Oracle Warehouse Management Cloud

Implementation and Configuration Guide

Release 23A

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Get Help

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

Get Help in the Applications

Access the online help from the user drop-down menu in the Warehouse Management application.

Get Support

You can get support at *My Oracle Support*. For accessible support, visit *Oracle Accessibility Learning and Support*.

Get Training

Increase your knowledge of Oracle Cloud by taking courses at *Oracle University*.

Join Our Community

Use *Cloud Customer Connect* to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, and watch events.

Learn About Accessibility

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

Share Your Feedback

We welcome your feedback about Oracle Warehouse Managment. If you need clarification, or find an error, you can direct your questions via a service request to *My Oracle Support.*

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2 **Overview**

Overview

These topics will serve as a guide to configure UI Modules for available Oracle® Fusion Cloud Warehouse Management functionalities needed for customer flows.

A summary of the specific functionality is provided in each section to help users decide on functionality that will be needed as well as what needs to be configured. The document follows a sequence based on the end-to-end flows (receiving to shipping), however configuration is not required to be done in this particular order. Any section can be configured at any time as long as prerequisites are met.

This guide will include some RF Transactions needed for specific flows but will not cover all RF Transactions.

Basic Guidelines

Assumptions

- The customer will also use the RF Parameters document for additional RF Modules needed for the flow.
- The customer will have basic knowledge of Oracle Warehouse Management (WMS) Cloud.

Basic Terminology

- SuperUser: User created at the Parent Company Level. This user will have access and visibility over all companies in any facility he/she has access to.
- Child User: User created at a company level. This user will only have access to that specific company.

Configuration Guidelines

- Each topic has multiple tasks and multiple sub-tasks for configuration. A task will have a summary that will help clients determine if the particular configuration task is needed for the client flow.
- All task and sub-tasks are not required. Customers can decide what is needed for their specific flow. The summary and overview of a task should be used to determine if optional tasks are needed for the business flow.

Configuration

- When doing configuration for a specific client company, users need to make sure they are logged in under the correct client company level.
- Lock codes and Reason Codes are only configured at the 3PL Parent Company Level

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UI Menu

- Existing Menus can be leveraged for new users. Additional Modules can be added to a User's Existing Menu if new functionality is required.

- Some UI Modules/Screens mentioned in configuration will have to be added to a user's menu prior to configuration. Section 'Custom Menu Set Up' will go over adding screens to a menu.

RF Menu

- RF Transactions that will be used for operations will have to be added to users' RF Menu.

- They will first be added in the "Screen Configuration" UI Module and then added to respective menus.

- These RF modules can be added as the configuration is being done.

- When adding and configuring RF Transactions, users need to make sure that they are at the correct company level:
    - If an RF Transaction is available in a SuperUser Menu, this RF Transaction will be added and configured at the 3PL Parent Company level
    - If an RF Transaction is available in a ChildUser Menu, this RF Transaction will be added and configured at the Client Company Level

Users

Users created at the Parent Company level will be able to operate on any company using the RF. Users will be logged in to a facility and will not have to specify a company for operations.

Users created at the Child Company level will only be able to operate for the specific client company.

3PL Parent Company vs. Client Company

- Wave templates configured at the 3PL Parent company level can be used for any client company. Wave Templates configured at the client company level can only be used for that client company.

- Configuration for wave templates made at the 3PL Parent Company level will not be visible at the client company level.

Recommendation: If wave templates will not be shared across different client companies, configuration should be done at the client company level.

Copy and Update Warehouse Management Databases

Oracle Cloud WMS supports cloning WMS databases. However, the cloning activity is strictly restricted to environments owned by a particular customer.

The following options are supported:

- Product to Test (P2T) - Copying the PROD environment to a non-Prod environment.

- Test-to-Test (T2T) - For customers that have purchased multiple non-Prod environments, copying one non-Prod to another non-Prod.

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- Test-to-Production (T2P) - Copying a non-Prod environment to Production. **Though this option is available, it can only be requested before the WMS environment Go-Live and does require further approvals from customer management.**

There are other rules and guidelines that governs database cloning procedure, so please carefully review MOS document *How Does Oracle Warehouse Management database copy and update process work across multiple environments? (Doc ID 2519902.1)* before submitting a Service Request (SR) via Oracle Cloud WMS Support.

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3 General Configuration

General Configuration

These topics will walk you through General Configuration for Oracle WMS Cloud. Click on the topics in the left-pane for more details.

Facility Setup

Task Description	WMS Module	Overview/Comments	Task Details
Facility Set Up	Facilities	New facility is required to be created if: -the company being added is in a new/non-existing Facility in Oracle WMS Cloud.	1. In the **Facilities** UI, Create a Facility as a Distribution Center for new Distribution Centers (DCs.) Create a Facility as a Store for new Stores 2. To add an existing company to that facility: access the link 'Companies in Facility' and add the company to the facility.
Add Facility to user	Users	A new created Facility needs to be added to the user profile	1. In the **Users** UI, under 'Eligible Facilities', the new DC can be added to the user's profile for access to the Facility 2. Log out and log back in for the change to take effect.

Company Setup

Task Description	WMS Module	Overview/Comments	Task Details
Non-existing Company Set Up	Companies	(Non-existing Company in New or Existing Facility)	1. Login under specific facility created 2. Create new company in the **Companies** UI. **Note:** The Company created will automatically added to the Facility under which the user is logged in.

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Task Description	WMS Module	Overview/Comments	Task Details
			In the Facilities UI, under Companies, all companies in the selected facility can be viewed.
Existing Company Set Up (Existing Company in new or existing Facility)	Facilities	Existing Companies do not need to be re-created but need to be added to the specific facility	1. In the **Facilities** UI, select the specific Facility and add the existing company under 'Companies in Facility'

Custom Menu Setup

Custom Menu Setup is required if new custom UI and RF menus are required for specific users/groups of users (i.e. Super User Menu, Inbound User Menu, Inventory Control Menu etc…)

Note:
- Existing Menus at the 3PL Parent Level can be used for users at the 3PL Parent Level (SuperUsers)
- Existing Menus for a specific existing client company can be used for users created at the specific client company level across different facilities
- For new companies: new users created at the new company level will require a new menu to be created if a custom menu is needed

All required screens/modules will need to be added in the **Screen Configuration** UI before they can get added to a menu. Required screens can be added as configuration is being done.

Task Description	WMS Module	Overview/Comments	Task Details
UI Modules/Screens Set Up	Screen Configuration	Login under Parent Company Level to add screens at the 3PL Parent level (for menus at Parent level) Login under the specific Child Company Level to add screens at the Client Company level (for menus at client company level)	1. Login at the specific level required to add UI Modules. 2. In the **Screen Configuration** UI, add all required Modules. **Note:** Some UI Modules may already be available to add to menus.
UI Menu Set Up	Menu Configuration	Login under Parent Company Level to add screens at the 3PL Parent level Login under the specific Child Company Level to add screens at the Client Company level	1. Login at the specific level required. 2. In the **Menu Configuration** UI, create Menu with correct type = UI.

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Task Description	WMS Module	Overview/Comments	Task Details
			3. Select the menu created and under the 'Details', add all required screens for the menu. **4.** Save all changes when done.
RF Screens Setup	Screen Configuration See the *RF Parameters* Document for more details.	Login under Parent Company Level to add screens at the 3PL Parent level *Login under the specific Child Company Level to add screens at the Client Company level	**1.** Login at the specific level required to add RF Transactions. **2.** In the **Screen Configuration** UI, add all required RF Transactions. **Note:** Some RF Transactions may already be available to add to menus. **3.** Configure the RF Parameters for each RF Transaction correspondingly based on flow requirements.
RF Menu Setup	Menu Configuration	Login under Parent Company Level to add screens at the 3PL Parent level Login under the specific Child Company Level to add screens at the Client Company level	**1.** Login at the specific level required. **2.** In the **Menu Configuration** UI, create Menu with correct type = RF. **3.** Select the Menu created and under the 'Details', add all required RF Transactions for the menu. **4.** Save all changes when done.

Group Configuration

Group Configuration will be used to set up User Groups (i.e. Super User Menu, Inbound User Menu, etc…). A user group will have an assigned UI and/or RF Menu. One or more groups can be assigned to each user.

Each user will have a default group. A user's default group will determine the user's RF Menu as well as the user's default UI Menu. The user will be able to switch from different UI Menus.

Note:
- Existing groups at the 3PL Parent Level can be used for users at the 3PL Parent Level (SuperUsers.)
- Existing Groups for a specific existing client company can be used for users created at the client company level across different facilities
- For new companies: new users created at the new company level will require a new group to be created if custom menus are needed

Task Description	WMS Module	Overview/Comments	Task Details
User Group Set Up	Group Configuration		1. Login at the specific level required to add Groups. 2. In the **Group Configuration** UI Module, create new group and select UI and RF Menus created for that group.
Group Permission	Group Configuration	If the group will be used for user roles such as 'Employee', 'Guards', 'Supervisors', Group permissions can be added. This will allow users to have specific additional permissions.	1. Select the group and under **Permissions** select all permissions needed for the specific group. **Note:** Permissions do not need to be added for user roles 'Administrator'

User Profiles

Task Description	WMS Module	Overview/Comments	Task Details
Add Profiles for new Users	Users	Users created at the 3PL Parent Company will have visibility across all companies in the specific facilities they have access to Users created at the client company level will only have visibility and access to that client company	1. Create usernames for any new users for the warehouse or customer. 2. When adding Facility to user profile: Select specific facility the user needs access to or default login facility. 3. When adding a Company to a user profile: o For SuperUsers, select the 3PL Parent Company o For customer users or users with limited access to a specific company, select the customer company. 4. When adding the role: o Select Guard or Employee for users with read-only access. 5. For the default group: Select the appropriate group with the correct Menu to add to the user.
Add Facility-Company to New and Existing Users	Users	New users will be created with a default facility. Additional facilities can be added to users.	1. Select the specific user and access the link 'Eligible Facilities.'

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Task Description	WMS Module	Overview/Comments	Task Details
			2. Add the Facilities to the user selected. **Note:** For users created at the 3PL Parent Company level: all companies in the added facility will be automatically added to the user.

Facility Parameters

Facility paramters are used to configure system functionalities for Facility level operations. The configuration for Facility parameters will apply to all companies within the specific facility being configured. Examples of facility level parameters: - Shipping Load Assignment - Auto Load and Ship Option etc...

See the *Facility Parameters* document for available facility parameters with their definition.

Parameter Values will mostly include: (Yes, No, Y, N, TRUE, FALSE)

Company Parameters

Company parameters are used to configure system functionalities for Company level operations. The configuration for Company parameters will only apply to the specific client company being configured.

See the *Company Parameters* document for available company parameters with their definition.

Parameter Values will mostly include: (Yes, No, Y, N, TRUE, FALSE)

Note: For existing companies, if company parameters are already configured, the parameter values will be the same and are not required to be re-configured.

Sequence Counters

Sequence Counters are used to set up the generation of values for the different identifiers/numbers used in an end-to-end process flow. For example, sequence counters include: License Plate Numbers, shipment numbers, load numbers, and any other identifier number generated automatically by the system.

The counter code and counter description will specify the name of the identifier (ex: OBLPN - Outbound Container --> This counter will be used to set up the generation of outbound license plate numbers).

- The prefix values will be used in every generated number sequence as a prefix. (ex: OC for Outbound Containers)

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- The start and end Number fields will specify the values for the start and end number of the sequence number (ex: 1 to 1000)

- The sequence length will specify the number of characters that will get generated after the prefix

- The increment will be the value by which the sequence number will increase.

- The 'Append Facility Code to Prefix' flag can be checked to append the facility code to the sequence counter prefix.

Task Description	WMS Module	Overview/Comments	Task Details
Existing Sequence Counters	Sequence Counter		1. Login at the specific company level 2. In the **Sequence Counters** UI Module, select each counter that will be used for the flow and edit each record to enter values for the fields. 3. For the counter code **Outbound Container** a check digit method can be chosen to calculate the identifier number.
Sequence Counters for Ship To Companies	Sequence Counter	New sequence counters for 'Outbound Container' are created for each new ship To company created in the Ship To Company Master. The sequence counter set up for a ship to company will be used to generate outbound containers for Outbound LPNs being shipped to the ship to company. **Note:** Ship To companies must be set up first to be able to set up these sequence counters. See Master Configuration.	1. Login at the specific company level. 2. In the **Sequence Counters** UI Module, search for the counter - **Outbound Container** created for a ship to company and edit the sequence values. 3. For the counter code **Outbound Container** a check digit method can be chosen to calculate the identifier number.
Sequence Counter by Stores	Sequence Counter	New sequence counters for 'Outbound Container' can be created for stores (Ship To Facilities). This will allow Outbound LPNs to be created with prefixes specific to a Store. (i.e. Store 1 can have a specific prefix or sequence range for Outbound LPNs while Store 2 has different prefix and range) **Note:** Facilities must be set up first to be able to set up these sequence counters. See Master Configuration.	1. Login at the specific company level. 2. In the **Sequence Counters** UI Module, search for the counter - **Outbound Container** created for a ship to company and edit the sequence values. OR copy an existing record for **Outbound Container** to add a new counter. 3. Enter the required values. 4. Select the specific Ship To Facility for which the sequence counter is being edited.

Task Description	WMS Module	Overview/Comments	Task Details
			5. For counter code **Outbound Container**, a check digit method can be chosen to calculate the identifier number.

Barcode Types

Barcode Types are used to set up acceptable barcode formats for barcodes scanned with RF during warehouse operations. The barcode types can be used if it is required to restrict the format of certain barcodes. Barcode types can be set up to restrict formats of LPNs, Batch Numbers, etc...

There can be multiple formats for the same barcode types.

A barcode type will specify:

- A prefix (not required)
- The length of the barcode. Note: A length of -1 will indicate any length.
  The 'numeric_flg' will specify if a barcode type will only include numeric values.

Task Description	WMS Module	Overview/Comments	Task Details
Barcode Types Set Up	Barcode Types		1. Login at the specific company level. 2. In the **Barcode Types** UI Module, select the barcode types that will be used for the flow and edit each record to enter values for the prefix and the length. 3. Copy and edit records to set up additional formats for the same barcode types.

Literals

Literals are field names that are displayed in the UI on headers and the search/edit/create pop-up screen. These field names can be renamed appropriately specific to your business flow.

For example: In the item master, item parts (part_b tp part_f) can be used as item characteristics such as color, size, etc.. These fields can be renamed appropriately to reflect what they represent for you.

> **Note:** You can also use the **Init Stage Interface** API to insert data into stage tables and run the interface to process Literals data. See the *Integration API Guide* for more details.

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Task Description	WMS Module	Overview/Comments	Task Details
Literals Setup	Literals	**Note:** Changes made at the 3PL Parent Company level will affect all the client companies. Changes made at the Company level will be visible for that company across facilities.	1. Login at the specific company level. 2. From the **Literals** UI, click on the **Search** Icon to look for a field name. 3. In the **Literal** field enter the field name that needs to be changed (ex: part for all the item parts) and click on **Search.** 4. Select the specific literal from the results and under the 'Edit Literal' section, enter the new field name in the field 'Text'. 5. Click **Save** for the changes to take effect. 6. Users will have to log out and log back in to see the changes in effect.

Messages

Messages are WMS Messages that are displayed on RF Screen during operations. These messages include informational messages such as messages for Inventory being received or picked, as well as error messages that prevent some operations.

These messages can be modified and worded differently, and they can also be disabled if required.

Task Description	WMS Module	Overview/Comments	Task Details
Messages Setup	Messages	**Note:** Changes made at the 3PL Parent Company level will affect all the client companies. Changes made at the Client Company level will be visible for that company across facilities.	1. Login at the specific company level. 2. In the **Messages** UI, click on the Search Icon to look for a message. 3. In the 'Text' field enter part of the message that needs to be changed and click 'Search'- OR display all messages with the 'Refresh' icon. 4. Select the specific message from the results and under the 'Edit Message' Section, enter the new message. 5. Under the **Edit Facility Properties**, check/uncheck the **Enabled** flag to disable/ enable a message. 6. Click **Save** for the changes.

4 Master Configuration

Master Configuration

Location Master can be configured before or after all other WMS Configuration. There are some prerequisites for the location master:

1. Location Size types which define a group/area of locations that will be used to putaway group of items of similar characteristics. The location size types can be automatically created with the location master or before uploading the location master. See section 'Putaway Operations' for more details on Location Size Types.
2. Replenishment zones which define a zone for a group of locations that will get replenished from the same reserve locations. See section 'Inventory Control' for more details on Replenishment zones.

Both location size types and replenishment zones do not need to be configured prior to the location master. If this information is available in the location master, these values will automatically get created in WMS. Rules can then be added afterwards in the other configuration sections.

Locations

The following are definitions for each type of location that can be configured:

Task Description	WMS Module	Overview/Comments	Task Details
Storage Locations Setup	Location Master	Storage locations consist of Reserve and Active locations. • Reserve Locations will be used to pick Full LPNs, Cases, Packs and Units, and will also be used for replenishment to active • Active Locations will be used to only store and pick Units. There is no LPN traceability in Active.	1. In Location Master, add Reserve Locations with Location Type = R and Active Locations with Location type = A 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Dock Locations Set Up	Location Master	Dock Locations are used to check in shipments and inbound loads at dock. This will give visibility on the locations of received LPNs. Dock Locations are not required for receiving	1. In Location Master, add Dock Locations with Location Type = D 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
QC and VAS Location Set Up (Quality Control & Value Added Services)	Location Master	QC Locations must be set up for QC operations. During receiving, Inventory marked for QC will be located to a QC Location. VAS Locations must be set up for VAS	1. In Location Master, add QC Locations with Location Type = Q and VAS Locations with Location type = V

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Task Description	WMS Module	Overview/Comments	Task Details
		operations. During receiving, Inventory marked for VAS will be located to a VAS Location.	2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Consolidation Locations Set Up	Location Master	Consolidation Locations are used for Distribution to Stores (Put-To-Store Process) Consolidation Locations will be assigned to stores for distribution Consolidation locations are not required unless the distribution to store process will be used	1. In Location Master, add Consolidation Locations with Location Type = C 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Drop Locations Set Up	Location Master	Drop Locations are used as intermediary locations. Users will be able to drop inventory in specific drop locations for inbound and outbound flows. (i.e. this can be used for zone picking and task movement rules).	1. In Location Master, add Consolidation Locations with Location Type = P 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Staging Location Set Up	Location Master	Staging locations are used after packing to consolidate inventory for outbound orders. Staging rules can be set up to consolidate inventory based on the shipping load, the destination, the order number, etc…) Staging locations will also be used to unload outbound containers from outbound loads when needed.	1. In Location Master, add Consolidation Locations with Location Type = S 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Pack and Hold Locations Set Up	Location Master	Pack and Hold locations are intermediate storage locations to place cartons in status packed. This is used to hold ready outbound inventory before shipping. The putaway sequence will be used to direct user to the first empty pack and hold location based on sequence.	1. In Location Master, add Pack and Hold Locations with Location Type = H 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'. 3. Enter a putaway sequence if needed.
Shipping Locations Set Up	Location Master	Shipping locations will be used to ship individual cartons through RF Ship functionality. The cartons and orders will be updated to status 'shipped' once the shipping location is scanned. Cartons will have to be in status 'packed'. The use of loads and manifests is not required for this functionality.	1. In Location Master, add Shipping Locations with Location Type = Y 2. Enter required fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Receiving and Packing Stations Set Up	Location Master	Receiving stations are used receive and sort items into totes. Packing stations are used to pack items into shipping cartons.	1. In Location Master, add Receiving Station Locations with Location Type = T and Packing Station Locations with Location type = K 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.

Items

Item Master can be configured before or after all other WMS Configuration. There are some prerequisites for the item master such as Putaway Types and VAS Group Codes, but these can be configured with the item master.

Putaway types represent the groups of items with similar characteristics (i.e. item divisions.)

1. Putaway types can be configured with the item master. When the item master is uploaded, putaway types will be automatically created. For UI Manual entry, putaway types must be configured prior.
2. Putaway types can be created prior to uploading item master.

VAS Groups do not require to be set up for the item master.

All fields in item master are not required. Only the mandatory fields need to be set up. The additional informational fields can be left blank.

Item Master Setup

Task Description	WMS Module	Overview/Comments	Task Details
Item Basic Identifiers	Items	Required fields: - Item Alternate Code: Another code to identify an item. This can be the same as the item code. - Item Barcode: UPC Barcode - This can also be the same as the item barcode if UPC Information is not available - Style/Part_a: Item Code/Number - Description Non-Required Fields: Part_b to Part_f: Additional Identifiers or attributes of an item. Parts can be used to specify color, size, etc.. Note: If these additional Parts are used the item code will be the concatenation of part_a and these other parts	1. In Item master, enter all item's basic attributes item code, description, parts… 2. Enter Additional Attributes in part_b to part_f fields if needed
Item Dimensions and Cost	Items	Fields unit_cost, unit_length, unit_width, unit_height, unit_weight, unit_volume will specify information for the unit/each UOM level	1. In Item master, enter all item's additional attributes: • unit_cost • unit_length • unit_width • unit_height • unit_weight • unit_voume

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Task Description	WMS Module	Overview/Comments	Task Details
Hazmat Flag Set Up	Items	The field 'Hazmat' is used to specify if an item hazardous	1. In item master, enter value 'TRUE' or 'FALSE' or check/ uncheck hazmat flag in UI to specify if an item is hazardous.
Informational Fields Set Up	Items	Additional Informational Fields can be set up: recv_type, catch_weight_ method, order_consolidation_attr These fields can be used for any informational purpose	1. In Item Master, add additional values for informational fields: o recv_type o catch_weight_method o order_consolidation_attr
OBLPN Type	Items	The OBLPN Type of an item can be set up to specify the type/ size of the container that needs to be used to pack an item. The OBLPN Type set up for an item will be set up in the 'OBLPN Type' UI Screen to specify dimensions of the container. These dimensions will be used for the cubing functionality. Note: The OBLPN Type is not required to be set up at the item level for the cubing functionality.	1. In Item Master, add OBLPN Type. In the UI, access the Item details. 2. Click on edit to add the OBLPN Type, then click Save for the change.
Additional Information Fields Set Up	Items	Additional Informational Fields can be set up: season_code, brand_ code, cust_attr_1, cust_attr_2, retail_price, net_cost, currency_ code, external_style	1. In Item Master, add values for informational fields: o season_code o brand_code o cust_attr_1 o cust_attr_2 o retail_price o net_cost o currency_code o external_style **In the UI, some of these fields might be accessible in the 'Details' and not with the 'Edit' option.

Task Description	WMS Module	Overview/Comments	Task Details
Item Standard Packs, Cases	Items	Information for standard packs and cases of an item can be set up for: std_pack_qty, std_pack_length, std_pack_width, std_pack_height, std_pack_weight, std_pack_volume, std_case_qty, max_case_qty, std_case_length, std_case_width, std_case_height, std_case_weight, std_case_volume These values are not required, but can be used to receive and pick packs and cases instead of units and Full LPNs	1. In Item Master Interface, add values for inner case and packs: o std_pack_qty o std_pack_length o std_pack_width o std_pack_height o std_pack_weight o std_pack_volume o std_case_qty o max_case_qty o std_case_length o std_case_width o std_case_height o std_case_weight o std_case_volume 2. In the UI, access the Item details and click on edit to add these values, then click Save for the change.
Additional Dimensions	Items	Additional dimensions can be set up for informational purposes with fields: dimension_1 to dimension_3	1. In Item Master Interface, add values for fields: o dimension_1 to dimension_3 2. In the UI, access the Item details and click Edit to add these values. 3. Click Save.
Hierarchical Information	Items	Item Hierarchical Fields can be set up for informational purposes: hierarchy1_code & hierarchy1_description to 5 group_code & group_description There can only be one description for each hierarchy code uploaded. (i.e. if multiple items have the same hierarchy code, the description of this code will be the same). Only Hierarchy descriptions are visible in the UI	1. In Item Master Interface, add values for fields: • hierarchy1_code • hierarchy1_description • group_code • group_description
VAS Group Code (Only if VAS Flow will be used)	Items	The VAS Groups define the different groups of VAS Activities. The VAS Group will have one or more VAS Activities based on group requirement. (i.e. VAS Group	1. In Item Master Interface, add values for VAS Group Code. 2. In the UI, click Edit to add this value.

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Task Description	WMS Module	Overview/Comments	Task Details
		'Clothes-Flats' will have activities: 1.'Ironing', 2. 'Sensors', and 3. 'Price Labels) See VAS Functionality section in 'Receiving Operations' section for more details	
Putaway Type	Items	Item Putaway Types are used to group items with similar characteristics for putaway. Items with same putaway types will be putaway in the same location area. (i.e. The putaway type can be an item's division, classification or even an item's velocity).	1. In Item Master Interface, add values for Putaway Type 2. To add this value in the UI, the putaway type needs to be created first.
Item Short Description	Items	The item short description can be used to specify an item's description with a shorter length. If the item short description is specified, this description will be displayed on the labels instead of the item's description	1. In Item Master Interface, add values for: • Short description
Additional Information	Items	conveyable: TRUE/FALSE sortable: TRUE/FALSE min_dispatch_ uom: informational velocity_code: indicates low to high volume skus regularity_code stackability_code: indicates skus in heavier to ligther order for sorting	1. In Item Master Interface, add values for: • Conveyable • sortable • min_dispatch_uom • velocity_code • regularity_code • stackability_code
Expiry and Lot/Batch Numbers	Items	Following fields will be used to set up expiry, lot/batch requirements: product_life: this is specified in number of days (i.e. 365 days) percent_acceptable_product_life: % of the number of days that is acceptable for an expiry date from today. req_batch_nbr_flg: flag to require batch/lot number for an item. When this flag is set to TRUE, batch number will be prompted for the item during receiving	1. In Item Master Interface, add values for: • product_life • percent_acceptable_product_life • req_batch_nbr_flg
Standard Pallets	Items	Fields: lpns_per_tier and tiers_per_ pallet are used to set up standard quantities of lpns per pallet for an item	1. n Item Master Interface, add values for: • pns_per_tier and tiers_per_ pallet

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Task Description	WMS Module	Overview/Comments	Task Details
Serial Number Tracking	Items	The serial_nbr_tracking field can be set up as follows: • **0 = Not required** (default) • **1 = Required. don't validate** during receiving if already specified on shipment interface, • **2 = Required. Validate, and allow user to override** = The receiving RF transaction will prompt for serial numbers regardless of whether or not the serial numbers are interfaced in the system. • SERIAL_NUMBER_ TRACKING_LEVEL' **0 = No Serial Number Tracking** (default), • **1 = Packing Only** (Tracks Serial Numbers from Packing stage only), • **2 = End to End.** (Track Serial Numbers at all Stages in DC Operations. Like an End to End option)	1. In Item Master Interface, add values for: • serial_nbr_tracking as 0, 1 or 2
Harmonized Tariff Codes	Items	An Harmonized Tariff Code and Description can be specified for each item	1. In Item Master Interface, add values for: • Harmonized Tariff Code • Harmonized Tariff Description
Additional Information	Items	full_oblpn_type: informational case_oblpn_type: informational pack_oblpn_type: informational description 2: Item description # 2 – Can be used to specify description in another language description 3: Item description # 3 – Can be used to specify description in another language nmfc code	1. In Item Master Interface, add values for: • full_oblpn_type • case_oblpn_type • pack_oblpn_type • description 2 • description 3 • nmfc code

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Item Facility Setup

Task Description	WMS Module	Overview/Comments	Task Details
Item Facility Set Up	Item Facility	Item Facility will allow to set up items to have different characteristics across different facilities for the same client company. Characteristics are:	1. In item facility master, enter all basic item attributes 2. Enter the correct attributes for the specific facility

Item Barcode Setup

Task Description	WMS Module	Overview/Comments	Task Details
Item Barcode Set Up	Item Barcode	Item Barcode Set Up will allow an item to have multiple barcodes	1. In 'Item Barcodes' Master, enter the main item barcode as the vendor barcode 2. Add records for all other barcodes for that item entering the barcodes in 'Item Barcode'

Item Prepack Setup

Task Description	WMS Module	Overview/Comments	Task Details
Individual Items Set Up	Item Master	Prepacks or Kits The prepack or kit in WMS is defined as a Parent Prepack Item which contains one or more Individual Items with specific ratios. Individual Prepack Items (Child Items) must be created before a prepack/kit can be created.	1. Set up Item Master by following sub tasks of Item Master Set Up above
Parent Item Prepack Set Up - Host Aware	Item Master & Item Pre-Pack	A parent item represents the identifier for prepacks (group/ assortment of items) that can be considered as one comprehensive	1. Set up Item Master with all Prepack Items by following the sub-tasks of Item Master Set Up above

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Task Description	WMS Module	Overview/Comments	Task Details
		item. Host aware Parent Items are prepacks recognized by the client's host system. For Parent Items to be aware they have to be created in the item master as items prior to setting up prepacks.	2. Using the Item Prepack interface, enter: ○ Parent Item Alternate Code in 'Parent_item_code' and/or Parent Item parts set up in Item Master
Parent Item Prepack Set Up - Non Host Aware	Item Master	A parent item represents the identifier for prepacks (group/assortment of items) that can be considered as one comprehensive item. Non Host aware Parent Items are prepacks not recognized by the client's host system. In this case, communication with host system will be done at the child item level while WMS Operations can be done at both the parent and child level. Non Host aware Parent Items do not need to be set up in the Item Master prior to configuring prepacks.	Using the Prepack Interface: 1. Create the Prepack Parent item by entering a parent item code in 'Prepack Code' **Note:** Parent_item_code and Parent parts fields do not need to be populated. This will create the Parent as a non-host aware item in the item master.
Prepack Child Items Set Up	Item Prepack	Prepacks Child Items represent the individual items that compose the package of items.	Using the Prepack Interface: 1. Add the individual child items to the prepack parent item: - Enter the child item alternate code in 'child_item_code' field - OR Enter the child item parts in 'child_item_part_a' to 'part_f' 2. Enter the number of units that are part of the prepack for the item 3. Enter the total number of units for all items 4. Enter a sequence number for each item
Prepack Additional Information	Item Prepack	Prepack information for the following can be specified: pre_pack_weight, pre_pack_volume, pre_pack_length, pre_pack_width, pre_pack_height, pre_pack_std_case_qty, pre_pack_max_case_qty Note: These fields are not required.	Using the Prepack Interface: 1. Add values for fields: ○ pre_pack_weight ○ pre_pack_volume ○ pre_pack_length ○ pre_pack_width ○ pre_pack_height ○ pre_pack_std_case_qty ○ pre_pack_max_case_qty

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Interface Protected Fields

Fields in the Item Master can be locked to prevent updates for future item master uploads. For example, if an item master is loaded, and the host will continue sending item master files with missing data - (i.e. Missing dimensions if dimensions were taken upon receiving and then uploaded) - some fields can be locked from updates. The values in these fields will not get updated or removed with item master uploads.

Task Description	WMS Module	Overview/Comments	Task Details
Item Master Fields to Protect	Interface Protected Fields	Fields added for protection will not be populated via Item uploads	1. Login at the correct company level 2. In the 'Interface Protected Fields' UI Module, Select the interface type (i.e. Item Input) 3. Select each field that need protection from the drop down in 'column name' and save

Vendors

Task Description	WMS Module	Overview/Comments	Task Details
Vendors Set Up	Vendors	Vendors will be used to set up Vendor Information for Purchase Orders (POs) Vendors are not required if the QC Functionality will not be used	Company level

Ship To Company

Task Description	WMS Module	Overview/Comments	Task Details
Ship To Company Set Up	Ship To Company	Ship To Company will be used to set up custom documents (labels, packing slips…) based on the company. The Ship To Companies must be set up in this case.	1. Login at the correct company level. 2. Add ship To company codes and description. 3. Add additional information if needed.

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Task Description	WMS Module	Overview/Comments	Task Details
Ship To Company Sequence Counters	Sequence Counters	New sequence counters for 'Outbound Container' are created for each new ship To company created in the Ship To Company Master.	1. Login at specific company level. 2. In the **Sequence Counters** UI Module, search for the counter - 'Outbound Container' created for a ship to company and edit the sequence values. 3. For counter code 'Outbound Container' a check digit method can be chosen to calculate the identifier number.
Barcode Types Validation (Optional)	Barcode Types	If New Sequence Counters for 'Outbound Container' were added for Ship To Companies, the sequence counter prefixes and lengths have to be elligible barcode formats in the 'Barcode Types' UI Screen	1. Login at specific company level. 2. In the **Barcode Types** UI Module, Select the barcode types OB Container and edit or create a new barcode type to add additional barcode formats.
Set Up Sequence Counter Use	Company Parameter	The company parameter 'USE_SEQ_CTR_BY_DEST_COMP' can be set as follow: 1. Yes: The system will use the sequence counter for the Company specified in the "Destination Company" field in the Order Header. The default is yes. 2. No: Will not use a company-specific sequence counter. **Note:** Only applies to OBLPNs from Full LPN allocations	1. Login at specific company level. 2. In the **Company Parameter** UI Module, select the barcode types OB Container and edit or create a new barcode type to add additional barcode formats.

Carriers

Carriers can be set up in the Carrier Master if needed:

- If LTL Loads need to specify carrier Information
- If the WMS Parcel functionality will be used

Task Description	WMS Module	Overview/Comments	Task Details
LTL Carriers Set Up	Carriers	LTL/TL Carriers can be set up for non-Parcel Carriers. Note: Parcel Carriers can also be set up as LTL/TL if the WMS Parcel Functionality will not be used.	1. Login at the client company level 2. In 'Carrier' UI Screen, add non-Parcel Carriers 3. Enter a carrier code and description and select carrier type as LTL/TL
Parcel Carriers Set Up	Carriers	Parcel Carriers will be set up if the WMS Parcel/Manifesting functionality will be used either through Web Services (FedEx, UPS), or Ratelinx for more Carriers Parcel Carriers can be created either at the Carrier level or the service level (i.e. One Carrier per ship via) Carriers at the service level will allow opening manifests at the service level rather than the Carrier level	1. Login at the client company level 2. In 'Carrier' UI Screen, add Parcel Carriers with type = Parcel 3. Enter a carrier code and description 4. Select a Standard Carrier **Note:** This must be specified for parcels

Ship Vias

Ship Vias will be used to set up shipping service levels for Carriers. Each ship via will be linked to an existing corresponding carrier. Parcel Ship Vias will have to be linked to Carriers of type = Parcel if the WMS Parcel functionality will be used. Ship Vias can be specified on orders.

Task Description	WMS Module	Overview/Comments	Task Details
Ship Vias Set Up	Ship Vias		1. In the 'Ship Via' UI, add all ship vias for services levels that will be used 2. Enter a ship via code and name 3. Select the corresponding Carrier to be linked to the ship via 4. For all parcel services, a standard service type must be chosen

Stores (Ship to Stores)

Store Master is used to set up all stores a client company will ship to. Setting up the store master will allow you to:

- Send orders to WMS with just the store number for the ship to information.
- Set up a default ship via for each store that needs to be used shipping if ship via is not provided on the order.
- Use the WMS Routing Functionality - This will allow setting different routes with specific service levels with each route containing stores. Please see next section for more details on the routing functionality.

Task Description	WMS Module	Overview/Comments	Task Details
Stores Set Up	Facilities	Stores will be set up as facilities with type = Store	1. In the **Facilities** UI, add store master with type = store for each store **Note:** The **Input Interface** UI can be used to upload the store master template. 2. When creating stores, a default ship via can be specified for each store if needed.
Stores Sequence Counters Set Up (Optional)	Sequence Counters	New sequence counters for 'Outbound Container' can be created for stores (Ship To Facilities). This will allow Outbound LPNs to be created with prefixes specific to a Store. (i.e. Store 1 can have a specific prefix or sequence range for Outbound LPNs while Store 2 has different prefix and range) **Note:** Facilities must be set up first to be able to set up these sequence counters. See Master Configuration.	1. Login at the specific company level 2. In the **Sequence Counters** UI, search for the counter - 'Outbound Container' created for a ship to company and edit the sequence values. OR Copy an existing record for 'Outbound Container' to add a new counter 3. Enter the required values 4. Select the specific Ship To Facility for which the sequence counter is being edited 5. For counter code 'Outbound Container' you can choose a check digit method to calculate the identifier number.
Barcode Types Validation (Optional)	Barcode Types	If New Sequence Counters for 'Outbound Container' were added for Stores (Ship To Facilities), the sequence counter prefixes and lengths have to be elligible barcode formats in the 'Barcode Types' UI Screen	1. Login at the specific company level 2. In the **Barcode Types** UI Module, Select the barcode types OB Container and edit or create a new barcode type to add additional barcode formats

Routes

Route Master is used to set up routes a client company will use for shipping to stores. Routes are used to group different stores on the same path/itinerary to allow for better planning for shipping to stores. This will allow you to:

- Assign ship vias to routes. All stores on a specific route will use the same ship via.
- Assign stores to outbound shipping loads based on routes. (i.e. An outbound load will be assigned for each route used)
- Enable/disable a route based on shipping rates and plans

Task Description	WMS Module	Overview/Comments	Task Details
Routes Set Up	Route Header View		1. In the **Route Header View** UI, create routes. The 'Input Interface' UI can be used to upload the route master template 2. The route master will specify a ship via code for each route 3. The route details will specify all stores that are on that specific route

Assets

The asset management functionality is used to track totes or other types of assets/containers with unique ID. Assets can be linked to OBLPNs before shipping and the SHIPPED LOADS interface/file will be generated with this asset number. Assets can be considered as totes that can be received, used for picking and also shipped.

The Asset Master can specify all IDs for totes/containers that are used in a Warehouse. When the Asset functionality in 'ON', the system will only allow receiving, picking shipping of LPNs/Assets that are set up in the Asset Master. The LPNs scanned will be considered as assets.

Task Description	WMS Module	Overview/Comments	Task Details
Reusable Assets Set Up	Facility Parameter	Assets can be set up to be to be reusable. (i.e. This can be used to reuse LPNs, Containers, Totes, etc…) The facility parameter REUSABLE_TOTES can be set up as 'Yes' to reuse assets.	1. In the **Facility Parameter** UI Module, search for the REUSABLE_TOTES parameter. 2. Edit the parameter and set the value to 'YES' or 'NO'.

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Task Description	WMS Module	Overview/Comments	Task Details
Assets Set Up	Assets		1. Use the **Asset** Interface file to upload all Asset identifiers. 2. Login at the correct company level. 3. In the **Input Interface** UI, select the module 'Asset' and upload the asset file. 4. Select the file uploaded and run the interface to upload the asset master.

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5 Location Master

Location Master

For more details on Location Master configuration and setup, refer to the following topics:

Reserve Locations

Reserve Locations are used to pick Full LPNs, Cases, Packs and Units, and will also be used for replenishment to active.

Task Description	WMS Module	Overview/Comments	Task Details
Locations Basic Information	Location Master	Mandatory	1. In Location Master, add Reserve Locations with Location Type = R. 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'. 3. Additionally, a position and a bin can be specified. 4. Enter dimensions Length, width, height.
Pick Sequence and Putaway Sequence (Not Mandatory but recommended)	Location Master	The pick sequence will be used for picking tasks to follow a specific order for picking instead of a random order. The putaway sequence will be used to putaway inventory based on a location sequence. The pick and putaway sequence are not required but are recommended.	1. In Location Master, enter the pick sequence and the putaway sequence for each location. **Note:** For the system to follow the sequence, the values entered must have equal lengths. For example: if a pick sequence goes from 1 to 10,000 then the pick sequence must be set up as follows: from 00001, 00002, ..., 00010, 00100, ... to 10000.
Dedicated Company (Optional)	Location Master	Dedicated Company will be used to specify if the location will be dedicated to a certain company	1. In Location Master, enter the Dedicated Company for the location.
Location Size Types (Optional)	Location Master	Location Size Types are used to specify a group of locations that will be used for specific Item's Putaway Types. Location Size Types can be configured previously in UI or using the location master.	1. In Location Master, enter the location size type for each Reserve Location.

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Task Description	WMS Module	Overview/Comments	Task Details
		Values in Location master will get automatically created as Location Size Types	
Replenishment Zones (Optional)	Location Master	Replenishment is allowed between Reserve Locations. Replenishment Zones are used to specify group of locations that will be replenished from specific allocation zones.	1. In Location Master, enter the location replenishment zone for each Reserve Location in the 'replenishment_zone' field.
Min and Max Units (Optional)	Location Master	Min and Max Units are used for replenishment. A replenishment trigger can be set for the minimum quantity of units in a location. Replenishment Allocation will be done up to the max quantity of units.	1. In Location Master, enter the min and max units for each location. (Integer Values.)

Active Locations

Active Locations will be used to store and pick Units.

Task Description	WMS Module	Overview/Comments	Task Details
Locations Basic Information	Location Master	Mandatory	1. In Location Master, add Reserve Locations with Location Type = A 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'. 3. Additionally, a position and a bin can be specified 4. Enter dimensions Length, width, height
Pick Sequence and Putaway Sequence (Not Mandatory but recommended)	Location Master	The pick sequence will be used for picking tasks to follow a specific order for picking instead of a random order. The putaway sequence will be used to putaway inventory based on a location sequence. The pick and putaway sequence are not required but are recommended.	1. In Location Master, enter the pick sequence and putaway sequence for each location. **Note:** For the system to follow the sequence, the values entered must have equal lengths. For example: if a pick sequence goes from 1 to 10,000 then the pick sequence must be set up as follow: from 00001, 00002, ..., 00010, 00100, ... to 10000

Task Description	WMS Module	Overview/Comments	Task Details
Replenishment Zones (Optional)	Location Master	Replenishment Zones are used to specify group of locations that will be replenished from specific allocation zones. Replenishment zones can also be used for putaway - Item Putaway type will be linked to replenishment zones to allow putaway to active locations.	1. In Location Master, enter the enter location replenishment zone for each Active Location in the 'replenishment_zone' field
Min and Max Units (Optional)	Location Master	Min and Max Units are used for replenishment. A replenishment trigger can be set for the minimum quantity of units in a location. Replenishment Allocation will be done up to the max quantity of units.	1. In Location Master, enter the min and max units for each location's. - Integer Values
Max LPNs, Min Volume and Max Volume (Optional)	Location Master	Max LPNs, Min Volume, and Max Volume are used for location capacity. When this information is provided, the putaway logic will check location capacity.	1. In Location Master, enter values for Max LPNs, Min Volume, and Max Volume - Integer Values
Allow Multi SKU (Optional)	Location Master	Locations can be set up to allow either single SKUs or Multi SKUs.	1. In Location Master, enter a TRUE/FALSE value for Allow Multi SKU in a location
Zones: - Allocation Zones - Pick Zones - Task Zones (Optional)	Location Master	Allocation Zones: 1) Used for replenishment - Replenishment locations can be replenished from specific allocation zones 2) Used as location attributes for picking tasks rules Pick Zones: 1) Used as location attributes for picking tasks rules Task Zones: 1) Used to identify location zones. This will be used for task zone movements and zone picking. This will allow setting start zone and end zone during picking.	1. In Location Master, enter the allocation zone, pick zone, and Task zone for each location.
Restrict Batch Number Flag	Location Master	For batch/lot management, locations can be set up to restrict mixing different batch numbers	1. In Location Master, enter value TRUE to restrict mixing of batch, and FALSE to allow mixing of different batch
Restrict Inventory Attribute Flag	Location Master	For Inventory attribute management, locations can be set up to restrict mixing inventory attributes	1. In Location Master, enter value TRUE to restrict mixing of inventory attributes and FALSE to allow mixing of different inventory attributes
Custom Fields 1-5	Location Master	Locations can be set up with	

Task Description	WMS Module	Overview/Comments	Task Details
Item Assignment to Location	Location Master	Locations can be set up to be permanent picking locations for items. Assigned locations can be used for replenishment.	1. In Location Master, to set up permanent locations: Set value for 'item_assignment_type' = P - 2. Enter Item alternate code or item parts for that location 3. For dynamic locations: - Set the value for 'item_assignment_type' = D

Task Zone Movements

Task zones are used to group a set of locations for tasking and also to set up drop zones to be used with tasking. Task zones are used to be able to move inventory from one zone to the next. Task Zones can be used to set up Task Rules for different specific task movements from a specific "start zone" to a specific "end zone" using a specific sequence and equipment type.

Task Description	WMS Module	Overview/Comments	Task Details
Add Task Zones to Locations Drop, Reserve & Active	Location Master	Task zones might have already been set up in the 'Location Master' section. Task zones will be entered for Reserve, Active and Drop locations for the tasking functionality.	1. In Location Master, enter the task zone code under the field 'task zone'

Additional Location Attributes

MHE Configuration treats all induction points as a drop location in WMS.

Task Description	WMS Module	Overview/Comments	Task Details
Drop Locations Set Up	Location Master	Drop Locations are used as intermediary locations. Users will be able to drop inventory in specific drop locations after picking (i.e. this can be used for zone picking).	1. In Location Master, add Consolidation Locations with Location Type = P 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
MHE Configuration	Location Master	MHE System Code Defines which MHE System is being used for that	1. In location Master, set up: - mhe_system_code - divert_lane

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Task Description	WMS Module	Overview/Comments	Task Details
		specific location. MHE System Codes must be pre-configured in 'MHE System' UI Module. Divert Lane code defines which lane or zone to drop a tote/LPN while using MHE System.	

6 Receiving Operations

RF Modules Setup

WMS RF Receiving can be set up to receive Inventory at the Shipment Level or at the Load Level. Receiving Inventory at the Load level will allow receiving multiple shipments on a load at a time and from the same dock. The WMS RF IB Sorting Transaction can be used to sort LPNs to facilitate putaway after receiving.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Receiving at Shipment Level	Screen Configuration UI Module: RF Module: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment)	**Note:** This may have already been configured in the 'Menu Configuration' Section	1. In 'Screen Configuration' UI Module, add module: Receive LPN Shipment - rf.inbound.cwrfrecvlpnshpmt
Set Up Receiving at Load Level	Screen Configuration UI Module: RF Module: rf.inbound.cwrfrecvlpnload (Receive Load)	**Note:** This may have already been configured in the 'Menu Configuration' Section	1. In 'Screen Configuration' UI Module, add module: Receive LPN Load - rf.inbound.cwrfrecvlpnload
Set Up RF 'Inbound Sorting'	Screen Configuration UI Module: RF Module: rf.inbound.cwrfibsortlpn (RF IB Sorting)	**Note:** This may have already been configured in the 'Menu Configuration' Section	1. In 'Screen Configuration' UI Module, add module: RF IB Sorting - rf.inbound.cwrfibsortlpn

Pre-Receiving Operations

Quality Control (QC) Setup

The WMS QC functionality will allow marking for QC a number of LPNs per load on a Vendor.

Note: Vendors require Purchase Orders (POs) to be used. QC Rules are set up at the vendor levelLPNs rejected during QC will not be elligible for receiving.

Task Description	WMS Module	Overview/Comments	Task Details
Vendor QC Set Up	Vendor QC UI Module	The vendor QC functionality will allow setting specific vendors that require QC Processes. LPNs will be selected for QC during receiving.	1. Login at the specific client company level 2. In the 'Vendor QC' UI Module, add the vendor QC by searching or entering the specific vendor code

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Task Description	WMS Module	Overview/Comments	Task Details
			3. In 'Count or Percentage' field enter: - U for QC Count as Units - P for QC Count as a % of the shipment 4. In the 'QC Per Load SKU' field enter the QC value for the Count specified. (i.e. Quantity of Units or Value of percentage)
Vendor Performance Report	Screen Configuration UI Module: Vendor Performance Report UI	The vendor performance report functionality record the QC data per vendor.	This UI will show the Vendor performance report only if there is a PO attached and after ASN has been verified.
Vendor Performance Code	Screen Configuration UI Module:Vendor Performance Code UI	The vendor performance code UI lets you create Vendor performance code and description	1. Login at specific client company level 2. In the Vendor Performance UI Module, add the vendor performance code and description. This code is asked in QC RF transactions
Parameter Set Up for QC Check	Screen Configuration UI Module: RF Modules: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment) rf.inbound.cwrfrecvlpnload (Receive Load)	RF Transaction that will be used for receiving will need to have the parameter for QC set up. Note: If QC is required for all received inventory, then all RF Receiving Transactions need to have the QC Parameter set up properly. An additional transaction can be set up without the QC configuration to allow the QC process to be occasionally skipped.	1. Login at specific company level (based on whether the RF Transaction is set up in a SuperUser or Child User menu) 2. In the 'Screen Configuration' UI Module: Search for the Receiving Transactions that will be used in the user menu 3. Select the Transaction record and in the details, set RF parameter 'qc-handling-mode' to either 'None' ,'Mark for QC prompt QC locn' , 'Mark for QC do not prompt QC locn'
QC Locations Set Up	Location Master	QC Locations must be set up for QC operations. During receiving, Inventory marked for QC will be located to a QC Location.	1. In Location Master, add QC Locations with Location Type = Q 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.

Value Added Services Setup

The WMS VAS Functionality will allow marking LPNs for VAS during the receiving process. The VAS Requirements can be set up as follows:

- SKU Level (All LPNs with the specific SKU will be marked for VAS during receiving)

- Vendor Level (LPNs with the specific SKU will be marked for VAS if their shipment is linked to a vendor set up for VAS). Note: Vendors require Purchase Orders (POs) to be used.

1. A WMS Activity will be set up for each VAS Activity required for inventory being received (i.e. Ironing, repacking, etc...)
2. The VAS Groups define the different groups of VAS Activities. The VAS Group will have one or more VAS Activities based on group requirement.

For example, VAS Group 'Clothes-Flats' will have activities: (such as 'Ironing', 'Scensors', and 'Price Labels)

VAS Groups will be set up either at the SKU or Vendor Level depending of the Group's requirements.

Task Description	WMS Module	Overview/Comments	Task Details
Work Area Set Up	Work Area	Work Areas are required to be set up to allow VAS activities	In 'Work Areas' UI Module, add work areas by entering a work are code and name
VAS Activities Set Up	Activities	All different VAS Activities that will be used in operations will have to be set up The UOM (Unit of measure) at which the VAS Activities will be performed will be specify. This can be (Units, Packs, Cases, LPNs).	1. In 'Activities' UI Module, add Activities by entering an activity code and Name (description) 2. Select Activity Type = VAS 3. Select Work Area for this group of VAS Activities 4. Select UOM at which VAS Activities will be performed 5. Optional: Select History Activity for Fee/Charge information
VAS Groups Assignment to Items *Also see Master Configuration for Item Master	Item Master	The VAS Group can be used for each group of items requiring similar VAS Activities. The VAS Group will specify the list of VAS Activities to be done for that group. Once VAS Groups are identified, they need to be configured and assigned to items Note: This step may have be done in Item Master Set Up	In 'Item Master' add VAS Group Code to items *This can be done with the Item Interface Template or also with a Manual UI Entry in the 'Items' UI Module
Option 1. VAS Groups Set Up at Vendor Level	Company VAS	Option 1 - Vendor Level - VAS Group Code linked to a Vendor. This can be used for items requiring VAS only for a specific vendor or vendors Items with a VAS Group set up at vendor level will only be marked for VAS if the shipment is linked to the specific vendor	1. In 'Company VAS' UI Module, add VAS Group Code for one or more VAS Activities. In 'Company' field, search or enter the vendor 2. Enter a sequence number and select the first VAS Activity to be added to the group 3. For additional VAS Activities in the same group, enter a new sequence and select the next VAS Activity

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Task Description	WMS Module	Overview/Comments	Task Details
			4. Repeat above steps if the VAS Group needs to be configured for other vendors
Option 2. VAS Groups Set Up at SKU Level	Company VAS	Option 2 - SKU Level This can be used for items always requiring VAS regardless of vendors Items with VAS Group set up at SKU Level will always be marked for VAS during receiving	1. In 'Company VAS' UI Module, add VAS Group Code for one or more VAS Activities. In 'Company' field, search or enter the Client Company. 2. Enter a sequence number and select the first VAS Activity to be added to the group 3. For additional VAS Activities in the same group, enter a new sequence and select the next VAS Activity 4. Repeat above steps if the VAS Group needs to be configured for other vendors
VAS Exception Set Up	Exception VAS	VAS Requirements can be overwritten with VAS Exceptions. VAS Exceptions will be set up for a specific Shipment Number and Item. VAS Exceptions will specify which activities need to be for a specific (shipment, item) combination	1. In 'VAS Exception' UI Module, add exception by entering: - Inbound Shipment Number and Item Number 2. Enter a sequence number 3. Select the VAS Activity and specify in the 'VAS Reqd type' if the VAS Activity will be required.
VAS Locations Set Up	Location Master	VAS Locations must be set up for VAS operations. During receiving, Inventory marked for VAS will be located to a VAS Location.	1. In Location Master, add QC Locations with Location Type = V 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.

Item Fields Pre-Receiving Setup

Item fields can be required to be populated prior to receiving. When required item fields are set up, WMS will prevent receiving when the fields are not populated for the Item being received. Receiving will be allowed once the fields are updated/populated.

This is done at the facility level. This configuration applies to all companies within a facility.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Required Item Fields	Required Item Fields		In 'Required Item Fields' UI Module, add the field names that are required to be populated for receiving inventory

Receiving Operations Setup

Purchase Orders Requirements Setup

There is currently no configuration required to set up Purchase Orders.

- If Purchase Orders will be used for the flow, the Purchase Orders will have to be created prior to the Inbound shipments.
- - Purchase Orders can be created through Interface Integration, Manual Interface Upload, or Manual UI Entry

Inbound Shipments Requirements Setup

Inbound shipments can be created with or without Purchase Orders.

- Inbound shipments can be created through Interface Integration, Manual Interface Upload, or Manual Entry

Task Description	WMS Module	Overview/Comments	Task Details
Shipment Types Set Up	Shipment Types	Over receipt and under receipt of inventory will be allowed on a shipment based on the shipment type specified on the shipment header. Over receipt warning %: % of received qty for which the system needs to display a warning message. The user will be able to accept or reject receiving. Over receipt error: % of received qty for which the system will prevent the user from over receiving Under receipt warning: % of received qty for which the system will display a warning message when the shipment is being verified. The user will decided whether to proceed with verification	1. In the 'Shipment Types' UI Screen, enter a shipment type code and description 2. Enter a % value for Over receipt warning, error and under receipt warning ex: If over receipt warning = 10% and shipped qty = 100, a warning will be displayed for any received qty > 110 3. Select a validation type PO vs ASN vs both to compare shipped vs. received qty

Inbound Loads and Appointments

An Inbound Loads will be created for each Inbound Shipment. Inbound Loads can be used to cceck in shipments at docks for receiving. Appointments can also be used to to schedule and manage receiving of shipments. This will also allow checking in loads to docks for receiving.

When shipments are checked in to docks, LPNs received will automatically be located at the dock location. This will give better visibility of LPNs in the WMS.

Task Description	WMS Module	Overview/Comments	Task Details
Dock and Dock Types Set Up*Also see 'Locations' Section in Master Configuration	1. Locations 2. Dock Types 3. Docks	Dock are required to be set up if inbound loads will be checked in at docks for receiving. 1. A dock location must be set up 2. Dock types (Inbound/Outbound) is required 3. Dock doors will be set up and linked to dock locations	1. In 'Location Master' UI Module, add locations with type 'Dock' 2. In 'Dock Types' UI Module, add dock type (i.e. Inbound and/or outbound) 3. In 'Docks' UI Module add dock door numbers and link the dock doors to dock locations

RF Receiving

RF Receiving can also be set up to specify the UOM at which inventory will be receive, as well as whether cases received will be palletized.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up UOM Receiving Level	Screen Configuration UI: RF Modules: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment) rf.inbound.cwrfrecvlpnload (Receive Load)	Unit of Measures: - Units - Packs - Cases Default = Units	1. Login at specific company level 2. In the 'Screen Configuration' UI Module: Search for the Receiving Transactions that will be used in the user menu 3. Select the Transaction record and in the details, set RF parameter 'qty-uom' to the desired UOM
Set Up Pallet Receiving Flow	Screen Configuration UI: RF Modules: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment) rf.inbound.cwrfrecvlpnload (Receive Load)	Available Options for Receiving Pallets: - Palletize up front: LPNs are palletized as receiving is being done onto the same pallet. - Palletize after receiving: Pallet is prompted for each LPN after receiving - LPN as Pallet: Full LPNs will be received as pallets	1. Login at specific company level 2. In the 'Screen Configuration' UI Module: Search for the Receiving Transactions that will be used in the user menu 3. Select the Transaction record and in the details, set RF parameter 'pallet-handling' to the correct value
Set Up Additional Receiving Parameters	Screen Configuration UI: RF Modules: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment) rf.inbound.cwrfrecvlpnload (Receive Load)	Refer to RF Parameter Document - Receiving Tab Available Options include: - Assume Single SKU per LPN - Capture Inventory Attribute - Capture batch, expiry, serial etc…	

Shipment Verification

Shipment Verification will be used in UI to generate a Receipt Confirmation File. Once receiving is done, inbound shipment can be verified in UI. Required fields for verification can be set up if needed. Users will not be able to verify shipments if any required values are missing on the shipment header.

(i.e. This can be used to restrict verifying shipments without specific reference numbers.)

Task Description	WMS Module	Overview/Comments	Task Details
Set Up required information for verifying shipments	Company Parameter UI Module	This is for the WMS standard interface.	1. In 'Company Parameters' UI Screen, search for parameter: IBSHIPMENT_VERIFICATION_ REQUIRED_FIELDS 2. Enter Inbound Shipments Fields that require values to be populated before verification

Sorting and Receiving Operations

Sorting While Receiving

To support the Direct to Consumer business, the Sort and Receive option helps the Warehouse sorting inventory into respective Inbound LPNs based on configurable rules. The Sort and Receive option allows you to scan each unit of the ASN and determine how to sort the item based on Rules Configured.

With this functionality you first sort the Inventory and then receive the Inventory to different Totes/LPNs simultaneously. You are directed to sort inventory into a specific tote/LPN. You also get the opportunity to mark the item being received as Damaged.

This functionality is for SKU Level ASN (i.e. Blind Receiving - LPN numbers are not sent on the ASN.) Inventory will be directed to Totes/LPN with matching criteria. When there is no matching criteria, you can enter a new LPN/Tote.

Task Description	WMS Module	Overview/Comments	Task Details
Receiving Station - Locations	Location Master	Receiving stations are used receive and sort items into totes.	1. In Location Master, add Receiving Station Locations with Location Type = T 2. Enter Values for fields 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Set Up RF 'Sort and Receive'	Screen Configuration UI Module: RF Module: rf.inbound.cwrfsortandrecv (RF Sort and Receive)	Note: This may have already been configured in the 'Menu Configuration' Section See RF Parameter Guide for more details. Parameters include: - scan-shipment-load: This can be set to	1. In 'Screen Configuration' UI Module, add/search module: RF Sort and Receive - rf.inbound.cwrfsortandrecv 2. Select and edit parameter 'scan-shipment-load' to: -

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Task Description	WMS Module	Overview/Comments	Task Details
		scan the Load Nbr or the Shipment Number during receiving	scan shipment or - scan load The default is shipment
Set Up Sort and Receive Rules Break Rules for Tote/LPNs (Not required for sorting)	Sort Receive Configuration (SortReceiveHdrView) Link - Break rules	Inventory will be sorted into totes/LPNs. Sort Break Rules specify the break values for closing the Totes. Totes/LPNs will have capacity in terms of weight/volume or number of units. If associated break criteria value is reached, user will be prompted to end the tote. Criteria: - weight - volume - total qty - number of SKUs - number of different LPN_cust_fields allowed	1. In 'Sort and Receive' UI Module, access the link 'Break Rules' 2. Add a new break rule, enter a name and description 3. Select a criteria to break the container and enter the max value
Set Up Sort and Receive Rules Select Receiving station	Sort Receive Configuration (SortReceiveHdrView)	For every Receiving Station, WMS allows configuring a sort criteria for sorting. If Sort & Receive Rules are not configured, the sorting process becomes user directed.	1. In 'Sort and Receive' UI Module 2. Select a receiving station from drop down
Set Up Sort and Receive Rules Select Sorting Criteria	Sort Receive Configuration (SortReceiveHdrView)	Two sorting criteria can be specified. Only the first criteria is required. The first criteria will be used to find a match for sorting inventory. If no match is found, the second criteria will be used. Criteria options are: - • lpn_lock_code • batch_number • inv_attr_a - inv_attr_b - inv_attr_c	1. In 'Sort and Receive' UI Module 2. Select fist criteria and select second if needed
Set Up Sort and Receive Rules Select Condition	Sort Receive Configuration (SortReceiveHdrView)	The condition options: - NON EMPTY FIRST: Sorting will be done by matching value of criteria 1. If there is no match, sorting will be done by matching value in criteria 2. MATCH ALL: Sorting will be done by matching values of both criteria. - MATCH EITHER: Sorting will be done by matching values for either criteria.	1. In 'Sort and Receive' UI Module 2. Select option needed for condition
Set Up Sort and Receive Rules Select Close LPN Location	Sort Receive Configuration (SortReceiveHdrView)	The close LPN Location will be used to automatically locate the LPN to a storage/reserve location after sorting and receiving. When the Close LPN Location is populated, the LPN/Tote closed	1. In 'Sort and Receive' UI Module 2. Select a reserve location in 'Close LPN Location'

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Task Description	WMS Module	Overview/Comments	Task Details
		will be updated to located status with current location specified in the field.	
Set Up Assets	Sort Receive Configuration (SortReceiveHdrView)	The Sort & Receive Functionality can be used with Reusable Totes/Assets. The facility parameter REUSABLE_TOTES can be set up as 'Yes' to reuse those assets.	1. In 'Facility Parameter' UI Module, search for parameter REUSABLE_TOTES 2. Edit parameter and set value to 'YES' or 'NO'

Inbound Sorting Operations

Inbound Sorting After Receipt

The Inbound Sorting functionality will provide the ability to sort inventory received to facilitate putaway using a pallet with multiple SKUs going to different locations. Inventory will be sorted/grouped based on the specified sorting criteria for a sorting zone. Multiple sorting zones can be configured with different criteria.

Inbound sorting will first call the directed putaway logic to find the destination location of an LPN. Then the sorting process will be done based on the destination location. For each sorting zones pallets will be created based on the specified criteria.

For example: If a sorting zone's criteria is the destination area, then LPNs will be sorted by Pallets depending on their destination location area based on putaway.

Task Description	WMS Module	Overview/Comments	Task Details
Drop Locations	Location Master	Drop Locations will be used for the sorting process. Drop locations are required and will be linked to Sorting Zone.	1. In Location Master, add Consolidation Locations with Location Type = P 2. Required fields are: 'Area', 'aisle', 'bay', 'level', and 'barcode'.
Sorting Zones and Criteria	Inbound Sorting	The IB Sorting criteria by zone will include: - aisle - alloc_zone - area - location-size-type Sorting by pallet can be done based any of these criteria for LPNs destination location based on putaway logic.	1. Login at the specific client company level 2. In the 'Inbound Sorting' UI Module, add a new sorting zone and select the sorting criteria for that sorting zone
Drop Locations - Sorting Zone Association	Inbound Sorting	After creating the sorting zones, drop locations will be linked to sorting zones.	1. Select the sorting - criteria record and access the details 2. Add all drop locations associated to the sorting zone

Task Description	WMS Module	Overview/Comments	Task Details
Set Up RF 'Inbound Sorting'	Screen Configuration UI Module: RF Module: rf.inbound.cwrfibsortlpn (RF IB Sorting)	**Note:** This may have already been configured in the 'Menu Configuration' section.	In 'Screen Configuration' UI Module, add module: RF IB Sorting - rf.inbound.cwrfibsortlpn

Receiving and Cross Dock

Cross Dock Functionality

The cross dock functionality will allow receiving and allocating the inventory to outbound orders during the receiving process. This will be done without having to locate the inventory to a location.

The cross dock functionality can work as follow for an LPN:

1. WMS will try to allocate the LPN to an order that specifies a matching PO, ASN and/or Required LPN.
2. If no orders have matching PO, ASN, or LPN number, WMS will try to allocated the LPN to any order with the same SKU with equal or greater quantity.

Auto Create Xdock Orders

A cross dock or flowthrough order can be automatically created for a specific Inbound Shipment. Cross dock orders created from Inbound Shipments can only be created for facilities/stores defined in WMS.

If set up, when an Inbound shipment is populated with a cross dock facility, an outbound order will be created for the specific inbound shipment. Inventory received for that shipment can be easily allocated to the created order via cross dock or flowthrough.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Order Types	Order Types	Order Type Codes will be specified on the order interface that will be loaded to WMS as well as any order created manually.	1. Login at the specific client company level 2. In 'Order Types' UI Module, add order types: Enter an order type code and a description 3. Check the flowthrough flag 4. Check the facility flag for facility orders
Auto Create Xdock Orders for IB Shipments/ASNs	Facility Parameter UI Module	The facility parameter 'AUTOCREATE_XDOCK_ORDER_ TYPE' can be set up to have cross dock orders created for an inbound shipment that specifies a xdock facility. The value of this parameter	1. In the 'Facility Parameter' UI Module search for the parameter. 'AUTOCREATE_ XDOCK_ORDER_TYPE' 2. Edit and enter the value of the order type code.

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		will be the order type that will be used to create the outbound order.	

Xdock Parameter

Task Description	WMS Module	Overview/Comments	Task Details
MultiSKU LPN Xdock	Facility Parameter UI Module	The company parameter 'MULTISKU_LPN_XDOCK_ONE_ORD[can be set as follow: - Yes: A multi sku LPN can only be allocated to a single order - No: A multi SKU LPN can be allocated to multiple orders if the orders have the same destination	1. In the 'Facility Parameter' UI Module search for the parameter 'MULTISKU_LPN_XDOCK_ONE_ORDER_ONLY' 2. Edit and enter the Yes or No
PO and ASN Check for Xdock	Facility Parameter UI Module	The company parameter 'XDOCK_ORD_SHP_PO_CHECKS' can be set up with values: - EXACT: PO and ASN Nbr on an Order must match the LPN's PO and ASN Numbers. - EXACT_SHP_WILD_PO: ASN on order must match the LPN's ASN - EXACT_PO_WILD_SHP: PO on ordeer must match the LPN's PO - WILD_SHP_WILD_PO: The PO and ASN on order do not meed to match - ALL: A xodck order will be found by following the sequence of the above values. Note: This is true If PO and ASN are not populated on order detail	In the 'Facility Parameter' UI Module search for the parameter 'XDOCK_ORD_SHP_PO_CHECKS' 2. Edit and enter the value needed
Checks if LPNs allocated need to match order detail inventory attribute fields	Company Parameter UI Module	The company parameter 'XDOCK_ORD_INV_ATTR_CHECKS' can be set up with values: - EXACT: LPNs inventory will have to match all the order detail inventory attribute values for a successful cross-dock allocation. -Blank:cross-dock allocation logic will ignore inventory attributes	1. In the 'Company Parameter' UI Module search for the parameter "XDOCK_ORD_INV_ATTR_CHECKS' 2. Edit and enter the value needed
Set Up RF 'Receiving' for Cross Dock	Screen Configuration UI Module: RF Modules: rf.inbound.cwrfrecvlpnshpmt (Receive Shipment) or rf.inbound.cwrfrecvlpnload (Receive Load)	**Note:** This may have already been configured in the 'Menu Configuration' Section	1. In the 'Screen Configuration' UI Module, add/search module: Receive Shipment - rf.inbound.cwrfrecvlpnshpmt or Receive Load - rf.inbound.cwrfrecvlpnload 2. Rename and add description for xdock if needed

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| | | Set up the correct RF module that will be used for cross dock. The cross dock mode can be set as:

• LPN Nbr Only: Cross dock will require orders to have the LPN or pallet specified on the order

• LPN Nbr, Single SKU: Cross will be done to orders specifying the LPN only for single SKU LPNs.

If no LPN is specified on the order, cross dock will be done to any order with matching inventory.

• LPN Nbr, single or multi SKU: Any order with matching inventory will be considered for cross dock. | 3. In the details edit the parameter 'xdock-mode' and set to the needed value |

7 Putaway Operations

RF Modules Setup

WMS RF Putaway can be set up as

1. System Directed Putaway or
    ○ The system will direct the user to the best putaway location based on the putaway rules.
2. User Suggested Putaway.
    ○ The user will be able to choose the putaway location.

Available RF Modules to be added to menus:

- rf.inbound.cwrfputaway (Putaway) - This transaction will be configured as Directed or Suggested Putaway

Task Description	WMS Module	Overview/Comments	Task Details
Add Putaway Transaction	Screen Configuration UI Module: RF Module: rf.inbound.cwrfputaway (Putaway) rf.inbound.cwrfputawayactive (Putaway to Active)	**Note:** This may have already been configured in the 'Menu Configuration' Section	In the 'Screen Configuration' UI Module, add module: Putaway - rf.inbound.cwrfputaway (Putaway)

Set Up Item Putaway Types

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Item Putaway Types	Putaway Types		In the 'Putaway Types' UI Module, set up all different Putaway Types that will be used to classify items for putaway. Enter a Putaway Type and a description.
Add Item Putaway Types to Item Master	Item Master / Item Master Interface	**Note:** This may have already been configured in the 'Item Master Configuration' Section	Add Putaway Types to Item Master. In Item Master, each item will have a putaway type

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Set Up Location Size Types

> **Note:** The following might have already been configured with the location master.

Location Size Types are used to specify a group of locations that will be used for specific Item's Putaway Types. (i.e. Group of locations separated by Item's Division, or even group of location by levels for specific Item velocity.) Both Reserve and Active locations can be set up for putaway. Active locations that have replenishment zones set up can be used for putaway priority.

- Reserve Locations will have 'Location Size Types'
- -Active Locations will have 'Replenishment Zones

Task Description	WMS Module	Overview/Comments	Task Details
Reserve Locations Set Up Location Size Types for Putaway to Reserve	Location Size Types	Location Size Types = Group of locations or location area used for specific item's characteristics	In the **Location Size Types** UI Module, set up all different Location size Types that will be used to group locations by area for putaway. Enter the location size type code and a description.
Reserve Locations Add Location Size Types to Locations	Location Master	Note: This may have been already configured in the 'Location Master' Section	Add **Location Size Types** to Location Master. In Location Master, each location will have a putaway size type
Active Set Up Replenishment zones for Putaway to Reserve	Replenishment Zones	Replenishment Zones are required to be set up to allow putaway to Active	In the **Replenishment Zones** UI Module, set up all different Location size Types that will be used to group locations by area for putaway/replenishment in active Enter a Replenishment zone code and a description
Active Add Replenishment zones to Locations	Location Master	**Note:** This may have been already configured in the 'Location Master' section.	Add **Replenishment Zones** to Location Master. In Location Master, each active location will have a replenishment zone

Set Up Putaway Priority

The putaway priority will be used to link by sequence Item's putaway types to locations size types.

For Example:

1. Putaway Type A - Location Size Type A
2. Putaway Type A - Location Size Type B

In the above scenario, the system will first try to find an available location with Location Size Type A. A putaway method (location sequence or radial can be specified) for each putaway sequence priority.

- Location Sequence: Putaway logic is based off location putaway sequence

- Radial: Putaway Logic is based off items' assigned location. Putaway logic will build up inventory around the item's assigned location. A putaway search mode can also be specified for each putaway sequence priority within the location size type. (i.e. Empty location, least empty locations....)

- Consider FEFO Flag: Putaway will to a location will be restricted for inventory older or with same expiration date as the inventory currently in the location for the item being putaway.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Putaway Priority for Reserve Locations based on Putaway Sequence	Putaway Priority View	Putaway Method Location Sequence: Putaway logic will follow location putaway sequence set up in location master. This require all locations to have a putaway sequence.	1. In the 'Putaway Priotity View' UI Screen add putaway priority: Select a putaway type, enter a prioriy for the putaway sequence and choose location type = 'Reserve' 2. Select the 'location size type' to be linked to the putaway type for the prirority chosen 3. Select Putaway Method = Location Sequence 4. Select a Putaway Search Mode 5. Check 'Consider FEFO Flag' if needed for flow
Set Up Putaway Priority for Reserve Locations by Radial method	Putaway Priority View	Putaway Method Radial: Putaway logic is to first find the item's assigned/picking location within location size type. Putaway logic will use the picking location as a pivot to build inventory around the location by finding first empty location within specified bay "radius" and "increment" values.	1. In the 'Putaway Priotity View' UI Screen add putaway priority: Select a putaway type, enter a prioriy for the putaway sequence and choose location type = 'Reserve' 2. Select the 'location size type' to be linked to the putaway type for the prirority chosen 3. Select Putaway Method = Radial 4. Enter a bay radius and a radial increment value

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Task Description	WMS Module	Overview/Comments	Task Details
			5. Select a Putaway Search Mode 6. Check 'Consider FEFO Flag' if needed for flow
Set Up Putaway Priority for Active Locations based on Putaway Sequence	Putaway Priority View	Putaway Method Location Sequence: Putaway logic will follow location putaway sequence set up in location master. This require all locations to have a putaway sequence.	1. In the 'Putaway Priotity View' UI Screen add putaway priority: Select a putaway type, enter a prioriy for the putaway sequence and choose location type = 'Active' 2. Select the 'Replenishment Zone' to be linked to the putaway type for the prirority chosen 3. Select Putaway Method = Location Sequence 4. Select a Putaway Search Mode 5.Check 'Consider FEFO Flag' if needed for flow
Set Up Putaway Priority for Active Locations by Radial method	Putaway Priority View	Putaway Method Radial: Putaway logic is to first find the item's assigned/picking location within location size type. Putaway logic will use the picking location as a pivot to build inventory around the location by finding first empty location within specified bay "radius" and "increment" values.	1. In the 'Putaway Priotity View' UI Screen add putaway priority: Select a putaway type, enter a prioriy for the putaway sequence and choose location type = 'Active' 2. Select the 'replenishment zone' to be linked to the putaway type for the prirority chosen 3. Select Putaway Method = Radial 4. Enter a bay radius and a radial increment value 5. Select a Putaway Search Mode 6. Check 'Consider FEFO Flag' if needed for flow

Set Up Putaway Rules

Putaway Rules can be used to calculate an LPN's putaway type at receiving. The calculated putaway type (final putaway) will be used for the putaway logic. The final putaway type overwrittes the item's putaway type set up in item master.

Multiple Item Attributes can calculate the final putaway. For example:

If Item Velocity = A AND Item cost > 1000 THEN Final Putaway Type = PUTAWAY_A)

Items attributes can be updated at any time. Final Putaway Type will be calculed for each LPN at receiving or during cartonizing process.

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Task Description	WMS Module	Overview/Comments	Task Details
Set Up Putaway Rules	Putaway Rules	Final Putaway Types can be calculated based on multiple attributes for an item	1. In the 'Putaway Rules' UI screen add new putaway rule: enter a priority, description and select the Putaway Type for which the rule is being created 2. Select the record created and under 'Selection Criteria - Select an sql operator for the folder (i.e. Use AND if multiple conditions need to be true for this putaway type) 3. Insert a Basic or Complex Operation.

RF Putaway

If Putaway rules and priorities are set up, the RF Putaway transaction can be set up to let the system direct to the best available location based on configuration. If Putaway rules and priorities are not set up, the RF Putaway transaction can be set up to let the user choose the putaway location.

Two Putaway Transactions can be set up to allow both system directed and user suggested putaway.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Suggested Putaway	Screen Configuration UI Module: RF Module: rf.inbound.cwrfputaway (Putaway)	RF Transaction for 'Putaway' must be added in UI Module 'Screen Configuration	1. Login at the specific company level 2. In the 'Screen Configuration' UI Module: Search for the Putaway Transaction 3. Edit the Transaction and rename appropriately i.e. 'User suggested Putaway'
Set Up Directed Putaway	Screen Configuration UI Module: RF Module: rf.inbound.cwrfputaway (Putaway)	RF Transaction for 'Putaway' must be added in UI Module 'Screen Configuration	1. Login at the specific company level 2. In the 'Screen Configuration' UI Module: Search for the Putaway Transaction 3. Select the transaction record and in the details, set RF parameter 'mode' to Directed Putaway LPN 4. Edit the transaction and rename appropriately (i.e. System Directed Putaway)
Set Up Additional Putaway Parameters	Screen Configuration UI Module: RF Module: rf.inbound.cwrfputaway (Putaway)	Refer to RF Parameter Document - Putaway Configuration for LPN vs. Pallet	

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Putaway Error Messages

During putaway error messages can be displayed to prevent users from putaway to wrong locations or locations that do not have a matching putaway type. These messages can be disabled and also set up to allow the user to proceed with putaway operations regardless of the putaway mismatch.

Task Description	WMS Module	Overview/Comments	Task Details
Messages: LPN Putaway Type Mismatch Putaway Type Mismatch	Messages	**Note:** Changes made at the 3PL Parent Company level will affect all the client companies. Changes made at the Client Company level will be visible for that company across facilities. The Auto Reject Flag can be set to 'No' to allow the user to accept proceeding with the putaway mismatch The Auto Reject Flag can be set to 'Yes' to always prevent to proceed with putaway when there is a putaway type mismatch	1. Login at the specific company level 2. In the 'Messages' UI Module, click on the Search Icon to look for a message - In the 'Text' field enter 'putaway' click 'Search'to display the message(s) 3. Select the specific putaway message from the results and under the 'Edit Message' Section, enter the new message if required 4. Under the 'Edit Facility Properties' check/uncheck the 'Enabled' flag to disable/enable the message 5. Check/Uncheck the 'Auto Reject' flag to allow or prevent users to proceed with the operations 6. Click 'Save' for the changes

8 Inventory Control

RF Modules Set Up

Inventory Control operations include: – Modifying Inbound LPNs, Adding Lock Codes, Cycle Count…

RF Transactions need to be added for these operations.

| **Note:** These RF Transactions may have already been configured in the 'Menu Configuration' Section

When adding the RF Transactions, Login at the correct company level (i.e. 3PL Parent Level or Client Company Level to add them to the correct meu).

Task Description	WMS Module	Overview/Comments	Task Details
Modify IB LPN+C10:G18	Screen Configuration UI Module: RF Module: rf.inbound.cwrfmodcase (Modify IBLPN)	The RF - Modify IB LPN is used to modify the quantity and/or Putaway type of an Inbound LPN	In the 'Screen Configuration' UI Module, add module: Modify IBLPN - rf.inbound.cwrfmodcase
Split Container	Screen Configuration UI Module: RF Module: rf.inbound.cwrfsplitcntr (Split Container)	The RF - Split Container is used to split an Inbound LPN into a new or existing IB LPN.	In the 'Screen Configuration' UI Module, add module: Split Container - rf.inbound.cwrfsplitcntr
Cycle Count	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountlocn (Cycle Count Location)	The RF - Cycle Count Location is used to cycle count locations without the use of tasks	In the 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountlocn
Cycle Count LPN	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountiblpn (Cycle Count LPN	The RF - Cycle Count LPN is used to cycle count specifc LPNs without having to cycle count a location	In the 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountiblpn
Create LPN	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcreatelpn (Create LPN)	The RF- Create LPN is used to create new LPNs	In the 'Screen Configuration' UI Module, add module: Create LPN - rf.inbound.cwrfcreatelpn
Create LPN from Active	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcreatelpnlocn (Create LPN Location)	The RF- Create LPN from Active is used to create a new LPN from active inventory	In the 'Screen Configuration' UI Module, add module: Create LPN Location - rf.inbound.cwrfcreatelpnlocn
Locate {LPN}/Pallet	Screen Configuration UI Module: RF Module: rf.inbound.cwrflocatelpnpallet	The RF-Locate {LPN}/Pallet is used to locate a LPN or Pallet in the warehouse	In the 'Screen Configuration' UI Module, add module:

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Task Description	WMS Module	Overview/Comments	Task Details
			Locate {LPN}/Pallet- rf.inbound.cwrflocatelpnpallet
Palletize	Screen Configuration UI Module: RF Module: rf.inbound.cwrfpalletizeplt	The RF– Palletize is used to palletize a set of LPNs	In the 'Screen Configuration' UI Module, add module: Palletize- rf.inbound.cwrfpalletizeplt
Execute Task	Screen Configuration UI Module: RF Module: rf.outbound.cwrfexecutetask (Execute Task)	The RF - Execute Task Function will be used to execute created cycle count tasks	In the 'Screen Configuration' UI Module, add module: Execute Task - rf.outbound.cwrfexecutetask

Inventory Adjustment

Inventory can be modified through:

- RF Transaction Modify LPN: This will allow modifying an LPN Quantity and/or Putaway Type
- Through the UI Screen 'Active Inventory'

Modifying Inventory will require the use of reason codes that will be specified for each modification on the reason why inventory was modified (i.e. cycle count, damages, QA, etc..)

Reason Codes will be generated in Inventory History along with the history activity for inventory adjustment.

Task Description	WMS Module	Overview/Comments	Task Details
Reason Codes	Reason Codes	**Note:** Reason Codes are configured at the 3PL Parent Level	1. Login at the 3PL Parent Level 2. In the 'Reason Code' UI Screen, add a code and description for each Inventory Reason Codes 3. Enter the reason code type as 'Any'
Modify IB LPN	Screen Configuration UI Module: RF Module: rf.inbound.cwrfmodcase (Modify IBLPN)	The RF - Modify IB LPN is used to modify the quantity and/or Putaway type of an Inbound LPN	In the 'Screen Configuration' UI Module, add module: Modify IBLPN - rf.inbound.cwrfmodcase

Container Split

The RF - Split Container is used to split an Inbound LPN into a new or existing IB LPN.

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Two IB LPNs can be combined using the RF - Split transaction (i.e. A container can be fully split into another container).

Task Description	WMS Module	Overview/Comments	Task Details
Quantity Entry Limit Set Up	Company Parameters	When entering a quantity while creating an LPN, there can be warning and error messages set up for quantity limits. Company Parameters can be set up: QTY_ENTRY_ERROR_LIMIT: This will prevent a user from proceeding with operations when the quantity is higher QTY_ENTRY_WARNING_LIMIT: This will display a warning message, and a user can accept or reject proceeding	1. Login at the correct company level 2. In the 'Company Parameter' UI Module, search for parameters: QTY_ENTRY_ERROR_LIMIT QTY_ENTRY_WARNING_LIMIT: 3. Set the quantity for each parameter
Split Container	Screen Configuration UI Module: RF Module: rf.inbound.cwrfsplitcntr (Split Container)	The RF - Split Container is used to split an Inbound LPN into a new or existing IB LPN.	In the 'Screen Configuration' UI Module, add module: Split Container - rf.inbound.cwrfsplitcntr

Lock Codes

Lock Codes can be used to add a lock attribute to inventory either at the LPN Level or at the Batch/Lot level. Lock codes can serve as attributes or as inventory locks to prevent allocation.

Task Description	WMS Module	Overview/Comments	Task Details
Lock Codes Set Up	Lock Codes	**Note:** Lock Codes are configured at the 3PL Parent Level	1. Login at the 3PL Parent Level. In the 'Lock Codes' UI Module, add lock codes. 2. Enter a code and description 3. Check the 'Allocatable' flag to allow inventory allocation for that lock code. 4. Check the 'Unlock on locate to Reserve' flag to remove the lock code from inventory when inventory is moved/located to a reserve location. 5. Enter 'Yes' in 'Treat as Attribute' Field to treat the lock as an attribute. 6. Check the flag 'Allow multiple lock codes' to allow an LPN to have multiple lock codes for the lock codes eligible.
Lock Locations Set Up (Optional)	Locations	Lock codes can be added to Inventory by locating/putting away inventory to a location with a lock code. The LPNs will inherit a	1. Login at the 3PL Parent Level. 2. In the 'Locations' UI Module, search or create locations that will serve as lock locations (with location type = Reserve or Dock).

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Task Description	WMS Module	Overview/Comments	Task Details
		location's lock code once located to that location. Reserve locations can be used to store inventory with lock codes. Dock locations can also be set up with a lock code to have LPNs locked before putaway.	3. In the 'lock code' field, select the specific lock code that needs to be added to the location. 4. Save the changes.

Create LPN

LPNs can be created in WMS without the need of inbound shipment receipts. LPNs can also be created from current Active Inventory. This is used to move Inventory from an Active Location to another for any reason such as Damaged inventory or any other reason.

Reason Codes must be set up in order to Create LPNs from Active Inventory.

Task Description	WMS Module	Overview/Comments	Task Details
Reason Codes	Reason Codes	Note: Reason Codes are configured at the 3PL Parent Level	1. Login at the 3PL Parent Level 2. In the 'Reason Code' UI screen, add a code and description for each Inventory Reason Codes 3. Enter the reason code type as 'Any'
Quantity Entry Limit Set Up	Company Parameters	When entering a quantity while creating an LPN, there can be warning and error messages set up for quantity limits. Company Parameters can be set up: QTY_ ENTRY_ERROR_LIMIT: This will prevent a user from proceeding with operations when the quantity is higher QTY_ENTRY_WARNING_ LIMIT: This will display a warning message, and a user can accept or reject proceeding	1. Login at the correct company level 2. In the 'Company Parameter' UI Module, search for parameters: QTY_ENTRY_ ERROR_LIMIT QTY_ENTRY_ WARNING_LIMIT: 3. Set the quantity for each parameter
Create LPN	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcreatelpn (Create LPN)	Refer to the RF Configuration Guide for more details on the parameters	In the 'Screen Configuration' UI Module, add module: Create LPN - rf.inbound.cwrfcreatelpn
Create LPN from Active	Screen Configuration UI Module: RF Module:	This RF Transaction will allow a user to create an LPN from Active Inventory. This allows the user to	In the 'Screen Configuration' UI Module, add module:

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Task Description	WMS Module	Overview/Comments	Task Details
	rf.inbound.cwrfcreatelpnlocn (Create LPN Location)	relocate the inventory from active to a new reserve or active or also lock the inventory for any particular reason.	Create LPN Location - rf.inbound.cwrfcreatelpnlocn

Immediate Cycle Count

The RF - Cycle Count Location is used to cycle count locations without the use of tasks. The location will be scanned with the cycle count RF Transaction to initiate the cycle count process. Inventory will then be scanned either at the LPN level or the SKU Content Level. Inventory adjustments will be made immediately.

- LPN Level cycle count - For Resereve Locations Each LPN will be scanned. For Active, SKU Qty will be entered.
- By SKU Count - For Resereve Locations a SKU Qty will be entered for each LPN scanned. For Active, SKU Qty will be entered.
- By SKU Scan - For reserve and active locations, Each unit in the location will be scanned.

Task Description	WMS Module	Overview/Comments	Task Details
Cycle Count Reason Code	Reason Codes & Company Parameters	Note: Reason Codes are configured at the 3PL Parent Level	1. At the 3PL Parent Level, in the 'Reason Codes' UI Module, create the reason code for cycle count if not yet configured (i.e. 'CC') 2. Switch to the correct company level, and In 'Company Parameters' UI Screen, search for parameter: CYCLE_COUNT_REASON_CODE 3. Edit the value and enter the reason code created for cycle count.
Cycle Count Location RF	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountlocn (Cycle Count Location)	The RF - Cycle Count Location is used to cycle count locations without the use of tasks Cycle count can done at different content level: - By LPN Count - By SKU Count - By SKU Qty	1. In the 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountlocn 2. In the details, edit parameter 'content-count' to select the level of cycle count: - No selection = LPN Level cycle count - By SKU Count = SKU Qty will be entered for each LPN - By SKU Scan = Each unit in a location will be scanned.
Cycle Count LPN RF	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountiblpn (Cycle Count LPN)	The RF - Cycle Count LPN is used to cycle count specific LPNs without the use of tasks LPN Cycle	1. In the 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountiblpn

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Task Description	WMS Module	Overview/Comments	Task Details
		count can done by: - SKU Qty - SKU Scan	2. In the details, edit parameter sku-scan-mode' to select the level of cycle count: - No selection = SKU Qty - By SKU Qty = SKU Qty will be entered for LPN - By SKU Scan = Each unit in a location will be scanned.

Delayed Cycle Count

Delayed cycle count works as follows:

- Cycle count is done with the RF Cycle Count transactions
- Inventory Adjustment records are created in the UI Screen 'Cycle Count Adjustment'
- Adjustment records with discrepancies can be approved, rejected or cancelled

Note: When a record is approved, inventory is adjusted accordingly. *When a record is rejected, a cycle count task is created for recount, and no inventory adjustment is made.When a record is cancelled, cycle count is cancelled (i.e. no inventory adjustment is made, and no cycle count task is created).

Task Description	WMS Module	Overview/Comments	Task Details
Cycle Count Reason Code	Reason Codes and Company Parameters	**Note:** Reason Codes are configured at the 3PL Parent Level	1. At the 3PL Parent Level, In 'Reason Codes' UI Module, create the reason code for cycle count if not yet configured (i.e. 'CC') 2. Switch to the correct company level, and in the 'Company Parameters' UI screen, search for parameter: CYCLE_COUNT_REASON_CODE 3. Edit the value and enter the reason code created for cycle count
Cycle Count Adjustment	Facility Parameters and Company Parameters	The facility and company parameters 'INVN_ADJ_APPROVAL_REQUIRED' must be set to 'YES' for a specific client company. When this parameter is set to yes, inventory adjustment records are created after each cycle count for approval before	1. Login at the correct company level 2. In the 'Company Parameters' UI module and 'Facility Parameters' UI Module, search for parameter: INVN_ADJ_APPROVAL_REQUIRED 3. Edit the value and enter value 'YES' or 'NO' based on requirement

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Task Description	WMS Module	Overview/Comments	Task Details
		adjustments are made to inventory. This allows the delayed cycle count.	
Cycle Count Location RF - Content Count	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountlocn (Cycle Count Location)	The RF - Cycle Count Location is used to cycle count locations without the use of tasks Cycle count can done at different content level: - By LPN Count - By SKU Count - By SKU Qty	1. In the 'Screen Configuration' UI Module, add the module: Cycle Count Location - rf.inbound.cwrfcyclecountlocn 2. In the details, edit parameter 'content-count' to select the level of cycle count: - No selection = LPN Level cycle count - By SKU Count = SKU Qty will be entered for eacg LPN - By SKU Scan = Each unit in a location will be scanned.
Cycle Count Location RF - Approval Mode	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountlocn (Cycle Count Location)	The Approval mode can be set on the RF Transaction to either allow: - Auto Approval of Adjustments: Adjustement records are created, and discrepancies are auto approved if any after cycle count is done. Adjsutments are made to inventory. - Delayed Approval of Adjustments: Adjustment records are created, and adjustments are not made until records are approved by a user. Records can also be rejected.	1. In the 'Screen Configuration' UI Module, select module: Cycle Count Location - rf.inbound.cwrfcyclecountlocn 2. In the details, edit parameter 'auto-approve-mode': - No selection = Yes - Yes = Adjustments are auto approved and inventory is updated - No = Adjustments require approval for inventory updates.
Cycle Count LPN RF - Content Count	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountiblpn (Cycle Count LPN	The RF - Cycle Count LPN is used to cycle count specific LPNs without the use of tasks LPN Cycle count can done by: - SKU Qty - SKU Scan	1. In the 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountiblpn 2. In the details, edit parameter 'sku-scan-mode' to select the level of cycle count: - No selection = SKU Qty - By SKU Qty = SKU Qty will be entered for LPN - By SKU Scan = Each unit in a location will be scanned.
Cycle Count LPN RF - Approval Mode	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountiblpn (Cycle Count LPN	The Approval mode can be set on the RF Transaction to either allow: - Auto Approval of Adjustments: Adjustement records are created, and discrepancies are auto approved if any after cycle count is done. Adjsutments are made to inventory. - Delayed Approval of Adjustments: Adjustment records are created, and adjustments	1. In the 'Screen Configuration' UI Module, select module: Cycle Count Location - rf.inbound.cwrfcyclecountlocn 2. In the details, edit parameter 'auto-approve-mode': - No selection = Yes - Yes = Adjustments are auto approved and inventory is updated - No = Adjustments require approval for inventory updates.

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Task Description	WMS Module	Overview/Comments	Task Details
		are not made until records are approved by a user. Records can also be rejected.	

Cycle Count Tasks

Cycle count tasks can be created based on item and location attributes. A cycle count wave template can be run to create cycle count tasks based on the configured conditions.

Tasks will be executed for cycle counts which can be either immediate or delayed based on the above configuration for immediate or delayed cycle count.

Note: Configuration for cycle count must be done for immediate or delayed cycle count.

Cycle Count Adjustment Records for Approval

Cycle Count Adjustment records can be allowed for approval or rejection after cycle count tasks are executed. Cycle count adjustements are created after cycle count and require approval before any update to inventory.

Task Description	WMS Module	Overview/Comments	Task Details
Cycle Count Adjustment	Facility Parameters and Company Parameters	The facility and company parameters 'INVN_ADJ_APPROVAL_REQUIRED' must be set to 'YES' for a specific client company. When this parameter is set to yes, inventory adjustment records are created after each cycle count for approval before adjustments are made to inventory. This allows the delayed cycle count.	1. Login at the correct company level 2. In the 'Company Parameters' UI Module and 'Facility Parameters' UI Module, search for parameter: INVN_ADJ_APPROVAL_REQUIRED 3. Edit the value and enter value 'YES' or 'NO' based on requirement

Cycle Count Task Type Setup (Optional)

Cycle Count Task types represent the types or methods of cycle count (i.e. Cycle count at the LPN level or the location contents level.) Cycle Count Task types are listed/defined in the UI Module 'Task Types'. Cycle Count Task types are linked to the 'Cycle Count' RF Module which can be configured for delayed cycle count approval.

Cycle Count Task Types are as follows:

- - CC LOCATION: Task type for cycle count done by LPN Scan by default

- - CC Location DTL: Task type for cycle count done at the location content level by default

The RF module in a task type details can be configured for approval mode. The auto approval mode must be configured accordingly to allow delayed cycle counts.

Task Description	WMS Module	Overview/Comments	Task Details
Cycle Count Location RF - Approval Mode	Screen Configuration UI Module: RF Module: rf.inbound.cwrfcyclecountlocn (Cycle Count Location)	The Approval mode can be set on the RF Transaction to either allow: - Auto Approval of Adjustments: Adjustement records are created, and discrepancies are auto approved if any after cycle count is done. Adjsutments are made to inventory. - Delayed Approval of Adjustments: Adjustment records are created, and adjustments are not made until records are approved by a user. Records can also be rejected.	1. In 'Screen Configuration' UI Module, add module: Cycle Count Location - rf.inbound.cwrfcyclecountlocnIn or select module if it already exists. Rename module if needed. 2. In the details, edit parameter 'auto-approve-mode': - No selection = Yes - Yes = Adjustments are auto approved and inventory is updated - No = Adjustments require approval for inventory updates
Cycle Count Task Type Set Up	Task Types	The cycle count RF Module configured with approval mode can be linked to the task types that will be used for cycle count tasks. These task types will then be used to create tasks with the required configuration.	1. In 'Task Type' UI Module, access the details of the task type being configured (CC_ Location or CC_Location_ DTL) 2. Select the RF Module and click on edit to select the previously configured Cycle count RF Module 3. In the drop down select the cycle count RF Module created. (The RF Module will show up with the specific name configured for the transaction in previous step) 4. Save changes

Cycle Count Task Template

The cycle count task template will specify the task types that need to be created for cycle count tasks based on specific criteria. When the cycle count template is run, cycle count tasks will be created for the configured conditions. The conditions can be set for item or location attributes (i.e. Cycle count tasks to be created for items with specific velocity or for locations in a specific area etc..)

Task Description	WMS Module	Overview/Comments	Task Details
Create Cycle Task Template	Task Creation		1. Login at the correct company level. In 'Task Creation' UI Module create a new Cycle Count template by entering a template name or description then save the template

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Task Description	WMS Module	Overview/Comments	Task Details
			2. Access the details to add task rules
Select Task Types	Task Creation - Details	Default Task Types: - CC LOCATION: Task type for cycle count done by LPN Scan by default - CC Location DTL: Task type for cycle count done at the location content level by default	1. In 'Task Creation' UI Module, in task template details add task types that will be used 2. Enter a sequence number for the order of task creation and select a task type from the task type drop down. Task types configured in above section will be visible in the drop down.
Set Up an Ordering Criteria	Task Creation - Details Link - Ordering Criteria	The ordering criteria will specify rules on how tasks are to be created (i.e. the sequence in which tasks will be created for cycle count based on location criteria)	1. In the details, after adding task types in task template, select specific task type and access the 'Ordering Criteria' 2. In 'Ordering Criteria' add a sequence number for the criteria 3. Add criteria for task rules (the break by count is not allowed for cycle count)
Set Up a Selection Criteria	Task Creation - Details Link - Ordering Criteria	The Selection Criteria is to specify the criteria for which cycle count tasks need to be created. This can be used to specify: - Items with specific criteria i.e. Item with a specific velocity, specific item attributes - Location with specific criteria i.e. location with specific area code, level etc..	1. In the details, after adding task types in task template, select specific task type and access the 'Selection Criteria' 2. In 'Selection Criteria' select the sql operator for the folder (i.e. Use AND if one or multiple conditions need to be true - Use OR if one of multiple conditions need to be true for the task type) 3. Click on 'Insert Basic Operation' to add condition(s) or click on 'Insert Complex Operation' to add a sub-folder of conditions 4. After adding a condition, click on the appropriate folder to add more conditions or click Save to save to complete the setup

Cycle Count Triggers

Cycle Count Triggers can be configured to trigger cycle count tasks to be create automatically. For example, this can be used to trigger the creation of a cycle count task after a short pick (i.e. Inventory is allocated, but is not physically present in location and the picker performs a short pick.)

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Triggers include the following:

- Alternate Location for Putaway (i.e. User was directed to a specific location for putaway but location was full or not available for putway)

- Short Pick Full LPN (i.e. LPN allocated is not present in the location directed by system)

- Short Pick Partial LPN (i.e. Full Quantity allocated by system is not present in location)

- Short Pick Active (i.e. Units allocated from active location are not present in location)

- De-allocate IBLPN from UI

- Set Location 'To be counted' flag from location screen (i.e. Location is manually set for cycle count)

Task Description	WMS Module	Overview/Comments	Task Details
Add Cycle Count Trigger	Cycle Count Trigger Management	Cycle count triggers will be displayed in the UI screen 'Cycle Count Trigger Management' Triggers needed will be copied and created for the specific client company	1. Login at the specific client company level 2. In 'Cycle Count Trigger Management' UI Module, copy trigger needed and click on the 'enabled' flag
Select Task Type	Cycle Count Trigger Management	Default Task Types: - CC LOCATION: Task type for cycle count done by LPN Scan by default - CC Location DTL: Task type for cycle count done at the location content level by default	1. In the 'Cycle Count Trigger Management' UI Module, select task type from drop down list 2. The Default task type can be selected as well as created and configured task types in previous section

Inventory Management Modules

The following UI modules can be added to a user's menu for inventory inquiry. There is no configuration required once these modules are added to a menu. A description of these modules is included below.

Task Description	WMS Module	Overview/Comments
Active Inventory	Active Inventory	The 'Active Inventory' UI Screen will show the current inventory available by location (in active locations). This will include the current quantity, and the allocated quantity. The current quantity will include the allocated quantity.
Reserve Inventory	Reserve Inventory	The 'Reserve Inventory' UI Screen will show the current inventory available by location (in reserve locations). This will include the current quantity, and the allocated quantity.

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Task Description	WMS Module	Overview/Comments
		The current quantity will include the allocated quantity.
Inventory Summary	Inventory Summary	- OBLPN Total = Total units currently packed. - Active Total = Total units in active (this include available and allocated units). - Active Allocated = Total units allocated in active - Active Available = Total units available for allocation (excludes allocated units) - IBLPN Total = Total units in IBLPNs in Received, Located or Allocated Status - Current Qty from IBLPNs - IBLPN Allocated = Total units allocated counted from IBLPNs in Allocated or Partly Allocated status - IBLPN Available = Total units available for allocation from IBLPNs - IBLPN Not verified = Total units from IBLPNs not verified - Total Allocated = Active Allocated + IBLPN Allocated - Total Available = Active Available + IBLPN Available - Total Inventory = Active Total + IBLPN Total - Four Wall Summary = Total Inventory + OBLPN Total
Inventory History	Inventory History	The 'Inventory History' UI Screen will show records for each inventory activity that occurs in the end-to-end process. These records will include LPNs, PO, Item #, Lock Codes, Reason Codes etc...
Container Lock View	Container Lock View	The 'Container Lock View' UI Screen will all current LPNs with an assigned lock code. This screen can also be used to add/remove/update lock codes on an LPN.
Batch Management	Batch Management	The 'Batch Management' UI Module will show all items with a current batch/lot number. This screen can be used to add/update a lock code or expiration date to a batch/lot. All LPNs with the specific batch/lot number will be updated.
Consolidation Inventory	Consolidation Location	The 'Consolidation' UI Module will show inventory currently in a consolidation location. This is used for put-to-store or distribution flows.

9 Configuring UOM

Configuring UOM

WMS Cloud extends the capability to track units of measure beyond discrete units, packs, and cases. Inventory can now be tracked in user defined units of measure belonging to unit of measure classes.

UOM Class Screen

Inventory Managers may receive different inventory from vendors in different metrics. In order to better track inventory, a new **UOM Class** UI has been added as a first step to start tracking inventory. This is helpful in scenarios where your vendors send you different metrics. The addition of UOM Class entity provides groupings for UOM's, so you may want to add UOMs that belong on a same Class. For example, you could have a length class, and the UOM under this class could be centemeters, meters, or feet. Or you could have a volume class, and the UOM under this class could be cubic meters, or cubic feet.

A new UI module **UOMClassView** is available, where Warehouse Management users can define UOM Class.

> **Note:** The System Class code indicates UOM codes that already existed in Warehouse Management prior to 22B. System class codes are not editable and you can't add additional uom codes to this class code.

UOM class code	UOM class description	Integer only flag	Predefined flag
SYSTEM	System-Count-UOM Class	No	true

The following table provides descriptions for the fields included in the UOM Class UI:

Fields	Description
UOM class_code	In the UOM Class UI, **UOM Class Code** allows you to define custom class codes specific to your business flow (like mass, volume, capacity, and so on.) > **Note:** the System class code is pre-populated and not editable. The System UOM Class encompasses Warehouse Management legacy UOMs like Packs, Units, Cases, Cubed, LPN, Pallet. UOM Class is not specific to company. Customers with multiple companies in the same environment will see UOM Class configured.
UOM_class_description	Description associated with the UOM Class code

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Fields	Description
Integer_only_flag	Indicates whether the underlying UOM's associated with UOM support decimals or not. The field will not be editable for "System" UOM Class.
Predefined_flag	For pre-seeded UOM's the predefined flag will be set to "true". UOM's with predefined flag will not be allowed to be edited or deleted.
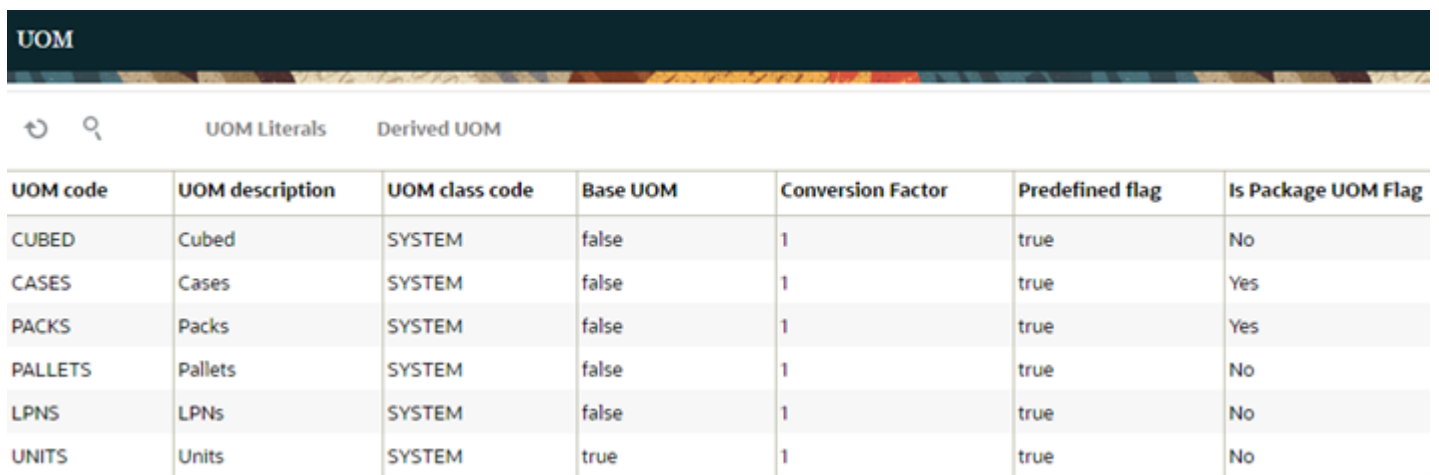
Pre-Defined UOM Flag

A **predefined_flag** is now available in the **UOM** UI that prevents users from deleting the standard UOMs from the UOM UI screen even if they have the delete permission enabled.

- The predefined UOMs for the predefined_flag are defaulted to "True" and cannot be edited.
- Users can edit only the UOM description of the UOMs with Predefined_flg as true. Check that the predefined UOMs cannot be edited except for the description (uom_name).
- The predefined UOMs cannot be deleted.
- Verify that users are able to add, edit, delete UOM literals of the predefined UOMs if they have the required permission.
- If a user defined UOM is used in the facility or company, the UOM class of that UOM cannot be changed to some other class.

UOM Configuration Screen

The Unit of Measure (UOM)UI module (**UomView**) gives you the flexibility to configure other UOMs in addition to the existing supported system class UOMs (cubed, cases, packs, pallets, LPNs, and units.)

UOM

↺ ○⟍   UOM Literals   Derived UOM

UOM code	UOM description	UOM class code	Base UOM	Conversion Factor	Predefined flag	Is Package UOM Flag
CUBED	Cubed	SYSTEM	false	1	true	No
CASES	Cases	SYSTEM	false	1	true	Yes
PACKS	Packs	SYSTEM	false	1	true	Yes
PALLETS	Pallets	SYSTEM	false	1	true	No
LPNS	LPNs	SYSTEM	false	1	true	No
UNITS	Units	SYSTEM	true	1	true	No

The **UOM** UI allows you to group and view additional UOMs that belong together in the same UOM Class.

In the following example, you can see all of the different UOM codes (measurement categories) that have been grouped as MASS:

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UOMs

		UOM Literals	Derived UOM	

UOM code	UOM description	UOM class code	Base UOM
TON	Short Ton	MASS	false
LB	Pound	MASS	false
OZ	Ounce	MASS	false
MTN	Metric Ton	MASS	false
KG	Kilogram	MASS	false
G	Gram	MASS	false
MG	Milligram	MASS	true

The following table describes the fields in the **UOM**UI:

Field	Description
UOM Code	You can define a UOM Code for each UOM. This will serve as an abbreviated name for the UOM that typically correlates to the UOM description.
UOM Description	UOM description describes the type of UOM.
UOM Class Code	Defines the UOM class associated with the added UOM.
Base UOM	This field should be Set to True for the base UOM and False for the other UOMs in the same UOM class.
Conversion Factor	You can view the conversion factor of the UOMs with respect to the base UOM.
Predefined Flag	This flag is already automatically predefined and set to true for existing defined UOMs. It will be set to false for newly created user UOMs
Is Package UOM Flag	Set to Yes if the UOM is a package and No if the UOM is not a package.
Create/Modify User	This field filters the records modified by user. It also supports partial search and you can search for multiple users by providing comma separated values.
Create/Modify Timestamp	This field filters the records created and modified within the provided range.

- Users should be able to view the system class UOMs by default upon launching the UOM configuration UI.
- System UOM Class encompasses our legacy UOMs like Packs, Units, Cases, Cubed, LPN, Pallet.

Note: The base UOM for the system class UOM is Units. The corresponding conversion factor for other UOMs is based on the system class UOM = 1.

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For example, where the UOM is 1 Millimeter, the corresponding conversion factor for Centimeter is 10.

UOM Description Character Limit

To support integration with Inventory Management, the current UOM description character limit in Warehouse Management has been limited to 25 characters.

UOM

↻ ⌕   **UOM Literals**   **Derived UOM**

UOM code	UOM description (T)	UOM class code	Base UOM	Conversion Factor
MI	Statute Mile	DIMENSION	false	1609344
IN	Inch	DIMENSION	false	25.4
FT	Foot	DIMENSION	false	304.8
KM	Kilometer	DIMENSION	false	1000000
M	Meter	DIMENSION	false	1000
CM	Centimeter	DIMENSION	false	10
MM	Millimeter	DIMENSION	true	1

Filter Options

The UOM UI includes the following filter criteria:

- UOM Code- entry field
- UOM class- Dropdown
- UOM description

Package UOM Flag in UOM UI

A Package UOM defines the way that a specific UOM is packaged (for example, Packs or Cases.)

From the UOM UI, you can configure a specific set of UOMs as a Package UOM using the **Is Package UOM Flag**. You can enable or disable the package UOM flag when you create or modify a UOM using the create/copy/edit pane.

> **Note:** For system class UOMS, the package UOM flag should be enabled by default for Packs and Cases. The flag should not be editable for any UOM belonging to system class UOMs.

In order to perform CRUD operations, you must have the following assigned permissions:

- UOM/ Can create UOM
- UOM/ Can edit UOM (For the system class UOMs even if users have the edit permission enabled, they can only update the UOM names)

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- UOM/ Can delete UOM

UOM Literals Button

When translating UOM for different languages, the symbols displayed can vary from one language to another. To accommodate these variations, UOM attributes are now translated and you can now view UOMs per their selected default language. This will help with ease of use because you can make UI names specific to your language.

The following languages are supported:

Language Code
(traditional Chinese)
Francais (French)
Deutsch (German)
Italiano (Italian)
(Japanese)
(Korean)
Polskie (Polish)
Русский (Russian)
(Thai)
Türkçe (Turkish)
(simplified Chinese)
Français-CA (French-CA)
English
Português (Portuguese)
Español (Spanish)
Hrvatski (Croation)
Čeština (Czech)
Slovenčina (Slovak)
Українська (Ukranian)
Nederlands (Dutch)

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Language Code
Suomi (Finnish)
Norsk (Norwegian)

From the UOM UI, click the **UOM Literals** button to add a literal. The UOM Literals button includes the following details:

- The UOM literals button is available only when a UOM is selected
- The UOM Literals UI includes the following columns:
- UOM Code
- Language Code
- Translated UOM Code
- Translated UOM description
- Create User
- Mod User
- Create Timestamp
- Modify Timestamp

Note: From the **UOM Literals UI,** you candefine the language specific UOM codes, characters, and UOM code. This UI provides you the ability to define the UOM's specific to the language for particular UOM.

For example, let's say your UOM is "Cubed" and your Language Code is Español. You might want your Translated UOM code to be "Cub" and your Translated UOM description to be "Cubicado."

Derived UOM Button

A **Derived UOM** button (accessible from the UOM UI) allows you to view the associated (preseeded) area and volume relative to the UOM dimension and volume.

From the UOM UI, you can click the **Derived UOM** button to view the derived area and volume for the selected unit of measure. The area and volume information is displayed based on the literals value defined against the respective UOM's.

To enable the Derived UOM button:

Assign the **" UOM/ Can Create Derived UOM"** Group Permission.

The following are the preseeded UOM options available from the Derived UOM UI:

Dimension UOM	Derived Volume UOM	Derived Area UOM
Millimeter	Cubic Millimeter	Square Millimeter
Centimeter	Cubic Centimeter	Square Centimeter
Meter	Cubic Meter	Square Meter

Dimension UOM	Derived Volume UOM	Derived Area UOM
Foot	Cubic Foot	Square Foot
Inch	Cubic Inch	Square Inch
Yard	Cubic Yard	Square Yard

> **Note:** If the predefined flag is set to **Yes**, you cannot change or delete the seeded values for Derived Volume UOM and Derived Area UOM against the dimension UOMs.

Company Specific Configuration

Configure UOM at the Child Company Level

A new **UOM configuration** allows you to add the UOM for Weight, Volume, and Dimensions at the child company level. This will help you reconcile the warehouse inventories with different UOM from various suppliers with common UOM at the company level across warehouses.

When the inventory is received with different UOM other than the configured UOM at the company level, the respective values are stored in the UOM defined at the company level.

> **Note:**
> - Once all the selected facilities are set to WMS managed, you can modify Weight, Volume, and Dimension UOMs across multiple facilities at a single instance.
>
> - On changing UOM value at the company level, the system does not update the respective UOM value across facilities.
>
> - When you remove any UOM value for Weight/Volume/Dimension at the company level, the value for the respective UOM is removed from all the associated facilities that are WMS managed.

3PL UOM Configuration

You now have the ability to define UOM at the facility and company level. When you are dealing with 3PL's the following will happen:

- Configuration that is set up at the parent company level will be copied to all of the child companies that are associated with the selected parent company.

- Child companies will not be able to change the Length, Width or Volume UOMs.

- The weight, volume, and dimension UOM at the facility level will be prepopulated with the values against the respective company, only if the facility is WMS managed.

- When a child company is not populated with any of the UOMs then its associated facilities should be blank as well.

- You will be able to modify weight/volume dimension UOM for facilities of type Store, Distribution Center, and Site that are WMS managed.

- On changing UOM value at company level, the system does not update the respective UOM value across facilities.

- When you remove any UOM value for Weight/Volume/Dimension at the company level, the value for respective UOM is removed from all the associated facilities which are WMS managed.

Configure Dimension, Weight, and Volume UOM in the Company UI

You now have the ability to set up a common UOM at the Company level. In scenarios where vendors send you inventory with different UOMs, having Company level common UOMs allows you to reconcile inventory across warehouses.

Now, when inventory is received in different UOMs, the inventory will be stored at the company level with common UOMs. When inventory is received with different UOMs at the company level, the respective values will be converted and then stored in the Company level UOM.

A new action button **'UOM Configuration'** is available in the Company UI to configure UOM at the Parent Company level.

> **Note:** The UOM Configuration button is enabled by default for the **Administrator** role . If you are not an admin, then you must have set up the Permission in '**Company/Can update UOM configuration'.**

This action button is only available if the selected company is a Parent Company. Parent companies have the field set up with a *. Once you configure UOM values for Weight/Volume/Dimension, the respective facilities associated with the parent company are pre-populated with same value.

This new action button allows you to configure weight/volume/dimension UOMs.

Display UOM Code in UI and Units in the RF

You can also display the UOM Code in the UI and display units in the RF.

- **Weight UOM** will display the UOM Code configured for **Weight class.**

- **Volume UOM** will display the UOM Code configured for **Volume class.**

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- **Dimension UOM** will display the UOM Code configured for **Dimension class.**

Display UOM Code in UI:

For Weight/Volume/Dimension quantity fields in the UI:

Company level setting- Display UOM Code	Expected Behavior
If set as 'Yes'	UOM code is appended to the values in respective fields.
If set as 'No'	UOM code is not appended.

The default value is set to 'Yes'and theUOM code will be appended to the values. The UOM code is picked from item facility primary UOM for the quantity fields and if the item facility is not available, it is picked from item primary UOM.

For Weight/Volume/Dimension quantity fields with multiple UOM in the UI:

Company level setting- Display UOM Code	Expected Behavior
If set to 'Yes'	If the primary UOMs are same, the system appends the UOM code to the values in respective fields. If the primary UOMs are different, the system displays the summed up value along with a star . **Example:** *If the summed value is 1000, the value displayed is 1000*.*
If set to 'No'	UOM code is not appended.

For Weight/Volume/Dimension quantity fields in CSV file:

Company level setting- Display UOM Code	Expected Behavior
If set to 'Yes'	UOM code is available as a separate column after each field in the exported file. **Example:** For ordered quantity and shipped quantity in the exported file, two column are available for UOM fields along with the quantity field.
If set to 'No'	UOM column is now available in the exported file.

> **Note:** Default values for UOM at the Company/Facility remains blank and once you configure values at company level, the system displays same values across all the associated facilities.

Display Units UOM in RF:

If this flag is enabled in the Company UI, then you can configure 'Units' to be displayed in the RF screens. The flag will also display quantity fields UOM. You can also disable the flag to exclude UOM information.

> **Note:**
> - If the UOM class is different for the item that you are scanning, the UOM associated with the item is displayed along with the quantity field.
> - If the configuration is at the parent company level, all the child companies within the same parent company will have the same setting.
> - If the selected company is a Parent company, the **UOM Configuration** action button is enabled and you can choose to display the UOM code in the RF screen by enabling the flag.

When new settings are carried over to the child companies associated with the parent company:

- Child companies are not allowed to change the value UOM values.
- If the **Display Units UOM in RF** box is disabled, all the child companies associated with the parent company will not display the UOM code.

The following group permission is required to access UOM Configuration:

- company/can configure UOM configuration

Facility Interface

Define Primary UOM for Item Facility

The warehouse deals with different inventory received from various vendors/suppliers that have multiple UOMs such as Units, Packs, Cases, and LPNs. that are supported in the system.

You now are able to see the UOM in the UI or RF screen. This is useful for scenarios where you have some vendors that send you inventory in different UOMs.

A new column **Primary UOM** is available at the facility level which allows you to add the primary UOM for an item in the item facility interface file and allows you to represent the inventory for the item and compute the transactions is terms of the selected UOM.

> **Note:** The primary UOM set at the item level is maintained across all the facilities.

The Primary UOM for item facility is available in the following file formats:

- psv
- xls
- xml

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The system displays the following messages once the UOM configuration is complete:

- If you send an invalid UOM code which is not present in the UOM configuration, the system displays an error 'UOM code not found'.
- If you create a new item facility record but send a different Primary UOM code of any UOM class other than the selected primary UOM, the system displays an error 'Provided UOM does not match with the UOM class of item % for facility%.
- If you send a Primary UOM code other than that is present in the item facility record, the system displays an error 'Cannot change Primary UOM for item% in facility%'.
- If you try to delete a Primary UOM that is already in in Shipment, Purchase Order , or Work Order detail, the system displays an error 'Cannot delete Primary UOM for item% in facility%'.
- If you define the primary UOM for the item other than 'Units', the system displays an error 'Primary UOM cannot be set other than Units for System UOM class'.

Configure UOM at the Facility Level

When you are a company with multiple facilities in different geographical locations, each facility may want to define different UOM for Weight/Volume/Dimension class. By allowing you to define UOM at the facility level, you have the flexibility to make transactions easily within your facility. A new action button in the Facility UI (**UOM Configuration**) allows you to configure UOM at the facility level.

> **Note:** UOM values defined at the facility level takes precedence over company UOM.

The default for the **UOM Configuration** action button is enabled when the selected facility is associated with the company. You can select multiple facilities and define UOM across facilities in a single instance.

> **Note:** If the selected facility is not associated with the company, then UOM Configuration action button is disabled.

To enable the **UOM Configuration** button, assign the **Facility/UOM/ Configure UOM permission.**

> **Note:** By default, this new permission is assigned to the Administrator role.

To configure values in the UOM Configuration for Weight/Volume/Dimension class:

1. Click **UOM Configuration**.
2. A pop-up window appears where you can define the Weight, Volume, and Dimension class based on the UOM configured in the new UOM UI screen:
   a. The weight UOM drop-down should display the UOM's Code configured for Weight class.
   b. The volume UOM drop-down should display the UOM's Code configured for Volume class.

    c.   The dimension UOM drop-down should display the UOM's Code configured for Dimension class.

3. Click **Save** to save the changes.

> **Note:**
> - If the respective UOM class is defined with value at company level, you cannot save blank value against any of the UOM class.
> - When you save UOM class for the facility and the associated company is not configured for the respective UOM class, the system displays an error message 'Cannot save value for %UOM class% as respective UOM is not defined at company level'.
> - Default value for Weight/Volume/ Dimension UOM fields are pre-populated from respective company setting and you can select value against each UOM class and save the value.

Item Facility Primary UOM Drop-Down

When defining a primary UOM in item facility UI, you can now choose any UOM as the primary UOM for the item-facility.

For example: If the **Item Primary UOM** is UNITS (system class), you can choose the following as the primary UOM in the facility UI for an item:

- Packs
- Cases
- LPN
- Pallets
- Cubed

> **Note:** When you choose a UOM in the system class, there is a flag that can be used to restrict the selection of UOM.

Item UI:

When you add a Primary UOM for a new item, each UOM that you created is displayed in the UI drop-down. If you want to choose a primary UOM belonging to system class, you must choose 'UNITS'. If you choose any other UOM from system class other than 'UNITS', the system displays an error **"Primary UOM cannot be set other than Units for System UOM class"**.

Item Facility UI:

If the item primary UOM is set as 'UNITS', in item Facility Primary UOM, you must choose 'UNITS'. If you choose any other UOM from system class other than 'UNITS', the system displays an error 'Primary UOM cannot be set other than Units for System UOM class'.

Maximum for Primary UOM in the Item Interface

The system will allow a maximum of one configuration of Primary UOM, if both Primary UOM and Item Facility Primary UOM are the same.

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When the Facility UOM is different from the Primary UOM and you try to update the Case or Pack quantity, the system will display an error in the item interface "Pack/Case Qty configured for item XYZ. Item Facility UOM for QAEST01 and item primary UOM must be same".
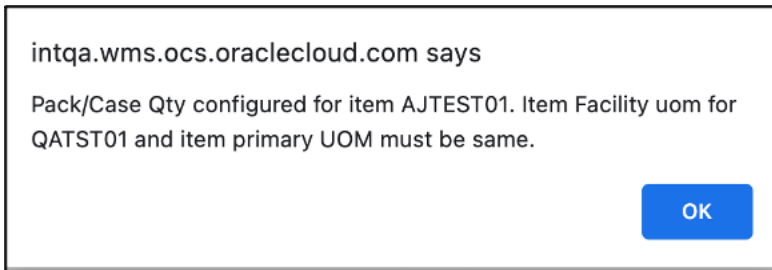
When the Facility UOM is different from the Primary UOM and you delete or make the Facility UOM the same as the Primary UOM, the system allows you to update the Case/Pack quantity greater than zero.

> **Note:** For the **Item Input Interface** file, you can upload following the same process as the Item UI.

Maximum for Item Facility Primary UOM in the Item UI

In the Item UI, the system will restrict configuration of standard pack or standard case quantity with value greater than zero is the item Primary UOM is different than item Facility UOM. The system displays an error 'Item has facility specific primary UOM configured for facility , cannot save' upon saving the item.
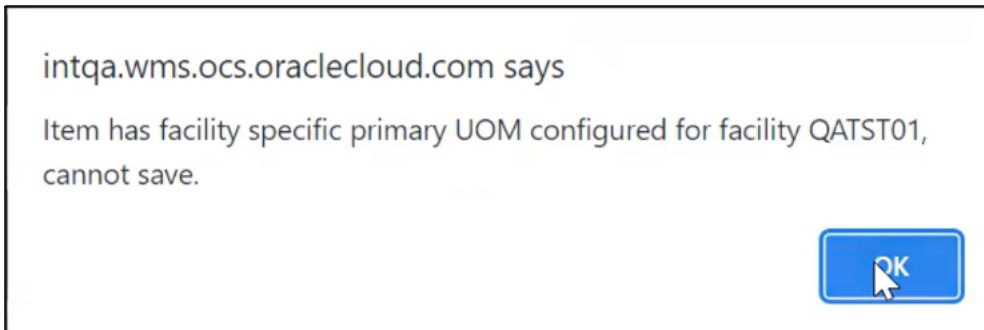
Package UOM

Define UOM at the Item Level

You now can define the Primary UOM for an Item in Item UI. By defining UOM at the item level, you can manage inventory in the warehouse better. When warehouses are dealing with various items, then having UOM for each items makes clear distinction about the properties of them.

You also now can configure UOM at the Pack and Case level. With support for UOM at the packs/case level, you can configure any UOM's which will help in floor operation for better understanding.

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To help you manage UOM, the following three fields are now available in the Item UI:

- **Primary UOM** :Primary UOM field is displayed below the Barcode field in the Item UI.

- **Pack UOM**:Pack UOM is displayed below the Std Pack Qty field in the Item Detail UI.

- **Case UOM**:Case UOM is displayed below the Std Case Qty field in the Item Detail UI.

Three new filters have been introduced for the Item UI to filter items based on the UOM, each filters has all the UOM configured. On selecting specific UOM in the filter, the system displays items matching with the filter criteria.

UI Package UOM

The following columns are available in the Item UI to define UOM:

- Primary UOM: Default value for primary UOM is set to Units.

- Pack UOM: Default value for Pack UOM is set as blank.

- Case UOM: Default value for Case UOM is set as blank.

The following column is available on the Item Facility entity to define the following UOM:

- Primary UOM: Default value for primary UOM is blank for item facility.

Note: By default, for existing items which were created, the Primary UOM is set as Units in the Item UI.

Selecting Pack and Case UOM for an Item

When creating an item, you can choose UOMs that are configured as a **Package UOM** in the **UOM** UI screen and based on the **UOM class code**, the **Pack UOM** and **Case UOM** can be selected for an item. The system allows the UOMs that have '**is Package UOM Flag'** enabled for Pack UOM and Case UOM field. And, if the Primary UOM belongs to a non-system UOM class, then Pack UOM and Case UOM is fetched from Primary UOM class once **is Package UOM flag** enabled in the **UOM** screen.

- In the Pack UOM/Case UOM drop-down list, only the UOMs within the same class as the item Primary UOM is available for selection

- To configure Pack UOM/Case UOM, you have to provide values for Standard Pack Quantity and Standard Case Quantity, respectively

- Once the item is created, the default values are displayed as 'Packs' and 'Cases'

- For the **Item Input Interface** file, the validation has been introduced and you can upload following the same process as Item UI.

Create Derived Volume and Area Dimension from Input Interface

You can derive the volume value and volume UOM based on the dimensions that were sent in the interface file. The system can now determine the volume UOM based on the dimensions from the input interface file.

You can support UOMs for dimension/volume and then the system can determine the volume based on the input from dimension UOM.

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To create derived volume UOM and derived area UOM, Select the 'Derived UOM' action button. The following fields are available in the Create/Copy/Edit flow:

- Dimension UOM

- Derived Volume UOM

- Derived Area UOM

The following preceded entries define the Derived Volume, Derived Area UOMs:

Dimension UOM	Derived Volume UOM	Derived Area UOM
Millimeter	Cubic Millimeter	Square Millimeter
Centimeter	Cubic Centimeter	Square Centimeter
Meter	Cubic Meter	Square Meter
Foot	Cubic Foot	Square Foot
Inch	Cubic Inch	Square Inch
Yard	Cubic Yard	Square Yard

For the Predefined flag:

- Flag value is set as Yes for the seeded data.

- Flag value is set as No for user created derived Volume UOM and Area UOM.

Note: You are not allowed to change the flag value.

A child UI is available for you to configure the derived Volume UOM and Area UOM for dimension UOM class+.

The following permissions are required to control CRUD operations of derived UOM:

- UOM/ Can Create Derived UOM: On having "UOM/ Can Create Derived UOM" permission, you are allowed to create the derived Volume/ derived Area UOM against the dimension UOM.

- UOM/ Can Edit Derived UOM: On having "UOM/ Can Edit Derived UOM" permission, you are allowed to edit and save the derived Volume/ derived Area UOM against the dimension UOM.

- UOM/ Can Delete Derived UOM: On having "UOM/ Can Delete Derived UOM" permission, you are allowed to delete the derived Volume/ derived Area UOM against the dimension UOM.

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> **Note:**
>   - By default, all three new permissions cannot be assigned to users (Except users with an administrator role).
>   - Users with group permissions enabled for their respective groups can perform the CRUD operations on derived UOM.

You can only select those dimension UOM for which the Derived Volume or Derived Area is not defined.

After selecting the dimension UOM:

  - You can now select Volume description from the available volume UOMs in the derived volume UOM field.
  - You can select area description from the available area UOMs in the derived Area UOM field.

> **Note:** You cannot change or delete the seeded values for Derived Volume UOM and Derived Area UOM against the dimension UOM for which the predefined flag for the Dimension UOM is Yes.

Define Primary UOM for Items in Item Interface

In order to better track inventory in the warehouse, you can define the Primary UOM for items through Item Interface and you can define the UOM against each item., Six fields are available on the Item Interface for (XML/PSV/XLS) formats:

  - Primary UOM
  - Pack UOM
  - Case UOM
  - *Weight UOM*
  - *Volume UOM*
  - *Dimension UOM*

> **Note:**
>   - The conversion happens based on the Weight/Volume/Dimension UOMs set at the company level.
>   - Additionally, The Weight, volume and dimension UOMs is the same class as defined at the company UOM class.

Sort Inventories Based on Primary UOM using Selection Criteria

Item Primary UOM and **Item Facility Primary UOM** selection criteriacolumns are available in multiple screens. These are useful for you to sort the inventories based on the primary UOM and you can represent the inventories handled within the warehouse with other UOM classes such as Quantity, Weight, Length, Volume, and Area.

The following screen contains the new selection criteria:

In the **Putaway Type Calc Rule** screen:

1. Select **Final Putaway type**.
2. Click **Selection Criteria**.
3. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
4. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down list.
5. Provide the **Column Value** and click **Save**.

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In the **Task Creation Template** screen:

1. Select **Template Type**.
2. Click **Details** and select **Task Creation Template**.
3. Click **Selection Criteria**.
   a. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
   b. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down list.
   c. Provide the **Column Value** and click **Save**.
4. Click **Ordering Criteria**.
   a. Select   icon.
   b. Enter Sequence number and select **Item primary UOM or Item Facility Primary UOM** from the **Order by Column** drop-down list.
   c. Enter the **Break by Count**.
   d. Click **Save**.

In the **Cubing Rule** screen:

1. Select **Cubing Rule** and click **Details**.
2. Once the cubing rule is selected, click **Selection**.
   a. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
   b. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down list.
   c. Provide the **Column Value** and click **Save**.
3. Click **Ordering Criteria**.
   a. Click the + icon.
   b. Enter the Sequence number and select **Item primary UOM or Item Facility Primary UOM** from the **Order by Column** drop-down list.
   c. Enter the **Break by Count**.
   d. Click **Save**.

In the **Wave Template** screen:

1. Select an existing or newly created **Template**.
2. Click **Wave Template Search**.
3. Select an order and click **Dynamic Wave Search**.
4. Select any existing or newly created order and click **Selection Criteria**.
   a. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
   b. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down list.
   c. Provide **Column Value** and click **Save**.

In the **Outbound Audit Rule** screen:

1. Select an existing or newly created **Outbound Audit**.
2. Click **Selection Criteria**.
   a. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
   b. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down list.
   c. Provide **Column Value** and click **Save**.

In the **OBLPN Putaway Type Determination** screen:

1. Select an existing or newly created **OBLPN Putaway**.
2. Click Details and select any **Final Putaway Type**.

3. Click **Selection Criteria**.
   a. Click **Insert Basic Operation** and select **Sql Operator** from the drop-down list.
   b. Select **Item primary UOM or Item Facility Primary UOM** from the **Column Name** drop-down option.
   c. Provide the **Column Value** and click **Save**.

In the **Inbound Sorting** screen:

1. Click the + icon.
2. Enter Sort Zone and select **Item primary UOM or Item Facility Primary UOM** from the **Criteria 1** drop-down list. You can select **Criteria 2** if needed.
3. Click **Save**.

In the **Sort Receive** screen:

1. Click the + icon.
2. Select **Receive Station** from the drop-down list.
3. Select **Item primary UOM or Item Facility Primary UOM** from the **Criteria 1** drop-down list. You can select **Criteria 2** if needed.
4. Select **Condition** from the drop-down list.
5. Click **Save**.

You can configure the selection criteria values with different operators (=, IN, NOT IN, etc.) and multiple rules can be configured for the selection criteria for a single rule.

Input Interface

Now with UOM support in Input Interfaces. Vendors will have the ability to send different entities with different UOM's to the Warehouse Management. WMS converts the UOM sent by the vendor to the respective UOM tracked in the WMS. This change helps the floor users to track the WMS entities in their respective UOM.

New fields have been introduced for different entities to track the quantity/weight/volume/dimension

- uom_code (This field will be used to specify the UOM sent for quantity)
- weight_uom_code
- volume_uom_code
- dimension_uom_code

AQ	AR	AS
invn_attr_o	erp_vendorsiteid	uom_code

> **Note:** The pre-existing field **uom**, available in some interfaces, will be deprecated in a future release. It's recommended that you start using the **uom_code** field to send the uom for your quantity fields. Field **uom_code** **takes precedence over pre-existing field uom.**

- The uom sent in the quantity fields should be within the same uom class as the item's primary uom. In case of multiple details, then you can send different UOMs provided it matches with primary UOM class of respective items.

Decimal Handling in Input Interface

- If Item & Item's Primary UOM class both are enabled for decimal handling, then system allows you to send & store the quantity value in decimal.

- If Item is not enabled for decimal handling & Items Primary UOM class is enabled for decimal handling, then system will not allow you to store decimal quantity.

- You can interface Quantity value in decimal, even though respective item's primary UOM class is not tracking in decimal. Reason, the converted value may be in integer based on the items primary UOM.

> **Note:** The system stores the quantity value based on decimal precision defined at the company level.

Defining UOM in the Interface File

1. For example, in the Purchase Order Detail interface file, enter the ord_qty value and define the uom_code in the respective columns.

pre_pack_total_units	ord_qty		erp_vendorsiteid	uom_code
	20			MM
	30			MM

2. Upload the interface file and Run Interface.

> **Note:** You can download the latest templates of the interface files from the Download Template folder.

Purchase Order ▾	↻	Upload Files	↻ Run Interface	Download Templates

Files | **Stage Record**

↻ 🔍   ⬚   **Reprocess selected records**   **Reprocess ALL failed**   **Clear Stage Records**

File group	Header group	PO Nbr	Facility	Company	Vendor	Action Code
PurchaseOrd...	er_202205311...	JPO20191018_1	QATST01	QATSTPC	VENDJ01	CREATE
PurchaseOrd...	er_202205311...	JPO20191018_1	QATST01	QATSTPC	VENDJ01	CREATE
_PurchaseOr...	ALL01_20220...	REPO52722-01	QATST01	QATSTPC		CREATE
_PurchaseOr...	ALL01_20220...	KRPO02	QATST01	QATSTPC		CREATE
_PurchaseOr...	ALL01_20220...	PO270422001	QATST01	QATSTPC		CREATE

3. For pre-existing uom field, the supported UOM's are CASES, PACKS & UNITS which are limited to system class UOM and supports XML, XLS, PSV formats.

The newly supported UOM Fields are applicable for following input interface files:

- Purchase Order
- Inbound Shipment
- Order
- Item Prepack
- Work Order

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- Location

- Outbound load

- Planned OB load

How Quantity Value and UOM is Captured

Let's say you're interfacing a Purchase Order and UOM Class is enabled for decimal tracking in below example:

Based on the warehouse operations, it is recommended that the minimum UOM which is transacted should be configured as primary UOM for the Item/Item facility.

Decimal Conversion

Item	Item Decimal Handling	PO Detail Qty	PO Detail UOM	Item Facility UOM	Converted Qty Value	Allow PO Detail Creation
ITM1	Yes	2.5	KG	Grams	2500	Yes
ITM2	Yes	0.5	Dozen	Each	6	Yes
ITM3	No	2.2	Liters	Milliliters	2200	Yes
ITM4	No	0.8	Milliliters	Milliliters	0.8	No
ITM5	No	500	Milliliters	Liters	0.5	No

- The PO is interfaced with 2.5 kilograms for ITM1 with decimal handling set to Yes.

- Based on the item facility UOM, the system converts 2.5 KG into decimal value of 2500 grams.

- Based on the converted value, the system creates the PO details.

During Purchase Order interface, order quantity value is captured in the new column ordered_uom_qty and its respective UOM value (units, cases, packs) is captured in the column ordered_uom for the respective PO detail.

UOM Conversion during PO Interface for Quantity UOM (ord_qty)

Conversion, when UOM for the Item is defined with system UOM class (Units):

If you send Quantity UOM as Units during PO interface, then UOM conversion is not required. As Primary UOM for Item/Item facility for system class supports only Units as UOM.

Existing Behavior, where UOM as Packs & Cases:

When you send quantity UOM as Packs/Cases, then system converts the quantity value based on items Std Pack quantity/ Std Case quantity and store the value in terms of Item's facility Primary UOM.

Example:

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If you want to continue with existing Package UOM of Packs & Cases.

- For "ITEM1" Primary UOM on the Item is Grams, Std Pack Quantity is 10 with Pack UOM defined as **Packs**. During PO interface, if Qty value is 5 **Packs** for ITEM1, then value should be saved as 5x10= 50 **Grams**.

- For "ITEM1" Primary UOM on the Item is Grams, Std Case Quantity is 30 with Case UOM defined as **Case**. During PO interface, if Qty value is 10 **Cases** for ITEM1, then value should be saved as 10x30= 300 **Grams**.

Standard conversion, When UOM for the Item is user defined UOM

- Item facility primary UOM is not defined on the item:

  If Quantity UOM value is different from respective item's Primary UOM, then system converts the value to respective item's primary UOM.

- Item facility primary UOM is defined on the item:

  If Quantity UOM value is different from item facility Primary UOM, then system converts the value to respective item facility specific primary UOM.

Example,

- Consider a company **C1,** operating in Facility **F1** having item "ITEM1" whose Primary UOM on the Item is defined as **Grams**. Whereas, the facility primary UOM for ITEM1 is not defined with any value.

  During PO interface for Company/Facility C1/F1, if Qty sent is 5 with quantity UOM of KG for ITEM1, then value should be saved as 5000 **Grams** (As per primary UOM defined on the Item).

- Consider a company **C1,** operating in Facility **F5** having item "ITEM2" whose Primary UOM on the Item is defined as **Grams**. Whereas, the facility primary UOM for ITEM1 is defined as **Pounds**.

  During PO interface for Company/Facility C1/F5, if Qty sent is 2 with quantity UOM of KG for ITEM1, then value should be saved as 4.41 **Pounds** (As per primary UOM defined on the Item Facility).

Pack UOM

When Quantity UOM on the PO detail is matching with the Pack UOM of respective item, then system considers Std Pack Quantity value for conversion. Convert the value into Items primary UOM then convert into item's facility primary UOM.

> **Note:** Your first converting value into Item's primary UOM because Std Pack/Case Quantity is defined in terms of Item's Primary UOM.

Example:

Consider a company **C1**, operating in Facility **F1** having item "ITEMP1" whose Primary UOM on the Item & Item facility is defined as **Bottles**. Whereas Pack UOM for ITEMP1 is defined as **Box** and standard pack quantity is defined as **15**.

- During PO interface for Company/Facility C1/F5, if Qty sent is **5** with quantity UOM of **Box** for ITEMP1, then value should be saved as 5*15 = 75 **Bottles.**

Case UOM

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When Quantity UOM on the PO detail is matching with the Case UOM of respective item, then system considers Std Case Quantity value for conversion. Convert the value into Items primary UOM then convert into item's facility primary UOM.

> **Note:** Your first converting the value into Item's primary UOM because Std Case Quantity is defined in terms of Item's Primary UOM.

Example:

Consider a company C1, operating in Facility F1 having item "ITEMP5" whose Primary UOM on the Item liters & Item facility primary UOM is defined as Gallon. Whereas, Case UOM for ITEMP5 is defined as Jar and standard case quantity is defined as 12.

During PO interface for Company/Facility C1/F5, if Qty sent is 10 with quantity UOM of Jar for ITEMP5, then value derive as 10*12 = 120 liters (As Per primary UOM of Item), but value needs to be converted into item facility specific primary UOM which is 120 liters = 31.7 Gallons, Value for ITEMP5 quantity value should be saved and displayed as 31.7 Gallons.

> **Note:** You can define Pack UOM/Case UOM on an item only when the Std Pack Quantity /Std Case Quantity is defined on respective item. Also, Facility Primary UOM cannot be configured if the Case/Packs Quantity needs to be tracked in a Facility.

UOM Conversion when UOM value is not defined during PO interface:

Without Item Barcode: *Item Barcode , uom & uom_code values are not sent in the PO detail.*

If Vendor Barcode (**item_barcode**) is not defined, then **ord_qty** value is considered w.r.t Item's Primary UOM.

Example :

Consider a company **C1,** operating in Facility **F1** having item "ITEMB1" whose Primary UOM on the Item is defined as KM. Whereas the facility primary UOM for ITEM1 is defined as Pounds.

- During PO interface for Company/Facility C1/F1, if Qty sent is 5 without any quantity UOM for ITEMB1, then given value is considered as 5 LBs.

With Item Barcode: *Item Barcode value is sent but uom & uom_code values are not sent in the PO detail.*

If Vendor Barcode (**item_barcode**) is defined then:

In this case, the system allows you to send quantity not as per standard Case/ Pack quantity. When an item is fulfilled by different vendors there are chances that from vendor-to-vendor packaging capacity varies and customers can use item barcode to get the exact value of quantity).

- System considers conversion factor from Quantity per UOM defined on the respective Item Barcode.

Example is w.r.t System Class: Item Barcode (ITEMABC) is defined with UOM of Packs & Quantity per UOM = 15.

If PO detail is sent with **"ord_qty"= 5,** then order quantity for respective detail is **5x15 =75.** Prior to UOM, all the conversions with respect to item barcode were considered in terms of units. Hence during PO interface, if the item barcode is sent and the respective items primary UOM is not Units, then we need to have an error condition "Item Barcode %Item Barcode% is not supported for items primary UOM other than Units "

UOM Conversion during Shipment creation during PO Interface (Comp Param "CREATE_ASN_FOR_EACH_PO")

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When system creates Shipment during PO interface, then shipped quantity for the shipment detail is equal to order quantity for respective item associated with the PO detail. During Shipment creation, shipment detail quantity is saved w.r.t Item Facility/ Item Primary UOM:

For example, ITEM1 with Facility Primary UOM as KG,

During PO interface, If **ITEM1** is defined with order quantity as **100 grams**, then system should store value as 0.1Kg for PO detail. For the Shipment created w.r.t ITEM1 system should store shipped quantity as 0.1 Kg and same value should be displayed in the shipment UI.

Validations During the Interface

The system runs though following validations and displays respective error message when interfacing the input file with uom_code field:

Validation During the Interface

Validation	Error Messages
If given Quantity UOM value is not present in the UOM configuration, then system display error message	"**%UOM code not found**"
If given Quantity UOM value is other than (Units/ Cases/Packs) for system UOM class, then system display error message	"**%UOM code not supported**"
If the Quantity UOMs class is not matching with the Item's Primary UOM class, then system displays error message	"**Primary UOM Class is not matching with UOM class of %Item**"
If the Item is not enabled for decimal tracking, but the converted quantity value (Based on the Item Facility/ Item Primary UOM) is in decimals then system displays error message	"**Item does not allow decimal quantities**"

Handling UOM for Weight, Volume, and Dimension

IB Shipment interface

You can send UOM for Weight/Volume/Length/ Width/ Height for the LPN's present on the shipment. When Weight/ Volume of LPN's is known, receiving activity can be optimized by selecting proper equipment's based on capacity handling of equipment's.

You can define UOM for Weight/Volume/ Dimension fields for LPN's associated with the IB shipment interface by:

- Three new UOM fields on the IB Shipment Interface at IB shipment detail for (XML/PSV/XLS) formats:
  - Weight UOM (weight_uom_code)
  - Volume UOM (volume_uom_code)
  - Dimension UOM (dimension_uom_code)

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- You can send UOM for following fields present on the IB shipment interface:

IB Shipment Interface

Interface Fields	Associated UOM Class
lpn_weight	Weight UOM
lpn_volume	Volume UOM
lpn_length	Dimension UOM
lpn_width	Dimension UOM
lpn_height	Dimension UOM

Item Prepack

You can define UOM for Child Units, Weight/Volume/ Dimension fields for Item Prepack interface where that helps the floor users to see the converted value for child items based on respective facility UOM during Prepack processing during Work Order.

Following are the fields available on the Item Prepack interface:

Item Prepack Interface

Interface Fields	Associated UOM Class
child_units	UOM (Quantity UOM)
pre_pack_weight	Weight UOM
pre_pack_volume	Volume UOM
pre_pack_length	Dimension UOM
pre_pack_width	Dimension UOM
pre_pack_height	Dimension UOM

Location

You can define the UOM against the Weight, Volume & Dimension related fields present in location interface. This helps he floor user to send in weight, volume and dimension related fields in any UOM, provided that the class for UOM's are same then system converts the value to respective company class UOM and stores the value.

Location Interface

Interface Field	Associated Interface Field
weight_uom_code	min_weight, max_weight

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Interface Field	Associated Interface Field
volume_uom_code	min_volume, max_volume
dimension_uom_code	length, width, height

Cycle Count Threshold UOM code in Location interface

You can send the UOM code in the "cc_threshold_uom_code" field in XLS, XML format along with cc threshold value for calculating location threshold as a part of opportunistic cycle count.

> **Note:** You still can send the UOM code in the existing UOM field along with cc threshold value for calculating location threshold as a part of opportunistic cycle count.

- GET support for the location entity API fetches the newly introduced field (cc_threshold_uom_code).
- During location interface(**XLS, PSV**), user should be able to send UOM of LPNs/UNITS in cc_threshold_uom_code field along with cc_threshold_value for active/reserve locations.

Outbound Load and Planned OB Load

You can send any user defined UOM for weight/volume related fields in planned OB loads interface, and therefore the system converts weight/volume related UOM fields to respective company weight/volume UOM and process the value

> **Note:** These fields are also available in Planned OB Load interface.

You can send UOM for following fields present on the outbound load interface:

Outbound Load and Planned OB Load

Interface Fields	Associated UOM Class
total_weight, stop_weight	Weight UOM
total_volume, stop_volume	Volume UOM

Output Interface

You can define the UOM for an item at Facility/Company level, so that irrespective of interfaced UOM they can transact the item in WMS as per UOM defined at company and facility level.

> **Note:** Host system using this information doesn't need to depend on any other source to know the UOM information associated with the output file but can directly be consumed from output file.

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A new qty_uom_code field is added to export the value based on Primary UOM from respective item facility. If primary UOM on the item facility is not defined, then Primary UOM from respective item is populated.

UOM Support in Output Interface

New fields are added to the output interface files for Quantity/ Weight/ volume/ Dimensions values:

- weight_uom_code
- volume_uom_code
- dimension_uom_code

UOM in Output Interface

Fields	Behaviour	Conversion for Reference Fields
weight_uom_code volume_uom_code dimension_uom_code	When facility param "OUTPUT_INTF_FACILITY_WT_VOL_DIM_UOM" is set as blank/no, respective company weight UOM is exported. When facility param "OUTPUT_INTF_FACILITY_WT_VOL_DIM_UOM" is set as 'Yes', respective facility weight UOM is exported.	When facility param "OUTPUT_INTF_FACILITY_WT_VOL_DIM_UOM" is set as blank/no, weight fields can be exported without conversion when facility param. When facility param "OUTPUT_INTF_FACILITY_WT_VOL_DIM_UOM" is set as 'Yes', weight fields should be converted from company weight UOM to facility weight UOM and exported.

These new UOM fields are applicable for following output interface files:

- Wave Pick Information (WOA) Interface
- Order Outbound Load Export File (PLS)
- Shipped Load File (SLS) Interface
- Pallet Shipping Info File (PLI)
- OBLPN Shipping Info File (OLO)
- Inventory History (IHT) Interface
- TO_MHE_DISTRIBUTION_INFO
- Standard Inventory Summary
- Customer Inventory Summary
- Shipment Verification (SVS) Interface
- Outbound Manifest File (SLS)
- Container Outbound Load Export File (LLS)
- TO_MHE_IBLPN_INFO"

Order Outbound Load Export File (PLS) and Shipped Load File (SLS) Interface

When an Order is packed, you can generate the Order outbound load export file along with UOM in PLS file with underlying details similar to Shipped Load output interface file.

The fields exported with supporting UOM are qty, weight, volume, and dimension fields for Shipped Load and Order outbound load export.

UOM Supported Fields

Fields	Level in Interface	Reference
weight_uom_code	Load/Stop	total_weight, total_volume, ob_lpn_weight, total_pallet_weight
volume_uom_code	Load/Stop	total_volume, ob_lpn_volume, total_pallet_volume
dimension_uom_code	Stop	ob_lpn_length, ob_lpn_width, ob_lpn_height, pallet_length, pallet_width, pallet_height

Pallet Shipping Info File (PLI)

Pallet Shipping Info File

Fields	Level in Interface	Reference
weight_uom_code	Pallet/OBLPN Header	total_pallet_weight, carton_weight, total_pallet_weight
volume_uom_code	Pallet/OBLPN Header	total_pallet_volume, carton_volume, total_pallet_volume
dimension_uom_code	Pallet/OBLPN Header	pallet_length, pallet_width, pallet_height, carton_length, carton_width, carton_height, pallet_length, pallet_width, pallet_height

OBLPN Shipping Info File (OLO)

OBLPN Shipping Info File

Fields	Level in Interface	Reference
weight_uom_code	OBLPN header	carton_weight, total_pallet_weight
volume_uom_code	OBLPN header	carton_volume, total_pallet_volume
dimension_uom_code	OBLPN header	carton_length, carton_width, carton_height, pallet_length, pallet_width, pallet_height

Inventory History (IHT) Interface

The field qty_uom_code is added to track following related fields:

- orig_qty,
- adj_qty,
- units_shipped,
- units_received,

- qty_shipped and
- qty_received

TO_MHE_DISTRIBUTION_INFO & TO_MHE_IBLPN_INFO

Following are the new fields that UOM:

1. New field "uom_code" in distro header and "alloc_qty_in_uom_code" in distro_dtl.
2. When the alloc_uom is Cases/Packs, this field provides the actual Case/Packs UOM of the inventory which is being dealt with:

UOM Fields

Fields	Reference	Behavior
alloc_qty_in_uom _code	alloc_qty_in_uom	alloc_qty_in_uom_code: Provides the context to the alloc_qty_in_uom when the allocations are in Packs/Cases by associating the Case/Pack UOM to alloc_qty_in_uom o If allocation UOM is UNITS : Primary UOM code associated with the Item Facility/Item o If allocation UOM is CASES : UOM code associated with the Item Case UOM o If allocation UOM is PACKS : UOM code associated with the Item Pack UOM For example, when allocation is in CASES, and CASE UOM is BOX, and 10 cases has been allocated, then alloc_qty_in_uom = 10 && alloc_qty_in_uom_code = BOX

3. Weight and Volume Conversion

Weight and Volume Conversion

Field	Without UOM	Field	With UOM
item_unit_weight	Case1: When Company and Facility Weight UOM are the same, process the unit_weight same as in Item Master. Case2: When Company and Facility Weight UOM are different, then we need to convert the unit_weight specific to Facility and then process Example: Company Weight UOM = KG ; Facility Weight UOM = POUNDS ; Item Units Weight = 10 Now when processing weight information, we need to	weight_uom_code	Case1: When Company and Facility Weight UOM are same, Process the uom code from either company or facility Case2: When Company and Facility Weight UOM are different, then process the uom code from Facility

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Field	Without UOM	Field	With UOM
	convert KG to Pounds 10 KG = 10 x 2.20462 = 22.0462 lbs		
item_unit_volume	Case1: When Company and Facility Volume UOM are the same, process the unit_volume same as in Item Master. Case2: When Company and Facility Weight UOM are different, then we need to convert the unit_volume specific to Facility and then process Example: Company Volume UOM = CC ; Facility Weight UOM = Cubic Inch; Item Units Volume= 100 Now when processing volume information, we need to convert CC to Cubic Inch 100 CC = 100 x 0.061 = 6.10 cubic inch	volume_uom_code	Case1: When Company and Facility Volume UOM are same, Process the uom code from either company or facility Case2: When Company and Facility Volume UOM are different, then process the uom code from Facility

Standard Inventory Summary & Customer Inventory Summary

The qty_uom_code provides quantity support to following columns:

- oblpn_total,
- active_total,
- active_allocated,
- active_available,
- iblpn_allocated,
- iblpn_total,
- iblpn_available,
- iblpn_notverified,
- total_allocated,
- total_available,
- total_inventory,
- four_wall_inventory,
- open_order_qty

New company parameter OUTPUT_LGF_FINFO_INVENTORY_SUMMARY is added in case you want to generate the output file in the old format configure the field as lgf22a. For generating the file as per new format, populate the value of "lgf" or leave it blank. By default, the parameter will be blank.

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New facility parameter: Program Key: OUTPUT_LGF_FINFO and Parameter Key INVENTORY_SUMMARY is added in case you want to generate the file as per the old format configure the field as lgf22a. For generating the file as per new format, populate the value of "lgf" or leave it blank. By default, the parameter will be blank.

Customer Inventory Summary

The qty_uom_code provides quantity support to following columns:

- oblpn_total,

- active_total,
- active_allocated,
- active_available,
- active_lockcode,
- active_allocated_lockcode,
- iblpn_allocated,
- iblpn_allocated_lockcode,
- iblpn_total,
- iblpn_available,
- iblpn_notverified,
- iblpn_lockcode,
- iblpn_lost,
- total_allocated,
- total_available,
- total_inventory,
- four_wall_inventory,
- open_order_qty

New Company Parameter OUTPUT_LGF_FINFO_CUSTTOMER_INVENTORY_SUMMARY is added in case you want to generate the file as per the old format configure the field as lgf22a. For generating the file as per new format, populate the value of "lgf" or leave it blank. By default, the parameter will be blank.

New Facility Paramater: Program Key: OUTPUT_LGF_FINFO and Parameter Key will be CUSTOMER_INVENTORY_SUMMARY is added in case you want to generate the file as per the old format configure the field as lgf22a. For generating the file as per new format populate the value of "lgf" or leave it blank. By default, the parameter will be blank.

Outbound Manifest File (SLS)

Fields that support UOM

UOM Fields

Fields	Level in Interface	Reference
weight_uom_code	Load/Stop	total_weight, ob_lpn_weight, total_pallet_weight

Fields	Level in Interface	Reference
volume_uom_code	Load/Stop	total_volume, ob_lpn_volume, total_pallet_volume
dimension_uom_code	Stop	ob_lpn_length, ob_lpn_width, ob_lpn_height, pallet_length, pallet_width, pallet_height

Label Designer

You can print the Inbound LPN Labels/Carton Content Label/Shipping Labels/Pallet Labels appending the UoM associated to the inventory. The system appends the UOM to the corresponding quantity in the warehouse and also LPN's that are shipped.

You need to define the following two columns in the Label Designer Columns fields:

- UOM Code: inventory.primary_uom.code
- UOM Description: inventory.primary_uom.description

You can configure the UoM code by language through UOM Literals entity. The system displays the value based on the user's language preference in which the label is printed. If UOM literal is not configured, then the system picks the default UOM Code.

Design label associated with UOM to the qty for the item, do the following:

1. Go to Label designer > Select the template that you want to design from the drop-down menu.
2. From the Edit Document Label pane, configure the required fields.

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3. Define the UoM Code and UoM Description. The system displays correctly the UOM Code, UOM Description, and Item Qty.

For example, Case Label:
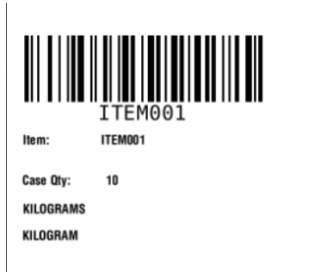
> **Note:** You can associate UOM Code or UOM Description to the quantity and render it as part of the label.

Weight/Volume/Dimensions in Label Designer

To display the UoM associated with Weight/Volume/Dimension while printing for Inbound LPN Labels/Carton Content Label/Shipping Labels/Pallet Labels or Packing Slips, you need to define the define the values at the company and facility level.

10 Replenishment

RF Modules Setup

Replenishment allocation is done through the following:

- Replenishment Waves
- Task Execution
- RF - Reactive Replenishment which will trigger a replenishment allocation and task creation with RF.

Task Description	WMS Module	Overview/Comments	Task Details
Execute Task	Screen Configuration UI Module: RF Module: rf.outbound.cwrfexecutetask (Execute Task)	The RF - Execute Task Function will be used to execute created replenishment & Picking tasks	1. In 'Screen Configuration' UI Module, add module: Execute Task - rf.outbound.cwrfexecutetask
RF Reactive Replenishment	Screen Configuration UI Module: RF Module: rf.inbound.cwrfreactreplen (Reactive Replenishment)	The RF - Reactive Replenishment can be used to trigger replenishment via RF for a specific location without having to run a wave for allocation through UI	1. In 'Screen Configuration' UI Module, add module: Reactive Replenishment - rf.inbound.cwrfreactreplen

Replenishment Template

Replenishment wave templates include the rules for replenishment allocation and task creation.

Set Up Replenishment Rules

Replenishment Rules are used to set up rules for allocation (i.e. locations from where inventory will be allocated as well as the UOM for allocation). Replenishment Rules will specify:

- Allocation Zone
- Allocation Area
- UOM

Allocation Zones are viewed as zones of locations from which inventory will be allocated for replenishment. All storage/ reserve locations that will be used to store inventory for replenishment will specify an allocation zone.

> **Note:** Allocation Zones do not need to be defined in WMS like replenishment zones.

Task Description	WMS Module	Overview/Comments	Task Details
Add Allocation Zones to Locations (Optional)	Location Master	Allocation zones are used to restrict allocation for replenishment from specific zones. The allocations zones will be added to the locations from which inventory will be allocated for replenishment. The location master will specify the allocation zone for each location. There can be multiple allocation zones. They can be used to prioritize location area from which inventory will be allocated.	1. In 'Location Master' add the allocation zone code to each location. 2. In the 'Locations' UI module, edit each location that needs replenishment and enter the allocation zone in the 'allocation zone' field
Create Replenishment Rules	Replenishment Template Link - Replenishment Rules	Replenishment Rules will be used to prioritize allocation from specific location areas, and also specify the UOM for allocation from specific location areas. In Replenishment Rules: - Sequence Number = Order in which allocation will occur with location area/zone - The location type = Location type from where inventory will be allocated for replenishmente	1. In 'Replenishment Template' UI Module, access the 'Replenishment Rules 2. Create a new replenishment rule 3. Select the replenishment rule and access the details. 4. In the details, enter a sequence number and select the location type. 5. See additional setup in the next subtask.
Create Replenishment Rules	Replenishment Template Link - Replenishment Rules	In Replenishment Rules: - Restrict Area = Location Area from where inventory needs to be allocated (optional) - Restrict Allocation Zones = Allocation Zones of locations from which inventory needs to be allocated. Allocation zone specified in location master (optional) - Allocation Method - Allocation UOM = UOM at which inventory will be allocated - Flag 'consolidate and distribute' = This flag applies to units and cases. When checked: units and cases allocated will be moved to a temporary LPN to be moved When unchecked: Full LPNs of units and cases allocated will be palletized and moved even when partial allocated	1. 1. In 'Replenishment Template' UI Module, access the 'Replenishment Rules 2. Select the replenishment rule and access the details 3. Enter an allocation zone or location area in fields 'restrict allocation zone' and/or 'restrict area' 4. Select an Allocation Method 5. Select the UOM 6. Check the ' Consolidate and distribute' flag if needed 7. Save changes

Set Up Replenishment Tasks

You can set up Replenishment Tasks rules for the creation of tasks when a wave is run for replenishment. Replenishment tasks specify how tasks are broken up (i.e. One task per aisle, location area, etc…)

1. In a Task Template, tasks types to be used will be specified and prioritized. Task types will represent the types or methods of picking/replenishment (i.e. Full LPN Replenishment, Cases/Packs/Units Replenishment). Task Types will create tasks based on the UOMs defined in the Replenishment Rules for Allocation. The task type's UOM will match the Allocation UOM.

2. Each task type will specify an 'Ordering Criteria' to specify how tasks are to be broken (i.e. by aisle, by area, by item, etc…)

3. Each task type can also specify a 'Selection Criteria' to restrict the created task's rules to specified criteria. Task types can also be prioritized using the selection criteria (i.e. Tasks are to be created for specific zones first, etc…)

Task Description	WMS Module	Overview/Comments	Task Details
Create Replenishment Task Template	Task Creation		1. Login at the correct company level. 2. In 'Task Creation' UI Module create a new Replenishment template by entering a template name or description then save the template
Select Task Types in Replenishment Task Template	Task Creation - Details	Task Types: - Full LPN Replenishment: This task type is used when Full LPNs are allocated for replenishement - Cases Replenishment: This task type is used when Unit/Packs/Cases are allocated for replenishement - Consolidate Replenish: used when the 'consolidate and replenish' flag is checked in the replenishment rules. Units&Cases allocated will all picked into a temporary LPN and then replenished/distributed	1. In the 'Task Creation' UI Module, select the replenishment task template created and access the template's details 2. In the details, add task types that will be used based on allocation UOMs 3. Enter a sequence number for the order of task creation and select a task type from the task type drop-down
Add Rules in Replenishment Task Template	Task Creation - Details	Break By Quantity: Do not use Create_held_flg: When this parameter is checked, tasks will be created in 'HELD' Status and will not be available for picking until released Priority: The priority in which tasks will be displayed on RF Screen	1. In the details, after selecting task types: Enter the 'Break by Quantity' if required 2. Check the 'create_held_flg' if required 3. Enter a priority for each task type. The default for all task types will be 20 if not specified.
Set Up an Ordering Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The ordering criteria will specify rules on how tasks are to be created and broken (i.e. If tasks will be broken by aisle, area, as	1. In the details, after adding task types in task template, select specific task type and access the 'Ordering Criteria'

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Task Description	WMS Module	Overview/Comments	Task Details
		well as if they will follow a pick sequence…) Break By Count: The break by count will specify the number by which tasks will be broken (i.e. Criteria to break aisle by 2 = Tasks will be created for every 2 aisles. For the pick sequence to be followed the break by count will be set to 0)	2. In 'Ordering Criteria' add a sequence number for the criteria 3. Add criteria for task rules and enter the break by count Note: The sequence number has to be set up properly (i.e. If a pick sequence needs to be followed, the criteria for pick sequence will have sequence number set to 1)
Set Up a Selection Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The Selection Criteria is used to restrict the created task's rules to specified criteria. Task types can also be prioritized using the selection criteria (i.e. Tasks are to be created for specific zones with specific criteria: 1. Task Type - FULL LPN broken by aisled & restricted to Zone 1 2. Task Type - FULL LPN broken by area & restricted to Zone 2)	1. In the details, after adding task types in task template, select specific task type and access the 'Selection Criteria' 2. In 'Selection Criteria' select the sql operator for the folder (i.e. Use AND if one or multiple conditions need to be true - Use OR if one of multiple conditions need to be true for the task type) 3. Click on 'Insert Basic Operation' to add condition(s) or click on 'Insert Complex Operation' to add a sub-folder of conditions 4. After adding a condition, click on the appropriate folder to add more conditions or click Save to save to complete the setup

Set Up Replenishment Wave Template

The Replenishment Wave Template will link:

1. The replenishment rules for allocation 2. The replenishment tasks 3. The replenishment zones and 4. The replenishment trigger all into a template to be run for allocation and task creation. The replenishment template will be run to allocate inventory and to create tasks based on the rules.
2. The Wave can be run manually in UI or can be triggered with RF through the RF - Transaction 'Reactive Replenishment'.
3. Following steps are to be followed to set up the replenishment template in the UI Module: 'Replenishment Template View'

Task Description	WMS Module	Overview/Comments	Task Details
Create a Replenishment Wave	Repenishment Template View	The replenishment zones need to be created/pre-defined prior to setting up the replenishment wave template.	1. Login at the correct company level 2. Add a new replenishment wave template - enter a template name

Task Description	WMS Module	Overview/Comments	Task Details
			3. Select the Replenishment Zone from the drop down 'Replenishment Zone' 4. Optional: Enter a replenishment area to restrict replenishment to a specific area
Select a Replenishment Rule Template	Repenishment Template View	The replenishment Rules need to be created/pre-defined prior to setting up the replenishment wave template.	1. Select the Replenishment Rule from the drop down 'Replenishment Rule'
Select a Task Creation Template	Repenishment Template View	The replenishment Rules need to be created/pre-defined prior to setting up the replenishment wave template.	1. Select the Task Template from the drop down 'Task Creation Template'
Select a Replenishment Trigger Mode	Repenishment Template View	The replenishment trigger mode will specify the trigger for replenishment as follow: - Minimum Capacity: When a replenishment wave is run, allocation will be done if current quantity available in locations is lower than the quantity specified as 'Min Units' in a location - Percentage of Max: When a replenishment wave is run, allocation will be done if current quantity available in locations is lower than the percentage specified for the quantity in 'Max Units' in a location - Reactive Replenishment: The replenishment Wave with this trigger will be run when a location is scanned with RF - Transaction 'Reactive Replenishment'. Allocation will be done for up to the max units of the location. - Order Based: Allocation will be done based on the quantity needed for orders created.	1. Select the Trigger Mode from the drop down 'Trigger Mode' 2. When the trigger mode 'Percentage of Max' is selected, enter the percent value in the field 'Percentage of Max'

General Task Type Configuration (Optional)

The following configuration is not required for operations, but offers additional functionality. See summary below.

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Replenishment Task types represent the types or methods of picking/replenishment type. (i.e. Full LPN Replenishment, Cases/Packs/Units Replenishment.) Task Types specified in the task template will create tasks for picking/replenishment.

Task types are listed/defined in the UI Module 'Task Types'. Task types are composed of a series of RF Modules, each specifying an operation for picking/replenishment. The Full LPN Replenishment Task Type includes the following RF Modules:

1. Move LPN (Operation: Pick allocated LPNs to a pallet before replenishment)
2. RF Replenish Full LPN (Operation: Replenish picked LPNs to appropriate picking locations).

Each module in a task type can be configured for additional functionality like validations (batch, exipiry or none) during picking, drop zone after picking, etc… The module configured can then be replaced on the specific task type. Multiple Task Type Records can be created for the same task type to be configured as needed and added to Task Templates.

For example, there can be two (2) task types for Full LPN Replenishment with different RF Modules Configuration.

Task Description	WMS Module	Overview/Comments	Task Details
Access Task Types & Look Up RF Modules	Task Types	The 'Task Type' UI Module will display all task types used in WMS. The task type details will display all RF Modules used withing a task type.	1. In the 'Task Type' UI Screen select the specific task type that needs to configured 2. Copy the task type to create a new task type for configuration - Rename the task type to be easily distinguished 3. Once the new task type is created, access the task type details 4. The details will list all RF Modules. Mark the RF Modules to look up to change their configuration
Access RF Modules for Configuration	Screen Configuration	RF Modules will have to be added in Screen Configuration to access the details for configuration. For more details on the functionality of RF Parameters, refer to the RF Parameters Configuration Document.	1. In the 'Screen Configuration' UI Module, click on the 'Generate Screens' button to display all RF Modules 2. Look for the RF Modules linked to the specific task type being configured. Select all RF Modules needed and click on 'Save' to add the RF Modules. 3. Select the specific RF Module added and edit the record to rename the Module to be easily distinguished for configuration (ex: Add initials) 4. Access the Details for RF Parameters configuration 5. Edit each parameter to set up the value needed
Configure Task Types with RF Modules	Task Types	RF Modules configured for required functionality can be linked to the task types that will be used in the task template. These	1. Go back to the 'Task Type' UI Module and access the details of the task type being configured 2. Select the RF Module that needs to be changed and

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Task Description	WMS Module	Overview/Comments	Task Details
		task types will then be used to create tasks with the required configuration.	click on edit to select the new configured RF Module 3. In the drop down select the new RF Module created and renamed. (The RF Module will show up with the new name that was given in previous step) 4. Click save when done and repeat for the other RF modules if needed
Configure Task Types in Task Template	Task Creation Template	Task Types configured with new RF Modules will have to be linked to appropriate Task Template. Task template used will create tasks based on the task types specified on the template.	1. In the 'Task Creation Template' UI Module, select the specific Task Template and add/replace task types correspondingly. **Note:** Task Types will show up as renamed in the previous step.

Replenishment Operations

These topics walk you through steps needed for Replenishment Operations including Execute Task and Reactive Replenishment.

Execute Task

The RF - Execute Task Transaction will be used to execute Picking & Replenishment Tasks created based on configuration.

When the transaction is accessed:

- The list of available tasks will be displayed in order of task priority.

- RF can also prompt for a location to display only the tasks available for that location.

Task Description	WMS Module	Overview/Comments	Task Details
RF - Execute Task	Screen Configuration UI Module: RF Module: rf.outbound.cwrfexecutetask (Execute Task)	The RF - Execute Task function is used to execute created tasks.	1. In 'Screen Configuration' UI Module, add module: Execute Task - rf.outbound.cwrfexecutetask 2. Access the details to configure the RF Parameters. The parameter 'required-location' can be set to yes to have the user scan the current location and only see the

Task Description	WMS Module	Overview/Comments	Task Details
			tasks for that location. See the RF Parameters document for more details.

Reactive Replenishment

The RF - Reactive Replenishment Transaction is used to trigger a replenishment wave to run for the location scanned. A wave will automatically be run for that location and allocation will occur if needed up to the max units quantity for that location.

Task Description	WMS Module	Overview/Comments	Task Details
RF Reactive Replenishment	Screen Configuration UI Module: RF Module: rf.inbound.cwrfreactreplen (Reactive Replenishment)	The RF - Reactive Replenishment can be used to trigger replenishment via RF for a specific location without having to run a wave for allocation through UI The parameter 'allow-task-execution' can be set to 'Yes' to allow a user to re-scan the location to execute the replenishment task.	1. In 'Screen Configuration' UI Module, add module: Reactive Replenishment - rf.inbound.cwrfreactreplen 2. Set up parameter 'allow-task-execution' correspondigly

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11 Waving

Waving Overview

Inventory allocation is done through allocation waves. A wave template specifies rules for allocation and task creation as well as additional options for cubing and distribution to store.

The wave template will specify the rules of allocation and picking tasks.

Configuration Level - 3PL Parent Company vs. Client Company:

1. Wave templates configured at the 3PL Parent company level can be used for any client company. Wave Templates configured at the client company level can only be used for that client company.
2. Configuration for wave templates made at the 3PL Parent Company level will not be visible at the client company level.

> **Note:** If wave templates will not be shared across different client companies, configuration should be done at the client company level.

Order Types

Oder Types distinguish the different types of orders that will be received in WMS. Order Types specify if an order will be a ship to facility/store, flowthrough, if the order will allow partial allocation, and short pick options.

Order Types will also be linked to wave templates to allow allocation restrictions to specific order types.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Order Types	Order Types	Order Type Codes will be specified on the order interface that will be loaded to WMS as well as any order created manually.	1. Login at the speific client company level 2. In 'Order Types' UI Module, add order types: Enter an order type code and a description
Set Up Parameters on Order Types	Order Types	Parameters for order types: - Facility Flag: When checked, orders will specify a destination/ ship to facility that is defined in the facility/store master. When unchecked, orders will be customer orders. - Flowthrough flag: When checked, inventory can be cross-docked for outbound orders without pre-allocation - Partial Allocation: When checked, orders can be partly allocated. When unchecked, orders that can't be	1. In 'Order Types' UI Module, if needed check flags based on functionality: - Facility Flag - Flowthourgh Flag - Partial Allocation

Task Description	WMS Module	Overview/Comments	Task Details
		fully allocated will not be allocated at all.	
Set Up Parameter for Short Pick Options	Order Types	Short pick Parameter for order types: - Only deallocate on short: When checked: If an order is short picked by a user, the order detail short picked will be deallocated by the quantity short picked. The order detail can then be re-waved later When unchecked: If an order is shor picked by a user, the order detail short picked will be deleted by the quantity short picked.	1. In 'Order Types' UI Module, if needed check the short pick parameter based on functionality: - Only Deallocate on Short

Set Up Facilities and Companies

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Ship To Facilities	Facilities	Facilities will need to be set up if orders will be shipped to DCs and Stores that can be pre-defined in WMS. They will also be required for the Distribution-To-Store flow.	1. In the 'Facilities' UI screen add store master with type = store for each store Note: 'Input Interface' UI screen can be used to upload store master template. 2. When creating stores, a default ship via can be specified for each store if needed.
Set Up Destination Companies	Ship To Companies	Ship To Companies are not required to be set up. Ship To Companies are mostly used to configure custom/compliant documents and labels based on the ship to company.	1. Login at the correct company level 2. Add ship To company codes and description 3. Add additional information if needed
Set Up Ship Vias	Ship Via	Ship Vias are not required to be set up to create orders. Ship Vias will require Carriers to be set up. Refer to Master Configuration section for more details.	1. In the 'Ship Via' UI Screen, add all ship vias for services levels that will be used 2. Select the corresponding Carrier to be linked to the ship via 3. For all Parcel Services, a standard service type must be chosen

Wave Template

Wave templates will include the rules for allocation and task creation.

Setup Restrictions for Wave Allocation – Wave Search

A wave template is run for inventory allocation and creation of picking tasks. The wave template will specify the rules of allocation and picking tasks.

The wave template is linked to a wave search. The wave search tied to the wave template can be used to restrict allocation for specific orders based on criteria specified. The specific wave will only allocate inventory to orders meeting the criteria. This can be used to restrict allocation for specific order types, for specific shipping service levels, for specific order values, etc... Multiple wave searches can be created to be tied to different wave templates. Multiple wave templates with different rules can be created and restricted to specific set of orders with the wave search.

This can be used to:

1. Prioritize how orders are to be waved and allocated
2. Restrict allocation and tasking rules for specific set of orders. For example, Wave Template for each type of order, Wave Template for each service level to prioritize allocation and so on.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Wave Template Search(es)	Wave Templates Link 'Wave Searches'	Multiple Wave Searches can be created based on the different wave templates needed. If there is no need to restrict allocation to specific orders, one general wave search will be created. In wave search fields criteria for outbound orders can be entered. The wave tied to the specific wave search will only allocate inventory to orders with the specified values.	1. Login at the specific company level 2. In the UI Module 'Wave Template' access the link 'Wave Template Searches' 3. Add a new wave search by entering a name 4. If needed, enter values in the available fields criteria. Values are to be separated with commas and no space. 5. Save the wave search template, and access the details of the wave search. In the wave search add all order types that need to be waved with the specific wave search

Set Up Allocation Rules

The wave template be linked to an allocation mode. The allocation mode will specify the rules of allocation:

- The sequence of Allocation by the Unit of Measure (Full LPN/Pallet, Cases, Packs, Units) *Note: Full Pallet picking is possible if all LPNs on a pallet are allocated.
- The Location Area from which inventory should be allocated (Reserve, Active, etc…)

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- The Distribution Mode for inventory consolidation if needed (Distribution to Store)
- The Cartonize UOM to specify how Outbound LPNs are created (LPN level, Inner Case level, Cubed...)

Note: The cartonize UOM will specify if units will be cubed. The cubing process is the process of allocating inventory to outbound containers based on the dimensions of the allocated inventory.

To set the Allocation Mode:

1. First follow Section 'Set Up Allocation Mode'
2. Second, set up configuration for one or any combination of the available allocation types (Non-Cubed, Cubed, Distribution).

Set Up Allocation Mode

Task Description	WMS Module	Overview/Comments	Task Details
Set Allocation Mode Templates	Wave Templates Link 'Allocation Mode'	Multiple Allocation Modes can be set up for different flows and for different types of orders. Each allocation mode will be linked to a specific wave template.	1. Login at specific company level 2. In UI Module 'Wave Template' access the link 'Allocation Mode' 3. Add a new wave search by entering a Allocation Mode Name and saving the allocation mode
Allocation Sequence	Wave Templates Link 'Allocation Mode'	The sequence of allocation will specify the order in which inventory should be allocated either from a specific location area, or at the level of UOM .. Multiple Allocation Sequences can be set up. (i.e. First allocate from Active, Second allocate Full Cases from Reserve Area 1, Third Units from Reserve Area 2 etc...)	1. Under the link 'Allocation Mode' select the allocation mode and access the details 2. Add an allocation sequence, enter a sequence number
Location Type	Wave Templates Link 'Allocation Mode'	The location type will specify the type of locations from which inventory will be allocated for the specific allocation sequence. (i.e. Seq 1 - Allocate from Active Seq 2 - If there is no available Active Inventory - Allocate from Reserve)	1. Under the 'Allocation Mode' details 2. Under the location type: select Active or Reserve based on the types of locations that will be set up in the location master
Location Area and Zone Restrication (Optional)	Wave Templates Link 'Allocation Mode'	Allocation can be restricted to specific location areas or location allocation zones set up in the location master. Inventory will only be allocated from the specified areas and/or allocation zones. Areas and Zones are not required	1. Under the 'Allocation Mode' details 2. In field 'Restrict Area', enter the location area that needs to be restricted for allocation if needed 3. In field 'Restrict Allocation Zone' enter the location

Task Description	WMS Module	Overview/Comments	Task Details
		to be specified. This can also be used to prioritize allocation by location area/zone (i.e. Seq 1 - Allocate Units from Area 1 Seq 2 - Allocate Units from Area 2)	allocation zone that needs to be restricted for allocation if needed

Allocation - Non-Cubed Picking

Non-Cubed Picking in WMS is defined as picking inventory that will not be assigned to outbound containers based on volume and dimensions.

Non-Cubed Picking is done via task excution for picking units, packs, cases and LPNs to an outbound container.

For non-cubed unit/pack/case picking, containers will be created during picking. BlindOutbound LPNs labels will be used for printing.

For non-cubed full LPN picking, containers can be created with the wave since the Inbound LPN can be used as an outbound LPN. In this case, Container Labels can be printed at the wave.

> **Note:** Non-Cubed picking can also be used to bulk pick inventory into a temporary container/tote and repacked into appropriate shipping containers after picking. This is used for E-commerce distribution.

Task Description	WMS Module	Overview/Comments	Task Details
Allocation UOM	Wave Templates Link 'Allocation Mode'	The Allocation UOM will specify the Unit of Measure level at which inventory will be allocated for picking (LPNs, Cases, Units...) Allocation can be prioritized by UOM (i.e. Full LPN first, then units) Active Locations will only allocate Units Reserve Locations will allocate LPNs, Cases, Packs and Units for non-cubed picking. Cases and Packs allocation will be based on the Standard Case and Packs Quantities in the Item Master.	1. Under the 'Allocation Mode' details 2. Under field 'Allocation UOM': - If location type chosen is active, the UOM does not need to be specified. This will be units by default. - If location type chosen is reserve, Select the UOM at which inventory needs to be allocated for the specific allocation sequence.
Active Locations - Cartonize UOM	Wave Templates Link 'Allocation Mode'	The Cartonize UOM will specify how allocated inventory will be assigned to outbound containers. WMS will create outbound containers at the level of UOM specified. For Active Locations, no option will be selected for non-cubed picked: - None - Outbound Containers will be created during picking	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Do not select an option if picking will be done with tasks

Task Description	WMS Module	Overview/Comments	Task Details
Reserve Locations - Cartonize UOM Allocation UOM: Units/ Packs/Cases	Wave Templates Link 'Allocation Mode'	The Cartonize UOM will specify how allocated inventory will be assigned to outbound containers. WMS will create outbound containers at the level of UOM specified. For Partial Reserve Picking, non-cubed options are as follow: - None - Outbound Containers will be created by users during picking - Units, Packs, Cases - Outbound containers will be created per each UOM at packing (i.e. After packing inventory WMS will create an outbound LPN per each UOM) - LPNs - Outbound containers will be created at the wave for inventory. (i.e. An LPN will be created at the wave for all inventory at the same UOM level). Container Labels can be printed at the wave.	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Select an option for UOM based on how Outbound LPNs need to be created (i.e. An Outbound LPN can be created for each inner case if needed)
Reserve Locations - Cartonize UOM Allocation UOM: Full LPNs	Wave Templates Link 'Allocation Mode'	The Cartonize UOM will specify how allocated inventory will be assigned to outbound containers. WMS will create outbound containers at the level of UOM specified. For full LPN non-cubed picking, options are as follow: - LPNs - Outbound Containers will be created per each LPN allocated. Shipping labels can be printed at the wave.	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Select LPNs
Active Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for non-cubed picking tasks will be 'No distribution'.	1. Under the 'Allocation Mode' details 2. Under field 'Distribution Mode': - Select No distribution
Reserve Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for non-cubed picking tasks will be 'No distribution'.	1. Under the 'Allocation Mode' details 2. Under field 'Distribution Mode': - Select No distribution

Allocation - Cubed Picking and Pick to Cart

Cubed Allocation in WMS is defined as assigning inventory to outbound containers based on containers' dimensions, max volume and weight. Outbound containers will be created at the wave or after packing based on the items' dimensions, volume and weight.

1. Pick Cart Functionality - Cubed Allocation can be done at the wave. Outbound Containers can will be created at the wave based on dimensions, volume and weight of inventory. In this case container/shippping labels can be printed at the wave. Containers will then be assigned to the pick cart. Multiple orders can be picked at a time with the pick cart functionality.
2. Cubed Allocation can also be done at packing. Outbound Containers sizes/types will be calculated but not created at the wave. Outbound Containers will be created at packing.

This can be used to pick inventory into a temporary LPN or tote and then distribute Inventory into the cubed calculated OBLPNs.

Note: Pick Cart will not be used in this case.

Task Description	WMS Module	Overview/Comments	Task Details
Allocation UOM	Wave Templates Link 'Allocation Mode'	The Allocation UOM will specify the Unit of Measure level at which inventory will be allocated for picking (Cases, Units...) Allocation can be prioritized by UOM (i.e. Cases first, then units) Active Locations will only allocate Units Reserve Locations will allocate Cases, Packs and Units for cubing. *Full LPNs cannot be cubed. Cases and Packs allocation will be based on the Standard Case and Packs Quantities in the Item Master.	1. Under the 'Allocation Mode' details 2. Under field 'Allocation UOM': - If location type chosen is active, the UOM does not need to be specified. This will be units by default. - If location type chosen is reserve, Select the UOM at which inventory needs to be allocated for the specific allocation sequence (Cases, Packs or Units)
Active - Cartonize UOM	Wave Templates Link 'Allocation Mode'	The Cartonize UOM will specify if inventory allocated will be cubed (i.e. outbound containers will be calculated)	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Select the option 'Cubed'
Reserve Locations - Cartonize UOM	Wave Templates Link 'Allocation Mode'	The Cartonize UOM will specify if inventory allocated will be cubed (i.e. outbound containers will be calculated)	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Select the option 'Cubed'
Active Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for non-cubed picking tasks will be 'No distribution'.	1. Under the 'Allocation Mode' details 2. Under field 'Distribution Mode': - Select 'No distribution'

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Task Description	WMS Module	Overview/Comments	Task Details
Reserve Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for non-cubed picking tasks will be 'No distribution'.	1. Under the 'Allocation Mode' details 2. Under field 'Distribution Mode': - Select 'No distribution'

Allocation - Distribution to Store

Distribution to Store or Put-To-Store (PTS) is defined in WMS as the process in which allocated inventory is pulled in bulk for multiple orders/stores. The inventory is then distributed to stores/destination facilities at a consolidation locations.

The PTS Process requires destination stores to be defined in WMS in the 'Facilities' screen, as well as assigned distrbuiton/consolidations locations for each store/facility.

Inventory can be allocated from both Active and Reserve Locations for distributions.

1. Distribution at LPN Level: Full LPNs will be picked and then units will be distributed to corresponding stores.
2. Allocated Units will be picked and consolidated (rather than the Full LPN) and then the units will be distributed to stores.

Task Description	WMS Module	Overview/Comments	Task Details
Allocation UOM	Wave Templates Link 'Allocation Mode'	The Allocation UOM will specify the Unit of Measure level at which inventory will be allocated for picking (Cases, Units...) Allocation can be prioritized by UOM (i.e. Cases first, then units) Active Locations will only allocate Units Reserve Locations will allocate Cases, Packs and Units for distribution. *Full LPNs is not an option. Cases and Packs allocation will be based on the Standard Case and Packs Quantities in the Item Master.	1. Under the 'Allocation Mode' details 2. Under field 'Allocation UOM': - If location type chosen is active, the UOM does not need to be specified. This will be units by default. - 3. If the location type chosen is reserve, Select the UOM at which inventory needs to be allocated for the specific allocation sequence (Cases, Packs or Units)
Active - Cartonize UOM (Not Applicable for Distribution)	Wave Templates Link 'Allocation Mode'	The Cartonize UOM is not used for Distribution To Store.	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Do not select an option
Reserve Locations - Cartonize UOM (Not Applicable for Distribution)	Wave Templates Link 'Allocation Mode'	The Cartonize UOM is not used for Distribution To Store.	1. Under the 'Allocation Mode' details 2. Under field 'Caronize UOM': - Do not select an option
Active Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for PTS Process from Active Locations will	1. Under the 'Allocation Mode' details

Task Description	WMS Module	Overview/Comments	Task Details
		be 'Consolidate and Distibute'. With this mode, all units allocated from active for stores will be picked in bulk into a temporary container and then distributed to stores at consolidated locations.	2. Under field 'Distribution Mode': - Select 'Consolidate and Distribute'
Reserve Locations - Distribution Mode	Wave Templates Link 'Allocation Mode'	The distribution Mode for PTS Process from Reserve Locations will be as follow: 1. Distribution, no residuals : Allocation will be done from LPNs allocated in full to one or more orders. Allocation will not be done if an LPN is not fully allocated. 2. Distrbution, residuals OK: LPNs will be allowed to be partly allocated for orders. 3. Consolidate and Distribute: Inventory will be allocated, picked and consolidated rather than the LPNs. Inventory will then be distrbuted.	1. Under the 'Allocation Mode' details 2. Under field 'Distribution Mode': Select option needed for flow - Distribution, No residuals - Distribution, Residuals OK - Consolidate and distribute

Allocation – Additional Options

Task Description	WMS Module	Overview/Comments	Task Details
MHE System (Optional)	Wave Templates Link 'Allocation Mode'		1. Under the 'Allocation Mode' details 2. Under field 'mhe_system': Enter the name of the MHE system to which communication will be made for allocation
Ignore Attributes	Wave Templates Link 'Allocation Mode'	Attributes A, B, C are inventory attributes specified on current inventory. The order details can specify one or more inventory attributes to restrict allocation to inventory with matching attributes. On the allocation mode: - Ignore Attribute flag: when checked inventory can be allocated from any inventory with non-matching attributes when unchecked, inventrory can be only allocated when attributes specified on order match if any	1. Under the 'Allocation Mode' details 2. Next to options 'Ignore Attribute A, B, or C: Check flag if needed. **Note:** if orders will not specify attributes, the flags are not required to be set.

General Task Type Configuration (Optional)

The following configuration is not required for operations, but offers additional functionality. See summary below.

Replenishment Task types represent the types or methods of picking/replenishment type. (i.e. Full LPN Replenishment, Cases/Packs/Units Replenishment.) Task Types specified in the task template will create tasks for picking/ replenishment.

Task types are listed/defined in the UI Module 'Task Types'. Task types are composed of a series of RF Modules, each specifying an operation for picking/replenishment. The Full LPN Replenishment Task Type includes the following RF Modules:

1. Move LPN (Operation: Pick allocated LPNs to a pallet before replenishment)
2. RF Replenish Full LPN (Operation: Replenish picked LPNs to appropriate picking locations).

Each module in a task type can be configured for additional functionality like validations (batch, exipiry or none) during picking, drop zone after picking, etc... The module configured can then be replaced on the specific task type. Multiple Task Type Records can be created for the same task type to be configured as needed and added to Task Templates.

For example, there can be two (2) task types for Full LPN Replenishment with different RF Modules Configuration.

Task Description	WMS Module	Overview/Comments	Task Details
Access Task Types & Look Up RF Modules	Task Types	The 'Task Type' UI Module will display all task types used in WMS. The task type details will display all RF Modules used withing a task type.	1. In the 'Task Type' UI Screen select the specific task type that needs to configured 2. Copy the task type to create a new task type for configuration - Rename the task type to be easily distinguished 3. Once the new task type is created, access the task type details 4. The details will list all RF Modules. Mark the RF Modules to look up to change their configuration
Access RF Modules for Configuration	Screen Configuration	RF Modules will have to be added in Screen Configuration to access the details for configuration. For more details on the functionality of RF Parameters, refer to the RF Parameters Configuration Document.	1. In the 'Screen Configuration' UI Module, click on the 'Generate Screens' button to display all RF Modules 2. Look for the RF Modules linked to the specific task type being configured. Select all RF Modules needed and click on 'Save' to add the RF Modules. 3. Select the specific RF Module added and edit the record to rename the Module to be easily distinguished for configuration (ex: Add initials) 4. Access the Details for RF Parameters configuration

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Task Description	WMS Module	Overview/Comments	Task Details
			5. Edit each parameter to set up the value needed
Configure Task Types with RF Modules	Task Types	RF Modules configured for required functionality can be linked to the task types that will be used in the task template. These task types will then be used to create tasks with the required configuration.	1. Go back to the 'Task Type' UI Module and access the details of the task type being configured 2. Select the RF Module that needs to be changed and click on edit to select the new configured RF Module 3. In the drop down select the new RF Module created and renamed. (The RF Module will show up with the new name that was given in previous step) 4. Click save when done and repeat for the other RF modules if needed
Configure Task Types in Task Template	Task Creation Template	Task Types configured with new RF Modules will have to be linked to appropriate Task Template. Task template used will create tasks based on the task types specified on the template.	1. In the 'Task Creation Template' UI Module, select the specific Task Template and add/replace task types correspondingly. **Note:** Task Types will show up as renamed in the previous step.

Set Up Picking Tasks Template

Picking Tasks can be created to pick allocated inventory following configured rules. Picking tasks rules can be set up for the creation of tasks when a wave is run for orders. Picking tasks will specify how tasks will be broken (i.e. One task per aisle, location area, etc…).

1. In a Task Template, tasks types to be used will be specified and prioritized. Task types will represent the types or methods of picking (i.e. Full LPN Replenishment, Cases/Packs/Units Replenishment). Task Types will create tasks based on the UOMs defined in the Allocation Mode. The task type's UOM will match the Allocation UOM.
2. Each task type will specify an 'Ordering Criteria' to specify how tasks are to be broken (i.e. by aisle, by area, by item, etc…)
3. Each task type can also specify a 'Selection Criteria' to restrict the created task's rules to specified criteria. Task types can also be prioritized using the selection criteria (i.e. Tasks are to be created for specific zones first, etc…)

Note: The task type selected in the following steps can be the WMS default task type or a new configured task type in the previous section.

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Set Up Task Template

Task Description	WMS Module	Overview/Comments	Task Details
Create Picking Task Template	Task Creation		1. Login at the correct company level. In 'Task Creation' UI Module create a new task template by entering a template name or description then save the template 2. Access the details to add task rules

Non-Cubed Picking

Picking Tasks will match the Allocation Type (UOM and Location Type) set up in the wave template.

Task Description	WMS Module	Overview/Comments	Task Details
Unit Picking - Select Task Types	Task Creation - Details	Task Types: - Non Cubed Active Picking: This task type is used when units are allocated from Active Locations - Reserve Units: This task type is used when Units are allocated for Reserve Locations	1. In 'Task Creation' UI Module, in task template details add task types that will be used based on allocation UOMs 2. Enter a sequence number for the order of task creation and select a task type from the task type drop-down. Task type configured will be visible in the drop-down.
Packs Picking - Select Task Types	Task Creation - Details	Task Type: - Reserve Inner Packs: This task type is used when Packs are allocated	1. In 'Task Creation' UI Module, in task template's details, add task types that will be used based on allocation UOMs 2. Enter a sequence number for the order of task creation and select the default or a configured task type for Reserve Inner Packs
Cases Picking - Select Task Types	Task Creation - Details	Task Type: - Reserve Cases: This task type is used when Inner Cases are allocated	1. In 'Task Creation' UI Module, in task template's details, add task types that will be used based on allocation UOMs 2. Enter a sequence number for the order of task creation and select the default or a configured task type for Reserve Cases
Full Pallet Picking - Select Task Types	Task Creation - Details	Task Types: - Plt Move Auto-Pack: This task type is used to pick a full pallet when all LPNs on a pallet are allocated.	1. In 'Task Creation' UI Module, in task template's details, add task types that will be used based on allocation UOMs 2. Enter a sequence number for the order of task creation and select the default or a

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Task Description	WMS Module	Overview/Comments	Task Details
			configured task type for Plt Move Auto Pack.
Full LPN Picking - Select Task Types	Task Creation - Details	Task Types: - Full LPN Pull: This task type is used when Full LPNs are allocated	1. In the 'Task Creation' UI Module, in task template's details, add task types that will be used based on allocation UOMs 2. Enter a sequence number for the order of task creation and select the default or a configured task type for Full LPN Pull
Add Rules in Task Template	Task Creation - Details	Break By Quantity: Do not use Create_held_flg: When this parameter is checked, tasks will be created in 'HELD' Status and will not be available for picking until released Priority: The priority in which tasks will be displayed on RF Screen Destination Zone: The destination zone (task zone created with location master) - This will be the drop zone to which the task will be directed after completion. User will have to scan a matching drop location.	1. In the details, after selecting task types: Enter the 'Break by Quantity' if required 2. Check the 'create_held_flg' if required 3. Enter a priority for each task type. The default for all task types will be 20 if not specified. 4. Save changes for the task type added
Set Up an Ordering Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The ordering criteria will specify rules on how tasks are to be created and broken (i.e. If tasks will be broken by aisle, area, as well as if they will follow a pick sequence…) Break By Count: The break by count will specify the number by which tasks will be broken (i.e. Criteria to break aisle by 2 = Tasks will be created for every 2 aisles. For the pick sequence to be followed the break by count will be set to 0)	1. In the details, after adding task types in task template, select specific task type and access the 'Ordering Criteria' 2. In 'Ordering Criteria' add a sequence number for the criteria 3. Add criteria for task rules and enter the break by count Note: The sequence number has to be set up properly (i.e. If a pick sequence needs to be followed, the criteria for pick sequence will have sequence number set to 1)
Set Up a Selection Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The Selection Criteria is used to restrict the created task's rules to specified criteria. Task types can also be prioritized using the selection criteria (i.e. Tasks are to be created for specific zones with specific criteria: 1. Task Type - FULL LPN broken by aisled & restricted to Zone 1 2. Task Type - FULL LPN	1. In the details, after adding task types in task template, select specific task type and access the 'Selection Criteria' 2. In 'Selection Criteria' select the sql operator for the folder (i.e. Use AND if one or multiple conditions need to be true - Use OR if one of multiple conditions need to be true for the task type)

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Task Description	WMS Module	Overview/Comments	Task Details
		broken by area & restricted to Zone 2)	**3.** Click on 'Insert Basic Operation' to add condition(s) or click on 'Insert Complex Operation' to add a sub-folder of conditions **4.** After adding a condition, click on the appropriate folder to add more conditions or click Save to save to complete the setup

Distribution to Store Picking

Picking Tasks for distribution will be used when a distrubution mode is set up in the allocation template for Inventory Distribution To store.

Task Description	WMS Module	Overview/Comments
Consolidate and Distri+C88:G92bute - Select Task Type	Task Creation - Details	If the Distribution Mode set up in the wave temp Distribute' for Active Units, Reserve Units, Packs be set up is: - Internal Picking Task: This task typ Mode = 'Consolidate and Distibute'. This is used allocated units, packs and cases from Active and LPN will be dropped at a drop zone and will then a separate RF Transaction.
Distribution No Consolidation - Select Task Type	Task Creation - Details	If the Distribution Mode set up in the wave temp Residuals' or 'Distribution Residuals OK' for Rese the task type to be set up is: - Distribute LPN: Th Distributin Mode = 'Distribution No Residuals' or This is used to bulk pick LPNs from Reserve for a cases. Inventory will then be distributed from pic
Add Rules in Replenishment Task Template	Task Creation - Details	Break By Quantity: Do not use Create_held_flg: V checked, tasks will be created in 'HELD' Status ar picking until released Priority: The priority in wh RF Screen Destination Zone: The destination zor location master) - This will be the drop zone to w after completion. User will have to scan a matchi
Set Up an Ordering Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The ordering criteria will specify rules on how tas broken (i.e. If tasks will be broken by aisle, area, a pick sequence…) Break By Count: The break by by which tasks will be broken (i.e. Criteria to brea created for every 2 aisles. For the pick sequence count will be set to 0)
Set Up a Selection Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The Selection Criteria is used to restrict the creat criteria. Task types can also be prioritized using t

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Task Description	WMS Module	Overview/Comments
		Tasks are to be created for specific zones with sp - FULL LPN broken by aisled & restricted to Zone broken by area & restricted to Zone 2)

Cubed Picking and Pick Cart

Picking for cubed allocation can be done as follows:

1. Using the Pick Cart functionality - The pick cart functionality will be used when the outbound containers are created with the wave. Picking using the 'pick cart' functionality will not require setting up the task template. Proceed to next section for pick cart configuration.
2. By Bulk Picking Inventory into a tote/LPN and then repacking inventory into the final calculated containers. Option 2 will most likely be used for E-Commerce flows as the repacking process is done at the Unit Level with a SKU Scan. This option will require setting task types equivalent to non-cubed picking.

Task Description	WMS Module	Overview/Comments
Unit Picking - Select Task Types	Task Creation - Details	Task Types: - Non Cubed Active Picking: This tas allocated from Active Locations - Reserve Units: Units are allocated for Reserve Locations
Packs Picking - Select Task Types	Task Creation - Details	Task Type: - Reserve Inner Packs: This task type allocated
Cases Picking - Select Task Types	Task Creation - Details	Task Type: - Reserve Cases: This task type is use allocated
Add Rules in Task Template	Task Creation - Details	Break By Quantity: Do not use Create_held_flg: V checked, tasks will be created in 'HELD' Status an picking until released Priority: The priority in wh RF Screen Destination Zone: The destination zor location master) - This will be the drop zone to w after completion. User will have to scan a matchi
Set Up an Ordering Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The ordering criteria will specify rules on how ta broken (i.e. If tasks will be broken by aisle, area, a pick sequence…) Break By Count: The break by c by which tasks will be broken (i.e. Criteria to brea created for every 2 aisles. For the pick sequence count will be set to 0)

Task Description	WMS Module	Overview/Comments
Set Up a Selection Criteria (Optional)	Task Creation - Details Link - Ordering Criteria	The Selection Criteria is used to restrict the creat... criteria. Task types can also be prioritized using t... Tasks are to be created for specific zones with sp... - FULL LPN broken by aisled & restricted to Zone... broken by area & restricted to Zone 2)

Set Up Cubing and Pick to Cart Rules

Cubing Rules need to be set up for cubed allocation. If a wave template's allocation mode specifies a cartonized UOM = Cubed, cubing rules will have to be set. The wave template run for cubed allocation will create/calculate outbound containers with the wave or after packing.

The wave template will be linked to a cubing rule. The cubing rule tied to the wave template will be used to set up the rules for creating cubed containers. (i.e. This will specify how containers should be broken/created by aisle, area, order etc…). In addition, a list of container types/sizes can be set up with dimensions, max volume, max weight and empty weight.

1. A predetermined Container Type can be used at the wave, order or item level for cubing.
2. Dynamic cubing can also be used where WMS will calculate the container sizes to be used.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Cubing Rules	Cubing Rules	Cubing rules will specify how containers should be created/ broken after allocation. **Note:** By default containers created will not be broken by order. To make sure that different containers are created for different orders a cubing rule will have to be added to break by order. Multiple Cubing Rules can be created to be linked to different wave templates.	1. Login at specific company level 2. In UI Module 'Cubing Rule' add a cubing rule - Enter a description 3. Select the cubing rule create and access the details 4. Enter a rule sequence and save the changes. Note: Multiple sequences can be added if there will be different rules for specifc criteria
Set Up an Ordering Criteria	Cubing Rules - Details Link - Ordering Criteria	The ordering criteria will specify rules on how containers are to be created and broken (i.e. If containers will be broken by aisle, area, as well as if they will follow a pick sequence…) Break By Count:	1. In the details, after adding rule sequences access the 'Ordering criteria' 2. In 'Ordering Criteria' add a criteria - enter a sequence number for the criteria

Task Description	WMS Module	Overview/Comments	Task Details
		The break by count will specify the number by which containers will be broken (i.e. Criteria to break Order by 1 = Containers will be created for every order. For the pick sequence to be followed the break by count will be set to 0)	3. Select the criteria from drop-down option and enter the break by count Note: If a pick sequence needs to be followed, the criteria for pick sequence will have sequence number set to 1 and break by count = 0 - Criteria for Order Number can be added with following sequence and break by count 1
Set Up a Selection Criteria (Optional)	Cubing Rules - Details Link - Selection Criteria	The Selection Criteria is used to restrict the created ordering rules to specified criteria. (i.e. Containers are to be created for specific zones with specific criteria)	1. In the details, access the 'Selection Criteria' 2. In 'Selection Criteria' select the sql operator for the folder (i.e. Use AND if one or multiple conditions need to be true - Use OR if one of multiple conditions need to be true for the task type) 3. Click on 'Insert Basic Operation' to add condition(s) or click on 'Insert Complex Operation' to add a sub-folder of conditions 4. After adding a condition, click on the appropriate folder to add more conditions or click Save to save to complete the setup
Set Up Container Types 'OBLPN Types'	OBLPN Types	OBLPN Types represent the list of container sizes that will be used for cubing. 1. 　1. One general container type can be set up and used if container sizes are not known or if WMS will not be used for dynamic cubing. 　2. The list of available container sizes can be set up if WMS will be used for dynamic cubing or if these container types will be set up at the item, order or wave level.	1. Login at specific company level 2. In UI Module 'OBLPN Type' add new OBLPN Type 3. Enter a code, description, prefix to differentiate with other OBLPN Types 4. Enter max volume, max weight, length, width, height and empty weight 5. Save and add additional OBLPN Types if needed.

Set Up Label Printing Order

The column ordering is the WMS functionality that allows setting the order in which labels will be printed from the wave. These labels can be printed after a wave is run as pick tickets or after packing as shipping labels. The column ordering will specify the criteria by which labels should be ordered for printing.

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Task Description	WMS Module	Overview/Comments	Task Details
Set Up a Column Ordering	Column Ordering	Multiple column ordering can be created. The column ordering will: 1. Be selected when printing from the wave 2. Or specified on a wave template	1. Login at the correct company level 2. in 'Column Ordering' UI Module, Add a new column ordering - Enter a description/name 3. Access the details and add the field(s) 4. Enter a sequence number and select the field by which labels will be ordered 5. Add sequences and fields if needed 6. Save the changes

Set Up Store Daily Capacity

The Facility Daily Capacity functionality will offer the option to configure the Daily Capacity Limit per destination facility where the Destination facility can be a store or a facility. Users can configure the capacity limit for each store or destination facility through UI or as an upload option.

When the daily limits are configured for a store, WMS will only allocate a daily total up to the value specified for each store.

Task Description	WMS Module	Overview/Comments	Task Details
Set up Daily Capacity by Facility	Wave Template	The Capacity will limit order allocation for a destination facility/store. - Max units/Weight/Volume/Orders: Total value of specified criteria that can be allocated for a wave run - % Tolerance: A tolerance percentage for the max values set that will allow allocating up to the specified % - Capacity multiplier: Values as follow: 0 = Turn off the capacity check temporarily 1 = Default 2 = Double the capacity limits	1. Login at the correct company level 2. in 'Destination Facility Attributes' UI Module, or using the interface 'DEST_FACILITY_ATTRIBUTES_INTERFACE' add a capacity check for a store 3. Enter/Select the destination facility/store 4. Enter values for max unit/weight/volume/order and % Tolerance 5. Select a capacity multiplier
Add the Daily Capacity View UI Module	Daily Capacity View	The UI Module 'Daily Capacity View' displays the running count of the capacity utilized for a store/destination facility.	1. Add UI Screen to menu

Set Up Wave Template

The Wave Template will link:

1. An allocation method
2. The allocation mode
3. The wave search
4. The task creation template all into a template to be run for allocation and task creation. The wave template will be run to allocate inventory and to create tasks based on the rules.

In addition, the wave template will specify:

1. A cubing mode
2. The cubing rule
3. OBLPN Type if the allocation mode linked is set up for cubed allocation.

Complete the following steps to set up the wave template in the UI Module: 'Wave Template'.

Task Description	WMS Module	Overview/Comments	Task Details
Create a Wave Template & Select an Allocation Method	Wave Template	Allocation methods: - 'First in First Out' & 'Last in First Out': Based on the 'Received Timestamp' - 'First Expiry First Out' & 'Last Expirt First Out': Based on the 'expiry date' if present; if not present based on the 'received timestamp' - 'Quantity Ascending' & 'Quantity Descending': Based on LPN quantity - 'Location Sequence Ascending' & 'Location Sequence Descending': Based on the location pick sequence	1. Login at the correct company level 2. in the 'Wave Template' UI Module, Add a new wave template - enter a template name 3. Select an allocation method
Select an Allocation Mode	Wave Template	The allocation modes need to be configured prior to setting up the wave template	1. In the 'Wave Template' UI module, Select the allocation mode from the drop down 'Allocation mode'
Reuse LPN Nbr Flag	Wave Template	The 'Reuse LPN' Flag is checked if the same LPN Nbr on an inbound container will be used as the LPN Nbr on the outbound container. This is mostly used for Full LPN picks scenario where the Inbound Container is a shippable container.	1. In 'Wave Template' UI module, check the 'Reuse LPN' Flag if needed
Select a Wave Search	Wave Template	The wave search need to be configured prior to setting up the wave template	1. In 'Wave Template' UI module, Select the wave search from the drop- down menu 'Wave search'

Task Description	WMS Module	Overview/Comments	Task Details
Set Up Location Size Type (Optional)	Wave Template	The location size type specified will restrict allocation to locations with the specific size type specified.	1. In 'Wave Template' UI module, Select the wave search from the drop- down menu 'Wave search'
Select a Task Creation Template	Wave Template	The task template need to be configured prior to setting up the wave template	1. In 'Wave Template' UI module, Select the location size type from the drop-down menu 'Location Size Type'
Select a Routing Mode	Wave Template	Routing Modes are not required: 1. MODE_1: This is used if parcel & LTL ship vias will be assigned to containers based on stores and routes. This assignment will be done at the wave. This is used for stores. 2. MODE_2: This is used to determine the parcel or LTL ship via based the ship via on the order or the default ship via set for a ship to facility. When a routing mode is set, communication to Web services for parcel shipments will be done. 3. None: If ship via does not need to be determine at wave and if communication to web services for parcel shipment is not required at the wave.	1. In 'Wave Template' UI module, Select Routing Mode from drop-down menu 'Routing Mode'.
Select a Cubing Mode (Only required for cubing)	Wave Template	A Cubing mode option will be selected if the wave template is set up for cubing. Cubing Mode Options: - NONE: If cubing will not be used for the wave - Use predetermined OBLPN Type: The OBLPN Type (container size) selected to create containers will be from the wave/order or item. Outbound containers will be created at the wave. - Calculate OBLPN Type and cube with wave: The OBLPN Type selected to create containers will be calculated at the wave based on inventory dimensions. Outbound containers will be created at the wave. - Calculate OBLPN Type at packing: The OBLPN Type selected to create containers will be calculated at packing based on inventory	1. In 'Wave Template' UI module, Select the cubing mode from the drop- down menu 'Cubing Mode'

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Task Description	WMS Module	Overview/Comments	Task Details
		dimensions. This is used when picking will be done with a temporary LPN/Tote and repacking into the final calculated containers.	
Select an OBLPN Type (Only required for cubing)	Wave Template	The OBLPN Type(s) need to be configured prior to setting up the wave template When the cubing mode is set to 'Use predetermined OBLPN Type': The OBLPN Type can be specified at the wave. In this case this OBLPN Type will be used for cubing all outbound containers. This can be used if a general OBLPN Type will be used for packing in case container sizes are not known.	1. In 'Wave Template' UI module, Select the OBLPN Type from the drop- down menu 'OBLPN Type'
Select a cubing Rule (Only required for cubing)	Wave Template	The OBLPN Type(s) need to be configured prior to setting up the wave template.	1. In 'Wave Template' UI module, Select the cubing rule from the drop- down menu 'Cubing Rule'
Select a Column Ordering (Optional)	Wave Template	The column ordering will be used to set the sequence in which container/shipping labels will be printed from the wave. When the column ordering is specified on the wave template, labels will be printed automatically after the wave is run.	1. In 'Wave Template' UI module, Select the column ordering from the drop- down menu 'Column Ordering'
Set Wave Capacity (Optional)	Wave Template	Wave Capacity will limit allocation to orders based on specified capacity. - Max units/Weight/ Volume/Orders: Total value of specified criteria that can be allocated for a wave run - % Tolerance: A tolerance percentage for the max values set that will allow allocating up to the specified % - Destination Capacity Check: When checked wave capacity will be based on the limits set up by store in the 'Destination Facility Attributes' UI Module	1. In 'Wave Template' UI module, Enter values for any of the needed option: - Max Units, Weight, Volume, Orders, Tolerance % 2. Check the 'Destination Capacity Check' flag if needed (if capacity are set up for destination facilities/stores)
Auto Release MHE Message Flag	Wave Template	The 'Auto Release MHE Message flag' is checked when communication/messages to MHE	1. In the 'Wave Template' UI module, check the 'Auto Release MHE Message' flag if needed

Task Description	WMS Module	Overview/Comments	Task Details
		System will be done when a wave is run.	

Set Up a Cancellation Wave

A cancellation wave will be used to cancel orders that were not allocated due to unavailable inventory. The flag 'Cancel Unallocate' will be checked for a cancellation wave.

> **Note:** It is best to not use this flag on wave templates that are set up for allocation. A separate wave template can be set up specifically for cancellation.

Task Description	WMS Module	Overview/Comments	Task Details
Set Up a Cancellation Wave	Wave Template	Repeat steps to create wave template and add the cancellation flag.	1. In 'Wave Template' UI module, create a new wave template called for example 'Cancellation Wave' 2. Add the required values to the wave template 3. Check the 'Cancel Unallocated' flag if needed

Set Up Cron Job Wave Template

Wave templates can be scheduled to be run automatically at specified times or interval of times instead of a user manual run. From the **Scheduled Jobs** UI, you can create a job type for the wave using the Wave Template job type.

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