle Fusion Field Service
4	Oracle Maintenance OFS WorkCenter Sync	ORCL-BA-MNT_OFS_WC_SYNC		Scheduled	Integration to sync work centers to work zones in Oracle Fusion Field Service
5	Oracle Maintenance OFS Activity Types Sync	ORCL-BA-MNT_OFS_ACT_TYPE_SYNC		Scheduled	Integration which syncs standard operations as activity types in Oracle Fusion Field Service
6	Oracle Maintenance OFS Property Setup	ORCL-BRT-MNT_OFS_PROPERTY_SETUP		Scheduled	Property SetUp integration to create all required properties for Oracle Maintenance Integrations
7	Oracle Maintenance OFS DFF Sync	ORCL-BA-OFS_MNT_DFF_SYNC	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper integration to sync the context/global segments and the fields within the segments to Oracle Fusion Field Service at WO/Operation/Op Resource level.
8	Oracle Maintenance OFS WorkZone Update Helper	ORCL-BA-MNT_OFS_RES_WZ_HLPR	Oracle Maintenance OFS WorkCenter Sync	Sub Integration	Helper integration to sync the work zone to resources in Oracle Fusion Field Service. When a new work zone is added or a new resource is associated with a work zone, this

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
					integration syncs the work zone for the resource in Oracle Fusion Field Service.
9	Oracle Maintenance OFS WorkCenter Sync	ORCL-BA-MNT_OFS_WC_SYNC		Scheduled	Scheduled integration to sync work center as work zones in Oracle Fusion Field Service.
10	Oracle Maintenance OFS Resource External ID Helper	ORCL-BA-MNT_OFS_RES_EXT_ID_HLPR	Oracle Maintenance OFS Resource Sync	Sub Integration	Sub Integration to map laborInstanceid and PartyId against externalId of field resource depending on the scenario.

## Oracle Maintenance to Oracle Fusion Field Service Work Order Sync

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle Maintenance OFS Get Inventory Type Helper	ORCL-BA-MNT_OFS_GET_INV_TYPE_HLP	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper integration to get the inventory type of the items
2	Oracle Maintenance OFS Update Activity Trigger	ORCL-BA-MNT_OFS_UPDATE_ACTY_TRIG		Realtime	Integration triggered on Update Oracle Maintenance Workorder event. It includes Create, Update, Cancel, Delete and Complete Activity Operations
3	Oracle Maintenance OFS Upsert Activity Helper	ORCL-BA-MNT_OFS_UPSERT_ACT_HELP	Oracle Maintenance OFS Update Activity Trigger	Sub Integration	Sub-integration to create or update activity from Workorder operation

4	Oracle Maintenance OFS Find Activities Helper	ORCL-BA- MNT_OFS_FIND_ACT_HELPER	Oracle Maintenance OFS Update Activity Trigger	Sub Integration	Helper integration to find the existing activities with the appointment numbers.
5	Oracle Maintenance OFS Delete Activity Helper	ORCL-BA- MNT_OFS_DEL_ACT_HELPER	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper Integration to Delete the Activities if corresponding Operation/Resource deleted in Oracle Maintenance
6	Oracle Maintenance OFS WO Status Update Helper	ORCL-BA-MNT_OFS_WO_STS_HLP	Oracle Maintenance OFS Update Activity Trigger	Sub Integration	Sub integration used to sync Work order Status with an Oracle Fusion Field Service Activity
7	Oracle Maintenance OFS ActivityLink Check Helper	ORCL-BA- MNT_OFS_ACT_CHECK_HLPR	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Integration used to check if an activity link is already present for an activity in Oracle Fusion Field Service.
8	Oracle Maintenance OFS Activity Type Lookup Helper	ORCL-BA- MNT_OFS_ACT_TYP_LKUP_HLP	Oracle Maintenance OFS Upsert Activity Helper  Oracle Maintenance OFS Upsert Activity Type Helper	Sub Integration	Helper integration used to obtain activity type related details provided a standard operation code
9	Oracle Maintenance Op Material Update Helper	ORCL-BA- MNT_OP_MATER_UPDAT_HELP	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper integration to update the Supply type as push for Operation material
10	Oracle Maintenance OFS DFF Sync	ORCL-BA-MNT_OFS_DFF_SYNC	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper integration to sync the Global and Context DFF fields at WO, Operation and Resource from Oracle Maintenance to Oracle Fusion Field Service.
11	Oracle Maintenance OFS Activity Types Sync	ORCL-BA- MNT_OFS_ACT_TYPE_SYNC		Scheduled	Scheduled integration to sync the Standard Operations from Oracle Maintenance as Activity types in Oracle Fusion Field Service based on the lookup mapping

12	Oracle Maintenance OFS WorkZone Update Helper	ORCL-BA-MNT_OFS_RES_WZ_HLPR		Sub Integration	
13	Oracle Maintenance OFS Upsert Work Skill Helper	ORCL-BA-MNT_OFS_WS_HELPER		Sub Integration	
14	Oracle Maintenance OFS Asset DFF Sync	ORCL-BA- MNT_OFS_ASSET_DFF_SYNC	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	Helper integration to sync Global and Context segment fields from Oracle Maintenance to Oracle Fusion Field Service.
15	Oracle Maintenance OFS Create Activity Trigger	ORCL-BA- MNT_OFS_CREATE_ACTY_TRIG		Realtime	Integration is triggered by the Create Maintenance Workorder event.
16	Oracle Maintenance OFS Warehouse Resource Helper	ORCL-BA-MNT_OFS_WH_RES_HLPR	Oracle Maintenance OFS Upsert Activity Helper	Sub Integration	
17	Oracle Maintenance OFS Upsert Activity Type Helper	ORCL-BA- MNT_OFS_ACT_TYPE_HELP		Sub Integration	Helper integration to create/update activity types in Oracle Fusion Field Service

## Oracle Fusion Field Service to Oracle Maintenance Activity Schedule and Assignment Update

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle OFS Maintenance Work Order Update	ORCL-BA- OFS_MNT_WORK_ORD		Realtime	Update WO Operation/resource schedule from Oracle Fusion Field Service to Oracle Maintenance for regular activities.
2	Oracle OFS Maintenance	ORCL-BA- OFS_MNT_SA_HANDLE		Realtime	Parent integration that's subscribed to schedule change and

	Segmented Activity Handler				assignment change for multi segmented activities.
3	Oracle OFS Maintenance Schedule Update Helper	ORCL-BA-OFS_MNT_SCH_UPDAT	Oracle OFS Maintenance Segmented Activity Handler	Sub Integration	Helper integration to get the start date time of the first segment and the end date time of the last segment and pass it to sub integration to update the schedule to Oracle Maintenance.
4	Oracle OFS Maintenance Activity WO Sync Helper	ORCL-BA-OFS_MNT_WO_SYNC_H	Oracle OFS Maintenance Work Order Update	Sub Integration	Helper integration to sync the schedule of an activity from Oracle Fusion Field Service to Oracle Maintenance. This integration also does the time zone conversion before sending the updates to Oracle Maintenance.
5	Oracle OFS Maintenance WO Operation Update Helper	ORCL-BA-OFS_MNT_WOO_UPDT	Oracle OFS Maintenance Activity WO Sync Helper	Sub Integration	Helper class to update the Operation window with the least start date of the resource and the max end date of the resource under the operation.
6	Oracle OFS Maintenance Work Order Update Helper	ORCL-BA-OFS_MNT_WO_UPDT_H	Oracle OFS Maintenance WO Operation Update Helper	Sub Integration	Helper integration which sets the WO start date as the least operation start date time and WO end date time as the max operation end date time. This integration also updates the custom Work order statuses to Oracle Maintenance based on the mapping in the lookup, ORCL-BRT-OFS-MNT-STATUS-MAPPING.
7	Oracle OFS Maintenance Resource Instance Sync	ORCL-BA-OFS_MNT_RES_INSTNC		Realtime	This integration captures the move events triggered



					from Oracle Fusion Field Service for regular activities and updates the resource instance to Oracle Maintenance.
8	Oracle OFS Maintenance Res Instance Sync Helper	ORCL-BA-OFS_MNT_RES_INST_H	Oracle OFS Maintenance Resource Instance Sync  Oracle OFS Maintenance Work Order Create	Sub Integration	Helper integration to sync the resource instance against an Operation Resource in Oracle Maintenance.
9	Oracle OFS Maintenance Remove Res Instance Helper	ORCL-BA-OFS_MNT_RMV_INST_	Oracle OFS Maintenance Res Instance Sync Helper	Sub Integration	Helper integration to check if all the work order operations' resources instances are present in all resource instance's activity or not.
10	Oracle OFS Maintenance Create Res Copying Helper	ORCL-BA-OFS_MNT_CREATE_RE	Oracle OFS Maintenance Res Instance Sync Helper	Sub Integration	Create a resource from the existing resource if the existing organisation don't have the resource details.
11	Oracle OFS Maintenance Segmented Activity Delete	ORCL-BA-OFS_MNT_SEGME_ACT		Realtime	This integration handles the sync of deletion of segments from Oracle Fusion Field Service to Oracle Maintenance
12	Oracle OFS Maintenance Master Segment Cancel	ORCL-BA-OFS_MNT_MAS_SEG_C		Realtime	This updates the Oracle Maintenance WO status to canceled when the master segment is canceled.
13	Oracle OFS Maintenance Update WO Status	ORCL-BA-OFS_MNT_UPDAT_WO		Realtime	Updates Oracle Maintenance WO status when an activity starts and when the activity is made note done without any action type selection. The action type is captured in the

					custom field, mwo_ action_type.
14	Oracle OFS Maintenance Operation Delete	ORCL-BA- OFS_MNT_OP_DEL		Realtime	This integration get triggered when an activity is deleted from Oracle Fusion Field Service. If the activity corresponds to an operation resource in Oracle Maintenance, then the resource is deleted from Oracle Maintenance.
15	Oracle OFS Maintenance DFF Sync	ORCL-BA- OFS_MNT_DFF_SYNC	Oracle OFS Maintenance Operation Completion Helper  Oracle OFS Maintenance Schedule Update Helper  Oracle OFS Maintenance Work Order Update	Sub Integration	Helper integration to create a new context segment set from Oracle Fusion Field Service to Oracle Maintenance or to sync the context segment field updates from Oracle Fusion Field Service to Oracle Maintenance.
16	Oracle OFS Maintenance Asset DFF Sync	ORCL-BA- OFS_MNT_ASSET_DFF	Oracle OFS Maintenance Update WO Status  Oracle OFS Maintenance Work Order Update  Oracle OFS Maintenance Schedule Update Helper	Sub Integration	Helper integration to sync the Asset Global and Context DFF fields from Oracle Fusion Field Service to Oracle Maintenance.
17	Oracle OFS Maintenance External Resource Helper	ORCL-BA- OFS_MNT_EXTNL_RES	Oracle OFS Maintenance Res Instance Sync Helper	Sub Integration	Update/Create Resource under Operation if the Resource instance not present in Oracle Maintenance.

## Oracle Fusion Field Service to Oracle Maintenance New Activity and Follow-Up Activity Sync

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle OFS Maintenance Work Order Create	ORCL-BA-OFS_MNT_WO_CREATE		Realtime	This integration syncs the new activities created in Oracle Fusion Field Service to Oracle Maintenance.
2	Oracle OFS Maintenance Followup Action Update	ORCL-BA-OFS_MNT_FOLLOW_UP_ACT_UP		Realtime	Integration that creates a new WO/OP/RES in Oracle Maintenance based on the action type selection in Oracle Fusion Field Service.
3	Oracle OFS Maintenance Operation Create Helper	ORCL-BA-OFS_MNT_OP_CREATE_HELPER	Oracle OFS Maintenance Work Order Create	Sub Integration	Helper integration to create a new operation in Oracle Maintenance.
4	Oracle OFS Maintenance Op Resource Create Helper	ORCL-BA-OFS_MNT_OP_RES_CREA_HELP	Oracle OFS Maintenance Work Order Create	Sub Integration	Helper integration to create a new operation resource in Oracle Maintenance.

## Oracle Fusion Field Service to Oracle Maintenance Transactions and Operation Completion

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle OFS Maintenance Operation Completion	ORCL-BA-OFS_MNT_OP_CMPLT	Oracle OFS Maintenance Operation Completion Helper	Realtime	Main integration to do the resource transaction, material transaction, operation

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
					completion, Inventory Cont adjustment, asset status update and post meter reading.
2	Oracle OFS Maintenance Operation Completion Helper	ORCL-BA-OFS_MNT_OP_CMPLT_	<p>Oracle OFS Maintenance Operation Completion</p> <p>Oracle OFS Maintenance Work Order Update Helper</p> <p>Oracle OFS Maintenance Followup Action Update</p>	Sub Integration	<p>Helper integration to do the resource transaction, material transaction, operation completion, Inventory Cont adjustment, asset status update and post meter reading. If any of the resource or the material transaction got failed, the mwo_transaction_status property will be set as FAILURE. If all the activities in the operation are completed, canceled, or not done and there's no transaction failure in any of the activity, then it performs an Operation Transaction.</p> <p>Along with that it:</p> <ul style="list-style-type: none"> <li>• Updates the inventory count also in Oracle Maintenance.</li> <li>• Updates the asset status.</li> <li>• Posts the meter reading captured in Oracle Fusion Field Service to Oracle Maintenance.</li> </ul>
3	Oracle OFS Maintenance Status Check Helper	ORCL-BA-OFS_MNT_STS_CHK_H	Oracle OFS Maintenance Operation Completion	Sub Integration	It checks if all the activities in an operation are completed, canceled, or not done. It returns

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
			Oracle OFS Maintenance Opn Completion Check Helper		a value COMPLETE or INCOMPLETE, the transaction status [Any transaction failure in any of the activity in that operation] and the last activity Id to the parent integration.
4	Oracle OFS Maintenance Opn Completion Check Helper	ORCL-BA-OFS_MNT_PREPO_OPN	Oracle OFS Maintenance Operation Completion Helper	Sub Integration	Helper integration to check if any Operations before/ after the current Operation is eligible for Operation Transaction Completion. If so, tries to complete those operations.
5	Oracle OFS Maintenance Required Inventory Helper	ORCL-BA-OFS_MNT_REQ_INV_H		Sub Integration	
6	Oracle OFS Maintenance Inventory Complete Helper	ORCL-BA-OFS_MNT_INV_COMP	Oracle OFS Maintenance Operation Completion Helper	Sub Integration	Helper Integration to trigger Material transaction in Maintenance Cloud, once an activity is completed in Oracle Fusion Field Service.
7	Oracle OFS Maintenance Inventory List Helper	ORCL-BA-OFS_MNT_INV_LIST_H	Oracle OFS Maintenance Operation Completion Helper	Sub Integration	Helper integration to get the list of installed inventories.
8	Oracle OFS Maintenance Get Labor Instance Helper	ORCL-BA-OFS_MNT_GET_LAB_IN		Sub Integration	Helper integration to get the Labor Instance ID of a Technician in Oracle Fusion Field Service.
9	Oracle FFS Maintenance Get Labor Instance Helper	ORCL-BA-FFS_MNT_GT_LAB_INS	Oracle OFS Maintenance Operation Completion Helper	Sub Integration	Sub Integration to get the labor instance details from Fusion for both normal and Cross-Org Scenario

## Oracle Maintenance to Oracle Fusion Field Service Asset Meter Sync

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle Maintenance OFS Meters Sync Helper	ORCL-BA-OFS_MNT_METER_SYNC_HELPR	<ul style="list-style-type: none"> <li>Oracle Maintenance OFS Upsert Activity Helper</li> <li>Oracle OFS Maintenance Schedule Update Helper</li> <li>Oracle OFS Maintenance Work Order Update</li> <li>Oracle OFS Maintenance Work Order Create</li> <li>Oracle OFS Maintenance Update WO Status</li> </ul>	Sub Integration	It syncs the current asset's meters and its latest reading data from Oracle Maintenance to Oracle Fusion Field Service. A maximum of two meters are syncd to Oracle Fusion Field Service.

## Oracle Fusion Field Service to Oracle Maintenance Asset Meter Readings Sync

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle Maintenance OFS Meters Sync Helper	ORCL-BA-OFS_MNT_METER_SYNC_HELPR	<ul style="list-style-type: none"> <li>Oracle Maintenance OFS Upsert Activity Helper</li> <li>Oracle OFS Maintenance Schedule Update Helper</li> </ul>	Sub Integration	It syncs the current asset's meters and its latest reading data from Oracle Maintenance to Oracle Fusion Field Service. A maximum of two meters are synced

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
			<ul style="list-style-type: none"> <li>Oracle OFS Maintenance Work Order Update</li> <li>Oracle OFS Maintenance Work Order Create</li> <li>Oracle OFS Maintenance Update WO Status</li> </ul>		to Oracle Fusion Field Service.

## Oracle Fusion Field Service Property Setup

S.No	Integrations	Identifier	Dependent Integrations	Type (Real time / Scheduled / Subintegration)	Remarks
1	Oracle Maintenance OFS Property Setup	ORCL-BRT-MNT_OFS_PROPERTY_SETUP		Scheduled	Scheduled integration to do the property setup in Oracle Fusion Field Service so as to support the Oracle Maintenance to Oracle Fusion Field Service integrations.
2	Oracle Maintenance OFS Property Create Helper	ORCL-BRT-MNT_OFS_PROP_CREAT_HLPR	Oracle Maintenance OFS Property Setup	Sub Integration	Helper Integration that would create a property in Oracle Fusion Field Service if it doesn't already exist

## Common Helper Integration

S.No	Integrations	Identifier	Type (Real time / Scheduled / Subintegration)	Remarks	
1	Oracle OFS Maintenance Lookup Helper	ORCL-BA-OFS_MNT_LOOKUP_HELPER	Sub Integration	Helper integration to get the value from lookup based	

				on the combination of two column values	
2	Oracle OFS Maintenance Set Valid Date Helper	ORCL-BA-OFS_MNT_SET_VLD_DATE_HLP	Sub Integration	Helper integration to validate the dates and return the valid dates	
3	Oracle OFS Maintenance Timezone Convertor Helper	ORCL-BA-OFS_MNT_TIMEZON_CONV_HLP	Sub Integration	Helper integration to convert the time to UTC time zone	
4	Oracle Maintenance OFS Create Resource Helper	ORCL-BA-MNT_OFS_CREATE_RES_HLPR	Sub Integration	Helper integration to create a resource in Oracle Fusion Field Service, if it doesn't exist.	
5	Oracle Maintenance OFS Resource External ID Helper	ORCL-BA-MNT_OFS_RES_EXT_ID_HLPR	Sub Integration	Helper integration to find whether the external ID is partyId.	
6	Oracle OFS Maintenance External Resource Helper	ORCL-BA-OFS_MNT_EXTNL_RES_HLPR	Oracle OFS Maintenance Res Instance Sync Helper	Sub Integration	Sub Integration Resource technician Oracle M

## Lookups

### ORCL-BRT-ACT-TYPE-MAPPING Lookup

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

Default Values:

- Standard operation codes and the corresponding activity types associated with it
- Column representing the default standard operation code for a given activity type

This lookup is also used to create the required activity types based on the Standard Operation code. It maps the data required to create segmentable activity types.

Sample Mapping:

STANDARD_OPERATION_CODE	ACTIVITY_LABEL	ACTIVITY_NAME	SEGMENTABLE	SEGMENT_MIN_DURATION	SEGMENT_MAX_DURATION	Default_Flag
DRAIN_OIL	drain_oil	Drain Oil	true	30	120	true



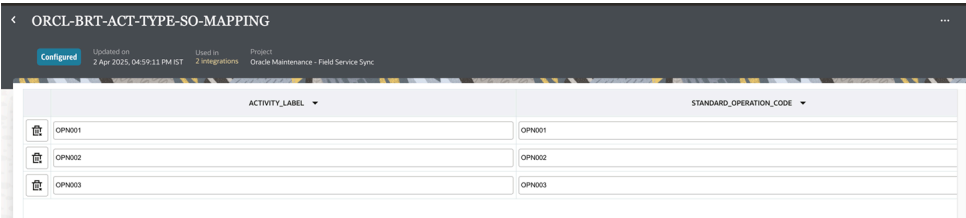
## ORCL-BRT-ACT-TYPE-SO-MAPPING Lookup

Lookup Name: ORCL-BRT-ACT-TYPE-SO-MAPPING

Default Values:

- ACTIVITY\_LABEL from Oracle Fusion Field Service corresponds to the Standard Operation
  - Standard operation codes and the corresponding activity types associated with it
- This lookup is used to map the standard operation code with the activity type for the Add/Follow-up activity integration.

Sample Mapping:



## ORCL-BRT-OFS-MNT-STATUS-MAPPING Lookup

This lookup maps the Oracle Fusion Field Service Activity Status and Status Change Reason fields [custom field used to capture the NotDone reason ] to Maintenance Work Order custom status. The values mapped depend on the business scenario.

Lookup Key	Usage
OFS_STATUS + STATUS_CHANGE_REASON	This lookup looks for a mapping for MNT_STATUS [custom MNT WO status] which can be derived from a combination of Oracle Fusion Field Service Activity Status and Status Change Reason [custom field to capture the reason for moving an activity to NotDone status].

Lookup Name: ORCL-BRT-OFS-MNT-STATUS-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:

<

ORCL-BRT-OFS-MNT-STATUS-MAPPING

CONFIGURED

Lookup

100%

Last Saved: Fri, Aug 25th, 2023 12:59:44 PM IST

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.

OFS_STATUS	STATUS_CHANGE_REASON	MNT_STATUS
<div>pending</div>	<div>(Add a Value)</div>	<div>Scheduled</div>
<div>started</div>	<div>(Add a Value)</div>	<div>IN_PROGRESS</div>
<div>completed</div>	<div>(Add a Value)</div>	<div>ORA_COMPLETED</div>
<div>pending</div>	<div>enroute</div>	<div>IN_PROGRESS</div>
<div>notdone</div>	<div>RequiresTowing</div>	<div>REQUIRES_TOWING</div>
<div>notdone</div>	<div>AdditionalTime/Manpower</div>	<div>ADD_TIME_MAN_POWER</div>
<div>notdone</div>	<div>AwaitingParts</div>	<div>AWAIT_PARTS</div>
<div>notdone</div>	<div>other</div>	<div>OTHER</div>

## ORCL-BRT-METERS-PROPERTY-MAPPING Lookup

Lookup Key	Usage
meter_code_	To create the property for meter code as meter_code_<<counter>>
meter_comment_	To create the property for meter code as meter_comment_<<counter>>
meter_direction_	To create the property for meter code as meter_direction_<<counter>>
meter_last_reading_	To create the property for meter code as meter_last_reading_<<counter>>
meter_last_reading_date_	To create the property for meter code as meter_last_reading_date_<<counter>>
meter_name_	To create the property for meter code as meter_name_<<counter>>
meter_new_reading_	To create the property for meter code as meter_new_reading_<<counter>>
meter_life_to_date_reading_	To capture the 'Life to Date' reading of the meter from Maintenance to Oracle Fusion Field Service.

Lookup Name: ORCL-BRT-METERS-PROPERTY-MAPPING

## ORCL-BRT-PROPERTY-MAPPING Lookup

Lookup Name: ORCL-BRT-PROPERTY-MAPPING

This lookup maps all the custom properties used in for the Maintenance integration. The label, name, entity, data type, and GUI are mapped in this table.

Lookup Key	Usage
mwo_repair_trans_code	To capture the Repair transaction code from Maintenance to .
mwo_work_accomp_code	To capture the Work to be accomplished code from Maintenance to .
mwo_inst_resource_code	To capture the resource code of the resource instance in Maintenance. This will help to identify the exact Resource if there are multiple skills associated with the technician in .
mwo_labour_identifier	To capture the Labour Identifier
external_id_identified_by	To identify how the externalID is computed, whether its calculated by Fusion Party ID or Maintenance Labor Instance ID
mwo_inv_last_sync_time	To identify when the last successful inventory incremental sync took place for the particular resource
mwo_resource_instance_id	To identify the Resource Instance associated with a technician in Maintenance.

### Sample Mapping:

INDEX	LABEL	NAME	ENTITY	GUI	TYPE
0	mmt_res_resource_name	Maintenance Resource Name	activity	text	string
1	mmt_res_seq_number	Operation Sequence Number	activity	text	string
2	mmt_workorder_id	Work Order ID	activity	text	string
3	mmt_workorder_type	Work Order Type	activity	combobox	enumeration
4	mmt_operation_name	Work Order Operation Name	activity	text	string
5	mmt_workorder_priority	Work Order Priority	activity	text	string

## ORCL-BRT-MNT-OFS-CONFIG Lookup

Lookup Name: ORCL-BRT-MNT-OFS-CONFIG

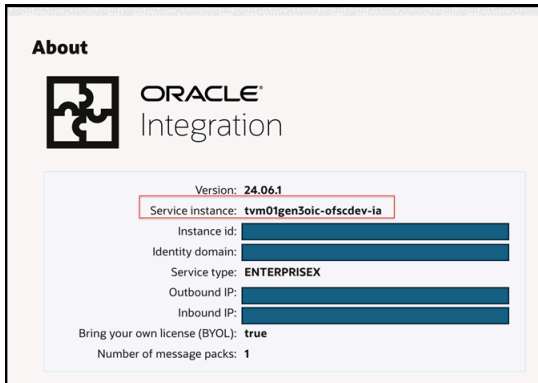
Lookup Keys and Usages:

Lookup Key	Usage
WOStatusToSyncOFSActivity	<p>The list of statuses in Oracle Maintenance that are synced to Oracle Fusion Field Service.</p> <p>You can add multiple Work Order Status(s) separated by commas.</p> <p>For example: ORA_RELEASED, AWAIT_PARTS</p>
ActivityTypeDefaultDuration	Default duration of activity types created as part of the Standard Operation sync.

Lookup Key	Usage
ActivityTypeSegmentMinDuration	Minimum duration of activities for segmentable activity types (applicable only if segmenting flag is enabled).
ActivityTypeSegmentMaxDuration	Maximum duration of activities for segmentable activity types (applicable only if the segmenting flag is enabled).
ActivityTypeCreateSegmentedTypes	Controls whether activity types created are segmentable.
DefaultActivityTypeName	Name of the default activity type created in Oracle Fusion Field Service used for syncing ad hoc operations.
DefaultActivityTypeGroupName	Group Name of the default activity type created in Oracle Fusion Field Service used for syncing ad hoc operations.
DefaultActivityTypeLabel	Label of the default activity type created in Oracle Fusion Field Service used for syncing ad hoc operations.
DefaultActivityTypeGroupLabel	Group Label of the default activity type created in Oracle Fusion Field Service used for syncing ad hoc operations.
IntegrationUser	Used for echo suppression, this field contains the clientID for the Oracle Fusion Field Service connection used in Oracle Maintenance flow.
ScheduleActivityEnabled	<p>When this flag is set to true, it creates the Oracle Fusion Field Service activity in the Scheduled pool. When set to false, all the synced activities are created under non scheduled pool.</p> <p>For example: true</p>
Basis	<p>Mandatory field to create a new resource under a Oracle Maintenance Operation. If the value is 1, then the resource consumption is fixed. It doesn't change according to work order quantity. If the value is 2, then the resource consumption isn't fixed. It might change according to work order quantity.</p> <p>For example: 1</p>
UsageRate	<p>Usage rate of the new resource created under an existing work order operation. Resource usage rate that the plant requires to make the required work order quantity.</p> <p>For example: 1</p>
RequiredUsage	<p>Required usage of the new resource created under an existing work order operation. Resource usage that the plant requires to make the required work order quantity.</p> <p>For example: 1</p>

Lookup Key	Usage
MNTSourceSystemCode	<p>The Source System Code in Fusion. It is required for the transactions. This denotes the source system that started the transactions.</p> <p>For example: OFS</p>
MNTSourceSystemType	<p>The type of the source system, INTERNAL/EXTERNAL.</p> <p>For example: EXTERNAL</p>
SupplyInventoryDelimiter	<p>The delimiter used to separate parts used in forming an inventory identifier. It is used in both Activity Required Inventory and Inventory Sync Integrations.</p> <p>For example: .</p>
MNTAssetMaxNoOfMeters	<p>It holds the maximum number of meters a single asset can hold. Currently it supports only a maximum value of 2.</p>
NewWOStatusFromOFSToMNT	<p>This is the work order status set whenever a new activity is created in Oracle Fusion Field Service and synced to Oracle Maintenance.</p> <p>For example: ORA_RELEASED</p>
WOStatusUpdateFlag	<p>This flag indicates whether work order status must be moved to custom statuses whenever an activity status changes in Oracle Fusion Field Service.</p> <p>For example: true</p>
InitialOpSeqNumber	<p>The operation sequence number with which a new operation is created whenever a new activity that's created in Oracle Fusion Field Service is synced to Oracle Maintenance.</p> <p>For example: 10</p>
ShouldCreateUserForEquipment	<p>This flag indicates whether to create user for equipment instances while syncing Resource Instances from Oracle Maintenance to Oracle Fusion Field Service. If set to false, the user isn't created for equipment type resource instances.</p> <p>For example: false</p>
TravelArea	<p>This is used while syncing work centres from Oracle Maintenance to Oracle Fusion Field Service.</p> <p>For example: MaintenanceTA</p>
ReservationSupplySourceType	<p>This is the value of SupplySourceType the inventory reservation.</p>

Lookup Key	Usage
	For example: On hand
ShouldCreateEquipmentResource	<p>This flag indicates whether to sync equipment type resource instances. If set to false, such resource instances aren't synced.</p> <p>For example: true</p>
ShouldCreateResourceBucket	<p>This flag indicates whether to create resources as buckets. If set to false, all instances are synced under a Oracle Maintenance org.</p> <p>For example: false</p>
UserType	<p>This indicates the user type of labor resource instances synced from Oracle Maintenance to Oracle Fusion Field Service.</p> <p>For example: mobile worker</p>
ParentResourceId	<p>The resource id of the parent bucket where the resources are to be synced.</p> <p>For example: maintenance_root</p>
BucketResourceType	<p>The resource type of buckets. It is used to create resource and Oracle Maintenance org.</p> <p>For example: BK</p>
EquipmentResourceType	<p>The resource type of equipment instances synced from Oracle Maintenance to Oracle Fusion Field Service.</p> <p>For example: tool</p>
LaborResourceType	<p>The resource type of labour instances synced from Oracle Maintenance to Oracle Fusion Field Service.</p> <p>For example: PR</p>
WO_STATUSES_ACTIVITY_CANCEL	<p>The work order status(es) that are allowed to cancel all the corresponding activities in Oracle Fusion Field Service.</p> <p>For example: ORA_CANCELED</p>
WO_STATUSES_ACTIVITY_DELETE	<p>The work order status(es) that are allowed to delete all the corresponding activities in Oracle Fusion Field Service.</p>

Lookup Key	Usage
	For example: ORA_ON_HOLD,ORA_UNRELEASED
SkipMntOperationsStatus	<p>When a work order is in this status, OIC skips the updates from Oracle Maintenance. This is to avoid deleting an activity from the Oracle Fusion Field Service, if the activity is moved to another resource instance that's not present in the organisation.</p> <p><b>Action for customer :</b> Customer must create a custom Work Order status in Oracle Maintenance using the value RESCHEDULE.</p> <p>For example: RESCHEDULE</p>
OICInstanceName	<p>This field is required to get the instance details to call the OIC factory API.</p>  <p>The screenshot shows the 'About' page for Oracle Integration. It displays the version as 24.06.1 and lists several configuration details: Service instance (tvm01gen3oic-ofscdev-ia), Instance id, Identity domain, Service type (ENTERPRISEX), Outbound IP, and Inbound IP. It also indicates 'Bring your own license (BYOL): true' and 'Number of message packs: 1'.</p>
WareHouseResourceType	Warehouse Resource type label from Oracle Fusion Field Service. Mandatory, if PreferredWarehouseEnabled is set to true.
setOrgAsPreferredWarehouse	If true, Inventory Organization Warehouse will be assigned as Preferred Warehouse. Otherwise, Subinventory warehouse will be assigned.
PreferredWarehouseEnabled	If true, Preferred Warehouse feature will be enabled.
EventsForWOUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityMoved, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated.
ActivityMoveConditions	Enter one or more move conditions, separated by commas. Supported values include, bucketToResource, resourceToBucket, resourceToResource, and bucketToBucket. If no value is specified, only bucketToResource and resourceToBucket will be handled by default.
EventsForMeterUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityCreated, and activityUpdated.
EventsForDFFUpdate	Enter one or more Field Service activity events, separated by commas. Supported values include, activitySuspended, activityStarted, activityNotDone, activityCanceled, activityCreated, and activityUpdated. If the lookup is empty, DFF updates will occur only on the activityCompleted event.

#### Default Values:

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

#### Note:

- Accelerator allows the update of resource instance to a work order when an activity is assigned to technician or when an activity completed from Oracle Fusion Field Service. To enable the update of resource instance as part of activity completion, enable the look up configuration `ORCL-BRT-MNT-OFS-CONFIG->SkipWOResInstanceUpdate` as **True**. This is the recommended flow if you are performing bulk operation of activity assignment /movement / reschedule operation from Oracle Fusion Field Service.
- If there is no value configured for this lookup accelerator will take the value of the `ORCL-BRT-MNT-OFS-CONFIG->SkipWOResInstanceUpdate` as **false**. And the resource instance details will get updated into the work order when an activity is assigned to a field resource from Oracle Fusion Field Service.

## ORCL-BRT-WO-DFF-MAPPING Lookup

Lookup Name: ORCL-BRT-WO-DFF-MAPPING

This lookup is used to map DFF fields in Oracle Maintenance work orders against activity properties in Oracle Fusion Field Service. Three columns are provided here:

- **FLEXFIELD\_CONTEXT** : This value represents the context for which the current FLEXFIELD\_SEGMENT is active. When populated with the value "`__GLOBAL__`" it implies that the segment is available globally.
- **FLEXFIELD\_SEGMENT** : This value represents the API Name of the flexfield segment in Oracle Maintenance.
- **ACTIVITY\_PROPERTY\_LABEL** : This value represents the API Name of the property associated with the DFF field in Oracle Fusion Field Service.

You can also set the Flex Context from Oracle Fusion Field Service, if it's not already set in Oracle Maintenance. Use these steps to set the Flex Context:

1. Leave the FLEXFIELD\_SEGMENT blank.
2. Set the value for FLEXFIELD\_CONTEXT as "`__FLEX_Context`".
3. Set ACTIVITY\_PROPERTY\_LABEL as the property which would contain the flex context value from Oracle Fusion Field Service.

Sample Mapping:



ORCL-BRT-WO-DFF-MAPPING

Lookup for mapping Work Order DFFs to Activity Properties

Configured

Updated on Jul 8, 2024, 03:33:22 PM IST

Used in 2 Integrations

Project Oracle Maintenance - Field Service Sync

	FLEXFIELD_CONTEXT	FLEXFIELD_SEGMENT	ACTIVITY_PROPERTY_LABEL
	__FLEX_CONTEXT		WOContext
	__GLOBAL__	woinfo	WOInfo

## ORCL-BRT-WO-OP-DFF-MAPPING Lookup

Lookup Name: ORCL-BRT-WO-OP-DFF-MAPPING

This lookup is used to map DFF fields in Oracle Maintenance Work Order Operations against activity properties in Oracle Fusion Field Service.

Three columns are provided here:

- FLEXFIELD\_CONTEXT** : This value represents the context for which the current FLEXFIELD\_SEGMENT is active. When populated with the value "\_\_GLOBAL\_\_" it implies that the segment is available globally.
- FLEXFIELD\_SEGMENT** : This value represents the API Name of the flexfield segment in Oracle Maintenance.
- ACTIVITY\_PROPERTY\_LABEL** : This value represents the API Name of the property associated with the DFF field in Oracle Fusion Field Service.

You can also set the Flex Context from Oracle Fusion Field Service, if it's not already set from Oracle Maintenance. Use these steps:

1. Leave the FLEXFIELD\_SEGMENT blank.
2. Set the value of FLEXFIELD\_CONTEXT as "\_\_FLEX\_Context".
3. Set ACTIVITY\_PROPERTY\_LABEL as the property that must contain the flex context value from Oracle Fusion Field Service.

Sample Mapping:

ORCL-BRT-WO-OP-DFF-MAPPING

Lookup for mapping Work Order Operation DFFs to Activity Properties

Configured

Updated on Jul 8, 2024, 03:33:22 PM IST

Used in 2 Integrations

Project Oracle Maintenance - Field Service Sync

	FLEXFIELD_CONTEXT	FLEXFIELD_SEGMENT	ACTIVITY_PROPERTY_LABEL
	__GLOBAL__	datetime	DateTime
	__FLEX_Context		OperationContext
	Physio	physiocode	Physiocode

## ORCL-BRT-WO-OP-RES-DFF-MAPPING Lookup

Lookup Name: ORCL-BRT-WO-OP-RES-DFF-MAPPING

This lookup is used to map DFF fields in Oracle Maintenance Work Order Operation Resources with activity properties in Oracle Fusion Field Service.

Three columns are provided here :

- **FLEXFIELD\_CONTEXT**: This value represents the context for which the current FLEXFIELD\_SEGMENT is active. When populated with the value "\_\_GLOBAL\_\_" it implies that the segment is available globally.
- **FLEXFIELD\_SEGMENT** : This value represents the API Name of the flexfield segment in Oracle Maintenance.
- **ACTIVITY\_PROPERTY\_LABEL** : This value represents the API Name of the property associated with the DFF field in Oracle Fusion Field Service.

You can also set the Flex Context from Oracle Fusion Field Service, if it's not already set from Oracle Maintenance. Use these steps:

1. Leave the FLEXFIELD\_SEGMENT blank.
2. Set the value for FLEXFIELD\_CONTEXT as "\_\_FLEX\_Context".
3. Set ACTIVITY\_PROPERTY\_LABEL as the property that contains the flex context value from Oracle Fusion Field Service.

Sample Mapping:

FLEXFIELD_CONTEXT	FLEXFIELD_SEGMENT	ACTIVITY_PROPERTY_LABEL
__GLOBAL__	duration	durationResource
__FLEX_Context		ResourceContext
ResourceType	regular	regular

## ORCL-BRT-ASSET-DFF-MAPPING

Lookup Name: ORCL-BRT-ASSET-DFF-MAPPING

This lookup is used to map DFF fields in Assets against Activity Properties in Oracle Fusion Field Service.

Three columns are provided here :

- **FLEXFIELD\_CONTEXT**: This value represents the context for which the current FLEXFIELD\_SEGMENT is active. When populated with the value "\_\_GLOBAL\_\_" it implies that the segment is available globally.
- **FLEXFIELD\_SEGMENT** : This value represents the API Name of the flexfield segment in Assets.
- **ACTIVITY\_PROPERTY\_LABEL** : This value represents the API Name of the property associated with the DFF field in Oracle Fusion Field Service.

You can also set the Flex Context from Oracle Fusion Field Service, if it's not already set from Oracle Maintenance. Use these steps:

1. Leave the FLEXFIELD\_SEGMENT blank.

2. Set the value for FLEXFIELD\_CONTEXT as "\_\_FLEX\_Context".
3. Set ACTIVITY\_PROPERTY\_LABEL as the property that contains the flex context value from Oracle Fusion Field Service.

Sample Mapping:

FLEXFIELD_CONTEXT	FLEXFIELD_NAME	ACTIVITY_PROPERTY_LABEL
__FLEX_Context	AssetDowntime	AssetDowntime
AssetDowntime	high	high
AssetDowntime	low	low

## ORCL-BRT-MNT-OFS-SUBINT-VERSION

Lookup Name: ORCL-BRT-MNT-OFS-SUBINT-VERSION

This lookup activates different versions between the parent and child integrations.

If the parent integration is 1.0.5 and if it wants to connect to the child integration of version 1.1.0, then 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 version child integration. Lookup can be left blank in this scenario.

Sample Mapping:

Integration_Id	Version
ORCL-BA-MNT-OFS_FIND_ACT_HELPER	01.00.0004

## Debugging and Troubleshooting

This topic let's you resolve some common errors that might occur while integrating Oracle Fusion Field Service with Oracle Maintenance using the accelerator.

This topic lists the errors, their symptoms, and solutions to resolve the errors:

- *Work Order Sync from Oracle Maintenance to Oracle Field Service*
- *Schedule updates from Oracle Field Service to Oracle Maintenance*
- *Inventory Reservations from Activity Installed Inventory*
- *Operation Completion*

- *Resource Sync or Organization Sync*

## Work Order Sync from Oracle Maintenance to Oracle Fusion Field Service

Symptom: Work Order isn't synced to Oracle Fusion Field Service

**Error:** NA

**Solution:** Make sure all the prerequisites for work order sync are done and the work order statuses to be synced to Oracle Fusion Field Service are added in the lookup, ORCL-BRT-MNT-OFS-CONFIG with key, WOStatusToSyncOFSActivity.

## Schedule updates from Oracle Fusion Field Service to Oracle Maintenance

**Symptom:** Activity schedules aren't updated

**Error:** Work Order Update failed due to Lock issue in Oracle Maintenance Work Order/Work Order Operation update API

**Solution:** The accelerator includes the retry logic for all the schedule updates from Oracle Fusion Field Service to Oracle Maintenance. The integrations in which retry is implemented are as follows:

Integration	Default Retry Count	Default Delay in milliseconds
Oracle OFS Maintenance Activity WO Sync Helper	3	5000
Oracle OFS Maintenance WO Operation Update Helper	3	5000
Oracle OFS Maintenance Work Order Update Helper	3	5000
Oracle OFS Maintenance Create Res Copying Helper	3	5000
Oracle OFS Maintenance Update WO Status	3	5000
Oracle Maintenance Op Material Update Helper	3	5000

Try to increase the delay between the retries by changing the integration property "delayInMilliseconds" in the listed integration. Use these steps and rerun the integration from OIC:

1. Navigate to **Monitoring > Integrations > Integrations**.

2. Click the integration that's showing the error and resubmit it as shown in the screenshot.

Monitor Integrations

Total Instance Count 1

15 of 105 Integrations

Time Window : Last 6 Hours X Status : Active Sort By : Last Update Clear

Name	Received	Processed	Succeeded	Errored	Aborted	Last Scheduled By
Oracle Maintenance OFS Meters Sync Helper Last Message: Today at 09:26 PM IST	701	701	700	1	0	
Oracle Maintenance OFS Update ... Last Message: Today at 09:26 PM IST	316	316	310	6	0	

3. Click the Resubmit button.

Errors

Track Errors Abort Resubmit

Only recoverable errors can be selected for Abort and Resubmit operations.

1 Error

Time Window : Last 6 Hours X Integration : Oracle Maintenance OFS Meters Sync Helper (ORCL-BA-OFS\_MNT\_METER\_SYNC\_HELPR | 01.00.0000) X Clear

Primary Identifier	Instance Id	Fault Location	Error Time
activity Id: 165 Oracle Maintenance ...   1.0.0	18202891	Failed at Oracle Maintenance OFS Adapte	

Resubmit

## Inventory Reservations from Activity Installed Inventory

Inventory Reservation fails intermittently

### Error:

When inventory is reserved simultaneously, it can trigger locks on the API.

Solution: The accelerator includes the retry logic for all the schedule updates from Oracle Fusion Field Service to Oracle Maintenance, the API is called a maximum of three times with an interval of 5 seconds between each attempt.

## Operation Completion

Operation is not completed, after the last activity in the operation is completed in Oracle Fusion Field Service.

### Error:

- There could be a resource transaction or material transaction error during the completion of any activity in the operation.
- The Source System defined in the lookup code "MNTSourceSystemCode" isn't available in Fusion.
- There was an error in a previous operation due to the errors listed earlier.

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**Solution:**

- Review the resource and material transactions corresponding to the operation in Oracle Maintenance and complete it manually.
- Verify/create the Source System in Oracle Sales. For more information, see [Set Up Source Systems](#).

## Resource Sync or Organization Sync

Resource Instances and Oracle Maintenance Organizations aren't present in Oracle Fusion Field Service

**Error:** The Resource Type for Oracle Maintenance Organization and/or the Resource Instance isn't configured in the lookup

**Solution:** Make sure BucketResourceType and LaborResourceType values are configured in the lookup.

Resource Instances and Oracle Maintenance Organizations aren't present in Oracle Fusion Field Service

**Error:** The ParentResourceId is not configured in the lookup

**Solution:** Make sure ParentResourceId is configured in the lookup and it corresponds to a resource that can contain child resources in Oracle Fusion Field Service.

## 6 Revision History

Date	What's Changed	Notes
February 2024	Initial Release	

