# Oracle Fusion Cloud SCM

**Using Inventory Management** 

**24B** 

Oracle Fusion Cloud SCM Using Inventory Management

24B

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There are a number of ways to learn more about your product and interact with Oracle and other users.

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Thanks for helping us improve our user assistance!





# 1 Overview

# Overview of Tasks from the Inventory Management Work Area

Use the task panel on the Inventory Management work area to access your inventory, shipping, and receiving tasks.

Click **Show Tasks** in the task pane to toggle between these main categories:

- Inventory
- Counts
- Shipments
- Picks
- Receipts

Once you select a main category, you can view all the tasks in that category. Click a task link to open the UI pages for that task.

**Note:** The list of tasks that you can view and access depends on the products that your enterprise has licensed and configured, and the security privileges and roles assigned to your user account.

### Inventory

Inventory tasks include both inventory-related and consigned inventory-related tasks.

This table shows the **Inventory** tasks.

Task	Description
Manage Item Quantities	Search, review, and maintain item quantities.
Create Miscellaneous Transaction	Create a miscellaneous inventory transaction.
	A miscellaneous transaction is a transaction, such as a miscellaneous issue or miscellaneous receipt that you can use to issue material.
Create Subinventory Transfer	Create inventory transfer transaction between two subinventories.
Create Interorganization Transfer	Create inventory transfer transaction between two organizations.
Create Project Transfer	Create an inventory transfer transaction between two projects.
Manage Reservations and Picks	Search, review, and maintain reservations and picks.



Task	Description
	Create linkages between supply and demand sources by using reservations and picks.
Manage Movement Requests	Search, review, and maintain movement requests.
	Movement requests are requests for the movement of material within an inventory organization.
Manage Transfer Orders	Search, review, and maintain transfer orders.
	Transfer orders represent demand and supply in a single document.
Manage Pending Transactions	Search, review, and maintain pending inventory transactions.
Review Completed Transactions	Review completed inventory transaction details.
Manage Reservation Interface	Upload reservation data for processing.
	Use the Reservation Interface to view, create, process, and delete inventory reservation requests in the Oracle Fusion Cloud Inventory Management INV_RESERVATION_INTERFACE table.
Manage Lots	Search, review, and maintain lot information.
Manage Serial Numbers	Search, review, and maintain serial number information.
Confirm Pick Slips	Enter details of picked material and confirm a pick slip.
Manage Inventory Balance Messages in Spreadsheet	Review and edit the pending or failed inventory balance messages from external systems.
Review Item Supply and Demand	Search for and review the supply and demand information for an item.
Review Replenishment Requests in Spreadsheet	Review and update pending or failed inventory replenishment requests.

### This table shows the **Consigned Inventory** tasks.

Task	Description
Review Consumption Advices	Review inventory consumption advice details.
Manage Consigned Inventory Aging	Search, review, and maintain consigned inventory aging.
Review Consumption Advice Exceptions	Review inventory consumption advice exception details
Create Transfer to Owned Transaction	Initiate an inventory transaction to transfer consigned inventory to owned inventory.



Task	Description
	Transfers the ownership of the inventory from the supplier to the internal organization.
Create Transfer to Consigned Transaction	Initiate an inventory transaction to transfer owned inventory to consigned inventory.  Transfers ownership of the inventory from the internal organization to the supplier.

Use these guides to access content related to your inventory and consigned inventory tasks:

- Oracle Fusion Cloud SCM: Using Inventory Management
- Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management

### Counts

The Count tasks include both cycle counts and physical inventory.

This table shows the **Cycle Count** tasks.

Task	Description
Create Cycle Counts	Create a count in which items are selected, counted, and reconciled with inventory records continually throughout the year.
Manage Cycle Counts	Search, review, and maintain cycle count information.
Record Count Sequences	Enter the count quantity and recorded by for an individual item belonging to a cycle count.
Approve Count Sequences	Authorize an individual item count.
Review Count Interface Records	Review details of the count interface records.

This table shows the **Physical Inventory** tasks.

Task	Description
Manage Physical Inventories	Search, review, and maintain physical inventories.
Record Physical Inventory Tags	Enter the count quantity for the physical inventory tags.
Approve Physical Inventory Adjustments	Authorize physical and financial inventory change.

Use these guides to access content related to your cycle count and physical inventory tasks:

Oracle Fusion Cloud SCM: Using Inventory Management



• Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management

# **Shipments**

This table shows the **Shipments** tasks.

Task	Description
Manage Shipments	Search, review, pack, confirm and close shipments.
Manage Shipment Lines	Search, review, and maintain shipment lines.
Manage Shipment Message Interface	Review messages sent or received for a shipment or shipment line.
Create Pick Wave	Create a new pick wave.
Confirm Pick Slips	Enter details of picked material and confirm a pick slip.
Create Outbound Shipment Request	Publish an event with the necessary criteria to select and send shipment lines to the external system as shipment requests.
Manage Shipping Transaction Corrections in Spreadsheet	Review and edit the pending or unprocessed shipping transactions received through the open interface.

Use the Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management guide to access content related to your shipment tasks.

# **Picks**

This table shows the **Picks** tasks.

Task	Description
Create Pick Wave	Create a new pick wave.
Confirm Pick Slips	Enter details of picked material and confirm a pick slip.
Schedule Pick Wave	Create pick waves on a regular basis adhering to set of release criteria.
Create Outbound Shipment Request	Publish an event with the necessary criteria to select and send shipment lines to the external system as shipment requests.

Use these guides to access content related to your pick tasks:

Oracle Fusion Cloud SCM: Using Inventory Management



• Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management

# Receipts

The Receipts tasks include expected shipments, receipts, unordered receipts, and returns.

This table shows the **Expected Shipments** tasks.

Task	Description
Receive Expected Shipments	Search, review, and select shipment lines to receive.
Manage Inbound Shipments	Search, review, and select inbound shipments to modify.
Create ASN	Maintain and communicate the advanced shipment notice.
Create ASBN	Maintain and communicate the advanced shipment and billing notice.
Upload ASN or ASBN	Upload advanced shipment notices and advanced shipment and billing notices.

This table shows the **Receipts** tasks.

Task	Description
Inspect Receipts	Search, review, and select receipt lines to inspect.
Put Away Receipts	Search, review, and select receipt lines to put away.
Correct Receipts	Search, review, and select receipts to correct.
Review Receipts Interface	Review the receipt transactions interface.
Quality Inspection Results	Search, review, and select receipts to view quality inspection results.

This table shows the **Unordered Receipts** tasks.

Task	Description
Create Unordered Receipt Lines	Create individual receipt transactions that identify the receipt of an unordered item without reference to a purchase order.
Match Unordered Receipts	Search, review, and select receipt lines to match.



#### This table shows the **Returns** tasks.

Task	Description
Return Receipts	Search, review, and select receipt lines to return.
Manage Supplier Returns Without Receipt	Create, edit, delete, and cancel supplier returns without a receipt.

Use these guides to access content related to your receipts tasks:

- Oracle Fusion Cloud SCM: Using Receiving
- Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management

#### Related Topics

- Oracle Fusion Cloud SCM: Using Inventory Management
- Oracle Fusion Cloud SCM: Using Receiving
- Oracle Fusion Cloud SCM: Manufacturing and Supply Chain Materials Management

# Inventory Management Work Area

Oracle Fusion Cloud Inventory Management offers a complete materials management solution that enables companies to manage the flow of inbound and outbound material within the warehouse and stocking locations.

Oracle Fusion Cloud Inventory Management is comprised of products designed for specific warehouse management business processes and tasks throughout the Inventory, Shipping, and Receiving applications. The Inventory Management work area provides a landing pad for these applications.

You can use the Inventory Management work area to view high-level details of your warehouse operations through infolets. Also, access tasks and processes to perform from the Task panel of the Inventory Management work area.

To use the Inventory Management work area, you must be aware of these items:

- Access
- Navigation
- Infolets
- Tasks

### Access

Your access to the Inventory Management work area is determined by these factors:

- The products that your enterprise has licensed and configured
- The security privileges and roles assigned to your user account

These factors determine which infolets and tasks you can view and access.



For more information about inventory, shipping, and receiving roles and privileges, refer to the Oracle Fusion Cloud SCM: Security Reference for Manufacturing and Supply Chain Materials Management guide.

# Navigation

To access the Inventory Management work area, click **Navigator > Supply Chain Execution > Inventory Management**.

### Infolets

Infolets are visual, actionable, and personalized information cards summarizing critical data about specific objects. Infolet cards display in the Inventory Management work area to make key performance indicators easy to view, understand, and act upon. Use the infolets in the Inventory Management work area to quickly view details about picks, cycle counts, on-hand values, shipments, and receipts.

You can do the following with infolet cards:

- Flip or expand the card to view additional details about the object featured in the infolet card.
- Drill down to more details by navigating to relevant manage pages from the infolet view.
- Hide infolet cards.
- · Reorder infolet cards.

Use the **My Infolets** icon in the right corner of the Inventory Management work area to toggle your infolets on and off. Drag and drop infolets to rearrange them in the work area.

This table describes the infolets available on the Inventory Management work area, along with the page that you can drill into by clicking details in the infolet.

Infolet	Description	Drill Down Page
Picks	View the number of open or confirmed picks. Toggle to view open picks by pick slip type.	Confirm Pick Slips page
Late Cycle Counts	View the number of late cycle counts. Expand the page to view individual late counts and drill down to examine them.	Record Count Sequences page
Cycle Count Sequences	View cycle count sequences to approve and record. Drill down to perform the cycle count approval and recording tasks.	Manage Count Sequences page
On-Hand Value	Expand and drill into the Manage Items Quantities page to view on-hand availability details for items.  Note:  If you have access to multiple organizations and the organizations have different currencies, this infolet doesn't display any data. Instead a message of No data available displays.	Manage Item Quantities page



Infolet	Description	Drill Down Page
Open Shipments by Priority	View the number of open shipments by priority levels. Drill down to view shipment details.	Edit Shipments page
Open Shipments by Carrier	View the number of open shipments by top carriers. Drill down to view shipment details.	Manage Shipments page
Shipment Lines	View shipment line statuses presented in a circle graph:  - Awaiting pick release - Awaiting pick confirm - Backordered - Awaiting ship confirm Toggle to the next screen to see a summary of shipment lines past due and the amount of time that's past due for the shipment lines:  - 0 to 3 days - 4 to 7 days	Manage Shipment Lines page
	<ul> <li>8 to 14 days</li> <li>15 to 30 days</li> <li>Click a shipment line status to drill down to the Manage Shipment Lines page.</li> </ul>	
Shipment Exceptions	View the number of shipment exceptions and drill down to view details of the shipment exceptions.	Edit Shipment page
Shipment Lines for Next 30 Days	View shipment lines expected in the next 30 days presented in a bar graph based on time:  1 to 3 days 4 to 7 days 8 to 14 days 15 to 30 days  Drill down to view details of the expected shipments.	Manage Shipment Lines page
Receipt Lines	View receipt line statuses:  • Awaiting receipt  • Awaiting put away  • Awaiting inspection  Drill down to the Receive Expected Shipments, Inspect Receipts page, and Put Away Receipts page accordingly.	Receive Expected Shipments, Put Away Receipts, and Inspect Receipts pages



Infolet	Description	Drill Down Page
	Toggle to view receipt lines that are past due and broken down by time past due:  • 0 to 3 days  • 4 to 7 days  • 8 to 14 days  • 15 to 30 days   Note: You can choose to display data for 30 days or 7 days using the Date Range for Inventory Management Infolets profile option for the Awaiting Receipt portion of the infolet. The default setup is 7 days. You can change this to 30 days if required.	
Expected Receipt Lines	View expected receipt lines due in these time ranges:  1 to 3 days 4 to 7 days 8 to 14 days 15 to 30 days Drill down to view details of the expected shipments.  Note: You can choose to display data for 30 days or 7 days using the Date Range for Inventory Management Infolets profile option. The default setup is 7 days. You can change this to 30 days if required.	Receive Expected Shipments page
Inspected Receipts	View the number of inspected and rejected receipt lines. Drill down to view details of these inspected receipts.	Manage All Lines page
Receipt Exceptions	View the number of receipt exceptions and drill down to view details of the receipt exceptions.	Manage All Lines page
Backordered Supply Lines	View the number of backordered supply lines in these statuses:  • Awaiting receipt  • Awaiting inspection  • Awaiting put away  Drill down to the Receive Expected Shipments, Inspect Receipts, and Put Away Receipts pages accordingly to view details of the backordered supply lines.	Receive Expected Shipments, Inspect Receipts, and Put Away Receipts pages



Infolet	Description	Drill Down Page
	Note: You can choose to display data for 30 days or 7 days using the Date Range for Inventory Management Infolets profile option for the Awaiting Receipt portion of the infolet. The default setup is 7 days. You can change this to 30 days if required.	
Inventory Transactions	View the number of internal inventory transaction line records not yet processed or in error. You can view these pending lines by transaction type when data is available:  Miscellaneous issue  Miscellaneous receipt  Account alias issue  Subinventory transfer  Interorganization transfer  Cycle count adjustment  User-defined transaction  Receipt from  Invalid (records without organization ID or transaction type ID defined)  Note: When the number of transaction types for the pie chart goes beyond 9, the category of Other displays to include transaction line records for those categories that go beyond 9.	You can't drill into any transaction pages from this infolet.  Note: This infolet applies to integrations with third parties, such as warehouse management systems and third-party logistics companies.
Shipments and Receipts	View the number of external inventory transaction line records not yet processed or in error. You can view these pending lines by transaction type when data is available:  Receipt confirmation - pending Receipt confirmation - error Receipt advice Shipment confirmation - ready Shipment confirmation - error	You can't drill into any transaction pages from this infolet.  Note: This infolet applies to integrations with third parties, such as warehouse management systems and third-party logistics companies.
Inventory Balances	View a summary number of inventory reconciliation transaction records. This infolet is especially important to keep inventory balances	You can't drill into any transaction pages from this infolet.



Infolet	Description	Drill Down Page
	accurate between your system and the external system.	<b>Note:</b> This infolet applies to integrations with third parties, such as warehouse management systems and third-party logistics companies.

**Note:** An infolet legend label may not appear if no data exists for that label. For example, for the Expected Receipt Lines infolet, if all receipt lines are expected within the next 7 days, then only these labels display:

- 1 to 3 days
- 4 to 7 days

The labels for **8 to 14 days** and **15-30 days** don't appear in this example since all receipt lines are expected within the next 7 days.

**Note:** You can then hide the seeded infolets displayed on the landing page of the Inventory Management work area. See *How You Hide Inventory Management Infolets* in the Implementing Manufacturing and Supply Chain Materials Management guide.

### **Tasks**

Use the task panel of the Inventory Management work area to access tasks and processes related to these areas:

- Inventory
- Counts
- Shipments
- Picks
- Receipts

Switch between these main areas by selecting **Show Tasks** in the Task pane.

#### Related Topics

- Overview of Tasks from the Inventory Management Work Area
- How You Use and Personalize Infolets in Oracle Fusion Cloud SCM and Procurement
- Overview of Infolets

# High-Level Tasks and Roles for Inventory Management

Here are the high-level tasks for roles in Oracle Fusion Cloud Inventory Management.



# Warehouse Manager

Warehouse manager tasks can include:

- Review inventory balances
- Analyze materials management

### **Inventory Manager**

Inventory manager tasks can include:

- Define ABC classifications
- · Min-max replenishment
- Manage consigned goods
- Purchasing inventory manufacturing and maintenance

# Warehouse Operator

Warehouse operator tasks can include:

- Manage inventory transactions
- · Perform counts
- Execute movement requests

For more information about inventory roles, duties, and privileges, refer to the Oracle Fusion Cloud SCM: Security Reference for Manufacturing and Supply Chain Materials Management Guide.

# FAQs for Inventory Management Roles

# How can I provide a user with a view-only role in Inventory?

You can create custom job roles to view certain information within Inventory, Receiving, and Shipping. Additionally, you can use Oracle Page Composer to hide specific fields and actions on selected user interfaces. Lastly, you can use Oracle Transactional Business Intelligence (OTBI) to create reports and analytics with drill-down capabilities to view transaction details.

For more information, see these guides:

- Oracle Fusion Cloud SCM: Creating and Administering Analytics and Reports for SCM
- Oracle Fusion Cloud SCM: Securing SCM
- Oracle Fusion Cloud Applications: Configuring and Extending Applications



# 2 Review Inventory Balances and Availability

# Manage Item Quantities

# Overview of Manage Item Quantities

The Manage Item Quantities page provides you with global visibility to items across your enterprise as well as details within a particular facility. The page also provides a number of actions that you can take after selecting a row from your search results.

#### These actions include:

- View item availability
- · Request movement request transfer
- Request movement request issue
- Request miscellaneous transaction
- Request cycle count
- · Manage material status
- · Edit lot grade
- Request transfer order
- View supplier lots
- View Item Cross References

# Available to Reserve and Available to Transact Values

Use the Manage Item Quantities task to review your Available to Reserve and Available to Transact values. On the Manage Item Quantities page, search for and select an item. Click the View Item Availability button.

#### **Definitions**

Here are the calculations:

- Available to Transact equals the quantity already reserved and ready to transact.
  - Available to Transact = (Quantity On Hand) Pending Transactions Reservations
- Available to Reserve equals the quantity on hand minus the quantity already reserved for other orders.
  - Available to Reserve = (Reservable Quantity On Hand) Pending Transactions Reservations



#### Don't Match

Here are some scenarios where the **Available to Reserve** and **Available to Transact** values don't equal the on-hand quantity, or appear mismatched in the View Item Availability window.

- If you see a value in the On-Hand Quantity field, but the Available to Reserve and Available to Transact
  values equal O, check the Pending Transactions and Manage Reservations and Picks pages to see if quantity is
  reserved or pending.
- If the Available to Transact value equals the On-Hand Quantity, but the value for the Available to Reserve is
   0 and no reservations exist, consider these reasons:
  - Is the item lot controlled and is the lot expired?
  - o Is the lot material status not allowing reservations?
  - Is the subinventory or locator material status not allowing reservations?

#### Can't Create Reservations

If the **Available to Transact** and **Available to Reserve** values equal the **On-Hand Quantity** in the View Item Availability window, but you can't create a reservation, then check the following:

- Is the item restricted to subinventories and locators? If so, is the staging subinventory and locator setup incomplete?
- Is the item lot controlled? Is the lot indivisible?
- Does the material status for the subinventory, locator, or lot have a value of Disallows Sales Order Pick?
- Are there no prior reservations, but the pick release rule checks for prior reservations?

# Example of Creating Miscellaneous Transactions from Manage Item Quantities Page

If you need to create a miscellaneous transaction such as an issue or receipt, you can create the miscellaneous transaction directly from the Manage Item Quantities page.

- From the Manage Item Quantities page, review item on-hand balances and then select the Request
  Miscellaneous Transaction from the Actions menu to access the Create Miscellaneous Transaction page.
  Attributes from the selected line on the Manage Item Quantities page, such as item details, subinventory, and location carry over to the Create Miscellaneous Transaction.
- Create and submit your transaction.This helps you better manage your inventory balances while streamlining the process of creating miscellaneous inventory transactions.

# External Page Linking From Manage Item Quantities

You can dynamically pass attributes to link to an external page form the Manage Item Quantities page.



#### Overview

Use Page Composer to insert a link on the Manage Item Quantities page and pass attributes like organization, item, and lot into the link. For example, using the item, lot, and serial number details returned from your search on the Manage Item Quantities page, you can insert a link that takes you directly to another page within Oracle Fusion Cloud Inventory Management or to a page within an external execution system.

On the Manage Item Quantities page, the lot link displays above the lot node. You can click the link to navigate to the Manage Lots page or to a page within an external execution system. This link is useful when you want to view additional details for the lot or edit lot-related information.

**Note:** If you want to link to an external execution system, the attributes you use for navigation must already support deep links.

### Example

External linking helps you quickly move from viewing item availability on the Manage Item Quantities page to taking specific actions on another page. For example, let's say there's a quality issue with a specific lot, and you want to ensure that goods from that lot aren't used. First, you can confirm that there's on-hand quantity for the lot on the Manage Item Quantities page. Then, using the new link you created on that page, you can immediately go to the Manage Lots page to change the lot's material status to ensure goods from that lot aren't used.

### **Steps**

Complete these steps to configure an external link from the Manage Item Quantities page.

First, configure a sandbox in Page Composer.

- 1. From the Navigation menu, select Configuration > Sandboxes.
- 2. On the Sandboxes page, click the **Create Sandbox** button.
- 3. Enter a **Sandbox Name** and **Description**.
- Select the Page Composer check box from the All Tools list.
- 5. Click the Create and Enter button.

Now you can set up the external link on the Manage Item Quantities page.

- 1. From the Inventory Management work area, select **Manage Item Quantities** from the task panel.
- 2. Click Tools > Page Composer.
- 3. Click the **Structure** tab.
- Select the Item column.
- 5. Select **column: Item** and click **Add**.
- **6.** Select **Components** and click **Open**.
- 7. Click **Add** for the Hyperlink content page.
- **8.** On the Component Properties: Hyperlink page, enter the hyperlink component properties. This table describes the hyperlink component properties:

Attribute	Value	Comments
Destination	https:// <pod-name>/ fndSetup/faces/deeplink? objType=&lt;&gt;&amp;action=<action>&amp;objKey=<nam< td=""><td>Follow the deep link URL pattern shown in the <b>Value</b> column. You can manage lots with expressions for the lot number, item number, and organization ID.</td></nam<></action></pod-name>	Follow the deep link URL pattern shown in the <b>Value</b> column. You can manage lots with expressions for the lot number, item number, and organization ID.

&returnA



Attribute	Value	Comments
Disabled	#{bindings.LotNumber.inputValue == null}	N/A
Partial Triggers	::::q1 ::::ATT1:_ATTp:tt1	Triggers the link with respect to the query and value in the table.
Target Frame	_blank	Launches the hyperlink in a new browser
Text	#{InvMaterialAvailabilityGenBundle['AltTxt.Lo #{bindings.LotNumber.inputValue} : #{ResourcesGenBundle['Header.Details']}	N/A
Visible	#{node.NodeType == 'Lot'}	Use the expression #{node.NodeType == 'Lot'} to display the link only for the lot node.

9. Click Ok.

# Query by Example for Serial Numbers on the Manage Item Quantities Page

You can quickly search for serial number information on the Manage Item Quantities page by using the Query by Example functionality.

- 1. From the Inventory Management work area, select the **Manage Item Quantities** task.
- 2. Search for an item.
- 3. Select the Serial Number Details tab.
- **4.** Click the **Query by Example** icon in the toolbar to enable the Query by Example search framework.

A blank filter row appears immediately above the **Serial Number** column. Use this row to filter your serial numbers.

5. Search for your specific serial number or a group of serial numbers by entering a partial or complete serial number in the filter row and pressing **Enter**.

Serial numbers matching the serial number or partial serial number you entered display.

**Note:** When entering text in the filter row, the text or partial text you enter is case-sensitive. The case must match exactly.

6. To return to the regular view, click the **Query by Example** icon again.



# FAQs for Manage Item Quantities

What's the difference between primary quantity and secondary quantity? Primary quantity is the quantity of items in the primary unit of measure.

Secondary quantity is the quantity of items in the secondary unit of measure.

What's an owning party?

The party with the financial liability of the consigned inventory.

Can I store both consigned and owned material in the same location?

Yes, you can. But it's not a good idea and you should avoid it if possible.

# Review Item Supply and Demand

# How You Review Item Supply and Demand

Use the Review Item Supply and Demand page to see a quick summary of on-hand quantity, incoming supply, and the out-going demand on products.

You can take a time-phased look at on-hand quantity. Plus, you can see details for all types of supply and demand. This helps you quickly assess and take action for your organization.

Access this page from the **Review Item Supply and Demand** task in the Inventory Management work area.

**Note:** On the Review Item Supply and Demand page, you can see on-hand quantities listed in the first row of the table. Supply and demand follow these quantities in chronological order.

Let's look at a few important aspects of the Review Item Supply and Demand page:

- Quantities to include
- Supply types
- Demand types

#### Quantities to Include

You can filter the quantities to include in your search results.

Here are your choices for the **Quantities to Include** field.



Quantities to Include	Search Results
All	Includes:  • Quantities that are both available and not available for fulfilling demand  • Quantities that are available to promise
Nettable only	Includes only nettable quantities.  These are quantities available for fulfilling demand.
ATP only	Includes only available to promise quantities.  These are quantities that are part of a company's inventory and planned production, which are available for future orders.

### **Supply Types**

Here are the available supply types:

- · On-hand quantity
- · Purchase order quantity in Receiving
- · Purchase orders
- Purchase requisitions
- In-transit shipments
- Transfer orders
- Transfer order quantity in Receiving
- Work order assembly

It's important to note that all supply types, except for on-hand quantity and transfer orders, increment the available quantity. However, transfer orders can increment the available quantity if there are no in-transit shipments associated with the transfer order.

### **Demand Types**

Here are the available demand types:

- Sales orders
- Transfer orders
- · Transfer order shipment lines
- Shipment lines
- · Outside processing orders
- · Return to supplier orders
- Return to supplier orders from outside processing manufacturing
- Sales order reservations
- · Transfer order reservations



- · Work order reservations
- User-defined reservations
- Account reservations
- · Account alias reservations
- · Cycle count reservations
- Movement request transfer demand
- Movement request issue
- Work order components

Several demand types always decrement the available quantity. These include outside processing orders, user-defined reservations, movement request transfer demands, movement request issues, and work order components.

A few demand types only decrement the available quantity when the supply isn't on hand. These include sales order reservations, transfer order reservations, and work order reservations.

There are also special cases for sales orders, transfer order shipment lines, and transfer orders. Sales orders and transfer order shipment lines only decrement the available quantity when there are no reservations. And transfer order lines only decrement the available quantity when there are no shipment lines.

#### Related Topics

• What's the difference between the Document Number and Source Document Number on the Review Item Supply and Demand page?

# FAQs for Review Item Supply and Demand

What's the difference between nettable and nonnettable quantities for on-hand quantity and availability calculations?

Nettable quantities are available for fulfilling demand. The on-hand quantity and available quantity calculations on the Review Item Supply and Demand page include nettable quantities. If the subinventory, locator, and lot for a quantity are nettable for their associated material statuses, then the item quantity is also nettable.

Nonnettable quantities aren't available for fulfilling demand. The on-hand quantity and available quantity calculations on the Review Item Supply and Demand page don't include nonnettable quantities.

What's the difference between the Document Number and Source Document Number on the Review Item Supply and Demand page?

The Document Number field displays the external source order number.

The **Source Document Number** field displays the Oracle Order Management sales order number. This column displays values for only the sales order and sales order reservation demand types.

When you capture sales orders using an external source system and integrate those orders into Oracle Order Management, it's helpful to have both the **Document Number** and **Source Document Number** fields available on the Review Item Supply and Demand page. This lets you view both the external source order number and Oracle Order Management sales order number when reviewing your item's specific supplies and demands.



**Note:** If you don't see the **Source Document Number** field displaying on the page, select **View > Show Columns**. Then, select the **Source Document Number** check box.

# Manage Pending Inventory Balances

# Manage Pending Inventory Balances

Pending transactions are the result of transactions not yet executed or transactions that have resulted in an error.

You can update pending cycle count, physical count, and material status transactions by running the **Manage Inventory Balances** process.

For pending transactions:

- 1. In the Scheduled Processes work area, select **Schedule New Process**.
- 2. Search for and select the **Manage Inventory Balances** process.
- 3. Click OK
- 4. In the Process Details dialog box, enter your process details.
- 5. Click Submit.

For transactions with errors:

- 1. In the Inventory Management work area, click the **Manage Inventory Balance Messages in Spreadsheet** task.
- 2. Edit the errors.
- 3. Upload the data.

**Note:** You need a Microsoft Excel add-in to do this task. From the Navigator, click **Tools > Download Desktop Integration Installer** to install the add-in.

# Perform Inventory On-Hand Quantity Consolidation

# Inventory On-Hand Quantity Consolidation

Use the Perform Inventory On-Hand Quantity Consolidation scheduled process to combine on-hand quantity records based on common item attributes and the original receipt date.

Every transaction that increases a good's on-hand quantity, like a purchase order receipt or miscellaneous receipt, creates a unique entry in the INV\_ONHAND\_QUANTITIES\_DETAIL table. While multiple entries are necessary for many reasons, the existence of multiple records for an item with the same attributes, in the same location, with the same original receipt date can potentially cause performance issues in future transactions that require checking material availability. Consolidating these rows improves future inventory transaction processing.

Here's an illustrative data sample of the on-hand table prior to consolidation:



Row	Item	Organization	Subinventory	Receipt Date	Original Receipt Date	On-Hand Quantity
1	AS54888	M1	Stores	11-SEP-2022 09:00:00	08-SEP-2022 09:00:00	10
2	AS54888	M1	Stores	11-SEP-2022 10:00:00	08-SEP-2022 09:00:00	5
3	AS54888	M1	Stores	12-SEP-2022 09:00:00	12-SEP-2022 09:00:00	20
4	AS54888	M1	FGI	11-SEP-2022 09:00:00	10-SEP-2022 09:00:00	25
5	AS54888	M1	FGI	13-SEP-2022 09:00:00	13-SEP-2022 09:00:00	55
6	AS54888	M2	Stores	11-SEP-2022 09:00:00	10-SEP-2022 09:00:00	30
7	AS54888	M2	Stores	12-SEP-2022 09:00:00	10-SEP-2022 09:00:00	25

The prior consolidation table shows sample on-hand records as created in the table when different receipts are performed. Notice that the rows 1 and 2 have the same item, organization, subinventory, and receipt date.

Here's an example of the table after consolidation:

Row	Item	Organization	Subinventory	Receipt Date	Original Receipt Date	On-Hand Quantity
1	AS54888	M1	Stores	11-SEP-2022 10:00:00	08-SEP-2022 00:00:00	15
2	AS54888	M1	Stores	12-SEP-2022 09:00:00	12-SEP-2022 09:00:00	20
3	AS54888	M1	FGI	11-SEP-2022 09:00:00	10-SEP-2022 09:00:00	25
4	AS54888	M1	FGI	13-SEP-2022 09:00:00	13-SEP-2022 09:00:00	55
5	AS54888	M2	Stores	12-SEP-2022 09:00:00	10-SEP-2022 00:00:00	55



This table shows how the consolidation groups records after the scheduled process runs. Notice that the **On-Hand Quantity** column contains the consolidated quantity based on the original receipt date. The **Original Receipt Date** value is reset to the start of the day (with time as 00:00:00).

In the after consolidation table, the first row now contains a quantity of 15 which is the sum rows 1 and 2 from the before consolidation table. Since the item, organization, subinventory, and receipt date are the same for those two rows, they are consolidated in the after consolidation table. The same is true for rows 6 and 7 in the before consolidation table. They are shown consolidated in the after consolidation table.

Here are important considerations for running the **Perform Inventory On-Hand Quantity Consolidation** scheduled process:

- On-hand quantity consolidation happens only when the Item, Organization, Revision, Subinventory, Locator,
   Lot, Project, Task, Country of Origin, and Original Receipt Date attributes are the same.
- Run this process for organizations where receipts are performed more frequently than issues for the same combination of attributes, thereby leading to excessive on-hand records that may impact your transaction processing performance.
- It's recommended to run or schedule the scheduled process only when you observe that Inventory transaction processing (through the user interface, FBDI, REST API, or SOAP API) is taking longer than expected.
- It's preferable not to run the scheduled process for all organizations to ensure it completes quickly.
- It's preferable to run the scheduled process on weekends or on days when there is minimal transaction processing.

# Perform Inventory On-Hand Quantity Consolidation

You can run the Perform Inventory On-Hand Quantity Consolidation scheduled process to consolidate on-hand records with similar attributes and the same original receipt date. This improves future inventory transaction processing.

On-hand quantity consolidation happens only when the **Item**, **Organization**, **Revision**, **Subinventory**, **Locator**, **Lot**, **Project**, **Task**, **Country of Origin**, and **Original Receipt Date** attributes are the same.

To perform inventory on-hand quantity consolidation, complete these steps:

- In the Scheduled Processes work area, select, Schedule New Process.
- Search for and select the Perform Inventory On-Hand Quantity Consolidation process.
- 3. Click OK.
- **4.** In the Process Details dialog box, choose a value for the **Organization** field to indicate where to perform the consolidation. It's recommended to run the process for the organization where the maximum receipt transactions are performed.
- 5. Click Submit.



# **3** Inventory Transactions

# **Subinventory Transfers**

# **Subinventory Transfers**

Use a subinventory transfer to transfer material within your current organization between subinventories, or between two locators within the same subinventory. Examples of subinventory transfers are transferring between asset and expense subinventories, and transferring between tracked and non-tracked subinventories.

# **Availability Types**

Availability types denote quantities of items that are available to transfer, and that are on hand.

You can view quantities in these availability types:

- Available
- Secondary Available Quantity
- On Hand
- Secondary On-hand Quantity

#### **Available**

The quantity that's available to transfer based on the unit of measure you specify, which is the quantity on hand less all reservations for the item. This amount could include the amount that you have reserved if you enter a transaction source that has reservations against it. The available quantity includes reservations against the current transaction source, and is specific to the revision level, lot number, source subinventory, and source locator that you specify for the transfer.

### Secondary Available Quantity

The quantity that's available to transfer in the secondary unit of measure. This value displays if the item is under dual unit of measure control.

#### On Hand

The current on-hand quantity for the item, based on the unit of measure you specify. The on-hand quantity is specific to the revision, lot number, source subinventory, and source locator you specify for the transfer. On hand includes quantities for pending transactions.

### Secondary On-Hand Quantity

The current on-hand quantity of the item in the secondary unit of measure. This value displays if the item is under dual unit of measure control.



# FAQs for Subinventory Transfers

How can I immediately transfer material between subinventories?

Use the Create Subinventory Transfer page to create a subinventory transfer. Subinventory transfers occur immediately after you create and submit them.

How can I create a subinventory transfer for consigned inventory transactions? Enter a value for the owning party on the Create Subinventory Transfer page.

# Miscellaneous Transactions

### Miscellaneous Transactions

A miscellaneous transaction is a transaction, such as a miscellaneous issue or miscellaneous receipt, that you can use to issue material that doesn't have or require documentation support.

These aspects are important when creating miscellaneous transactions:

- Examples
- · E-signatures for approval

### Examples

In your organization, you can create miscellaneous transactions to:

- Perform manual adjustments to the general ledger by receiving material from one account to inventory, then issuing that material from inventory to a different account
- Load all on-hand items at the beginning of the Oracle Fusion Cloud Inventory Management implementation process
- Issue items to individuals, departments, or projects
- Receive items that were acquired without purchase orders
- Enter adjustments and corrections to system quantities outside of performing cycle counting or physical inventory counting, due to theft, vandalism, loss, shelf life expiration, or inaccurate record keeping
- Issue damaged items to expense accounts, such as scrap

### E-Signatures for Approval

If miscellaneous transactions are configured for approval using e-signatures, the E-Signature page opens when you create a miscellaneous transaction and click **Submit for Approval**. Use the page to approve the transaction.

The e-signature IDs are recorded and available on the Review Completed Transactions and Review Completed Transaction Details pages.



For information about e-signatures, see the Oracle Fusion Cloud SCM: Using E-Signatures and E-Records guide, available on the Oracle Help Center.

For information about how to configure e-signatures for supply chain management transactions, see the Oracle Fusion Cloud SCM: Implementing Manufacturing and Supply Chain Materials Management guide, available on the Oracle Help Center.

# Available On-Hand Quantity for Miscellaneous Transactions

The Create Miscellaneous Transaction page provides you with an efficient way to manage items that don't require documentation support. When you use miscellaneous transactions as part of your stockroom procedures, you need an easy way to determine which subinventories and locators contain item on-hand and available quantity.

You can search for item availability across subinventories and successfully process miscellaneous transactions by selecting the Search On-Hand Quantity icon. To enable the **Search On-Hand Quantity** icon, you must first enter an item on the transaction line.

**Note:** The Search On-Hand Quantity column is hidden by default and you must select it from the **View** menu.

# FAQs for Miscellaneous Transactions

#### What's a miscellaneous transaction?

A miscellaneous transaction is a transaction, such as a miscellaneous issue or miscellaneous receipt, that you can use to issue material that doesn't have or require documentation support.

You can create miscellaneous transactions to make ad-hoc adjustments to on-hand quantities, or to issue material to individuals or projects that aren't in inventory or receiving, such as a research and development group or an accounting department.

### Can I create a new miscellaneous transaction line by copying an existing line?

Yes, use the Duplicate action on the Create Miscellaneous Transaction page to create a new miscellaneous transaction line by copying an existing line. This reduces the requirement to enter repetitive data for similar transaction lines.

These attributes copy onto the new miscellaneous transaction line:

- Subinventory
- Locator
- Reason
- Reference
- Inventory Project
- Inventory Task
- Project Costing Project
- Project Costing Task
- Expenditure Type



- · Expenditure Organization
- Contract Number
- Funding Source

Note: Other fields such as quantity, UOM, account details, and additional information aren't copied onto the new line.

How can I receive material that doesn't have a purchase order number?

Create a miscellaneous transaction of type miscellaneous receipt.

#### Related Topics

How can I issue material without creating a movement request?

Create a miscellaneous issue on the Create Miscellaneous Transaction page. Access this page from the task pane of the Inventory Management work area.

#### What's Enter Cost Details?

You can click Enter Cost Details to specify a cost for the transaction that's other than the default. If you don't specify a cost, the default current cost of the item is used.

How can I enter the unit cost for miscellaneous transactions?

Enter unit costs on the Create Miscellaneous Transaction page or through the Transaction Manager service.

How can I default the current item cost when creating miscellaneous transactions?

To default the Use Current Item Cost field to Yes on the Create Miscellaneous Transaction page, select the Use Current Item Cost check box on the Manage inventory Organization Parameters page. You must enable this parameter for each organization.

Can I enter the requester for a miscellaneous transaction?

Yes, you can enter the requester for a miscellaneous transaction. To enter or view the requester you must first enable the Requester column from the View menu on the Create Miscellaneous Transaction page.

Select View > Columns > Requester.

How can I create miscellaneous transactions against a specific owning party for consigned inventory items?

Enter a value for the owning party on the Create Miscellaneous Transaction page.



# Can I create a new account combination if the one I want doesn't exist when performing a miscellaneous transaction or movement request issue?

Yes, you can create a dynamic general ledger account combination on the spot. This saves times by letting you complete miscellaneous transactions and movement request issues without relying on other departments in your organization to create general ledger accounts.

**Note:** Your organization must be set up for dynamic insertion of account combinations within the account structure.

# Interorganization Transfers

# Interorganization Transfers

Interorganization transfers enable you to transfer material between inventory organizations, which can be necessary if you define multiple inventories, warehouses, and manufacturing facilities as distinct inventory organizations.

In addition to being able to transfer one or more items in a single transaction, you can transfer partial quantities of the same item to different subinventories and locators in a single transaction. The items that you transfer must exist in both the source and destination organizations.

You can create these types of interorganization transfers:

- Direct interorganization transfers
- In-Transit interorganization transfers

### **Direct Interorganization Transfers**

Direct interorganization transfers move items directly between inventory organizations. The destination organization receives the material immediately when you submit the transaction.

### In-Transit Interorganization Transfers

In-transit interorganization transfers move items directly from the source organization to in-transit inventory. You usually transfer material to in-transit inventory when transportation time is significant.

# Available On-Hand Quantity for Interorganization Transfers

The Create Interorganization Transfer page provides you with an efficient way to transfer material quickly between inventory organizations when you don't need a formal pick, pack, or ship process. When you use interorganization transfers as part of your stockroom procedures, you need an easy way to determine which subinventories contain onhand items and available quantity.

You can search for item availability across subinventories and successfully process interorganization transfers by selecting the **Search On-Hand Quantity** icon. This lets you search and return only those subinventories when on-



hand quantity is currently available. To enable the **Search On-Hand Quantity** icon, you must first enter an item on the transaction line.

**Note:** The **Search On-Hand Quantity** column is hidden by default and you must select it from the **View** menu.

# FAQs for Interorganization Transfers

How can I create an interorganization transfer for consigned inventory transactions? Enter a value for the owning party on the Create Interorganization Transfer page.

Interorganization transfers trigger consumption (ownership change) by default. If you want the material to remain consigned, you must set up a consumption rule to specify that consumption does not occur with interorganization transfers.

How can I prevent my interorganization transfer from triggering an ownership change?

Set up a consumption rule to specify that consumption does not occur with an interorganization transfer. Otherwise, the interorganization transfer triggers consumption (ownership change) by default.

Why can't I select a destination organization when creating an interorganization transfer?

To create an interorganization transfer between internal organizations, you must first complete this setup:

- 1. Set up the interorganization parameters between the source and destination organization using the **Manage Interorganization Parameters** task.
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Interorganization Parameters
- **2.** Set up the receiving parameters for the destination organization using the **Manage Receiving Parameters** task.
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Receiving
  - Task: Manage Receiving Parameters



# Movement Requests

# Movement Requests

Movement requests are requests for the movement of material within an inventory organization such as a warehouse or facility.

These types of movement requests exist:

- · Requisition movement requests
- · Replenishment movement requests
- Shop floor movement requests

### Requisition Movement Requests

Requisition movement requests are manually created, and can be used for subinventory transfers and account issues. Once a movement request has been submitted, the movement request is ready to be sourced and transacted.

A movement request creates instructions to pick or move material for warehouse personnel. You can create a requisition movement request to manually relocate stock within a warehouse. You can also create a requisition movement request to issue material out of a certain location. For example, you might want to issue out stock for damaged goods, or to a certain project.

### Replenishment Movement Requests

Replenishment movement requests are requests that are generated by min-max planning to replenish material when a minimum quantity for a specific item is reached. Replenishment movement requests replenish material that's sourced from a different location within the same inventory organization. For example, a requisition movement request can be generated to move material from a bulk locator to a fast pick locator.

### **Shop Floor Movement Requests**

Shop floor movement requests are requests to perform replenishment for components needed for manufacturing and maintenance work orders. Shop floor movement requests move materials either to WIP supply locations or directly to the work order from the warehouse locations.

You can create a pick request to inventory for one or more multiple work orders. Warehouse personnel pick the components from warehouse locations in the same manner as is done for sales orders, transfer orders and replenishment requests.

#### Related Topics

· What's a pick?



# Perform Movement Requests

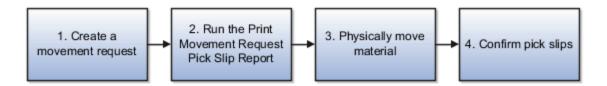
When you fully transact a movement request, you perform the complete process required to request movement of material, physically move material, and confirm physical movement of material.

### Scenario

You are charged with performing the entire movement request process flow.

The movement request process flow includes creating a movement request, running the Print Movement Request Pick Slip Report, physically picking material, and confirming pick slips, as illustrated in the following diagram:





To perform the movement request process flow:

- 1. Manually create a requisition movement request on the Manage Movement Requests page.
- 2. Run the Print Movement Request Pick Slip Report using the Enterprise Scheduler Service.

Give the pick slips to the warehouse operator.

**Note:** Set the **Release Approved Lines** parameter on the Print Movement Request Pick Slip Report to **Yes** to eliminate the need to perform the pick in the Reservations and Picks pages.

3. Physically move material according to the Movement Request Pick Slip Report's specifications.



4. Confirm pick slips.

To confirm pick slips, verify that you have moved the material according to the Movement Request Pick Slip report, and confirm the items to be shipped on the Confirm Pick Slips page.

If necessary, you also enter discrepancies such as changing the quantity of items that you picked.

# Set Up Replenishment Movement Requests

This example illustrates the prerequisites that you need to perform to set up the generation of replenishment movement requests.

#### Scenario

You are charged with performing the prerequisites necessary to set up the generation of replenishment movement requests. You need to perform these steps:

1. Set up min-max planning on the subinventory level.

On the Create Subinventory or Edit Subinventory page:

- Select item sourcing options
- (Optional) Specify lead times
- 2. Set up min-max planning on the item subinventory level.

On the Add Item to Subinventory page or Edit Item Subinventory page:

- Select Min-Max planning.
- Specify minimum and maximum quantities.
- (Optional) Specify the desired fixed lot multiple value or minimum and maximum order quantities.

You only need to specify these values if supplier constraints affect replenishment.

- Select Subinventory for the item sourcing option, as well as the source subinventory.
- o (Optional) Specify lead times.
- **3.** In the Print Min-Max Planning Report Enterprise Scheduler Service program, select Subinventory for the planning level.

The Min-Max Planning Report generates movement requests to replenish material for the items and subinventories for which you set up min-max planning.

4. Run the Print Min-Max Planning Report Enterprise Scheduler Service program.

# Cancel or Fulfill the Remaining Quantity on Partially Picked Movement Request Lines

For a manually created movement request line, you can cancel or fulfill the remaining quantity on partially picked lines.



### Cancel Remaining Quantity

To cancel the remaining quantities of a partially picked movement request line automatically, enable the **Close movement request lines at pick confirmation** parameter for the inventory organization. This selection automatically closes replenishment movement requests that are partially filled at pick confirmation time.

- 1. From the Setup and Maintenance work area, go to the Manage Inventory Organizations task:
  - o Offering: Manufacturing and Supply Chain Materials Maintenance
  - Functional Area: Facilities
  - Task: Manage Inventory Organizations
- 2. On the Manage Inventory Organizations page, search for and select an organization.
- 3. Click the Manage Organization Parameters button.
- **4.** Select the **Close movement request lines at pick confirmation** check box.

You can also manually cancel the remaining quantity on a movement request by using the **Manage Movement Requests** task.

- 1. From the Inventory Management work area, select the **Manage Movement Requests** task.
- 2. On the Manage Movement Requests page, search for and select a movement request.
- **3.** From the **Actions** menu, select **Cancel Movement Request**.

An information message displays indicating that if you close the movement request, you can no longer take any actions on the movement request other than viewing it.

### **Fulfill Remaining Quantity**

If you want to fulfill the remaining quantity of the movement request, create a new pick for the remaining quantity on the movement request. You do this in the same way that you created the first pick for the movement request.

- 1. From the Inventory Management work area, select the Manage Reservations and Picks task.
- 2. On the Manage Reservation and Picks page, select Create Pick from the Actions menu.
- 3. Enter values for the **Organization** and **Item**.
- 4. Select Movement Request from the Demand Document Type drop down list.
- **5.** Enter the partially picked movement request number in the **Demand Document Number** field and click **Search**.
- 6. The search results display the movement request with the remaining quantity available to pick.

You can also use the Pick Release Movement Request scheduled process to initiate the picking process.

## Overview of Approval for Movement Requests

You can use an approval-based workflow to route your Requisition type movement requests to the appropriate approval authorities prior to executing the movement request.

A workflow task generally passes from one user (or group of users) to another, usually for approvals. The users get notifications, for example, when the task is assigned to them for approval. After all approvers act on the task, say by approving it, the task is complete and whatever was approved takes effect.

You can configure approvals for the notifications to meet your own company's requirements. Set up approval rules on the Manage Movement Request Approval Rules page. You submit movement requests for approval from the Create



Movement Request page. Then, you can take actions based on the notifications you receive. If the approval transactions fail, you can recover transactions using the Transaction Console. You can also search for approved, rejected, and pending approval lines on the Manage Movement Request page.

#### Related Topics

- Movement Request Approval Process
- · Movement Request Approval Rules
- Movement Request Approval Stage and Participants
- Transaction Console for Movement Request Approval Transactions
- Set Up Approvals for Movement Requests

# Movement Request Approval Process

Movement requests with a movement request type of Requisition are enabled for approvals using workflow.

Here are the steps for the movement request approval process:

- 1. Configure rules for approvals
- 2. Create movement request
- 3. Approval notification sent
- 4. Approver approves notification
- 5. Movement request is approved

### Configure Rules for Approvals

Configure your movement request approval rules on the Manage Movement Request Approvals page.

Approval rules are routing policies or rules that are evaluated to determine the approvers or FYI recipients for a business transaction. At least one rule with the condition **Rule always applies** must be created to prevent movement request approval transactions from getting stuck.

You must have the Manage Inventory Movement Request Approvals privilege to define approval rules for movement requests.

### Create Movement Request

Once the rules are configured, you can create and submit the movement request. Use the Create Movement Request page to create and submit your movement request for approval. Use the Manage Movement Requests page to search for approved, rejected, and pending approval lines.

Here are some notes about your approval movement requests on the Manage Movement Requests page:

- The movement request is in Pending Approval status until it's approved.
- On approval, the movement request moves to Approved status.
- On rejection by any of the approvers, the movement request moves to Rejected status and nothing more can be done on the movement request.
- You can search for Approved, Rejected, and Pending Approval lines.
- You can't edit or cancel a movement request in the Approved, Rejected, or Pending Approval status.



### **Approval Notification Sent**

Movement request approvals use the Oracle Analytics Publisher notification. When a user submits a **Movement Request** requisition type, it's sent for approval, and notifications are sent to approvers based on the rules and conditions defined on the Manage Movement Request Approvals page.

### Approver Approves Notification

Approvers receive an email as well as a notification in the global header section under **Notifications** (bell) icon. You can take actions like approve or reject through email, by clicking the bell icon notification, or using the BPM worklist.

You must have the Approve Inventory Movement Request Notification privilege to view the notification body. This privilege is assigned by default to the Warehouse Manager role.

### Movement Request is Approved

As a default configuration, FYI notification is sent to the Created By user once the movement request is approved or rejected. This is a seeded notification and can't be changed by users.

#### **Related Topics**

- Movement Request Approval Rules
- Movement Request Approval Stage and Participants
- Transaction Console for Movement Request Approval Transactions
- Set Up Approvals for Movement Requests

# Set Up Approvals for Movement Requests

Prior to using approvals for movement request, you must enable participants and define your approval rules.

- 1. In the Setup and Maintenance work area, use the Manage Movement Request Approvals setup task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Movement Request Approvals
- 2. On the Manage Movement Request Approvals page, enable a participant by selecting a row and clicking the **Enable** button, or by selecting **Enable** from the **Actions** menu.
  - Note that the participant name conveys both the participant type and the voting regime. You may choose to use and enable at least one participant for defining the approval rules.
- **3.** After enabling a participant, select the **Edit Rules** button to access the Edit Approval Rules page where you can create new rules or edit, copy, or delete existing rules.
  - Define a rule name, conditions, and add actions to complete a rule.

**Note:** Each participant (except for those containing the **First Responder Wins** voting regime must have at least one rule with the condition **Rule always applies** to prevent failed approval transactions.

- 4. Enter a rule name.
- 5. Click the **Add Condition** button to add conditions for the approval rule.



- **6.** Click the **Add Action** button to add actions for the approval rule.
- You can also optionally set up approval groups using the Manage Approval Groups task to configure rules for movement request approvals.

#### Related Topics

- Movement Request Approval Process
- Movement Request Approval Rules
- Movement Request Approval Stage and Participants

# Movement Request Approval Stage and Participants

On the Manage Movement Request Approvals page, Oracle Inventory Management has a predefined stage for approvals for movement requests with different seeded participants.

Stage: Movement Request Approval Stage

#### Participants:

- Movement Request Parallel Consensus Participant
- Movement Request Serial Participant
- Movement Request FYI Participant
- Movement Request Parallel First Responder Wins Participant

Note that the participant name conveys both the participant type and the voting regime. For example, **Movement Request Parallel First Responder Wins Participant** has a participant type of **Parallel** and voting regime of **First Responder Wins**. This implies that all the approvers are notified in parallel and the first responder decision is final for that participant. You may choose to use and enable at least one participant for defining the approval rules.

#### Related Topics

Movement Request Approval Process

# Movement Request Approval Rules

Approval rules are routing policies or rules that are evaluated to determine the approvers or FYI recipients for a business transaction.

Define a rule name, conditions and add actions to complete an approval rule. At least one rule with the condition **Rule always applies** must be created to prevent movement request approval transactions from getting stuck.

Set up movement request approval rules on the Edit Approval Rules page. Access this page by clicking the **Edit Rules** button on the Manage Movement Request Approvals page.

#### Conditions

You can create rules on the approval task attributes to ensure the movement request approvals are routed to approvers based on the conditions for the business need.



Here's the list of approval task attributes supported for creating approval rules:

- Created By
- Requester
- Destination Account
- Source Subinventory
- Destination Subinventory
- Organization
- Item
- Item Category (only Inventory functional area categories)
- Item Class
- Total Cost
- Transaction Type
- Movement Request Header DFF attributes
- Movement Request Line DFF attributes

Click the **Add Condition** button from the Edit Approval Rules page to update conditions for an approval rule.

**Note:** The user-defined attribute isn't supported. Also, when defining conditions for rules, approval task attributes with free text values only support Equals as the operator.

#### **Actions**

Click the **Edit Action** button from the Edit Approval Rules page to update actions for an approval rule. The Edit Action pop up contains the **Action Type** and **Route Using** fields.

There are three types of action types:

- Approval Required: The movement request is routed for approvals.
- · Automatic: The movement request can be approved or rejected automatically.
- Information Only: FYI tasks are sent to notify the specified people.

The **Route Using** attribute identifies the type of users needed to approve or receive notification of the movement request. The following list is supported for movement request approvals. Each type has a specific set of parameters or properties that must be defined.

#### Route Using attributes include:

- Approval Group
- Job Level
- Single Approver
- Supervisory Hierarchy

#### **Related Topics**

- Movement Request Approval Process
- Set Up Approvals for Movement Requests



# Transaction Console for Movement Request Approval Transactions

You can add roles with the Review Approval Transactions privilege to provide access to the Transaction Console.

#### Select Navigator > Tools > Transaction Console.

Use the Transaction Console to perform these tasks:

- Monitor and troubleshoot the approval processes.
- Check the latest status of approval transactions and take necessary actions, for example recover failed transactions.
- Search existing transactions and look for the approval history.
- Access the simple and straightforward Process Details page.
- For faulted transactions, the Process Details page provides issue details and possible resolutions.
- Add roles with the Review Approval Transactions privilege to provide access to the Transaction Console.

#### Related Topics

- Overview of Approval for Movement Requests
- Movement Request Approval Process

## FAQs for Movement Requests

### Can I create a movement request from the Manage Items Quantities page?

Yes, select Request Miscellaneous Transactions from the Actions menu to access the Create Miscellaneous Transactions page. Attributes from the selected line on the Manage Item Quantities page, such as item details, subinventory, and location carry over to the Create Miscellaneous Transaction page.

Once you create and submit the transaction, you're automatically returned to the Manage Item Quantities page.

### Can I enter the requester for a requisition movement request?

Yes, you can enter the requester for a requisition movement request when creating movement requests using the Manage Movement Requests page.

You can also view the requester on the Review Completed Transactions page. To enter or view the requester, you must first enable the **Requester** column from the **View** menu on these pages. Select **View** > **Columns** > **Requester**.

# Can I create a new account combination if the one I want doesn't exist when performing a miscellaneous transaction or movement request issue?

Yes, you can create a dynamic general ledger account combination on the spot. This saves times by letting you complete miscellaneous transactions and movement request issues without relying on other departments in your organization to create general ledger accounts.



**Note:** Your organization must be set up for dynamic insertion of account combinations within the account structure.

How can I cancel a pick slip automatically when the related movement request is closed or canceled?

You must enable the Automatically delete picks when movement request are canceled check box for the organization.

Complete these setup steps:

- 1. In the Setup and Maintenance work area, go to the Manage Inventory Organization task:
  - o Offering: Manufacturing and Supply Chain Materials Management.
  - Functional Area: Facilities
  - Task: Manage Inventory Organization
- 2. Search for your organization.
- 3. Click Manage Organization Parameters.
- **4.** Select the **Automatically delete picks when movement request are canceled** check box.

Now, the removal of the pick happens automatically when the movement request or sales order is canceled.

What type of movement requests can use approval workflow?

Movement requests with a movement request type of Requisition are enabled for approvals using workflow.

Movement request types like Pick wave, Replenishment, and Shop floor don't go through the approval process and are preapproved.

# **Pending Transactions**

# **Pending Transactions**

A pending transaction is either a transaction that's waiting to be executed, or a transaction that has been executed, but has resulted in an error.

For miscellaneous receipts, miscellaneous issues, subinventory transfers, interorganization transfers, and user-defined transactions that are waiting to be executed or have errors, do the following:

- Click Manage Pending Transactions from the Inventory task list in the Inventory Management work area.
- 2. Edit the errors.
- Click Add All to Process Schedule. You can optionally select rows in the table and click Add Selected to Process Schedule to process only your selected rows.

**Note:** You can process a maximum of 500 rows at a time.

For pending cycle count adjustment transactions do the following:

1. Open the scheduled process interface.



2. Search for and run Import Count Sequences.

For cycle count adjustment errors, do the following:

- Download the Review Count Interface Records spreadsheet from the Counts task list in the Inventory Management work area.
- 2. Edit the errors.
- 3. Upload the data.

To do this task you need a Microsoft Excel add-in. From the Navigator, click **Tools > Download Desktop Integration** to install the add-in.

# How You Delete Pending Transactions

You can delete a pending inventory transaction if the transaction is no longer wanted or needed. Once you delete the pending transactions, the quantities return to the inventories that they came from. All associated transactions revert to the setups prior to the creation of the transactions.

You can purge transactions directly from the Manage Pending Transactions page, or you can use the **Purge Inventory Transactions Interface** scheduled process.

### Manage Pending Transactions

Use the Manage Pending Transaction pages to delete pending transactions:

- 1. On the Manage Pending Transactions page, click the **View Pending Transactions** button.
- 2. On the View Pending Transactions page, search for the records that you want to delete. You can search by organization, processing status, transaction date, transaction type, and more.
- 3. Select each transaction row that you want to delete. You can select up to 500 rows to delete at one time.
- 4. Click the **Delete** icon. You can also select **Delete** from the **Actions** menu.

This deletes the transactions from the Inventory Transactions Interface table (INV\_TRANSACTIONS\_INTERFACE).

**Note:** To delete a pick pending transaction, you must remove the pick transactions using the Confirm Pick Slip pages instead of the Manage Pending Transaction pages. From the Confirm Pick Slip page, search by order number and pick **0** for the pick lines that you want to delete.

### Purge Inventory Transactions Interface Scheduled Process

Use the **Purge Inventory Transactions Interface** scheduled process to delete a large volume of pending or error transactions from the inventory interface tables.

- 1. Navigate to the Scheduled Processes work area.
- 2. Click the Schedule New Process button.
- 3. Search for the **Purge Inventory Transactions Interface** process.
- 4. Click OK.
- 5. Enter the process details including the **Load Request ID** or **Error** number.
- 6. Submit the process

#### Related Topics

- Purge Inventory Transactions Interface Process
- Example of How to Purge Inventory Interface Transactions Using the Scheduled Process



# Purge Inventory Transactions Interface Process

Run the Purge Inventory Transactions Interface process to purge data from the INV\_TRANSACTIONS\_INTERFACE, INV\_TRANSACTION\_LOTS\_INTERFACE, and INV\_SERIAL\_NUMBERS\_INTERFACE tables. The content of these tables displays collectively on the Manage Pending Transactions page.

#### **Process Parameters**

This table provide a description of the **Purge Inventory Transactions Interface** process parameters.

Parameter	Description
Review Only check box	The process purges records when this check box isn't selected. The check box is selected by default.
Load Request ID	Let's you purge transactions with a specific load request ID. You can get this value from the Manage Pending Transactions page, or use the Inventory Staged Transactions Rest resource to get this value.
Organization	You can choose to purge the records for a specific organization.
Processing Status	Select from these values:
	3: purges error transactions
	• 1: purges pending transactions
	All: purges both error and pending transactions
	The default value is 3.
Error	You can purge transactions for a specific error number for a transaction. Get the error from the Manage Pending Transactions page or Inventory Staged Transactions Rest resource.
From Creation Date and To Creation Date	Use these fields to purge transactions between two creation dates.
Created By	Purge transactions created by a specific user.

## **Functional Log**

After running the scheduled process, you can view a summary of the process. The output from the functional log provides this information:

- · Total number of records deleted
- Number of records with pending status deleted
- · Number of records with error status deleted
- Earliest creation date
- Latest creation date



#### Related Topics

- Example of How to Purge Inventory Interface Transactions Using the Scheduled Process
- Purge Inventory Transactions Interface

# Example of How to Purge Inventory Interface Transactions Using the Scheduled Process

Use the Purge Inventory Transactions Interface process to quickly and easily delete a large volume of pending or error transactions from the inventory interface tables.

Let's look at these steps to purge inventory transactions:

- 1. # ./Identify transactions to purge
- 2. Purge pending transactions using the **Purge Inventory Transactions Interface** scheduled process.
- 3. Review process log.
- 4. Confirm pending transactions were purged.

### **Identify Transactions to Purge**

Here's how to identify transactions to purge.

- 1. From the Inventory Management work area, select the **Manage Pending Transactions** task.
- **2.** On the Manage Pending Transactions page, click an error transaction number for a transaction type. In this example, let's use the **Data Migration** transaction type.
  - Clicking an error transaction takes you to the View Pending Transactions page. Here you can see how many errors you have for that transactions type. In this example, let's say there are five errors.
- 3. On the View Pending Transactions page, let's add the **Load Request ID** field to the page. From the **View** menu, select the **Load Request ID** field to have this field display in the table.
- 4. Click a transaction.
  - This takes you to the Pending Transactions page. You can also use the value in the Error field on this page to purge pending transactions.
- 5. Click Done.

### Purge Pending Transactions Using the Scheduled Process

Here's how to purge pending transactions using the **Purge Inventory Transactions Interface** scheduled process.

- 1. Navigate to the Scheduled Processes work area.
- 2. Click the Schedule New Process button.
- 3. Search for the Purge Inventory Transactions Interface process.
- Click OK.
- 5. Enter the process details:
  - Review only: Deselect this check box to purge records.
  - Load Request ID: Enter this parameter to purge transactions with a specific load request ID. You can get
    this value from the Manage Pending Transactions page, or use the Inventory Stage Transactions Rest
    resource to get this value.



- o **Organization**: You can choose to purge the records for a specific organization.
- Processing status: Select 3 to purge error transactions. Select 1 to purge pending transactions. Select All
  to purge both error and pending transactions.
- Error: You can purge transactions for a specific error for a transaction. Get the error number from the Manage Pending Transactions page or Inventory Stage Transactions Rest Resource.
- From Creation Date and To Creation Date: Purge transactions between two creation dates.
- Created By: Purge transactions created by a specific user.
- 6. Submit the process.

### **Review Process Log**

Here's how to review the process log.

- 1. Back on the Scheduled Processes page, click the **Refresh** button until the job is completed.
- 2. Click **Attachments** under the Log and Output section to review the job details.
- 3. Click the text file name. The text file provides a summary of the process. Here are the details in our example:
  - Total number of records deleted: 5
  - Number of records with pending status deleted: 0
  - Number of records with error status deleted: 5
  - o Earliest creation date: 16-04-2020 01:55
  - Latest creation date: 16-04-2020 01:55

### Confirm Pending Transactions Were Purged

Let's review the pending transactions after the purge process is completed.

- 1. From the Inventory Management work area, select the Manage Pending Transactions task.
- On the Manage Pending Transactions page, notice that the **Data Migration** transaction type for pending transactions no longer exists. This indicates that the error messages have been purged successfully from the pending transactions.

# Pending Inventory Reduction Transactions for Sales Orders

Use the Manage Pending Transaction pages to review and modify pending transaction errors for inventory reduction transactions for sales orders (direct sales order issue transactions).

Inventory reduction transactions can be used when the sales order doesn't need to go through the entire fulfillment cycle, such as pick wave, pick, pack, and ship, but still needs to complete sales order costing and accounting.

From the Inventory Management work area, select **Manage Pending Transactions** from the task pane. Click a link for a Direct Sales Order Issue error transaction on the Manage Pending Transactions page. This takes you to the View Pending Transactions page. To search for inventory reduction transactions, select **Sales Order** in the **Source Type** field and enter the sales order number in the **Source Reference** field. The **Source Reference** field doesn't display by default. You must select it from the **Add Fields** menu.

In a case where a transaction in stuck in pending because of a discrepancy between the physical and on-hand quantity in the application, you can perform a cycle count adjustment so that on-hand quantity matches the physical quantity,



or you can enter a different subinventory, locator, lot, or serial number for a transaction to process it from the pending transaction.

An inventory reduction transaction with a project and task reference on the sales order can become stuck in Manage Pending Transactions when you don't have enough on-hand available for the item for the associated project and task. In order to process the error record from pending transactions, you can perform a cycle count adjustment to correct your project inventory, or you can issue common inventory by removing the inventory project and inventory task for the stuck transactions. You can issue common inventory for the project demand when the **Allow Use of Common Suppliers** attribute for an item organization combination has no value or is set to **Yes**.

You can use the Inventory Staged Transaction REST service to get and update the pending transactions.

#### Related Topics

Reduce Inventory When a Sales Order Doesn't Require Picking or Shipping

# **FAQs for Pending Transactions**

### How can I edit pending transaction errors?

Use the Manage Pending Transaction pages to correct pending transaction errors for miscellaneous receipts, miscellaneous issues, subinventory transfers, inter-organization transfers, and user-defined transactions.

Click a link for an error transaction on the Manage Pending Transactions page. Select a row to edit and click the **Edit** icon. Make your corrections and save them. Then, click the **Add All to Process Schedule** button.

### What's the difference between the validated and staged transaction states?

The Validated transaction state denotes an inventory transaction that's created in the Oracle Fusion Cloud Inventory Management application.

The Staged transaction state denotes a transaction whose record is in the transaction open interface table. Usually, Staged transactions are created in external applications.

### What happens when I add a transaction to the Process Schedule?

The transaction is submitted, and this transaction will be processed when the **Manage Inventory Transactions** scheduled process runs the next time.

### How can I delete a pick pending transaction?

Use the Confirm Pick Slip page (instead of the Manage Pending Transactions page) to delete a pick pending transaction. From the Confirm Pick Slip page, search by order number and pick 0 for the pick lines that you want to delete.

# Can I delete a sales order pick transaction if the lines have already been shipped or canceled?

If the shipment lines are in Released to Warehouse status, then the pick slip report has been printed for the pickers to complete their picks. It's assumed that the materials have been physically moved to the staging subinventory.



For this reason, picking lines are kept when a sales order is canceled. To remove this transaction, you have two choices. You can either pick the full quantity and the material moves to the staging subinventory, but isn't attached to the sales orders. Or, if the full material isn't physically moved, you can pick **0** for the picking lines from the Confirm Picks Slips page to delete the transaction.

**Note:** You must use the Confirm Pick Slip page (instead of the Manage Pending Transactions page) to delete a pick pending transaction.

### Why can't I delete cycle count pending transactions?

Cycle count records must be processed and in a transaction process status of Staged to be deleted from the View Pending transactions page.

You must first run the **Manage Inventory Transactions** scheduled process to get these records to a **Staged** status. Then, you can delete the cycle count transactions.

**Note:** Don't purge the cycle count or physical inventory until the cycle count records are completely processed and moved to completed transactions.

### How can I purge data from the Inventory Transactions Interface table?

Use the Manage Pending Transactions page to delete transactions from the Inventory Transactions Interface table (INV\_TRANSACTIONS\_INTERFACE).

On the Manage Pending Transactions page, click the **View Pending Transactions** button. Search for the records that you want to delete. Select each transaction row that you want to delete and click the **Delete** icon. You can select up to 500 rows to delete at one time.

You can also use the **Purge Inventory Transactions Interface** scheduled process to quickly purge large amounts of inventory transactions. From the Scheduled Process work area, search for the **Purge Inventory Transactions Interface** scheduled process. Enter your process details including the **Load Request ID** or **Error** number and submit the process.

### How can I mass update the transaction dates on pending transactions in the UI?

Use the Oracle Visual Builder Add-In for Excel to mass update the transaction dates for pending transactions. The Visual Builder extension let's you view and edit business data from REST services in Microsoft Excel. Once you install this add in, complete these steps:

- 1. Open Excel and select the Oracle Visual Builder extension.
- Click Designer.
- In the New Layout Setup window, enter https://xxxx-test.fa.us2.oraclecloud.com/fscmRestApi/ resources/11.13.18.05/inventoryStagedTransactions/describe in the Web Address field and click OK.
- 4. Enter your login credentials.
- **5.** Choose a business object. A window appears.
- Select inventoryStagedTransactions and click OK.
- 7. Choose a layout: **Table Layout > OK**.
- 8. Under Layout Designer, select Query.
- **9.** Click **Pencil** in the **Search** field.
- Select OrganizationName.
- 11. Enter your organization name and click **OK**.
- 12. Click Download Data.
- **13.** In the **Search** box, select **OK** for the **Organization Name** search. You will see all pending transactions for the organization and you can now update the transaction date using the copy and paste method.



#### 14. Click Upload Changes.

**Note:** This mass update only applies to the type of transactions that can be created using the InventoryStagesTransactions REST service. For example, you can update transactions for miscellaneous receipts, miscellaneous issue, and subinventory transfers. However, you can't update sales order issue and transfer order issue transactions by mass update.

#### Related Topics

- Using the Visual Builder Add-in for Excel
- Oracle Visual Builder Add-in for Excel Downloads
- REST API for Oracle Fusion Cloud SCM

Why doesn't the transaction date on the Review Completed Transactions or Manage Pending Transactions pages match the actual source transaction creation date entered through FBDI?

When entering a transaction date and time through FBDI (File-Based Data Import), the spreadsheet uses the raw transaction data based on the server date and time in UTC (Coordinated Universal Time). However, when viewing the transaction date through the UI, the value in the Transaction Date field considers your time zone preference.

**Note:** When you click the **Export to Excel** icon from the **Actions** menu on the Review Completed Transactions or Manage Pending Transactions pages, you also view the user's time zone preference.

Why can't I view my account or account alias transactions on the Manage Pending Transactions page?

For transactions with the source type of Account and Account Alias, if you've selected the Security Enabled check box for any of the account's key flexfields, you need to have that data security privilege to view those account transactions.

This is in addition to your normal organization data security.

# **Review Completed Transactions**

# Overview of Review Completed Transactions

Use the Review Completed Transactions page to search for and view details of completed inventory transactions. From the Inventory Management work area, select Review Completed Transactions from the task pane.

To search for detailed information for completed transactions, enter any combination of search criteria. Select **View** and then **Columns** to choose additional fields to display on the Review Completed Transactions page. Click on a transaction in the Search Results table to drill down to the Completed Transaction Details page to review a detailed, single record view of the transaction.

This table provides a summary of the completed transaction details that you can view on both the Review Completed Transactions and Completed Transaction Details pages.



Completed Transaction Details	Description
Location	View item, subinventory, locator, and quantity information. You can also view details such as revisions, transfer information, and attachments.
Transaction	View transaction details such as transaction date, transaction type, transaction action, transaction source type, transaction costed status, and more.
	Note: The value in the Transaction Date field considers your time zone preference. This value may not match the actual creation date of the transaction if the transaction was entered through FBDI (File-Based Data Import). FBDI uses UTC (Coordinated Universal Time) and doesn't consider time zone preference.
In Transit	View the shipment number, waybill, carrier, and packing unit information for in-transit shipments.
Consigned Inventory	View the owning party, consumption advice, and transfer owning party details. You can also review the purchase order, receipt, and error information if provided.
Tax Determinants	View details on transactions such as receipt, ship confirm, and consumption that become inputs into the tax determination process. Examples of tax determinants are taxation county, product fiscal classification, and tax classification code.
Additional Information	View additional information that you may have provided for your transactions such as patient account or other user-defined flexfields.

You can also view lot and serial information when applicable. The lot and serial information is only enabled if the item is lot controlled, serial controlled, or both. To view lot and serial information for a transaction, click the **View Lot and Serial Details** icon on the Review Completed Transactions page. You may have to add the **Lot and Serial Numbers** column to the page by selecting **View > Columns > Lot and Serial Numbers**. To access lot and serial details from the Completed Transaction Details page, click the **View Lot and Serial Numbers** button.

In addition, on the Review Completed Transactions page you can export your completed transactions to a Microsoft Excel file. Select **Export to Excel** from the **Actions** menu or click the table icon. The **Export to Excel** action shows the transaction date in the user's time zone.

## FAQs for Review Completed Transactions

How can I view completed inventory reduction transactions for sales orders?

When using the Direct Sales Order Issue transaction type to create an inventory reduction transaction for a sales order, you can view details of the completed transaction on the Review Completed Transactions page.

From the Inventory Management work area, select **Review Completed Transactions** from the task pane. To search for inventory reduction transactions, select **Sales Order** in the **Source Type** field and enter the sales order number in the **Source Reference** field. The **Source Reference** field doesn't display by default. You must select it from the **Add Fields** menu.



Use the Review Completed Transactions page to view the item, quantity, transaction date, revision, lot, serial, project, and task details for the transaction. You can also use the Inventory Completed Transactions REST service to get details for these transactions.

# Discrete Manufacturing Sourced Inventory Transactions

# Discrete Manufacturing Sourced Inventory Transactions

Oracle Inventory Management interfaces with Oracle Discrete Manufacturing to process work in process (WIP) inventory transactions.

Here are the process flow steps for WIP inventory transactions:

- 1. Discrete Manufacturing initiates the processing of WIP transactions.
- 2. Discrete Manufacturing generates inventory transactions in the Inventory Interface tables.
- 3. Discrete Manufacturing calls the Inventory Transaction Manager to process the WIP inventory transactions.
- 4. Inventory Transaction Manager process returns a response to the Discrete Manufacturing application.
- 5. Handling of WIP inventory transactions errors.
- 6. Review completed inventory transactions.

### Discrete Manufacturing Initiates the Processing of WIP Transactions

Discrete Manufacturing processes transactions within the WIP application. You can enter WIP transactions through user interfaces, or you can batch them in transaction tables and process them in a background mode.

# Discrete Manufacturing Generates Inventory Transactions in the Inventory Interface Tables

Discrete Manufacturing determines which inventory transactions to pass to inventory, and then generates these transactions in the Inventory Transaction Interface tables. The transferred information includes core transaction details such as transaction type, inventory item, quantity, UOM, subinventory, locator, and so forth.

The interface supports these WIP transactions:

- · Work in Process Material Issue
- · Work in Process Material Return
- Work in Process Product Completion
- · Work in Process Return
- Work in Process Negative Material Issue
- Work in Process Negative Material Return

# Discrete Manufacturing Calls the Inventory Transaction Manager to Process WIP Transactions

Discrete Manufacturing initiates the processing of the Inventory Transaction Manager. This process validates WIP transactions, applies necessary options, and updates inventory tables. The process deletes transactions that pass



validation from the inventory transaction interface tables and updates on-hand balances and lot and serial details in the core inventory tables.

### Inventory Transaction Manager Returns a Response to Discrete Manufacturing

Once processing of designated transactions is complete, the Inventory Transactions Manager process returns either a success or failure status to the calling Discrete Manufacturing application.

### Handling of WIP Inventory Transaction Errors

If an error is found, the calling application in Discrete Manufacturing makes the appropriate error message available to the user for resolution. Note that the transaction is cleared out of the inventory interface table and must be resolved in the Discrete Manufacturing application that originated the WIP inventory transaction. Once the error is resolved, the originating application can resubmit the transaction for processing.

### Review Completed Inventory Transactions

You can view successfully processed inventory transactions using the Review Completed Inventory Transactions user interface.

# Work in Process Negative Material Return Transactions

We have two types of Work in Process Negative Material Return Transactions.

#### These include:

- Work in Process Negative Material Issue
- Work in Process Negative Material Return

### Work in Process Negative Material Issue

The Work in Process Negative Material Issue transaction type enables you to recover byproducts from the manufacturing processes. This transaction provides a way to remove components from a final assembly that must be replaced or upgraded, and places the components back into inventory. The Work in Process Negative Material Issue transaction issues components from jobs and schedules to inventory to fulfill negative material requirements.

## Work in Process Negative Material Return

The Work in Process Negative Material Return transaction type reverses the Work in Process Negative Material Issue transaction. This transaction enables components that are put back into inventory using the Work in Process Negative Material Issue, to be issued back to the original rework work order when the original transaction was done in error.

This transaction returns components to jobs and schedules from inventory to fulfill negative material requirements. A WIP negative material return reverses a WIP negative material issue.

**Note:** If you perform a negative material return transaction to return components that are under lot, serial, or lot and serial number control, you must identify the lots and serial numbers to perform the transaction.



### Serial Numbers and Rework Work Orders

When performing a Work in Process Material Issue transaction for a lot or serialized assembly item into a rework work order, the lot or serial number isn't required.

Lot and serial numbers aren't required for the following Work in Process transaction types:

- Work in Process Material Issue
- Work in Process Material Return
- Work in Process Product Completion
- Work in Process Return

However, lot and serial numbers are required for these two Work in Process transaction types:

- Work in Process Negative Material Issue
- · Work in Process Negative Material Return

# FAQs for Discrete Manufacturing Sourced Inventory Transactions

What happens if I perform a negative material return transaction for lot or serial controlled items?

You must identify the lots and serial numbers to perform Work in Process Negative Material Issue and Work in Process Negative Material Return transactions.

# Reservations and Picks

### Overview of Reservations and Picks

Availability and promise of delivery is vital for any business. You can guarantee availability by creating linkages between the supply and demand sources by using reservations and picks.

A reservation is an association between a demand source and a supply source to ensure availability. A reservation creates a data link between supply and demand and represents a guaranteed allotment of material to a specified demand source. A pick is a directive to move material for a particular demand from one specific inventory location to another location.

Both reservations and picks ensure that material for a demand isn't available for another demand to be reserved or picked from. You can transfer reserved inventory from one demand or supply source to another, but you can't pick reserved inventory for another demand source. Use the Manage Reservations and Picks page to view snapshots of reservations and picks on a single page. This helps in reserving or picking for a demand.



For example, when a request to reserve material for a sales order is placed, and enough available to reserve quantity exists for an item, a reservation is placed. This reservation ensures that a certain quantity of item is available on a certain date when transacted. Once reserved or picked, the product can't be picked for another sales order or issued out from inventory.

With the Manage Reservations and Picks page, you can:

- · Create, edit, delete, and view reservations and picks
- Choose available quantity for reservations and picks
- Reserve material for a customer without the order information using user-defined reservations
- View the material consumption picture for an item, a particular customer, a particular order, or a combination of these
- Transfer reservations from one supply (or multiple sources) to another, or one demand (or multiple demands) to another
- · Specify the reservation controls such as lot, revision, subinventory, and locator
- Check the on-hand and available to reserve quantities

### Reservations

A reservation is a link between a supply document and a demand document. For example, you can create a reservation for a demand document type of sales order against a supply document type of purchase order. The reservation creates the association between these two documents and ensures that the specified quantity of an item is available on a certain date.

Item reservations prevent picking material you previously set aside for a sales order, account, account alias, or user-defined demand. You can also create reservations for different types of supplies such as on-hand inventory or purchase orders.

You can manually create a reservation or set parameters for the application to automatically generate the reservation. You can reserve material at the subinventory, locator, and if applicable, lot and serial number level.

Once reserved, you:

- Can transfer reserved material from one demand or supply source to another.
- Can't allocate the product to another supply source or transfer the product within inventory if the reservation is to a subinventory and locator. You can do this if the reservation is at a high level.
- Can't pick reserved inventory for another demand source.

Let's look at these important aspects of reservations:

- Reservation Types
- Supply and demand source types
- · Reservations with no existing demand
- Create Reservations page

### Reservation Types

For on-hand inventory supply, there are two types of reservations:

High-level reservations: contain information about the item and the organization.



• Low-level reservations: contain more detailed information about the item such as revision, lot number, subinventory, serial number, and locator.

With high-level reservations, you aren't reserving against a specific subinventory. So, issued stock can come from any available subinventory. If you want to issue material from a specific subinventory, use the Manage Reservations and Picks page to specify the subinventory details.

**Note:** The sales order line has a subinventory attribute and the reservation APIs honor this field if you specify the subinventory at the line level. You can change the subinventory or leave it blank.

### Supply and Demand Source Types

Supply source types include:

- On hand
- Purchase order
- · Internal requisition
- Transfer order
- Transfer order returns
- Work order

The demand source for reservations may be an application or user-defined transaction source type. Demand source types include:

- Account
- Account alias
- Cycle count
- Movement request
- Sales order
- Shipment request
- User defined
- Transfer order
- · Work order

**Note:** For any supply and demand document, for example purchase order, the document number and line number identifies the item quantity to reserve.

### Reservations with No Existing Demand

You can use the Manage Reservations and Picks task to create inventory reservations when you don't have an existing demand, such as a sales order or transfer order, to reserve inventory against. In these cases, you can create a user-defined, account, or account alias demand.

Here are the demand document types you can use when there is no existing demand document:



Demand Document Type	Description
User-defined demand	Use the user-defined document type when there isn't an official demand document such as a sales order or movement request. For example, you may not want to create an ad-hoc reservation against material they you may need at some future point in time.
Account alias	An account alias is an alternate name for an account number, and is used to more easily identify an account when performing a transaction. You can select an account alias as a demand source when performing a reservation. You can also select an account alias as a transaction source when performing a miscellaneous transaction.
Account	The Account demand is similar to the Account Alias. But in this case, you use the actual account number to reserve against and not the account alias.

It's important to note that you can't automate or use the picking process to relieve the user-defined, account alias, or account demand types. But, you can relieve them using the miscellaneous inventory transactions. For example, if you create a user-defined demand and reference an external document called **DOC-123**. Then you can perform a miscellaneous issue transaction and reference **DOC-123** in the **Source** field when entering the transaction. After processing, the reservation relieves the user-defined demand of **DOC-123** for the quantity on the miscellaneous issue transaction.

The account and account alias demand types work the same way. For example, if you create a reservation against an account demand type, you enter the account number when you create the reservation. If you then create an account miscellaneous issue transaction and use the account number in the **Source** field, the account reservation is relieved when you process that inventory transaction. And, the same idea holds true for the account alias demand type. But in this case, you use the account alias miscellaneous issue transaction.

### Create Reservations page

Use the Manage Reservations user interface to create, view, update, transfer, and delete reservations. Use the Create Reservations page to create new reservations for a demand.

In the Demand section of the Create Reservations page, you can:

- · Create user-defined demand
- Create account demand
- Create account alias demand
- Reserve automatically

In the On-Hand and Available Quantity section of the Create Reservations page:

- You can view the on-hand and available quantities for the current reservation line.
- The on-hand and available quantities change as you change the supply type, reservation quantity, or reservation levels.
- The on-hand and available quantities change as you enter new reservation rows.

To access the Create Reservations page, select the **Manage Reservations and Picks** task from the Inventory Management work area. On the Manage Reservations and Picks page, select the **Create Reservations** button. You can also select **Create Reservations** from the **Actions** menu of the Search Results section. You can select the **Create Reservations** action with or without completing a search and selecting a node.



#### Related Topics

- How You Manage Reservations for Maintenance Work Order Materials
- How You Manage Reservations for Work Order Materials in Manufacturing
- · Overview of Reservation of Materials for Work Orders
- Overview of Reservation of Materials for Maintenance Work Orders

### **Picks**

A pick is a directive to move material for a particular demand from one specific inventory location to another location. You can manually create a pick or set parameters for the application to automatically generate the pick.

You can manually create a pick or set parameters for the application to automatically generate the pick. You can create a pick for material at the subinventory, locator, lot, and serial number level.

Use the Create Picks page to manually create new picks for a demand.

In the Demand section of the Create Picks page, you can:

- · Pick automatically
- Generate a pick slip
- Backorder a line

In the On-Hand and Available Quantity section of the Create Picks page:

- You can view the on-hand and available quantities for the current pick line.
- The on-hand and available quantities change as you change the pick quantity or levels (for example, changing the lot on an existing pick line).
- The on-hand and available quantities change as you enter new pick rows.

When you manually create or edit a pick from the Reservations and Picks user interface, the destination subinventory and locator default based on the demand document type. For sales order and transfer order demand types, it's common for these fields to contain the default staging subinventory and locator for the item. You can create picks for movement requests from a sales order, internal order, and shipment request. You can also create picks for replenishment or requisition movement requests.

Note: The Create Pick action isn't applicable for User-Defined, Account, and Account Alias demand types.

To access the Create Picks page, select the **Manage Reservations and Picks** task from the Inventory Management work area. On the Manage Reservations and Picks page, select **Create Picks** from the **Actions** menu of the Search Results section. You can select the **Create Picks** action with or without completing a search and selecting a node.

# Hierarchy Levels for Reservations and Picks

You can create reservations and picks at different levels. Depending on the level you define, certain fields are required, conditionally optional, or optional.



### Reservations

You can create reservations at the organization, revision, lot, subinventory, and locator levels.

**Note:** You must first enter the lot, if you want to enter the subinventory and locator when creating reservations.

Reservation Level	Required or Optional Field	Description
Organization and Item	Required	Item reservations prevent the allocation of inventory that was previously set aside for a demand source in an organization.
Revision	Conditionally optional	Reservation at the revision level sets aside a revision of an item for the specified demand source.
Lot Number	Conditionally optional	If a lot is reserved for a demand source, it prevents allocation of any item in the lot for any other source.
Subinventory	Optional	Subinventory reservation sets aside the items in the subinventory for the demand source.
Locator	Conditionally optional	You can reserve locator combinations such as rack, bin, and row for a demand source.
Serial Number	Conditionally optional	You can reserve serial numbers if they're available in inventory and unreserved, and the serial quantity is available for the reservation.  • If serials are reserved, then pick release allocates these serials regardless of the suggestions made by the picking rules, assuming that the serial status allows pick release.  • If serials are reserved, then pick release allocates the reserved serials first. For the remaining demand, it honors the organization parameter Allocate serial numbers.

### **Picks**

You can create picks for items that are lot controlled or not lot controlled. A pick is always detailed at the lowest level.

Pick Items	Required Fields	Optional Fields
Item with lot control	Organization, item, lot, subinventory.	Serial number
Item without lot control	Organization, item, subinventory.	Serial number



Pick Items	Required Fields	Optional Fields

When you manually create or edit a pick from the Reservation and Picks user interface, the destination subinventory and locator default as the default staging subinventory and locator for the item.

**Note:** For picks, revision is required if an item is revision controlled. Locator is required when subinventory is locator controlled.

# **Transfer Supply**

Use the Transfer Supply page to transfer the supply details from existing reservations lines to one or more reservation lines.

For example, you may want to transfer reservations from on-hand inventory to any future purchase orders that are incoming. Also, if one or multiple lots are bad, you may want to transfer the reservations to other lots. You can transfer the partially or complete reserved quantity to one or more supply types using the Transfer Supply page.

From the Details section of the Manage Reservations and Picks page, you can navigate to the Transfer Supply page. Select **Transfer Supply** from the **Actions** menu of the **Reservations** tab.

### Transfer Reservations from Supply

The transfer quantity for each line on the Transfer Supply page defaults from the reservation quantity. You can change this value. You can view the total reservation quantity and total transfer quantity at the bottom of each column. The value for the total transfer quantity changes as you enter or change the value of the **Transfer Quantity** field.

The Transfer Reservations from Supply reservation lines should all belong to the same organization. You can remove any rows from this region.

### Transfer Reservations to Supply

Use the Transfer Reservation to Supply section of the Transfer Supply page to:

- Search for availability at different levels such as organization, subinventory, lot, and locator
- View the entire availability picture
- Enter the transfer quantity for any available line to choose that line as the destination supply

You can also remove any rows from this region.

In the search results, the value for the Transfer Quantity field defaults as **0**. You must enter the correct transfer quantity and it needs to be less than the value in the **Available to Reserve Quantity** field. Once you enter the transfer quantity, click **Save and Close** to transfer the source supply for all the demands in the source reservation lines (Transfer Reservations from Supply section) with supply from destination supply sources (Transfer Reservations to Supply section).

**Note:** You can't enter the transfer quantity for any line for which the destination supply details match the supply details of the source reservation lines.



### Example

In the **Transfer Quantity from Supply** section, enter the quantity of the reservation you want to transfer from the supply.

In the **Transfer Quantity to Supply** section, search and select the new supply for you to transfer the reservations. For example, if you know that there is more quantity coming in for a particular item on a purchase order. Search for and select that purchase order row, and enter the quantity of the reservation that you want to transfer to that supply.

Save and close the page. This moves the reservation for that on-hand demand supply to the purchase order supply.

## Transfer Demand

Use the Transfer Reserved Quantity page to transfer demand details for existing reservation lines. You can transfer a partial or the complete reserved quantity to one or more demand types.

For example, you may identify material that you need to transfer from low-priority demand to high-priority demand. You can then transfer the reserved quantity to one or more demand types using the Transfer Reserved Quantity page.

From the Search Results section of the Manage Reservations and Picks page, you can navigate to the Transfer Demand page. Select **Transfer Reserved Quantity** from the **Actions** menu.

### Source Demand Documents

You can view the total reservation quantity of the selected demands and the total transfer quantity at the bottom of each column. The value for the total transfer quantity changes as you enter or change the value of the **Transfer Quantity** field.

The Source Demand Document reservation lines should all belong to the same organization.

#### **Destination Demand Documents**

Use the Destination Demand Documents section of the Transfer Reserved Quantity page to:

- Search for destination demand documents by document type, document number, document line, and demand document name.
- Enter the transfer quantity for any available line to choose that as the destination for demand.

**Note:** The total transfer quantity for lines in the Source Demand Document section should be always greater than the total transfer quantity for lines in the Destination Demand Document Demand section of the page.

Add user-friendly demands for which reservations already exist.

You can also remove any search results rows from this region.

In the search results, the value for the Transfer Quantity field defaults as **0**. You must enter the correct transfer quantity and it needs to be less than the remaining unfulfilled quantity for the demand. Once you enter the transfer quantity, click **Save and Close** to transfer the material reserved from the source demand lines to the destination demand lines.

**Note:** You can't enter the transfer quantity for any line for which the destination demand details match the demand details of the source demand lines.



# Create Inventory Reservation without Existing Demand Document

You can use the Manage Reservations and Picks task to create inventory reservations when you don't have an existing demand, such as a sales order or transfer order, to reserve inventory against. In these cases, you can create a user-defined, account, or account alias demand.

In our example, let's create an inventory reservation against a user-defined demand document type.

Here's a summary of our overall steps:

- Create the user-defined demand document type
- · Confirm inventory reservation creation was successful

### Create the User-Defined Demand Document Type

- 1. From the Inventory Management work area, click the **Tasks** panel tab and select the **Manage Reservations and Picks** task.
- 2. Click the Create Reservations button.
- **3.** In the Search Results: Demand region, click the **Create** list and then, select **Create User-Defined Demand** from the list.
- **4.** In the Create User-Defined Demand dialog box, enter or select these values:

Fields	Values
Inventory Organization	M1
Supply Document Type	On hand
Demand Document Name	Demand Document 01
ltem	ABC01-100
Subinventory	KKCONSUB
Reserved Quantity	1

- 5. Click **OK** to return to the Create Reservations page.
- 6. Click Save and Close.



### Confirm Inventory Reservation Creation was Successful

1. On the Manage Reservations and Picks page, in the Advanced search region, enter or select these values:

Fields	Values
Search	Reservations
Inventory Organization	M1
Item	ABC01-100
Demand Document Type	User Defined

- 2. Click Search.
- 3. Click the **Expand** icon next to **Organization M1** to see the item node.
- 4. Click the **Expand** icon next to **ABC01-100** to see the user-defined node.
- 5. Click the **Expand** icon next to the **User-Defined** node to see your demand document.
- 6. Click Done.

# Detailed Reservations for Purchase Orders, Work Orders, and Transfer Orders

You can create detailed reservations for customer orders for items using the back-to-back process, or orders where you manually reserve the incoming supply (like the purchase order, transfer order, or work order) to the sales order.

Doing this ensures that the actual goods you make or procure with the supply order are used to fulfill the demand, and your customer gets exactly what they ordered. You can also ensure that items stay tied to an order after they enter inventory.

You can detail item reservations to these levels:

- Subinventory
- Locator
- Revision
- Lot
- Serial
- Project
- Task

**Note:** You can reserve a project-based demand to project-based supply and to non-project based supply if the **Allow Use of Common Suppliers** option is set to null or **Yes** for an item.



After the goods are completed or received, the reservation adjusts from the incoming supply document to the on-hand quantity at the most detailed level possible. Items not using lot or serial control are detailed to the subinventory and locator level, while lot or serial-controlled items are detailed to the subinventory, locator, and lot or serial level. If using project-driven supply chain processes, the project and task attributes are included in the reservation as well.

**Note:** If the sales order is manually reserved to on-hand inventory after the supply document is received or completed, the reservation isn't automatically updated.

You can review the serial numbers reserved to a sales order by clicking the **Record Serial Number Information** button on the Create Reservations page. This opens the Serial Numbers window that shows all serial numbers reserved to the sales order.

Let's look at reservation examples for these supply types:

- Purchase order
- Work order
- Transfer order

### Purchase Order

For purchase orders, you can perform a detailed reservation for sales order to on-hand inventory when the purchase order is delivered. The application transfers the reservation of the sales order to the purchase order when the purchase order is returned or corrected. The application also updates serial numbers associated to the reservation on the return or correction of the purchase order.

Let's look at the table to review a scenario for a purchase order.

Step	Description
Sales order is reserved to a purchase order	A sales order for a procured item is reserved to a purchase order for an item that's lot, serial, and revision controlled for a quantity of 10.
After purchase order is delivered	After the purchase order is received and delivered for the quantity of 10, the reservation is detailed to:  Subinventory SUB1  Locator L1  Revision A  Lot1  Serials S001 to S010
After purchase order is returned or corrected	When the purchase order is returned for a quantity of 2 for serials S001 and S002, the reservation is transferred back to the purchase order for a quantity of 2, and the reservation for the on-hand document type is updated from a quantity of 10 to 8.  If you click on the <b>Record Serial Numbers Information</b> button on the Create Reservations page, the Serial Numbers window shows the update. The serial numbers S001 and S001 have been removed from the sales order reservation.



### Work Order

For work orders, you can perform a detailed reservation of a sales order to on-hand inventory when the work order is completed. The application transfers the reservation of the sales order to the work order when the work order product is returned. The application also updates the serial numbers associated to the reservation upon the work order product return.

This table shows the scenario for a work order.

Step	Description
Sales order is reserved to a work order	A sales order for a manufactured item is reserved to a work order for an item that's lot, serial, and revision controlled for a quantity of 10.
After work order is completed	After the work order is completed for the quantity of 10, the reservation is detailed to:  - Subinventory SUB2 - Locator L2 - Revision A - Lot2 - Serials S101 to S110
After work order is returned	When the work order is returned for a quantity of 2 for serials S101 and S102, the reservation is transferred back to the work order for a quantity of 2, and the reservation for the on-hand document type is updated from a quantity of 10 to 8.  If you click on the <b>Record Serial Numbers Information</b> button on the Create Reservations page, the Serial Numbers window shows the update for the work order return. The serial numbers S101 and S102 have been removed from the sales order reservation.

### Transfer Order

For transfer orders, you can perform a detailed reservation of a sales order to on-hand inventory when the transfer order is delivered. The application updates the reservation when the transfer order is returned back to the source organization. The application also updates the serial numbers associated to the reservation upon the transfer order return.

This table shows the scenario for a transfer order.

Step	Description
Sales order is reserved to a transfer order	A sales order for an internally sourced item is reserved to a transfer order for an item that's lot, serial, and revision controlled for a quantity of 10.
After transfer order is delivered in destination organization	After the transfer order is received in the destination organization for the quantity of 10, the reservation is detailed to:
	Subinventory SUB3
	Locator L3
	Revision A



Step	Description
	<ul><li>Lot3</li><li>Serials S201 to S210</li></ul>
After transfer order is returned back to source organization	When the transfer order is returned for a quantity of 2 to the source organization for serials S201 and S202, the reservation for the on-hand document type is updated from a quantity of 10 to 8.  If you click on the <b>Record Serial Numbers Information</b> button on the Create Reservations page, the Serial Numbers window shows the update. The serial numbers S201 and S202 have been removed from the sales order reservation.

### Reserve Unreleased Orders

There may be times that you want to reserve supply manually before a sales order is released to the warehouse for shipping.

For example, an unforeseen emergency can generate demand spikes that quickly drive your on-hand quantities below what's required to meet demand. Using the **Manage Reservations and Picks** task, you can manually reserve supply before the sales order is released to the warehouse for shipping. You can also manually reserve transfer orders that route through Oracle Fusion Cloud Order Management.

When reserving unreleased orders, you can:

- Search reservations for unreleased orders on the Manage Reservations and Picks page. Use the **Order Interface Status** search parameter to guery these orders.
- Manually reserve unreleased orders with various supply types, such as on-hand inventory, purchase orders, work orders, and transfer orders on the Create Reservations page.
- Manually edit or delete reservations on the Create Reservations and Edit Reservations pages.
- Purge excess reservations for unreleased orders using the Purge Excess Inventory Reservations scheduled process.
- Use the enhanced Inventory Reservations REST resource to manage reservations for unreleased orders.

Here are some important limitations:

- When an unreleased order is canceled or unscheduled, you must manually delete the reservation or run the Purge Excess Inventory Reservations scheduled process to delete reservations against canceled lines or unscheduled lines.
- The file-based data import (FBDI) process doesn't support reservations of transfer orders.

#### Order Interface Status

Search reservations for unreleased orders on the Manage Reservations and Picks page. Use the **Order Interface Status** search parameter to filter these orders. Values for the **Order Interface Status** field include:

- Awaiting release to shipping or inventory
- Released to shipping or inventory

Sales orders and transfer orders interfaced to Order Management are considered as unreleased orders if the sales order is in a scheduled status and awaiting release to shipping or inventory. You can manually create, edit or delete



reservations for the orders awaiting release to shipping or inventory. You can also transfer supply for reservations with an **Order Interface Status** of **Awaiting release to Shipping or Inventory**.

The **Order Interface Status** field doesn't appear by default in both the search and search results sections of the page. Select **Add Fields** in the search area to add the field to the page. In the search results section, select **View > Columns > Order Interface Status**.

### Purge Excess Inventory Reservations Process

Run the **Purge Excess Inventory Reservations** process to purge excess reservations for unreleased orders. Change management for scheduled order lines which are awaiting release to shipping or inventory isn't automated. Therefore, manually-created reservations for scheduled order lines when canceled or unscheduled, don't automatically delete. Use the **Purge Excess Inventory Reservations** scheduled process to delete these reservations.

#### **REST**

You can also use the Inventory Reservations REST resource to manage reservations for unreleased orders. Use the DemandSourceHeaderNumber attribute to pass the order number or transfer order number. Use the **DemandSourceLineNumber** attribute to pass the **FulfillLineId** to create reservations against the order lines that are awaiting release to shipping or inventory.

### Important Notes

Important notes about reserving unreleased orders:

- You can't use the file-based data import (FBDI) process to reserve transfer orders.
- The Review Item Supply and Demand page doesn't support unreleased order demand.
- The **Transfer Reserved Quantity** action on the Manage Reservations and Picks page is disabled for orders awaiting release to shipping or inventory.
- You can't edit reservations for the canceled or unscheduled order lines of unreleased orders, but you can delete them.

# Purge Inventory Reservations Interface Process

Run the Purge Inventory Reservations Interface process to purge data from the inventory reservations interface table (INV\_RESERVATIONS\_INTERFACE). This process lets you quickly delete error or pending records from the reservation interface. The content of this table displays on the Manage Reservations page.

#### **Process Parameters**

This table provide a description of the **Purge Inventory Reservations Interface** process parameters.

Parameter	Description
Purge Data Before	Purge any records in the reservation interface created before the date you specify here.
Status	Purge error, pending, or both error and pending records.



Parameter	Description
Load Request ID	Purge records for a specific file-based data import (FBDI) load. This is applicable for records loaded using the Reservation FBDI.

### Steps

- 1. Navigate to the Scheduled Processes work area.
- 2. Click the **Schedule New Process** button.
- **3.** Search for the **Purge Inventory Reservations Interface** process.
- 4. Click OK.
- 5. Enter the process details including the Purge Data Before date, Status, and Load Request ID.
- **6.** Submit the process.

### **Functional Log**

After running the scheduled process, you can view a summary of the process. The output from the functional log provides this information:

- Number of records picked
- · Number of records processed
- · Number of records failed

#### Related Topics

Purge Inventory Reservations Interface

### FAOs for Reservations and Picks

#### What's a reservation?

A reservation links a supply source to a demand source and guarantees allotment of material to the demand source.

A supply source could be on-hand inventory or a purchase order. A demand source could be an account, cycle count, or user-defined demand source. You can reserve material at the subinventory, locator, and if applicable, lot and serial number level.

### What's a pick?

A pick is a manually- or automatically-created suggestion to honor a reservation when on-hand inventory is available.

Picks can be created for material at the subinventory, locator, lot, and serial number levels.

### What's a cycle count reservation?

A cycle count reservation is a reservation with the demand document type of cycle count.

You can create a cycle count reservation if, during picking or shipping, you have determined missing material and you want to ensure that no one else tries to use or pick the missing material. Cycle count reservations are deleted when you perform a cycle count of the item in the specified location.



You can use the Submit for Cycle Count action in the Manage Shipment Line page or the Submit All for Cycle Count action in the Manage Shipment page to create a cycle count reservation.

What happens to reservations when I make changes to supply sources?

Reservations change according to supply sources.

The changed supply sources are:

- On hand: After on-hand supply has been issued against a specified demand, the on-hand quantity decreases by the amount that was issued. The same material can't be issued against another demand.
- Purchase order: If you reduce the quantity of material in or cancel a purchase order that's reserved against a demand, the corresponding reservation is modified or canceled.
  - Any other changes to the purchase order that affect the expected quantity also trigger changes to the associated reservation.
- Requisition: If you reduce the quantity of material in or cancel a requisition that's reserved against a demand, the corresponding reservation is modified or canceled.
  - Any other changes to the requisition that affect the expected quantity also trigger changes to the associated reservation.
- Transfer order: If you reduce the quantity of material in or cancel a transfer order that's reserved against a demand, the corresponding reservation is modified or canceled.
  - Any other changes to the transfer order that affect the expected quantity also trigger changes to the associated reservation.
- Transfer order return: If you cancel a transfer order return that's reserved against a demand, the corresponding reservation is canceled.
- Work order: If you reduce the quantity of material in or cancel a work order that's reserved against a demand, the corresponding reservation is modified or canceled.
  - Any other changes to the purchase order that affect the expected quantity also trigger changes to the associated reservation.

How can I use the Manage Reservations and Picks page to reserve materials for manufacturing work orders?

You must first enable the Enable Reservation for Work Order Materials plant parameter for the manufacturing plant's organization. Then, you can use the Manage Reservations and Picks page to reserve materials for work orders:

- From Oracle Fusion Cloud Inventory Management: Select the Manage Reservations and Picks task from
  the Inventory Management work area to access the Create Reservations and Picks page. Select the Create
  Reservations button to open the Create Reservations page. You can manually create a reservation for the
  work order by entering the Demand Document Type and Demand Document Number. Enter the work order
  number for the Demand Document Number.
- From Oracle Fusion Cloud Manufacturing: Click the Reserve Materials Manually button on the Manage
  Work Order or Edit Work order page. This opens the Create Reservations page in Inventory Management. The
  Demand Document Type defaults as Work Order and the Demand Document Number defaults the work
  order number.



## Why can't I detail my sales order reservation to the project and task level?

To detail the reservation to the project and task level, the incoming supply should have a project reference. You can reserve a project-based demand to supply without a project reference when the Allow Use of Common Suppliers option is set to null or Yes for an item on the item definition.

The reservation isn't detailed to the project and task when the incoming supply without project reference is received through a purchase order or transfer order, or completed using a work order.

#### How can I automatically pick release for serialized items?

To set up the application to perform automatic pick release for serialized items, you must set the System Selects Serial Numbers option to Yes on the Manage Inventory Organization Parameters page.

- 1. In the Setup and Maintenance work area, go to the **Manage Inventory Organizations task**.
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Facilities
  - Task: Manage Inventory Organizations
- 2. Select the inventory organization where you're picking the item.
- 3. Click the Manage Organization Parameters button.
- 4. Click the Lot, Serial Number, and Packing Unit tab.
- 5. Under the Serial Number Generation section, select **Yes** for the **System Selects Serial Numbers** option.

If the **System Selects Serial Numbers** option is set to **No**, you must enter the serial numbers when confirming the picks manually.

How can I create a manual reservation for sales orders and transfer orders that aren't yet awaiting shipping?

Use the Manage Reservations and Picks task to manually reserve supply before the sales order is released to the warehouse for shipping.

You can also manually reserve transfer orders that are routed through Oracle Fusion Cloud Order Management. Use the **Order Interface Status** search parameter to search for orders with an **Order Interface Status** of **Awaiting release to shipping or inventory** or **Released to shipping or inventory**.

Use the Manage Reservations and Picks page to create, view, update, transfer, and delete reservations. Use the Create Reservations page to create new reservations for the demand.

## How can I remove excess inventory reservations?

Run the Purge Excess Inventory Reservations process to remove excess and orphaned reservations associated with shipped and canceled order lines.

Use the Scheduled Process work area to run the **Purge Excess Inventory Reservations** process. Click **Navigator** > **Tools** > **Scheduled Processes**. Then, search for and run the **Purge Excess Inventory Reservations** process.

**Note:** When an unreleased order (awaiting release to shipping or inventory) is canceled or unscheduled, you must manually delete the reservation or run the **Purge Excess Inventory Reservations** process to delete reservations against canceled lines or unscheduled lines.



## How can I make a pick release allocate a specific lot to sales orders?

You can create a manual reservation at the lot level prior to pick release. Use the Manage Reservations and Picks task to create this manual reservation. On the Manage Reservations and Picks page, click the Create Reservations button.

# Confirm Pick Slips

### Overview

You use the Confirm Pick Slips page to enter details of picked material and confirm a pick slip.

You can do the following as part of confirming a pick slip:

- · Enter details of picked material
- · View and modify details of picks on a pick slip
- Enter multiple lot and serial number for picked material, if required
- Enter the transaction date for each pick
- · Evaluate pick slip discrepancies

To confirm a pick slip, select **Navigator > Supply Chain Execution > Inventory Management**, and then click the **Confirm Pick Slips** task from the task panel.

# Serial Number Entry at Pick Confirmation

To enter a serial number at pick confirmation, an item must be configured to create and assign serial numbers at pick confirmation.

If you enter serial numbers at pick confirmation, your shipping personnel don't need to scan or enter serial numbers during the ship confirm process. This results in efficient processing of outbound shipments.

**Note:** If required, you can override the serial number entered at pick confirmation at shipment confirmation.

#### Related Topics

Item Inventory Specifications

# Overpick for Sales Orders, Transfer Orders, and Work Orders

You can specify more than the requested quantity on your pick-and-move requests for sales orders, transfer orders, and work orders. This lets you pick a quantity that makes sense for your business, move it to a staging or processing location, perform your required tasks, and then take appropriate actions to handle the remaining quantities.



You can overpick and move materials on the Confirm Pick Slip page prior to staging the materials for shipping or the shop floor. Select the **Overpick and Move** icon for a pick line on the Confirm Pick Slip page to open the Overpick and Move window. This icon is available if the **Allow overpicking for special handling** check box is enabled at the inventory organization level. You can enter a picked quantity for the pick line that's greater than the requested quantity, and move it to an intermediary subinventory prior to confirming the pick to a staging subinventory. Applicable demand types, such as a shipment for a sales order or transfer order, or a work order to the shop floor, can then consume the pick.

#### Example

Let's look at an example where overpicking could be useful. Let's say that you have items that are boxed in multiples or lots and you need to breakdown the boxes to fulfill the requested quantity. It may not be efficient to perform the breakdown at a congested store's location. Instead, it's easier to move the material to a dedicated location for processing.

#### **Validations**

This table shows the validations that the application considers for overpick and move transactions.

Validation	Description	
Material Availability	There must be sufficient on-hand quantity available in the subinventory, locator, or lot for the picked quantity.	
	Other pick lines that are vying for the same material automatically move in parallel, prioritized by due date, across demand types unless there's sufficient on-hand quantity to fulfill them at the source after the move. These other pick lines must not be reserved at a detailed level such as subinventory, locator, and lot.	
	You can split pick lines between the source and intermediary subinventory unless they're constrained by a lot. You can also override the source subinventory, locator, and lot, but the new values are subject to the same material availability rules.	
Material Status of Source and Destination	If the source subinventory, locator, or lot disallow subinventory transfer transactions or pick transactions for the respective demand types, the overpick and move can't be completed.	
	If the intermediary subinventory disallows pick transactions for the respective demand types or the transaction isn't reservable, the overpick and move can't be completed.	
Project or Common Inventory Integrity	The sales order, transfer order, or work order dictate the requirement for project or common inventory. The inventory isn't interchangeable.	

Once you initiate the overpick and move transaction, the application reallocates the target pick line and other qualifying pick lines to their new source subinventory, and locator where applicable.

#### Considerations

Consider these items when performing an overpick:

- The picked quantity must be greater than or equal to the requested quantity.
- If your inventory organization is set to allow negative balances, you can overpick and move more than is on hand or available.



 Excess material (material that you overpick over the requested quantity that's not allocated to other demand) is considered available for new demand at all times.

**Note:** You can't overpick serial-controlled items. You can't pick a single pick line that contains multiple lots.

#### Related Topics

Enable Overpicking for Sales Orders, Transfer Orders, and Work Orders

# Enable Overpicking for Sales Orders, Transfer Orders, and Work Orders

To enable overpicking, complete these steps:

- 1. In the Setup and Maintenance work area, use the **Manage Inventory Organizations** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Facilities
  - Task: Manage Inventory Organizations
- 2. In the **Organization** field, select the inventory organization and click **Search**. The organization displays in the Search Results area.
- 3. Click Manage Organization Parameters.
- 4. Click the Item Sourcing Details tab.
- 5. In the Picking Defaults section, select the **Allow overpicking for special handling** check box

#### Related Topics

Overpick for Sales Orders, Transfer Orders, and Work Orders

# Example of How to Prioritize Picking Based on Subinventory

This example walks you through the steps to prioritize picking based on subinventory.

Let's assume that you have three subinventories and you would like to pick based on the picking orders shown in the table:

Subinventory	Picking Order
FG	1
MFG	2
RM	3



When you execute picking against any transaction, you want the application to first pick the goods from the **FG** subinventory. However, if stock isn't available in **FG**, then the application should next pick from the **MFG** subinventory. And if stock isn't available in both the **FG** and **MFG** subinventories, the application should pick from the **RM** subinventory.

Here are the steps to make this happen.

1. Create a picking rule with material sort criteria Priority 1 with subinventory ascending.

From the Setup and Maintenance work area, use the **Manage Picking Rules** task:

- Offering: Manufacturing and Supply Chain Materials Management
- Functional Area: Shipping
- Task: Manage Picking Rules
- **2.** Assign the picking rule to an inventory organization.

From the Setup and Maintenance work area, use the Manage Picking Rule Assignments task:

- Offering: Manufacturing and Supply Chain Materials Management
- Functional Area: Shipping
- Task: Manage Picking Rule Assignments
- **3.** Associate the picking rule on the Item Sourcing Details tab of the Manage Inventory Organization Parameters page.
  - a. From the Setup and Maintenance work area, use the **Manage Inventory Organizations** task:
    - Offering: Manufacturing and Supply Chain Materials Management
    - Functional Area: Facilities
    - Task: Manage Inventory Organizations
  - **b.** Search for and select an organization.
  - c. Click the Manage Organization Parameters button.
  - d. Click the Item Sourcing Details tab.
- 4. Create and submit a sales order.

Use the Manage Orders task from the Order Management work area.

- **5.** Create a pick wave against the sales order.
  - a. From the Inventory Management work area, select **Shipping** from the task panel.
  - **b.** Select the **Create Pick Wave** task.
- **6.** Check the source subinventory and confirm the pick slip.
  - a. From the Inventory Management work area, select **Shipping** from the task panel.
  - **b.** Select the **Confirm Pick Slips** task.

**Note:** After pick release, you don't have the option to prioritize picking based on subinventory. For example, let's say after pick release, the application generates two picks:

- Item ABC from Subinventory A
- Item DEF from Subinventory B

You can't indicate which subinventory gets picked first.



# FAQs for Confirm Pick Slips

What happens if I confirm a pick slip and navigate to ship confirm?

You can continue with processing the shipment and then ship confirming it as an integrated flow.

What are the inventory transactions that support entering serial numbers at pick confirmation?

You can enter serial numbers at pick confirmation for inventory transactions such as sales order pick, transfer order pick, transfer order return pick, and movement request issue.

For internal material transfers, you can enter serial numbers between two inventory organizations (interorganization transfer) including for expense destinations. For internal material transfers between two subinventories (intraorganization or intersubinventory transfer) you can't enter serial numbers except for destination type expense.

What happens if I select the Close movement request lines at pick confirmation check box?

This selection automatically closes replenishment movement requests from min-max planning that are partially filled at pick confirmation time.

#### Can I overpick more than the on-hand quantity?

Yes, if your inventory organization is set to allow negative balances, you can overpick and move more than the available on-hand quantity.

## Why did I get the partial picking error INV\_PICK\_NO\_QTY\_EXCEPTION?

You can get the INV\_PICK\_NO\_QTY\_EXCEPTION error when the pick transaction is submitted for confirmation with a quantity different then the requested quantity (partial picking), and a picking exception wasn't provided.

When the **Capture Picking Exceptions** option is setup for the inventory organization level, you must also define a picking exception reason for the **Manage Inventory Transaction Reasons** task. As an example, you can select **Pick** for the reason type and **Short pick** for the reason context.

First, confirm the **Capture Picking Exceptions** option is enabled:

- 1. In the Setup and Maintenance work area, go to the **Manage Inventory Organization** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Facilities
  - Task: Manage Inventory Organization
- 2. Search for your organization.
- 3. Click Manage Organization Parameters.
- 4. Click the Item Sourcing Details tab.
- **5.** Confirm that the **Capture picking exceptions** check box is selected.



#### Then, set up up picking exception reasons:

- 1. In the Setup and Maintenance work area, go to the **Manage Inventory Transaction Reasons** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Facilities
  - Task: Manage Inventory Transaction Reasons
- 2. Create a picking exception reason and enter these values:

。 Reason Type: Pick

Reason Context: Short pick

# Lot Transactions

# **Inventory Lot Transactions**

When dealing with goods that are under lot control, there are numerous events that might require you to break, combine, or transform some or all of the goods in a specific lot. You can perform lot splits, merges, and translations within Oracle Inventory Management using REST APIs or file-based data import (FBDI).

#### Inventory Lot Split Transactions

You can use an inventory lot split transaction to split a single lot into multiple lots. For example, you can split a source lot into a single subinventory or among multiple subinventories. The resultant lots inherit their lot attributes from the source lot. However, depending on your business requirements, you can change the resultant lot attributes. This feature is particularly useful if you need to change a lot attribute for selected items within a lot.

An example of when you might want to split a lot is if a weather event causes damage to your warehouse and spoils only a portion of a lot. The damaged portion of the lot is still usable for some, but not all, of your manufacturing processes. Therefore, you need to split this quantity from the original lot and assign new lot numbers to ensure your goods are designated properly for future use.

## **Inventory Lot Merge Transactions**

You can use an inventory lot merge transaction to merge multiple inventory lots into a single lot. For example, if you have four separate lots with similar characteristics, you can merge them into a single lot rather than maintaining four separate lots. The individual item quantities from the four source lots are summed for the resultant lot. The ability to merge lots reduces overhead for your organization, allowing you to manage the inventory lot as a single unit.

An example of when you might want to merge a lot is if you regularly combine multiple lots into a single vat before use in downstream processes. When you merge all of these lots into a single vat, you assign a new unique lot number.

## Inventory Lot Translate Transactions

You can use an inventory lot translate transaction to translate a single source lot into a single resultant lot through REST APIs or file-based data import (FBDI). For example, you can use a lot translate transaction to correct lots that have been entered incorrectly. Let's say you incorrectly specify lot A when entering a purchase order receipt. You can perform an



inventory lot translate transaction to update the resultant lot to lot B. Inventory lot translate is only supported within an item.

In some industries, a chemical reaction process might require that you change the assigned lot number of an item when the process is complete. In this example, let's say you complete a work order for item 123 into lot A. After two weeks, the reaction process is complete, and the lot should change to lot B. This change indicates that the item is ready for the next step. The item itself hasn't changed, and the additional overhead of a work order just to change the lot number isn't desired. Additionally, you need the lot history retained.

#### Important Notes

Let's look at these important notes for lot split, merge, and translate transactions:

- Lot split, merge, and translate is only allowed when there is available quantity for the item.
- Lot attributes are inherited by the resultant lot and can be overridden if required.
- Both source and resultant lots must have the same value for the inventory tracking attributes.
- Serial number-controlled items are supported for lot split, merge, and translate transactions.
- Disabled inventory lots can be reused for lot split, merge, and translate transactions.
- Lot translate to a different item isn't supported.
- Consigned inventory isn't supported for lot split, merge, and translate transactions.
- If the representative lot isn't specified for a lot merge, the lot with the highest available quantity is used.
- · Lot split, merge, and translate transactions support multiple transaction units of measure.
- · Lot split, merge, and translate transactions support transactions at the inventory locator level.
- **Use Current Cost** defaults to **Yes** can can't be changed for inventory lot transactions.

#### Related Topics

- Implementation Considerations to Perform Lot Transactions
- Sample REST API Payloads for Lot Split, Lot Merge, and Lot Translate Transactions
- Review Completed Lot Transactions
- REST API for Oracle Fusion Cloud SCM

## **Review Completed Lot Transactions**

Use the Review Completed Transactions and Manage Pending Transactions pages to review completed inventory lot transactions. These fields help you identify split, merge, and translate lot transactions:

- Lot Transaction Source: lets you identify which inventory lot represents the source lot.
- Lot Transaction Group: user-defined value that provides you with a way to group your lot transactions.
- Representative Lot: used when performing lot merge transactions. The value in this field indicates which lot in the merge transaction is the representative lot.



# Implementation Considerations to Perform Lot Transactions

To perform lot split, lot merge, and lot translate transactions, you must configure your item in the Product Information Management work area.

On the Manage Items page, under Inventory Specifications, you can enable an item as **Lot Translate Enabled**, **Lot Split Enabled**, and **Lot Merge Enabled**. Optionally, you can set the **Lot Divisible** field to **Yes**, which allows you to perform partial lot split, merge, and translate transactions.

To enable material status control for a given transaction type, you must enable status control for the respective transaction type. Use the **Manage Inventory Transaction Sources and Types** setup task to enable status control for a given inventory transaction type. Select the **Enable Status Control** check box. This configuration lets you allow or deny inventory lot transactions based on material status.

# Sample REST API Payloads for Lot Split, Lot Merge, and Lot Translate Transactions

You can find sample REST API payloads for lot split, lot merge, and lot translate transactions in the REST API for Oracle Fusion Cloud SCM guide. You can find the sample payloads under the Inventory Management task. Select **Inventory Staged Transactions**.

Related Topics

REST API for Oracle Fusion Cloud SCM

## Units of Measure

# UOM Conversions for Inventory, Receiving, and Shipping Transactions

UOM conversions enable you to view different units of measure set up for an item in inventory transactions. With UOM conversions, you can order items in one unit of measure, and convert and fulfill the items in a different unit of measure.

The UOM conversions option is hidden by default. Enable UOM conversions by selecting the **UOM Conversions** item from the **View** menu on the following applicable pages:

- Receive Expected Shipments
- Put Away Receipts
- Manage Transfer Orders
- Create Subinventory Transfers
- Create Interorganization Transfers



- Confirm Pick Slips
- Return Receipts
- Cycle Count Record Count Sequences
- Physical Count Record Physical Inventory Tags
- Create Miscellaneous Transactions
- Manage Shipment Lines
- · Manage Item Quantities
- Manage Movement Requests

Select the **UOM Conversions** icon to access the View UOM Conversions page. On the View UOM Conversions page, you can view the UOM conversion between the transaction UOM and other item-specific defined UOMs.

**Note:** You can use UOM conversions if you have defined interclass and intraclass UOM conversions for your items.

#### Related Topics

- Standard Conversions for Units of Measure
- What's a unit of measure standard conversion?

## Residual Quantity Transactions with Dual UOMs

If you have a dual UOM item, and if a transaction drives the on-hand quantity for the item in the primary UOM to zero, then Inventory Management automatically creates a residual quantity transaction, but the secondary on-hand quantity isn't zero.

If the secondary on-hand quantity is:

- Less than zero, the residual quantity transaction will have a residual quantity receipt.
- Greater than zero, the residual quantity transaction will have a residual quantity issue.

You can use the Defaulting Control attribute to specify how to handle these differences.

Value	Description
Fixed	Inventory Management will use the primary quantity and your UOM conversion to determine the secondary quantity.
Default or No Default	The deviation that you specify will determine the secondary quantity.

Let's take an example where you allow a 10% deviation in either direction. The conversion from primary to secondary is 1 to 1, such as KG and Liters. And, let's say you receive 100 KG and 100 Liters.

Now you do a few issues of the material, with some deviation from the standard conversion. Let's say you issue 50 KG and 51 Liters to a batch or shipment because the material expanded during fulfillment. That leaves you with 50 KG and 49 Liters on hand. Now you do another issue of 50 KG and 51 Liters. This leaves your on-hand quantity as 0 KG and -2 Liters. Obviously, that's not physically possible. If you have 0 KG, you must also have 0 Liters. Inventory Management



will automatically create a residual quantity receipt for 0 KG and 2 Liters to bring your on-hand quantity in sync to 0 KG and 0 Liters. Similarly, if you had been left with 0 KG and a positive 2 Liters, Inventory Management will create a residual quantity issue.

You will usually see these residual quantity transactions when you allow a deviation. However, if you set Defaulting Control to Fixed, then the secondary on-hand quantity can sometimes get out of sync with the primary quantity and the UOM conversion because rounding errors accumulate. If a transaction leaves on-hand quantity at zero in the primary quantity, but not zero in the secondary quantity, then you'll have a residual quantity transaction.

**Note:** The reverse isn't true. If a transaction leaves on-hand quantity as zero in the secondary quantity, but not zero in the primary quantity, then Inventory Management doesn't automatically create a residual quantity issue for the primary UOM. You can create a miscellaneous issue to make the primary UOM 0.

Learn how to set the Defaulting Control attribute. For details, see Set Up Dual Units of Measure.

#### Related Topics

- Track Items in More Than One Unit of Measure
- Overview of Setting Up Dual Units of Measure
- How Units of Measure, Unit of Measure Classes, and Base Units of Measure Relate to Each Other

# Country of Origin Tracking

# Country of Origin Tracking for Inventory Transactions

You can report and track the country of origin on on-hand quantity and inventory transactions in receiving, shipping, and inventory.

Once you select the **Enable Inventory Tracking by Country of Origin** option on the Manage Inventory Organization Parameters page, country of origin tracking is available to you.

Report and track country of origin when you:

- Receive purchase orders
  - Receive and put away lines for a specific country of origin material. The country of origin on the purchase order defaults when receiving the lines.
- Perform inventory transactions
  - Use the Create Miscellaneous Transaction task to issue or receive country of origin-specific material. Use the Create Subinventory Transfer task to transfer country of origin-specific material. Use the Create Interorganization Transfer task to transfer country of origin-specific material across inventory organizations.
- · Confirm pick slips
  - Pick confirm material for a specific country of origin. You may also override the picking recommendation.
- · Manage item quantities
  - Query and review for on-hand inventory based on country of origin.



· Review completed transactions

Query and view completed transactions for country of origin-specific material using the Review Completed Transactions task

Perform cycle counting

Record cycle count sequences and approve the sequences for country of origin-specific material.

Perform physical inventory

Record physical inventory tags and approve the adjustments for country of origin-specific material.

· Import material transactions to costing

Use country of origin as an additional valuation structure attribute to track costs and value inventory.

Ship material

Ship and quick ship the shipment lines with or without the country of origin-striped material.

Once you identify the country of origin details on a receipt, those details are then tracked by the various inventory functions that handle material within a warehouse. Tracking by country of origin helps you to maintain reporting compliance on import and export documents, take advantage of country specific trade agreements or other trade programs, and identify risk in supply chain sourcing as tariffs change.

#### Note:

- Reservations don't support country of origin.
- Country of origin is view only during inspection and put away transactions.
- You can't stripe consigned inventory material for country of origin.

# FAQs for Country of Origin Tracking

How can I track inventory transactions by country of origin?

Set up your inventory organization to track by country of origin. In the Setup and Maintenance work area, go to the Manage Inventory Organizations task. On the Manage Inventory Organization Parameters page, select the Enable inventory Tracking by Country of Origin check box.





# **4** Lot and Serial Numbers

# Lot Numbers

## Overview of Lot Control

A lot can represent a quantity of an item that shares the same specifications, one or more receipts from the same supplier, or whatever you choose. You can enable lot control for specific items in your inventory.

For items under lot control, you assign lot numbers to each receipt, and then reference the same lots each time you perform material transactions. This enables you to have tight control over lot-controlled items in your inventory.

Lot control starts with defining how lot control should perform at an organizational level. Next, you define item-specific lot controls at the item level. You can define additional lot attributes to capture attributes specific to certain industries and businesses.

Once your set up is complete, you can enter lot numbers on transactions requiring lot entry. Some transactions that may include lot entry include:

- Standard receipts
- RMA receipts
- · Miscellaneous receipts
- Miscellaneous issues
- Sales order issues
- Subinventory transfers
- Interorganization transfers
- Transfer orders

# Lot Management

Lot management includes assigning and maintaining lots, as well as managing child and parent lots.

## **Assigning Lots**

You can pre-assign lots or assign lots while performing material transactions. For example, when performing a receipt transaction, you can assign a lot to an inventory item or group of inventory items. You can also add quantities to existing lot numbers. You can receive a single purchase order multiple times for different quantities. And, you can assign a different lot to each quantity.

The location where you create the lot determines the lot origination type. If you create the lot on the lot master, the origination type is **Lot Master**. If you generate the lot while performing a transaction, the origination type is Inventory.

The application generates a lot number based on either the organization or the item lot definition parameters that were previously set up.



#### Maintaining Lots

On the Manage Lots page, you can view, create, and edit lots. You can view all lots created in your current organization and the supplier lot information associated with the lots. For example, you can view lot attributes such as origination date, parent lot, material status, and origination type. You can also view the on-hand quantity associated with a lot by selecting **View On-Hand Balances** from the **Actions** menu.

You can also update the lot expiration date for items under lot expiration (shelf life) control on this page. The expiration date controls the availability of the lot for transacting and planning purposes.

With an expired lot, these rules apply:

- Can't be reserved for a date beyond the expiration date
- Can be transacted and is included in on-hand quantities
- Is included in a cycle count and count entry, and adjustments are allowed
- Is included in a physical inventory and tag entry, and adjustments are allowed

You can also enable and disable lots on the Manage Lots page. Disabling inventory lots lets you reuse the lot name with another item. This can save processing time and provides a way for you to self-correct an incorrectly entered lot. A lot is eligible to be disabled if the lot has no on-hand balance and hasn't progressed down the supply chain. Disabled item and lot combinations still show in historical transactions, but you can't initiate new inventory transactions for them.

Note: You can't disable lots for items that are both lot and serial number-controlled.

#### Child and Parent Lots

You can divide each lot into child lots that can reflect characteristics you choose for items within the lot. For example, you may divide a lot of items from a supplier into child lots to reflect differences in quality specifications. When you allocate stock for production, you can allocate specific lots to a production batch based on the potency, age, or other item characteristics.

#### Related Topics

How You Disable Inventory Lots

# Lot Number Recording

You can access the Record Lots page from several different business processes. For example, you can access this page when receiving an item. You might want to enter multiple lots for a receipt. You can also access this page when performing a miscellaneous receipt or miscellaneous issue transaction that requires lot entry.

When performing a transaction that requires you to generate and record lots, the Transaction Details section of the page shows different details depending on the process that brought you to the page (receipt, pick confirm, and so forth).

You can enter the lot number manually or click the **Generate Lot** button to have the lot number automatically assigned. You can also select **Generate Lot** from the **Actions** menu. When you choose **Generate Lot**, the application generates a lot number based on either the organization or the item lot definition parameters that were previously set up, and populates the lot fields on the Record Lots page with that number. You can also generate a parent lot number by selecting **Generate Parent Lot** from the **Actions** menu.



If your process requires assigning the transaction quantity to more than a single lot, you can enter the quantity desired for the lot on the line. You can also view how many lots have been entered for the transaction quantity and how many remain to be entered.

Once you generate the lot, you have two options:

- Click **OK**: Clicking **OK** closes the Record Lots page and navigates you back to the source page. The transaction on the page must also be saved in order for the application to save the generated lot. Upon clicking **OK**, the application generates as many lots as specified and populates the generated lots in the Record Lot Information area with the pending quantity of the transaction split equally across the number of lots requested.
- Click Cancel: Clicking Cancel closes the Record Lots page and navigates you back to the source page with no
  action taking place. If you select Cancel after a lot has been generated, the items in the transaction remain
  unassigned from a lot.

# How You Set Up Lot Control

To set up lot control, complete these steps:

- · Establish lot control for an item
- Establish lot expiration (shelf life) control
- Establish lot grade control
- Establish lot number uniqueness
- Optionally, enable child lots
- Optionally, determine to automatically generate lot numbers

#### Establish Lot Control for an Item

You can establish lot control for an item when you define the item. You can select either no lot control or full lot control. If you choose full lot control, then you must assign lot numbers when you receive the item into inventory. Then, when you transact the item, you must provide a lot number that you specified when you received the item.

You can update lot control options for an item if the item has zero on-hand quantity. In addition, you can't change lot control when open shipments exist.

A lot number is a combination of an alphanumeric prefix and a numeric suffix. When you define an item, you can specify the starting lot prefix and the starting lot number. Inventory uses this information to generate defaults during transaction entry.

## Establish Lot Expiration (Shelf Life) Control

Shelf life is the amount of time that an item can reside in inventory before it expires. When defining items under lot control, you can choose no shelf life control, a certain number of item shelf life days from the date that you receive the item, or a user-defined expiration date for each lot.

You can also enter the default expiration action code and expiration interval for the item. For the expiration action interval, enter the number of days the application adds to the expiration date before it performs an action on the lot.



#### Establish Lot Grade Control

When defining an item, indicate whether the item is grade controlled in addition to lot controlled. A grade code represents specific characteristics of a lot. If you select the **Grade Controlled** check box, then you must specify a default grade for the item.

#### Establish Lot Number Uniqueness

Specify whether lot numbers should be unique for an item in the organization parameters. If you don't establish lot number uniqueness, you can assign the same lot number to multiple items in the same organization and across organizations. If you control lot number uniqueness at the master level, you can assign a specific lot number only to one item in the same organization and across organizations. When you perform transactions, Inventory checks the lot number uniqueness control to generate lot number defaults.

#### Optionally, Enable Child Lots

If you enable child lot control when defining an item, you can specify a parent lot and a child lot for transactional purposes. The application processes transactions for the lot regardless of whether you specify the parent lot for the transaction. You can't modify this field if inventory transactions or reservations exist for the item. If you choose to control this attribute at the master organization level, then you can modify this attribute only if no transactions or reservations exist for the master organization or any child organizations that are associated with the master organization.

## Optionally, Determine to Automatically Generate Lot Numbers

Specify how to generate lot number defaults in the organization parameters. You can generate sequential lot numbers based on an alphanumeric prefix that you specify when you define an item. Inventory can also generate lot number defaults for the entire organization. In this case, you must define a lot number prefix at the organization level.

If you don't want Inventory to automatically generate lot number defaults for you, you can enter your own lot numbers when you receive items. You can always override lot number defaults.

## Lot-Controlled Items

When you define a lot-controlled item in the Product Information Management work area, the values that you enter for the lot and lot expiration parameters at the item organization level determine the dates that default during receipt of the lot controlled item.

Other parameters that you enter on the item definition that impact default values at the lot item receipt include the material policy setup parameters and the grade control setup parameters. When you create a receipt on the lot-controlled item, key dates default for the lot based on the values defined for the lot-controlled item.

For example, this table shows where the values on the Record Lots page originate.

Field	Origination
Status	From the material policy defined on the item definition.
Grade	From the default grade defined for the item.



Field	Origination
Origination Date	Date the lot was created in the application.
Expiration Date	Based on shelf life defined for the item.
Retest Date	Based on retest interval defined in item setup.
Expiration Action	Comes from item setup.
Expiration Action Date	Based on expiration action interval defined in item setup.

Once the lot-controlled item is received, you can review and edit the lot details on the Manage Lots page.

You can change the lot attributes on the Manage Lots page by selecting the individual lot and clicking the **Edit** icon. You can also select **Edit** from the **Actions** menu.

When the lot-controlled item is defined with shelf life attributes, expiration attributes, and material policy, you can edit these fields:

- · Origination date
- Material status
- Expiration date
- Expiration action
- Retest date
- Maturity date
- Grade
- Hold until date
- Active

## Lot Attribute Restrictions

When updating lot attributes for an item, the application checks against any lot attribute restrictions. Validation checks occur on these lot attributes that you may choose to edit on the Edit Item page:

- · Lot control (Lot section, Control field)
- Grade control (Grade Control section, Grade Controlled field)
- Child lot enabled (Child Lot section, Child Lot Enabled field)
- Lot divisible (Lot Split or Merge section, Lot Divisible field)
- Shelf-life control (Lot Expiration section, Control and Shelf Life Days fields)

You can change an item's lot attributes in these scenarios:

- Only open purchase orders exist for the item
- An advanced shipment notice (ASN) exists for an open purchase order and the ASN doesn't include any lot numbers



- A receipt exists for an open purchase order, but the goods haven't been put away
- · A shipment line exists for the goods
- An open RMA exists for the goods

In all situations above, no on-hand quantity or pending transactions can exist for the goods.

You can also update the **Lot Divisible** attribute if any pending transactions exist for the lot-controlled goods, as long as no on-hand quantity exists for the item.

To edit the lot attributes for an item:

- 1. From the Product Information Management work area, select the Manage Item task.
- 2. Search for and select an item to access the Edit Item page.
- **3.** Select the **Inventory** link from the **Specifications** tab.
- **4.** Under the Lot, Grade Control, Child Lot, Lot Split or Merge, and Lot Expiration sections, you can edit the lot attributes for the item.

## How the Dates in Lot Attributes Are Calculated

When you create a receipt on a lot-controlled item, key dates default for the lot based on the values defined for the lot-controlled item during setup in the Product Information Management work area.

Here are the lot attribute dates:

- · Origination date
- Expiration date
- · Retest date
- Maturity date
- Expiration action date
- · Hold until date

## **Origination Date**

When creating a lot or assigning lot numbers within transactions, the system date defaults as the origination date. This is essentially the lot creation date and you can modify this date. The values for the maturity date, hold date, retest date, and expiration date (if an item is shelf-life controlled), default from or are calculated based on the origination date.

Origination Date = Lot Creation Date

## **Expiration Date**

The expiration date controls the availability of the lot for transacting and planning purposes. This field populates automatically based on the lot origination date plus shelf-life days that you define in the item master. You can modify the expiration date if the lot is under shelf-life control.

Expiration Date = Origination Date + Shelf-Life Days

Here are some important characteristics of expired lots:

- Aren't considered as on-hand supply when performing min-max, reorder point, or MRP planning calculations.
- Can't be reserved for a date beyond the expiration date.



- Are included in on-hand quantities, and can be transacted.
- Are included in a cycle count. Cycle count entry and adjustments are allowed.
- Are included in all inquiries and reports, including inventory valuation reports.

#### Retest Date

The retest date is the date to retest the lot. The retest date automatically defaults based on the sum of the lot origination date and the retest interval that you define in the item master.

You define the retest interval in terms of days for an item in the item master. So, if you create a lot on 31-July-2020 (origination date) and the retest interval was previously defined as 365 for the item, then the default retest date is 31-July-2021. You can view the retest date on the Manage Lots and Edit Lots pages.

Retest Date = Origination Date + Retest Interval

#### **Maturity Date**

The maturity date is the date when the lot reaches full maturity. The maturity date defaults automatically based on the sum of the lot origination date and the maturity days that you define in the item master. If maturity days aren't defined, the application assumes the lot is mature at creation.

Maturity Date = Origination Date + Maturity Days

#### **Expiration Action Date**

The expiration action date identifies the date that the defined expiration action for the item is to occur. The application calculates the default expiration action date by adding the lot expiration action interval to the lot expiration date.

Expiration Action Date = Lot Expiration Action Interval + Lot Expiration Date

#### Hold Until Date

The hold until date is the date that the lot can be released for usage in inventory. The hold date defaults automatically based on the sum of the lot origination date and the hold days that you define in the item master.

Hold Until Date = Origination Date + Hold Days

# Considerations for Selecting Lot Number Uniqueness Control

Use the Inventory Organization Parameters page to specify if lot numbers should be unique for an item.

Select one of these lot number uniqueness control options to apply to the items in your inventory organization:

- No uniqueness control
- Across items

When you perform transactions, Oracle Inventory Management checks the lot number uniqueness control to generate lot numbers.



#### No Uniqueness Control

Choose this option if you don't want to establish lot number uniqueness. When selected, you can assign the same lot number to multiple items in the same organization and across organizations. Organizations that choose **No uniqueness control** can enter any lot as long as the lot doesn't exist in any organization that's set to **Across items**.

#### Across Items

Choose this option to control lot number uniqueness across items. With this option, you can assign a specific lot number to only one item in the same organization and across organizations. The application verifies that the lot number doesn't exist for any other item in any other organization.

This table shows what's allowed:

Organization	Uniqueness Setting	Item	Lot Number
M3	No control	INV-101	LOT2
M3	No control	INV-102	LOT2
M4	No control	INV-103	LOT2
M5	No control	INV-104	LOT2

This table shows what's not allowed:

Organization	Uniqueness Setting	Item	Lot Number
МЗ	No control	INV-101	LOT1
МЗ	No control	INV-102	LOT1
M4	No control	INV-103	LOT1
M5	No control	INV-104	LOT1

It is important to understand that when you use this setting for an organization, the same lot number can't exist for any other item in any other organization. However, it's possible to have the same item with the same lot number in multiple organizations.

**Note:** You can change the setting for the lot number uniqueness control at the inventory organization level if there are no open transactions.



# How You Disable Inventory Lots

On the Manage Lots page you can disable inventory lots, enable inventory lots, and search disabled lots. Disabling inventory lots improves transaction processing time because you can reuse disabled lots for other items.

Once you disable a lot for an item, you can't use the lot for performing transactions in Oracle Fusion Cloud Inventory Management or Oracle Fusion Cloud Manufacturing, but you can search and view the lot's transaction history. You can enable a disabled lot if you disabled it by mistake.

#### Disable an Inventory Lot

On the Manage Lots page, search for and select the lot that you want to disable. Select **Disable Lot** from the **Actions** menu. You can disable inventory lots for lot-controlled items only.

Validations take place before you can disable the lot. For example, you can't disable an item and lot combination if it's present in multiple inventory organizations, has open in-transit shipments, has material shipped using sales order and transfer orders or drop-ship sales orders, or exists as an active asset.

Also, you can disable a lot only when there's no on-hand balance and no:

- · Pending inventory transactions
- · Cycle count sequences
- · Physical inventory adjustments
- Inventory balance transactions
- · Recall count transactions
- Shipment lines
- Pending receiving transactions
- Open ASNs
- Receipt awaiting put away
- · Not referenced RMA receipts
- · Open picks
- Movement request lines
- Not referenced supplier receipts

#### Search for Disabled Lots

You can search for disabled lots on the Manage Lots page by selecting the **Show disabled lots only** check box. To view disabled lots in the Search Results section of the page, enable the **Disabled** column by selecting the field from the **View** menu. Use **View** > **Columns** > **Disabled**.

## E-Signatures, E-Records, and Auditing for Disabled Lots

When you initiate the disable lot action for an inventory organization requiring E-Signatures and E-Records, the lot details require approval before the lot can be disabled. E-Signature and E-Records show the disabled lot attribute. You can also configure the disabled attribute (LotItemDisableFlag) in audit functionality to track for data changes on the new attribute on the lot business object.



#### Important Notes

Here are a few important notes about disabling lots:

- You can only disable inventory lots for lot-controlled items. You can't disable lots for items that are both lot and serial number-controlled.
- You can only disable one lot at a time using the Manage Lots page.
- Parent lot functionality isn't impacted by disabling a lot. You can disable a parent lot independent of the child lot, and you can disable a child lot independent of the parent lot.
- Inventory Management transactions don't accept disabled item-lot combinations.
- You can't use disabled lots in manufacturing transactions.
- The Warehouse Manager job role has the ability to disable lots by default. For other users, you must assign the
  functional privilege Disable or Enable Item Lot (INV\_DISABLE\_OR\_ENABLE\_ITEM\_LOT) before they can disable
  or enable a lot.

# How You Transact Lots Without On-Hand Quantity

You can set up your organization to let you transact existing lots without on-hand quantity.

You may want to do this if you don't need to track inventory balances for lot-controlled items, or when you want to allow negative quantities temporarily. This lets you avoid waiting for on-hand quantities to be transacted into stores before allowing their consumption.

You can transact against lots with zero on-hand balances for interorganization transfers, miscellaneous transactions, and subinventory transfers when your organization allows negative balances.

## Set Up

You must enable the specific organization to allow negative balances:

- 1. In the Setup and Maintenance work area, use the **Manage Inventory Organizations** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Inventory Organizations
- **2.** Search for the organization and select the **Allow negative balances** check box. This must be consistent with the inventory organization where the transaction is being executed.

## **Enable Audit for Lot and Serial Numbers**

When you enable an attribute for audit, any changes made to it are tracked and saved. This makes it possible to trace all changes and provide complete information to auditors on demand.

You can enable data auditing capabilities to include any changes to lot and serial attributes and their associated descriptive flexfields. You can review these changes in the Audit Reports work area, which provides you with



information such as what operation was performed, when it was performed, and how the value was changed. This lets you quickly and easily generate a data auditing report for use in internal and external auditing compliance.

To enable audit of lot and serial numbers, you must be assigned a role that includes the Manage Audit Policies privilege.

You can enable or disable audit of the lot and serial number business objects as follows:

- 1. In the Setup and Maintenance work area, use the **Manage Audit Polices** task.
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Applications Extensions
  - Task: Manage Audit Polices

**Note:** If you're unable to view the Manage Audit Policies task, select **All Tasks** from the **Show** drop-down list on the Setup: Manufacturing and Supply Chain Materials Management page.

- 2. On the Manage Audit Policies page, click the **Configure Business Objects Attribute** button for Oracle Fusion Cloud Applications.
- **3.** On the Configure Business Objects Attributes page, select **Inventory Management** in the **Product** Field. The business objects available for auditing display on the page.
- 4. Select and expand Lot and Serial Number Audit Setup.
- 5. Select Lot and Serial Number, and then click Save and Close.

#### Related Topics

- Audit Policies
- Audit Configuration for Business Object Attributes
- · Overview of Audit Configuration

## FAQs for Lot Numbers

## What happens to an inactive lot?

When a lot's status becomes inactive, the lot is still included in available-to-transact, available-to-promise, and available-to-reserve calculations.

#### Additionally, the lot:

- Is included as on-hand supply when you're performing min-max or reorder point planning calculations.
- Is included as on-hand inventory in all inquiries and reports, including the inventory valuation report.
- · Can be transacted.
- Can be reserved.

## What happens when a lot expires?

When a lot expires, the lot isn't considered on-hand supply when the user is performing min-max or reorder point planning calculations.

#### Additionally, an expired lot:

Cannot be reserved for a date beyond the expiration date.



- · Is included in on-hand quantities, and can be transacted.
- Is included in a cycle count; cycle count entry and adjustments are allowed.

# Does a lot retain its expiration date during interorganization and subinventory transfers?

Yes, if you transfer a lot across or within an organization (interorganization or subinventory transfer), the lot retains its expiration date.

After submitting an interorganization or subinventory transfer, you can navigate to the Manage Item Quantities page to verify the lot expiration date. Search for the item and drill down to the lot details.

What happens if I allow different lot statuses in an organization? Here are your lot status options:

- Select **Yes** to allow new lot quantities to inherit the status of the existing lot.
- Select **No** to disallow transacting of new lot quantities into existing lots.
- Select With Exception to allow transacting of lot quantities if the on-hand balance of the destination organization is zero.

What happens if I select different lot generation options for lot control? Here are your lot generation options for lot control:

- Select At item level to generate lot numbers using the starting lot number prefix and the lot number of the
  predefined item.
- Select **At organization level** to generate lot numbers using the lot name generation options for prefix, zero pad suffix, and total length.
- Select User defined for users to define lot numbers at item receipt.

# Can I change the lot number uniqueness control option for an inventory organization?

Yes, you can change your setting for the lot number uniqueness control at the inventory organization level if there are no open transactions.

#### What's a child lot?

A child lot is a subdivision of a parent lot. You can divide each parent lot into child lots that can reflect characteristics you choose for items within the lot.

For example, you may divide a lot of items from a supplier into child lots to reflect differences in quality specifications. When you allocate stock for production, you can allocate specific lots to a production batch based on the potency, age, or other item characteristics.

Using a child lot maintains the integrity of the lot, but enables you to consume it in manageable pieces. When you process transactions for material under child lot control, you enter the child lot as the lot number.



#### How can I disable an inventory lot?

On the Manage Lots page, search for and select the lot that you want to disable. Select Disable Lot from the Actions menu.

**Note:** Validations take place before you can disable the lot. If a lot is ineligible for disabling, an error message displays. For example, you can't disable an item and lot combination if it's present in multiple inventory organizations, has open in-transit shipments, has material shipped using sales order and transfer orders or drop-ship sales orders, or exists as an active asset.

#### Why can't I disable inventory lots?

You can only disable inventory lots for lot-controlled items. You can't disable lots for items that are both lot and serial number-controlled.

Also, you can't disable an item and lot combination if it's:

- Present in multiple inventory organizations
- Has open in-transit shipments
- Has material shipped using sales order and transfer orders or drop-ship sales orders
- Exists as an active asset

You can disable a lot only when there's no on-hand balance and no:

- · Pending inventory transactions
- Cycle count sequences
- Physical inventory adjustments
- Inventory balance transactions
- Recall count transactions
- Shipment lines
- · Pending receiving transactions
- Open ASNs
- · Receipt awaiting put away
- Not referenced RMA receipts
- Open picks
- Movement request lines
- Not referenced supplier receipts

What's the difference between creating lot UOM conversions automatically and creating lot UOM conversions as a result of user confirmation?

When lot UOM conversions are created automatically, lot-specific UOM conversions are created using the parameters of the lot quantities received.

When lot UOM conversions are created as a result of user confirmation, lot-specific UOM conversions are created using the lot quantities received.



## Can I record lot and serial numbers for consigned transactions?

Yes, select lot and serialized items for a specific owning party when performing consigned inventory transactions.

## Serial Numbers

## Overview of Serial Number Control

You can use serial number control for specific items in your inventory. A serial number is an alphanumeric identifier that you assign to an individual unit of an item. For items under serial number control, you assign unique serial numbers to individual units and then reference the same serial numbers each time you perform material transactions. This lets you have tight control over every unit of every item in your inventory.

Serial control starts with defining how serial number control should perform at an organizational level. Next, you define item-specific serial controls at the item level. You can define additional serial attributes to capture attributes specific to certain industries and businesses.

Once your set up is complete, you can enter serial numbers on transactions requiring serial number entry. Some transactions that may include serial number entry include:

- Standard receipts
- · RMA receipts
- Miscellaneous receipts
- Miscellaneous issues

# Serial Number Management

Once you generate serial numbers for an item, they're visible on the Manage Serial Numbers page. You can view all serial numbers that you created in your current organization and the usage and supplier lot information associated with the serial numbers.

You can also use the Manage Serial Numbers page to update supplier information that's associated with your serial numbers.

You can capture e-records and e-signatures when updates are made to serial number attributes on the Manage Serial Number page. This includes an in-line e-record report that includes an electronic signature history and formatting rules consistent with other inventory e-record reports. The in-line report also captures the user name and password of the approver.

## Serial Number Recording Options

When recording serial numbers for inventory, receiving, and shipping transactions, you have the option to enter a single serial number, a range of multiple serial numbers, or a multiple serial numbers that aren't in a range.



On the Record Serials page, select from three actions to record your serial numbers:

Option	Use
Enter Individual Serial Number	Individual entry mode for entering a single serial number.
Enter Serial Number Range	Entry mode for entering a serial number range.
Select Serial Numbers	Entry mode for selecting and adding multiple serial numbers even when they aren't in a range.  Note: This action is not available when generating serial numbers.

# How You Set Up Serial Number Control

Before you can use serial number control, you must set the item attributes and organization parameters.

To set up serial number control:

- · Establish serial number generation for an item
- Establish serial number uniqueness
- · Optionally, create predefined serial numbers

#### Establish Serial Number Generation for an Item

You establish serial number generation at the item or organization level. You can choose from these values for the serial number generation option:

Serial Number Generation Option	Description
No Serial Number Control	The application doesn't enforce serial number control.
Predefined Serial Number	You must predefine serial numbers for the item.
Entry at sales order, transfer order, or work order issue	You can enter the serial number when performing a sales order, transfer order, or work order issue transaction.
Entry at inventory pick	You can enter the serial number at the time of picking.
Dynamic entry at inventory receipt	You can dynamically enter serial numbers when performing a receipt transaction.



#### Establish Serial Number Uniqueness

Choose the type of serial number uniqueness for your organization in the organization parameters. You can choose to enforce uniqueness within items, within organizations, and across organizations. The three levels for serial uniqueness are cumulative.

#### · Unique Within Items

You can't assign the same serial number to the same item, regardless of whether that item exists in the same or a different inventory organization.

For example, if you assign serial number SN100 to item A, you can't assign serial number SN100 to any other instance of that item in any inventory organization. However, you can receive a different item with serial number SN100 in any inventory organization.

#### Unique Within Organizations

The same serial number uniqueness rules apply as when you set serial number uniqueness control to be within items. Additionally, setting serial number uniqueness control to be within an organization prevents the same serial number from existing multiple times within the same inventory organization.

For example, if you assign SN100 to item A in a particular inventory organization, you can't receive item B with serial number SN100 in the same inventory organization. However, you can receive item B with serial number SN100 in any other inventory organization.

#### Unique Across Organizations

The same serial number uniqueness rules apply as when you set serial number uniqueness rules to be within an organization. Additionally, setting serial number uniqueness control across organizations prevents the same serial number from being assigned to more than one item, regardless of the inventory organization.

For example, if you assign SN100 to item A, you can't receive item B with the serial number SN100 in any inventory organization. In this example, SN101 and SN100 belong to different inventory organizations.

When you assign a particular inventory organization's serial number uniqueness control to be across organizations, serial number uniqueness is similarly restricted for all inventory organizations.

#### Create Predefined Serial Numbers

If you specified **Predefined Serial Numbers** as the serial number generation option for the item, you can select existing predefined serial numbers from a list of values in the **From Serial Number** field on the transaction line or navigate to the Record Lots and Serial Numbers page to select serial numbers there. To access the Record Lots and Serial Numbers page, select the **Record Lots and Serial Numbers** button or action. On the Record Lots and Serial Numbers page, either select existing serial numbers from a list of values in the **From Serial Number** field or click **Select Serials** to see a full list of predefined serial numbers available for the transaction. If you specified **Dynamic Entry at Inventory Receipt** or **Entry at Sales Order, Transfer Order, or Work Order Issue**, then you can optionally predefine serial numbers for the item.

Inventory uses the starting serial number prefix and the starting serial number that you specify when defining the inventory organization or item to create predefined serial numbers. You can create as many serial numbers as you want for any item under serial number control.



## Serial-Controlled Items

When you define a serial-controlled item in the Product Information Management work area, the values that you enter for the generation, starting prefix, and starting number parameters at the item organization level determine the values that default when generating a serial number.

Other parameters that you enter on the item definition that impact default values when generating a serial number include the material policy setup parameters.

The inventory organization parameters control the serial number uniqueness parameters and whether generation occurs at the organization level or the item level. If generation is at the item level, then parameters defined on the item level are used to generate serial numbers for that item. If the serial generation is at the organization level, then organization parameters are used to determine the serial numbers generated for the item.

This table shows the relevant serial number generation values that can be found on the Item Specification tab of the Create Items and Edit Items pages and the Manage Inventory Organization Parameters page. These values control how serial numbers are generated.

Field	Option
Uniqueness	Options include:  Unique within model and inventory items  Unique across organizations  Unique within inventory items  Unique within organization
Generation	Options include:  - At organization level  - At item level
Prefix	Alphanumeric prefix for the serial number.
Starting Serial Number	The next serial number to use when generating serial numbers.
System Selects Serial Number	Select the check box or leave it blank.

## Serial Number Generation Restrictions

If you choose to change the serial number generation method for an item, the application first checks against any restrictions.



You can change an item's serial generation control when there are pending inventory transactions for:

- Purchase orders (expected shipments)
  - There are only open purchase orders and no on-hand quantity exists for the item.
- Put away transactions
- Advance shipment notices awaiting receipt

You can't change the serial number generation control attribute in these scenarios:

- If the item is in the source and destination inventory organization for in-transit shipments and transfer orders, you can't change the serial number generation control.
  - For example, if you have an in-transit shipment between a source and destination inventory organizations, you can't change the item serial generation control in both the source and destination inventory organizations.
- If the **Defer Sending Inventory Updates to Integrated Application** shipping parameter is enabled for your organization, you can't change the item serial generation control when outbound shipments are pending the inventory interface.

#### To edit the **Serial Number Generation Method** for an item:

- 1. From the Product Information Management work area, select the Manage Item task.
- 2. Search for and select an item to access the Edit Item page.
- **3.** Select the **Inventory** link from the **Specifications** tab.
- **4.** Under the Serial section, edit the **Generation** field for the item.

# Serial Number Generation and Assignment

When and where you record serial numbers depends on the serial number generation option previously set up at the item or organization level.

#### Possible values include:

- No Serial Number Control: the application doesn't enforce serial number control.
- **Predefined Serial Number**: you must predefine serial numbers for the item.
- Entry at sales order, transfer order, or work order issue: you can enter the serial number when performing a sales order, transfer order, or work order issue transaction.
- **Entry at inventory pick**: you can enter the serial number at the time of picking. You can't record serial numbers at the time of receipt or put away.
- **Dynamic entry at inventory receipt**: you can dynamically enter serial numbers when performing a receipt transaction.

You can assign serial numbers when you receive items into inventory for the **Predefined Serial Number** and **Dynamic Entry at Inventory Receipt** options. Use the Record Serial Numbers page or record serial numbers on the transaction line itself when choosing serial numbers for the item quantity to issue or receive.

If an item is under **Predefined Serial Number** control, you can choose from the list of predefined serial numbers for that item. Inventory uses the starting serial number prefix and the starting serial number that you specify when defining the inventory organization or item to load the number of predefined serial numbers you request. When serial number generation is defined at the organization level under the Lot, Serial Number, and Packing Unit tab on the Manage Inventory Organization Parameters page, Inventory uses the starting serial number prefix and starting serial number



specified there. If serial number generation isn't defined in inventory organization parameters, Inventory uses the starting serial number prefix and starting serial number defined for the item. You can load as many serial numbers as you want for any item under serial number control. The process of generating serial numbers is done through the Generate Serial Numbers process. You must run this process before receiving the item. This process doesn't assign numbers to units in inventory. It simply reserves specific serial numbers for an item for later use.

If an item is under **Dynamic Entry at Inventory Receipt**, you can choose from a predefined list of serial numbers, generate new ones, or enter any serial number, depending on the uniqueness control for your organization. You can create and assign serial numbers individually or as a range to speed up data entry.

If your item is under **Entry at Sales Order, Transfer Order, or Work Order Issue**, you can assign serial numbers when you perform a shipment transaction in Shipping for a sales order or transfer order, and when a work issue transaction is used to pull the item out of inventory and into a work order. If an item is under **Entry at Inventory Pick**, you record serial numbers at the time of picking, and can't record them at the time of receipt or put away.

Once you assign a serial number to an item, the combination of the serial number and the item is an entity known as a serialized unit. From that point on, Inventory tracks all movements and maintains the following information for each serialized unit:

- Receipt or Ship Date: the date on which you last performed a material transaction for your serialized unit. Material transactions update this information when you move your serialized unit.
- Usage: Inventory assigns one of the following usages to your serialized unit:
  - Defined but not used
  - Resides in stores
  - Issued out of inventory
  - Resides in in-transit inventory
- Location: the organization, subinventory, and locator in which the serialized unit currently resides. Material transactions update this information when you transfer the serialized unit.
- Revision Level: the revision of the item when you assign the serial number to the unit.
- Lot Number: During material transactions, you first specify the lot number and then the serial number. Inventory tracks the lot from which a specific serialized unit originates.

# Serial Number Generation Option Changes

You can establish serial number generation at the item or organization level.

This table presents conditions where you can change back and forth between certain serial number generation options.

Change To or From	Change To or From
Dynamic entry at inventory receipt	Predefined serial number
Predefined serial number	No serial number control
Dynamic entry at inventory receipt	No serial number control



Change To or From	Change To or From
Entry at sales order, transfer order or work order issue	Predefined serial number
Predefined serial number	No serial number control
Dynamic entry at inventory receipt	Entry at sales order, transfer order or work order issue

# Considerations for Selecting Serial Number Uniqueness Control

Select one of these serial number uniqueness control options to apply to the items in your inventory organization:

- · Unique within items
- · Unique within organization
- · Unique across organizations

#### **Unique Within Items**

You cannot assign the same serial number to the same item, regardless of whether that item exists in the same or a different inventory organization.

For example, if you assign serial number SN100 to item A, you cannot assign serial number SN100 to any other instance of that item in any inventory organization. You could, however, receive a different item with serial number SN100 in any inventory organization.

The following table provides an example of the serial numbers that are generated for two separate items when serial number uniqueness is set to be within items.

Organization	Item	Serial Number
M1	AS100 (Printer)	SN100
M1	AS101 (Laptop Computer)	SN100

## Unique Within Organization

The same serial number uniqueness rules apply as when you set serial number uniqueness control to be within items. Additionally, setting serial number uniqueness control to be within an organization prevents the same serial number from existing multiple times within the same inventory organization.

For example, if you assign SN100 to item A in a particular inventory organization, you cannot receive item B with serial number SN100 in the same inventory organization. You can, however, receive item B with serial number SN100 in any other inventory organization.

The following table provides an example of the serial numbers that are generated for two separate items when serial number uniqueness is set to be within an organization.



Organization	Item	Serial Number
M1	AS100 (Printer)	SN100
M1	AS101 (Laptop Computer)	SN101

#### **Unique Across Organizations**

The same serial number uniqueness rules apply as when you set serial number uniqueness rules to be within an organization. Additionally, setting serial number uniqueness control to be across organizations prevents the same serial number from being assigned to more than one item, regardless of the inventory organization.

For example, if you assign SN100 to item A, you cannot receive item B with the serial number SN100 in any inventory organization. In this example, SN101 and SN100 belong to different inventory organizations.

When you assign a particular inventory organization's serial number uniqueness control to be across organizations, serial number uniqueness is similarly restricted for all inventory organizations.

The following table provides an example of the serial numbers that are generated for two separate items when serial number uniqueness is set to be across organizations.

Organization	Item	Serial Number
M1	AS100 (Printer)	SN100
M2	AS101 (Laptop Computer)	SN101

# Serial Entry at Pick

Serialize at pick confirm is a method of assigning and tracking serial numbers entered at pick confirmation. You can serialize these items at pick confirm (instead of at the time of issue) for tracking and visibility purposes.

This lets you easily identify which material is destined to what demand and take any further actions. This also reduces the burden on the shipping agent since the picking operator scans the serial numbers ahead of time.

Here are important aspects of serial entry at pick:

- Transactions supported
- Serial generation option
- Serial number entry at ship confirm
- · Review completed transactions
- Return material authorizations



#### **Transactions Supported**

You can use serial entry at pick confirm for these inventory transaction types:

- · Sales order pick
- · Transfer order pick
- · Transfer order return pick
- · Movement request issue

Serialize at pick confirm is supported for internal material transfers between two inventory organizations (interorganization transfer) including expense destinations. Internal material transfers between two subinventories (intraorganization or intersubinventory transfers) are only supported for expense destination types.

You can use serial entry at pick confirm for these manufacturing related transactions:

- · Work in Process Material Issue
- Work in Process Material return
- Work in Process Negative Component Issue
- · Work in Process Negative Component Issue Return

### Serial Generation Option

To use serial entry at pick confirm you must select **Entry at inventory pick** for the serial generation option for the item. When the item serial generation method is set to **Entry at inventory pick**, serial numbers can't be recorded at the time of receipt or put away. The actions for recording and generating serial numbers are disabled on the Put Away Lines page.

Once the Generate Serial Numbers scheduled process runs and the serial numbers have been generated for the item, you can view them on the Manage Serial Numbers page.

## Serial Number Entry at Ship Confirm

There can be cases when the serial number entered at pick confirm needs to be updated at ship confirm. For example, a serial number entered at pick confirm is **Serial 1**, but now at ship confirm the serial number needs to be changed to **Serial 2**. You can use the Manage Shipment Lines page to update the serial number at ship confirmation.

## **Review Completed Transactions**

You can view serial numbers that you enter at pick confirm on the Review Completed Transactions page. The serial numbers are shown in the context of the inventory transaction. For example, serial numbers display for an inventory transaction such as movement request issue if the item serial generation method is **Entry at inventory pick**.

#### Return Material Authorizations

When receiving return material authorizations for items with the serial generation method of **Entry at inventory pick**, different things happen depending on the Validate Serial Number receiving parameter.

If the Validate Serial Number parameter is enable and Distributed Order Orchestration has transmitted serial numbers to Receiving, then the serial number field is a list of values. The serial numbers displayed in the list of values are restricted to those that are shipped by Distributed Order Orchestration.

If the Validate Serial Number parameter is disabled or Distributed Order Orchestration hasn't transmitted serial numbers to Receiving, then the serial number field is a text field.



After receiving and put away, the serial number usage updates to **Defined but not used**.

#### Related Topics

Examples of Serial Entry at Pick

# **Examples of Serial Entry at Pick**

You have the option to enter serial numbers further upstream in the fulfillment process and capture serial numbers at the time of picking.

Since serial numbers are entered at pick confirmation, the shipping agent doesn't need to scan or enter serial numbers during the ship confirm process. This alleviates work on shipping personnel and results in the efficient processing of outbound shipments.

You can enter serial numbers at pick confirmation for the following transaction types:

- · Sales order pick
- Transfer order pick
- Transfer order return pick
- Movement request issue
- · Manufacturing-related transactions

### Sales Order Pick Example

The ability to enter serial numbers at pick confirm is supported for the **Sales Order Pick** transaction type. The process of creating a sales order remains the same. The difference is users must record serial numbers while confirming the pick slip.

There are three options to record serial numbers on the Confirm Pick Slips page.

- Click the Generate Serial Numbers button to have the serial numbers generated automatically.
- Enter the From Serial Number and To Serial Number values for the pick slip line.
- Select the Record Serial Numbers from the Action menu.

In the event that you attempt to perform pick confirm without entering the serial number details, you will receive a message warning you to record lot and serial information on one or more pick lines.

## Transfer Order Pick Example

The ability to enter serial numbers at pick confirm is supported for the **Transfer Order Pick** transaction type. The process of creating a transfer order remains the same. The difference is that you must record serial numbers while confirming the pick slip.

**Note:** For intraorganization transfer orders, serial number entry at pick confirm is only supported for expense destination types.

Similar to a sales order pick transaction, a transfer order pick transaction is processed using the Confirm Pick Slip page. Select **Record Serial Numbers** from the **Actions menu** of the Manage Transfer Order page for the selected transfer



order line. This takes you to the Record Serial Numbers page where you can enter the serial numbers for the pick slip line.

Once the material has been picked, it can be ship confirmed. When the material is ship confirmed, the serial number usage becomes **Resides in in-transit inventory** in the source organization. The serial numbers are recorded and you can view their associated usage on the Manage Serial Numbers page.

The next step in the process is the receipt and put away of the transfer order at the destination inventory organization. The treatment of serial numbers depends on the item serial generation method established at the destination inventory organization. In this example, the item serial generation method for the destination inventory organization is **Entry at inventory pick**.

Serial number entry is enforced at the time of receipt or put away. The serial number field displays with a list of values on the Receiving pages and the Record Lot and Serial page. You must choose the same serial numbers that were shipped for the associated line. The action to generate serial numbers is disabled. Upon put away, the serial number usage changes to **Defined but not used**. You can view this usage on the Manage Serial Numbers page.

### Transfer Order Return Pick Example

The ability to enter serial numbers at pick confirm is supported for the **Transfer Order Return Pick** transaction type. The transfer order process provides the ability to return material from the destination inventory organization to the source inventory organization. You can search for lines to return using the transfer order number.

Once you create a return line against a transfer order on the Return Lines page, a return transfer order is automatically created. The return transfer order references the original transfer order and the original transfer order line.

The return transfer order goes through the same picking and shipping process as the original transfer order. Once the transfer order has been picked, the serial number usage becomes **Defined but not used**. You can view the usage on the Manage Serial Numbers page.

### Movement Request Issue Example

The ability to enter serial numbers at pick confirm is supported for the **Movement Request Issue** transaction type. Once the movement request issue transaction has been processed, it's available on the Confirm Pick Slip page to enter serial numbers.

You can either automatically generate serial numbers or manually record serial numbers on the Confirm Pick Slip page. Once the pick slip has been confirmed, the associated serial number usage becomes **Issued out of stores**, which you can view on the Manage Serial Numbers page. Additionally, you can view the movement request issue transaction on the Review Completed Transactions page.

### Manufacturing-Related Transactions

The manufacturing-related transactions shown in this table are supported for serial entry at pick confirmation.

Transaction Source	Transaction Type	Transaction Action	Serial Usage After Processing
Work Order	Work in Process Material Issue	Issue from stores	Issued out of stores
Work Order	Work in Process Material Return	Receipt into stores	Defined but not used
Work Order	Work in Process Negative Component Issue	Work in process negative component issue	Defined but not used



Transaction Source	Transaction Type	Transaction Action	Serial Usage After Processing
Work Order	Work in Process Negative Component Issue Return	Work in process negative component return	Issued out of stores

When the work order is created in Manufacturing, you can select items that have the serial number generation method set to **Entry at inventory pick**. You can then enter the component serial numbers on the Report Material Transactions page. Once the material transaction has been reported, the manufacturing transaction is shown on the Review Completed Transactions page. Clicking on the transaction link lets you view the associated serial number.

The final step is to confirm the usage associated with the serial number. The Manage Serial Numbers page shows the serial number usage.

# FAQs for Serial Numbers

How can I enter multiple serial numbers when they aren't in a range?

On the Record Serials page, select the Record Serial Numbers button. This takes you to the Select: Serials page where you can select and add multiple serial numbers even when they aren't in a range.

This action is not available when generating serial numbers.

Can I override the serial number at ship confirm?

Yes, you can override the serial number entered at pick confirm during ship confirmation. Use the Manage Shipment Lines page to update the serial number.

Can I change an item's serial generation control when there are pending transactions?

Yes, you can change an item's serial generation control when there are pending purchase orders (expected shipments), put away transactions, and advanced shipment notices.





# **5** Inventory Replenishment

# Min-Max Planning

Use min-max planning to maintain inventory levels for all of your items or for selected items. Min-max planning requires specification of minimum quantity and maximum quantity inventory levels for your items.

When you print the Min-Max Planning report, the inventory level for an item, on-hand quantities plus on-order quantities, is considered. If the inventory level is below the minimum quantity defined for the item, min-max planning suggests a new purchase requisition or movement request to bring the inventory level back up to the maximum quantity. You perform min-max planning at the inventory organization level or at the subinventory level.

You perform the following actions for min-max planning:

- Define min-max planning attributes when setting up items, item subinventories, or inventory organizations.
- Print the Min-Max Planning report.

**Note:** The min-max planning calculations exclude any items and item subinventories configured with the **Supplier Managed** inventory planning method. See the Oracle Fusion Cloud SCM: Using Supply Chain Collaboration guide for more information.

# **Define Min-Max Planning Attributes**

To use min-max planning you set the attributes used by min-max planning. The following attributes are used by min-max planning calculations:

- Min-max minimum quantity
- Min-max maximum quantity
- Fixed lot multiple
- Minimum order quantity
- Maximum order quantity
- Round reorder quantity

To use min-max planning at the organization level, you set the attributes used by min-max planning when you manage items. First, you set the **Inventory Planning Method** attribute to min-max planning. When you define min-max parameters at the organization level, you also have the option to define sourcing rules to generate purchase requisition information for buy items. You can also generate transfer order or work order requests. For work order requests, you must first set the **Build in WIP** attribute for the item.

To use min-max planning at the subinventory level, you set the attributes used by min-max planning when you manage item subinventories. First you enable min-max planning for the item subinventory. When you define min-max parameters at the subinventory level, you also have the option to define sourcing rules to generate purchase requisition information or movement requests for the suggested replenishment quantities. You can also generate transfer order requests.



At the subinventory level, min-max planning generates either a transfer order, movement request, or purchase requisition based on the following rules:

- If the source type is **Organization**, and you're using the same organization to which the subinventory belongs, then min-max planning generates an intraorganization transfer order (subinventory transfer). If you're using a different organization to which the subinventory belongs, then min-max planning generates an interorganization transfer order.
- If the source type is Subinventory, then min-max planning generates a movement request.
- If the source type is **Supplier**, then min-max planning generates a purchase requisition.

# Print the Min-Max Planning Report

Print the Min-Max Planning report to show planning information for all min-max planned items in an organization or subinventory or for items with on-hand balances either below or above their assigned minimum or maximum on-hand quantities. When you submit the Min-Max Planning report, the first parameter you specify is the planning level parameter to specify organization level or subinventory level.

**Note:** Supply order requests for purchase requisitions, transfer orders, and work orders go into the Supply Chain Orchestration Interface table. You must run the Process Supply Chain Orchestration Interface process in Oracle Supply Chain Orchestration to create the actual supply orders in the destination systems. If you don't have Oracle Fusion Cloud Manufacturing and Supply Chain Materials Management installed, you must run the Requisition Import process to create requisitions. A default item source may be defined at the organization, subinventory, or item level. Min-max planning uses the information from the lowest level to determine the source from which to requisition the item. The ascending hierarchy is:

- Item in a subinventory
- Source in a subinventory
- 3. Item in an organization
- **4.** Source in an organization

#### **Related Topics**

- What's inventory organization-level min-max planning?
- Min-Max Planning Report Parameter Options
- How Min-Max Planning Replenishment Quantities Are Calculated
- What's subinventory-level min-max planning?

# Min-Max Planning Report Parameter Options

When you run the Min-Max Planning report, you set many parameters to specify the results you want for the current submission of the report.

## Min-Max Planning Report Parameters

This table lists the parameters you specify when you run the min-max planning report and explains the options you select for each parameter.



Parameter	Options	
Organization	Specify the organization to run the report for.	
Sort By	Select one of the following to specify how you want the report output sorted:  Item Category Buyer	
From Item and To Item	Enter a range of items to restrict the report to one or more items.	
Planning Level	Specify whether min-max planning will be performed for the entire organization or for a specific subinventory.	
Item Selection	Specify whether min-max planning will include only items under minimum quantity, only items over maximum quantity, or all min-max planned items.	
Subinventory	Enter the subinventory for which you want to run the report.	
Lot Control	Specify whether min-max planning will include lot controlled items, non-lot controlled items, or both.	
Demand Cutoff Date	Enter the demand cutoff date. The report includes demand on or before this date.	
Demand Cutoff Date Offset	Enter the demand cutoff date offset. The value that you enter here's subtracted from the current date. For example, if you enter a value of <b>2</b> for the <b>Demand Cutoff Date Offset</b> , the application considers demand within the current day minus two days.  The Min-Max Planning report now runs for demand between the value that you entered for the <b>Demand Cutoff Date</b> and this new date (current date minus offset).	
Supply Cutoff Date	Enter the supply cutoff date. The min-max planning calculation includes open supply orders on or before this date.	
Supply Cutoff Date Offset	Enter the supply cutoff date offset.	
Restock	Enter yes or no to indicate whether to generate purchase requisition information or movement request orders.	
Ship-to Location	Enter the ship-to location to be specified on any requisition records created during the Min-Max Planning process.	
Net Unreserved Orders	Enter yes or no to specify whether to include unreserved order quantity in min-max planning calculations.	
Include Interface Supply	Enter yes or no to indicate whether to include interface supply as supply quantity.	
Net Reserved Orders	Enter yes or no to specify whether to include reserved order quantity in min-max planning calculations	



Parameter	Options
Include Nonnettable Subinventories	Enter yes or no to specify whether to include nonnettable subinventories.
Display Format	<ul> <li>Choose one of the following:</li> <li>Display all information.</li> <li>The report displays all columns.</li> <li>Do not display supply and demand details.</li> <li>The report doesn't display the Minimum Order Quantity, Maximum Order Quantity, and Multiple Order Quantity columns.</li> <li>Do not display order constraints.</li> <li>The report doesn't display the On-Hand Quantity column.</li> </ul>
Display Item Description	Enter Yes or No to indicate whether to display item description.
Include Purchase Order Supply	Enter yes or no to indicate whether to include purchase order supply.
From Category and To Category	Enter a range of categories to restrict the report to one or more categories.
From Buyer and To Buyer	Enter a range of buyers to restrict the report to one or more buyers.
Purchasing by Revision	Specify whether to issue purchase order by item revision.
Include Movement Request Supply	Specify whether movement request supply will be included in the min-max planning calculations.
Include Subinventories Without On-Hand Quantities	Enter yes or no to indicate whether the min-max planning planning process creates replenishment movement requests when the source subinventory has zero item on-hand quantity.  When this value is set to <b>No</b> , the min-max planning process suppresses the creation of the replenishment movement request when the source subinventory has zero item on-hand quantity.

# How Min-Max Planning Replenishment Quantities Are Calculated

Min-max planning calculates whether the total available quantity is less than the minimum quantity to decide whether to suggest a new order. When min-max planning decides to suggest a new order, another calculation is used to determine the order quantity to suggest.



## Settings That Affect Min-Max Planning

The settings that affect min-max planning fall into one of these two categories:

- Attributes you define for items, item subinventories, or inventory organizations.
- Parameters you specify when printing the Min-Max Planning report

The attributes you define include these min-max planning attributes and order quantity modifier attributes:

- Min-max minimum quantity
- · Min-max maximum quantity
- Minimum order quantity
- · Maximum order quantity
- Fixed lot multiple

# How Min-Max Planning Is Calculated

The definitions of the variables used in the min-max planning calculations depend upon whether you perform min-max planning at the organization level or at the subinventory level. This table provides the definitions for the variables at each level.

Variable	Organization Level Definition	Subinventory Level Definition
Quantity on Hand	Nettable Quantity on Hand: The sum of quantities on-hand for the item across all the nettable subinventories within your organization. Non-nettable quantities may optionally be included.	The quantity in the subinventory you specify when you submit the Min-Max Planning report.
On Order	The sum of open purchase orders and requisitions.	The sum of open purchase orders, purchase requisitions, and subinventory transfer movement requests scheduled for receipt at the specified subinventory on or before the supply cutoff date.  Supply orders referencing a different subinventory, or with no subinventory specified, aren't included.
Open Demand	The sum of reserved and unreserved sales orders, inventory reservations, account issue movement requests. Open Demand also includes work orders in status Completed, On Hold, Released, and Unreleased.	The sum of inventory reservations (including reserved sales orders), account issue movement requests, and subinventory transfer movement requests scheduled to ship from the specified subinventory on or before the demand cutoff date.  Inventory reservations referencing a different subinventory, or with no subinventory specified, are not included.
Minimum Quantity	Minimum quantity defined for the applicable item.	Minimum quantity defined for the applicable item subinventory.



Variable	Organization Level Definition	Subinventory Level Definition
Order Quantity Modifiers	Order quantity modifiers defined for the applicable item.	Order quantity modifiers defined for the applicable item subinventory.

Min-Max planning uses these three calculation steps:

1. Calculate the total available quantity.

The equation used to calculate total available quantity depends upon a combination of the min-max planning level and what you select for the net demand options. This table provides the equation used to calculate total available quantity for each combination of min-max planning level and net demand option.

Min-Max Planning Level	Net Demand Options Selected	Total Available Quantity Equation
Organization	No for all of the net demand options	Nettable Quantity On Hand + On Order
Organization	Yes for any of the net demand options	Nettable Quantity On Hand + On Order - Open Demand
Subinventory	No for all of the net demand options	Quantity On Hand + On Order
Subinventory	Yes for any of the net demand options	Quantity On Hand + On Order - Open Demand

- 2. Suggest a new order if: total available quantity < minimum quantity.
- **3.** Calculate order quantity using the equation: order quantity = maximum quantity total available quantity, adjusted for order quantity modifiers.

The order quantity modifiers are used to adjust the order quantity as follows:

- If the order quantity is less than the minimum order quantity, the order quantity is revised up to the minimum.
- o If the order quantity is greater than the maximum order quantity, the order quantity is revised down to the maximum.
- If revision is necessary for the order quantity to be a multiple of the fixed lot multiple, the order quantity is revised accordingly.

# Min-Max Planning Example

This example shows how Oracle Inventory Management uses the item attributes and the Min-Max Planning Report parameters to perform min-max planning to determine whether an order should be placed, and how min-max planning calculates the quantity to order. For this example, assume the item has the following quantity values and item attribute settings:

Nettable quantity on hand = 25



- Open supply quantity = 50 with all supply within the supply cutoff date
- Open reserved sales order quantity = 90 with all demand within the demand cutoff date
- Min-max minimum quantity = 100
- Min-max maximum quantity = 500

Using this scenario, when you run the Min-Max Planning report for the organization level with No specified for the Net Reserved Orders parameter, the following calculations are performed:

- 1. Total available quantity: 25 + 50 = 75
- 2. Below minimum quantity check: 75 < 100

  The total available quantity is less than the min-max minimum quantity, so an order is suggested.
- **3.** Maximum quantity less total available quantity: 500-75 = 425

  To bring the quantity available back to the min-max maximum, min-max planning will suggest an order with the quantity to order = 425.

Using the previous scenario, when you run the Min-Max Planning report for the organization level with Yes specified for the Net Reserved Orders parameter, these calculations are performed:

- 1. Total available quantity: 25 + 50 90 = -15
- 2. Below minimum quantity check: -15 < 100
  - The total available quantity is less than the min-max minimum quantity, so an order is suggested.
- 3. Maximum quantity less total available quantity: 500 (-15) = 515

  To bring the quantity available back to the min-max maximum, min-max planning will suggest an order with the quantity to order = 515.

#### Related Topics

- How Rounding the Reorder Quantity Affects Min-Max Planning Reorder Calculations
- How Specifying the Fixed Lot Multiple Affects Min-Max Planning Reorder Calculations
- Min-Max Planning Report Parameter Options

# How Rounding the Reorder Quantity Affects Min-Max Planning Reorder Calculations

When you specify to round reorder quantities, min-max planning reorders for item subinventories are automatically rounded up or down.

# Settings That Affect Rounding the Reorder Quantity

Reorder quantities for an item subinventory are calculated based on:

 The setting that you select for the Round reorder quantity parameter on the Manage Inventory Organization Parameters page, General tab, of the inventory organization containing the item subinventory



• The value that you specify for the **Fixed Lot Multiple** text box on the Add Item to Subinventory window

# How Rounding the Reorder Quantity Affects Min-Max Planning Reorder Quantity Calculations

If you enable rounding the reorder quantity for the inventory organization, and specify the fixed lot multiple for the item subinventory, the reorder quantity is rounded up. If you disable rounding the reorder quantity for the inventory organization, and specify the fixed lot multiple for the item subinventory, the reorder quantity is rounded down.

**Note:** To round reorder quantities, you must specify a fixed lot multiple.

## **Example: Rounding the Reorder Quantity**

Assume that the reorder quantity is 24. If you enable rounding the reorder quantity and specify 10 for the fixed lot multiple, the reorder quantity is rounded up to 30. If you disable rounding the reorder quantity and keep the fixed lot multiple at 10, the reorder quantity is rounded down to 20.

# How Specifying the Fixed Lot Multiple Affects Min-Max Planning Reorder Calculations

The fixed lot multiple setting specifies fixed numeric multiples in which items are transacted. Min-max planning uses the fixed lot multiple setting to calculate reorder quantities for item subinventories.

# Settings that Affect Fixed Lot Multiple Specifications

Reorder quantities for an item subinventory are calculated using:

- The value that you specify for the Fixed Lot Multiple text box on the Add Item to Subinventory window
- The setting that you select for the **Round reorder quantity** parameter on the Manage Inventory Organization Parameters page, General tab, of the inventory organization containing the item subinventory

# How Specifying the Fixed Lot Multiple Affects Reorder Quantity Calculations

To round reorder quantities, you must specify a fixed lot multiple. If you specify the fixed lot multiple for the item subinventory and enable rounding the reorder quantity for the inventory organization, the reorder quantity is rounded up. If you specify the fixed lot multiple for the item subinventory and disable rounding the reorder quantity for the inventory organization, the reorder quantity is rounded down.



## Example: Specifying the Fixed Lot Multiple

Assume that the reorder quantity is 24. If you specify 10 for the fixed lot multiple and enable rounding the reorder quantity, the reorder quantity is rounded up to 30. If you disable rounding the reorder quantity, the reorder quantity is rounded down to 20.

# Set Up Min-Max Planning

To set up min-max planning for an item, complete steps at the organization, item-subinventory, and inventory profile option levels. You also need to setup item catalogs and default categories for the Inventory and Purchasing functional areas.

#### Organization

- 1. On the Specifications tab of the Create Item page in the Product Information Management work area, set the **Inventory Planning Method** to **Min-Max planning**.
- 2. Specify the min-max quantities of the item.

#### **Item-Subinventory**

- 1. In the Setup and Maintenance work area, go to the Manage Subinventories and Locators task:
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Subinventories and Locators
- 2. In the Select Organization dialog box, select an organization and then click **OK**.
- 3. On the Manage Subinventories page, click Manage Item Subinventories.
- 4. On the Manage Item Subinventories page, edit or add an item to subinventory.
- Select Min-Max planning and then specify the min-max quantities of the item.

#### **Inventory Profile Option**

- 1. In the Setup and Maintenance work area, go to the Manage Inventory Profile Option task.
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Inventory Profile Option
- 2. Enter INV\_MINMAX\_REORDER\_APPROVED in the Profile Option Code field and click Search.
- 3. In the INV\_MINMAX\_REORDER\_APPROVED: Profile Values table, select a value for the **Profile Value** field.

The profile value determines the requisition status for min-max generated requisitions. Options include:

- Preapproved: requisition is created in Approved status
- Incomplete: requisition is created in Incomplete status
- Approval required: requisition is created in Incomplete status

#### **Catalogs and Categories**



Make sure that you set up catalogs and default categories for Inventory and Purchasing functional areas before loading items. The application assigns these functional area catalogs automatically once an item is created.

- 1. In the Setup and Maintenance work area, go to the **Manage Functional Area Catalogs** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Catalogs
  - Task: Manage Functional Area Catalogs
- 2. Create a catalog for the Inventory functional area. Select the functional area first to ensure that the catalog is configured to follow the rules of the specific functional area. When you create the catalog, you must create a category and assign it to the default category. The default category is used in the automated process that assigns any new items used in inventory to the default category.

**Note:** All items that have the INVENTORY\_ITEM\_FLAG set to **Yes** are automatically added to the default category when the item is created.

**3.** Repeat the steps for the Purchasing functional area.

# Min-Max Sourcing Types

Depending on how you configure your Sourcing Type at the subinventory or item subinventory level, min-max planning can create four different replenishment document types.

Here are the sourcing types for min-max planning:

- Organization
- Supplier
- Subinventory

Here are the replenishment document types that min-max planning can create:

- · Supplier requisition
- Movement request
- Interorganization transfer order
- Intraorganization transfer order

## Sourcing Fields

The sourcing fields are located under the Sourcing section on the Edit Subinventory and Edit Item Subinventory pages.

From the Setup and Maintenance work area, go to the Manage Subinventories and Locators task:

- Offering: Manufacturing and Supply Chain Materials Management
- Functional Area: Inventory Management
- Task: Manage Subinventories and Locators

Use the sourcing fields to specify how min-max planning sources the material. The sourcing fields include:

Sourcing Type:



- Organization: If you select Organization, the Organization field is available for selection and mandatory.
- Supplier: If you select Supplier, both the Organization or Sourcing Subinventory fields are unavailable for entry.
- Subinventory: If you select Subinventory, the organization value populates by default and the Sourcing Subinventory field is available for selection. The Sourcing Subinventory field is optional.
- Organization
- Sourcing Subinventory

## Relationship Between Sourcing Type and Replenishment Documents

This table shows the relationship between the values in the Sourcing fields and the replenishment document created by min-max planning after submitting the Min-Max Planning process.

Sourcing Type	Replenishment Document
Organization (same organization to which the subinventory belongs)	Intraorganization transfer order  If the source type is <b>Organization</b> and you're using the same organization to which the subinventory belongs, then min-max planning generates an intraorganization transfer order.
Organization (different organization to which the subinventory belongs)	Interorganization transfer order  If the source type is <b>Organization</b> and you're using a different organization to which the subinventory belongs, then min-max planning generates an interorganization transfer order.
Supplier	Purchase requisition  If the item source is a <b>Supplier</b> , Inventory creates a purchase requisition to order the items from an outside supplier when reorder is necessary.
Subinventory	Movement request  If the source type is <b>Subinventory</b> , then min-max planning generates a movement request. Once you select <b>Subinventory</b> , the <b>Organization</b> value defaults. You can optionally specify a value for the <b>Sourcing Subinventory</b> . The <b>Sourcing Subinventory</b> represents the source subinventory from which the movement request is sourced.

# Calculate the Min-Max Quantities of an Item Automatically

To automatically calculate the min-max quantities of an item:

- 1. Set up the item for min-max planning at the organization level or at the item-subinventory level. You don't have to enter min-max quantities.
- **2.** Define classifications to associate similar categories with a classification.



- 3. Create policy profiles to define policy parameters.
- 4. Assign policy profiles to the classifications.
- 5. Run the Calculate Min-Max Planning Policy Parameters scheduled process.

Running the process updates the organization-level and item-subinventory level min-max quantities.

#### Related Topics

- Set Up Min-Max Planning
- Classifications in Min-Max Planning
- Policy Profiles in Min-Max Planning
- · Policy Profile Assignments in Min-Max Planning
- How Classifications Work with Policy Profiles and Policy Profile Assignments in Min-Max Planning

# Example of Min-Max Planning with Process Manufacturing and Co-Products

This example shows how min-max planning of items with associated co-products can exceed the maximum quantity during a replenishment run.

## Min-Max Planning of Items with Co-Products

For this example, let's assume these quantities for each item:

Item	Minimum Quantity	Maximum Quantity	In Stock Quantity
А	1000	5000	0
В	1000	2000	0
С	750	2000	0
D	750	2000	0

Your company places two work orders:

- Work Order 1: Product A with a quantity of 1000
- Work Order 2: Product B with a quantity of 2000

Work Orders 1 and 2 both have co-products associated with them as shown here:



Product	Co-Product	Requested Quantity	Min-Max Calculation
А		1000	1000
	В	500	500
	С	500	500
В		2000	2000
	С	750	1000
	D	750	1000

Now, here are your resulting min-max totals compared to the previous maximum quantities:

Item	Total Requested Quantity	Maximum Quantity
А	1000	5000
В	2500	2000
С	1250	2000
D	750	2000

Note that for Product B, the maximum quantity of 2000 was exceeded. When both work orders for Product A and Product B are factored into a single min-max replenishment run, this scenario of exceeding the maximum quantity can happen. You can get around this by planning one product at a time.

# Min-Max Movement Request Process Flow

Use inventory min-max planning to maintain inventory levels for your items. With min-max planning, you specify minimum and maximum inventory levels for your items. When the inventory level for an item drops below the minimum, min-max planning can automatically generate a movement request to replenish the balance back to the maximum.

You can perform min-max planning at either the organization level or the subinventory level. Replenishment movement requests replenish material that's sourced from a different location within the same inventory organization. For example, you can generate a replenishment movement request to move material from a bulk subinventory to a pick subinventory.



Let's look at the min-max movement request process flow. The steps include:

- · Configure min-max planning replenishment parameters
- Generate Min-Max Planning report
- Review inventory movement request
- Generate Movement Request Pick Slip report
- Confirm pick slip
- Review inventory balances

# Configure Min-Max Planning Replenishment Parameters

You can configure inventory min-max planning parameters at either the item organization or item subinventory level.

- To enable min-max planning at the item level, select the Inventory Planning Method under the Planning specifications for the item (Use the Create Item page from the Product Information Management work area).
- To enable min-max planning at the item subinventory level, select the Min-Max planning check box on the Edit Item Subinventory page (Use the Mange Subinventories and Locators task in the Setup and Maintenance work area).

At both levels, you can specify additional parameters such as the minimum quantity and maximum quantity thresholds. The Sourcing region of the page lets you specify how the material is sourced. In the case of a movement request, you must select **Subinventory** in the **Sourcing Type** field. Once you select **Subinventory**, the **Organization** value defaults. You can optionally specify a value for the **Sourcing Subinventory**. The **Sourcing Subinventory** represents the source subinventory from which the movement request is sourced.

## Generate Min-Max Planning Report

Once you configure the min-max planning parameters, the next step is to generate the min-max planning report. You can generate this report by submitting the **Print Min-Max Planning Report** scheduled process.

There are a number of parameters that you can define when submitting the report. The **Planning Level** parameter indicates whether you want to run min-max planning at the organization or subinventory level. The **Restock** parameter indicates whether you want to generate the replenishment request. If your intent is to view min-max quantities and the proposed reorder quantity, leave the default value as **No**. If you want to generate the corresponding replenishment requests, set this parameter to **Yes**.

Once the **Print Min-Max Planning Report** process is successfully generated, you can review the Min-Max report. The values for the **Minimum Quantity** and **Maximum Quantity** are sourced from the item subinventory setup. The **Reorder Quantity** represents the quantity that's to be replenished.

# Review Inventory Movement Request

If the sourcing setup was previously configured, min-max planning automatically creates the movement request. Select the **Manage Movement Request** task form the Inventory Management work area to review the movement request details. The movement request is created for a requested quantity that equals the same quantity as the min-max reorder quantity.

## Generate Movement Request Pick Slip Report

Next, run the **Print Movement Request Pick Slip Report** scheduled process to generate the pick slip report. You can provide the pick slips to the warehouse operator to perform material picking tasks. Set the **Release Approved Lines** 



parameter on the **Print Movement Request Pick Slip Report** to **Yes** to eliminate the need to perform the pick on the Reservations and Picks pages.

Once complete, you can view details such as movement request number, item, and quantity on the Movement Request Pick Slip report.

## Confirm Pick Slip

Now, let's use the Confirm Pick Slips page to enter details for the picked material and confirm the pick slip. Select the **Confirm Pick Slips** task from the task panel of the Inventory Management work area to access the Confirm Pick Slip page.

You can do the following as part of confirming a pick slip:

- Enter details of picked material
- · View and modify details of picks on a pick slip
- · Enter multiple lot and serial numbers for picked material, if required
- Enter the transaction date for each pick
- Evaluate pick slip discrepancies

Once you confirm the pick slip, the movement request line status updates to **Closed**.

## Review Inventory Balances

You can confirm the successful transfer of material by navigating to the Manage Item Quantities page and reviewing the on-hand quantities. Select **Manage Item Quantities** from the task panel of the Inventory Management work area.

Related Topics

Set Up Min-Max Planning

# FAQs for Inventory Replenishment

# What's inventory organization-level min-max planning?

Inventory organization-level min-max planning replenishes a particular item in an inventory organization. When you use inventory organization-level min-max planning, inventory balances, purchase requisitions, inbound transfer orders, and work orders are treated as supply, whereas sales orders, outbound transfer orders, and account issue movement requests are treated as demand.

To set up organization-level min-max planning, navigate to the Create Item page, Specifications tab from the Product Information Management work area. Select Min-Max Planning for the inventory planning method, then specify minimum and maximum levels.



# What's subinventory-level min-max planning?

Subinventory-level min-max planning replenishes items in a subinventory using the minimum and maximum inventory levels and fixed lot multiple value that you specify for a particular item subinventory. When you use subinventory-level min-max planning, inventory balances, inbound transfer orders, purchase requisitions, and movement requests are treated as supply.

# What happens if I select the supplier item sourcing type for replenishment?

Items are replenished from an external supplier.

# How do I use the Demand Cutoff Date and Demand Cutoff Date Offset parameters for the Min-Max Planning Report?

The Demand Cutoff Date tells the application to consider demand up until the particular date that you enter.

The value that you enter for the **Demand Cutoff Date Offset** is used by the application to consider demand within the current date minus the offset number of days that you specify. Let's say you enter a value of **2** for the **Demand Cutoff Date Offset**. The application considers demand within the current day minus two days.

For example, consider the values in this table:

Field	Value
Demand Cutoff Date	25-Jan
Current Date	31-Jan
Demand Cutoff Date Offset	2

The Min-Max Planning report runs for all demand between 25-Jan to 29-Jan (31-2=29).

# Can min-max planning ever exceed your maximum quantity?

Yes. If you're using process manufacturing, min-max plans the primary items along with any associated co-products. This can result in possibly exceeding the maximum quantity for an item.



For example, let's say your company places two process manufacturing work orders which can produce multiple products. Work Order 1 contains product A with a requested quantity of 1000 and a maximum quantity of 5000. Work Order 1 also contains co-products B and C with requested quantities of 500 each. Work Order 2 contains product B with a requested quantity of 2000 and a maximum quantity of 2000. Work Order 2 also contains co-products C and D with requested quantities of 750 each.

In this scenario, the total requested quantity for product B is 2500 (500+2000=2500) and the maximum quantity is 2000. This can happen when running replenishment planning for products A and B in a single replenishment run. You can get around this by planning only one product at a time.

# Can I use both min-max planning and PAR level counting for a subinventory?

No, if the PAR location check box is selected at the subinventory level, you won't have the option to enable min-max planning for that item subinventory.

# How can I create a requisition after the min-max process has been run?

If you've completed these steps, your requisition should create automatically after running the min-max process.

- 1. Create an item with the following prerequisite setups:
  - o The item has a default buyer.
  - On the Planning specifications tab of the Create Item page in the Product Information Management work area (Item > Specifications > Planning), set these parameters for the item:
    - Set the **Replenishment Source Type** to **Supplier**
    - Set the Inventory Planning Method to Min-Max Planning
  - The item should have a list price under the organization for which you're trying to replenish.
- 2. On the Manage Inventory Organization Parameters page, set the item source details type to **Supplier**.
  - a. From the Setup and Maintenance work area, go to the Manage Inventory Organizations task.
  - **b.** On the Manage Inventory Organization page, search for your organization.
  - c. Click the Manage Organization Parameters button.
  - d. Select the Item Source Details tab.
  - e. Select **Supplier** in the **Type** field.

**Note:** You can also set the **Sourcing Type** to **Supplier** at the subinventory and item subinventory levels. From the Setup and Maintenance work area, use the Manage Subinventories and Locators task to access either the Manage Subinventories or Manage Item Subinventories page. This lets you set the sourcing at a more granular level.

**3.** Check that the implementation status for Manufacturing and Supply Chain Management is set to **Implemented**.



- **4.** Use the Manage Supply Request Exceptions page in Oracle Supply Chain Orchestration to check for an exception message. If there is an exception for the batch, it's listed in the search results.
- **5.** Ensure that the INV\_MINMAX\_REORDER\_APPROVED profile option is set to **Preapproved** at the site level.
- **6.** You should order only when the available quantity is less than the minimum quantity. If the available quantity is greater than the minimum quantity, no replenishment order (purchase requisition) is created.
- 7. If you receive any import errors, search the POR\_REQ\_IMPORT\_ERRORS table and verify the error details.

# Why isn't the min-max report creating any requisitions?

Min-max planning should create requisitions for min-max planned items that have their source type set as Supplier.

Ensure that you have set the item sourcing details type to **Supplier**:

- 1. In the Setup and Maintenance work area, go to the **Manage Inventory Organization task**.
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Facilities
  - Task: Manage Inventory Organization
- 2. Search for the organization for which min-max requisitions aren't creating correctly.
- 3. Click the Manage Inventory Organization Parameters button.
- 4. Click the Item Sourcing Details tab.
- 5. Under the Item Sourcing Details section, select **Supplier** in the **Type** field.

Verify that requisitions are now being created:

- 1. Create a min-max item.
- 2. Run the Min-Max Planning report.
- 3. Submit the Process Supply Chain Orchestration Interface scheduled process.

# How can I group all min-max lines together on a single requisition?

Set the Group Requisition Import By option to None on the Configure Requisitioning Business Function page to group all min-max lines on a single requisition.

In the Setup and Maintenance work area, use the **Configure Requisitioning Business Function** task:

- · Offering: Procurement
- Functional Area: Procurement Foundation
- Task: Requisitioning Business Function



# **6** Item Replacement

# Overview of Item Replacement

Item replacement is a unified solution across the Oracle Fusion Cloud Procurement and Oracle Fusion Cloud Inventory Management applications.

When there are supply disruptions from external supply sources, you can replace the original item with a replacement item. Or you can choose an alternate supplier for the same item. Based on the nature of the supply disruption, the replacement can be either be temporary or permanent. For example, if the item is discontinued by the manufacturer, it's a permanent replacement. When the supply is expected to be restored in future, it can be treated as a temporary replacement.

The alternate items are retrieved from the substitute relationship defined in Oracle Product Hub. The alternate source agreements are retrieved from the BPA defined in Oracle Purchasing.

In Oracle Procurement, a buyer can manage item replacement by creating replacement tasks or deleting item replacement tasks, initiate replacement, notify stakeholders, replace unfulfilled purchase orders in bulk, review errors that occurred during mass replacement, and reinstate the original item or supplier for temporary replacements.

In Oracle Inventory, you can:

- Notify stakeholders on replacement in effect and help them initiate item replacement on the item subinventories, item locators, and item transaction defaults.
- Perform mass updates on these inventory entities for an impacted organization or a group of impacted organizations. Updates include disabling the min-max or par replenishment planning for the disrupted item and creating new item subinventories, item locators, and item transaction defaults for the replacement item.
- Manually define item subinventories, item locators, and item transaction defaults for the replacement item through a guided process.
- Perform mass reinstatement on the inventory entities for temporary replacements once the supply is restored.

For more information about the actions that a buyer can take in Oracle Procurement, see Item Replacement in the Using Procurement guide.

#### **Related Topics**

- Considerations for Item Replacement
- Overview of Item Replacement

# Notifications for the Inventory Planner

A smooth flow of tasks is established between the buyer in Oracle Fusion Cloud Procurement and the planner in Oracle Fusion Cloud Inventory Management with the help of notifications.



As an inventory planner, you'll be informed about the replacement tasks and the actions required by you through these notifications:

- 1. When the buyer initiates the replacement in Oracle Procurement, you'll receive an FYI notification that an item replacement is in effect and the original item's subinventories and locators are disabled for replenishment.
- 2. When the buyer completes the replacement task in Oracle Procurement, you'll receive a notification informing you about the replacement of the original item with the replacement item or supply source. Through this notification, you can find the item replacement task in Oracle Inventory and take further actions to update inventory entities for the replacement item.

#### Related Topics

Configure Business Rules for Item Replacement Notifications

# Accessing an Item Replacement Task

There are two ways you can access an item replacement task.

- Through the Inventory Management work area:
  - a. In the inventory management work area, find and click the Manage Mass Replacement of Items task.
  - **b.** On the Item Replacements page, you'll find a list of item replacement tasks in your inventory organization. Click on a replacement task to go to its replacement details page.
  - c. Click **Replace** to initiate replacement for an inventory organization.
- Through the item replacement notification: When the buyer replaces the unfulfilled POs and completes the replacement task that they've defined in Oracle Purchasing, you'll receive a notification.
  - a. Click the replacement task number on the notification that you receive. This will take you to the Replacement Details page, where you can view a list of impacted inventory organizations for which you have data access.
  - **b.** Click **Replace** to initiate replacement for an inventory organization.

The item replacement landing page shows a list of item replacement tasks from where you can drill down to the replacement details page of a task. The replacement details include the status of a task and the actions you can take based on the status.

Status	Action
Pending	Replace or Reinstate
In Progress	Review Scheduled Process
Error	Resolve Exceptions
Replaced	View Summary
Reinstated	View Summary

**Note:** In some statuses, scheduled processes could be running to complete different actions. Make sure that you refresh the replacement details page to get the updated status and action required for a replacement task at any point of time.



After you initiate replacement, you'll be directed to a guided process to complete the next steps.

# Mass Replacement of Inventory Entities

# Perform Mass Replacement of Inventory Entities

On the replacement details page, when you click on the Replace action for a task, you'll be directed to the Manage Item Replacement in Inventory Entities guided process.

This guided process takes you through a series of steps to help you perform mass replacement of inventory entities:

- 1. Select mass replacement options
- 2. Define item subinventory attributes
- 3. Define item locator attributes
- 4. Set replacement option for item transaction defaults
- 5. Define item transaction defaults

After you initiate replacement of inventory entities in the guided process, replenishment is enabled for the replacement item and disabled for the disrupted item to ensure that no new replenishment request gets created for the disrupted item. When you reinstate the original item, requests will start being created for that item.

# Select Mass Replacement Options

Review and compare the original and replacement item's parameter details such as primary UOM, purchasing UOM, and pack size. Next, you'll make two choices to determine how you want to proceed with the replacement:

- Replace item subinventories replenished by inventory source?
   If you want to replace internally sourced subinventories, select Yes.
   Select No if you want to replace only the supplier sourced subinventories. If the disrupted item has stock that can be consumed, you can continue to replenish the stock from the internal source until it gets exhausted. In such case, you can opt for not replacing inventory sourced subinventories and locators. Only the supplier sourced subinventories and corresponding locators will undergo mass replacement.
- 2. Copy item subinventories, item locators, and item transaction defaults from the disrupted item? Review the comparison of parameters for the disrupted item and replacement item displayed in this step in a card view. These guidelines can help you select yes or no:

Options	Guidelines to Make a Choice	Next Steps
Yes	If the parameters such as primary UOM, purchasing UOM, packaging string, minimum order quantity, or lead time for both items are the same, perform mass replacement by selecting yes.	When you select Yes, no other actions are required by you. A scheduled process is submitted, and it performs mass updates on item subinventories, item locators, and item transaction defaults. You'll be guided to the replacement details page where you can view the progress of the scheduled process.



Options	Guidelines to Make a Choice	Next Steps
No	There are a few scenarios in which you may prefer to choose No:  o If there's a change in the UOM, pack size, minimum order quantity, or lead time for the replacement item, you may want to opt for No.  o You may want to associate a different subinventory or locator to the replacement item if you don't want the disrupted item and replacement item to commingle in the same location.  o If the replacement item already has an existing demand and is set up for replenishment in the same item subinventories or locators where the disrupted item resides, you'll be prompted to define the inventory entities manually, irrespective of whether the parameters are the same or not.	When you select No, you'll be directed to the next steps in the guided process where you'll define the item subinventories, item locators, and item transaction defaults.

If the replacement is for alternate supplier, you'll be asked this question: Change item subinventories, item locators and item transaction defaults?

If you select no, no other actions are required by you. You'll be guided to the replacement details page where you can view the status of the task. If you select yes, you'll be guided to the next step in the guided process to change item subinventories, item locators and item transaction defaults.

Any exceptions that occur during the mass update of the inventory entities through the scheduled process are displayed in the execution errors page. The replacement details page will show the error status and the Resolve Exceptions action. Click Resolve Exceptions to go to the execution errors page. Review the errors, make corrections, and resubmit the updates.

# **Define Item Subinventory Attributes**

Define the item subinventories for the replacement item by providing a new set of replenishment attributes.

If the replacement task has alternate supplier as the replacement method, you can update item subinventories for the disrupted item with a new set of replenishment attributes that can vary based on purchasing UOM, lead time, and minimum order quantity for the alternate supplier. You can also associate a different subinventory to the impacted item if you don't want the disrupted item and replacement item to commingle in the same location.

There are a few ways you can create records for the replacement item. You can:

- Add a new record for perpetual and PAR subinventories.
- Copy from an existing record to create a new record.
- Review original item subinventory records and add them to the replacement item.
- Update multiple PAR item locator records with the same value for any replenishment attribute in one go.

After you've created the item locators for the replacement item, click **Submit** and then click **Continue**.



### **Define Item Locator Attributes**

Define item locators for the replacement item.

You can associate a different locator to the impacted item if you don't want the disrupted item and replacement item to commingle in the same location. There are a few ways you can create records for the replacement item. You can:

- Add a new record for perpetual and PAR locations.
- Copy from an existing record to create a new record.
- · Review original item locator records and add them to the replacement item.
- Update multiple item subinventory records with the same value for any replenishment attribute in one go.

# Select a Replacement Option for Item Transaction Defaults

In this step you select if you want to copy item transaction defaults from the disrupted item to the replacement item. Use these guidelines to select yes or no:

- If the subinventories or locators for the replacement item are the same as the disrupted item, you can copy
  the item transaction defaults by selecting Yes. When you select Yes, no other actions are required by you. A
  scheduled process performs mass updates on item transaction defaults and the same item transaction defaults
  are created for the replacement item. You'll be guided to the replacement details page where you can view the
  progress of the scheduled process.
- If the subinventories or locators for the replacement item are different from that of the disrupted item, select No. You'll be guided to the next step where you can define the item transaction defaults for the replacement item by providing the newly associated subinventories and locators.

If you choose not to define the item transaction defaults, click **Skip**. The replacement task for the organization will be completed and marked as Replaced.

## **Define Item Transaction Defaults**

Define the item subinventory defaults and item locator defaults for the replacement item. You can:

- Copy item transaction defaults from the disrupted item.
- Manually add a new record.
- Review original item transaction default records and add them to the replacement item.
- Update multiple transaction default records with the same subinventory or locator value in one go.

This is the last step of the guided process. Click **Finish**.

### Reinstate an Item

In a temporary replacement, you'll receive notifications base on the buyer's actions in Oracle Fusion Cloud Procurement.



When the buyer initiates reinstatement, you'll receive a notification that an item reinstatement is in effect and the replacement item's subinventories and locators are disabled for replenishment. When the buyer completes the reinstatement task in Oracle Procurement, you'll receive a notification informing you about the reinstatement of the original item.

- 1. In the notification you receive, click the task number to access the replacement details page. The status for that task is shown as Pending. Click Reinstate to go to the replacement summary page.
- 2. Review the item details for the original and replacement items and click Reinstate Original Item.
- **3.** In the replacement details page, the status will change to Reinstated after the scheduled process is completed. You can click View Summary to view the reinstatement summary.

**Note:** The reinstate option is available for item replacement tasks where the replacement type is temporary. In permanent replacements, the original item can't be reinstated.



# **7** Cycle Counts

# Cycle Counting

Cycle counting is an inventory accuracy analysis technique where inventory is counted on a cyclic schedule rather than once a year to ensure the accuracy of inventory quantities and values.

Cycle counting enables you to keep inventory records accurate by correcting errors between the on-hand (perpetual) and actual on-hand (physical) quantities. Cycle counting can also be a valuable tool to help identify patterns in the errors found. Analysis of these patterns can suggest and help to prioritize improvements in training, tools, and processes. Over a period of time these improvements may increase the average level of inventory record accuracy.

Accurate on-hand quantities are essential for managing supply and demand, maintaining high service levels, and planning production. Most effective cycle counting procedures require the counting of a certain number of items every workday with each item counted at a prescribed frequency. You can perform cycle counting instead of taking complete physical inventories, or you can use both techniques side by side to verify inventory quantities and values.

# Create and Manage Cycle Counts

# Cycle Count Criteria

Cycle counting is the periodic counting of individual items throughout the course of the year. Cycle counting increases your level of inventory accuracy.

You can perform cycle counts using either of these as criteria for your cycle count:

- ABC classes
- Item categories from the Product Information Management work area

You can manage all of your cycle counting tasks from the Inventory Management work area. Select **Counts** from the task panel.

#### **ABC Classes**

You can group items assigned to specific ABC classes. With ABC classification of your items as the basis for deciding the count frequency, your A class items get counted more frequently compared to B or C class items. For this method, you specify ABC assignment groups and ABC assignment group synchronization options.

## Item Categories

You can assign items associated with specific item categories to a cycle count. All items belonging to those item categories are included in a cycle count regardless of the subinventory or locator they're stored in. This lets you define the items in the cycle count based on common grouping criteria already established in item categories in the Product Information Management work area.



#### Related Topics

Cycle Count Creation

# Cycle Count Creation

Creating a cycle count includes specifying schedules, approvals, parameters, items, item categories, and classes to include in a cycle count. Use the Create Cycle Count and Manage Cycle Counts tasks from the Inventory work area to create and manage your cycle counts.

You can perform cycle counts using ABC classes or PIM item categories as criteria for your cycle count.

**Note:** To create a cycle count using item categories from the Product Information Management work area, you must first enable the **Perform Cycle Count Based on Item Category** feature in the Setup and Maintenance work area.

The process includes seven train stops:

- · Enter primary details
- Define schedules and approvals
- Define parameters
- Define item categories
- · Define items in item categories
- · Define classes and items
- Review

## **Enter Primary Details**

On the Create Cycle Count: Enter Primary Details page, choose the subinventories to include in the cycle count. Also, specify ABC assignment groups and ABC assignment group synchronization options.

To create a cycle count using item categories from PIM, select the **Enable cycle count by item category** check box.

You can automatically add items to a cycle count by selecting an ABC assignment group. In this case, all of the ABC assignment group's items are added to the cycle count.

Here's how to use the Synchronize Count Classes and Items with ABC Group fields.

Field	Definition
ABC Assignment Group	Select an ABC assignment group to associate items and item classes with the cycle count. These items and item classes assigned in the ABC assignment group are automatically brought into the cycle count.
Synchronization Mode	When you select an ABC assignment group, you can select a synchronization mode to determine how changes to the ABC Assignment group synchronize with cycle count classes and items.
	<ul> <li>Append changes: Use when adding items to a cycle count. During synchronization, only the new items are added to the ABC assignment group and cycle count.</li> </ul>
	<ul> <li>Complete: Use during the initial creation of a cycle count. During synchronization, the entire contents of the designated ABC assignment group replace whatever is currently in the cycle count</li> </ul>



Field	Definition
	tables. Whether you add, remove, or change classifications of items in the ABC assignment group, when in <b>Complete</b> mode, all changes that occur in the assignment group are reflected in the cycle count upon synchronization.  None: No synchronization takes place.
Delete Additional Items	Select this check box if you're using the <b>Append Changes</b> synchronization mode and you want to delete items that have been recently removed from the ABC assignment group.

**Note:** Clicking the **Next** button is the trigger for synchronization of the ABC assignment group and the cycle count.

## Define Schedules and Approvals

On the Create Cycle Count: Define Schedules and Approvals page, define the schedule for the cycle count. Also, specify whether and when approval is required for variances between the actual counted quantity and on-hand quantity.

Let's look at the fields for schedules.

Fields	Definition
Automatically Schedule	Select this check box to automatically schedule the cycle count.
Frequency	Specify the frequency of scheduling. This determines how often to generate a count schedule.  • Weekly: Account schedule generates that includes all items due for counting in the next 1 week.
	<ul> <li>Daily: One count schedule generates for every day. The schedule includes only those items that are due for counting on that day.</li> </ul>
	<ul> <li>By period: The schedule generates count sequences based on the calculation - the number of items assigned to the class, multiplied by the number of counts per year, divided by the number of working periods in a year. The calculation uses 13 working periods as defined in the Quarterly Type field on the time schedule used for the cycle count.</li> </ul>
Workday Schedule	Select the calendar to use for scheduling.
Last Scheduled Date	Date the cycle count was last scheduled.
Next Scheduled Date	Date the cycle count has to be scheduled next.

**Note:** The scheduling program updates the values for the **Last Scheduled Date** and **Next Scheduled Date**. You can edit the **Next Scheduled Date**. These fields apply only if you enable automatic scheduling.

Let's look at the fields for approvals.

Fields	Definitions
Approval Required	Select whether or not approval is required for the cycle count.



Fields	Definitions
Approval Type	Determine the level of approval required for the cycle count.
	<ul> <li>Always: Every count sequence where the count quantity doesn't match system quantity requires an approval. If there isn't a discrepancy between the count quantity and system quantity, no approval or on-hand updates for the item are required.</li> </ul>
	• <b>If out of tolerance</b> : Approval is required only when the quantities differ from system quantities beyond the tolerances stipulated.
Positive and Negative Quantity Tolerance Percentages	Enter the percentage variances of count quantity to on-hand quantity beyond which adjustments are held for approval.
Positive and Negative Adjustment Value Tolerance	Enter the positive and negative adjustment values beyond which adjustments are held for approval.

The tolerances are applicable for the entire cycle count. These tolerances are applied only when more specific tolerances at the item or ABC class aren't defined.

### **Define Parameters**

On the Create Cycle Count: Define Parameters page, specify count parameters, serial number options, and count accuracy values for the cycle count.

Enter the required fields and save your count definition in order to enable the Define classes and Items stop enabled. This only applies if ABC assignment groups are selected.

Here are the fields for Count Parameters.

Field	Definition
Starting Count Sequence	Enter the sequence number to use as the starting number in the next count sequence generation.  Inventory assigns count sequence numbers to stock keeping units. A keeping unit is a unique combination of an item, subinventory, locator, revision, and lot. If an item has several counts, each count is assigned a sequence number.
Maximum Days Before Late	Enter the number of workdays that can pass from the count generation date before a scheduled count is late.  Count sequences not recorded within this number of days are marked as late counts in the Inventory Management work area.
Maximum Recounts	Enter the maximum times an out-of-tolerance count is automatically assigned recount status.  When the recorded quantity exceeds system quantity beyond the stipulated tolerance, the count is automatically sent for recount without intervention from the inventory manager. If the number of recounts exceed the number specified here, but the deviation still exceeds the tolerance, the count is routed for approval.
Manual Counts Allowed	Select this check box to enable unscheduled counts by users.



Field	Definition
Count Zero Quantity	Select this check box to generate blank count sequences for items with zero on-hand quantities.  Note:  This option is only applicable for items in which the item and subinventory relationships have been defined. When you select this check box, a count sequence is generated if zero quantity exists for that item in that subinventory.
Display Suggested Quantity	Deselect this check box to enforce blind counting. Blind counting ensures that actual physical counting is performed.
Serialized Items Allowed	Select this check box to generate count sequences for serial controlled items.

Use the Serial Number Option fields to enter parameters for serialized counts. You can enter these parameters only when you enable the **Serialized Items Allowed** check box in the Count Parameters section of the page.

This table defines the serial number option fields.

Field	Definition
Serial Numbers per Count	Select a value:  • Multiple: You can include multiple serial numbers in one count sequence.
	One: Generate a separate count sequence for each serial number.
Serial Number Adjustment	<ul> <li>Adjust if possible: If a serial number discrepancy exists between the count quantity and system quantity, or if the entered serial numbers don't correspond to the serial numbers already in the specified location, adjustments are attempted if the adjustment variance and value are within tolerances.</li> <li>Review all adjustments: Send all serial adjustments for approval.</li> </ul>
Record Count Serial Numbers	Select this check box when serial numbers should also be counted if the actual and system quantities are the same. This is applicable only when multiple serial numbers are included in a count sequence.
Serial Discrepancy Allowed	Select this check box to permit a discrepancy in the actual location of a serial number. When selected, the application transfers the serial number to the recorded location.

For the Count Accuracy section, use the **Positive Hit or Miss Percentage** and **Negative Hit or Miss Percentage** fields to enter the deviation percentage range to evaluate a count as a hit or miss.

## **Define Item Categories**

On the Create Cycle Count: Define Item Categories page, select the item categories from PIM to use in the cycle count. Also, specify your options for synchronizing item categories with items.



**Note:** This stop is available only if you select the **Enable cycle count by item category** check box on the Enter Primary Details page.

### Define Items in Item Categories

On the Create Cycle Count: Define Items in Item Categories page, select the items to use in the cycle count.

Manually add items to a cycle count by searching for and selecting the desired individual items on this page. You can also enter the number of counts per year for the selected items.

**Note:** This stop is available only if you select the **Enable cycle count by item category** check box on the Enter Primary Details page.

#### Define Classes and Items

On the Create Cycle Count: Define Classes and Items page, select the ABC classes and items to use in the cycle count.

Manually add items to a cycle count by searching for and selecting the desired individual items on this page.

#### Review

On the Create Cycle Count: Review page, review the selections made on previous pages. You can click the **Subinventories to Count** link to display the subinventories to be included in the count.

# How You Add Items to a Cycle Count

When you add items to a cycle count, you specify the items that you want to include in the cycle count.

#### You can:

- Manually add items to a cycle count
- Automatically add items to a cycle count

**Note:** To be able to add an item to a cycle count, you must set the item's **Cycle Count Enabled** attribute to Yes.

### Manually Adding Items to a Cycle Count

For cycle counts with ABC classes, manually add items to a cycle count by searching for and selecting the desired individual items on the Define Classes and Items page.

For cycle counts with item categories, manually add items to a cycle count by searching for and selecting the desired individual items on the Define Items in Item Categories page.

## Automatically Adding Items to a Cycle Count

For cycle counts with ABC classes, automatically add items to a cycle count by selecting an ABC assignment group on the Enter Primary Details page. All of the ABC assignment group's items are added to the cycle count. The ABC assignment group's ABC classes are also added to the current cycle count classes, and classifications are maintained for the included items.



You can choose to synchronize class information for existing items in the cycle count based on the new ABC assignments. You can also choose to have any items that are no longer in the ABC group automatically deleted from the cycle count item list. To be able to change classifications of items in a cycle count independently of ABC classes, choose the **None** option for the synchronization mode.

For cycle counts with item categories, automatically add items to a cycle count by selecting an item category on the Define Item Category page. When you select an item category on the Define Item Category page, all items in that category populate in the item and item category tables at the next train stop.

# How Cycle Count Approval Tolerances Are Calculated

This topic discusses how cycle count approval tolerances are calculated.

### **Settings That Affect Approval Tolerances**

You specify values for these settings on the Define Classes and Items and Define Schedules and Approvals pages:

- Positive Quantity Tolerance Percentage and Negative Quantity Tolerance Percentage: Limits that you
  define for the positive and negative difference between the actual cycle count quantity and the tracked onhand quantity.
- Positive Adjustment Value Tolerance and Negative Adjustment Value Tolerance: Limits that you define for the total value of a cycle count adjustment.

### How Approval Tolerances Are Calculated

Approval tolerances are first calculated using class- and item-level values that you specify on the Define Classes and Items page. If you don't specify values on the class and item level, approval tolerances are calculated using values that you specify on the Define Schedules and Approvals page.

### **Example: Calculating Approval Tolerances**

This table provides examples of values for quantity variance and adjustment value tolerances for one item in a cycle count.

Item Attributes	Value
Item Standard Cost	\$10.00
Positive Quantity Tolerance Percentage	5%
Negative Quantity Tolerance Percentage	10%
Positive Adjustment Value Tolerance	\$200
Negative Adjustment Value Tolerance	\$250



Using the values from the previous table, the following table provides examples of four different count scenarios for the item, and the tolerances that each different scenario violates.

Application On-Hand Quantity	Count Quantity	Quantity Variance	Adjustment Quantity	Adjustment Value	Tolerance Exceeded
100	106	+6%	+6	+\$60	Positive Quantity Percentage
100	88	-12%	-12	-\$120	Negative Quantity Percentage
100	122	+22%	+22	+\$220	Positive Quantity Percentage and Positive Adjustment Value
100	73	-27%	-27	-\$270	Negative Quantity Percentage and Negative Adjustment Value

#### Related Topics

Quantity Tolerance Percentages

# How Cycle Counts Determine the Number of Items to Count Each Day

To determine the number of cycle count items to be scheduled on a given day, first multiply the number of items assigned to the class by the number of counts per year. Then, divide that total by the number of working days in the year.

Here's the formula:

[(Number of items assigned to the Class) x (Number counts per year)]/(Number of working days in a year).

For example, let's say you have these parameters:

- Number of items in Class A = 131
- Counts per year = 52
- Number of working days in a year = 225

The number of items to be scheduled per day is (131\*52)/225. The number of items to be scheduled each day in this example is 31.

If you need to count an item more frequently than the schedule suggests, you can select the **Include in Count** check box on the Item Cycle Count definition to have the item included in all subsequent counts.



The first count schedule created for this cycle count contains the first 31 Class A items listed in Define Classes and Items. The next count schedule will contain the next 31 Class A items, and so forth. This continues until all Class A items have been counted 52 times.

#### Note:

- If the Cycle Count Schedule Frequency defined for the cycle count is **By period**, the calculation to generate count sequences uses 13 periods, and not 12.
- Count sequences for zero on-hand quantity items aren't generated unless you have defined an item and subinventory relationship for the item.

# Query by Example for Cycle Counts

Use the Query by Example search option during cycle count subinventory selection to easily search for subinventories to include or remove from your cycle counts.

Here's how to perform a query by example for cycle count subinventories:

- 1. From the Inventory Management work area, select the **Create Cycle Count** task.
- 2. On the Create Cycle Count: Enter Primary Details page, click the **Query by Example** icon in the toolbar to enable the Query by Example search framework.

Separate, blank rows appear immediately above the search results table for the **Subinventory** and **Include in Count** search attributes.

- 3. Enter a value in one or more of the search fields.
  - **Subinventory**: You can enter all or part of a subinventory name.
  - Include in Count: Select either Yes or No for the Include in Cycle Count search. Yes indicates that the subinventory is included in the count and No indicates that the subinventory isn't included in the count.

Items in the table matching the values you entered display.

**4.** To return to the regular view, click the **Query by Example** icon again.

This functionality is available on both the Create Cycle Count: Enter Primary Details and Edit Cycle Count: Enter Primary Details pages.

**Note:** If you enter values in both fields, only the results that match both search values display.

## Schedule Automatic Cycle Counts

To schedule automatic schedule cycle counts, you must first define the schedules fields on the Create Cycle Counts page. Then, you can process the cycle count.



#### **Define Schedules**

Access the Create Cycle Counts page. Then, define the fields in the Schedules region of the Define Schedules and Approvals step as follows.

- 1. From the Inventory Management work area, select the **Create Cycle Counts** task.
- 2. On the Create Cycle Counts page, select the **Automatically schedule** check box.
- 3. In the **Frequency** field, specify the frequency of scheduling.

Frequency determines how frequent a count schedule is generated. If the frequency is weekly, then a count schedule is generated including all items that are due for counting in the next one week. If the frequency is daily, then one count schedule is generated everyday and the schedule includes only those items that are due for counting that day. If the frequency is by period, 13 periods are used in the calculation to generate count sequences.

4. In the Workday Schedule field, enter the calendar to use for scheduling.

Values for the **Last Scheduled Date** and **Next Scheduled Date** fields populate automatically by the scheduling program.

### **Process Cycle Count**

You can process the cycle count that you just set up in three different ways:

- Complete these steps from the Manage Cycle Counts page.
  - **a.** On the Manage Cycle Counts page, select **Generate Count Schedules** from the **Actions** menu. This runs the **Generate Count Schedules** process (InvCcGenerateCountSchedulesJob).
  - **b.** After completion, select **Generate Count Sequences** from the **Actions** menu. This runs the **Generate Count Sequences** process (InvCcGenerateCountSequencesJob).
  - **c.** After the completion of both processes, navigate to the Counts Overview page where you can now see a value in the **Count Sequences to Record** field.
- Run the two scheduled processes from the Scheduled Processes work area.
  - a. From the Scheduled Processed work area, run the **Generate Count Schedules** process.
  - **b.** From the Scheduled Processed work area, run the **Generate Count Sequences** process.

**Note:** You must schedule these processes to run simultaneously and at the same frequency defined in the **Schedules** section of the **Cycle Count Definition** field. For example, if the value for the cycle count definition frequency is **Daily**, you must schedule these two processes to run daily as well.

- Run the full cycle count job set from the Scheduled Processes work area. This job set runs three sequential scheduled processes:
  - Generate Count Schedules
  - Generate Count Sequences
  - Cycle Count Listing Report



### Cycle Counts and Consigned Inventory

When the subinventory you're counting contains both consigned and nonconsigned quantities for the same items, the Generate Count Sequence process creates two count sequences:

- One for the consigned quantity (owned by the supplier)
- One for the nonconsigned quantity (owned by the organization)

To get an accurate physical count of the items owned by the organization, both quantities must be verified when counting the subinventory.

Adjustments that you make to the quantity of items not owned by the organization (consigned items) have a different financial impact because the supplier owns the items. Therefore, they must be counted separately from the nonconsigned items owned by the organization.

### Adjustments for Nonconsigned Items

When you approve a cycle count adjustment for nonconsigned items, the cycle count process makes the adjustment when the count sequence approval is submitted. The application updates the on-hand inventory, and the books for the organization are updated to reflect the adjustment.

### Adjustments for Consigned Items

When you approve a negative adjustment for consigned items, two things happen:

- 1. First, an implicit **Transfer to Owned** transaction occurs for the item.
- 2. Then, the cycle count adjustment takes place on the owned items. The consigned item is basically consumed by the organization, resulting in the generation of a consumption advice.

For positive adjustments of consigned items, these steps occur:

- 1. An implicit **Transfer to Owned** transaction takes place.
- **2.** Then, a cycle count adjustment happens on the owned item.
- 3. Finally, an implicit **Transfer to Consigned** transaction occurs.

Positive adjustments for consigned material are more restrictive because the final quantity after a positive adjustment can't exceed the total quantity received from the supplier for the consigned items.

# FAQs for Cycle Counts

### What are positive and negative hit and miss percentages?

Positive and negative hit and miss percentages define the positive and negative tolerances for the percentage difference between the tracked on-hand quantity and the actual cycle count quantity.

A count is considered to be a hit if it's within these tolerances, and a miss if it's outside them. The hit and miss tolerances are used to evaluate the accuracy of cycle counting procedures, rather than the accuracy of inventory.



### What happens if I select Adjust if Possible for serial number adjustments?

If a serial number discrepancy exists between the count quantity and system quantity, or if the entered serial numbers don't correspond to the serial numbers already in the specified location, adjustments are attempted if the adjustment variance and value are within tolerances.

These adjustments consist of receipts and issues of the appropriate serial numbers to and from the specified location and are applicable only to instances in which new serial numbers or shipped serial numbers are counted.

### How does the cycle count handle consigned inventory?

The cycle count includes the consigned current on-hand value and consigned current on-hand quantity.

### Why can't I see records in the Cycle Count Open Interface table?

To view records in the Cycle Count Open Interface table, select Review Count Interface Records from the task list in the Counts work area. If the ADFdi extension is installed, you see a dialog box indicating that you're opening a Microsoft Excel spreadsheet.

There are two tabs on the interface table:

- Cycle Count Interface Summary
- Review Cycle Count Interface

Click the Review Cycle Count Interface tab.

To search for cycle count interface records, enter search criteria or select criteria from a list of values. Then, select the **Search** button.

### How is the due date on the Cycle Count Listing report calculated?

When the count sequence is generated, that date is added to the value in the **Maximum Days Before Late** field. If the date is a non-working day, then the next working day date is used.

For example, if the workday schedule is Monday through Thursday (July 18 through July 21), counts are generated on Thursday (July 21). If the maximum number of days before late is 3, then the due date would be Sunday (July 25). However, as Sunday is off, the count date will be stamped with Monday's date (July 26).

# Purge Cycle Counts

# **Purge Cycle Counts**

Use the Purge Cycle Count process to remove cycle count records from the database.

Purging a cycle count removes all related objects such as schedules, count sequences, count classes, items, and so forth. You can purge cycle counts using the Manage Cycle Counts page or the Scheduled Processes work area.



### Purge Using Manage Cycle Counts Page

To purge cycle counts using the Manage Cycle Counts page:

- 1. Select Manage Cycle Counts from the Counts task list in the Inventory Management work area.
- 2. Search for and select a cycle count.
- 3. Select **Purge Cycle Count** from the **Actions** menu.
- **4.** In the Purge Cycle Count dialog box, decide whether or not to select the **Include Count Definition** check box.

When you select this option, the process deletes all data for the complete cycle count from the database. If you don't select this option, only the count sequences are deleted.

- **5.** Enter a date in the **Purge Information Before** field. For example, if you enter November 1, 2019, the process purges all cycle counts prior to this date.
- 6. Optionally, select a value for the **Purge Count Sequences** field. You can choose to purge the cycle counts:
  - Purge all count sequences
  - Purge only count sequences with errors

You can also choose to leave this field blank.

7. Click Ok.

### Purge Using Scheduled Processes Work Area

To purge cycle counts using the Scheduled Processes work area:

- 1. From the Navigator, select **Tools** > **Scheduled Processes**
- 2. Click the Schedule New Process button.
- 3. Search for and select the **Purge Cycle Count** process.
- 4. Enter your organization and cycle count name.
- 5. Determine whether to purge the count setup.
- **6.** Select the date before which you want to purge all cycle count records.
- 7. Optionally, select a value for the **Purge Count Sequences** field. You can choose to purge the cycle counts:
  - Purge all count sequences
  - Purge only count sequences with errors

You can also choose to leave this field blank.

8. Click Submit.

**Note:** If you select **Purge only count sequences with errors** and choose **No** for the **Purge Count Setup** field, then only the count sequences that have error records in pending transactions are deleted. In this case, the **Purge Count Details Before** date isn't required. If you select **Purge all count sequences** and choose **Yes** for the **Purge Count Setup** field, then all count sequences and pending transactions with errors before the specified date are deleted.



# FAQs for Purge Cycle Counts

When does the Purge Cycle Count process delete pending cycle count transactions?

If you select a value for the Purge Count Sequences field when submitting the Purge Cycle Count process, the process also deletes the cycle count pending transactions (for that cycle count only).

You can choose to purge all count sequences, purge only the count sequences with errors, or leave the field blank.

Why did I get a cycle count sequence purge error?

When purging a cycle count sequence, an error is raised if you have pending transactions for the cycle count.

This could happen if someone uploaded cycle count sequences, but didn't process them yet. This error assures that you're aware of any pending transactions against the cycle count and forces you to process the pending transactions.

The **Purge Cycle Count** process contains a parameter to enable you to purge only the count sequences with errors, or purge all count sequences.

How can I purge successfully imported cycle count interface data created by ADFdi? Use the Purge Cycle Count process to purge cycle count data imported through ADFdi spreadsheets.

From the Scheduled Processes work area, click the **Schedule New Process** button. Search for and select the **Purge Cycle Count** process. Enter your organization and cycle count name, determine whether to purge the count setup, and select the date before which you want to purge the cycle count records. You can optionally choose to purge all count sequences or only those count sequences with errors.

**Note:** It's standard cycle count ADFdi behavior for the successfully processed count records to remain visible in the Cycle Count Interface table. Use the **Purge Cycle Count** process to periodically purge interface records, or you can use the ADFdi to delete records by flagging them.

### Create Manual Count Schedules

### FAQs for Create Manual Count Schedules

Why would I create a manual count schedule?

You can create a manual cycle count schedule in addition to, or instead of, creating an automatic cycle count schedule.

You can create a manual schedule to add an additional count for a particular item if you want to count the item more frequently than the automatically scheduled counts require. Additionally, you can create a manual schedule for specific subinventories, locators, and items, and set the count for any inventory date. For example, you could create a manual schedule to count item A wherever it can be found in subinventory X. You could also create a manual schedule to count all item quantities in subinventory Y, locator B-100.



# Generate Count Schedules

# How Cycle Count Schedules Are Generated

This topic discusses how cycle count schedules are generated.

#### Settings That Affect Cycle Count Schedule Generation

Cycle counts are generated using the automatic schedule parameters that you set on the Define Schedules and Approvals page. On this page, you must enable automatic scheduling to generate cycle counts. Additionally, you must set the **Cycle Count Enabled** item attribute to Yes for each item you want to include in a cycle count.

### How Cycle Count Schedules Are Generated

Cycle count schedules are generated at the frequency that you define. For example, if the frequency is weekly, cycle counts are scheduled for all items that need to be counted on all of the workdays in the current week. If the frequency is daily, cycle counts are scheduled for items that are due for counting on the current date.

A cycle count request is generated for each item number, revision, lot number, subinventory, and locator combination for which on-hand quantities exist. Cycle count requests are ordered first by subinventory and locator, then by item, revision, and lot. A unique sequence number is assigned to each cycle count request, and can be used for reporting, querying, and rapid count entry.

# Example of Generating More Count Schedules Than Expected

There are times when more count schedules are created for an item in a cycle count than you expected based on your entered scheduling frequency.

For example, multiple count schedules might be created for an item in the cycle count when the items are only supposed to be counted once per year. This example describes how this can occur.

#### Classes

Let's say you have three classes in a cycle count.

On the Create Cycle Count: Define Classes and Items page, you define three classes in the cycle count:

- Class 1 has 284 items with 4 counts per year
- Class 2 has 402 items with 2 counts per year
- · Class 3 has 1249 items with 1 count per year

### Frequency

On the Create Cycle Count: Define Schedules and Approvals, you set the **Frequency** to **Daily**.



#### Calculations

Let's assume there are 260 working days in a year. The count schedule is run every day.

Here's a summary of the count schedule calculations and the resulting number of items scheduled per day:

Class	Number of Items	Counts per Year	Counts Calculation	Number of Items Scheduled per Day
Class 1	284	4	(284*4)/260 = 4.4  Since this is a decimal, we take the next integer.  So, we schedule 5 items for Class 1 per each day schedule.	5 items per day
Class 2	402	2	(402*2)/260 = 3.1  Since this is a decimal, we take the next integer.  So, we schedule 4 items for Class 2 per each day schedule.	4 items per day
Class 3	1249	1	(1249*1)/260 = 4.8  Since this is a decimal, we take the next integer.  So, we schedule 5 items for Class 3 per each day schedule.	5 items per day

Let's look at the actual number of items scheduled per day for Class 3. Since 5 items are scheduled per day for Class 3 instead of 4.8, 51 items are counted two times per year instead of one time per year.

(5 items per day \* 260 days = 1300 items)

[1300 items - (1249 items \* 1 count per year)] = 51 items

The number of counts per year is honored, but when we get a value that's not an integer for the number of items to be scheduled, we must take the next integer. This might result in counting a few percentages of items one time more than the scheduled frequency.



# Generate Count Sequences

### How Cycle Count Sequences Are Generated

This topic discusses how cycle count sequences are generated.

### **Settings That Affect Count Sequences**

Count sequences are generated using the automatic schedule parameters that you define on the Define Schedules and Approvals page, and the manual schedule parameters that you define on the Manage Manual Count Schedules page.

### How Count Sequences Are Generated

Count sequences are generated for each item number, revision, lot number, subinventory, and locator combination for which on-hand quantities exist. Count sequences are ordered first by subinventory and locator, then by item, revision, and lot. A unique sequence number is assigned to each count sequence. You can use this sequence number for reporting, querying, and rapid count entry.

#### **Example 1: Count Sequence Generation**

Assume that an inventory organization has the following on-hand quantities:

Locator B1.1.1: 100 EALocator: B1.1.2: 10 EA

Locator: B1.1.3: Does not include any on-hand quantities

Assume that the cycle count schedule has this information:

Item: PLT100

Subinventory: BULK

· Count Zero Quantity: No

No locator is specified at the schedule level

Using the on-hand quantities and cycle count scheduling information described, the count sequences generated are:

- Item: PLT100; Subinventory: BULK; Locator: B1.1.1; Suggested Quantity: 100 EA
- Item: PLT100; Subinventory: BULK; Locator: B1.1.2; Suggested Quantity: 10 EA

Note that cycle count sequence generation would differ if these changes existed:

- For a lot- or revision-controlled item, generation of cycle count schedules would result in different count sequences for different revisions and lots, depending on whether the item is lot-, revision-, or lot/revisioncontrolled).
- If the item is serial number-controlled, the serial number options that are defined in the cycle count properties
  determine that either different cycle count sequences are generated for each serial number, or one cycle count
  sequence is generated for multiple serial numbers.



### **Example 2: Count Sequence Generation**

Assume that an inventory organization has these on-hand quantities:

Locator B1.1.1: 100 EALocator: B1.1.2: 10 EA

Locator: B1.1.3: Does not include any on-hand quantities

Assume that the cycle count schedule has this information:

Item PLT100

Subinventory: BULK

Count Zero Quantity: Yes

- · No locator is specified at the schedule level
- The Item/locator combination exists between Item PLT100 and all of the locators in the BULK subinventory

The count sequences generated would be the following:

- Item: PLT100; Subinventory: BULK; Locator: B1.1.1; Suggested Quantity: 100 EA
- Item: PLT100; Subinventory: BULK; Locator: B1.1.2; Suggested Quantity: 10 EA
- Item: PLT100; Subinventory: BULK; Locator: B1.1.3; Suggested Quantity: 0 EA

# FAQs for Generate Count Sequences

### When should I generate count sequences?

Generate count sequences just before you want to count the physical material, since count sequences are generated for balances that are on hand at the moment that you generate count sequences.

### Can I make secondary quantity adjustments without changing the primary quantity?

No, cycle count adjustments are made in the primary UOM. You must change both the primary and secondary UOM quantities to apply secondary quantity adjustments to cycle counts.



# **Approve Count Sequences**

# FAQs for Approve Count Sequences

How can I approve count sequences for counts that are associated with consigned inventory?

Change the value in the Status field on the Approve Count Sequences page. Enter your comments or reason for approval. The Owning Party field is displayed when the count is for a consigned item.

#### How can I approve a cycle count adjustment when reservations exist?

You can't approve a cycle count adjustment if the quantity being adjusted has reservations or allocation against it. A message displays indicating that you can't approve this count sequence adjustment because reservations or allocations exist for the item.

If you can't approve a count sequence because there are pending reservations, the warehouse manager can intervene. For example, the warehouse manager can use the Manage Reservations and Picks page to adjust the reservations (manually remove the reservations) in order to approve the cycle count adjustment.

# Import Count Sequences

# How You Integrate Cycle Counting With an External Application

This topic discusses how to integrate cycle counting with an external application.

#### You can:

- Import count sequences
- Export count sequences
- · Review count interface records

### Importing Count Sequences

You can import an external application's count sequence records to process them in Oracle Inventory Management using the Cycle Count Open Interface. You might want to do this if, for example, your company runs Oracle Fusion Cloud Applications, but your company's inventory organizations are managed by a third-party warehouse that uses a different system.

After the records are imported to the Cycle Count Open Interface's tables, cycle count adjustments can be processed using an open API, a concurrent program such as GenerateCountschedules Or GenerateCountsequences, or the Oracle Inventory Management cycle counts user interface.



### **Exporting Count Sequences**

You can export count sequences to populate an ADFdi-enabled Excel spreadsheet. You can use this spreadsheet to:

- Review count interface records.
- Serve as the data source for importing count sequence records from Oracle Inventory Management to an external application's database.

After the records are imported, you can edit count sequence data using the third-party application.

### **Reviewing Count Interface Records**

When you review count interface records, you view and make changes to cycle count sequences in an ADFdi-enabled spreadsheet rather than in the Oracle Inventory Management cycle counting user interface.

**Note:** Before you can review count interface records, you must first export count sequences.



# 8 Physical Inventory Counts

# Overview of Physical Inventory

Use physical inventories to reconcile system-maintained item on-hand balances with actual counts of inventory.

Accurate system on-hand quantities are essential for managing supply and demand, maintaining high service levels, and planning production. You can perform these physical inventory tasks:

- Define a physical inventory
- Generate a physical inventory snapshot
- Generate physical inventory tags
- Record physical inventory tags
- Approve physical inventory tags
- · Post physical inventory adjustments
- Purge physical inventory

# **Define Physical Inventories**

## Physical Inventory Creation

Creating a physical inventory includes specifying primary details, subinventories, approvals, and tags. You can define and maintain an unlimited number of physical inventories.

Use the Manage Physical Inventories task from the Inventory work area to create and manage your physical inventories. To create a new physical inventory, select **Actions** > **Create** from the Search Results section of the page. To manage an existing physical inventory, search for and select a physical inventory.

Complete these details when creating a physical inventory:

- Primary details
- Subinventories
- Approvals
- Tags

### **Primary Details**

On the Create Physical Inventory page, specify primary details for your physical inventory.

Field	Definition
Name	Enter a unique physical inventory name.



Field	Definition
Description	Enter a unique physical inventory description.
Exclude Negative Balances	Select this check box to exclude items with a negative quantity from the snapshot.
Exclude Zero Balances	Select this check box to exclude items with zero quantity from the snapshot.
Dynamic Tags Allowed	Select this check box to allow dynamic entry of tags that you manually create. If you choose not to allow dynamic tag entry, all tags must be generated before use.  If you don't want to allow dynamic tag entry, but you need blank tags, you can generate numbered blank tags for counting miscellaneous items.
Additional Information	Use the descriptive flexfields to add additional information about your physical inventories.

### Subinventories

On the Create Physical Inventory page, specify the subinventories to count by selecting on option for the **Subinventories to Count** field. You can choose between these values:

- All: count all subinventories.
- **Specific**: specify the specific subinventories to count by clicking the **Select Subinventories** button.

### **Approvals**

Let's look at the fields for approvals.

Field	Definition
Approval Type	<ul> <li>Determine the level of approval required for physical inventory adjustments:</li> <li>Always: All physical inventory adjustments required approval. If there isn't a discrepancy between the count quantity and system quantity, no approval or on-hand updates for the item are required.</li> <li>If out of tolerance: Approval is required only when the quantities differ from system quantities beyond the defined tolerances.</li> <li>Allow any adjustment to post without approval.</li> </ul>
Positive and Negative Quantity Tolerance Percentages	Enter the percentage variances of count quantity to on-hand quantity beyond which adjustments are held for approval.
Positive and Negative Adjustment Value Tolerance	Enter the positive and negative adjustment values beyond which adjustments are held for approval.



### Tags

Use physical inventory tags to record the physical counts of inventory items. Physical inventory tags represent actual paper tags that some companies use to count inventory items. A tag contains the count for a group of a given item.

Let's look at the fields for tags.

Field	Definition
Tag Type	<ul> <li>Select the type of tag to create:</li> <li>Blank: tags contain no item information.</li> <li>Both: create blank and default tags.</li> <li>Default: creates a unique tag for every combination of item number, subinventory, revision, locator, lot, and serial number that exists in the subinventories for the selected physical inventory</li> </ul>
Show Serial Numbers on Tags	Select this check box to show serial numbers on physical inventory tags. If you choose not to show serial numbers on tags, you get a tag for each item, but you must match the serial numbers to the items manually.  You can enter a value in this field only if you select <b>Default</b> or <b>Blank</b> in the <b>Tag Type</b> field.
Starting Default Tag	Enter the starting default tag number.  Tag numbers may be alphanumeric, but you can increment only the numeric portion.  Note: When entering a starting tag number, be sure that it contains the total number of possible digits that a tag can have. For example, if your tag numbers can have up to five digits and you want the starting number to be 1, you would enter 00001.
Starting Blank Tag	Enter the starting blank tag number.  Tag numbers may be alphanumeric, but you can increment only the numeric portion.  Note: When entering a starting tag number, be sure that it contains the total number of possible digits that a tag can have. For example, if your tag numbers can have up to five digits and you want the starting number to be 1, you would enter 00001.
Number of Blank Tags	Enter the number of blank tags you anticipate needing. You can void blank tags if they aren't used. Use blank tags if you find items in the warehouse for which the system shows no quantity available. The items are physically there, but they aren't recorded in the system.
Tag Generation Sequence	Determine your tag generation sequence using the Tag Generation Sequence choice lists: <b>Sequence 1</b> , <b>Sequence 2</b> , <b>Sequence 3</b> , <b>Sequence 4</b> , <b>Sequence 5</b> , and <b>Sequence 6</b> . Choose from subinventory, locator, item, revision, project, and task for Sequence 1 through Sequence 6.  Tags are generated in numeric and alphabetic order using the tag generation sequence that you specify.
	Note: You don't need to select values for all six sequences.



# **Quantity Tolerance Percentages**

When you specify quantity tolerance percentages, you set the positive or negative difference between the physical tag count and on-hand quantity that, when exceeded, requires an adjustment approval.

You can specify:

- Positive quantity tolerance percentage
- Negative quantity tolerance percentage

### Positive Quantity Tolerance Percentage

The value that you enter for the positive quantity tolerance percentage specifies the positive percentage difference between the physical tag count and on-hand quantity that, when exceeded, requires an adjustment approval.

For example, you enter 10 as the positive quantity tolerance percentage. The physical tag count is 111, and the onhand quantity is 100. Because the physical tag count is at least 10% greater than the on-hand quantity, the adjustment resulting from this count requires approval.

#### **Negative Quantity Tolerance Percentage**

The value that you enter for the negative quantity variance tolerance percentage value specifies the negative percentage difference between the physical tag count and on-hand quantity that, when exceeded, requires an adjustment approval.

For example, you enter 10 as the negative quantity tolerance percentage. The physical tag count is 89, and the on-hand quantity is 100. Because the physical tag count is at least 10% less than the on-hand quantity, the adjustment resulting from this count requires approval.

# How Tag Generation Sequences Are Calculated

The tag generation sequence defines the sequence in which tags are generated.

### Settings That Affect Tag Generation Sequence

Define the tag generation sequence using the Tag Generation Sequence choice lists: **Sequence 1**, **Sequence 2**, **Sequence 3**, **Sequence 4**, **Sequence 5**, and **Sequence 6**.

**Note:** You don't need to select values for all six sequences.

### How Tag Generation Sequence Is Calculated

Tags are generated in numeric and alphabetic order using the tag generation sequence that you specify.



### **Example: Default Tag Generation Sequence**

This example lists the sequence of tags that are generated from the default tag generation sequence:

- 1. Sequence 1: Subinventory
- 2. Sequence 2: Locator
- 3. Sequence 3: Item
- 4. Sequence 4: Revision

This sequence of tags is generated:

- 1. Tag 1: Subinventory 1, Locator A, Item AS54888
- 2. Tag 2: Subinventory 1, Locator B, Item CM11911
- 3. Tag 3: Subinventory 1, Locator C, Item CM11222
- 4. Tag 4: Subinventory 1, Locator D, Item MEC\_123
- 5. Tag 5: Subinventory 1, Locator D.1, Item MEC\_123-A
- Tag 6: Subinventory 2, Locator W, Item 100-3456-200
- 7. Tag 7: Subinventory 2, Locator X, Item Gr2\_11234
- 8. Tag 8: Subinventory 2, Locator Y, Item 346-2210
- 9. Tag 9: Subinventory 2, Locator Z, Item AS54888
- 10. Tag 10: Subinventory 2, Locator Z.1, Item AS54888-A
- 11. Tag 11: Subinventory 3, Locator 1.0, Item VC\_103
- 12. Tag 12: Subinventory 3, Locator 1.0.1, Item VC\_102
- 13. Tag 13: Subinventory 3, Locator 1.0.2, Item VC\_101
- 14. Tag 14: Subinventory 3, Locator 1.1, Item AS54888
- 15. Tag 15: Subinventory 3, Locator 1.2, Item CM11222
- Tag 16: Subinventory 3, Locator 1.3, Item AS55888

### Example: User-Defined Tag Generation Sequence

This example uses the same subinventories, locators, items, and revisions as the default tag generation sequence example and lists the sequence of tags that are generated from the following user-defined tag generation sequence:

- 1. Sequence 1: Item
- 2. Sequence 2: Revision
- 3. Sequence 3: Subinventory
- 4. Sequence 4: Locator

This sequence of tags is generated:

- 1. Tag 1: Item 100-3456-200, Subinventory 2, Locator W
- 2. Tag 2: Item 346-2210, Subinventory 2, Locator Y
- 3. Tag 3: Item AS54888, Subinventory 1, Locator A
- 4. Tag 4: Item AS54888, Subinventory 2, Locator Z
- 5. Tag 5: Item AS54888-A, Subinventory 2, Locator Z.1
- Tag 6: Item AS54888, Subinventory 3, Locator 1.1
- 7. Tag 7: Item AS55888, Subinventory 3, Locator 1.3
- 8. Tag 8: Item CM11222, Subinventory 1, Locator C
- 9. Tag 9: Item CM11222, Subinventory 3, Locator 1.2
- 10. Tag 10: Item CM11911, Subinventory 1, Locator B
- 11. Tag 11: Item Gr2\_11234, Subinventory 2, Locator X
- 12. Tag 12: Item MEC\_123, Subinventory 1, Locator D



- 13. Tag 13: Item MEC\_123-A, Subinventory 1, Locator D.1
- 14. Tag 14: Item VC\_101, Subinventory 3, Locator 1.0.2
- 15. Tag 15: Item VC\_102, Subinventory 3, Locator 1.0.1
- 16. Tag 16: Item VC\_103, Subinventory 3, Locator 1.0

### Search Subinventories When Creating a Physical Inventory

When creating a physical inventory, you have the option to count all subinventories or select subinventories within your organization. If you are creating a physical inventory that doesn't require you to count every subinventory in your organization, you can efficiently find the subinventories to include in your inventory count.

Here's how to create physical inventories for select subinventories:

- 1. From the Inventory Management work area, select **Counts** from the **Show Tasks** drop down list.
- 2. Select the Manage Physical Inventories task.
- **3.** On the Manage Physical Inventories page, click the **Create** icon in the search results table.
- **4.** On the Create Physical Inventories page, select **Specific** for the **Subinventories to Count** option.
- 5. Click the **Select Subinventories** button.
- **6.** In the Select Subinventories dialog box, find and select only the specific subinventories that you want to include in your physical inventory.
- **7.** Click **OK**.

# FAQs for Physical Inventories

What happens if I select different approval type options for physical inventories? Here are your approval type options for physical inventories:

- Select **Always** to require approval of all physical inventory adjustments.
- Select **If out of tolerance** to hold for approval those counts that are outside the limits of the positive and negative quantity tolerance percentages or value tolerances.
- Select **Never** to allow any adjustment to post without approval.

# Generate Physical Inventory Snapshot

# Physical Inventory Snapshots

A snapshot represents the on-hand quantity of items in all subinventories of a physical inventory at a specific time. Item counts captured in a snapshot are the basis for all physical inventory adjustments.

The snapshot is the baseline from which physical counts are reconciled. Therefore, you must manually stop inbound and outbound activities while taking a snapshot.



**Note:** Oracle Inventory Management doesn't restrict inventory transactions when you take the snapshot. However, to ensure data accuracy in posting your final physical inventory adjustments, it's best practice to stop all transactions during a physical inventory.

# Generate a Physical Inventory Snapshot

To generate a physical inventory snapshot, complete these steps:

- 1. Click Manage Physical Inventories from the Counts task list in the Inventory Management work area.
- 2. Search for and select an inventory and click **Actions>Generate Physical Inventory Snapshot**.
- **3.** In the Scheduled Processes work area, search for the process ID and download the physical inventory snapshot attached in the Log and Output section.

**Note:** There should be no reservations or open picks before you take the physical inventory snapshot. If there are existing reservations on items during a physical inventory snapshot, and those items require adjustments resulting from the physical inventory count, the Post Physical Inventory Adjustment process will result in error. You must manually delete the reservations and then process the errored pending transactions again.

#### Related Topics

Generate Physical Inventory Snapshot

# Generate Physical Inventory Tags

# **Physical Inventory Tags**

You generate and print physical inventory tags for counting inventory items.

Physical inventory tags represent actual paper tags that some companies use to count inventory items. A tag contains the count for a group of a given item.

Oracle Inventory Management generates one tag for every unique combination of item, subinventory, locator, lot, serial, and revision for which the application has on-hand quantity not equal to zero.

The tag generation process doesn't print physical tags. It generates electronic records of tags. You must run the Physical Inventory Tags report to print physical inventory tags. For a specified physical inventory, you can print all tags or ranges of tags for a single subinventory or all subinventories.

The Generate Physical Inventory Snapshot scheduled process must complete successfully before you can generate physical inventory tags.



# **Print Physical Inventory Tags**

To generate and print physical inventory tags, complete these steps:

- Click Manage Physical Inventories from the Counts task list in the Inventory Management work area.
- 2. Search for and select a physical inventory and click **Actions** > **Generate Physical Inventory Tags**.
  - Note the process ID.
- 3. In the Scheduled Processes work area, click **Schedule New Process**.
- 4. Enter Print Physical Inventory Tags Report in the Name field and click OK.
- 5. Enter values for the Organization and Physical Inventory fields and click Submit.
  - Note the process ID.
- **6.** In the Scheduled Processes work area, search for the process ID of the **Print Physical Inventory Tags Report** and download the physical inventory tags document from the Log and Output section.

#### Related Topics

Generate Physical Inventory Tags

# Record Physical Inventory Tags

# Overview of Recording Physical Inventory Tags

You use physical inventory tags to record the physical counts of inventory items. Although you can record only one item on a tag, multiple tags can reference the same item, with each tag referring to a unique physical location for an item.

To record tags, you can create a single dynamic tag for a physical inventory to enter counts for any item without a pregenerated tag number. You can also create dynamic tags for unexpected item count entries, and default tags, blank tags, or both for counting miscellaneous items.

### **Record Physical Inventory Tags**

To record physical inventory tags, complete these steps:

- Click Record Physical Inventory Tags from the Counts task list in the Inventory Management work area.
- 2. Search for and select a physical inventory.
- 3. Click Actions and then click one of the following:
  - Create Dynamic Tag
  - Record Blank Tags
- 4. Click Save and Close.

**Note:** You can select up to 500 rows to record at one time.



# FAQs for Record Physical Inventory Tags

#### What should I do with unused tags?

Void unused default and blank tags. Typically, companies are required to track the status of each inventory tag that is generated. For this reason, you should void unused tags to alleviate the chances of unused tags being reported as missing or lost.

When you void a default tag (such as a tag that identifies a stock-keeping unit for which there is system on-hand quantity), the quantity in that location is adjusted to zero. Voiding the tag indicates that you did not use the tag in question, presumably because the stock-keeping unit corresponding to the tag did not exist.

### When should I create dynamic tags?

Create dynamic tags when you are performing a physical inventory count and find items for which tags have not been generated. Use dynamic tags to record counts for these items.

#### How can I record multiple physical inventory tags at one time?

On the Record Physical Inventory Tags page, search for the physical inventory records that you want to record. Select each transaction row that you want to record and click either Create Dynamic Tags or Record Blank Tags from the Actions menu.

You can select up to 500 rows to record at one time. If you have more than 500 rows to record physical inventory tags for, modify the search criteria (for example, based on tag numbers) so that the total rows don't exceed 500.

How can I record physical inventory tags for a consigned inventory item? Enter a value for the owning party on the Record Physical Inventory Tags page.

How can I create a dynamic or blank tag for a consigned inventory item? Enter a value for the owning party on the Record Physical Inventory Tags page.

# Approve Physical Inventory Adjustments

### Overview of Approving Physical Inventory Adjustments

You can approve, reject, or reset the status of physical inventory adjustments to pending approval.

The adjustments are determined by the approval option you define for your physical inventory. If you approve an adjustment, Oracle Inventory Management adjusts your inventory balance by that quantity. If you reject an adjustment, Inventory Management doesn't change the on-hand quantity.

Physical inventory adjustments don't occur until they're posted.



# Approve Physical Inventory Adjustments

To manage a physical inventory adjustment, perform these steps:

- Click Approve Physical Inventory Adjustments from the Counts task list in the Inventory Management work area.
- 2. On the Approve Physical Inventory Adjustments page, search for and select a physical inventory, and click **Actions** and select one of the following:
  - Approve
  - Reject
  - Reset to Pending

**Note:** You must either reject or approve all adjustments for a physical inventory before you can start processing your adjustments.

3. Click Save and Close.

# FAQs for Approving Physical Inventory Adjustments

How can I approve physical inventory adjustments for consigned inventory items? Enter a value for the owning party on the Approve Physical Inventory Adjustments page.

# Post Physical Inventory Adjustments

# Posts for Physical Inventory Adjustments

When you post physical inventory adjustments, Oracle Inventory Management creates a material transaction, adjusting the item quantity and debiting or crediting the adjustment account that the user specifies for the physical inventory.

If the count of an item matches the snapshot on-hand quantity, no adjustment transaction is posted.

After inventory adjustments are posted, users can't make any changes to the physical inventory. They can't generate new tags or update tag counts.

# Post Physical Inventory Adjustments

To post an inventory adjustment, complete these steps:

- 1. Click Manage Physical Inventories from the Counts task list in the Inventory Management work area.
- 2. Search for and select an inventory and click **Actions** > **Post Physical Inventory Adjustments**.



- 3. Enter the Adjustment Date and click OK.
  - Note the process ID.
- **4.** In the Scheduled Processes work area, search for the process ID to view the status of the posted adjustment.
- **5.** Once the process completes successfully, verify that the **Adjustments Posted** check box on the Manage Physical Inventories page shows selected.

**Note:** To ensure data accuracy in posting your final physical inventory adjustments, it's best practice to stop all transactions during a physical inventory.

#### Related Topics

Post Physical Inventory Adjustments

### Troubleshooting the Post Physical Inventory Adjustment Process

When you submit the Post Physical Inventory Adjustments process, the process picks up the adjustments to post in batches of 100 adjustments at a time. For each set of 100 adjustments, the process calls the Inventory Transaction Manager. Once the first set of 100 adjustments results in a success from the Inventory Transaction Manager, the next set of 100 records are picked up. This continues until all adjustments are processed.

If the Inventory Transaction Manager fails to process any adjustments for a specific set of 100 records, then the scheduled process stops and ends in error. Most often, this error is due to not following the best practice to restrict transactions during a physical inventory.

Monitor the results of your Post Physical Inventory Adjustments scheduled processes. If the process ends in an error, submit the process again until the process ends in success and the **Adjustments Posted** check box on the Manage Physical Inventories page shows selected.

You also want to review the pending transactions for any stuck transactions after the Post Physical Inventory Adjustments process is run. If the Post Physical Inventory Adjustments process fails, it will show one or more records on the Pending Transactions page. The transactions will display with an error status and show specific error details. You must review and correct these records and resubmit them for processing.

**Note:** When the Post Physical Inventory Adjustments process fails, the scheduled process log file instructs you to review the Pending Transactions page.

### Physical Inventory Adjustments for Consigned Items

You can have positive or negative physical inventory adjustments for consigned items.

When a negative adjustment happens for the consigned on-hand quantity, first an implicit **Transfer to Owned** transaction takes place for the item. Then, the cycle count adjustment occurs on the owned material. Basically, you're consuming the consigned item so there's a consumption advice created.

When a positive cycle count adjustment happens for the consigned on-hand quantity, first a cycle count adjustment takes place on the owned material. Then, an implicit **Transfer to Consigned** transaction occurs. This results in the reverse of a consumption advice.



Note that positive adjustments for consigned material are much more restrictive because the final quantity after the positive adjustment can't exceed the total quantity received from the supplier for the consigned item.

### FAQs for Post Physical Inventory Adjustments

#### What happens when I post physical inventory adjustments?

When you post physical inventory adjustments, a material transaction is created that adjusts the item quantity and debits or credits the adjustment account that you specify for the physical inventory.

If the count of an item matches the snapshot system on-hand quantity, there is no adjustment transaction posted. After adjustments are posted, you can't generate tags, update tag counts, or make any changes to that physical inventory. Physical adjustments aren't posted if any are pending approval; you must approve or reject all of your adjustments before you can post them.

# Purge Physical Inventory

# **Physical Inventory Purges**

Organizations typically retain several years of inventory data for various business reasons. However, you may sometimes need to purge a physical inventory for database performance or other reasons. You can choose to purge a physical inventory or only physical inventory tags.

# Purge a Physical Inventory

Use the Purge Physical Inventory process to remove physical inventory records from the database. You can choose to remove the complete physical inventory or only the physical inventory tags.

You can purge physical inventory from the Manage Physical Inventories page or the Scheduled Processes work area.

### Purge from Manage Physical Inventories Page

To purge cycle counts from the Manage Physical Inventories page:

- 1. Select Manage Physical Inventories from the Counts task list in the Inventory Management work area.
- 2. Search for and select a physical inventory.
- **3.** Select **Purge Physical Inventory** from the **Actions** menu.



- In the Purge Physical Inventory dialog box, determine the purge scope and decide whether to purge error records.
  - When you select **All** for the **Purge Scope** option, the process deletes all data for the physical inventory from the database. If you select **Tags Only**, only the physical inventory tags are deleted.
  - If you select **Yes** for the **Purge Error Records** field, the process deletes all pending transactions for physical inventory, along with corresponding tags and adjustments. If you select **No**, only physical inventory tags and adjustments are deleted after all pending transactions are processed.
- 5. Click Ok.

### Purge from Scheduled Processes Work Area

To purge cycle counts from the Scheduled Processes work area:

- 1. From the Navigator, select Tools > Scheduled Processes.
- 2. Click the Schedule New Process button.
- 3. Search for and select the **Purge Physical Inventory** process.
- 4. Enter your organization and physical inventory name.
- 5. Determine whether to purge the physical inventory setup.
- 6. Select a value for the Purge Error Records field:
  - Yes: Purge pending physical inventory transactions along with corresponding tags and adjustments.
  - No: Purge only tags and adjustments after all pending transactions are processed. This is the default value.
- 7. Click Submit.

**Note:** If you select **Yes** for **Purge Error Records** and choose **No** for the **Purge Physical Inventory Setup** field, then the application deletes only the physical inventories that have error records in pending transactions, along with their corresponding tags and adjustments. If you select **Yes** for the **Purge Physical Inventory Setup** parameter, the application purges the setup data associated with the physical inventory.

#### Related Topics

Purge Physical Inventory

# FAQs for Purge Physical Inventory

### What happens when I purge physical inventory information?

Oracle Inventory Management deletes all information associated with the physical inventory. However, the purge doesn't affect any adjustments or adjustment transactions made using the physical inventory.

If a purge is done mistakenly, the user can decide to purge only tags for a physical inventory or perform the physical count from the beginning again.



# When does the Purge Physical Inventory process delete pending physical inventory transactions?

If you select Yes for the Purge Error Records field when submitting the Purge Physical Inventory process, the process also deletes the physical inventory pending transactions (for that physical inventory only), along with the corresponding tags and adjustments.

### Why did I get a physical inventory purge error?

When purging a physical inventory, an error is raised if you have pending inventory transactions for the physical inventory.

This could happen if someone uploaded physical inventory tags, but didn't process them yet. This error assures that you're aware of any pending transactions in the application against the physical inventory and forces you to process the pending transactions.



# **9** Transfer Orders

### **Transfer Orders**

Transfer orders represent demand and supply in a single document. Transfer orders support interorganization, intraorganization, and intercompany transfers.

You can perform these actions on transfer orders:

- Pick, ship, receive, put away, and return against a transfer order document
- View shipments and receipts associated with the transfer order
- Update attributes such as source organization, requested delivery date, and requested quantity on the transfer order
- Monitor the transfer order line status, fulfillment status, and interface status

# **Transfer Types**

Transfer types determine how to transfer material between two inventory organizations. Transfer types apply to both interorganization and intraorganization (intersubinventory) transfers, and are applicable to both inventory and expense destination transfers.

Transfer types apply to:

- · Inventory destination transfers
- Expense destination transfers

### **Inventory Destination Transfers**

Inventory destination transfer orders require movement to a destination inventory warehouse location. With inventory destination transfers, you have a shipment in the source organization that decrements the source location's inventory, and a put away transaction in the destination organization that increments the destination location's inventory.

Transfer types include:

- Direct transfer type
- In-transit transfer type

Direct interorganization transfers move items directly between inventory organizations. The destination organization receives the material immediately when you submit the transaction. Direct intersubinventory transfers move inventory directly from the shipping subinventory to the destination subinventory within an organization. In both cases, the transfer of material is immediate and no receipt is required by the requesting organization.

In-transit interorganization transfers move items directly from the source organization to in-transit inventory. In-transit intersubinventory transfers move inventory from the shipping subinventory to the in-transit inventory. Receipts are required for in-transit transfer types and you must specify the receipt routing.



#### Receipt routing options include:

- **Standard**: Receive the item first, and then deliver without inspection.
- Direct: At receipt, deliver this item directly to its location.
- **Inspection**: Receive the item first, inspect it, and then deliver the item.

With in-transit transfer types, you can track the inventory until it arrives at the destination organization. You usually transfer material to in-transit inventory when transportation time is significant.

### **Expense Destination Transfers**

Expense destination transfer orders transfer material from an inventory warehouse location directly to the buyer's location for immediate usage. With expense destination transfers, there is no put away transaction in Inventory since the item is expensed, and the destination inventory isn't incremented.

You must indicate whether or not a receipt is required in the destination inventory organization for expense destination transfers going to that destination location. If you select this option, a receipt is required on interorganization expense destination transfer orders between the from and to organizations. If you don't select this option, then the transfer order is considered received and delivered at the time of shipment. This field is available for Expense destination types only.

If the **Receipt Required at Expense Destination** option is set, you must specify the receipt routing.

Receipt routing options include:

- **Standard**: Receive the item first, and then deliver without inspection.
- Direct: At receipt, deliver this item directly to its location.
- **Inspection**: Receive the item first, inspect it, and then deliver the item.

### Transfer Order Statuses

Transfer order statuses represent the current state of the internal material transfer.

Statuses for transfer orders include:

- · Transfer order status
- Transfer order line status
- · Transfer order fulfillment status
- Transfer order interface status

### Transfer Order Status

This tables shows the transfer order statuses.

Transfer Order Status	Description
Open	Transfer order open for shipping and receiving.



Transfer Order Status	Description
Closed	Transfer order when all lines are fully received or canceled.

# Transfer Order Line Status

This table shows the transfer order line statuses.

Transfer Order Line Status	Description
Open	Transfer order line open for shipping and receiving.
Closed	Transfer order line when all lines are fully received.
Canceled	Transfer order line canceled for shipping and receiving operations.

### Transfer Order Fulfillment Status

This table shows the transfer order fulfillment statuses.

Transfer Order Fulfillment Status	Description
Partially shipped	Transfer order line is shipped partially from the source organization. For this status, less than 100 percent of the requested quantity is shipped.
Shipped	Transfer order line is shipped completely from the source organization. For this status, 100 percent of the requested quantity is shipped.
Shipped and partially received	Transfer order line is shipped completely from the source organization, but received partially in the destination organization. For this status, 100 percent of the requested quantity is shipped, but less than 100 percent of the quantity is received.
Partially shipped and partially received	Transfer order line is shipped partially from the source organization and received partially in the destination organization.
Shipped and received	Transfer order line is shipped completely from the source organization and received completely in the destination organization.
Awaiting fulfillment	Transfer order line awaiting fulfillment from the source organization. In this status, the line is created, but shipping hasn't yet begun.

### Transfer Order Interface Status

This table shows the transfer order interface statuses.



Transfer Order Interface Status	Description
Awaiting interface to Order Management	Transfer order is awaiting interface to Oracle Order Management.
Awaiting interface to Shipping	Transfer order is awaiting interface to Oracle Shipping.
Interfaced to Order Management	Transfer order is communicated to Oracle Order Management.
Interfaced to Shipping	Transfer order is communicated to Oracle Shipping.
Order Management interface error	Transfer order encountered an error during the interface to Oracle Order Management.
Shipping interface error	Transfer order encountered an error during the interface to Oracle Shipping.

# How Transfer Orders Are Processed

Transfer orders transfer inventory for interorganization, intraorganization, and intercompany flows. You can transfer material to inventory destinations or expense destinations.

# Settings That Affect Transfer Order Processing

The settings that affect transfer order processing include:

- Inventory destination transfer type
- · Receipt routing
- · Transfer order required
- · Receipt required at expense destination

This table describes the parameters for transfer order processing.

Parameter	Description
Inventory Destination Transfer Type	Determine how material should be transferred between two inventory organizations. Specify either direct or in-transit transfer types.
Receipt Routing	Specify the receipt routing for in-transit transfer types. Receipt routing options include Standard, Direct, and Inspection.  You can specify a separate receipt routing option for inventory destination transfers and expense destination transfers.
Transfer Order Required	Indicate whether a transfer order is required for each transfer.



Parameter	Description
Receipt Required at Expense Destination	Indicate whether or not a receipt is required in the destination inventory organization for expense destination transfers going to that destination location. If you select this option, a receipt is required on interorganization expense destination transfer orders between the from and to organizations. If you don't select this option, then the transfer order is considered received and delivered at the time of shipment. This field is available for Expense destination types only.

### How Transfer Orders Are Processed for Inventory Destination Transfers

Use the Manage Intersubinventory Parameters setup task to configure parameters for transferring material between two subinventories within an organization. When material is transferred between subinventories, intersubinventory parameters determine the transfer type and receipt routing.

For an in-transit transfer type, intersubinventory transfers move material to in-transit inventory before reaching the destination subinventory. Receipts are required for in-transit transfer types. For the direct transfer type, intersubinventory transfers move your material directly from the shipping subinventory to the destination subinventory.

Use the Manage Interorganization Parameters setup task to specify how material should be transferred between two inventory organizations. Also, indicate whether a transfer order is required for each transfer.

When creating transfer orders from Oracle Planning, min-max planning, and as supply orders in back-to-back situations, the transfer order also has an inventory destination.

Transfer orders with an inventory destination must be delivered to a subinventory and locator.

### How Transfer Orders Are Processed for Expense Destination Transfers

For expense destination transfers, when selecting the **Expense Destination** type on the Manage Intersubinventory Parameters page, you must set the **Receipt Required at Expense Destination** option. If a receipt is required, you must also choose the receipt routing. You can optionally enter the source subinventory.

If you enter a source subinventory for an Expense destination type, then the parameters on this row apply to all intraorganization expense destination transfer orders sourced from the entered subinventory. If a subinventory isn't entered, then the parameters on this row become the default parameters for the organization, and the parameters are applied to any intraorganization expense destination transfer order that's sourced from a subinventory that doesn't have a specific intersubinventory parameter row defined.

**Note:** If the source subinventory for an intraorganization expense destination transfer order isn't found on an intersubinventory parameter row at shipping time, and a default parameter row hasn't been set up, then the **Receipt Required at Expense Destination** option is automatically set to not selected, and the transfer order is considered received and delivered at the time of shipment.

When creating transfer orders from Oracle Fusion Cloud Self Service Procurement, the Manage Item Quantities page, spreadsheet upload, and the Supply Order web service, you can create either inventory or expense destination transfers.

Transfer orders with an expense destination must be delivered to a location.

#### Related Topics

- Transfer Types
- Intersubinventory Parameters



# Transfer Order Billing Details for Requisitions

For transfer orders sourced from requisition lines, you can view distribution details and change the requested quantity and amount at the distribution level. You can also have multiple distributions of the line level quantity spread across different accounts.

These fields on the Edit Transfer Order page enable you to view and edit the billing details.

- Distribution
- Charge Account
- Requested Quantity (%)
- Requested Quantity (each)
- Amount
- Delivered Quantity

These fields provide a detailed breakout of accounting distribution details for the associated transfer order line on transfer orders created from requisitions.

**Note:** If you are using budgetary control or encumbrance accounting, you can also view the budget date and fund status.

# Transfer Order Supply Sources

Use sourcing tools to manually create internal material transfer requisition lines in Oracle Fusion Cloud Self Service Procurement, as well as create supply requests from the Manage Item Quantity page.

To identify the source organization for a transfer order request, you can initiate the rule-driven Select Supply Source page by clicking the **Select Supply Source** button. The sourcing tools provide a default source organization and enable use of source organization rankings and available to promise quantities. Source organization rankings are based on preestablished rules.

The individual source organization alternatives are displayed along with available inventory quantities at those organizations. If the item is not a planned item, then the ranking is performed using the distance values that are set up for the given from and to organization pairs on the Manage Interorganization Parameters setup page.

### Notes on Transfer Orders

You can add notes to transfer orders on the Manage Transfer Order page.

The two types of notes include:

Notes to supplier



Notes to receiver

### Notes to Supplier

Enter notes to the supplier to provide instructions for shipping and receiving personnel. You can add information in the **Notes to Supplier** field that prints as shipping instructions on the packing slip and bill of lading.

#### Notes to Receiver

You can add notes in the **Notes to Receiver** field that display on receiving pages. This gives the receiving clerk additional information at receiving time.

# How You Create an Ad-Hoc Transfer Order Request

You can create ad-hoc internal material transfers directly from the Manage Item Quantities page.

Select the **Request Transfer Order** item from the **Actions** menu to request an ad-hoc transfer of goods. This initiates the Create Supply Request page where you can enter your transfer order details, create the transfer order, and submit it for processing.

If you previously selected an item on the Manage Item Quantities page, that item is prepopulated when you access the Create Supply Request page. You can add additional items to the transfer order request directly from the Create Supply Request page. You can also select the **Request Transfer Order** action without first selecting an item. This enables you to create a transfer order for any item, even if it does not currently have a balance history in inventory.

**Note:** You must implement the Manufacturing and Supply Chain Materials Management offering to create ad-hoc order requests.

### Inventory and Expense Destinations

You can enter both inventory destination and expense destination transfers on the Create Supply Request page, as well as interorganization and intraorganization transfer orders.

### Select Supply Source

To identify the source organization for the transfer order request, use the rule-driven Select Supply Source page by clicking the **Select Supply Source** button. This page ranks the different source organizations based on previously-established sourcing rules set up in Oracle Global Order Promising. The individual source organization alternatives are displayed along with available inventory quantities at those organizations. If the item is not a planned item, then ranking is performed using the distance values that are set up for the given from and to organization pairs on the Manage Interorganization Parameters setup page.

### Supply Details

To enter additional details for the transfer order request, click the **Supply Details** icon on the detail line.

This enables you to:

Manually enter a source organization.



- Change the destination type between inventory and expense.
- · Enter a source subinventory.
- Enter a destination location for expense destination transfers.

#### Related Topics

Create Supply Requests

# Query by Example for Items on Transfer Orders

You can quickly search for a particular item on a transfer order using the Query by Example search option. This is an efficient way to find a specific item on your transfer order when you have many goods on a single order.

- 1. From the Inventory Management work area, select the Manage Transfer Orders task.
- 2. On the Manage Transfer Orders page, search for and select a transfer order.
- On the Edit Transfer Order page, click the Query by Example icon in the toolbar to enable the Query by Example search framework.
  - A blank filter row appears immediately above the **Item** column. Use this row to filter your items.
- Search for your item or a group of items by entering a partial or complete item name in the filter row and pressing Enter.

Items in the table matching the full or partial item name you entered display.

**Note:** When entering text in the filter row, the text or partial text you enter is case-sensitive. The case must match exactly.

5. To return to the regular view, click the **Query by Example** icon again.

# How You Use the Destination Inventory Organization as Customer on Internal Material Transfers

You can use the destination inventory organization as the customer when managing shipments and transfer orders.

This provides better grouping and tracking when multiple requesters initiate internal material transfers for an organization. The destination inventory organization appears in the **Customer** field in shipping and order management user interfaces when processing.

To use the destination organization as the customer, you must complete these tasks:

- Create a customer and customer account representing the destination inventory organization (this is a prerequisite).
- Associate the customer and customer account with the inventory organization in the Manage Organization Parameters page of the Manage Inventory Organizations task.



• Optionally set up a release rule for the destination inventory organization using the Manage Pick Wave Release Rules task. This enables you to create and schedule pick waves by customer and not individual order.

# Substitute Items on Transfer Orders During Pick Release

You can automatically pick release a substitute item in place of the original requested item on a transfer order line if you've enabled a specific organization and set up item substitute relationships. The ability to pick substitute items for your transfer orders provides greater flexibility in case you run out of goods to fulfill internal demands.

Once you enable the feature for an organization, all transfer order and shipment lines created in that organization default to allow item substitution, represented by an attribute on the line. You can disable this on a line-by-line basis. Likewise, if the organization isn't enabled, you can enable it line by line. Both transfer order and shipment lines show an attribute against the original requested item to indicate the use of a substitute item.

You can define item-substitute relationships in the Product Information Management work area, at the master or destination organization level, by rank. At pick release, depending on the original requested item's availability, the functionality cycles through the ranked item relationships, by level in hierarchy and then rank, to determine which substitute items meet the requested quantity. You can define many item-substitute relationships. However, pick release stops looking for substitutes after considering three viable items. Any quantity outstanding from there is backordered in the original item, or canceled if the appropriate setup is in place.

Here are important notes about using substitute items for transfer orders:

- Shipment lines show original and substitute items used to fulfill the demand from pick release onwards, including their statuses.
- Once the transfer order line has shipped, you can review the substitute items used, but the transfer order line
  only represents the original item. Backorders are also only for the original item. Shipment lines represent all
  items after being released to the warehouse.
- Reservations are maintained according to item substitutions at pick release, but item substitution isn't supported for transfer order lines with prior reservations.
- Changes to the transfer order are supported for lines using substitute items.
- Item substitution isn't available for return transfer orders, back-to-back sales orders being fulfilled by transfer orders, or for organizations located in Brazil, India, or Portugal due to tax implications.
- Control of item substitution at the transfer order line level is supported by the Manage Transfer Orders pages and through the Inventory Transfer Orders REST resource.
- Releasing a pick online shows you in the UI the number of substitute items used, whereas scheduling a pick release generates a log with more information on the substituted items.
- When item substitution happens at pick release for transfer order lines under budgetary control, there's no change to the existing funds reservation and there are no new approvals generated for the substitution.
- This capability is only available when transferring materials internally, directly through Oracle Shipping.
- This capability is only available when creating or scheduling a pick wave, pick releasing from shipment lines, or through the Pick Waves REST resource.

**Note:** It's recommended that you don't specify multiple child processes when scheduling a pick wave where item substitutes are likely, as this could result in parallel picking errors.

• Substitute items can be for different units of measure than the original item, with standard, interclass, and intraclass conversion required as appropriate, except for dual unit of measure items, which must have the same primary and secondary unit of measure as the original item in the destination organization.



**Note:** It's recommended for the substitute items to have the same unit of measure as the original item. Having different units of measure can lead to fractional quantities left over in certain scenarios.

#### Related Topics

Use Substitute Items During Pick Release for Transfer Orders

# Use Substitute Items During Pick Release for Transfer Orders

To automatically pick release a substitute item in place of the original requested item on a transfer order line, you must enable a specific organization and set up item substitute relationships.

- 1. Enable the specific organization.
  - a. In the Setup and Maintenance work area, select the Manage Inventory Organizations task:
    - Offering: Manufacturing and Supply Chain Materials Management
    - Functional Area: Inventory Management
    - Task: Manage Inventory Organizations
  - b. Search for the organization and enable the Warehouse accepts substitute items check box. This must be consistent with the destination inventory organization on the transfer order, and it ensures the Allow item substitution check box is checked for any transfer order lines raised in that organization.
- 2. Set up item substitute relationships.
  - a. In the Setup and Maintenance work area, select the Manage Items task.
    - Offering: Manufacturing and Supply Chain Materials Management
    - Functional Area: Product Information Management
    - Task: Manage Items
  - **b.** Select the Relationships tab, and then the Related Items tab.

The relationships can be direct or chain relationships. You can define the relationships at either the master or the organizational level, but you can't define them at both. If set at the organization level, the relationship refers to the destination organization in the context of a transfer order. If set at the master level, the relationship is always valid. The rank, within the level of the hierarchy, determines the order in which the items are considered at pick release. The type will always be substitute, and you have the option of defining the relationship as reciprocal, therefore both ways.

**Note:** When configuring a related item relationship, the **Reciprocal** check box isn't supported. To define a reciprocal item relationship, you must define two separate related item relationships. For example, Item A is related to Item B and Item B is related to Item A.

#### Related Topics

Substitute Items on Transfer Orders During Pick Release



# How Item Substitution at Pick Release Works for Transfer Order Lines Under Budgetary Control

You can enable item substitution during pick release for your expense destination transfer orders that are enabled for budgetary control.

#### Here's how it works:

- 1. The process starts with the creation of an internal requisition under budgetary control for an expense destination. The transfer order created by the internal requisition is also under budgetary control.
- 2. The requisitioned item is available on the transfer order. The **Allow Item Substitution** column is checked on the transfer order line if valid substitutes are setup for the item and the destination organization is enabled for item substitution.
  - You can view the **Allow Item Substitution** check box on the Manage Transfer Orders page. If you drill down into the order, you can also view this check box on the Edit Transfer Order page for the specific transfer order.
- **3.** The shipment line is created with the requisitioned item. Once the line is pick released, picks are created for substitute items if sufficient on-hand quantity for the original shipment line isn't available.
  - You can see that the **Allow Item Substitution** column is checked for the transfer order on the Manage Shipment Lines page.
- **4.** On the Confirm Pick Slips page, the pick slip shows the substitute item picked if the on-hand quantity for the requisitioned item isn't sufficient.
- **5.** On the Manage Shipment Lines page, the shipment line shows the requisitioned item and its substitute after pick release and can be further processed to ship confirm.

# Substitute Items for Transfer Order Lines Interfaced to an External WMS or 3PL

You can substitute an item in place of the original requested item on a transfer order line that's interfaced to an external Warehouse Management System (WMS) or Third-Party Logistics (3PL) if you've enabled a specific organization and set up item substitute relationships. The ability to send substitute items to your external execution system when fulfilling transfer orders provides you greater flexibility to fulfill your internal orders and keeps your business running without unnecessary delays.

Once you enable the feature for an organization, all transfer order and shipment lines with that destination organization default to allow item substitution, represented by an attribute on the line. You can disable this on a line-by-line basis. Likewise, if the organization isn't enabled, you can enable it line by line. Both transfer order and shipment lines show an attribute against the original requested item to indicate the use of a substitute item.

You can define item-substitute relationships in the Product Information Management work area, at the master or destination organization level, by rank. When fulfilling transfer orders, depending on the original requested item's availability, the functionality cycles through the ranked item relationships, by level in hierarchy and then rank, to determine which substitute items meet the requested quantity. You can define many item-substitute relationships. However, the application stops looking for substitutes after considering three viable items.



Your shipment line may be split for the original item based on the on-hand availability for the substitute item in the source organization and the setting of the **Reservation Behavior for Integration to External System** parameter on the Manage Shipping Parameters page.

This table describes actions taken based on the setting of the **Reservation Behavior for Integration to External System** parameter on the Manage Shipping Parameters page. Choices include **Partial** or **Full**.

Reservation Behavior for Integration to External System	Actions				
Partial	<ul> <li>The transfer order line created for the original item is split if the requested quantity for the original item can be partially substituted by substitute items or by a combination of original and substitute items.</li> </ul>				
	<ul> <li>The Generate Shipment Request process determines the substitute item to meet the transfer order demand for the original item. It splits the shipment lines for the original item based on the availability of the original and substitute items and interfaces the shipment lines for the substitute items to the external systems.</li> </ul>				
	<ul> <li>The integration status for the shipment lines corresponding to the substitute items for the available quantity changes to Interfaced.</li> </ul>				
	<ul> <li>The shipment lines for the original item for the unavailable quantity remain in Ready to Interface status.</li> </ul>				
	<ul> <li>A Non-reserved line not interfaced shipping exception is logged against the shipment line for the original item for the unavailable quantity.</li> </ul>				
	<ul> <li>Reserves the original item on the transfer order to the available quantity of the original item and substitute items in order of their ranks when the Reservation Behavior for Integration to External System is set to Partial.</li> </ul>				
Full	<ul> <li>The shipment line for the original item is split and interfaced to external systems only when the requested quantity for the original item can be fully substituted with the substitutes or a combination of original and substitute items.</li> </ul>				
	<ul> <li>The Generate Shipment Request process splits the shipment line for the original item based on the availability of the original and substitute items and interfaces the shipment lines for the substitute items to the external systems.</li> </ul>				
	<ul> <li>The integration status for the shipment lines corresponding to the substitute items for the available quantity changes to Interfaced.</li> </ul>				
	<ul> <li>The shipment line for the original item is split for the available quantity when the original item is partially available, and it's canceled when the original item isn't available.</li> </ul>				
	<ul> <li>A Non-reserved line not interfaced shipping exception is logged against the shipment line for the original item when the available quantity of original and substitute items is less than the quantity requested for the original item on the transfer order line.</li> </ul>				
	<ul> <li>When the substitute items aren't available in full quantity to fulfill the requested quantity of the original items, the Generate Shipment Request process keeps the shipment line for the original item in the Ready to Release status and logs a shipping exception against the shipment line for the original item for the requested quantity.</li> </ul>				
	<ul> <li>Fully reserves the original item on the transfer order to the available quantity of the original item and substitute items in order of their ranks when the Reservation Behavior for Integration to External System parameter is set to Full.</li> </ul>				

Ship confirmation is processed for the substitute items for the transfer order line using the Shipment Transaction Requests REST resource (shipment Transaction Request).



If backorders are necessary, the backorder action for the substitute item uses the Shipment Line Change Requests REST resource (shipmentLineChangeRequests) to cancel the shipment line for the substitute item. This creates a new line for the original item for the backordered quantity.

A partial backorder of the substitute item reduces the requested quantity for the shipment line by the backordered quantity, and the shipment lines for the substitute item stays in the **Ready to Release** status. This creates a new line for the original item for the backordered quantity.

## Important Notes

Here are important notes about using substitute items for transfer orders:

- Once the transfer order line has shipped, you can review the substitute items used, but the transfer order line
  only represents the original item.
- Reservations are maintained for the original requested item on the transfer order when the **Generate Shipment Request** process is run for a transfer order.
- Reservations for substitute items are deleted when a backorder action is performed by external systems on a shipment line.
- You can't make changes to the transfer order quantity after the transfer order interfaces to external systems.
- You can reset the shipment status for a substitute item in Shipping. This moves the lines to **Ready to Interface** status. Reduction in the transfer order quantity for the original item after reset of the shipment status cancels the shipment lines for substitute items and relieves the reservations associated to the substitute items.
- Item substitution isn't available for return transfer orders, back-to-back sales orders being fulfilled by transfer orders, transfer order lines with budgetary control, or for organizations located in Brazil, India, or Portugal due to tax implications.
- Control of item substitution at the transfer order line level is supported by the Manage Transfer Orders pages and through the Inventory Transfer Orders REST resource.
- This capability is only available when transferring materials internally, directly through Oracle Shipping.
- Substitute items can be for different units of measure than the original item, with standard, interclass, and
  intraclass conversion required as appropriate, except for dual unit of measure items, which must have the same
  primary and secondary unit of measure as the original item in the destination organization.

**Note:** It's recommended for the substitute items to have the same unit of measure as the original item. Having different units of measure can lead to fractional quantities left over in certain scenarios.

#### Related Topics

Set Up Substitute Items for Transfer Order Lines Interfaced to an External WMS or 3PL

# Set Up Substitute Items for Transfer Order Lines Interfaced to an External WMS or 3PL

Enable a specific organization and set up item substitute relationships to substitute an item in place of the original requested item on a transfer order line that's interfaced to an external Warehouse Management System (WMS) or Third-Party Logistics (3PL) provider.



## **Enable Specific Organization**

You must first enable the specific organization.

- 1. In the Setup and Maintenance work area, select the Manage Shipping Parameters task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Shipping
  - Task: Manage Shipping Parameters
- 2. Search for the organization and select the **Enable substitution for external system integrations** check box. This check box must be enabled for the source organization if you want the original item to be substituted with substitute items when the original item is not available to meet the demand for a transfer order.
- **3.** In the Setup and Maintenance work area, select the **Manage Inventory Organizations** task:
  - o Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Inventory Management
  - Task: Manage Inventory Organizations
- **4.** Search for the organization and enable the **Warehouse accepts substitute items** check check box. This must be consistent with the destination inventory organization on the transfer order, and it ensures the **Warehouse accepts substitute items** check box is checked for any transfer order lines raised in that organization.

## Set Up Item Substitute Relationships

To set up the item substitute relationships, navigate to the **Manage Items** task.

- 1. In the Setup and Maintenance work area, select the **Manage Items** task:
  - Offering: Manufacturing and Supply Chain Materials Management
  - Functional Area: Product Information Management
  - Task: Manage Items
- 2. Select the Relationships tab, and then the Related items tab.

The relationships can be direct or chain relationships. You can define the relationships at either the master or the organizational level, but you can't define them at both. If set at the organization level, the relationship refers to the destination organization in the context of a transfer order. If set at the master level, the relationship is always valid. The rank, within the level of the hierarchy, determines the order in which the items are considered at pick release. The type will always be substitute, and you have the option of defining the relationship as reciprocal, therefore both ways.

#### Related Topics

Substitute Items for Transfer Order Lines Interfaced to an External WMS or 3PL

## Kit Items for Transfer Orders

A kit item is an item with fixed components that displays the item structure and doesn't have options and classes. The kit item itself is a list of standard, nonconfigurable, nonselectable items that are consistently combined and shipped. The top level is the kit item, and it contains a primary item structure type.



With kit items, you can request pick-to-order kits on a transfer order instead of requesting each component individually. After defining the kit parent item and associating the component structure in Oracle Product Hub, you use the kit parent item name when requesting the transfer order. Upon creation, Oracle Fusion Cloud Inventory Management automatically explodes the kit components onto the transfer order so that picking, shipping, and receiving still occur at the component level.

When the transfer order for the kit item is created, it can be viewed in Oracle Inventory Management on the Manage Transfer Order page. From there, you can review and edit the kit item transfer order. The kit components are shippable items displayed in shipping as individual shipment lines. The shipment lines are automatically grouped into a shipment set at transfer order creation to ensure all items in the kit ship together. Kit items can be entered on both inventory and expense destination transfer orders.

It's common for companies to group several items that frequently ship together into a single kit item for order efficiency purposes. That way the order can be placed for a single item that represents multiple items being shipped.

## Important Notes

- You can create a transfer order for a kit item using the Oracle Supply Chain Orchestration supply request, REST resource, or file-based data import (FBDI). This doesn't apply to kit items on transfer orders routed through Oracle Order Management.
- When defining the kit item from the Product Information Management work area, you must set the **Internally Transferable** and **Transfer Orders Enabled** attributes to **Yes**.
- A kit item can be pick-to-order or prebuilt. For example, kit components can be kept in separate locations, picked individually, and then packed together to fulfill an order.
- You can't cancel a kit component if it's backordered.
- Supply lines in Oracle Supply Chain Orchestration aren't updated when transfer order lines are updated.
- Multiple distributions are supported by Oracle Supply Chain Orchestration from Self Service Procurement
  and interfaced to Inventory Management. Multiple distributions aren't supported for expense and inventory
  destination transfers using the Supply Chain Orchestration REST resource. This is because the REST resource
  doesn't capture distribution percent and distribution quantity as part of the REST payload.

#### Related Topics

- Considerations for Using Kit Items for Transfer Orders
- · Set Up Kit Items for Transfer Orders
- Impact of Shipping Parameters for Kit Items on Transfer Orders

## How Transfer Order Change Management Is Calculated

Many rules apply to changing transfer orders. Transfer orders can be changed by many different people including a warehouse manager and a preparer of requisitions. Transfer order change rules also depend on the transfer order destination type.



## Settings That Affect Transfer Order Change Management

Parameters that affect transfer order change management include who's performing the change and the transfer order destination type. Combinations include:

- Preparer for expense destination transfers
- · Preparer for inventory destination transfers
- User with access to source organization for expense destination transfers
- User with access to source or destination organization for inventory destination transfers
- Users with access to source or destination organization for inventory and expense destination transfers

An additional parameter that affects transfer order change management is whether the transfer order goes directly to Oracle Shipping without passing through Oracle Fusion Cloud Order Management, or if the transfer order passes through Oracle Order Management.

## **Update Rules for Transfer Orders**

Updates to transfer order can be received through a service or from the Manage Transfer Order pages. Updates are applied immediately, may cause repricing, and are communicated to downstream applications in the transfer order process.

These general rules that apply to updating transfer orders:

• You can update shipping attributes, such as the shipping method and shipping priorities, for lines that directly interface to Shipping up until the shipped quantity is recorded against the line.

These lines go directly to Shipping without passing through Oracle Order Management.

 You can update the requested delivery date for lines that are directly interfaced to Shipping until the shipped quantity is recorded against the line.

These lines go directly to Shipping without passing through Oracle Order Management.

- You can update the Note to Receiver and Note to Supplier field from the Manage Transfer Order pages until
  the shipped quantity has been recorded against the line.
- The tables in the following sections note that the quantity can be decreased with the phrase "Allowed, system permitting." Here are the rules for all transfer orders regardless of the transfer order source:
  - You can decrease the quantity without any limitations if the line hasn't had any shipping activity.
  - o If the order is going through Oracle Order Management, then the only quantity decrease that you can perform after a partial shipment, is to update the quantity to that of the shipped quantity.
    - You can't make any other changes to the quantity after the transfer order has been shipped. You can cancel the remaining quantity by setting the quantity to the previously shipped quantity.
  - If the order isn't going through Oracle Order Management, then you can decrease the quantity after a partial shipment, as long as the quantity doesn't go below the previously shipped quantity.

## Changes Made by the Preparer for Expense Destination Transfers

Here are the rules for changes made by the preparer for expense destination transfers. These rules apply to transfer orders linked to requisitions only. This table includes the type of change and whether or not the change is allowed.



Type of Change	Allowed			
Quantity increase	Not allowed			
Quantity decrease	Allowed, system permitting			
Destination Subinventory (doesn't apply for expense destination)	Not available			
Charge Account	Not allowed			
Distribution Quantity, Amount, and Percentage	Decrease allowed, system permitting (Increase not allowed and decrease can't be reduced lower that delivered quantity.)			
Adding a distribution	Not allowed			
Deleting a distribution	Not allowed. Distribution quantity can be set to 0			
Update of source organization (only for lines directly interfaced to Shipping)	Not allowed			

## Changes Made by the Preparer for Inventory Destination Transfers

Here are the rules for changes made by the preparer for inventory destination transfers. These rules apply to transfer orders linked to requisitions only. This table includes the type of change and whether or not the change is allowed.

Type of Change	Allowed			
Quantity increase	Allowed, until shipped quantity is recorded			
Quantity decrease	Allowed, system permitting			
Destination Subinventory	Allowed, until shipped quantity is recorded			
Charge Account	Not allowed			
Distribution Quantity, Amount, and Percentage	(The preparer doesn't make changes here. Since there is a single distribution on inventory destinatio transfers, the application does this automatically when change is allowed at the line level.)			
Adding a distribution	Not allowed			
Deleting a distribution	Not allowed			
Update of source organization (only for lines directly interfaced to Shipping)	Allowed, until shipped quantity is recorded			



Type of Change	Allowed

# Changes Made by the User with Access to the Source Organization for Expense Destination Transfers

Here are the rules for changes made by a user who has access to the source organization for expense destination transfers. These rules apply to transfer orders linked to requisitions, as well as to transfer orders coming in from the spreadsheet upload and supply order web service. This table includes the type of change and whether or not the change is allowed.

Type of Change	Allowed			
Quantity increase	Not allowed			
Quantity decrease	Allowed, system permitting			
Destination Subinventory	Not available			
Charge Account	Not allowed			
Distribution Quantity, Amount, and Percentage	Decrease allowed, system permitting (Increase not allowed and decrease can't be reduced lower the delivered quantity.)			
Adding a distribution	Not allowed			
Deleting a distribution	Not allowed			
Update of source organization (only for lines directly interfaced to Shipping)	Not Allowed for requisition-based expense destination transfers. Allowed until shipped quantity is recorded for expense destination transfers not sourced from requisitions.			

# Changes Made by the User with Access to the Source or Destination Organization for Inventory Destination Transfers

Here are the rules for changes made by a user who has access to the source or destination organization for inventory destination transfers. These rules apply to transfer orders linked to requisitions, as well as to transfer orders coming in from the spreadsheet upload and supply order web service. This table includes the type of change and whether or not the change is allowed.

Type of Change	Allowed	
Quantity increase	(Destination) Allowed, until shipped quantity is recorded	
Quantity decrease	(Both) Allowed, system permitting	



Type of Change	Allowed			
Destination Subinventory	(Destination) Allowed, until shipped quantity is recorded			
Charge Account	Not allowed			
Distribution Quantity, Amount, and Percentage	Decrease allowed, system permitting for requisition-sourced transfer orders (Increase not allowed decrease can't be reduced lower than delivered quantity.)  Not available for transfer orders not sourced from requisitions.			
Adding a distribution	Not allowed			
Deleting a distribution	Not allowed			
Update of source organization (only for lines directly interfaced to Shipping)	(Destination) Allowed, until shipped quantity is recorded			

**Note:** "Destination" in the previous table means that the user with access to the destination organization can make changes, but the user with access to the source organization can't. "Both" means that the user with access to the destination organization or the source organization can make changes.

# Changes Made by the User with Access to the Source or Destination Organization for Inventory and Expense Destination Transfers

Here are the rules for changes made by a user who has access to the source or destination organization for inventory and expense destination transfers. These rules apply to transfer orders from sources other than requisitions, spreadsheet upload, and the supply order web service. These rules apply to transfer orders from sources other than requisitions, spreadsheet upload, and the Supply Order web service. The sources this rule applies to include back-to-back, planning, inventory min-max planning, and the Manage Item Quantities page. This table includes the type of change and whether or not the change is allowed.

Type of Change	Allowed			
Quantity increase	Allowed, until shipped quantity is recorded			
Quantity decrease	Allowed, system permitting			
Destination Subinventory	Allowed on inventory destination transfers until shipped quantity is recorded. Not applicable for expense destination transfers.			
Charge Account	Not allowed			
Distribution Quantity, Amount, and Percentage	Decrease allowed, system permitting (Increase not allowed and decrease can't be reduced lower than delivered quantity.)			



Type of Change	Allowed		
Adding a distribution	Not available		
Deleting a distribution	Not available		
Update of source organization (only for lines directly interfaced to Shipping)	Allowed, until shipped quantity is recorded		

## How You Cancel Quantities on Transfer Orders

You can cancel quantities on transfer orders by using the cancel action or by updating the transfer order and reducing the requested quantity.

You can cancel an entire transfer order line, cancel the remaining portion of a line after a partial shipment has already been made against the line, or just decrease the requested quantity on a transfer order line.

How you can cancel quantities on transfer orders depends on these scenarios:

- Canceling quantities from the Manage Transfer Orders pages
- Canceling quantities from applications outside of Oracle Fusion Cloud Inventory Management
- · Canceling quantities when the transfer order passes through Oracle Fusion Cloud Order Management
- Canceling quantities from the Print Cancel Transfer Order Report process
- Canceling quantities when the automatically cancel transfer order backorders option is set

## Canceling Quantities From the Manage Transfer Orders Pages

When canceling quantities from the Manage Transfer Orders pages, you must decrease the requested quantity if there has already been a partial shipment. You can reduce the requested quantity down to the previously shipped quantity. You can only use the cancel option if there has not been a partial shipment against the line.

## Canceling Quantities From Applications Outside of Inventory

When canceling quantities from applications outside of the Manage Transfer Order page, the cancel action:

- Cancels the line if there has been no shipping activity.
- Automatically reduces the quantity to the shipped quantity if there has been shipping activity.

You can cancel transfer order quantities from requisitions sourced from Oracle Fusion Cloud Self Service Procurement and Oracle Planning. You can also cancel transfer order quantities from the spreadsheet upload or web service in Oracle Fusion Cloud Supply Chain Management.



# Canceling Quantities When the Transfer Order Passes Through Order Management

If the transfer order passes through Order Management, you must reduce the requested quantity to the previously shipped quantity. The requested quantity then equals the previously shipped quantity. You cannot reduce the requested quantity to a quantity greater than or less than the previously shipped quantity if the transfer order has been partially shipped in this situation.

## Canceling Quantities From the Print Cancel Transfer Order Report Process

When canceling quantities from the Print Cancel Transfer Order Report process, the cancel action:

- Cancels the line if there has been no shipping activity.
- Automatically reduces the quantity to the shipped quantity if there has been shipping activity.

# Canceling Quantities When the Automatically Cancel Transfer Order Backorders Option is Set

During pick release, pick confirm, and ship confirm time, you can automatically cancel the remaining quantities on transfer orders that cannot be fulfilled. The decision to cancel the backordered quantities is determined based on a hierarchy of options set up at the subinventory, interorganization parameter, and inventory organization levels.

When canceling quantities with the **Automatically cancel transfer order backorders** option is set, the cancel action:

- Cancels the line if there has been no shipping activity.
- Automatically reduces the quantity to the shipped quantity if there has been shipping activity.

#### Related Topics

How You Automatically Cancel Backordered Transfer Order Lines

# How You Automatically Cancel Backordered Transfer Order Lines

During pick release, pick confirm, and ship confirm time, you can automatically cancel the remaining quantities on transfer orders that cannot be fulfilled.

Many organizations don't want to maintain requests with shortages when goods are not available or completely available at the time the replenishment is being fulfilled. In these situations, the remaining quantity not fulfilled will either be picked up in the next replenishment cycle or fulfilled from another source. Processing automatically cancels any remaining quantities that cannot be fulfilled.

Set up this option to cancel backordered quantities at the inventory organization, interorganization parameter, or subinventory level. You also have the option to override this setup parameter.

- Setup
- Overrides



**Note:** The automatic cancel of backordered transfer order lines does not apply to transfer orders that pass through Oracle Fusion Cloud Order Management.

## Setup

You can set the option to automatically cancel the remaining quantities on transfer orders at the subinventory, interorganization parameter, and inventory organization level. The cancel decision is based on a hierarchy of options.

The decision to cancel the backordered quantities is determined based on a hierarchy of options set up at the following levels:

Subinventory

At the destination subinventory level, select the appropriate option for the **Cancel Backorders** setting. This option specifies whether the cancel decision is made at this level for transfer orders that are being delivered to a specific destination subinventory. Use the Manage Subinventories and Locators task to set this option.

Options for this setting include:

- Cancel remaining quantities
- Do not cancel remaining quantities
- Use next level in hierarchy

If you select the Use next level in hierarchy, the inventory organization is used for intraorganization transfer orders, and the interorganization parameter is used for interorganization transfer orders.

Interorganization parameter

At the interorganization parameters level, select the appropriate option for the **Cancel Backorders** setting. This option specifies whether the cancel decision is made at this level for interorganization transfer orders where the option was not applied at the subinventory level. Use the Manage Interorganization Parameters task to set this option.

Options for this setting include:

- Cancel remaining quantities
- Do not cancel remaining quantities
- Default to source inventory organization level
- Inventory organization

At the source inventory organization level, select the **Automatically Cancel Transfer Order Backorders** check box to indicate the cancel decision in cases where the lower levels in the hierarchy have defaulted up to the inventory organization level. Use the Manage Inventory Organizations task to set this option.

**Note:** You can override these rules manually on the Confirm Pick Slips page or from the Manage Shipments, Manage Shipment Lines, Edit Shipments, and Edit Shipment Lines pages.



#### **Overrides**

You have the ability to override the setting to automatically cancel a backordered transfer order. There are situations where a short pick at pick confirm or a short ship at ship confirm are due to issues outside of shortages. In these cases, you can create a backorder to take the quantity and process it back through the pick release process. This enables you to override the automatic cancellation in a situation where you know the full order quantity can be filled, but you need to release the line again in order to process it. This gives you the ability to allocate, pick, and ship product that is available in the warehouse.

You can override backorder processing in these three areas:

Reservations and Pick pages

Select the **Backorder** action from the **Action Type** menu.

· Pick confirm

If you select a Short Pick exception reason code when picking a line short, then automatically canceling backordered lines is not initiated. In this situation, the status on the delivery line is moved to a Ready to Release status.

**Note:** This creates a split delivery line in a Ready to Release status, and not a Backorder status.

Shipping

The automatic cancellation of backordered transfer order lines can be overridden from the action menus on the Shipping pages (Manage Shipments, Edit Shipments, Manage Shipment Lines, and Edit Shipment Lines). Select the **Backorder** or **Cycle Count** actions from the **Action Type** menu

#### Related Topics

Examples of Automatically Canceling Backordered Transfer Order Lines

## Examples of Automatically Canceling Backordered Transfer Order Lines

If the automatic cancellation of backordered transfer orders setting is set, processing automatically cancels the quantity that cannot be filled on a transfer order at pick release time, when confirming pick slips, and when confirming shipments.

#### Example at Pick Release

If a transfer order with an order quantity of 100 is pick released and only 95 are available, then the remaining 5 are automatically canceled.

For pick release, if the automatic cancellation of backordered transfer orders setting is set, and the full quantity on the transfer order line cannot be filled, then any remaining quantities will be canceled.



## **Example at Pick Confirm**

If a transfer order with an order quantity of 100 has the full 100 pick released, but only 95 are picked, then the 5 that aren't picked are canceled when recording the pick confirm results.

When confirming pick slips any action that creates a backorder goes through the processing to determine if any generated backorders should be canceled.

## **Example at Shipping**

If a transfer order with an order quantity of 100 has the full 100 pick released and pick confirmed, but at shipping time only 95 are ship confirmed, then the remaining 5 are automatically canceled.

Once the picked quantities are pick confirmed and moved into the ship staging area, they can be ship confirmed. On the shipping pages, when selecting the Ship Confirm button or Ship Confirm action type, processing is initiated to determine if any generated backorders should be canceled. If the automatic cancellation of backordered transfer orders setting is set, then the backorder is always canceled when processing the Ship Confirm function.

## Transfer Order Status Report

The transfer order status report provides visibility into transfer order status details.

Use the Print Transfer Order Status Report scheduled process to initiate the report. You must enter a source organization, destination organization, or a requisition business unit to run the scheduled process and create the report.

You can print the transfer order status report using either one of two provided report formats:

- Requisition view
- · Transfer order view

#### Requisition View

The Requisition shows the transfer order information from a requisition focused point of view. Budget status, budget dates and distribution accounts are shown on this report format. This gives a view into open orders for use in period end processing at sites using budgetary control and encumbrance accounting.

## Transfer Order View

The Transfer Order view shows the information more from a warehouse manager's point of view. This format shows details of key transfer order attributes, and enables reporting of orders inactive for a given number of days.

#### Related Topics

Print Transfer Order Status Report



## Print Cancel Transfer Order Report

The Print Cancel Transfer Order Report process enables you to perform a mass cancellation of the remaining quantities on transfer order lines. The remaining quantity is the difference between the requested quantity and the shipped quantity on the transfer order lines. This mass cancellation of transfer orders can be more convenient than canceling one order at a time on the Manage Transfer Orders page.

You can still perform an immediate cancel of backorders at pick release, pick confirm, and ship confirm time. However, this process provides you with an alternative method to automatically cancel remaining quantities on transfer orders. The Print Cancel Transfer Order Report process provides an option to print a report and cancel the transfer order lines based on entered selection criteria. If you do not select the cancel option, the report still prints, and the report shows what would be canceled if the cancel option was selected.

Use the Print Cancel Transfer Order Report scheduled process to initiate the report. You must enter a source organization, destination organization, or a requisition business unit to run the scheduled process and create the report.

You can print the print cancel transfer order report using either one of two provided report formats:

- Requisition view
- Transfer order view

#### Requisition View

The Requisition view shows transfer order information from a requisition focused point of view. The current status of open transfer orders, including details specific to the transfer orders sourced from Oracle Fusion Cloud Self Service Procurement, are shown in this report format.

Additionally, budget status, budget dates, and distribution accounts are shown providing a listing of transfer orders for use in period-end processing at sites using budgetary control and encumbrance accounting.

## Transfer Order View

The Transfer Order view shows the current status of transfer order information oriented from the warehouse manager's point of view. This format provides details of the on-going status of transfer orders coming from many different transfer order sources without the budgetary control fields. The Transfer Order view is the default view.

#### Related Topics

- How the Print Cancel Transfer Order Report Is Processed
- Print Cancel Transfer Order Report

## How the Print Cancel Transfer Order Report Is Processed

The Print Cancel Transfer Order Report process enables you to perform a mass cancellation of the remaining quantities on transfer orders based on selection criteria entered when initiating the process.



The process provides many options such as canceling based on the percentage filled on transfer orders that are partially shipped, days of inactivity, or days past due based on the scheduled ship date. You also have the option to cancel backordered transfer orders only.

The Print Cancel Transfer Order Report process prints a report showing the order being canceled. When you run the process, you have the option to just print the report, or to perform the cancel and print the report. Printing the report only, provides a chance for some fine tuning prior to actually initiating any activity canceling transfer orders.

## Settings That Affect the Print Cancel Transfer Order Report Process

Important parameters that affect the Print Transfer Order Report process include:

- · Percentage filled
- Date type
- Date offset
- Backordered transfer orders only
- · Cancel transfer orders
- Include in-process orders
- · Number of days without activity

In addition to these parameters, you can choose values for many other attributes such as the source and destination organization, item number, and transfer order origin.

Attributes tied to self-service requisitions are also available providing support in budgetary control environments to clean up orders that need to be canceled during period end preparations. This includes attributes such as requisition numbers, budget dates, and charge accounts.

## Percentage Filled

Use this value to optionally determine whether or not transfer orders meeting the selection criteria should be canceled. This option enables you to cancel based on the percentage filled on the transfer orders that are partially shipped. For example, if 95% of an order is shipped, then you can cancel the remaining quantity on the transfer order.

The percentage fill is the rate determined by dividing the Shipped Quantity by the Requested Quantity. If the calculated percentage filled is greater than or equal to the entered value, then the process selects the orders for cancellation. This default value is zero.

#### Date Type

Specify a date type value of None, Scheduled Ship Date, or Requested Delivery Date. The default value is None.

#### **Date Offset**

This option lets you cancel transfer orders for a specified number of days after either the scheduled ship date or the requested delivery date. This value defaults to zero.

## **Backordered Transfer Orders Only**

Set this value to indicate whether or not you want to include only transfer orders that have a backordered line. If this option is selected, then in addition to meeting all the other selection criteria, the transfer order line also needs to have quantities in a backordered status.



**Note:** There may be some quantities in a backorder status and other quantities that aren't. If any backorder was created for the transfer order line, then the transfer order line is eligible to be canceled.

#### Cancel Transfer Orders

If you select the **Cancel Transfer Orders** option, any orders meeting selection criteria that aren't an exception, are canceled.

The process cancels the remaining quantity on transfer order lines. This reduces the quantity on the transfer order line down to the previously shipped quantity. This process also then cancels delivery lines in shipping associated with that transfer order line. All processing that occurs when a quantity on a transfer order line is reduced or canceled from the Manage Transfer Orders page is performed when canceling or reducing the quantity using the Cancel Transfer Order Report process. This includes updating budget dollars, as well as closing completely shipped or canceled orders.

You can cancel transfer order lines in these situations:

- Transfer order lines meeting selection criteria with no current fulfillment activity.
  - This enables you to cancel all lines with no activity.
- Transfer order lines meeting selection criteria including those with released lines.
  - This includes transfer orders with lines in a Released to Warehouse or Staged status.
- Transfer order lines with backordered quantities only.

This enables you to cancel transfer orders that have gone through pick release processing and have had a backorder created for them.

When canceling quantities from the Print Cancel Transfer Order Report process, the cancel action:

- Cancels the line if there has been no shipping activity.
- Automatically reduces the quantity to the shipped quantity if there has been shipping activity.

If you don't select the **Cancel Transfer Orders** option, the process prints the report only without canceling any transfer orders.

#### Include In-Process Orders

Specify whether or not you want to cancel orders that have lines in the Released to Warehouse or Staged status. If this option is set to No,, then transfer order lines with a line in either of these two statuses cannot be canceled.

The process still extracts and reports on these lines, but if you selected the **Cancel Transfer Orders** option, then these lines receive a warning message on the report letting you know that the transfer order line couldn't be canceled because it's in the process of being picked and shipped.

## Number of Days Without Activity

Enter a value for the **Number of Days Without Activity** field to cancel transfer orders that meet this requirement. For example, if you enter a value of 10 in this field, the process cancels transfer orders that have had no activity for 10 or more days.



#### Cancel Results

The Print Cancel Transfer Order report displays the results of the cancel process. This table explains the three possible values for the Cancel Results column.

Value	Meaning				
Success	The cancel processing was successful.				
Error	You may receive an error message in cases where the cancel processing is rejected by shipping.  For example, this can happen when a line is shipped, but the shipped quantity hasn't yet been interfaced. The transfer order line level won't be correct until the transaction is posted. In this situation, the line appears on the report along with an error message from shipping explaining the issue.				
Submitted	The transfer order is being processed through Oracle Fusion Cloud Order Management and the cancel request has been submitted to Order Management.  To later verify that the transfer order line has been canceled, you can view it from the Manage Transfer Orders page.				

## Set Up Shipment Tolerances for Transfer Orders

## **FAQs for Transfer Orders**

#### What's an internal material transfer?

An automated or manual transfer request of materials within or between organizations. Transfer orders transfer inventory for interorganization, intraorganization, and intercompany flows. The transfer order serves as the orchestration document representing demand and supply for an internal material transfer.

# What's the difference between inventory and expense destination transfer orders?

Expense destination transfer orders transfer material from an inventory warehouse location directly to the buyer's location for immediate usage. With expense destination transfers, there's no put away transaction in inventory since the item is expensed, and the destination inventory isn't incremented. Returns aren't allowed, and serial and lot numbers aren't tracked in receiving.



Inventory destination transfer orders require movement to a destination inventory warehouse location. With inventory destination transfers, you have a shipment in the source organization that decrements the source location's inventory, and a put away transaction in the destination organization that increments the destination location's inventory.

## What's a transfer order requester?

The person creating the transfer order for transfer orders manually created from other sources. The transfer order requester is the person entered on the requisition for transfer orders sourced from a requisition.

# Can I use the source organization's business unit for sales orders created from transfer orders?

Yes, when using Supply Order Defaulting and Enrichment Rules to route transfer orders through Oracle Fusion Cloud Order Management, you have the option to align the sales order requisitioning business unit with the source organization's business unit.

Normally, when you create a sales order from a transfer order, you use the destination inventory organization's business unit on the sales order. Creating the sales order in the source organization's business unit lets the organization actually shipping the requested goods accurately track the internal order through its lifecycle. This also enables you to accurately manage and account for orders through their lifecycle.

In the case of multiple lines and source organizations, the first line of the transfer order determines the business unit on the sales order.

# Why doesn't the transfer order number, with a corresponding internal sales order, display in the search criteria on the Create Pick Wave page?

In a scenario where a sales order is created from a transfer order, the transfer order doesn't appear in the search criteria of the Create Pick Wave page if any of its associated sales order lines are in a status of Not Started.





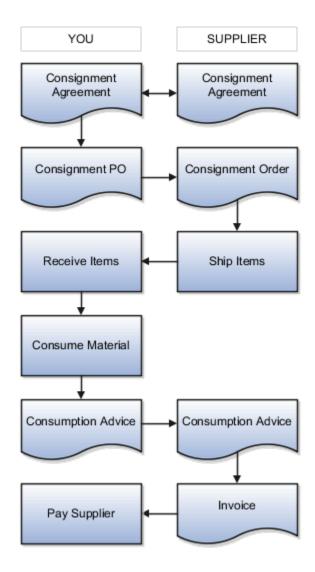
## **10** Consigned Inventory From Supplier

## **Consigned Inventory**

Consigned inventory refers to items that are in the possession of one party, but remain the property of another party by mutual agreement.

The process of consigned inventory follows steps between the buyer and seller. You start with a consignment agreement and end with paying the supplier. The following figure shows the steps of the consigned inventory process flow.





## Consignment Agreement

The consigned inventory process starts with a buyer entering into a consignment agreement with a supplier. The consignment agreement carries the terms related to the consignment arrangement between the trading partners, items to be purchased on consignment, and the price associated with the items.

## Consignment Order

The buyer periodically generates consignment orders requesting the supplier to ship goods.

The consignment order uses the terms and conditions of the consignment agreement and specifies the delivery details, quantities, locations, and dates for the consigned goods to be delivered.



## Ship and Receive Items

Once the supplier ships goods, and the inventory has been received, the inventory is held as consigned stock. The inventory is in the possession of the buyer. However, the ownership of the inventory remains with the supplier.

**Note:** For regular (nonconsigned) inventory, once goods are received, the ownership changes to the buying party.

## Consumption Advice

When the inventory is consumed, a consumption advice is generated based upon a frequency agreed upon between the buyer and supplier. The consumption advice communicates to the supplier the consumption transactions that occurred within a given period of time.

## Invoice and Pay Supplier

The consumption advice serves as the document to initiate financial settlement for the consumed inventory. You also have the option to pay-on-use to pay your supplier immediately upon usage of the consigned inventory.

#### Related Topics

Consigned Inventory Lifecycle

## Consigned Inventory Lifecycle

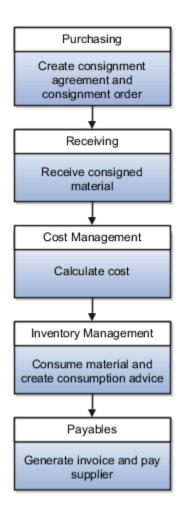
The lifecycle of consigned inventory spans several tasks and products from creating the consignment agreement in Oracle Purchasing through the final step of paying the supplier in Oracle Payables.

The consigned inventory lifecycle includes these tasks and products:

- Creating consignment agreement and consignment order (Oracle Purchasing)
- Receiving consigned material (Oracle Receiving)
- Calculating cost (Oracle Cost Management)
- Consuming material and creating consumption advice (Oracle Inventory Management)
- Generating invoice and paying supplier (Oracle Payables)

The following figure shows the lifecycle of consigned inventory and the products responsible for each task.





## Creating Consignment Agreement and Consignment Order

Purchasing enables the creation of the consignment agreement and consignment order. The buyer and supplier negotiate the terms of the consignment arrangement and these details are captured on the consignment agreement.

Demand often originates from an inventory application. Purchase orders are created by inventory in response to requisitions originating from sources such as min-max planning. For example, a min-max threshold can be set so that when the on-hand quantity dips below 100, a requisition is automatically created, followed by a purchase order. The consigned inventory process then follows.



## **Receiving Consigned Material**

The Receiving application allows receiving personnel to receive and put away goods into inventory. Once consigned inventory is received, the goods are in the physical possession of the buying organization, but the supplier still retains ownership of the goods.

## **Calculating Cost**

The Cost Management application lets you generate the necessary cost accounting to take ownership of the material. Cost Management doesn't accrue payable liability or record consigned inventory received as an asset owned by the company. Instead, it allows the value of consigned inventory to be tracked in a separate account so that it isn't considered as owned goods for financial reporting.

## Consuming Material and Creating Consumption Advice

Consumption takes place in Inventory Management. Consumption represents the event point where ownership of the inventory is transferred from the supplier to the buyer. The buyer periodically generates a consumption advice to inform the supplier about the quantity of inventory consumed.

## Generating Invoice and Paying Supplier

Oracle Payables processes invoices for the consignment order and makes payments to suppliers. Before making the payment, the invoice must be matched to the consumption advice lines. Every invoice has a one-to-one relationship with a consumption advice number. Also, if you set up the pay on use option on the consignment agreement, you can pay your supplier immediately upon usage of the consigned inventory.

## **Consigned Inventory Aging**

Consigned inventory aging is an agreed upon period of time where at the end of the aging period, the ownership of the inventory transfers from the supplier to the buyer.

These aspects are important regarding consigned inventory aging:

- Aging process
- Aging period
- · Aging onset point
- · Transfer to Owned transaction

## **Aging Process**

When a buyer and supplier enter into a consignment agreement, they agree to a specified aging period and aging onset point. When the aging period expires, the buyer takes ownership of the consigned inventory. The inventory manager performs a manual Transfer to Owned transaction (ownership change) that transfers the material from supplier owned to buyer owned.

Now that the consigned inventory has been consumed, a consumption advice is generated based upon the frequency agreed upon between the buyer and supplier. The consumption advice communicates to the supplier the consumption



transactions that occurred within a given period of time and it also serves as the document to initiate financial settlement for the consumed goods.

## **Aging Period**

The aging period indicates the maximum number of days the material may be on consignment. You specify the aging period on the consignment agreement. Oracle Inventory Management uses this value to determine if consigned inventory has aged and what appropriate action should be taken. Once the buyer takes ownership of the consigned material, the aging period is no longer tracked since the material is no longer consigned.

Note: The aging period isn't reset when inventory transactions for the item don't involve an ownership transfer.

The **Aging Period Days** field is available on the header and line level for a consignment agreement. The line-level value takes precedence over the header value. For example, if the value in the **Aging Period Days** field is 1 at the header level and 180 at the line level, then the aging period is 180.

## **Aging Onset Point**

The aging onset point indicates the mutually agreed event point at which consigned material begins to age. Values can be **Receipt** or **Shipment**. You specify the aging onset point on the consignment agreement. Oracle Inventory Management uses this term to determine whether to begin aging when the consigned goods are shipped by the supplier or when they're received at the buying organization.

If the aging onset point value is **Receipt**, then the date of receipt is used to start the aging period calculation. If the aging onset point is defined as **Shipment**, then the application uses the ship date specified on the advance shipment notice (ASN) to start the aging period calculation.

#### Transfer to Owned Transactions

The change in ownership (Transfer to Owned transaction) typically occurs when the buyer uses the product or when the aging period has expired.

Related Topics

- · Consigned Inventory
- Consigned Inventory Lifecycle

## **Consigned Inventory Consumption**

Ownership changes from the supplier to the buyer when the buying organization consumes the consigned inventory. This process is referred to as consumption.

These factors are important regarding the consumption of consigned inventory:

- Ownership change
- Explicit or implicit transaction
- · Lot and serial
- Consumption transaction pricing



## Ownership change

You can define consumption rules to specify whether the transfer of consigned inventory between two inventory locations triggers an ownership change (consumption). When you execute a transfer between organizations, your previously defined consumption rules determine whether or not the transfer results in an ownership change.

There are two types of consigned inventory transactions:

- **Transfer to Owned**: Transfers consigned inventory to owned inventory. This transaction transfers the ownership of the inventory from the supplier to the internal organization.
- **Transfer to Consigned**: Transfers ownership of the inventory from the internal organization to the supplier.

## **Explicit or Implicit Transaction**

You can choose to perform consumption transactions both explicitly and implicitly.

With explicit consumption, you specify the external owning party whose goods will be transferred to the internal organization.

With implicit consumption, consumption is a result of an inventory transaction such as a sales order issue. Most transactions occur through implicit consumption. You can configure the transaction types that trigger consumption through the setup of consumption rules.

For implicit consumption, the application generates two separate inventory transactions. The first transaction represents the consumption (change in ownership). This table shows a Transfer to Owned transaction. This transaction records the change in ownership between the original owning party (Allied Supplier) and the new owning party (Organization M1).

Transaction Type	Item	Quantity	Owning Party	Owning Party
Transfer to Owned	100C	10	Allied Supplier	Organization M1

The second transaction represents the movement of inventory. This table shows the transaction to record the movement of inventory. The consumption rules indicate that ownership changes when Item 100C transfers from source subinventory FGI to destination subinventory Stores.

Transaction Type	Item	Quantity	Source Subinventory	Destination Subinventory
Subinventory Transfer	100C	10	FGI	Stores

The two, separate transactions allow the segregation of transactions involving the change in ownership and the movement of material.

#### Lot and Serial

You can select lot and serial controlled items for a specific owning party when executing consigned inventory transactions.



## **Consumption Transaction Pricing**

When the consumption transaction takes place, the application uses the terms of the associated consignment agreement to calculate the price that's in effect at the time of consumption. The calculated price is based on the date of consumption since this represents the point when ownership transfers from the supplier to the internal organization. Oracle Inventory Management interfaces with Oracle Purchasing to determine the current price from the consignment agreement.

#### Related Topics

Consumption Rules

## **Consumption Advice**

A consumption advice is a periodic summary report of consumption transactions that reports the usage of consigned inventory to the supplier based upon a consumption advice frequency.

The consumption advice stores the details needed to communicate information to the supplier such as item quantity and value of the inventory consumed in the warehouse. The consumption advice also serves as the document to initiate financial settlement for the consumed material.

#### Related Topics

- Considerations for the Create Consumption Advice Process
- How Consumption Advice Generation Frequency Is Calculated

# Considerations for the Create Consumption Advice Process

The Create Consumption Advice process consolidates consumption transactions over a period of time and groups them together to create the consumption advice.

The consumption advice is a report to the supplier that indicates that the consigned inventory has been consumed and that ownership has transferred from the supplier to the buyer. The consumption advice is created on a periodic basis agreed upon between the supplier and buyer and is used for billing purposes.

Important factors regarding a consumption advice include:

- · Process parameters
- · Communication methods
- Consumption advice summary
- Consumption advice generation frequency



#### **Process Parameters**

You can define the following parameters when setting up the Create Consumption Advice process:

- **Supplier** (optional): used to filter transactions for generating a consumption advice. If you don't specify a supplier, the application generates a consumption advice for all suppliers in the organizations that have ownership changes.
- **Supplier Site** (optional): used to further filter transactions for generating a consumption advice. If you specify a supplier site, you must also select a supplier.
- Include Transaction Type: you can group consumption advice by transaction type.
- **Display Lot and Serial Number**: specify whether or not to include lot and serial number details on the consumption advice.

#### Communication Methods

There are several different methods to communicate the consumption advice to the supplier. Communication methods include:

- Print
- Fax
- Email
- · Publish to Supplier Portal

## Consumption Advice Summary

You can produce a consumption advice at different summary levels. For example, you may want to produce a single consumption advice for each organization and item. The consumption advice summary option is carried on the consignment agreement. The Create Consumption Advice process uses this value to determine how to generate the consumption advice. The consumption advice summary options include:

- A single consumption advice for inventory organization, item, and transaction date.
- A single consumption advice for inventory organization and item.
- A single consumption advice for inventory organization.
- A single consumption advice for all inventory organizations.

## Consumption Advice Generation Frequency

For consigned inventory, the buyer and supplier agree upon a consumption advice generation frequency.

The consumption advice generation frequency indicates the frequency at which the Create Consumption Advice process runs to consolidate consumption transactions for a defined period of time. When the Create Consumption Advice process is run, the application generates a consumption advice which sends consigned inventory transaction information from the buyer to the supplier.

The consumption advice generation frequency is determined by adding the consumption advice frequency (Daily, Weekly, or Monthly) to the closing date of the billing cycle.



#### Related Topics

- How Consumption Advice Generation Frequency Is Calculated
- Consigned Inventory
- Create Consumption Advice

# How Consumption Advice Generation Frequency Is Calculated

The consumption advice generation frequency indicates the frequency at which the **Create Consumption Advice** process runs to consolidate consumption transactions for a defined period of time.

## Conditions That Affect the Consumption Advice Generation Frequency

Two factors affect the consumption advice generation frequency:

- Consumption advice frequency: Daily, Weekly, or Monthly
- · Billing cycle closing date

## How Consumption Advice Generation Frequency Is Calculated

The consumption advice generation frequency is determined by adding the consumption advice frequency (**Daily**, **Weekly**, or **Monthly**) to the closing date of the billing cycle.

In addition, a consumption advice for item consumption is generated only after the billing cycle has ended (the closing date has passed). Each consumption advice reports transactions that were created in that billing period only.

Each time the consumption advice is generated, the billing cycle closing date resets (moves forward) for the next billing cycle.

## Example 1

If you set the consumption advice frequency to **Weekly** and the billing cycle closing date to **November 7, 2014**, then you produce the following billing periods:

- November 1, 2014 November 7, 2014
- November 8, 2014 November 14, 2014
- November 15, 2014 November 21, 2104

Here's how the **Create Consumption Advice** process runs on the following dates:

- November 2, 2014: no consumption advice is generated.
- November 7, 2014: consumption advice is generated and next closing date is set to November 14, 2014.
- November 10, 2014: no consumption advice is generated.
- November 14, 2014: consumption advice is generated and next closing date is set to November 21, 2014.



## Example 2

If you set the consumption advice frequency to **Monthly** and the billing cycle closing date to **January 10, 2023**, then you produce the following billing periods:

- January 10, 2023 February 10, 2023
- February 11, 2023 March 10, 2023
- March 11, 2023 April 10, 2023

Here's how the **Create Consumption Advice** process runs on the following dates:

- January 4, 2023: no consumption advice is generated.
- January 10, 2023: consumption advice is generated and next closing date is set to February 10, 2023.
- January 30, 2023: no consumption advice is generated.
- February 10, 2023: consumption advice is generated and next closing date is set to March 10, 2023.

Since the number of days can vary from month to month, such as 28, 30, and 31, the next billing cycle close date is updated as follows.

- If the billing cycle close date is **January 31, 2023**, then the next billing cycle close date is updated to **February 28, 2023**, the last day of the month.
- If the billing cycle close date is April 30, 2023, then the next billing cycle close date is updated to May 31, 2023, the last day of the month.

## Consumption Advice Errors and Exceptions

Consigned inventory transactions can result in errors during the processing of ownership transfers.

For example, if the consignment agreement associated with the consumption transaction is no longer valid, the process results in an error. When errors occur, the consumption transactions aren't included on the consumption advice. You must correct the transactions and resubmit them for processing.

Here are the steps to find and resolve errors and exceptions for consigned inventory transactions:

- Resolve error
- · Resubmit transaction for processing

#### Resolve Error

You can search for consigned inventory related transactions that resulted in errors during processing on the Review Consumption Advice Exceptions page. You can also search for pending transactions that resulted in an ownership transfer error. Once you identify the pending transactions, you can review and resubmit the transaction for processing. Access the Review Consumption Advice Exceptions page from the Inventory Management work area.



## Resubmit Transaction for Processing

Once you correct the consigned inventory transaction, the Create Consumption Advice process automatically processes the corrected transaction in the next run of the consumption advice. The process gives the corrected transaction a different consumption advice number. This number is for internal reference only, and isn't exposed to the supplier.

## **Examples of Consigned Inventory Returns**

You can return consigned material in various statuses such as Put Away and Consumed. Use the Transfer to Consigned transaction type to transfer consigned material that has been consumed implicitly or explicitly back to a Consigned status.

These examples illustrate return scenarios based on material status:

- Material received and not yet put away to inventory
- Material received and put away to inventory
- Material consumed and consumption advice not yet generated
- Material consumed and consumption advice generated

## Material Received and Not Yet Put Away to Inventory

You can search for and return consigned material in this status. If the material is lot or serial controlled, you can provide the lot and serial numbers while initiating the return. You can't create a debit memo for this type of return transaction.

## Material Received and Put Away to Inventory

You can search for and return consigned material in this status. If the material is lot or serial controlled, you can provide the lot and serial numbers while initiating the return. You can perform either a single or two-step return. With the single step return, you return directly to the supplier. With the two-step return, you first return to receiving, and then return to supplier. You can't create a debit memo for this type of return transaction.

## Material Consumed and Consumption Advice Not Yet Generated

The material ownership has changed from supplier to buyer, but the consumption advice hasn't yet been created. Since the consumption advice hasn't communicated the detail of ownership change to the supplier, you may prefer to return the material to the supplier as consigned rather than as owned inventory. In order to do this, you must first perform a Transfer to Consigned transaction for the item and quantity.

The Transfer to Consigned transaction changes the status of the material back to Consigned. If the item isn't lot or serial controlled, the application uses FIFO logic to determine the exact transaction line or lines whose status must be changed from regular to consigned. If the item is lot or serial controlled, you can narrow down the specific transaction line.

Once the material changes status from Owned to consigned, the material is available for return to supplier. Since the ownership has passed back to the supplier, debit memos aren't needed.



## Material Consumed and Consumption Advice Generated

The material ownership has changed from supplier to buyer, and the consumption advice has been created. Since, the consumption advice has communicated the detail of ownership change to the supplier, you need to return the material to supplier as owned rather than consigned inventory.

Since the ownership is with the buyer, when the return to supplier transaction is created, a debit memo is generated if the invoice has been created based on the consumption advice.

If the material is lot or serial controlled, you can provide the lot and serial numbers while returning. Once the supplier receives the material, they process a credit note against the invoice for the consignment order line.

# Logic for Consigned Inventory Receipt and Quantity Adjustments on the Manage Item Quantities Page

Let's look at the consigned inventory receipt and quantity adjustment logic when performing these two scenarios on the Manage Item Quantities page:

- Miscellaneous issue and receipt against a consigned inventory item
- Ownership transfer and Transfer to Consigned transaction with receipt reference

#### Transfer to Owned

For Transfer to Owned transactions, the application associates the Transfer to Owned quantity against the receipts in the order in which the receipts were received. The application starts with the oldest receipt first and uses FIFO (first in, first out) logic.

## Transfer to Consigned

For Transfer to Consigned Transactions, the application associates the Transfer to Consigned quantity to the most recent Transfer to Owned transactions using the LIFO (last in, last out) logic. The application chooses the consuming transactions. Lot or serial numbers are used to identify the consuming transactions. If material isn't lot or serial controlled, LIFO (not FIFO) is used to default the most recent consumption transaction to restore the consigned attributes (reference documents, owning party, and dates). You can't transfer more than the original quantity consumed. Therefore, these transfers point to the Transfer to Owned transactions to help with tracking the consumed and consigned quantities.

## **FAQs** for Consigned Inventory

## How can I transfer consigned inventory to owned inventory when the aging period expires?

Select the Transfer to Owned button on the Manage Consigned Inventory Aging page.



# What's the difference between transfer to owned and transfer to consigned transactions?

A Transfer to Owned transaction transfers consigned inventory to owned inventory. This transaction transfers the ownership of the material from the supplier to the internal organization or buyer.

A Transfer to Consigned transaction transfers consigned material that has been consumed back to a Consigned status. This transfers the ownership of material from the internal organization or buyer back to the supplier.

# Can I return material to consigned status after the generation of a consumption advice?

Yes, you can return the material. The application creates an automatic debit memo since the consumption advice was already generated.

## How can I resolve consumption advice errors?

Search for consigned inventory transactions that resulted in errors during processing on the Manage Pending Transactions page. Once you identify the pending transactions, you can review and resubmit the transaction for processing.

## What's the consumed quantity?

The quantity consumed or returned on consignment. The consumed quantity represents the sum of the inventory transactions (positive if transferred to owned and negative if transferred to consigned) that were converted into purchase order quantity units of measure.

## Can I pay on use for consigned inventory?

Yes, you can set up the pay on use option on the consignment agreement. This enables you to pay your supplier immediately upon usage of the consigned inventory.



## 11 Back-to-Back Orders

## Promise Sales Orders In Your Back-To-Back Flow

Back-to-back is a supply chain management technique where you receive supply at a warehouse then ship it directly to your customer. You can use Global Order Promising to help fulfill a back-to-back order.

You typically use back-to-back fulfillment to fulfill a high cost or a slow moving item. You usually don't stock the item in inventory but instead build it in reply to demand.

Here's the general flow:

- · You create a sales order and submit it to fulfillment.
- Promising creates and schedules supply for the order.
- You procure and receive supply in your warehouse.
- Supply Chain Orchestration reserves supply, then Inventory Management manages it in inventory during shipping.

You set up your implementation to automatically do this work, including selecting the source, reserving supply until its fulfilled, and automatically adjusting fulfillment when supply or demand changes.

For details, see Overview of Back-to-Back Fulfillment.

## Reservations Handling in Back-to-Back Fulfillment

The backbone of the back-to-back fulfillment flow is the reservation that ties a sales order with the supply document.

After the supply document is created in the supply execution application, Oracle Supply Chain Orchestration initiates the creation of a reservation in inventory to tie both demand and supply together. The reservation is managed dynamically and is updated whenever there are demand-side or supply-side changes. This reservation improves fulfillment accuracy and timeliness by ensuring that demand-specific supplies are reserved and prevents misallocation of supply to other demand sources.

You can search for and view reservations in the Manage Reservations and Picks page, which provides detailed information about both demand and supply documents.

## Change Management in Back-to-Back Fulfillment

The back-to-back fulfillment flow supports change management that handles change initiated from the demand side as well as the supply side.



This automatic change management prevents excess inventory buildup by matching supply to demand and circumvents the need for manual intervention, except to address an exception. For any exceptions in the flow, the order fulfillment manager is notified to take appropriate action, and precludes delays that could occur because of human intervention.

For successful demand and supply changes in the back-to-back fulfillment flow, the reservation is updated to reflect the changes. Demand changes that are supported include changes in quantity (both increase and decrease), total cancellations, and changes to the requested date. Such demand-side changes are orchestrated to Supply Chain Orchestration to keep the supply documents updated with the changed demand picture. Similarly, supply-side changes that are supported include quantity decrease, supply delays, and supply document cancellations (for example, transfer order cancellation by the source organization).

## **Exception Case: Reduction of Purchase Order Quantity**

When the purchase order quantity is reduced, Supply Chain Orchestration tries to find an alternate source of supply. If this is successful, you don't need to take any action on the sales order line. If the alternate source of supply isn't successful, you receive a message letting you know that the quantity was reduced and the line is an exception. An unassigned line also appears in Supply Chain Orchestration on the Manage Supply Lines page. This information is communicated to the sales order and the sales order line shows as an exception. On the Supply Details tab for the sales order in Order Management, you can view that manual action is required for the line. In the Back-to-Back section of the Supply Details tab, the value of the **Supply** Status field shows **Manual Action Required**.

The reason that this action of whether to reschedule or split the line is left to the order manager is because Supply Chain Orchestration doesn't know the user's intent. For example, does the user want only a quantity of 2, or is it fine to ship a quantity of 1 instead? If the customer isn't going to receive his entire quantity of 2, maybe he wants to cancel the order.

## FAQs for Back-to-Back Processing

## What's a back-to-back transfer order?

An internal material transfer order to transfer supply from the source location to the destination location to fulfill a back-to-back sales order.

The back-to-back transfer order is automatically reserved against the associated back-to-back sales order by Oracle Supply Chain Orchestration. When the transfer order is received and put away at the destination location, the supply-side of the reservation is automatically moved from the transfer order to the new on-hand inventory. This action maintains the reservation of the supply against the back-to-back sales order until shipping.

## What's the difference between a regular transfer order and a backto-back transfer order?

A back-to-back transfer order is processed in the same manner as a regular transfer order, except for the following points:

• The transfer order supply is automatically reserved to the originating back-to-back sales order by Supply Chain Orchestration when the order is created.



• The back-to-back transfer order is monitored by Supply Chain Orchestration to ensure the original supply required to fulfill the back-to-back sales order is not at risk. As quantities and dates change on the transfer order, Supply Chain Orchestration performs exception handling to fulfill the back-to-back sales order. In addition, Supply Chain Orchestration is notified when the supply is shipped from the source organization as well as when it is put away in the destination organization.





# 12 Project-Specific Inventory

# Segregate and Manage Project-Specific Inventory

## Overview of Segregating and Managing Project-Specific Inventory

Project-Driven Supply Chain is an end-to-end integrated solution across Oracle Fusion Cloud Supply Chain and Manufacturing and Project Management applications. It provides the ability to execute project-specific inventory management by inventory transactions, counting, and reclassification of project-specific inventory.

When segregating and managing project-specific inventory, you can:

- Segregate inventory by project and task in your warehouse.
- Segregate materials in a specific location by project and task within the warehouse.
- Automatically or manually reserve materials to a project or project task, or from common inventory, based on the values specified for the project attributes on the sales order, transfer order, or shipping request.
- Maintain valuation of inventory by project and task.
- Provide visibility into on-hand supplies by project and task.
- Maintain the integrity of material ownership within a project across warehouse operations.
- Enforce project-specific rules and policies of material management within a warehouse.
- Perform inventory operations such as cycle counting, physical inventory, material issues and receipts, and move, for project and task specific material.

## Project-Specific Inventory for Segregating and Managing Material

You can use project-driven supply chain to manage project-specific material for multiple projects without having to create separate inventory organizations for each project. And, if you procure materials specifically for projects at project-specific price quotes, you can track the materials and their valuation by project.

You must first enable inventory tracking by project for your applicable organizations and set up your default expenditure types.

Use the segregate and manage project-specific inventory functionality to:

- Segregate and manage project-specific inventory
- Manage project-specific inventory costs



#### Segregate and Manage Project-Specific Inventory

The functionality for segregating and managing project-specific inventory enables you to:

- Track on-hand inventory by project and task for inventory organizations.
- Query and review for on-hand inventory based on project and task.
- Check item availability for project and task.
- Use the Create Miscellaneous Transaction task to issue or receive project and task.
- Use the Create Subinventory Transfer task to transfer project material.
- Use the Create Interorganization Transfer task to transfer project material across inventory organizations.
- Record cycle count sequences and approve the sequences for project material.
- Record physical inventory tags and approve the adjustments for project material.
- Move material across projects or tasks or between project and common inventory using the Create Project Transfer task.
  - You can transfer inventory between projects, but within the same subinventory and locator.
- Query and view completed transactions by project and task using the Review Completed Transactions task.
- Automatically reserve project demand from sales orders, transfer orders, return transfer orders, and shipment requests, as well as create manual reservations from project or common inventory, or do a combination of both.
- Import costed and accounted transactions from supply chain as project expenditures into Oracle Project Portfolio Management.
  - If the cost incurred against the project is a billable cost, you can bill your customer based on the completion percentage or milestones achieved on the project. If it's a cost that can be capitalized, you can proceed to run the capitalization flow.
- Choose to allocate costs to other projects, project tasks, or accounts as appropriate.

**Note:** Inventory organizations enabled for tracking by project can have both project-specific inventory and common inventory.

#### Manage Project-Specific Inventory Costs

You can cost project-specific inventory transactions and project transfer transactions.

You can use project and task as additional valuation structure attributes for maintaining tracking cost at the granular level. You can specify whether or not to send an expenditure to a project by setting up an exclusion for project cost collection by project types. Accordingly, the costed amounts for the miscellaneous receipts and miscellaneous issue transactions are sent as a credit or debit charge to the project. You can also manage project-specific accounting based on project attributes that are available as accounting sources.

You can import miscellaneous inventory transactions using the Import Costs process. This may include miscellaneous inventory transactions such as miscellaneous receipt or issue of project inventory, issue to project of project-specific inventory, receipt from project of project-specific inventory, project reclassification using project transfer transactions, and interorganization transfer of project-specific inventory.

Depending on the source transaction and the destination type, one or more of the following document entries for Miscellaneous Inventory document are created in Project Portfolio Management:

Item cost



#### Overhead

Use the Manage Project Costs task in Costs work area in Project Management to search and view expenditure item and project costing details associated to the miscellaneous inventory transactions.

#### From the Manage Costs page:

- Click on the transaction to open expenditure item details, including item number and description.
   Besides the specific attributes, supply chain transactions may also include the cost element that identifies the type of cost in the source system.
- Perform adjustments using the **Actions** menu.
   Adjustments performed in Project Portfolio Management aren't reflected in the source transaction. Also, note that you cannot perform reverse type of adjustment for these transactions.

You can view and adjust these costs in the Manage Cost Distributions task. You can resolve any cost exceptions using the Manage Unprocessed Costs task. If the project is enabled for same line burden, the transaction has the burden cost calculated. If it's a separate line burdened, the application creates a new expenditure item for the burden cost. On the Costing tab, you can view the distributions and drill down to view the journal entries.

## Receive Project-Specific Inventory

## Overview of Receiving Project-Specific Inventory

Project-Driven Supply Chain is an end-to-end integrated solution across Oracle Fusion Cloud Procurement, Supply Chain and Manufacturing, and Project Management applications. It provides the ability to receive project-specific inventory when a project-striped purchase order is created.

When receiving project-specific inventory, you can:

- Receive project-specific purchase orders, transfer orders, and in-transit shipments into project-specific inventory.
  - You can review the project and task from the source document during receiving.
- Carry forward the project identifiers from the execution document to on-hand inventory.
   Receiving carries forward the project details from the execution document to on-hand inventory. On-hand quantity is striped by project and task after put away. You can view the on-hand quantities striped by project and task on the Manage Item Quantities page.
- Carry forward costs of material to on-hand inventory.
  - For standard costed organizations, the application determines the on-hand valuation based on the on-hand inventory and standard cost. For actual-costed and average-costed organizations, the actual cost of received material carries forward into on-hand inventory.
- You can send project costing attributes from purchase orders and transfers to cost accounting.
   Cost accounting distributions for a project-based purchase order appear on the Cost Accounting Distributions page.



## **Project-Specific Inventory for Receiving**

With project-driven supply chain, you can receive project-striped purchase orders, transfer orders, or in-transit shipments directly into project inventory. This enables you to automatically, without manual intervention, receive project-specific supply into inventory as project material to prevent commingling with common inventory. This can improve your operational efficiency and save labor costs.

You must first enable inventory tracking by project for your applicable organizations and set up your default expenditure types.

Use the receive project-specific inventory functionality to:

- Receive project-specific inventory
- Transfer transactions from Inventory to Costing

#### Receive Project-Specific inventory

Using project-driven supply chain improves your operational efficiency by receiving the project-striped purchase orders, transfer orders, or in-transit shipments directly into the project inventory. The system stripes the on-hand inventory by project and task after the put away transaction. Upon the receipt of the project material, the project valuation automatically updates. The reservation transfers to on-hand inventory when the incoming project-striped purchase order is reserved to a project demand.

In the case of purchase orders and transfer orders, the project details show the project and task from the source document. For in-transit shipments, the inventory project and task are populated depending on whether project or common inventory is shipped to the destination organization. The inventory attributes show the striping project and task. When you enable an organization for striping by project, then the project and task under the project details and inventory attributes header are the same. This set of project and task information displays on the Receipt Lines, Inspect Lines, and Put Away Lines pages. You can view the project and task for the source document during correction or return.

#### Transfer Transactions from Inventory to Costing

You can use project-driven supply chain to cost project-based deliver transactions. The Transfer Transactions from Inventory to Costing process interfaces the project, task, expenditure type, expenditure date, expenditure organization, and other user-defined project costing attributes from purchase orders and transfer orders to cost accounting. For transfer orders, the transaction date is used as the expenditure date for the material transactions.

Cost Accounting costs the inventory transaction, and then you can view the cost accounting entries. For actual-costed and average-costed organizations, the actual cost of received material carries forward into on-hand inventory. For standard-costed organizations, the predefined standard cost is used to value the on-hand inventory.



# Pick Project-Specific Inventory

## Overview of Picking Project-Specific Inventory

Project-Driven Supply Chain is an end-to-end, integrated solution across Oracle Fusion Cloud Order Management, Manufacturing, Supply Chain and Manufacturing, and Project Management applications. It provides the ability to pick project-specific inventory for a project-specific sales order, transfer order, work order, or requisition movement request.

You can create pick waves and pick project-specific material for projects. Based on rules, you can also pick material from a common pool of inventory when project-specific inventory isn't available.

When picking project-specific inventory, you can:

- · Set hierarchical business rules for project-specific picking.
- Enforce rule-based picking for project-striped sales orders, movement requests, transfer orders, and manufacturing work orders.
- Create picks for project specific sales orders, transfer orders, work orders, and requisition movement requests.
- Carry forward project details from sales orders, transfer orders, and work orders to the movement request, picks, and inventory transactions.
- Group pick slips by the project and task on the demand.

**Note:** Define pick slip grouping rules by project and task number to group together pick slips for sales orders, transfer orders, or work orders associated to the same project and task number.

## Project-Specific Inventory for Picks

You can use project-driven supply chain to enforce picking from project-specific or common inventory.

You can also set hierarchical business rules, such as pick from a project-specific task, and then pick from common inventory. This prevents commingling of inventory across projects and tasks. This also improves picking efficiency and reduces cost by automating the generation of accurate picking slips.

You must first enable inventory tracking by project for your applicable organizations and set up your default expenditure types.

Use the pick project-specific inventory functionality to:

- Use common inventory to fulfill demand
- Pick project-specific inventory for sales orders
- Pick project-specific inventory for work orders
- Pick project-specific inventory by movement request for pick release
- Create manual pick for requisition movement requests
- Manage project-specific inventory costs



#### Use Common Inventory to Fulfill Demand

You can pick from common inventory to fulfill demand if you set up the item definition for usage of common inventory. This lets you control whether to consume common material or project material based on the inventory attributes of an item.

Usage of common inventory for project demand is dependent on the values of the attributes in this table.

Hard Pegging Level	Allow Use of Common Supplies	Expected Behavior
None	Null	Allows usage of common inventory
<ul><li>Project and task</li><li>Project</li><li>Project group</li></ul>	No	Disallows usage of common inventory
<ul><li>Project and task</li><li>Project</li><li>Project group</li></ul>	Yes	Allows usage of common inventory

The **Allow Use of Common Supplies** option is null when you set the **Hard Pegging Level** field to None. This indicates that common inventory can be issued or reserved for a project demand for this item.

You can set the **Allow Use of Common Supplies** option to Yes or No when the **Hard Pegging Level** has a value of Project and Task, Project, or Project Group. In this case, you can use common inventory for a project demand only when the **Allow Use of Common Supplies** option is set to Yes.

### Pick Project-Specific Inventory for Sales Orders

You can pick release sales order by entering the costing project number and task number on the Create Pick Wave page. The pick release honors the reservation and allocates the material based on the reservation. The inventory project and task populate on the pick if you chose to allocate the project material to the demand. These fields are blank if you chose to allocate common material.

You can search picks by the inventory project, inventory task, project number, and task number. When searching by the inventory project and inventory task, your search results show the picks based on the material allocated to the demand. If you search based on the project number and task number, your search results show the picks based on the project and task on the demand.

## Pick Project-Specific Inventory for Work Orders

The pick release of the project work order creates movement requests that reference the project and task from the work order. The application derives the expenditure type, expenditure date, and expenditure organization when the work in process material issue or work in process material pick transactions are interfaced to costing.

- Expenditure type: derived based on the default expenditure type attribute in inventory management. If it's not defined in inventory, then the expenditure type is derived from the expenditure type associated to material from the manage default expenditure types setup.
- Expenditure organization: is the same as the organization for the work order.



The picks for the work order are grouped by project costing project and task using the pick slip grouping rules. You can search the picks created for the work order using the project number and task number on the Confirm Pick Slip page.

The pick populates with the inventory project and inventory task when the project material is allocated for all the work order components. The inventory project and inventory task show **Multiple** when material from multiple projects is allocated to work order components. These fields are blank when common material is allocated. You can override the pick.

#### Pick Project-Specific Inventory by Movement Request for Pick Release

You can allocate project material for requisition movement requests. The pick release of the requisition movement request allocates the project material prior to allocation of common inventory. The project number and the task number parameters on the movement request pick slip report releases all the eligible movement request lines. The pick slip grouping rules enable grouping of the picks by the project costing project and task.

#### Create Manual Pick for Requisition Movement Requests

You can manually allocate project or common material at will for requisition movement requests with reference to a project costing project and project costing task. There are three types of requisition movement requests that can have a project reference.

- Movement requests with reference to the project costing project and task. Project driven supply chain enables
  you to allocate project material ahead of common inventory for requisition movement requests. You can use
  project material or common inventory to manually create a pick for such movement requests.
- Movement requests that have an inventory project and inventory task referenced on the movement request.
   You can create a manual pick for such movement requests using the project material, common inventory, or inventory from another project.
- Movement requests that let you transfer project material from one subinventory to another using the movement request transfer transaction type. You can create a manual pick for such a requisition using the project material, common inventory, or inventory from another project.

## Manage Project-Specific Inventory Costs

You can import miscellaneous inventory transactions using the Import Costs process. This may include miscellaneous inventory transactions such as miscellaneous receipt or issue of project inventory, issue to project of project-specific inventory, receipt from project of project-specific inventory, project reclassification using project transfer transactions, and interorganization transfer of project-specific inventory.

Depending on the source transaction and the destination type, one or more of the following document entries for the miscellaneous inventory document is created in Project Portfolio Management:

- Item cost
- Overhead

Use the Manage Project Costs task in Costs work area in Project Portfolio Management to search and view expenditure item and project costing details associated to the miscellaneous inventory transactions.

**Note:** During pick, if you issue common material to a movement request with reference to a costing project and task, then the transaction is sent to Cost Accounting and Project Portfolio Management to capitalize or allocate project costs. If you issue common material for a movement request with reference to an inventory project and task, the transaction isn't sent to Cost Accounting or Project Portfolio Management.



# Transfer Project-Specific Inventory

## Overview of Transferring Project-Specific Inventory

Project-Driven Supply Chain is an end-to-end, integrated solution across Oracle Fusion Cloud Order Management, Manufacturing, Supply Chain and Manufacturing, and Project Management applications. It supports business processes to transfer project-specific material to another inventory organization, or within an inventory organization. It lets you automate the transfer of project-specific materials for multiple projects and carry forward project attributes throughout the entire transfer.

When transferring project-specific inventory, you can:

- Transfer material between project inventory locations either across inventory organizations or within the same inventory organization.
- Transfer material from common inventory to project inventory either across inventory organizations or across subinventories of the same inventory organization.
- Create project commitment when a transfer requisition or a transfer order is created.
- Send material costs to project when common inventory is transferred to a project inventory destination.
- Maintain project-specific valuation upon transfer.

## **Project-Specific Inventory for Transfers**

You can use project-driven supply chain to transfer project-owned material from the point of storage to the point of use on demand, and ensure that it remains segregated through the moves. You can also make sure that when material transfers in or out of a project, its costs are properly accounted for on the project.

With project-driven supply chain, you can reduce the capital tied up in stored inventory and expedite the project schedule by maintaining central warehouses and transferring material to points of use when required on a task.

You must first enable inventory tracking by project for your applicable organizations and set up your default expenditure types.

Use the transfer project-specific inventory functionality to:

- Create requisitions for inventory destination transfer orders
- Create transfer orders from requisitions in Supply Chain Orchestration
- · Manage transfer orders
- · Pick materials
- Ship materials
- Cost and account transfer orders
- Manage project-specific transfer order costs



#### Create Requisitions for Inventory Destination Transfer Orders

Use Self-Service Procurement to manually create internal requisitions for inventory destination items and charge the transfer cost to projects by including project costing details in the distribution. The project costing details you enter in the user's preference also default to the requisition line for the inventory destination when you add items to the cart.

After requisition approval, the application automatically creates the transfer order and the project details from the requisition copy over to the transfer order. Using Oracle Project Costing, you can report committed costs of requisitions that are outstanding against your projects.

**Note:** Internal transfer requisition lines to inventory destinations aren't subject to budgetary controls. In case you enable budgetary control to the requisitioning business unit, the funds status is **Not Applicable** for internal transfer requisition lines to inventory destinations with or without project details.

Project Accountants can view committed costs for internal material transfer requisitions with project reference once Procurement creates the requisition. When the requisition is converted to a project transfer order, the committed costs are reported against the transfer order which are then relieved upon the item receipt. Project Managers can view committed costs on the Review Project Performance page.

#### Create Transfer Orders from Requisitions in Supply Chain Orchestration

Oracle Supply Chain Orchestration can receive interorganization transfer requests of inventory destination and expense destination with project costing attributes through Self-Service Procurement. Since Self-Service Procurement prevalidates the project costing attributes, Supply Chain Orchestration forwards the transfer order request to inventory, and inventory creates a transfer order based on the details on your requisition.

You can also search and manage supply requests using project and task number attributes on the Manage Supply Request Exceptions and Manage Supply Lines pages. Similarly, you can view the project costing attributes on the Supply Order Details page.

## Manage Transfer Orders

Within Inventory Management, the application creates the transfer order line with project and task details at the transfer order distribution level for inventory destinations based on your requisition or supply request. When you use common material to fulfill such a transfer order, material gets reclassified to that project and task, and incurs corresponding accounting adjustments at both the source and destination as needed. If you want to return the material on a transfer order, the application stamps the appropriate project and task on the return transfer order depending on whether the project and task are valid at the source organization of the original transfer order. Depending on the situation, you might have to reclassify the material from project to common before shipping the return transfer order, or after receiving it, to ensure the accounting entries are reverted accurately.

While using transfer project-specific inventory, you can track commitments for project related internal material transfers. You can use the Update Project Performance Data process to summarize the project information and view committed costs in Project Portfolio Management.

#### **Pick Materials**

You can pick release transfer orders by entering the costing project number and task number on the Create Pick Wave page. The pick release honors the reservation and allocates the material based on the reservations. The inventory project and task populate on the pick if you chose to allocate the project material to the demand. These fields are blank if you chose to allocate to common material. You can also group the picks with the same project and task on a single pick slip.



You can search picks by the inventory project, inventory task, project number, and task number. When searching by the inventory project and inventory task, your search results show the picks based on the material allocated to the demand. If you search based on the project number and task number, your search results show the picks based on the project and task on the demand.

#### Ship Materials

You can create shipment lines with the project and task specified to indicate the project costing preference. You can specify the project and task even if they're not valid in the shipping organization or if you haven't enabled the shipping organization for projects. You can manage and process the lines with the same costing project and task together.

You can also use Quick Ship to bypass pick release and pick confirm, and ship the material from either project inventory or common inventory.

#### Cost and Account Transfer Orders

You can cost project-based interorganization transfers and transfer order issue transactions using project-driven supply chain.

When you perform a transfer of common or project-specific inventory, for a transfer from a project specific inventory, Costing sends these expenditures:

- Negative expenditure to the project referencing the transfer-from organization
- Positive expenditure referencing the destination organization

If common inventory is transferred, the project is charged referencing the destination organization. There's no corresponding credit to the project referencing the sending organization.

Costing uses the transfer price to charge the project referencing the destination organization when the transfers happen across profit center business units and Supply Chain Financial Orchestration applies for the flow. For all other types of transfers, project transactions happen at cost. You can specify whether or not to send an expenditure to a project by setting up an exclusion for project cost collection by project types. You can also manage project specific accounting based on project attributes that are available as accounting sources. In addition to the transfer price or the cost, you can define overheads to apply directly on issue transactions.

Return transfer orders and return transfer orders to scrap transactions that reference a project transfer order are costed and accounted to projects appropriately.

### Manage Project-Specific Transfer Order Costs

Within Project Portfolio Management, you can import transfer order delivery transactions using the Import Costs process.

Depending on the source transaction and the destination type, Project Portfolio Management creates one or more of the following document entries for the transfer order delivery document:

- Item cost
- Nonrecoverable tax
- Nonrecoverable tax inclusive
- Project inventory overhead

You can use the Manage Project Costs task in Costs work area in Project Portfolio Management to search and view expenditure item and project costing details associated to the transfer order.



If the cost incurred against the project is a billable cost, you can bill your customer based on the completion percentage or milestones achieved on the project. If it is a cost that can be capitalized, you can proceed to run the capitalization flow. You can also choose to allocate costs to other projects, project tasks, or accounts as appropriate.

# Accept Project-Specific Customer Returns

## Overview of Project-Specific Customer Returns

Project-Driven Supply Chain is an end-to-end integrated solution across Oracle Fusion Cloud Procurement, Supply Chain and Manufacturing, and Project Management applications. It provides the ability to accept customer returns for project-specific inventory.

When accepting project-specific customer returns, you can:

- Receive project-based Return Material Authorizations (RMAs).
- Put away the project RMA into project inventory.
- Interface the project cost collection attributes during creation of sales return transactions for:
  - Intercompany referenced RMAs
  - Unreferenced RMAs
- Interface the cost of referenced RMA receipts including overheads to a project in an intercompany flow.
- Review imported trade sales order return receipts and issue appropriate invoice credit actions.

After the put away transaction, the on-hand inventory received from the customer segregates by project and task. The receipt of RMA into project inventory streamlines the project cost collection for intercompany RMA receipts.

**Note:** After the return sales order is submitted and released to your warehouse for receiving, you can no longer update the project or task attributes at any point in the return.

## **Project-Specific Customer Returns**

With project-driven supply chain, you can receive project-specific customer returns into project-specific inventory. This enables you to return project-specific material directly to your organization and ensures that the correct charges are credited back to your projects upon return of goods.

You must first enable **Inventory Tracking by Project** for your applicable organizations and set up your default expenditure types.

The high-level process flow includes:

- 1. Ship project-specific material to your customer
- 2. Return sales order with project and task details
- 3. Receive the goods back into project-specific inventory
- **4.** Credit costs to the appropriate project



Let's look at these areas of project-specific customer returns:

- · Project details and inventory attributes
- On-hand inventory
- Shipments
- Completed transactions
- Transfer transactions
- Cost accounting review
- Managing project-specific customer returns in Projects

#### Project Details and Inventory Attributes

You can view the project details and inventory attributes for project-specific customer returns on several Receiving pages. The **Project Details** section shows the project and task from the Return Material Authorization (RMA) order. The **Inventory Attributes** section shows the project and task by which the on-hand quantity for the item is tracked.

When you enable an organization for inventory tracking by project, then the project and task under the **Project Details** and **Inventory Attributes** sections are the same. This set of project and task information displays on these Receiving pages:

- · Receipt Lines and Receipt Line pages
- Inspect Lines and Inspect Line pages
- Put Away Lines and Put Away Line pages

You can also view the project and task for the source document during corrections and returns.

### On-Hand Inventory

After performing the put away transaction, the on-hand inventory is tracked by project and task. The **Transfer Inventory Transactions to Costing** process gets project costing attributes from the RMA and interfaces them to costing.

- For referenced RMA orders, the cost of the RMA is derived from the original sales order.
- For unreferenced RMA orders, the actual cost of the received material carries forward into on-hand inventory for the actual and average costed organizations. For standard costed organizations, the predefined standard cost is used to value the on-hand inventory.

#### **Shipments**

When the organization in which the RMA is received is enabled for the **Print shipping documents for return material authorizations** option, a shipment is created for the RMA. The shipment has a reference to the project and task for a project-based RMA order.

The inventory project and task that appear on the shipment depend on whether or not the organization is enabled for the **Inventory Tracking by Project** option:

- When the shipment is created for an organization that's enabled for inventory tracking by project, the inventory project and task on the shipment is the same as the project and task on the RMA order.
- When the shipment is created for an organization that's not enabled for inventory tracking by project, the inventory project and task are blank.



You can view the inventory tracking details and project and task details on the Manage Shipment Lines page.

#### **Completed Transactions**

You can use the Review Completed Transactions page in Inventory Management to view the project costing and inventory tracking details for the RMA receipt transaction created for a project-based RMA order.

When the organization is enabled for inventory tracking by project, the inventory project and task for an RMA receipt transaction is the same as the project costing project and task on the RMA order. If the organization isn't enabled for inventory tracking by project, the inventory project and task are blank, while the project costing project and task number refer to the project and task from the RMA order.

#### Transfer Transactions from Inventory to Costing

Use the **Transfer Transactions from Inventory to Costing** process to cost project-based put away transactions for RMA orders. This process sends the project, task, expenditure type, expenditure date, expenditure organization, and other user-defined project costing attributes from RMAs to Costing Accounting. For referenced returns, the process uses the shipped date on the original sales order as the expenditure date for the material transactions.

Cost Accounting costs the inventory transactions. Once costed, you can review the cost accounting entries.

#### Cost Accounting Review

Use the **Review Cost Accounting Distributions** task to review the cost accounting information for the project-based sales order return transactions. These return transactions can be referenced or unreferenced to the original sales order.

### Managing Project-Specific Sales Order Customer Returns in Projects

You can import referenced intercompany transactions using the **Import Cost** process. Depending on the source transaction, the process creates one or more of these document entries for a sales order Project Portfolio Management:

- Item cost
- Item overhead

Use the **Manage Project Costs** task in the Costs work area in Project Portfolio Management to search and view expenditure items and project costing details associated to the returned sales order.

#### Related Topics

- Considerations for Project-Specific Customer Returns
- Proiect-Specific Customer Return Scenarios
- How can I set up inventory for project-driven supply chain?

## Considerations for Project-Specific Customer Returns

If you need to return project-specific inventory after it has been shipped to your customer, you can create a return sales order with project and task details, receive the goods back into project-specific inventory, and receive a credit back to the project when appropriate.



Let's look at the implementation decisions you should make prior to receiving project-specific customer returns. Here are a list of questions to ask:

- Do you want to default the project and task values from original sales order on the return order?
- Do you need to suppress project-based order lines from being sent to Accounts Receivables?
- Does your organization receive project-specific inventory using return orders?
- Does your business require sending project-specific material costs to project financials?

Do you want to default the project and task values from original sales order on the return order?

If yes, then set the Allow User to Remove Project Details on Referenced Return parameter to No.

In the Setup and Maintenance work area, go to the **Manage Order Management Parameters** task to set this parameter:

- · Offering: Order Management
- Functional Area: Orders (click Show All Tasks)
- Task: Manage Order Management Parameters

This ensures that you can default the project and task values from the original sales order on return orders, and that you don't want users to remove the project details.

Do you need to suppress project-based order lines from being sent to Accounts Receivables?

If yes, create a custom orchestration process with line selection criteria to skip sending lines to Accounts Receivables when the **Project Indicator** value is **Y**.

Does your organization receive project-specific inventory using return orders?

If yes, then opt-in for the **Accept Project-Specific Customer Returns** feature in the Manufacturing and Supply Chain Materials Management offering.

Also, select the **Enable Inventory Tracking by Project** inventory organization option for the desired inventory organization. In the Setup and Maintenance work area, go to the **Manage Inventory Organizations** task to set this option:

- Offering: Manufacturing and Supply Chain Materials Management
- Functional Area: Facilities (click Show All Tasks)
- Task: Manage Inventory Organizations

You must also classify the inventory organizations enabled for inventory tracking by project as project expenditure organizations. In the Setup and Maintenance work area, go to the **Manage Project Organization Classifications** task to make these classifications:

- Offering: Manufacturing and Supply Chain Materials Management
- Functional Area: Facilities (click Show All Tasks)
- Task: Manage Project Organization Classifications



# Does your business require sending project-specific material costs to project financials?

If not, then define project types and identify the desired project types to be excluded from cost collections.

## **Project-Specific Customer Return Scenarios**

You can create customer returns for project-specific inventory for both single business unit and intercompany transactions.

The process starts with the creation of a project-specific referenced RMA or unreferenced RMA order in Oracle Order Management. When the original order with the project is shipped from Oracle Fusion Cloud, the referenced RMA derives the project, task, and other project attributes from the original sales order. In the case of the unreferenced RMA order, the project attributes are populated during order entry.

There are three scenarios here:

- Referenced RMA order is created with project and task
- Unreferenced RMA order is created with project and task
- Referenced RMA order is created without any project and task

The RMA order is interfaced to Receiving where it's received, inspected, and put away. Receiving gets the reference to the project, task, and other project attributes from the Order Management database. At the time of receipt creation, Receiving validates if the receiving organization is enabled for inventory striping by project.

The receiving scenarios depend on the type of return transactions:

- Non-intercompany scenario
- · Intercompany scenario

Intercompany orders are created in one selling business unit and fulfilled from another business unit.

## FAQs for Project-Specific Customer Returns

What's the difference between a referenced and unreferenced return sales order?

A referenced return sales order copies the project and task details from the original sales order. To allow the removal of the project and task from a referenced return sales order, set the Allow User to Remove Project Details on Reference Returns parameter to Yes.

An unreferenced return sales order requires the order entry clerk to enter those details manually. When creating a referenced return sales order, you can remove the project and task details before submitting the order if the project is no longer valid or you want to return the goods to common inventory.

How can I remove project and task details from a referenced return?

Set the Allow User to Remove Project Details on Reference Returns parameter to Yes.



When this parameter is set to **Yes**, you can remove project details before an order is submitted for a project-specific customer return.

From the Setup and Maintenance work area, use the **Manage Order Management Parameters** task to set this parameter:

- Offering: Order Management
- Functional Area: Orders (click Show All Tasks)
- Task: Manage Order Management Parameters

Why doesn't the referenced RMA for a project-based sales order have a project or task reference?

If the project and task on the sales order aren't valid at the time of the referenced RMA creation, the order isn't submitted, but remains in draft status. You can submit the order by removing the project and task on the referenced order.

# FAQs for Project-Specific Inventory

## How can I set up inventory for project-driven supply chain?

Enable inventory tracking by project for your applicable organizations and set up your default expenditure types.

Set up your inventory organization to track by project by selecting the **Enable Inventory Tracking by Project** check box on the Manage Inventory Organization Parameters page. Set up your default expenditure types by selecting a default value for each of the fields on the Manage Default Expenditure Types page. If you want to track project costs, you must also classify your organizations as project expenditure organizations in Oracle Fusion Cloud Project Management.



# 13 External System Integrations

# **Inventory Transaction Interface**

Use the Inventory Transaction Interface to automatically create inventory transactions from another system. You can also use the interface to view, edit, and correct transactions.

Run both the Create Inventory Transactions Interface and the Manage Inventory Transactions Interface by selecting the **Manage Pending Transactions** task from the Tasks pane of the Inventory Management work area.

Before launching this interface, you must:

 Load import data to the Inventory Transaction Interface tables (INV\_TRANSACTIONS\_INTERFACE, INV\_TRANSACTION\_LOTS\_INTERFACE, and INV\_SERIAL\_NUMBERS\_INTERFACE). For more information on each interface table, see Oracle Enterprise Repository for Oracle Fusion Applications.

You can load data to interface tables using predefined templates and the Load Interface File for Import scheduled process, which are both part of the External Data Integration Services for Oracle Cloud feature. For other implementations, optionally use this feature only if you have SFTP configured for it.

- Establish parent-child relationships for the following Inventory Transaction Interface tables:
  - INV\_TRANSACTIONS\_INTERFACE
  - INV\_TRANSACTION\_LOTS\_INTERFACE
  - INV\_SERIAL\_NUMBERS\_INTERFACE

#### Related Topics

- Create Inventory Transactions
- Manage Inventory Transactions

# Count Sequence Interface

Use the Count Sequence Interface to create a new cycle count sequence, or to modify an existing cycle count sequence. You can also use the Count Sequence Interface to import and export cycle entries to and from external systems.

Run the Count Sequence Interface by selecting the **Review Count Interface Records** task from the Tasks pane of the Inventory Management work area.



#### Before launching this interface, you must:

- Load import data to the Count Sequence Interface table (INV\_CC\_ENTRIES\_INTERFACE). For more information on the interface table, see Oracle Enterprise Repository for Oracle Fusion Applications.
  - You can load data to interface tables using predefined templates and the Load Interface File for Import scheduled process, which are both part of the External Data Integration Services for Oracle Cloud feature. For other implementations, optionally use this feature only if you have SFTP configured for it.
- Establish parent-child relationships for the Count Sequence Interface table (INV\_CC\_ENTRIES\_INTERFACE).

Related Topics

## Reservation Interface

You can use the Reservation Interface to view, create, process, and delete inventory reservation requests in the Oracle Inventory Management INV\_RESERVATION\_INTERFACE table.

These reservation requests include unprocessed requests and process requests that didn't complete successfully. Requests that complete successfully disappear from the interface table. You can also submit and resubmit reservation requests for processing.

Run the Reservation Interface by selecting the **Manage Reservation Interface** task from the Tasks pane of the Inventory Management work area.

#### Before launching this interface, you must:

- Load import data to the Reservation Interface table (INV\_RESERVATION\_INTERFACE). For more information on the interface table, see Oracle Enterprise Repository for Oracle Fusion Applications.
  - You can load data to interface tables using predefined templates and the Load Interface File for Import scheduled process, which are both part of the External Data Integration Services for Oracle Cloud feature. For other implementations, optionally use this feature only if you have SFTP configured for it.
- Establish parent-child relationships for the Reservation Interface table (INV\_RESERVATION\_INTERFACE).

After you successfully load your data, submit the Manage Reservation Interface process to import the data into the application tables.

#### Related Topics

Considerations for Using the Reservation Interface

# Considerations for Using the Reservation Interface

You can create inventory reservations automatically from any internal or external application using the Reservation Interface.



Use the control file **InvReservationsInterface.ctl** and the Manage Reservation Interface process to load data from legacy and third-party applications. Use the Load Interface File for Import process to load your reservation data into the INV\_RESERVATION\_INTERFACE interface table.

Consider these tips when using the Reservation Interface:

- · Preparing table data
- · Loading data
- Excel template format
- Recommendations for loading reservation data
- Importing loaded data

### **Preparing Table Data**

Here are the steps for preparing the table data:

- 1. Prepare the data for each interface table using the worksheet in Reservation Interface template.
- **2.** Refer to the bubble text on each column header for detailed instructions on preparing the data in that column, or for a description of the required data and data type.
- **3.** Common tasks for preparing table data include setting up for the data merge and searching for internal identifiers.

## **Loading Data**

- 1. After you finish preparing the data in the parent and child sheets, click the Generate CSV File button to generate a ZIP file containing one or more CSV files.
- 2. Load your data from the CSV file into the interface tables using the Load Interface File for Import scheduled process. For more information, see the Documentation tab for the Load Interface File for Import scheduled process in Oracle Enterprise Repository for Oracle Fusion Applications.

### **Excel Template Format**

Here are the details for the excel template format:

- Each interface table is represented as a separate Excel sheet.
- The first row in each sheet contains column headers that represent the interface table columns.
- The columns are in the order that the control file expects them.
  - Don't change the order of the columns in the Excel sheets. Changing the order of the columns can cause the load process to fail.
  - You can hide columns that you don't intend to use, but you can't delete columns. Deleting columns can cause the load process to fail.
- Each column header contains bubble text about the expected data type and, in some cases, instruction text.
- You must enter data that conforms to what the control file can accept and process for the associated database column
  - Date fields must be entered in YYYY/MM/DD format.
  - Amount columns must not contain a thousands separator and must use a period (.) as the decimal separator.



- o Columns that must be whole numbers have data validation to allow only whole numbers.
- Columns are formatted, where applicable, to match the expected data type to eliminate data entry errors.
- For columns that require internal ID values, refer to the bubble text for additional guidance about finding these values.

### Recommendations for Loading Reservation Data

In general, we recommend that:

- You build an export file in the same format as the Reservations Interface described in this template. No matter
  which method you use to extract data, you need to create staging tables and a spreadsheet that mirrors the
  tabs contained in this template. You can use SQL, ODI, or a similar tool to extract data into a CSV file with the
  same structure as the CSV file generated by this template.
- Your spreadsheet must have the same columns, and the columns must be in the same order, as in this template.
- Once you have extracted the data into your temporary spreadsheet, cut and paste the data into the relevant sheets provided in this template.
- For ID columns, you need to develop a mapping between existing values and Oracle Fusion Cloud Application
  values. Use the implementation pages in Oracle Functional Setup Manager to extract the identifier and
  additional attributes to help map the two values.
- For key flexfields, you also need to develop a way to map the values in the source system that correspond to the unique combinations in Oracle. For key flexfield columns in the spreadsheet that require internal IDs, use the related Oracle implementation pages to export the internal IDs and the segment values to map to the source system values.

### Importing Loaded Data

After you successfully load your data, you must submit the Manage Reservation Interface process to import the data into the application tables.

To submit the Manage Reservation Interface process:

- 1. Navigate to the Scheduled Processes work area (Tools > Scheduled Processes.
- Click the Schedule New Process button and select Manage Reservation Interface.
- 3. Enter the appropriate parameters and click **Submit**.
- **4.** Monitor the process in the Scheduled Process work area.
- **5.** If the submitted process ends in error or warning, review the log file for details about the rows that caused the failure.

#### To correct import errors:

- 1. Click on the Manage Reservation Interface task in the Inventory Management work area.
- **2.** Query the records by specifying the appropriate search criteria.
- **3.** Review and correct the errors in the spreadsheet.
- **4.** Once you correct all of the rows with errors, resubmit the process.
- 5. Repeat the submit and error correction steps in this section until all rows import successfully.



# Inventory Balances Integration with External Systems

Using Oracle Fusion Cloud Inventory Management's inventory balances integration capabilities, you can outsource warehousing and manufacturing processes to efficiently lower costs, service local markets, reduce cycle times, and so on

A central integration framework across Oracle Purchasing, Oracle Fusion Cloud Order Management, and Oracle Inventory Management tracks interactions between the various external systems. You can receive inventory balance details from external systems, such as third-party logistics providers, warehouse management systems, or contract manufacturers and use this information to reconcile inventory balances. Inventory on-hand details can include subinventory, locator, lot, serial number, and external packing unit.

The inventory balances integration feature enables you to:

- Use the Inventory Balance Transactions REST resource to post inventory balance messages from an external system
- Import inventory balance messages in bulk using a SaaS spreadsheet
- Enable users to resolve any processing exceptions
- Purge inventory balance messages periodically

**Note:** This feature is automatically available and is included with the shipped job roles (warehouse manager and inventory manager).

Use the following processes and task to interface with external systems to improve tracking and visibility across your supply chain, including partners:

- Manage Inventory Balances Processes
- Manage Inventory Balance Messages in Spreadsheet (ADFdi)
- Manage Inventory Transaction Process
- Purge Inventory Balance Messages Process

#### Manage Inventory Balances Process

This scheduled process processes the imported inventory balance messages in the interface tables.

## Manage Inventory Balance Messages in Spreadsheet (ADFdi)

Use this task, in the Inventory Management work area in the Manufacturing and Supply Chain Materials Management offering, to review and resolve any exceptions while processing the inventory balance messages.

## Manage Inventory Transaction Process

This scheduled process processes the necessary adjustment transactions to reconcile the inventory balances.



### Purge Inventory Balance Messages Process

Use this scheduled process to purge the historical balance inventory messages collected over time in the interface tables. Using the processing status parameter, you can purge error, successful, or all messages between a date range.

#### Related Topics

- Manage Inventory Balances Process
- Manage Inventory Transactions
- Purge Inventory Balance Messages

# Third-Party Logistics and Warehouse Management Systems

A third-party logistics (3PL) provider typically specializes in integrated operation, warehousing, and transportation services that can be scaled and configured to customer need based on market conditions. A warehouse management system (WMS) is a software application designed to support warehouse or distribution center management and staff.

This application facilitates management of available resources to move and store materials into, within, and out of a warehouse, while supporting staff in material movement and storage

Oracle Fusion Cloud Applications provide a central integration framework that coordinates communication with a 3PL system or WMS to support purchase order receipts, returns to suppliers, internal material transfers, inventory transactions, and sales order shipments. Using Simple Object Access Protocol (SOAP)-based web services or REST resources, Oracle Fusion Cloud Inventory Management communicates receiving advice and shipment requests to a 3PL provider or external WMS for processing. After completion of processing in the 3PL system or WMS, Inventory Management accepts receipt confirmations, shipment confirmations, and inventory transactions from the 3PL system or WMS.

For more information, see these guides:

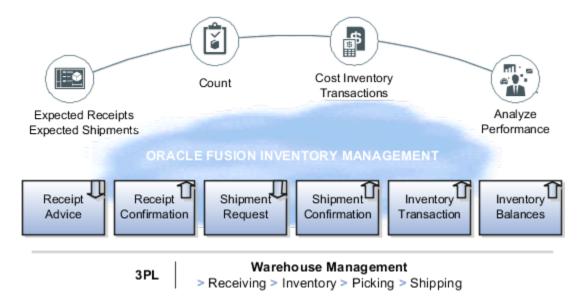
- REST API for Oracle Fusion Cloud SCM
- Oracle Fusion Cloud SCM: SOAP Web Services for SCM

# Overview of Inventory Management Integration with 3PL and Warehouse Management Systems

Oracle Fusion Cloud Inventory Management supports a central integration framework for working with third-party logistics (3PL) providers and warehouse management systems (WMS). The inventory management suite of products includes Oracle Receiving, Oracle Inventory Management, and Oracle Shipping.

The following figure illustrates how Inventory Management integrates with 3PL and WMS systems. The subsections following the figure provide more detail for this integration.





## Receiving Integration

Receiving integration addresses the following points:

- Sends a receipt advice to the WMS for the various documents, such as purchase order (POs), advanced shipment notices (ASNs), and return material authorizations (RMAs).
- Receives and processes receipt confirmations to acknowledge the receipt of material, updates the source
  documents and on-hand details for quantities and other related information, such as lots, serials, and external
  packing units, and the return of rejected material. This includes reference to the WMS transactions for
  reconciliation.

## Shipping Integration

Shipping integration addresses the following points:

- Sends the shipment requests to the WMS for the various documents, such as sales orders and transfer orders.
- Receives and processes shipment confirmations to acknowledge the shipment of material and updates the source documents. This includes reference to the WMS transactions for reconciliation.
- Updates the on-hand details for quantities and other related information, such as lots and serials and splitting
  of the unfulfilled portions.

## **Inventory Management Integration**

Inventory Management integration addresses the following points:

- Receives and processes various inventory transactions that can happen within a WMS that might affect the
  material location and on-hand details. Such inventory transactions include adjustments, miscellaneous receipts
  and issues, and transfers. This includes reference to the WMS transactions for reconciliation.
- Receives and processes inventory balance updates for solving inventory reconciliation challenges.



#### Related Topics

- Inventory Balances Integration with External Systems
- Inventory Management Integration with 3PL and Warehouse Management Systems Process Flow

