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# ACS Multi-Bin and WMS

Warehouse Management System  
for SAGE 100 versions 2013 to 2018  
(5.0, 5.1, 5.2, 5.3, 5.4 and 6.0)

## Quick Start Guide and Documentation Manual



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 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

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# Installation Instructions

## NEW USER INSTALLATION INSTRUCTIONS



### Please Review the before Installing

- Any other modifications present? Review the Library Master - Reports - Installed Module Listing Report. Most extended solutions and other enhancements will work fine but some require unique installation or programming. Please contact us or your reseller before proceeding.
- Prepare well before turning ON in the Live Company. Turn ON ACS Multi-Bin and WMS in a Test Company and leave it OFF in the Live Company. Learn the software, prepare locations, prepare for changes to operations without interfering with operations in the live system.
- A physical count or a well structured cycle count should be performed for each warehouse that will be using the software.
- Verify the version and product update is current. If you need to update your product update, install the product update before this software. This software product update should match.
- Insure that all transactions are updated before installation. This includes Inventory Transactions, Sales Order Invoicing, Purchase Order Receipt of Goods, Bill of Materials Productions, Work Order Transactions.
- Login into Sage 100 ERP with full security rights to Library Master Setup, Inventory Setup and Maintenances.

### INSTALLATION AND ACTIVATION

1. Perform a full backup of the Sage 100 ERP system, programs and data.
2. Install Sage 100 ERP Version to a new area as stock requires. Download and Install the appropriate Sage Product Update.
3. Install Multi-bin and WMS from the link provided. Select the MAS90 folder. The software will recall the last path installed to.
4. If provided copy the license text file to the MAS90\ACS\_Group directory.
5. Software Activation. Select Library Master > Setup > ACS Group Product Registration. Click the Activate button. It will activate license files copied to the MAS90\ACS\_Group directory and offer an internet activate.
6. In Library Master Main Menu -> Role Maintenance. Provide security rights to the following:
  - Task -> Library Master Setup -> ACS Group Registration
  - New Tasks and Security Events in Inventory Management. Multi-Bin Location Add On the Fly.
7. If there are customizer screen changes, run Custom Office > Utilities > Update Forms to Current Level. If there are User Field Changes in IM, PO, BM, or WO - run the Update the ODBC fields in Custom Office > User Defined Fields Maintenance.
8. Enable Multi-Bin WMS for the appropriate companies. Run the Setup Wizard by selecting Inventory Management > Setup > ACS Warehouse Mgmt System Options. Click Yes to run the Wizard. If you have locations setup in stock Sage it will default to create those bin locations and default them as Primary bin locations. The Wizard will initialize Quantity On Hand for each item and lot serial number.

### QUICK START SUGGESTIONS

1. Create new Pick Sheet Forms for Sales Order, Bill of Materials and Work Order by creating a new form code and selecting the Multi-Bin form.
2. Grant security rights for Inventory Dashboard and certain features like Quick Transfers, Hold and Release inventory. [Refer to Page Security](#) for details on security.
3. Review Options for printing, data entry, and directed picking auto-allocation. [Click here](#) for more information about Directed Picking and [Click here](#) for information for Directed Put Away. Please prepare for the changes to your operations before running live.

# Upgrade Installation Instructions

## VERSION UPGRADE AND PRODUCT UPDATES INSTALLATION INSTRUCTIONS

*REFER TO APPENDIX V FOR UPGRADE  
INSTRUCTIONS FOR VERSIONS 4.30 AND BELOW*

### **How to Upgrade between Versions. For example how to Upgrade from Version 5.00 to 5.40.**

1. Follow Sage instructions to install the new version and migrate data. Before upgrading in Company Maintenance install and activate Multi-bin and WMS software.
  - a) Install the new Sage 100 Version (e.g., 5.40) to a new area. Install the current Sage Product Update.
  - b) Run the Parallel Migration utility located in Library Master — Utilities.
2. Install Multi-bin and WMS from the link provided. Select the destination folder MAS90. Always install or even reinstall Multi-bin and WMS software after migrating system data.
3. Select Library Master > Setup > ACS Group Product Registration. Click the Activate button. The system will activate over the internet.
4. Run the Data Conversion from Company Maintenance
5. Select ACS Group Product Registration from the Library Master – Setup menu. Click the Prepare Data button. Click the All button. All button upgrades all companies, One button upgrades the company you are in.
6. Run the Custom Office – Utilities – Update Custom Panels to Current Level.

### **How to Update between Product Updates. For example how to Update from Version 5.20 Product Update 1 to Product Update 3.**

1. Install the Product Update.
2. Install the Multi-bin and WMS from the link provided.
3. Select Library Master > Setup > ACS Group Product Registration. Click the Activate button. The system will activate over the internet.
4. If Sage requires, run the Data Conversion from Company Maintenance.
5. Select ACS Group Product Registration from the Library Master – Setup menu. Click the Prepare Data button. Click the All button. All button upgrades all companies, One button upgrades the company you are in.
6. Run the Custom Office – Utilities – Update Custom Panels to Current Level.



## Product Activation and Management

LIBRARY MASTER &gt; SETUP &gt; ACS GROUP PRODUCT MANAGEMENT

Product management provides software activation, data preparation and software uninstallation.

Registered Customer Name: acs group, inc  
 Serial Number: 1501234  
 Sage Version: 5.40.0.0

Product Code	Description	Status	Version
MB	ACS Whse Mgmt System Base	Activated	5.407
MB-AINVTY	Multi-bin Inventory Distribution	Activated	
MB-APKPUT	Directed Picking and Putaway	Activated	
MB-BATCH	Select by Fill Rate and Wave Batch	Activated	
MB-BM	Multi-bin Inventory Bill of Matls	Activated	
MB-CATCH	Catch Weight		
MB-EXP	Expire Date Lot Serial Traceability	Activated	
MB-JOBOPS	JobOps Integration	Activated	
MB-LOTSER	Expanded Lot Serial		
MB-LP	License Plate	Activated	
MB-OTW	On The Water	Activated	
MB-WO	Multi-bin Inventory Work Order	Activated	

Mode: Licensed  
 User Licenses: Sage Sys  
 Date Installed: 5/18/2016  
 Date Licensed: 5/18/2016  
 Date Expires:

Buttons: Activate, Prepare Data, Uninstall, Close

**Activate Button** - Activates software products.

- **FTP License.** The system will offer to check our web site for the License file.
- **License Text file.** A license text file can be copied to the mas90\ACS\_Group folder. Clicking the activate button will license the software.
- **Product Key and Activate Key.** Fields for the product and activate key are provided to manually enter the information.

**Prepare Data Button** - prepares files for use in one or all companies. It will not erase existing data. It should be run after upgrades and it must be run when there are no users on the system.

**Demo Button** - provides a demo license of 20 days for software installed in the system. The Demo button is offered if the system is not activated.

**Uninstall Button** - uninstall components from the system. The Uninstall option is offered when a product is selected from the product list. If the base software product is selected (e.g., Multi-bin and Whse Mgmt for Distribution) it will uninstall the entire product.

Uninstall verifies all users are out of the inventory system. It removes the Multi-bin enhancement from the system and it will not be active. It does not remove the data from the product's files. Because some of the screens have changes and work order module has changes within the programs, we recommend Sage 100 ERP stock software is installed and the related product update.

**ACS MULTI-BIN AND WMS OVERVIEW**

ACS Multi-Bin and WMS is designed to start up fast with simple to use right away features. It provides built-in advanced features for warehouse management which can be setup and turned ON as required. From the simple use of Bins in a small warehouse to automating the flow of inventory in the most complicated of warehouses, ACS Multi-Bin WMS provides the options necessary. In the following pages you will see a description of warehouse flow and terminology that will assist you in getting the most out of the system.

**Warehouse Management System.** A warehouse management system, or WMS, is a key part of the supply chain and primarily aims to control the movement and storage of materials within a warehouse and process the associated transactions, including shipping, receiving, putaway and picking. The systems also direct and optimize stock putaway based on real-time information about the status of bin utilization.

The objective of a warehouse management system is to provide a set of computerized procedures to handle the receipt of stock and returns into a warehouse facility, model and manage the logical representation of the physical storage facilities (e.g. racking etc.), manage the stock within the facility and enable a seamless link to order processing and logistics management in order to pick, pack and ship product out of the facility.

**Aisles** are codes assigned to bin locations to create a narrow zone within a Region in the warehouse. Directed Putaway uses Aisle codes to put goods in the Aisle. Association of Aisles can be done by Item Maintenances and Product Line Maintenance.

**Directed Pick** directs the picker where to pick goods from. Goods are allocated to sales orders so goods. The Sales Order pick sheet and the Multi-bin Wave pick sheet are printed to pick by order. The **(\*W)** Wave Batch pick sheet to print by the Wave Batch. Raw materials can be allocated to B/M production entries and W/O material issues and pick sheets guide to picking those goods.

**Directed PutAway** options directs the system where goods are stored. The system calculates destination information from the capacity of the locations and the desired settings. Print the Multi-Bin PutAway Report to print put aways from staging locations or after goods are produced. Put Away report also can be generated for goods that have not been received by using the Put Away template in purchase order printing.

**ID** license plate ID code to represent any group of inventory items. Also known as Pallet Case ID.

**ID Type Code** groups license plate ID's to certain case packs, pallets and containers. Unit of Measure codes so similar Pallet Case IDs can be processed for the Unit of Measure.

**Inventory Allocations** can be considered physically setting aside an item for use elsewhere. Allocations are considered hard, because an item allocated in one place, cannot be allocated to another as well. Directed picking "allocates" goods automatically from the rules set in the system. Goods can be pre-allocated manually in Sales Order entry.

**Location Types/Areas** represents the types of locations to represent if a pick area to pick from, overflow for backstock and case packs and pallets, staging to hold inventory to disseminate from. Floor and Other location types used to pick other areas to pick with a different priority versus the pick area.

**Primary bin locations** are locations for dedicated for certain items. The same goods rotate in these locations. They can be close to the shipping to speed pick and shipping. They can be manually assigned to an item or they can be assigned because the goods land in a location designated as a primary.

**Priority bin locations** are locations that supersede the regular system algorithms. Bin locations selected for a Customer and Sales Order will prioritize directed picking and directed putaway.

**Region Codes** are codes assigned to bin locations group the locations and/or create a zone in the warehouse. Wave Batch auto splits a batch by Region codes so pickers can pick by their zone. Directed Putaway narrows putaway to the selected Region codes in Item Maintenance and Product Line Maintenance.

**Replenishment** is the process of rotating inventory from back stock or other selectable areas in the warehouse forward into picking zones. Replenishment quantities are typically calculated and triggered via a Min/Max attributes of an item/bin combination or in more complex warehouse environments can sometimes be demand driven.

**Staging bin locations** are common locations for task setup by warehouse code. RECEIVING for P/O receipts, SHIPPING for packing to ship, WIP to group raw materials to be issued, QC to group finished goods completed.

**License Plate** Identifying inventory with a License Plate (LP) containerizes inventory and makes the inventory movement more efficient by moving the inventory as a group rather than by individual items and lot serial numbers. Fully integrated throughout multi-bin inventory, provides on the fly creation, editing and printing of pallet objects. License plates can be received, transferred, picked, issued, shipped. LP inventory can moved between locations and merged into other LP's.

**Wave Picking** is picking by bin location code order or by bin location sort code order. Features provide to do this for a single sales order or a group of sales orders.

**Wave Batch Picking** is picking for a number of orders at once in the order of bin locations in warehouse region. The goods can be pre-allocated (as defined above) or estimated and then transferred to the shipping dock and allocated or just shipped there.

Some information reference Wikipedia: [http://en.wikipedia.org/wiki/Warehouse\\_management\\_system](http://en.wikipedia.org/wiki/Warehouse_management_system)

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability

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(\*W) Feature for Add-on for Wave Batch Picking

### PRIMARY PICK LOCATIONS

**Primary Pick** locations are the “unique” bin location where an item is usually found year round. These locations are generally found in the main picking areas of the warehouse, near the shipping dock. Primary bin location replenishment advises how to rotate inventory from other areas to primary bin locations.

C10U	C20U	Overflow	
C10M	C20M	Primary Pick	
C10L	C20L	Primary Pick	

Row C Fixture - 5 sections horizontal, 3 sections vertical.  
L = Lower  
M = Mid  
U = Upper

A bin location is designated as a primary in bin location maintenance. To assign an item to a primary bin location, select Item Maintenance, Multi-bin Tab. A bin location will be designated as primary when designating the item to a bin location.

If the item floats in an area designated for primary bin locations, you can use the Multi-bin Option to **Auto Assign Primary Bin Locations**. As inventory is moved to a location designated as primary the system will auto create the primary assignment to the item. Any minimum or maximum settings in the item’s primary setup will be placed to the new item primary location. The system will self clean the item primary location setup for locations that have no quantity on hand.

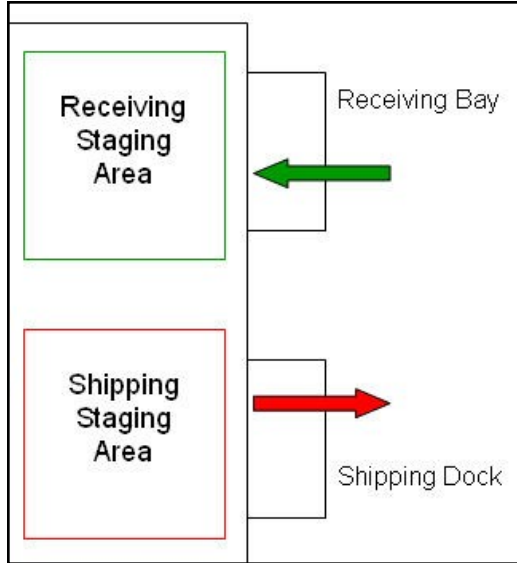
The locations entered here will be used in several places:

- Primary bin location replenishment. Replenishment is triggered when quantity on hand falls below the Minimum quantity. The Maximum designates the maximum quantity to fill this item to this location. When the Maximum is null the system will rely on the capacity settings in the bin location.
- Replenishment rotation is calculated from the algorithms designed for directed picking. For example in FIFO order. Directed picking does not need to be turned ON for the system.
- Directed Picking can deplete the primary bin locations before allocating other areas. Can choose to also only pick goods from Primary bin locations. Replenishment will rotate goods to the primary bin location. Goods can be allocated in numbered order. Bin Location 1 is first, Bin Location 2 is second and so on.
- Directed Putaway advises to store goods in primary bin locations when there is no other inventory to rotate in. Goods can be stored in reverse numbered order. Bin Location 5 is first, Bin Location 4 is second and so on.
- Primary bin location can be automatically selected in transactions. This improves the time it takes to create transaction and the accuracy of the inventory. Multi-bin options designates when this should occur during Receipt of goods, Shipping, RMA Receiving, B/M Production, and W/O Raw Material Issue.
- Picking sheets can print primary bin locations first.

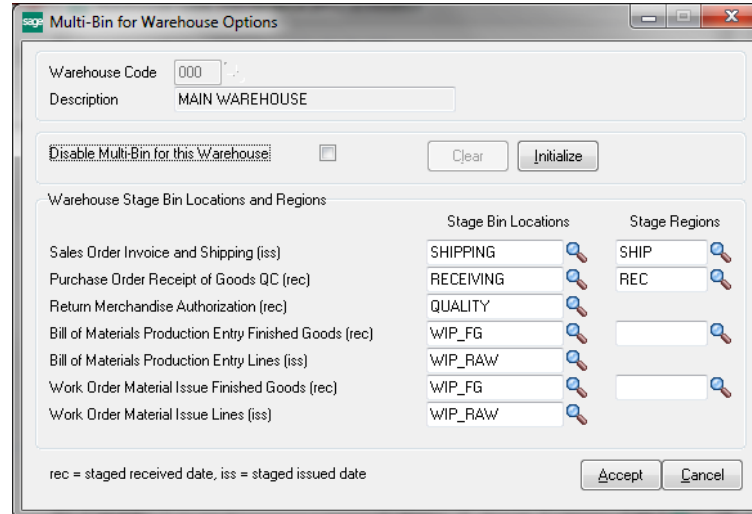
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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# Warehouse Management

## STAGING LOCATIONS



**Staging** locations are where items are stored until something else is done with them. Consider them holding locations. Staging Locations are setup in Inventory Management - Warehouse Code Maintenance.



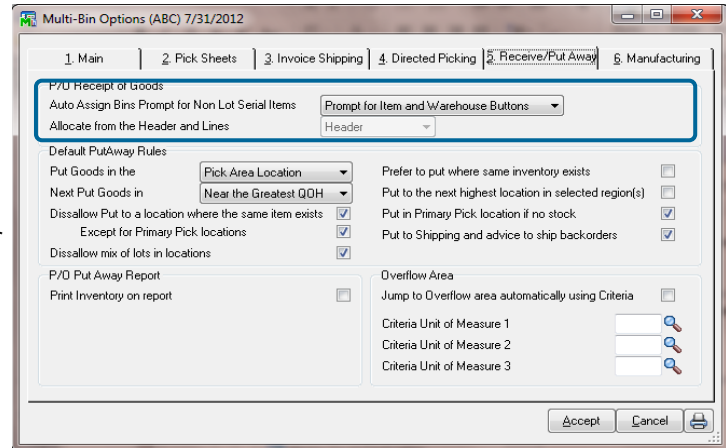
### P/O Receipt of Goods

**Auto Assign Bins Prompt for Non Lot Serial Items** - When entering a receipt of goods, the system can help user automate the distribution process if desired.

**Prompt for Item and Warehouse Buttons** - A pop-up prompt will appear, allowing the user to select assignment of the Primary Item location or the Warehouse Receiving Staging location.

**Auto Assign Item Primary Bin Location** - Will automatically receive the item to the Primary Item location set in Inventory Maintenance.

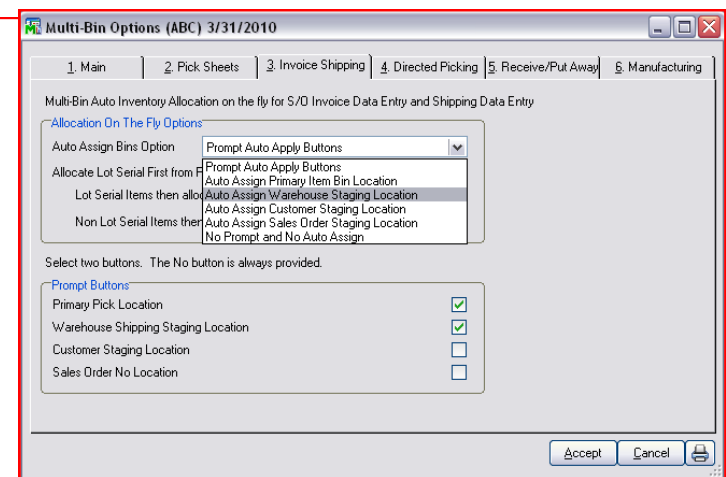
**Auto Assign Warehouse Staging Location** - Will automatically receive the item to the Warehouse Receiving Staging Location designed in Warehouse Code Maintenance.



### Shipping

When setting up Multi-Bin Options, you will see there is an option for automatically assigning the "Warehouse Staging Location" to all outgoing items. Based on our setup - this means that when the Sales Order Invoice is processed, everything in that order will be shipped from the SHIPPING bin location.

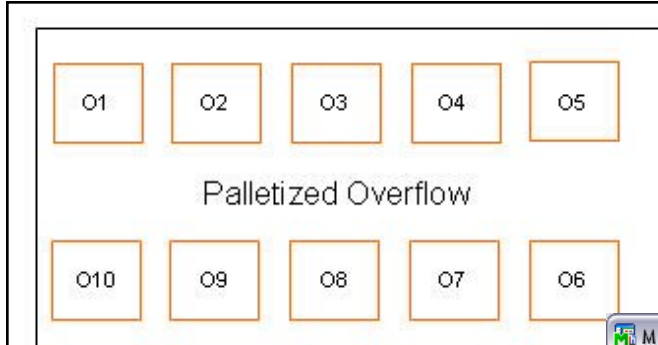
This means that when the order is entered, all items are pulled by warehouse staff from their primary pick locations and moved to the staging locations. RF scanning users will do this with their scanners. Manual users will do Inventory Transaction Transfers.



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# Warehouse Management

## OVERFLOW LOCATIONS



**Overflow** locations are for the over the head and bulk storage of items. This can be used for shipping large orders, putting away large receipts, or to replenish primary pick locations as they become depleted.

Bins themselves are designated as Overflow, and each item can have it's own overflow settings.

The screenshot shows two overlapping software windows. The background window is 'Multi-Bin Location Maintenance (ABC) 3/25/2010'. It displays fields for Warehouse Code (000), Bin Location (0-01), and Description (Overflow Pallets 1). The 'Location Type' is set to 'Overflow'. The foreground window is 'Multi-Bin for Item Options' for item '1001-HON-H252' in 'CENTRAL WAREHOUSE'. It shows 'Primary Pick Area' settings with Bin Locations A10L and A20L. The 'Overflow Area' section is highlighted with a red box, showing 'Minimum Quantity To Auto Allocate from Overflow Area' set to 200.00 and 'Minimum Quantity To Put To Overflow Area' set to 400.00. Bin Location 1 is set to A10L.

Overflow settings you can designate the number of items that warrants putting away to or pulling orders from the overflow area. Also Unit of Measure codes can be selected to advice picking and put aways in overflow locations. This will allow the system to make directed put away and directed picking suggestions for large quantities in a more educated way.

The screenshot shows the 'Overflow Area' settings section. It includes the following options:

- Jump to Overflow area automatically using Criteria
- Auto Allocate Overflow after Primary and Other areas
- Criteria Unit of Measure 1: CS2
- Criteria Unit of Measure 2: [Empty]
- Criteria Unit of Measure 3: [Empty]

Get to Overflow area by U/M and quantity criteria. If there is Quantity Available.

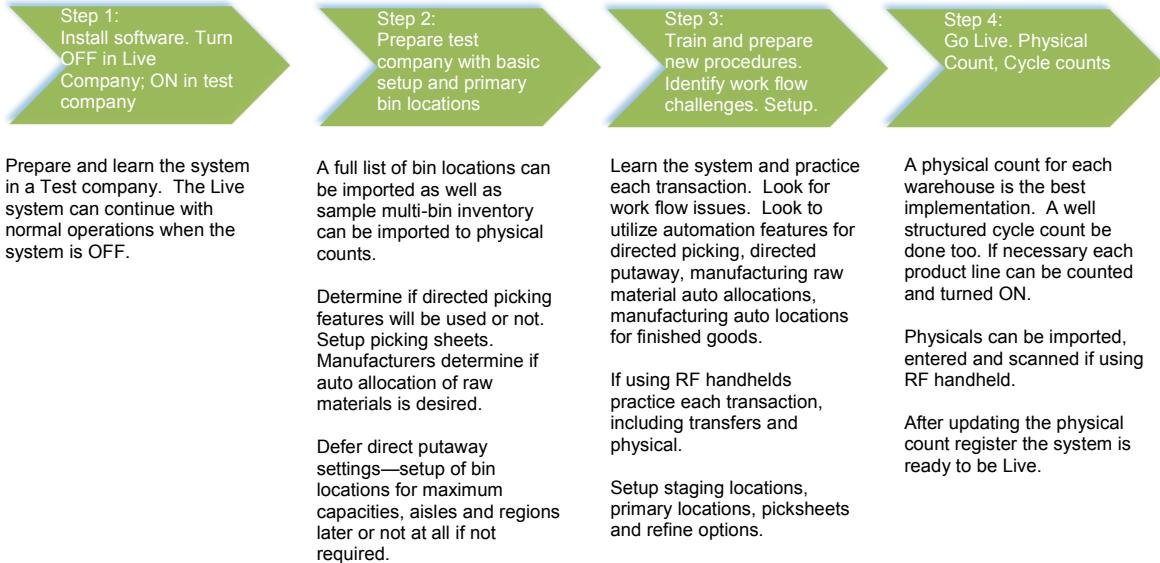
Overflow area allocates like Primary Pick Area. The Selected Overflow Pick Locations are allocated first. The remainder of the Overflow area is allocated by the Valuation Allocation Rules.

Unit of Measure code selectable in directed picking and directed putaway options.

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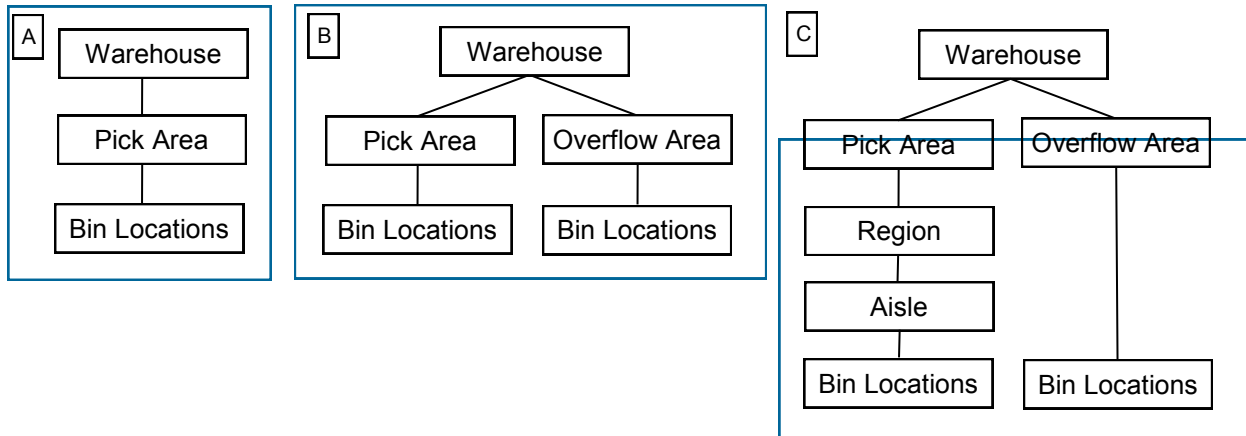
# Initial Options, Setup and Locations

## IMPLEMENTATION OVERVIEW



## BIN LOCATION DESIGNS

Model A straight forward setup. Good during the initial setup of the system.  
 Model B sets up overflow location to immediately separate inventory from the Pick area. Good for Directed Picking  
 Model C region and aisle setup will help the system place goods where planned. Good for Directed Picking and Directed Putaway.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Initial Options, Setup and Locations

## DIRECTED PICKING

**ACS Multi-bin and WMS Directed Picking** automatically allocates inventory to sales orders so you can sell the optimal goods and from the optimal bin locations. Directed Picking options are first setup on a company level in ACS Warehouse Mgmt System Options. Options can be superseded in Product Line Maintenance for the Product Line and then Item Maintenance directed picking options provides the ultimate setting for the Item.

Auto allocations can occur automatically as the order is saved, by clicking on the Allocate button in the order, as the pick sheet is printed, as orders are imported and as the order is selected to pick on the handheld. The allocated inventory for the sales order can be printed on the pick sheet to direct the picker and the information is resident on RF handhelds to both direct the pickers and to offer validation right goods and lots are picked.

Wave picking sheets provides an output in bin location order and by sort code which will provide your own directional pick flow. [Click for wave picking options](#). Wave picking sheets are printable for individual sales orders and groups of sales orders. The Wave Batch Shipping Control add-on provide automated selection of orders, back order fill, split picking and more advanced wave batching features.

Directed picking first allocates from reserved bin locations specified for the Customer and Sales Order. This is great for inventory earmarked for certain orders and customers. Directed Picking allocates inventory from the Multi-bin Directed Picking Options starting from the pick area. However, if designated, it will allocate from the Primary Bin Locations in the Pick area before seeking other inventory in the Pick area. The other areas can be chosen to allocate and their relative priority. Or you can choose to just allocate inventory from the primary locations and then rotate inventory to them.

[Click for Directed Picking Options](#).

**Jump to Overflow and Other** settings will fill large orders from the overflow area (other location type area) where large case packs and palleted goods are stored. This will help keep up the pick area and primary locations filled for the smaller orders. Setup is from the minimum quantity designated in item maintenance and designated Unit of Measure codes to the ones in the sale order. The increment option will designate case packs and pallets to not break.

**(\*W) Wave Batch Shipping Control** prioritizes the orders to ship and to allocate inventory to. Inventory here can be allocated order or to the batch itself. Batch allocations allows gross picks where more than the sales order can be picked and then staged. Ultimately batching will allocate to the order in the staged area.

**Override Sales Order and Customer Settings** supersede all settings in the system for the Overrides designated in the Sales Order and Customer. Customer Overrides transfer to new sales orders automatically. Overrides can be designated to pull inventory from certain locations, region codes, IDs and more. Desired algorithms and location types to pick for the order can be overwritten.

**Customer and Sales Order Priority Bin Locations** - Customer bin locations is useful for staged goods just for the customer saving goods in the regular pick area for other orders. Directed picking checks for locations created for the customer and sales order and will allocate from those locations. Bin location maintenance has options to restrict inventory to certain customer numbers and customer types. Inventory can be transferred to those locations at will and Directed Putaway can recommend transfers to the restricted bin locations when the sales order number is specified in P/O Receipt of Goods and Work Order Completions.

**Floor Locations** - select the Floor Priority picking as 1st and goods staged in Floor type bin locations will auto allocate prior the warehouse's regular primary and other pick algorithms. This feature is most useful when staging goods to the Floor for quick pick of orders.

**Item Primary Bin Locations** - select the desired algorithms for Non-Lot Serial items and Lot Serial items to allocate from their primary bin locations. The primary bin locations were selected in Inventory maintenance or are auto assigned to the item if the Multi-bin Option is ON to Auto Assign Primary Bin Locations. This option allows the primary location to float as inventory lands in a bin location designated as a primary bin location.

**Auto Allocate from the Pick area** - inventory is selected from the valuation selection rules. They include the next bin location, least quantity in a bin location, FIFO as goods were received into a location, a sort code which is a user defined, lot serial number, lot receipt date (FIFO), (\*E) lot expiration date, Lot LIFO.

**Auto Allocate from Other Areas** - select to pick and the priority from bin locations in other areas in the warehouse: Floor, Other, Overflow and Staging location types. Floor and Other areas may contain less inventory than the Pick area or the quality of goods is less. Overflow may want to pick last because it is the newest inventory or can have the large case packs and palleted goods. Staging goods for goods that are still getting checked in or the goods are selected for goods going out.

**(\*P) Auto Allocate by ID Package Quantity** - will allocate to best case packs and pallets to fill an order. There is an option to scan all inventory regardless of the area it exists so that the largest package size is allocated. The system will also best match the unit of measure code selected in the sales order. If a certain case pack is designated in the order the system can fill the order from that case pack size on up to larger designated case packs.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability

(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers

(\*W) Feature for Add-on for Wave Batch Picking

## Initial Options, Setup and Locations

### DIRECTED PUTAWAY

**ACS Multi-bin and WMS Directed PutAway** options directs the system where goods are stored. The system calculates destination information from the capacity of the locations and the desired settings. Print the Multi-Bin PutAway Report to print put aways from staging locations or after goods are produced. Put Away report can be generated based on purchase orders by using the Put Away template in purchase order printing.

Choose to store goods nearby or in the same location of the same item. Also it can give favor to store goods or product lines in certain warehouse zones (called regions) or aisles. Perhaps you want to store goods in overflow locations first or to the pick area. Goods can go directly to primary pick locations too and if you have a number of the them it will put them to the lowest primary code first. There are also overriding factors such as when there is no existing inventory and the system can direct goods to Primary Bin locations or to the Shipping dock if there are backorders.

#### **Sales Order Priority Location**

Inventory designated for a sales order in a purchase order and a work order is directed to the bin location selected for the sales order. If there is no location in the sales order the system checks for a location setup for the customer and shipping staging location. [Click for setup of Customer and Sales Order Priority Location Setup.](#)

#### **Ship Backorders when there is no stock**

Directed putaway will advice to put goods in the S/O shipping staging location if there is no inventory on hand to fill an order.

#### **Store in Overflow**

Directed putaway will advice to put goods in the overflow locations if the settings to store purchase orders from the overflow area were large case packs and palleted goods are stored. Setup is the minimum quantity designated in item maintenance and designated Unit of Measure codes to the ones in the purchase order.

**(\*P) Store by ID Package Size** ID types have their own Volume size and locations can be selected to store a designated quantity of ID types. Volumes for ID types are setup in Pallet ID Type Maintenance. This value will be used instead of volume computed for the ID (TotalVolume). ID Types can be associated to a bin location in bin location maintenance where the quantity of the ID type (and Volume) can be designated. When bin locations have designated ID types, directed putaway prioritizes IDs to these locations.

#### **Store to Primary Bin Locations when there is no stock**

Advice to primary bin locations can be done when there is no stock to rotate to the primary bin location. Uncheck the option to lean system to store to the primary locations first. System evaluates settings in the item for the maximum quantities desired as well as the location capacity.

**Putaway Rules** - Directed Putaway evaluates options you set. Click for [company wide options](#), product line and item.

- (\*P) ID Package size. The quantity of an ID type (e.g., pallets) and the volume for mixed IDs in a location. [Click for ID package size settings](#)
- To the preferred area—pick area or to the overflow area
- If preferred Aisles are designated to the product line setup or to the Item Code. [Click for Product line Region - Aisle settings.](#)
- If preferred Regions are designated to the product line setup or the Item Code.
- Should goods go to where it was last received, where the greatest QOH or the least QOH
- Should goods go to the same location where inventory is or nearby to the same location where the item is.
- Bin location restrictions and put away settings. [Click for Bin Location options.](#)
- Bin location capacity. Capacity designates volume factors for mixed goods items and quantity settings for same sized items. [Click for capacity settings.](#)

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking



# Initial Options, Setup and Locations

## IMPLEMENTATION CHECKLIST

### Test Phase 1

Import desired bin locations. Can leave system defaults.

Initialize inventory to ONE location or to Primary locations if good setup in item warehouse location.

Determine warehouses and product lines that need or should be disabled

If importing physical counts—do test import. Freeze before importing. Improve validation for bin locations.

Do setup for each transaction type evaluating factors listed below.

Practice each transaction and get sign off for each department.

Evaluate each transaction type for bottlenecks and efficiencies.

#### **P/O Receiving**

Use RF handhelds?

Lot serial items or Not?

Can the location be automated? Primary or Staging receiving or quality bin location

Receive complete P/O's (Header) or a lot of partial receipts (Lines)?

Directed Putaway necessary in phase 1, 2 or none?

### Determine P/O Receipt of Goods Automation

If using RF Handheld integration, refer to the setup in the RF Handheld software. The following setting generally apply to Sage 100 ERP P/O Receiving data entry options and imports.

Determine if a bin location is assigned to goods received or after the goods are putaway. Receipt of goods data entry can auto assign bin locations to speed data entry. Options provide for Warehouse Receiving location and Primary bin location. Options provide for auto assignment for receive complete P/O's and for partial receipts and will auto assign the location after quantity received.

Most often businesses will auto receive goods into the Receiving staging location when using RF handhelds and when goods need to be checked in. It is best to store goods here also when Putaway takes some time.

(\*E) Determine input of expire data for Lot Serial goods. Expire date can be defaulted in receipt of goods based on UDF expire days option to product line and/or the item code. Goods may want to be received and QA analyzes Receiving bin for expire data.

(\*L) For License Plate determine if pallets are received or built after receipt of goods.

#### **Transfers and Restocking**

Use RF handhelds?

Quick Transfers?

Transaction entry transfers?

Imports?

Replenishment Report?

#### **S/O Shipping**

Enable Directed Picking? Directed Picking algorithms? Sales order pre-allocating?

Determine desired pick flow? By Order and by Wave? By bin or sort code? Print inventory?

Use RF handhelds? Pick allocations? Pick and Pack?

Lot serial items or Not?

Can the location be automated? Primary or Staging or Other

### Determine S/O Picking Sheet Automation - Directed Picking

Determine if directed picking will be implemented. If not, usually a basic setup with the first import of the bin location is satisfactory. Setup for regions (i.e., zones) and location types can probably be spared for this Phase. If the Quantity Available by bin location is desired on the pick sheet select (across) picking sheet template.

Considerations in the business to decide for and against directed picking.

- 1) Are the pickers to be directed where to pick goods and/or want Wave Picking Sheets?
- 2) Is the accuracy of the quantity on hand in bin locations is over 90% accurate?
- 3) Will the Pickers pick from primary pick locations only?
- 4) Is the size of the warehouse manageable and the pickers can pick well without direction?
- 5) Does the business mostly make goods to order and do not shelve finished goods? Do the finished goods produced/assembled go to the Shipping location?

# Initial Options, Setup and Locations

## IMPLEMENTATION CHECKLIST

### **Manufacturing Finished Goods.**

- Where do the goods go for make to order?
- Where do the goods go for storage?
- Do goods go to a staging location for quality review?
- Can the location be automated? Primary or Staging
- Override location by Work Order or Bill?
- Is Directed Putaway desired?

### **Manufacturing Raw Materials**

- RF handheld transfers, issues, completions?
- Are components valuation lot/serial or Not?
- Are components transferred to a staging location before production?
- Can the raw material selection be automated? Raw material primary or in a single location?
- Print pick sheet before component selection or after?

### **Test Phase 2 — Refine for Directed Picking and PutAway**

1. Test well in test company before implementing live
2. Any pick sheets in the warehouse. Pull back into the office and redo allocating inventory
3. Bin Location Master file
  - Select Bin Location types for Overflow and Staging
  - Set Capacity type and Maximum quantity or volume
  - Select Region Codes and Aisles
4. Multi-bin Options for company wide settings
  - For Directed Picking change Print Picking Sheet options to uncheck disallow and enable auto allocate
  - Select Directed Picking options—Directed Putaway options
5. Override by Product Lines and then by Item Codes
  - Designate preferred Regions and Aisles for Directed Picking

### **Go Live**

1. Turn ON in Live Company
2. Copy Multi-bin options file or select same options
3. Initialize multi-bin data for warehouses enabled for Multi-bin
4. Copy Bin Location master file or reimport
5. If using Primary bin locations for items—clean up Primary bin location setup file IM404\_ItemLocation
6. If selecting expiration dates and vendor lot number—can import to master file or Multibin physical file IM404\_Physical
7. If there are Directed Picking or PutAway overrides to Product Lines or Item Codes then can copy setup files
8. Finalize and/or copy picking sheet crystal forms
9. Do Physical count by location. Freeze before importing.
10. Finalize clean up to stock files—IM\_ItemWarehouse, Warehouse Codes
11. After updating physical Live for everyone.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

# Inventory Views and Management

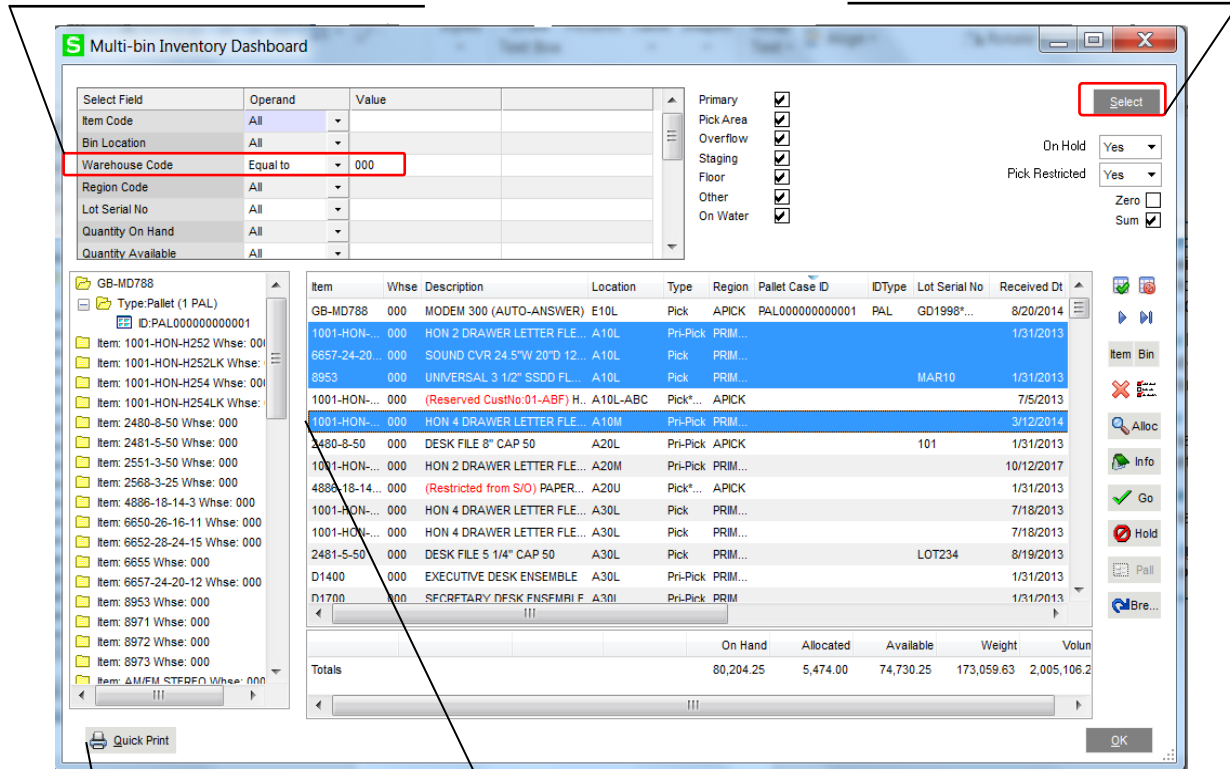
## MULTI-BIN INVENTORY DASHBOARD

### INVENTORY MANAGEMENT > MAIN MENU

Utilize the strength of the selection operands to get at the data you need. Then control click and shift click to select the exact data you wish to transfer, put on hold, break pallets and much more. From the selection grid choose an entire Location or Region/Zone while evaluating net available. Or choose the usual selection fields like Items and Pallets and make unique fields like Lot Serial No, Lot Expire Dates, Quantity Allocated and Net Quantity Available. With On The Water activation select goods on Containers and by expected receive date range.

**Multi-Warehouse selections:** Defaults a single warehouse code. Change warehouse codes to

**Select button:** After selecting fields and options, click the Select button to display



**Quick Print:** Prints an Inventory Quantity On Hand Valuation Report for the inventory in the dashboard.

**Multiple Selections:** Click multiple selections with Control-click and Shift-click. Click the select the green All button to select all inventory; red to clear selections. **Intelligent Refresh** saves your view and time

On Hold	Yes
Pick Restricted	Yes
	Zero
	Sum

**On Hold and Pick Restricted inventory:** Select Yes to include inventory and pallet IDs on hold or locations in locations with a pick restriction. No to not include. Only to only display them.

**Zero:** Displays inventory that has been fully relieved from a location. Options will remove this inventory during period end processing.

**Sum:** Summarized view for the contents of each Pallet ID. Uncheck to display each item in the ID in the grid.

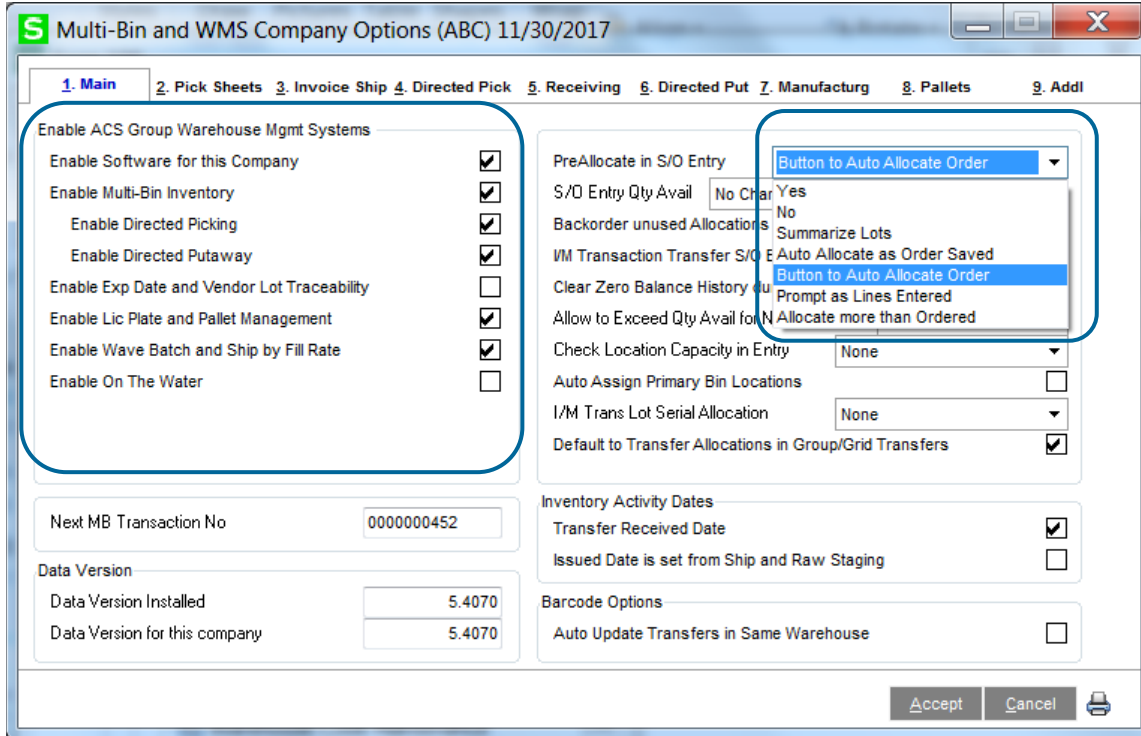
- Transfers:** All selected inventory is passed to the group item/pallet transfer grid. All inventory can be quickly transferred to a location and/or pallet. If one item was selected the quick transfer app is launched. User login role Maintenance rights are required.
- Drill Down/Allocate to Orders:** The allocations for all selected inventory. Can quickly delete allocations and allocate inventory to open sales orders.
- Go/Release:** The release button will immediately release all selected inventory with holds. User login role Maintenance rights are required.
- Hold:** The hold button will immediately put a hold on all selected inventory. User login role Maintenance rights are required.
- Break** Breaks all selected Pallet IDs.

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**ACS WAREHOUSE MGMT SYSTEM OPTIONS - MAIN PANEL**

INVENTORY MANAGEMENT > SETUP MENU

Enable Software for this Company and Enable Multi-Bin Inventory and hitting Accept is sufficient to turn ON the software and proceed with initialization. The system defaults quick startup options and can be overridden any time.



Enable ACS Group Warehouse Mgmt Systems - fields are disabled if not activated in ACS Product Registration.

**Enable Software for this Company and Enable Multi-Bin Inventory** - Click these options ON to enable the Base software for the Company. Uncheck these options to turn OFF.

**Enable Directed Picking** - enables directed picking and auto allocation of sales orders options throughout the system.

**Enable Directed Putaway** - enables directed putaway and advise where to store inventory.

**(\*E) Enable Expiration Date and Vendor Lot Traceability** - Multi-bin WMS Add-on. Enables added Lot Serial options for Expire Date, Vendor Lot Tracing features.

**(\*P) Enable License Plate Pallet Management** - Multi-bin WMS Add-on. Enables License Plate Pallet and Case Pack Management.

**(\*W) Enable Wave Batch and Shipping Control** - Multi-bin WMS Add-on. Enables Wave Batch Picking and Shipping features.

**(\*I) Enable On the Water** - Enables WMS Add-on to track goods in transit during P/O Receipt of Goods and Container Receiving.

**Pre-Allocate in S/O Entry -**

**Yes** allows manual entry and changes to hard-allocate (pre-allocate) inventory in Sales Order Entry.

**No** disallows manual entry (i.e., manual distribution and pre-allocations) in Sales Order Entry.

**Auto Allocate as Order is Saved** auto allocates inventory to the sales order as the order is saved. In Sales Order entry/Header tab the **Auto Allocate checkbox** is defaulted ON as orders are created and changed and will auto allocate the order as saved. That check box can be unchecked to not auto allocate the sales order. Auto allocate uses the full directed picking setup to calculate inventory to allocate.

The **Summarize Lots** option provides a pre lookup summary of Lotted inventory, eliminating quantities by location. This is useful when manually allocating desired lots and lot inventory is in many locations.

The **Button to Auto Allocate Order** provides the **Allocate Button** on the bottom of Sales Order entry. Pressing the button will auto allocate the order and redisplay the sales order lines panel so the results of the allocations can be quickly viewed. Auto allocate uses the full directed picking setup to calculate inventory to allocate.

**Prompt as Lines Entered** displays the distribution dialog as each sales order line is created

**Allocate More than Entered** allows over distribution in sales order entry. The quantity allocable in the distribution dialog is allowed to exceed the quantity ordered.

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**ACS WAREHOUSE MGMT SYSTEM OPTIONS - MAIN PANEL**

INVENTORY MANAGEMENT > SETUP MENU (continued)

**Display Multi-bin S/O Qty Available** - provides alternate quantity available displays on the bottom of sales order lines panel while your field is on the Quantity Order field.

**No Change** does not change the quantity available calculation and display in Sales Order entry.

**Stock Avail and NonSell Options** displays the non-sellable quantity in the quantity available field and the stock warehouse available.

**Stock Avail less NonSell Options** displays the computed quantity available using the stock quantity available and reducing the quantity available for non-sellable quantity.

**Allocated Avail: QOH less Qty Alloc** displays the Allocated Available for the warehouse which is the Item Quantity Available less the Quantity Allocated. Quantity Available is the Item Quantity On Hand less Non-Sellable Quantity if designated in options.

**Backorder Allocations** - This feature applies to pre-allocations in Sales Order Entry and as the order lines are shipped in Invoice Data Entry or Shipping Data Entry ("Invoicing"). If the full the sales order pre-allocation quantity is not used in Invoicing, then the balance of the allocation will be retained in the sales order. After the invoice is updated the allocation balance will be retained for the backorder. Leave this feature OFF if allocations will not be backordered.

**I/M Transaction Transfer S/O Entry Allocations** - This option enhances Inventory Transaction Entry Transfers to exclude the quantity on S/O entry Pre Allocations. This provides the capability to transfer inventory and automatically move the S/O Entry Allocations. During I/M transaction Update the system will move allocations to keep the transferring location from net negative quantity available.

**Clear Zero balance History During I/M Period End** - Allows the system to clear zero balance item entries out of Bin Location Maintenance when the period is closed. Transaction history detail will remain.

**Allow to Exceed Quantity Available for Non-Lot/Serial** - This option allows the system to exceed quantity available by allocating more items from the bin then quantity on hand. This is especially useful for users who transfer items from auxiliary or overflow locations to a primary pick location. Select **Only Selected Locations** to allow exceed quantity available in designated locations. To exceed for a location set Exceed Available in the location option **Allow to Exceed Quantity Available and Capacity**.

**Check Location Capacity in Entry** - Only check put options verifies the directed put options for the location. The Ck Capacity and Put Options will also check the remaining balance of capacity during data entry.

**Auto Assign Primary Bin Locations** - Ideal for locations for quick pick areas. The system will auto create the primary bin location setup for the item when an item lands in a bin location designed as a primary bin location. As QOH is reduced, the primary setup is cleared when there is no stock. It will retain at least one primary setup. Minimums and maximum quantities are copied to the next location created.

**I/M Trans Lot Serial Allocation** - Select any option other than None to allow auto allocate bin locations during I/M Transaction entry transfers. The system will provide fields on the Transaction Entry Header panel for the default from and to locations.

**Default to Transfer Allocations in Group/Grid Transfers** - Check this option ON to default the quantity allocated in the Transfer grids screen.

**Inventory Activity Dates:** These activity date options enhances multi-bin transfers to default when the received and issued dates are changed. By leaving both of these options unchecked then the received and issued dates will change each time a transfer is performed. By checking them ON then dates will default to change when coming from an inbound or outbound staging location. Both transaction entry transfers and quick transfers provide a drop down Transfer Option field to override these defaults.

**Received Date is set from Rec and FG Staging** - The Receipt date is changed when transferring goods from a warehouse receiving (or a mfg finished goods) staging location or a location within the receiving (or a mfg finished goods) location region.

**Issued Date is set from Ship and Raw Staging** - The Issued date is changed when transferring goods to a warehouse shipping (or a mfg raw material) staging location or a location within the shipping (or a mfg raw material) location region.

**Multi-Bin for Barcode Options: Auto Update Transfers in Same Warehouse** - While using RF barcode handhelds, this option allows the system to complete "quick" same warehouse transfers without going through the update process in Inventory Transaction Entry.

**Next MB Transaction No** - Provides an internal transaction number to group transactions. Individual transfers with quick transfer are assigned a single number and group transfers are assigned the same number to group them. All items assigned to license plate ID (\*P) are grouped with same number as the ID is transferred.

**ACS WAREHOUSE MGMT SYSTEM OPTIONS - PICK SHEET PANEL**

INVENTORY MANAGEMENT > SETUP MENU

Picking Sheet options gives options to Auto Allocate Inventory while printing, options to printing available inventory by bin location on a pick sheet sub report, options to print a wave pick sheets and options for the Wave Batch Ship by Fill Rate add-on.

**Picking Sheet Allocation Options -**

**Disallow Picking Sheet Auto Allocations -** Supersedes Picking Sheet printing to not auto allocate inventory as pick sheets are printed. Uncheck to allow auto allocations during printing.

**Default to Auto Allocate Inventory from Bin Locations -** Defaults the Auto-Allocation Option in picking sheet printing. Uncheck to click auto allocate option on the fly as you print.

**Default to Print Allocations not Available Inventory -** Click OFF to default the option to not print only allocations and to print the available inventory sub report on the pick sheet.

**Only Print S/O Lines with Allocations -** Click ON to only print inventory allocated on the sales order. Uncheck to print unallocated lines. The invoice will reflect the unallocated line as not shipped.

**Enable Print Pick Sheet Allocations for B/M and W/O -** When this option is turned ON B/M picking sheet printing will provide the ability to select Production No's and will print the raw material allocations on the pick sheet. Work Order provides an option in Work Order Pick Sheets to print only allocations for the work order.

**Wave Pick Sheets -** will print allocated inventory in bin location order (or sort code) the pick sheet for each order and a pick sheet for multiple orders. Also see [printing allocations and inventory](#) and [wave picking sheet forms](#). System defaults No to not print a wave pick sheet. Yes provides a prompt at the end of picking sheet printing to print a wave pick sheet for multiple orders. Std Form prints a wave pick sheet in the regular Sage 100 pick sheet and Std & Wave prints both pick sheets.

Select the **Std Form** option in Multi-bin Options Wave Pick Sheet **Print Wave Pick Sheets on-the-fly**. This will enable and provide the option in Picking Sheet printing for the **Sort Allocations Std Form**. This check box needs to be clicked ON to print and sort by allocations.

**Print Wave Pick Sheets on-the-fly -** the Wave Picking Sheet for Multiple Orders is selected to print with **Yes** and **Std & Wave**. After printing a range of sales order picking sheets you will receive the prompt to print the Wave Picking sheet.

**Bin Location Print Order -** Select by **Bin Location** will sort pick sheets in alpha-numeric order by Bin Location Code. Select by **Sort Code** will sort the report by the Sort Code entered in Bin Location Maintenance. This option give users the most control over Wave printing.

**Picking Sheet Available Inventory Options - for Sales Order, Bill of Materials and Work Order**

Multi-bin pick sheet templates always print inventory allocated to sales orders. Allocations will begin a row.

**Bin Location Print Order -** sorts the output. **Bin Location** sorts inventory by bin location code. **Sort Code** will print inventory by the bin location sort code. **Primary Pick Location** to print primary locations first. **Received in Location FIFO** prints in FIFO order. You can print the FIFO date also because the pick sheet sub report fields includes the FIFO date for each column.

**Override Sort for Lot Serial Items -** Will change the sort order for available inventory for Lot Serial valuations. **Lot Number** to sort by Lot Serial Number. **Expiration Date** to sort by the item's expire date. Only available when using Multi-Bin Expiration Date Control add-on. **Not Applicable** will not override the print order for Lot Serial inventory.

**Type of Quantity to Print -** Allows users to decide how quantity is displayed, as **Quantity on Hand** or **Quantity Available**.

**Limit to One Row of Inventory -** Because the pick sheet is able to print all bins for a given item, users have the ability to limit the output of bin locations to a single row across. Not applicable to allocations.

**Warn when Primary Location at Replenish Point -** Click ON to track when items in the Primary bin locations satisfy the minimum replenish points. With Directed Putaway and the putaway dashboard, the system will track all replenishments for the day with a batch number using the Day Code. History is retained as for all advised replenishments for the day. The user is prompted after picking sheet printing to print.

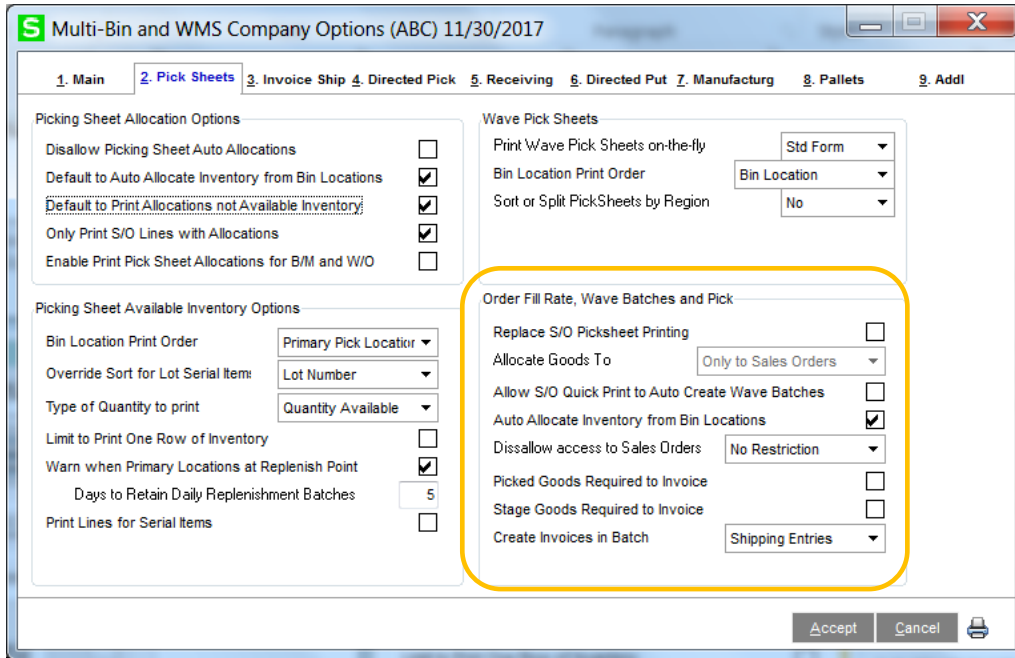
**Days to Retain Daily Replenishment Batches -** Enter the number of days to retain replenishment batches. Batches will be purged during the sales journal and Inventory Period End Processing.

**Print Lines for Serial Items -** Click ON to print individual lines for the quantity ordered for each serial number picked.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ACS WAREHOUSE MGMT SYSTEM OPTIONS - PICK SHEET PANEL

INVENTORY MANAGEMENT > SETUP MENU (continued)



(\*W) Wave Pick Batch Options

**Replace S/O Picking Sheet Printing** - Wave Batch selection screen will come up instead of S/O picking sheet printing.

**Allow S/O Quick Print to Auto Create Wave Batches** - Defaults the **Create Wave Batch** in S/O Quick Print for Picking Sheet Printing to automatically create a wave batch. Uses defaults options in Wave Batch for Splits. If splitting the pick sheet use the S/O Pick Sheet Template for Splits to print split pick sheets and the pick sheet header will reference the split pick sheet Wave Batch number.

**Auto Allocate Inventory from Bin Locations** - directed picking auto allocate inventory in batches.

**Disallow access to Sales Orders** - Sets restrictions for users accessing sales orders when selected to a batch. Choose no restriction, to restrict when the order has been added to a batch or restrict when picking has been started.

**Picked Goods Required** - Designates that the Wave Pick needs to be performed before allowing to be invoiced/ shipped.

**Stage Goods Required** - Designates that goods needs to be transferred to the staging location before invoicing.

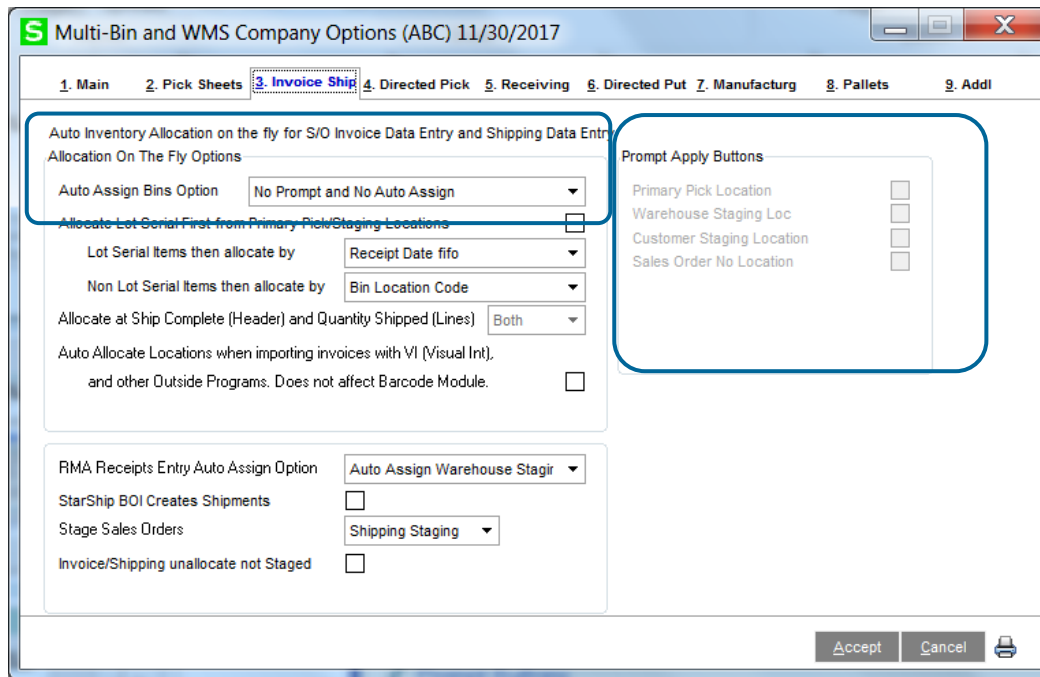
**Create Invoices in Batch** - Choose to allow batches to create Invoices or Shipping entries.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ACS WAREHOUSE MGMT SYSTEM OPTIONS - INVOICE SHIP PANEL

INVENTORY MANAGEMENT > SETUP MENU

**Allocation On The Fly Options** When items are not allocated prior to Invoicing, the system will require bin location selections during Sales Order Invoicing or Shipping Data Entry. Multi-Bin WMS provides options to help automate those selections if desired. We refer to these as “Allocations on the Fly”. Auto allocations can occur with a prompt, automatically (blind to the user in data entry) and as invoices are imported.



**Allocation On The Fly Options** - To help automate bin assignments, users can allocate on the fly. This is especially useful when taking advantage of staging locations or overloading primary bins.

**Auto Assign Bins Option** - There are several auto assign options:

- **Prompt Auto Buttons, No Assign** - A pop-up prompt will appear (from the selections made in the right side of this screen.) The system will auto-assign based on that selection.
- **Auto Assign Primary Item Bin Location** - Will automatically ship the item from the Primary Pick Location set in Inventory Maintenance.
- **Auto Assign Warehouse Staging Location** - Will automatically ship the item from the Warehouse Staging Location designated in Warehouse Code Maintenance.
- **Auto Assign Customer Staging Location** - Will automatically ship the item from this customer's specific staging location.
- **Auto Assign Sales Order Staging Location** - Will automatically ship the item from this Sales Order's specific staging location. The bin location is created automatically for the sales order number. The location is also automatically removed when the sales order is. No inventory can be in the location to be automatically removed.
- **No Prompt, No Auto Assign** - Requires a completely manual selection of bins.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



## Company Options

### ACS WAREHOUSE MGMT SYSTEM OPTIONS - INVOICE SHIP PANEL

INVENTORY MANAGEMENT > SETUP MENU (continued)

**Allocate Lot Serial First from Primary Pick/Staging Locations** - Allocates Lot / Serial Items first from the primary pick or staging locations.

**Lot Serial Items the allocate by** - After Lot/Serial items have been exhausted from the primary pick or staging location, the system can pull by:

- **Lot/Serial Number** - Pulls from the bin with the next sequential lot or serial number (great if dates are used in the lot number).
- **Receipt Date** - Pulls from the bin with the next receipt date, where the FIFO method will be used.
- **(\*E) Expiration Date FIFO** - Pulls from the bin with the next closes expiration date. Only available if the Expiration Date Control module is installed.

**Non Lot Serial Items Then allocate by** - For not lot serial numbers, the system can use a number of options for auto allocating:

- **Bin Location** - The system will simply allocate from the next bin with quantity available of that item.
- **Overload Bin and Allow Negative QOH** - The system will allocate all quantity to the item's primary bin location and overload it (allowing the quantity on hand to go negative).
- **Only from Primary Staging Location** - The system will only allocate from the staging location. If there is not enough quantity on hand in the staging location, the line will not be shipped in full.

**Allocate from Header and Lines** - Designates when to allocate

- **Header** - Like Ship Complete, auto allocates when selecting the Lines panel the first time.
- **Lines** - Auto allocates after selecting the Quantity Shipped. This option works well with Visual Integrator and BOI invoicing.
- **Both** - does Header Ship Complete and then allocations change for Lines Quantity Shipped.

**Auto Allocate Locations when importing invoices with VI...** - click ON to auto allocate inventory when importing invoices and uncheck to disable.

**RMA Receipts Entry Auto Assign Option** - Choose to auto allocate inventory from Staging locations, primary locations or not applicable.

**StarShip BOI Creates Shipments** - click ON only if the BOI version of StarShip is used. See the full setup for BOI StarShip in the appendix.

**Stage Sales Orders** - sets an automatic transfer action after selecting a sales order in the Stage Sales Order program. Select **Shipping Staging** to assign Shipping staging location as each order line/allocation is listed. Select **To Pallet ID** to designate the transfer action To Pallet as each line is listed.

**Invoice/Shipping unallocated not Staged** - will auto ship each line that is allocated in a staging location and unship and unallocated those lines that are not.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**ACS WAREHOUSE MGMT SYSTEM OPTIONS - DIRECTED PICKING PANEL**

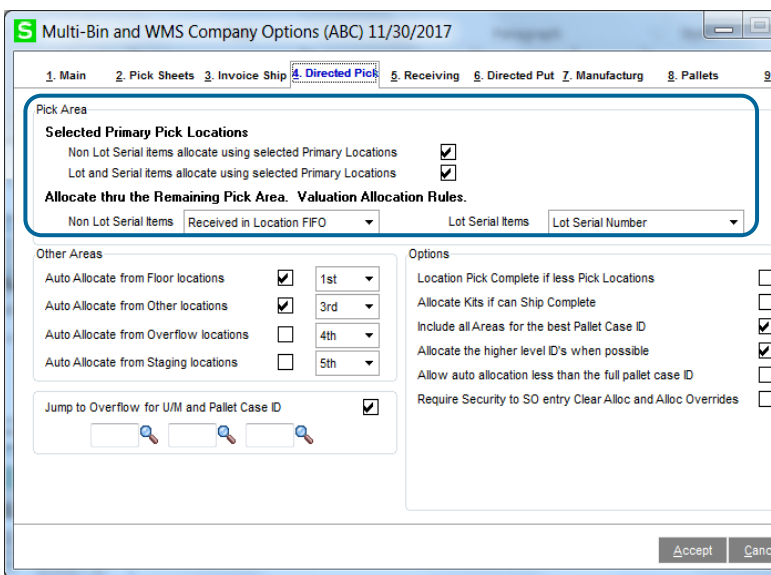
INVENTORY MANAGEMENT > SETUP MENU

**ACS Multi-bin and WMS Directed Picking** automatically allocates inventory to sales orders so you can sell the optimal goods and from the optimal bin locations. Directed Picking options are first setup on a company level in ACS Warehouse Mgmt System Options. Options can be superseded in Product Line Maintenance for the Product Line and then Item Maintenance directed picking options provides the ultimate setting for the Item. Overrides to the picking algorithm can be done in the sales order, customer and other. Directed Picking requires activation and to be enabled on the main panel. This tab is disabled if Directed Picking is unchecked.

The different ways to auto allocate orders before picking:

- Auto allocations can occur automatically as the order is saved,
- by clicking on the Allocate button in the order,
- as the pick sheet is printed,
- as orders are imported,
- as the order is selected to pick on the handheld,
- selected in Wave Batch and Stage Sales Orders

The allocated inventory for the sales order can be printed on the pick sheet to direct the picker and the information is resident on RF handhelds to both direct the pickers and to offer validation right goods and lots are picked. [Click here to review more about Directed Picking.](#)



**Directed Pick location types.** A typical distribution setup is where picking is from Pick Locations and to pick from the Primary bin locations first. Then to pick from the Overflow locations when the pick area is depleted or pick from the Overflow locations when there is a large order. Picking large orders from the Overflow helps you to not run out of inventory in the Pick Area. If you have non-breakable case packs or pallets - you can designate that and the system will know to get the case pack/pallet from the Overflow. We help you keep up stock in the primary locations or other pick locations with replenishment.

- Pick Area– Non-Primary Locations different items usually exist in a location.**
- Pick Area– Primary Pick Locations. Same item exists year round or is in pick from first area.**
- Overflow Locations - usually has back stock, case packs, pallets.**

**Pick Area– Primary Pick Locations: Non Lot Serial Items...** check to allocate first and **Lot Serial Items...** check to allocate first

**Valuation Allocation Rules for Non Lot Serial items**

- Bin Location Code** allocates all areas to the next bin location code, ascending order
- Least Quantity in Bin Location** allocates all areas by the least quantity available in the location
- Received in Location FIFO** allocates all areas in FIFO order, by the last received date in the location.
- Sort Code - Wave** allocates all areas by the bin location sort code.
- None** allocates only within the Pick Area.
- None Exceed Qty Avail** allocates only within the Pick Area and exceeds quantity available if needed to allocate an order.

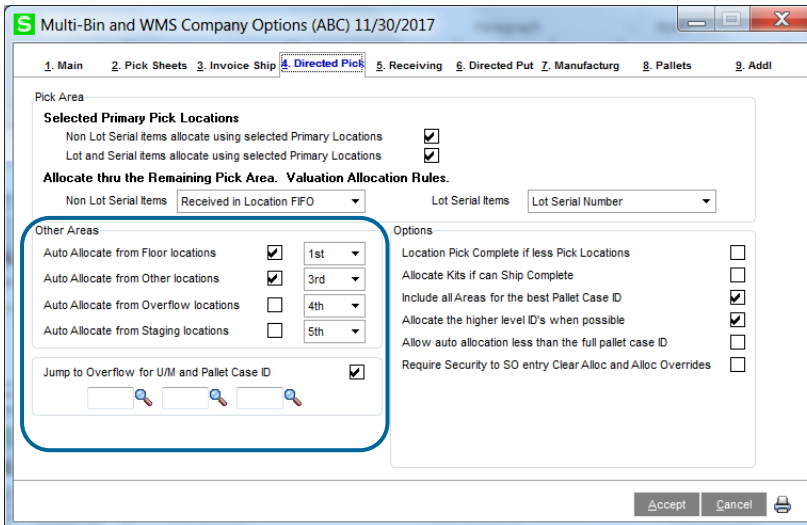
**Valuation Allocation Rules for Lot Serial items**

- Receipt Date Fifo** allocates by the Lot Serial oldest receipt date.
- Lot Serial Number** allocates by the lowest Lot Serial Number.
- Expiration Date (\*E)** allocates by the oldest Expiration Date. If the goods are expired it will not allocate. The system will evaluate to include and exclude inventory based on the user defined the minimum and maximum expire days set in for Customers and Sales. Click for expire user fields. Null expire dates allocates first and by the Lot Serial Receipt Date.
- Receipt Date Lifo** allocates by the Lot Serial youngest receipt date.
- None** indicates to only allocate from the primary bin location to the extent of quantity available and to not go any further.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ACS WAREHOUSE MGMT SYSTEM OPTIONS - DIRECTED PICKING PANEL 2

INVENTORY MANAGEMENT > SETUP MENU (continued)



**Other Areas:** click ON to auto allocate from these locations types/areas when the previous area, based on the priority code, is depleted.

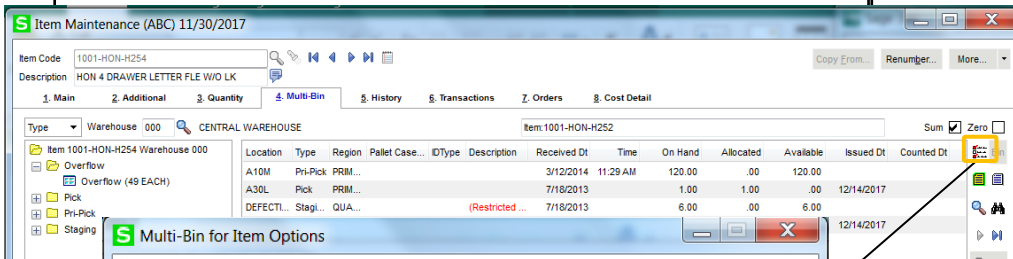
**Auto Allocate from Floor Locations** floor location type can be designated 1st which indicates to allocate before the Primary Bin Locations.

**Auto Allocate from Other Locations** useful to allocate inventory from a nearby building or anywhere you want to pick the same day as the pick area.

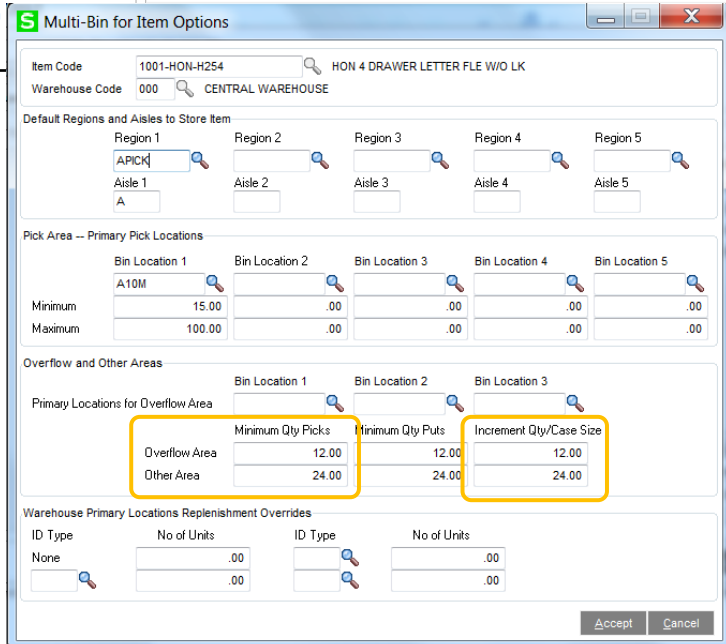
**Auto Allocate from Other Locations** when you want to pick from the Other area automatically when the previous pick areas are depleted. Uncheck if you don't to automatically pick from the Other area or when you want to pick from the Other area for a large order/case pack/pallet and with the minimum quantity to pick setting.

**Auto Allocate from Overflow Locations** when you want to pick from the Overflow automatically when the previous pick areas are depleted. Uncheck if you don't to automatically pick from the Overflow or when you want to pick from the Overflow for a large order/case pack/pallet and with the minimum quantity to pick setting.

**Jump to Overflow and Other Areas for Large Orders, Case Packs and Pallets** check to allocate based on the Large Order **Minimum Qty Picks** setting in Item Maintenance or when sales orders have the Unit of Measure code. The Increment Qty/Case Size designates quantity as non-breakable.



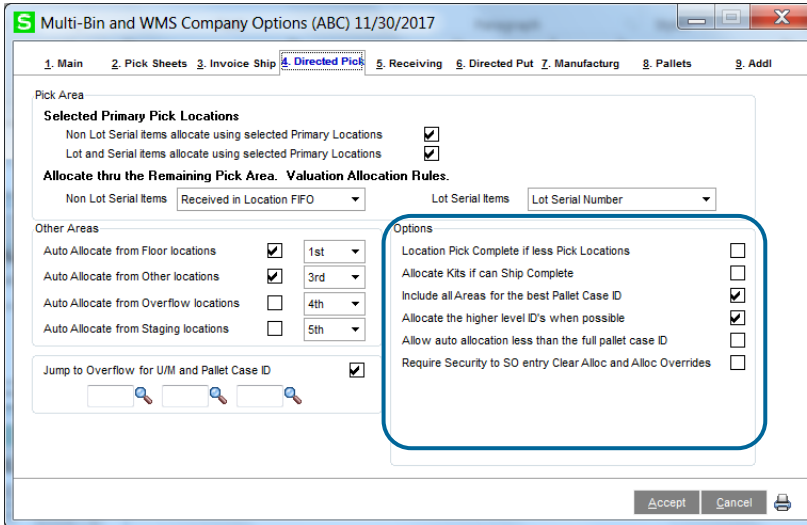
**Auto Allocate from Staging Locations** when you want to auto allocate from Receiving and other staging locations. Usually unchecked so staging locations are not automatically allocated from.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ACS WAREHOUSE MGMT SYSTEM OPTIONS - DIRECTED PICKING PANEL 3

INVENTORY MANAGEMENT > SETUP MENU (continued)



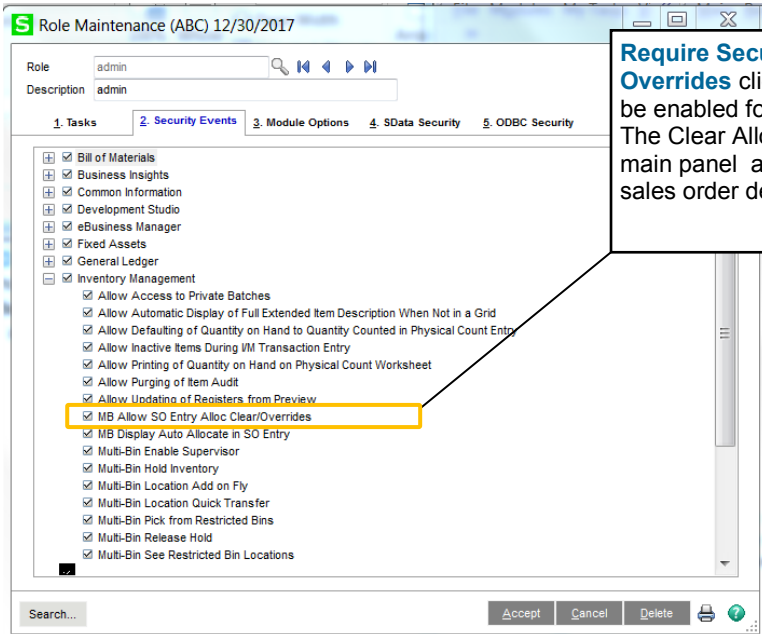
**Location Pick Complete if less Pick Locations** when desiring to allocate when newer lots exist in locations with older lot serial items. If during allocation of for Lot Serial goods in FIFO if the system calculates fewer number of locations to pick because it encountered newer Lot Serial items.

**Allocate Kits if can Ship Complete** system will evaluate if the kit can allocate completely before allocating.

**Include all Areas for Best Pallet Case ID** system seeks to allocate ID from other IDs to fill an order.

**Allocate the higher level IDs when possible** the system will seek to allocate larger IDs for an ID to fill an order.

**Allow auto allocation less than the full pallet case ID** allows IDs to break in order to allocate. Uncheck to force full allocation of an ID to allocate.



**Require Security to SO entry Clear Alloc and Alloc Overrides** click ON to force Role Maintenance security to be enabled for users to see the Clear and Override utilities. The Clear Allocations hyperlink exists on the sales order main panel and the Allocation Override hyperlink is on the sales order detail tab.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

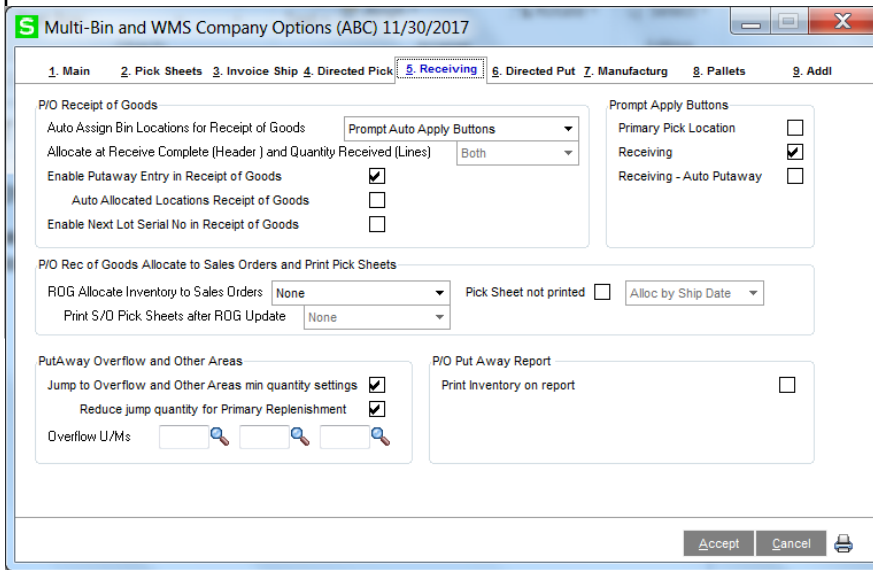
**ACS WAREHOUSE MGMT SYSTEM OPTIONS - RECEIVING PANEL**

INVENTORY MANAGEMENT > SETUP MENU

**P/O Receipt of Goods**

**Auto Assign Bins Prompt for Non Lot Serial Items** - When entering a receipt of goods, the system can help user automate the distribution process if desired.

- **Prompt for Item and Warehouse Buttons** - A pop-up prompt will appear, allowing the user to select assignment of the Primary Item location, the Warehouse Receiving Staging location and Auto Putaway. Select the desired buttons from the choices on the right.
- **Auto Assign Item Primary Bin Location** - Will automatically receive the item to the Primary Item location set in Inventory Maintenance.
- **Auto Assign Warehouse Staging Location** - Will automatically receive the item to the Warehouse Receiving Staging Location designed in Warehouse Code Maintenance.
- **No Prompt, No Auto Assign** - Requires a completely manual selection of bin locations.



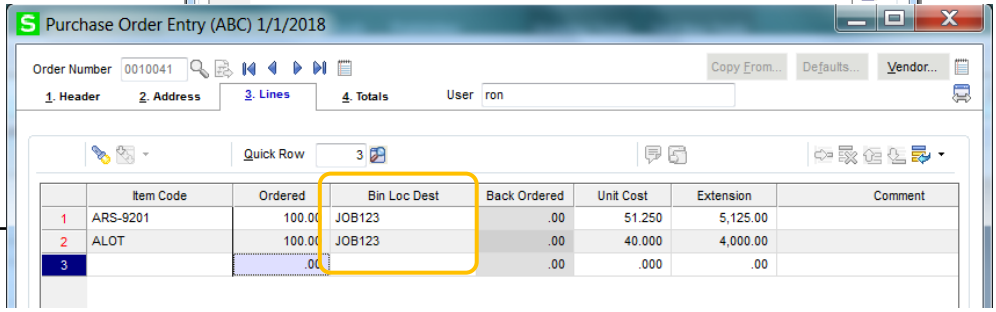
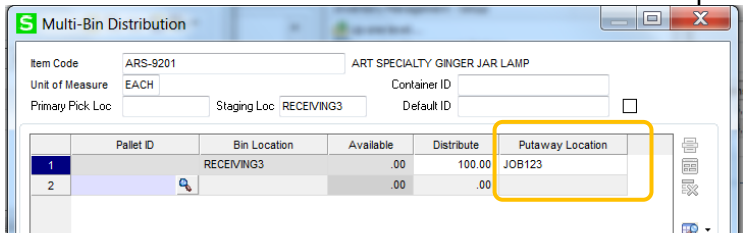
**Allocate from the Header and Lines - Header** Provides automatic allocation to bin locations during the receive complete option. When switching to the Lines panel from the Header.

**Lines** Provides automatic allocation to bin location during when the Quantity Received is entered.

**Both** will do receive complete and auto assign for Quantity Received for new receiving lines.

**Enable Putaway Entry in Receipt of Goods** provides Putaway Location in distribution. Use Putaway when receiving to a staging location and you require to pass the desired putaway location. Putaway can be viewed via the Receiving location, printed on the Purchase Order Putaway Report and via the directed putaway system and putaway reports. Putaway locations can be preselected in Purchase Order entry Lines tab. Those entries automatically pass thru to receiving.

**Auto Allocated Locations Receipt of Goods**  
When Directed Putaway is enabled the system can auto assign the putaway location which will evaluate capacity of the locations and your putaway preferences.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ACS WAREHOUSE MGMT SYSTEM OPTIONS - RECEIVING PANEL

INVENTORY MANAGEMENT > SETUP MENU

**P/O Receipt of Goods**

Multi-Bin and WMS Company Options (ABC) 11/30/2017

1. Main 2. Pick Sheets 3. Invoice Ship 4. Directed Pick 5. **Receiving** 6. Directed Put 7. Manufacturing 8. Pallets 9. Add

**P/O Receipt of Goods**

Auto Assign Bin Locations for Receipt of Goods  Prompt Auto Apply Buttons

Allocate at Receive Complete (Header ) and Quantity Received (Lines)  Both

Enable Putaway Entry in Receipt of Goods

Auto Allocated Locations Receipt of Goods

Enable Next Lot Serial No in Receipt of Goods

**Prompt Apply Buttons**

Primary Pick Location

Receiving

Receiving - Auto Putaway

**P/O Rec of Goods Allocate to Sales Orders and Print Pick Sheets**

ROG Allocate Inventory to Sales Orders  Orders selected on P/O's  Pick Sheet not printed  Alloc by Ship Date

Print S/O Pick Sheets after ROG Update  Prompt

**P/O Put Away Report**

Print Inventory on report

Pallet ID	Lot Number	Bin Location	Available	Distribute	Putaway
1			.00	.00	

Next ID Auto IDs **Next Lot No** Distribution Balance 10.00

Default Masters  Dir ID Type PAL

**Enable Next Lot Serial No in Receipt of Goods** displays the Next Lot No Button in the PO Receiving Distribution screen. Click the button for the next lot number which is the Year Month and number item is received in the month.

**P/O Rec of Goods Allocate to Sales Orders and Print Pick Sheets** auto allocates received inventory to sales orders. The results of allocations are printed on the back order fill report which is printed before updating receiving. Subsequent to the hard allocations performed during the receipt of goods update—the system will offer to print the sales order pick sheets for the all of the orders allocated.

**ROG Allocate Inventory to Sales Orders** — select None to disable

**S/O Backorders only** will only auto allocate receipts to backorder type sales orders.

**S/O Backorders - Std Orders** will auto allocate receipts to backorder type sales orders and standard sales orders with a quantity backordered.

**Orders selected on P/O's** will only auto allocate receipts where the sales order number is selected on the Purchase Order detail line.

**Pick Sheet not printed** — before selecting orders to allocation - checking this option verifies sales order pick sheet was not printed.

**Alloc by Ship Date or by the Sales Order No** — allocation sort order

**Print S/O Pick Sheets after ROG Update** — Prompt for printer to print to or a printer can be pre selected in options

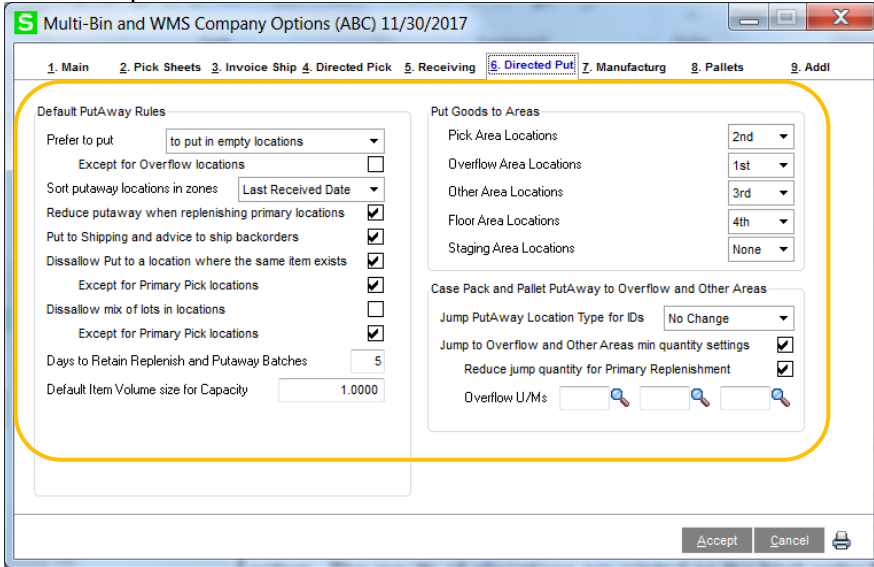
**P/O Putaway Report during Purchase Order Printing** — print locations for the purchase order detail item code.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**ACS WAREHOUSE MGMT SYSTEM OPTIONS - DIRECTED PUT PANEL**

INVENTORY MANAGEMENT > SETUP MENU

**Directed Putaway** options directs the system where goods are stored. System direction can be calculated in batches where the system advises putaway from staging locations or advise can be calculated on the fly as you receive inventory. Putaway uses your preferences where you want to putaway items and product lines, options in Sage and considers the capacity of destination locations. Some users prefer to not mix items in locations, to put in overflow/back stock locations to later rotate or to put goods straight in primary bin locations. Results of the putaway advise can be printed on putaway reports/forms and be access on handhelds. [Click here to read more details in Directed Putaway Summary.](#) Directed Put fields are enabled if activated and directed put is enabled.



**PUT GOODS TO AREAS**

Set the preference of priorities to put goods away based on all of the Location Type/Areas. Priority to set Overflow or Pick areas to put goods away to.

**DEFAULT PUT AWAY RULES**

**Prefer to put** - initial preference to putaway: **to put in empty locations, where the same item exists or to put another item exists.**

**Sort putaway locations in zones** leans putaway advise based on Last Received Date or Quantity on Hand in the locations.

**Reduce putaway when replenishing primary locations** check to reduce replenishment quantity (i.e., the quantity going to a primary location) for the quantity that is not in the primary location. Unchecking will initially calculate to put the full putaway quantity to the primary location.

**Put in Shipping and advice to ship backorders** - if there is no stock and has backorders the system will skip other advice to advice to transfer goods to the Shipping Staging location. It advises up to the quantity on backorder and the Shipping Staging location must be setup in Warehouse Code Maintenance.

**Dissallow Put to location where the same item exists** - skips puts where the same item exists. **Except for Primary Pick Locations** designated in inventory maintenance. Skipping the primary location is normal.

**Dissallow mix of lots in locations** - skips puts to locations with the same item and different lot numbers.

**Days to retain Replenishment and Putaway Batches** - number of days to retain batches before automatically purging. Purges during I/M Period End Processing and the S/O Sales Journal/Invoice Update.

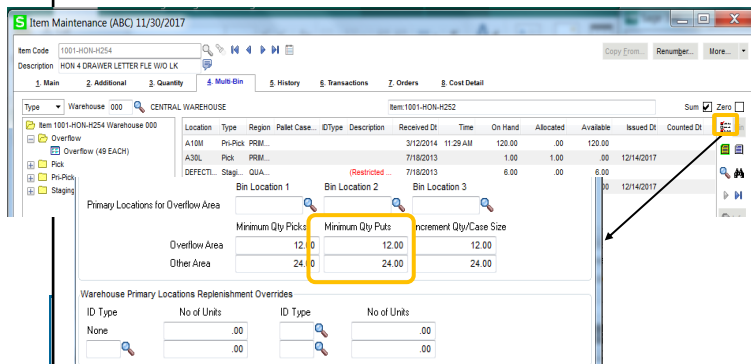
**Default Item Volume size for Capacity** - provides a default volume size to assist startup of the putaway by Volume sizes. This volume size is used when there is no value in the **Volume** field in Item Maintenance.

**CASE PACK AND PALLET PUTAWAY TO OVERFLOW AND OTHER AREAS**

**Jump Putaway Location Type for IDs** - allows you to set a location type/area for putaway of IDs.

**Jump to Overflow and Other Areas min Quantity Settings** - in Item Maintenance

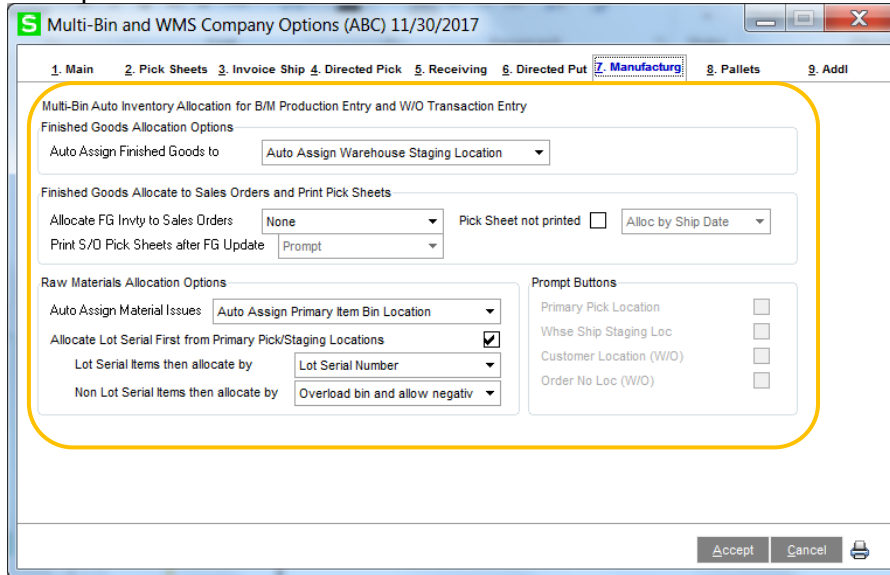
- set minimum quantity to put goods away to Overflow and Other areas.



**ACS WAREHOUSE MGMT SYSTEM OPTIONS - MANUFACTURING PANEL**

INVENTORY MANAGEMENT > SETUP MENU

FINISHED GOODS ALLOCATION OPTIONS - Default to auto assign the primary bin location or the warehouse staging location.



**Finished Goods Allocate to Sales Orders and Print Pick Sheets** auto allocates finished goods inventory to sales orders. The results of allocations are printed on the back order fill report which is printed before updating. Subsequent to the hard allocations performed during the update—the system will offer to print the sales order pick sheets for the all of the orders allocated.

**Allocate Inventory to Sales Orders** — select None to disable

**S/O Backorders only** will only auto allocate receipts to backorder type sales orders.

**S/O Backorders - Std Orders** will auto allocate receipts to backorder type sales orders and standard sales orders with a quantity backordered.

**Orders selected on Work Orders** will only auto allocate completions where the sales order number is selected.

**Pick Sheet not printed** — before selecting orders to allocation - checking this option verifies sales order pick sheet was not printed.

**Alloc by Ship Date or by the Sales Order No** — allocation sort order

**Print S/O Pick Sheets after FG Update** — Prompt for printer to print to or a printer can be pre selected in options

**Raw Materials On The Fly Options** - To help automate bin assignments, users can allocate on the fly. This is especially useful when taking advantage of staging locations or overloading primary bins.

**Auto Assign Bin Option** - There are several auto assign options:

- **Prompt Auto Apply Buttons** - A pop-up prompt will appear (from the selections made in the bottom half of this screen.) The system will auto-assign bins based on that selection.
- **Auto Assign Primary Item Bin Location** - Will automatically pull the component item from the Primary Pick Location set in Inventory Maintenance— Multi-bin Tab.
- **Auto Assign Warehouse Staging Location** - Will automatically pull the component item from the Warehouse Staging Location designated in Warehouse Code Maintenance.
- **No Prompt, No Auto Assign** - Requires a completely manual selection of bins.

**Allocate Lot Serial First from Primary Pick/Staging Locations** - If users choose to let the system allocate Lot / Serial Items, they can choose to first check the primary pick or staging locations.

**Lot Serial Items the allocate by** - After Lot/Serial items have been exhausted from the primary pick or staging location, the system can pull by:

- **Lot/Serial Number** - Pulls from the bin with the next sequential lot or serial number (great if dates are used in the lot number).
- **Receipt Date** - Pulls from the bin with the next receipt date, where the FIFO method will be used.
- **(\*E) Expiration Date FIFO** - Pulls from the bin with the next sequential expiration date. This option is only available if the Expiration Date Control module is installed.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



ACS WAREHOUSE MGMT SYSTEM OPTIONS - PALLET ID PANEL

INVENTORY MANAGEMENT > SETUP MENU

PALLET CASE ID DEFAULTS - **ID Code Length** default is 15, maximum length is up to characters. After making changes to the length, review the changes made to the next Pallet ID numbers in the Pallet ID Type maintenance.

**Default ID Type Code** defaults this ID Type in all transactions. It saves time if one or two type codes are used.

**Container ID Type Code** if On The Water Container Receiving is enabled select the Container ID type code to assist receipt of goods container entry.

**Check Full Pallet Distribution in Bill of Materials** check for B/M Production Entry to validate entry of Pallet Distribution Finish Goods. Uncheck to turn off this validation.

**Check Full Pallet Distribution in Work Order** check for W/O Completions to validate entry of Pallet Distribution Finish Goods. Uncheck to turn off this validation.

**Enable Invoice/Ship Allocate Pallet IDs.** This option displays a link in S/O invoice entry lines panel and Shipping Entry. This is an auto allocation link to provide a pallet ID selection screen which when processed it will auto allocate the selected IDs to invoice/ship lines.

**Enable to Stage Sales Orders:** sets an automatic transfer action after selecting a sales order in the Stage Sales Order program. Select **Shipping Staging** to assign Shipping staging location as each order line/allocation is listed. Select **To Pallet ID** to designate the transfer action To Pallet as each line is listed.

**Require Sales Orders to be Staged:** will auto ship each line that is allocated in a staging location and unship and unallocated those lines that are not.

**Enable SSCC alias for Pallet Case ID:** check to allow the Pallet ID SSCC Alias field to auto select IDs from the regular Pallet ID field.

**Mfg Auto Finished Good Pallets:** select to auto build IDs for finished goods blind and without a pop-up. Choices are **One Pallet ID** is created for the Finished Goods and **Qty Per Pallet Options** which will auto build the quantity IDs based on the Quantity Per Pallet options set in Item and Product Line Maintenances.

**Putaway Location Type for IDs:** allows you to set a location type/area for putaway of IDs.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**ACS WAREHOUSE MGMT SYSTEM OPTIONS - ADDL PANEL**

INVENTORY MANAGEMENT > SETUP MENU

ADDL PANEL OPTIONS - includes On The Water add-on options and other options for physical count and options for the quantity available computation in the system.

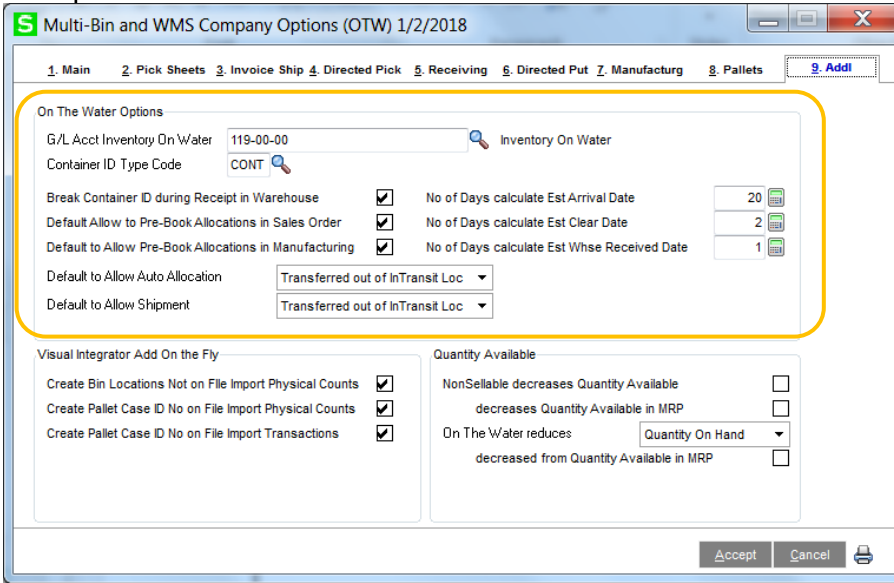
**ON THE WATER OPTIONS** - fields for On The Water add-on are enabled if activated and is enabled.

**G/L Acct Inventory On Water** - complete field to auto debit instead of the debit of stock Inventory account when Receipt of goods is On The Water.

Account is reduced when goods are received in the warehouse. Leave field blank if you do not want this feature.

**Container ID Type Code** provide the ID Type Code for Container types. This is required when using Containers in the system. Its suggested to not use the usual Pallet ID Type code.

**Break Container ID during Receipt in Warehouse** - will auto break Containers when goods are received in the warehouse. This break is automatically done in Container Receipt of Goods and P/O Receipt of Goods Entry.



**Default Allow to Pre-Book Allocations in Sales Order** - this is a default that applies new purchase orders designated as On The Water. Click ON to allow pre-allocations in Sales Order entry to Inventory inTransit, where the P.O. is received On The Water.

**Default Allow to Pre-Book Allocations in Manufacturing** - this is a default that applies new purchase orders. The field is for future use.

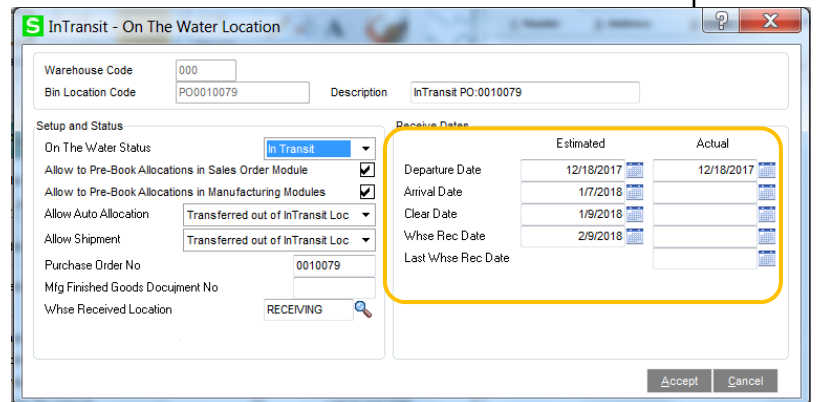
**No of Days calculate Est Arrival Date** - calculates an estimate when goods will be received in Customs based on when the PO hits the water.

**No of Days calculate Est Clear Date** - calculates an estimate when goods will clear Customs based on when the goods are received in Custom.

**No of Days calculate Est Whse Received Date** - calculates an estimate when goods will be received in the warehouse after goods clear customs.

**Default to Allow Auto Allocation** - grants when inventory can be auto allocated. The default is to allow auto allocation after when goods are received in the warehouse. The system will allow auto allocation sooner ultimately based on the options in the InTransit bin location. It checks the On The Water Status if the PO is intransit or in the warehouse.

**Default to Allow Shipment** - feature disabled for now.

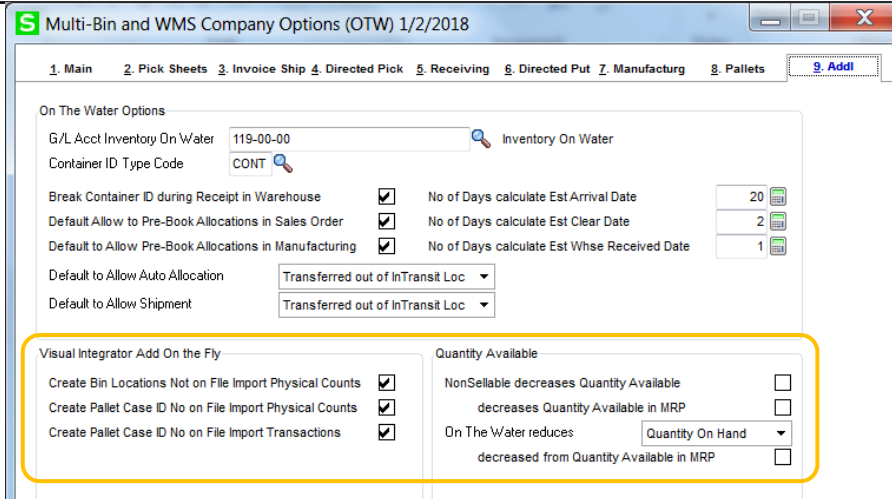


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**ACS WAREHOUSE MGMT SYSTEM OPTIONS - ADDL PANEL**

INVENTORY MANAGEMENT > SETUP MENU

ADDL PANEL OPTIONS - (continued)



**VISUAL INTEGRATOR ADD ON THE FLY OPTIONS -**

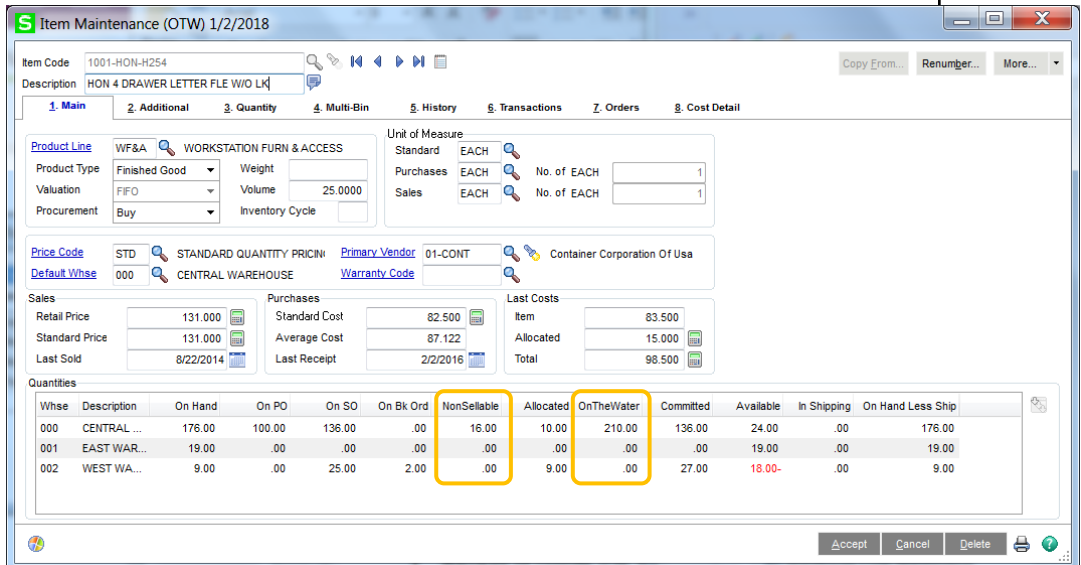
**Create Bin Locations Not on File Import Physical Counts** - Click ON to auto create bin locations during a physical count. The default is to reject the import of the bin location when not on file.

**Create Pallet Case ID No on Not on File Import Physical Counts** - Click ON to auto create IDs during imports to physical count. Import the Pallet ID Type when creating ID's during the import.

**Create Pallet Case ID No on Not on File Import Transactions** - Click ON to auto create IDs during imports to Receipt of Goods (On The Water type) —other transactions. Import the Pallet ID Type when creating ID's during the import.

**NonSellable decreases Quantity Available** - Nonsellable quantity by the warehouse is inventory on hold and in locations with a S/O or Manufacturing pick restriction. Click ON to reduce quantity available.

**On The Water decreases Quantity Available and On Hand** - for the quantity on the water—set the option to decrease the quantity available or On Hand.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Initial Options, Setup and Locations

## MULTI-BIN LOCATION MAINTENANCE - CREATE AND QUANTITY

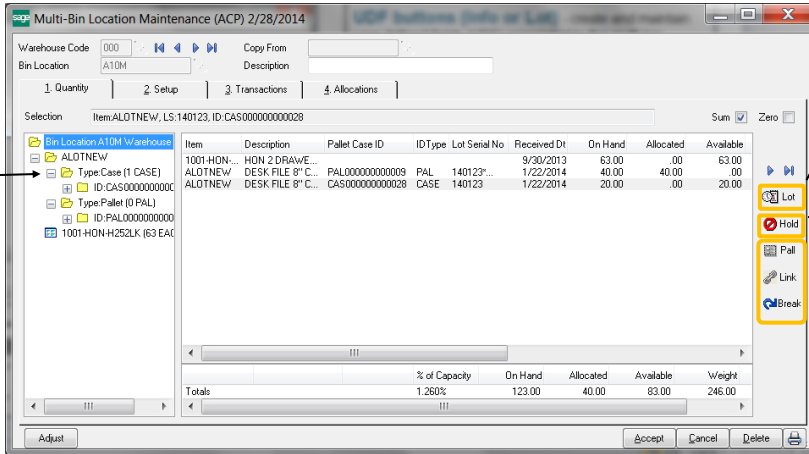
### INVENTORY MANAGEMENT > SETUP MENU

Create a bin location requires a warehouse code and bin location code. Bin location is a 15 character field. The system has defaults for the usual default setup fields and as a Pick Location. Bin locations can also be created on the fly with the Role-security option and usually importing them into the IM404\_BinLocation file.

The Quantity tab provides a quick reference look at the items in a bin, QOH and availability for each item, and capacity information. Buttons are provide transfer of inventory and provide the ability to assign data to QOH UDF fields. Hold and Release buttons are accessible with role security events. For license plate ID's, buttons provide a quick break of inventory and link ID's to another.

Tree view provides summary by and contents of (\*P) IDs. Selection of items in the tree in bin location defaults selects in Group Transfer and (\*P) Link.

(\*P) Select an ID to drill down ID with Pal button and do an immediate break.



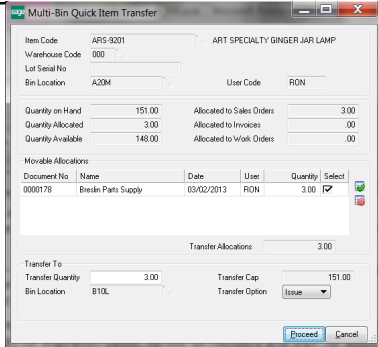
**UDF buttons (Info or Lot)** - create and maintain user defined fields (UDF) associated to the multi-bin inventory. A Lot (\*E) tracks information for expiration dates, vendor lot numbers and UDF for lotted inventory. Save and auto Hold and Release buttons are provided in the UDF screens also.

**Hold and Release button** - create a Hold on goods and release Hold. Held goods cannot be issued to transactions. Role security is required to Hold and Release Holds. Users with this security can also transfer Held goods.

**Pallet, Break and Link buttons** - (\*P) License plate features from the bin location. [Refer to License Plate Link and Break.](#)

**Quick Transfer** - after selecting inventory the quick transfer button is enabled. Quick transfer provides the immediate transfer of inventory and transfer of allocations to another location. Audit trail is tracked for the user transferring. Integrated handhelds usually access same transfer program.

Role maintenance, Inventory security events — select to grant rights for access to Quick Transfer in Item Maintenance, Item Inquiry and Bin Location Maintenance.

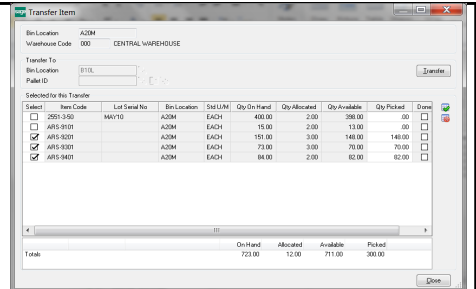


Quick Transfer. Transfer individual inventory. Small grid display S/O entry and W/O allocations. Select to transfer allocations along with the QOH transfer.

**Group Transfer** - Group transfer provides grid selection of inventory in the location. Select the destination location to transfer to. Select the green select all button to select all inventory in the location.

Quantity available to transfer is reduced by the quantity allocated.

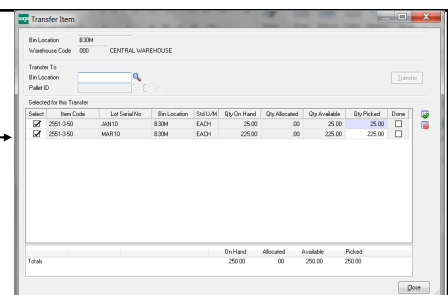
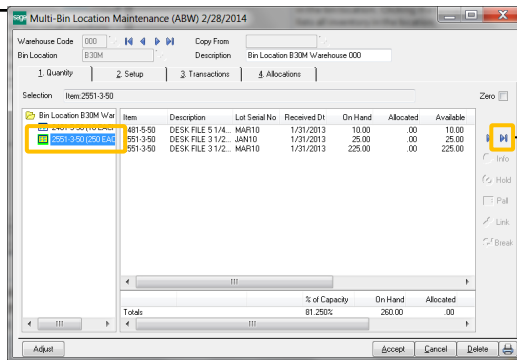
(\*P) For license plate inventory it includes the hard allocated on sales orders and the allocations will transfer along with the inventory.



Group transfer provides grid based selection of inventory in the bin location. Clicking the Group Transfer button lists all inventory in the location.

**Group Transfer Auto Select** - First select an item from the tree to automatically select all lot serial numbers for that in the location. Select the destination location to transfer to.

(\*P) All License Plate IDs with the item in the location is auto selected.



**Adjust Button** - provides supervisor override to quantity on hand and quantity allocated. It can be used if it needs to be changed quickly. It does not change quantities in the stock system. Unique audit trail information is retained for users overriding quantities. Click on a line to enable the button. Role maintenance — for inventory security must be enabled.

# Initial Options, Setup and Locations

## MULTI-BIN LOCATION MAINTENANCE - SETUP

### INVENTORY MANAGEMENT > SETUP MENU

The system is designed to work in a standard mode without having to scrutinize the setup. Newly created locations are setup are in the Pick area of the warehouse. Goods can be easily received, allocated and goods can be issued from them. Bin location setup can be expanded on to take advantage of restricting inventory for directed picking and to use directed putaway. More discussion is also covered in the [Directed Picking](#) and [Directed Putaway](#) sections.

ID Type	No of Units	Volume
None	.00	600.0000
CASE	.00	400.0000
MAST	.00	400.0000
	.00	0.0000

**Region Code** - provides two roles to the system. (1) Define zones in the warehouse zones to narrow Put Away product lines and items to those regions. Wave Batch picking can segregate picking by these Regions. Directed Picking and can nudge directed picking allocations to stay within a Region. Click for more information about [Directed Put Away](#)

(2) The Second Role is to group locations for Receiving and Production. The Region code is selectable in warehouse code maintenance reference the group of locations for Receiving and Production Putaway.

Use the [Multi-bin Space by Location Type Report](#) to reconcile location setup.

**Aisle** - aisle codes are used to create more narrow aisles putaway, more than Regions in the warehouse. Used for put Away reporting to refine placement of goods. Aisles can be associated to Product Lines and Lines.

**Print Sort Code** - Supersede the order to pick goods. Rather than picking in the order of bin locations the Sort Code sets the order for zig zag, up and down and around corners.

**Location Type** - Designate the type of bin this is - Pick Location, Overflow, Staging, Floor and Other. Location types can be given different priority and deselected for Directed Picking. Overflow types can be selected as the first area to put goods away. Item maintenance and directed pick options define default quantity or Unit of Measure codes to direct large orders to be picked from Overflow types.

**Primary Bin Location** - Select to designate location as a primary bin location. This field is auto selected and disabled if the bin location was selected as a primary bin location in Item Maintenance.

**Disallow Selection in Sales Order / Disallow Selection in Manufacturing** - These options will lock the inventory in these locations out of Sales Order or manufacturing B/M and W/O module selection. It can be used to limit the select ability of inventory like for returns and quality control.

**Restrict Goods for Customer Number and by Customer Type** - Restrict goods to certain customers. Inventory cannot be viewed or selected in Sales Order screens. Neither it will be automatically selected. Works well too with bin location UDFs selected in Customer Maintenance and Sales Order Entry to automate and narrow selection with directed picking. Fields will narrow to this location for Directed Putaway report for good received and produced when a sales order number was selected in the transactions.

**Date Inventory Available for Sale/Issue** - Restricts availability of goods in the location until the date.

**Location Capacity and Limit Putaway to the ID Types** - discussed next page.

**Disallow PutAway to this location** - Provides immediate stoppage to put goods in this location for Put Away system and if the Multi-bin option to Check Location Capacity to Store Goods.

**Disallow Mix of Goods in this location** - Disallows different goods to be placed in the location for Directed Putaway. The first item in the location with QOH reserves that item in the location.

**Remove During Period End When Empty** - Only use for truly temporary bins. Bins with zero quantity will be removed from the system at Period End Processing. This option should NOT be selected on permanent warehouse bins.

**Auto Put Hold Goods Received** - Goods received into the location will automatically placed on Hold and cannot be issued to a transaction until Released. Security roles and Hold and Release buttons can manually Hold and Release goods. Good for Quality Control. UDF fields can be associated to retain comments and approval progress.

# Initial Options, Setup and Locations

## MULTI-BIN LOCATION MAINTENANCE - SETUP CAPACITY

### INVENTORY MANAGEMENT > SETUP MENU

Capacity setup in the location drives Directed Picking and can assist in the rotation of inventory to primary bin locations. The Location Capacity Report requires capacity setup in the bin location so it can determine how empty or full the locations are. Click for more information about [Directed Put Away](#).

**Min Max Calculate Option** - The Calculate Option can be calculated from the item Volume and Number of Units. If there are no maximum settings then Put Away will treat that no limit. **Volume** is ideal when a mix of goods are stored in the location. The **No. of Units** is ideal when the same item is in the location (primary item location) or the items stored are the same size.

If (\*P) License Plate is not enabled then the Volume criteria is computed by the volume field setup in Item Code Maintenance multiplied by the quantity on hand in the location.

If there is a value No. of Units and Volume, the system evaluates the maximum Volume before the No. of Units.

If (\*P) License Plate is enabled the Volume is obtained from the Case ID Type from the top level ID. Only if there is no value for Case ID type the volume for the ID is obtained from the Total Volume field in Pallet ID Maintenance. The Total Volume is a computed value for the items in the ID and it can be overridden in Pallet ID Maintenance.

For (\*P) License Plate the Limit to **Put Away to the ID Types** option attempts to limit only the ID Types selected in bin location maintenance to go into the location.

Following are examples:

<p>Location Capacity Settings</p> <table border="1"> <thead> <tr> <th>ID Type</th> <th>No of Units</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>100.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> </tbody> </table> <p>Put Away Settings</p> <p>Limit Putaway to the ID types <input type="checkbox"/></p>	ID Type	No of Units	Volume	None	100.00	0.0000		.00	0.0000		.00	0.0000		.00	0.0000	<p><b>Select No. of Units</b> - Only a quantity of 100 will be allowed into the location. If the location is designated as a Primary Bin Location and associated to an item, only that item will be allowed into the location.</p>
ID Type	No of Units	Volume														
None	100.00	0.0000														
	.00	0.0000														
	.00	0.0000														
	.00	0.0000														

<p>Location Capacity Settings</p> <table border="1"> <thead> <tr> <th>ID Type</th> <th>No of Units</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>.00</td> <td>500.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> </tbody> </table> <p>Put Away Settings</p> <p>Limit Putaway to the ID types <input checked="" type="checkbox"/></p>	ID Type	No of Units	Volume	None	.00	500.0000		.00	0.0000		.00	0.0000		.00	0.0000	<p><b>Std U/M Volume, No ID types and Limit ID type</b> - (*P) Only inventory at the standard unit of measure will put in this location. IDs are excluded because the Limit Put to the ID types is ON and no ID types were selected.</p>
ID Type	No of Units	Volume														
None	.00	500.0000														
	.00	0.0000														
	.00	0.0000														
	.00	0.0000														

<p>Location Capacity Settings</p> <table border="1"> <thead> <tr> <th>ID Type</th> <th>No of Units</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td>PAL </td> <td>4.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> </tbody> </table> <p>Put Away Settings</p> <p>Limit Putaway to the ID types <input checked="" type="checkbox"/></p>	ID Type	No of Units	Volume	None	.00	0.0000	PAL	4.00	0.0000		.00	0.0000		.00	0.0000	<p><b>ID Type is selected and Limit ID type</b> - (*P) Only 4 ID types PAL will put in this location. The ID type was designated and the Limit ID type option is ON.</p>
ID Type	No of Units	Volume														
None	.00	0.0000														
PAL	4.00	0.0000														
	.00	0.0000														
	.00	0.0000														

<p>Location Capacity Settings</p> <table border="1"> <thead> <tr> <th>ID Type</th> <th>No of Units</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>.00</td> <td>300.0000</td> </tr> <tr> <td>CASE </td> <td>.00</td> <td>400.0000</td> </tr> <tr> <td>MAST </td> <td>.00</td> <td>400.0000</td> </tr> <tr> <td></td> <td>.00</td> <td>0.0000</td> </tr> </tbody> </table> <p>Put Away Settings</p> <p>Limit Putaway to the ID types <input type="checkbox"/></p>	ID Type	No of Units	Volume	None	.00	300.0000	CASE	.00	400.0000	MAST	.00	400.0000		.00	0.0000	<p><b>Std U/M Volume, ID Type is selected and Limit ID type is not selected</b> - (*P) All inventory can put to this location because the Limit ID type options is OFF. During Put calculations the system will see the CASE and MAST ID types are designated and will lean those ID types to this location. Those ID types will calculate up to a volume of 400. Standard U/M items will calculate up to 300. Other ID types not selected here is calculated at 300.</p>
ID Type	No of Units	Volume														
None	.00	300.0000														
CASE	.00	400.0000														
MAST	.00	400.0000														
	.00	0.0000														

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

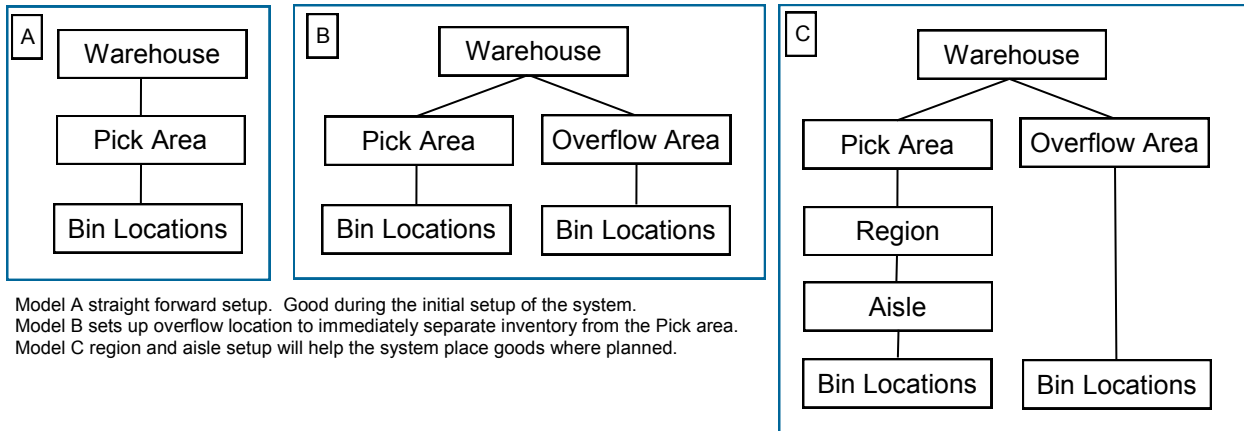
# Initial Options, Setup and Locations

## MULTI-BIN SPACE BY LOCATION TYPE REPORT

INVENTORY MANAGEMENT > REPORT MENU

The Multi-bin Space by Location Type Report helps reconcile location setup. It categorizes warehouse Areas Primary Pick Locations, Pick Locations, Overflow and Staging and other. It highlights designated Regions and Aisles associated to bin locations. It also shows association of which items are tagged to locations as primary bin locations.

Warehouse setup can be simple and straight forward. A straight forward setup of ACS Multi-bin and WMS can be good for small to medium needs. To help break down inventory between areas and to utilize Put Away automation it useful to identify locations with different location types and regions. More information about setup is discussed in the initial sections of the manual. Following is a reminder of structures using location types.



Model A straight forward setup. Good during the initial setup of the system.  
 Model B sets up overflow location to immediately separate inventory from the Pick area.  
 Model C region and aisle setup will help the system place goods where planned.

Multi-Bin Location SpaceType Report Sorted by Location Type							XYZ Manufacturing Company (XYZ)						
Warehouse: 000 MAIN WAREHOUSE PRIMARY BIN LOCATIONS in PICK AREA													
Bin Location and Description	Location Type	Region	Aisle	Bay Level	Assigned Item Codes	Assigned Product Lines							
1000BIN	Pick	FG		Mediu	FLOUR, PIZZA, SCREW-02554	FIN							
100A	Pick*Dis-ε	FG		Mediu	BOARD-04230	FIN							
200B	Pick	FG		Mediu	ALOT	FIN							
870D	Pick	FG		Mediu	MEMRY-00080	FIN							
DEFAULT Default	Pick	FG		Mediu	BM2, BOARD-004230-33, BTTY-98422,	FIN							
Warehouse: 000 MAIN WAREHOUSE PICK AREA LOCATIONS													
Bin Location and Description	Location Type	Region	Aisle	Bay Level	Assigned Item Codes	Assigned Product Lines							
103E	Pick	A		Mediu		CARD, CHIP							
236C	Pick	A		Mediu		CARD, CHIP							
480C	Pick	A		Mediu		CARD, CHIP							
481A	Pick	A		Mediu		CARD, CHIP							
481B	Pick			Mediu									
Warehouse: 000 MAIN WAREHOUSE OVERFLOW AREA LOCATIONS													
Bin Location and Description	Location Type	Region	Aisle	Bay Level	Assigned Item Codes	Assigned Product Lines							
Warehouse: 000 MAIN WAREHOUSE STAGING LOCATIONS													
Bin Location and Description	Location Type	Region	Aisle	Bay Level	Assigned Item Codes	Assigned Product Lines							
BILL_FG	Staging	PROD		Mediu									
QUALITY	Staging	REC											
RECEIVING Receiving Dock	Staging-sf	REC		Top									
SHIPPING	Staging	SHIP		Mediu									

Primary Pick Locations

Pick Locations

Overflow Locations

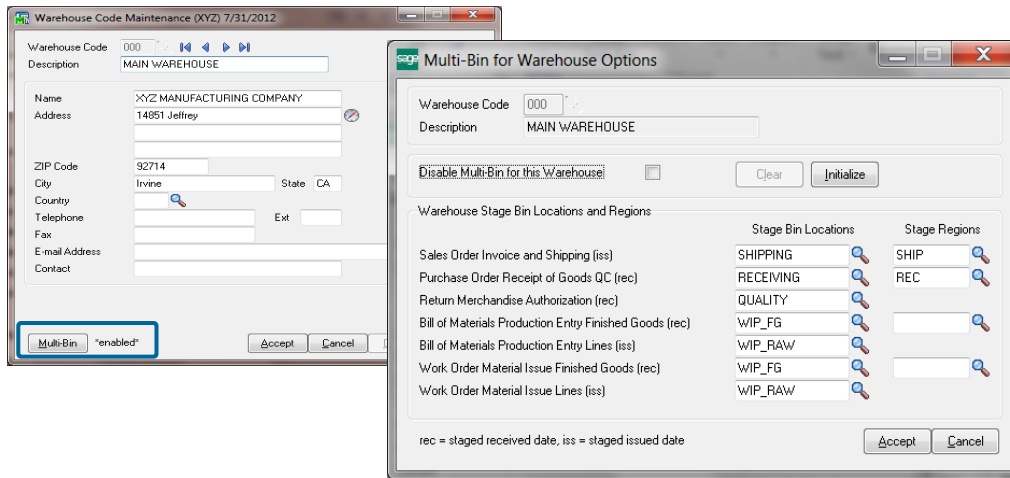
Staging Locations

# Initial Options, Setup and Locations

## WAREHOUSE CODE MAINTENANCE

INVENTORY MANAGEMENT > SETUP MENU

Once Multi-Bin and WMS has been turned on for a company, each warehouse is designated as enabled or disabled for usage. Enabled warehouses initial Initialization of inventory is required. Staging Locations and Stage Regions can be designated to automate receipt of goods, RMA, put away and shipping, selection of raw materials and the location for finished goods. (rec) and (iss) shows whether the receipt and issue dates are changed to multi-bin inventory when transferred.



**Disable Multi-Bin for this Warehouse** - For warehouses which do not need multi-bin tracking and WMS features, the warehouse can be completely disabled. The system will check there is no physical inventory taking place. It will also check if there are open transactions. It will provide an option to proceed if the user has Multi-bin Adjustment security right. If clicking Yes to proceed with this override, be sure there are no transactions pending with this product line.

**Clear** - If a warehouse that was previously enabled for Multi-Bin and then is disabled, the Clear button will prompt. This will clear all QOH information from any bins associated with items in that warehouse. Clearing disabled inventory is irreversible and is good housekeeping.

**Initialize** - The Initialize button is a quick bin Initialization for this warehouse. For more information about [Bin initialization, please review page 27.](#)

**Warehouse Stage Bin Locations** - Designate Staging locations to auto allocate inventory by them and staging locations and Regions can be used for Put Away and Wave Picking.

Multi-bin WMS Options provides the options to turn-on automatic allocations for Staging locations. Raw materials can be selected from primary bin locations and these staging locations. Finished goods finished in production and completions can automatically land in the finished goods staging locations. Receiving to the receiving location and shipping auto allocations on the fly can be drawn from the Shipping staging location. There are other overrides after the initial company options are set.

Multi-bin Put Away report can look at the staging locations as well as the staging region.

Wave Picking (\*W) can view inventory in the Shipping Staging location and staging region.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



# Initial Options, Setup and Locations

## PRODUCT LINE MAINTENANCE

### INVENTORY MANAGEMENT > SETUP MENU

Multi-bin and WMS settings based on product line. Company wide settings that are setup in Multi-bin Options can be overridden by product line. Designating default warehouse regions (zones) and Aisles, as well as the directed picking and put away options, is selected here in product line maintenance and can be overridden in inventory maintenance.

**Override Directed Picking and Putaway Options** - select check box to override directed picking and directed putaway options for the product line. Item code maintenance settings will override the product line.

**Default Regions and Aisles to Store Product Line** - for product lines, sets default regions or aisles for Put Away. Item Code regions and aisle setting override these settings for the individual item.

**Pallet Case ID for Directed Picking - (\*P)** prioritizes these ID types that is automatically selected during directed picking. Applies when the option to Allocate higher level Case ID is OFF. [See ID U/M settings.](#)

**Pallet Case ID for Receiving and Finished Goods - (\*P)** sets P/O Receipt of goods U/M Conversion and finished good defaults to auto create ID levels. [See ID U/M settings.](#)

**Disable Multi-Bin for this Product Line** - For product lines which do not need bin and WMS tracking, Multi-Bin can be completely disabled, regardless of the warehouse setting. The system will check there is no physical inventory taking place. It will also check if there are open transactions. It will provide an option to proceed if the user has Multi-bin Adjustment security right. If clicking Yes to proceed with this override, be sure there are no transactions pending with this product line.

**Clear** - If a product line that was previously enabled for Multi-Bin and then is disabled, the Clear button will prompt. This will clear all QOH information from any bins associated with items in that product line. Clearing disabled inventory is irreversible and is good housekeeping.

**Initialize** - The Initialize button is a quick bin Initialization for this product line. Initialization is required after re-enabling a product line. For more information about refer to [Multi-Bin Location Initialization](#).

**Default Regions and Aisles to Store Product Line** - To give favor to store goods in product lines to certain warehouse Regions (e.g., warehouse zones) or Aisles. Information can be overridden in by item in inventory maintenance and inquiry. Click for more information about [Directed Put Away](#).

**Override Directed Picking Settings for this Product Line** - Enabling this option will override any directed picking options setup in Multi-Bin Options specifically for items belonging to this product line. The Directed Picking Options on this screen must be setup if this option is selected. Directed Picking options selected in Inventory Maintenance will supersede settings for the item.

**Disable Directed Picking Allocations for this Product Line** - To disable this product line from the Directed Picking options the Override Directed Picking settings must also be turned ON.

**Override Directed PutAway Settings for this Product Line** - Enabling this option will override any directed PutAway options setup in Multi-Bin Options specifically for items belonging to this product line. The Directed PutAway Options on this screen must be setup if this option is selected. Directed PutAway options selected in Inventory Maintenance will supersede settings for the item.

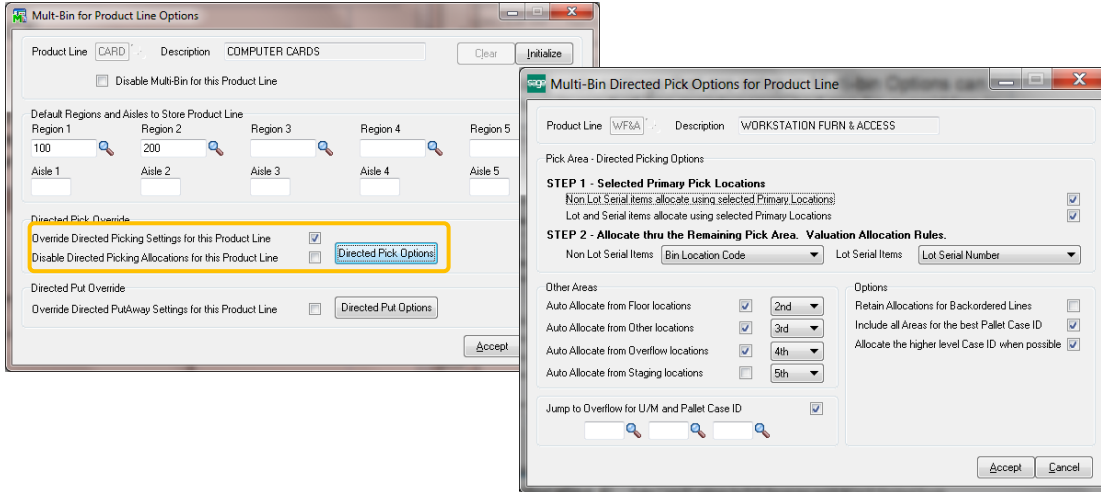
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Initial Options, Setup and Locations

## PRODUCT LINE MAINTENANCE - DIRECTED PICKING OVERRIDE

INVENTORY MANAGEMENT > SETUP MENU

Multi-bin and WMS settings based on product line. Company wide settings that are setup in Multi-bin Options can be overridden by product line. Directed picking selected here in product line maintenance and can be overridden in inventory maintenance. [Click to review Sales Order directed picking options.](#)



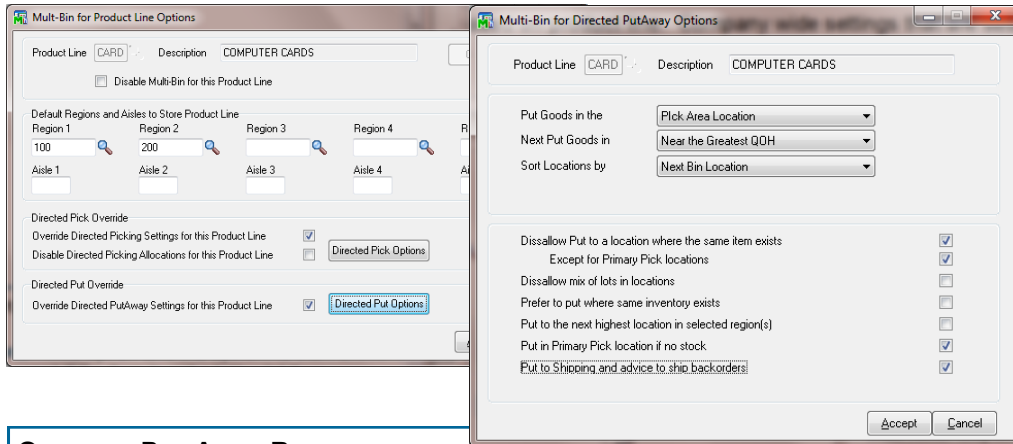
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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## Initial Options, Setup and Locations

### PRODUCT LINE MAINTENANCE - DIRECTED PUTAWAY OVERRIDE

INVENTORY MANAGEMENT > SETUP MENU

Multi-bin and WMS settings based on product line. Company wide settings that are setup in Multi-bin Options can be overridden by product line. Directed put away selected here in product line maintenance and can be overridden in inventory maintenance.



#### OVERRIDE PUT AWAY RULES

**Put Goods in the** - Can choose to first put goods in the **Pick Area** or **Overflow Area**. Pick area is the normal choice unless Overflow locations is chosen.

**Next Put Goods in** - Select to store at or near the **Greatest QOH** or **Least QOH**. Still evaluating Regions and Aisles that maybe setup in options, storing goods where the Greatest QOH could be best if you are not storing goods where the same inventory item exists. The Least QOH can be best when storing in the same location.

**Sort by Bin Location and Sort code** sorts bin locations within Regions and Aisles by this option.

**Dissallow Put to location where the same item exists - Except for Primary Pick Locations** - skips puts where the same item exists. **Except for Primary Pick Locations** designated in inventory maintenance. Skipping the primary location is normal.

**Dissallow mix of lots in locations** - skips puts to locations with the same item and different lot numbers.

**Prefer to put where the same inventory exists** - will allow put of the same item in a location if running out of available locations to store goods.

**Put to the next highest location in selected region(s)** - discussed on the next page and example.

**Put in Primary Pick location if not stock** - if there is no inventory and availability in the Primary Pick locations. If multiple primary pick locations are setup then goods are assigned to the lowest priority location first (i.e., 5th, 4th, 3rd, 2nd and 1st).

**Put in Shipping and advice to ship backorders** - if there is no stock and has backorders the system will skip other advice to advice to transfer goods to the Shipping Staging location. It advises up to the quantity on backorder and the Shipping Staging location must be setup in Warehouse Code Maintenance.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

## Initial Options, Setup and Locations

### MULTI-BIN LOCATION INITIALIZATION

INVENTORY MANAGEMENT > SETUP MENU

Multi-bin Location Initialization should be performed for each warehouse enabled for Multi-bin inventory. An option to turn ON multi-bin on-the-fly for warehouse codes that were turned OFF. Inventory can be assigned to one location or to a bin location already setup in Item Maintenance.

Multi-Bin Initialization (ABC) 3/15/2010

Initialization sets up quantity on hand in Multi-bin locations.  
The system will setup quantities by the Default Bin Location code.  
Check Use Item Warehouse Detail check box to create locations  
setup in Inventory Maintenance.

Initialize Multi-bin Inventory for Warehouse

Initialize Multi-bin Inventory for Product Line

Use Item Warehouse Primary Locations

Default Bin Location

Proceed Cancel

**Initialize Multi-Bin Inventory for Warehouse** - To initialize bin locations by warehouse, select the warehouse code. You must then select a **Default Bin Location** as created in Bin Location Maintenance.) Clicking proceed will initialize ALL items with QOH into the default bin.

**Initialize Multi-Bin Inventory by Product Line.** This is a must if certain product lines have been Multi-Bin disabled.

If **Use Item Warehouse Primary Locations** is selected, the system will check the Item setup for a bin location. If one is designated for the warehouse being initialized, that item's QoH will go to its listed primary bin instead of the default bin.

Once initialization is complete, additional warehouse bins can be created (or imported) and items can be transferred into them using Inventory Transaction Entry or Physical Counts.

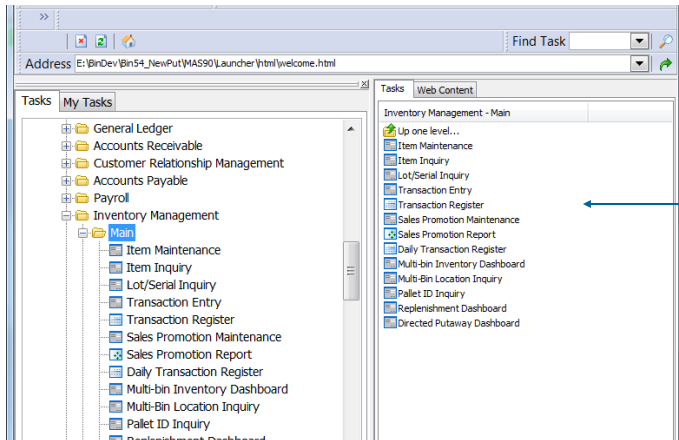
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

# Inventory Management

## MULTI-BIN AND WMS FOR INVENTORY MANAGEMENT

INVENTORY MANAGEMENT > MAIN MENU, PHYSICAL, REPORTS AND SETUP

Following is an overview of where Multi-bin and WMS programs and features are for Inventory.



**Inventory Maintenance/Inquiry.** Glance inventory, allocations, quick transfers between locations, transaction details, extended inventory lot UDF. Regions and Aisles by Item Code, Directed Pick and Put Away overrides by Item Code.

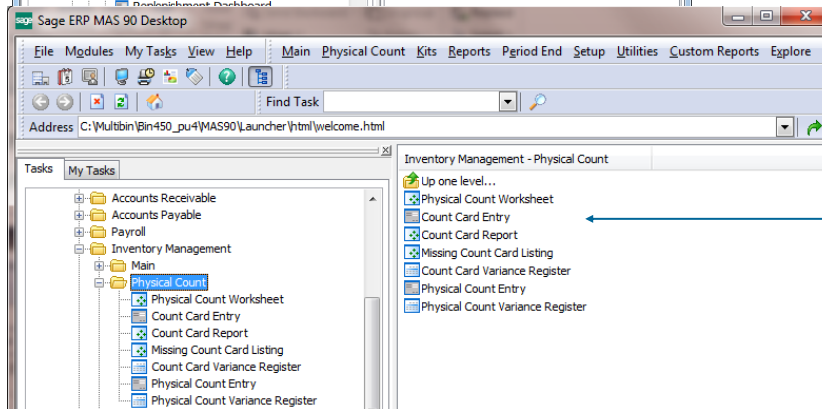
**Multi-bin Inventory Dashboard.** Manage, transfer, hold inventory and more with Control Shift Click features.

**Transaction Entry.** Batch transfers between locations and warehouses.

**Multi-bin Location Inquiry.** Inventory inquiry by location.

**Pallet ID Inquiry.** ID Case Pack and Pallet Inventory inquiry.

**Replenishment and putaway Dashboards** put/replenish/rotate inventory

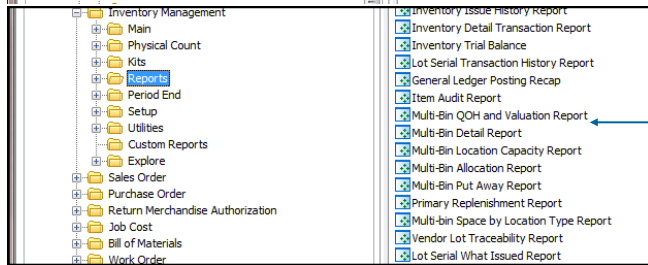


**Physical Count Worksheet.** Worksheets, freeze by locations, regions, when last counted, pallet ID(\*P)

**Count Card entry.** Auto load all multi-bin inventory with locations. Explode Pallet IDs (\*P)

**Physical Count Entry.** Count by location, pallet ID (\*P), VI and BOI import counts.

**Variance Register.** Validates not to exceed S/O allocations and prints variance by location.



**Multi-bin WMS Reports.** Multi-bin and WMS data is in our reports in the bottom after the stock Sage 100 ERP reports.

**Warehouse Code Maintenance.** Turn ON and OFF by warehouse and setup of Staging locations and Regions.

**Product Line Maintenance.** Turn ON and OFF by Product Line, Regions and Aisles by Product Line, Directed Pick and Put Away overrides by Product Line.

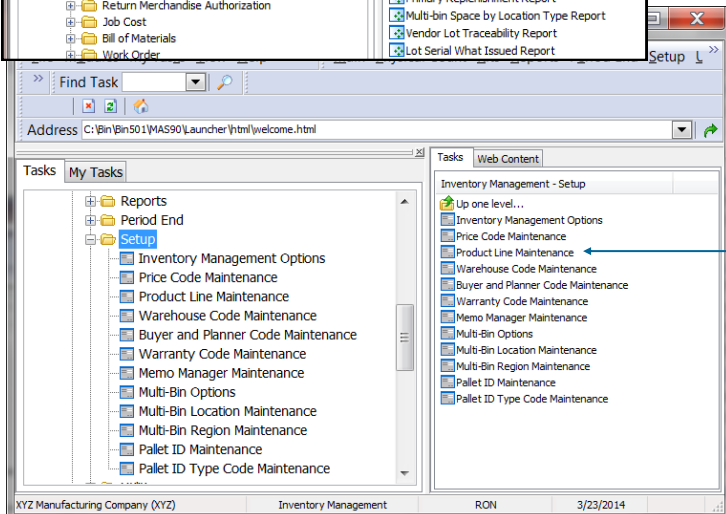
**Multi-Bin Options.** Turn ON and OFF company wide and Multi-bin and WMS options.

**Multi-Bin Location Maintenance.** Location creation and setup.

**Regions Maintenance.** Code creation

**Pallet ID Maintenance.** Case and Pallet ID setup and inventory.

**Pallet ID Type Code Maint.** Case and ID type setup.



# Inventory Item Setup and Tracking

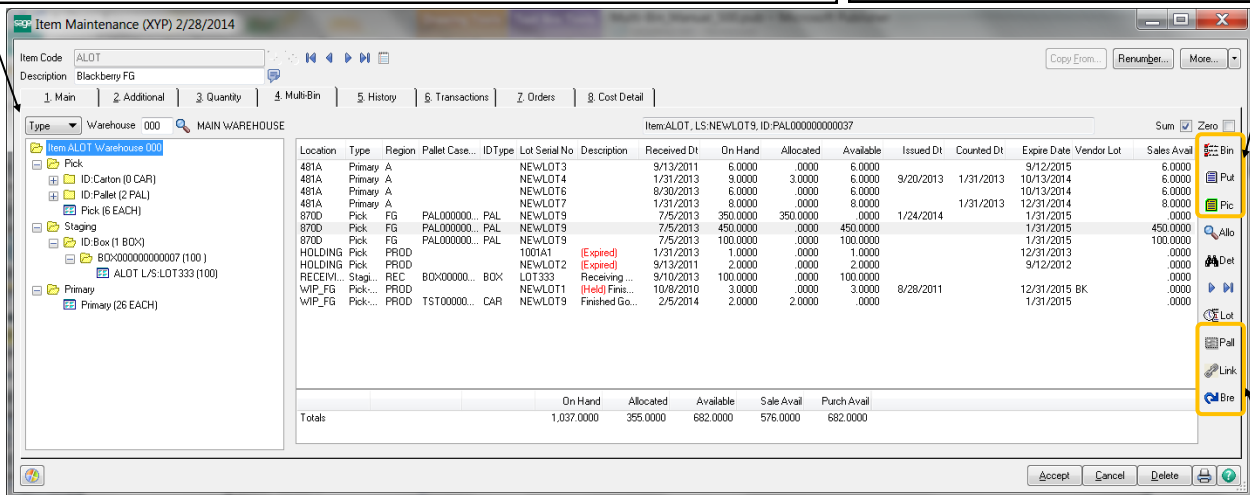
## BIN TRACKING FOR INDIVIDUAL INVENTORY ITEMS

INVENTORY MANAGEMENT > MAIN MENU > INVENTORY MAINTENANCE > MULTI-BIN TAB

The Multi-Bin tab provides a quick view of multi-bin inventory and quick inventory utilities that run by item. View quantity available in bin locations, by location type and region code. Button controls provides additional setup options for the item, drill down details, inventory transfer utilities, UDF data for multi-bin inventory and lots and serial, utilities to link (\*P) IDs to another and (\*P) break IDs. [Refer to Bin Location maintenance](#) for the quick inventory utilities that run by the location.

**Tree view** provides summary view by Location Type and by Region.  
 Selection of items in the tree in bin location defaults selects in Group Transfer and (\*P) Link.  
 (\*P) Contents of IDs. Ex: 2 Pallets, 1 Box and 0 Carton is avail.  
 (\*P) Select an ID to drill down ID with Pal button and do an immediate break. Ex: ID Box drill down and 100 avail.

**Item Setup buttons** - setup primary locations, directed picking and direct putaway options for the item. Refer to next page for [Item settings](#).



**Pallet, Link and Break** - (\*P) Provides drill down Pallet Maintenance and utilities from the Item to Link an IDs to another and do a quick break of the ID. [Refer to License Plate Link and Break](#).

**Columns Detail** - Provide view of multi-bin inventory. Bin Location, Location Type, Region Code, ID, ID Type, Lot Serial No, Description, Received Date, On Hand, Allocated, Available, Issued, Counted Date, Expire Date, Vendor Lot Serial No and Sales Available.  
**Description** provides in red alerts for the item in the location. (Held) inventory is held from transactions. User with Release security rights to transfer inventory. (\*Dis - S/O) bin location is disabled for S/O transactions. (-Mfg) the location disabled for B/M and W/O transactions. (Expired) (\*E) expired inventory. (\*Dis - CustNo) and (\*Dis - CustType) the location is reserving inventory for the customer number and customer type.  
**Received Date** is the last date the item (and the lot serial number and (\*P) ID) was received into the bin location. The multi-bin option Inventory Activity Date for Received Dates is set from Rec and FG Staging carries the original received date to the destination location to help retain the age of inventory. Inventory with this option ON will take on the destination last receipt date if the same inventory exists.  
**Quantity Allocated** detail is drill down using the Alloc button and the Multi-bin Allocation Report.  
**Counted Date** is the last date inventory was counted in physical counts even if there was no change.  
**(\*E) Expire Date and Vendor Lot Serial No** is the expire date and vendor lot serial numbers set in receipt of goods and any time can be entered and changed using the Lot button. The Lot button is also in bin location maintenance.  
**Sales Available** is reduced for inventory has been locked down in the bin location or (\*E) expired.  
**UDF fields** created for multi-bin inventory initially appears on the right hand side of the inventory display. [Use custom office](#) to move.

**Quick and Group Transfer buttons** - select inventory in the list view enable the quick transfer button. Select location types and regions to auto select inventory for group transfer grid. [See Item Quick Transfer and Group Transfer Grid](#).

**UDF buttons (Info or Lot)** - create and maintain user defined fields (UDF) associated to the multi-bin inventory. A Lot (\*E) tracks information for expiration dates, vendor lot numbers and UDF for lotted inventory. Save and auto Hold and Release buttons are provided in the UDF screens also.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Inventory Item Setup and Tracking

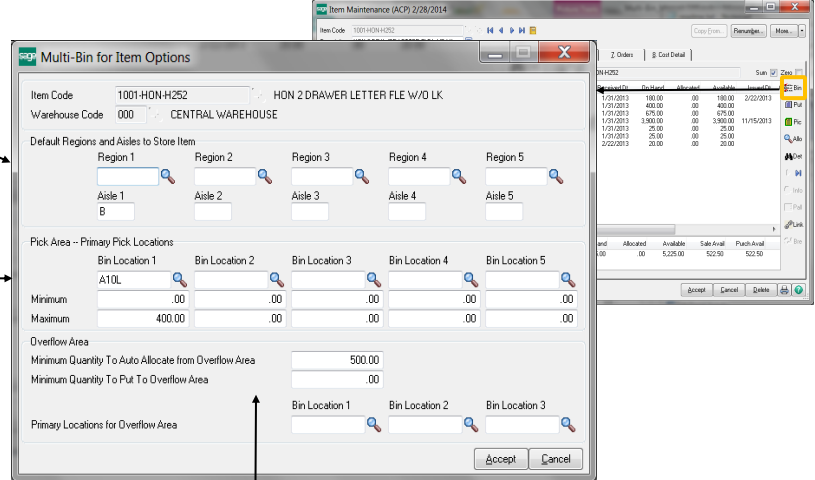
## SETTING UP PRIMARY ITEM BINS

INVENTORY MANAGEMENT > MAIN MENU > INVENTORY MAINTENANCE > MULTI-BIN TAB

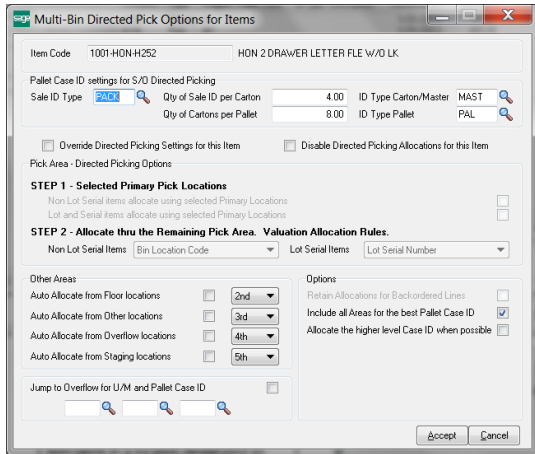
Bin Setup for the Item Code designates the items primary bin locations and overrides to the default warehouse Regions and Aisles to store the item.

**Item Code Regions and Aisles** - overrides the default regions or aisles for Directed Put Away. These settings can be defaulted in product line maintenance and then can be superseded in Item Code Maintenance.

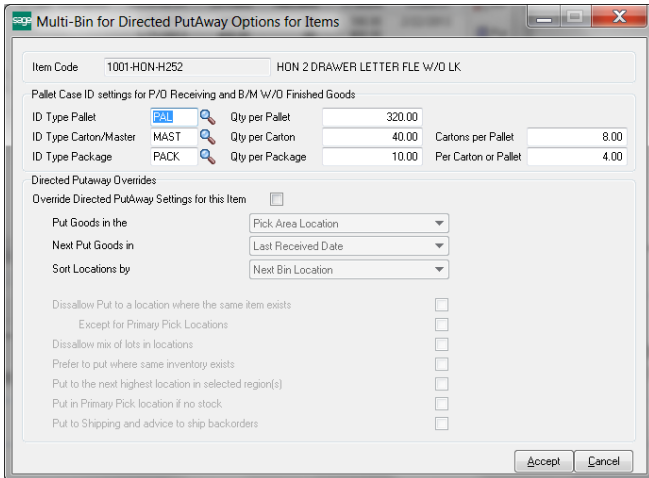
**Primary Bin Locations** - Pick area. Designate primary bin locations for the item. Setup the minimum quantity when to replenish the location with the item and maximum will be the maximum replenishment will recommend to transfer to the location. [See Primary Location Overview.](#)  
The primary bin location can be automatically designated when the Multi-bin Option [Auto Assign Primary Bin Locations](#) is ON. This option, sets up the primary location for the item when the item lands in a location designated as primary.



**Overflow Area** - Designate options to automate pick and puts from the overflow area over the pick area. Minimum quantity to auto allocate from overflow area applies to directed picking. Minimum quantity to put to overflow area applies to directed putaway. Options are available to designate unit of measure conversion codes to trigger to the pick and put of goods in the overflow area.



**Directed Picking Options for Item Code** - select ON to override directed picking options for the item. Company wide settings that are setup in Multi-bin Options can be overridden by product line and by Item Code. [Click to review Sales Order directed picking options.](#)  
**Pallet Case ID settings for S/O Directed Picking** - (\*P) prioritizes these ID types that is automatically selected during directed picking. Applies when the option to Allocate higher level Case ID is OFF. [See ID U/M settings.](#)



**Directed Putaway Options for Item Code** - select ON to override directed putaway options for the item. Company wide settings that are setup in Multi-bin Options can be overridden by product line and by Item Code. [Click to review putaway options.](#)  
**Pallet Case ID for Receiving and Finished Goods** - (\*P) sets P/O Receipt of goods U/M Conversion and finished good defaults to auto create ID levels. [See ID U/M settings.](#)

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 (\*W) Feature for Add-on for Wave Batch Picking

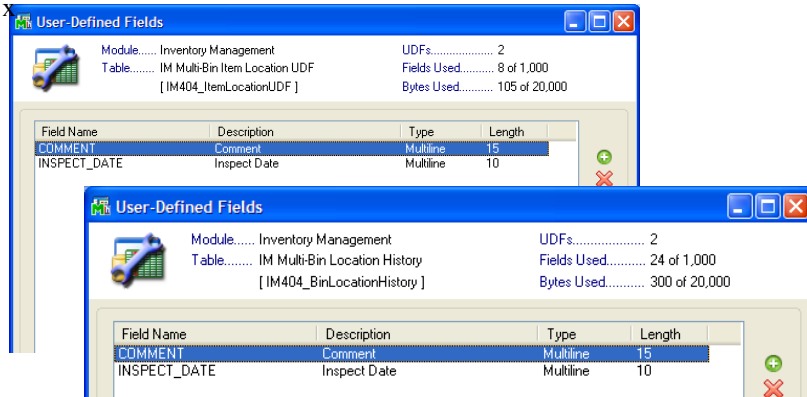
# Inventory Item Setup and Tracking

## CUSTOM OFFICE - USER DEFINABLE FIELDS

Multi-bin and WMS provides features for UDF data associated to the QOH data to automatically load on screens, move between locations and to store in history. If you have Expiration Date Vendor Lot Traceability and you want to track UDF's for Lot Items, please goto the page for UDF setup for [Expiration Date Control and Vendor Lot Traceability](#).

### Create UDF Fields in Files

Create your UDF fields in the IM Multi-Bin Item Location UDF and the IM Multi-Bin Location History File and all distribution files where you need the data in our grids. Create the same field names in the desired distribution tier files where data will be viewed and entered to. The custom field names must be consistent.



### UDF fields to these files to auto store and display.

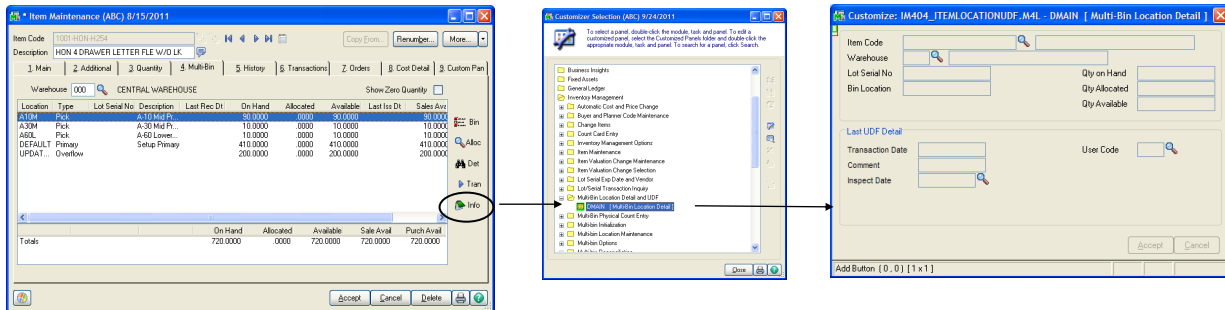
Purchase Order: PO404\_ReceiptTierDistribution, PO404\_MaterialReqTierDist, PO404\_ReturnTierDist  
Sales Order: SO404\_OrderTierDist, SO404\_InvoiceTierDist

Inventory: IM404\_VendorLotSerial, IM404\_BinLocationHistory, IM404\_ItemLocationUDF, IM404\_TransactionTierDist, IM404\_Physical, IM\_ItemCost

Bill of Materials: BM404\_ProductionTierDist, BM404\_DisassemblyTierDist

### Add UDF Fields to the UDF Maintenance Panel: IM404\_ItemLocationUDF.M4L

The IM404\_ItemLocationUDF.M4L is the dialog in Inventory maintenance and inquiry.



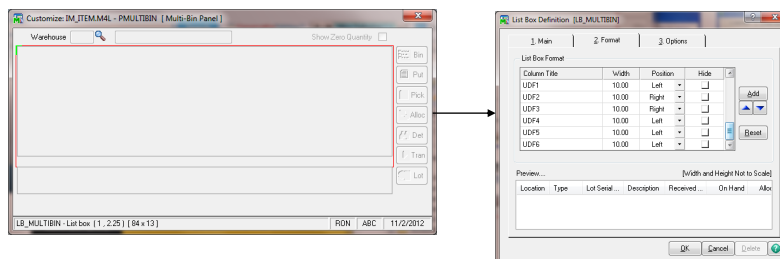
### Add UDF Fields to selected Distribution screens

Select the CI404\_MBin\_Entry.M4L and add your fields to each selectable business object you want them on.



### Add UDF Fields to Multi-bin Inventory in Inventory Maintenance/Inquiry

Select the PMultiBin Panel in the IM\_Item.M4L. UDF fields are automatically shown in the list-box named UDF1, UDF2 to 6. Numerics and date fields appear best right justified. Column headings and numeric mask settings are obtained from the field setup in custom office.



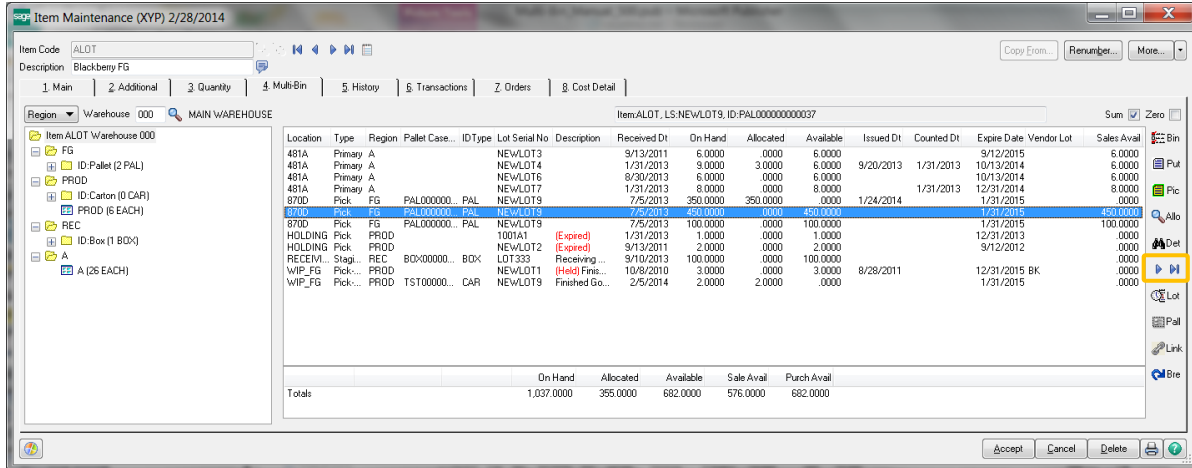


# Inventory Item Setup and Tracking

## QUICK AND GROUP TRANSFERS

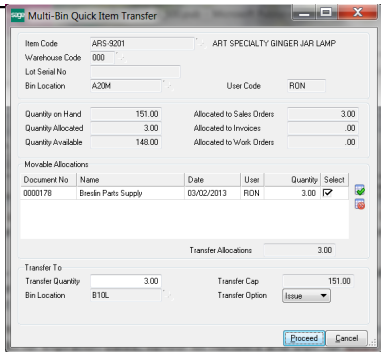
INVENTORY MANAGEMENT > MAIN MENU > INVENTORY MAINTENANCE > MULTI-BIN TAB

Quick inventory transfers from the inventory item is selected in the Multi-bin Tab in inventory maintenance. Quick transfer will move inventory immediately to another location and the Group Transfer provides transfer all inventory for the item. Full audit trail is retained including the user, the date. In some cases pre-allocations can be moved.



**Quick Transfer** - after selecting inventory the quick transfer button is enabled. Quick transfer provides the immediate transfer of inventory and transfer of allocations to another location. Audit trail is tracked for the user transferring. Integrated handhelds usually access same transfer program.

Role maintenance, Inventory security events — select to grant rights for access to Quick Transfer in Item Maintenance, Item Inquiry and Bin Location Maintenance.

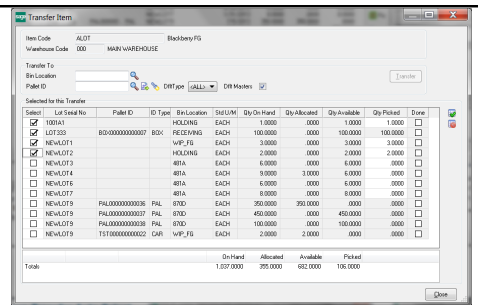


Quick Transfer. Transfer individual inventory. Small grid display S/O entry and W/O allocations. Select to transfer allocations along with the QOH transfer.

**Group Transfer** - Group transfer provides grid selection of inventory for the item code. Select the destination location to transfer to. Select the green select all button to select all inventory in the location.

Quantity available to transfer is reduced by the quantity allocated. The Quantity Picked can be overridden except for IDs.

(\*P) License plate inventory includes the hard allocated on sales orders and the allocations will transfer along with the inventory.

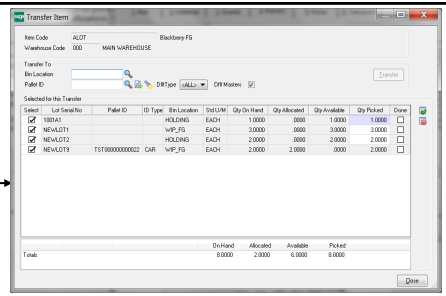
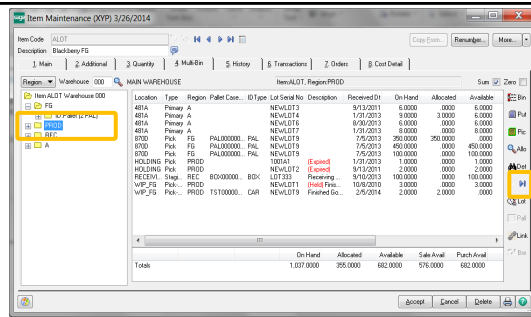


Group transfer provides grid based selection of inventory in the bin location. Clicking the Group Transfer button lists all inventory in the location.

**Group Transfer Auto Select** - Select a location type or region from the tree to automatically select all inventory from the category. Next select the group transfer button. Select the destination location to transfer to.

(\*P) All License Plate IDs with the item in the location is auto selected.

Auto select feature works with the group transfer in bin location maintenance and works with (\*P) Link in Item and Bin Location Maintenance.



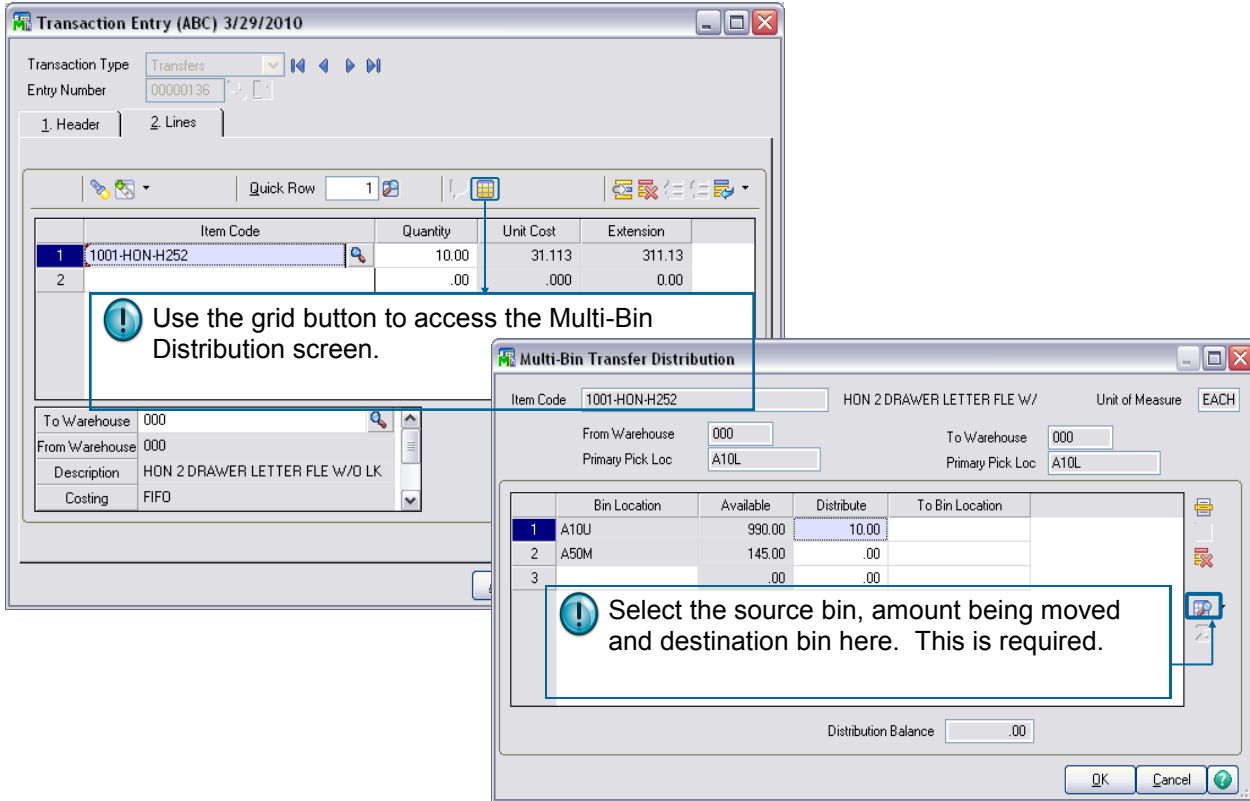
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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# Inventory Transactions

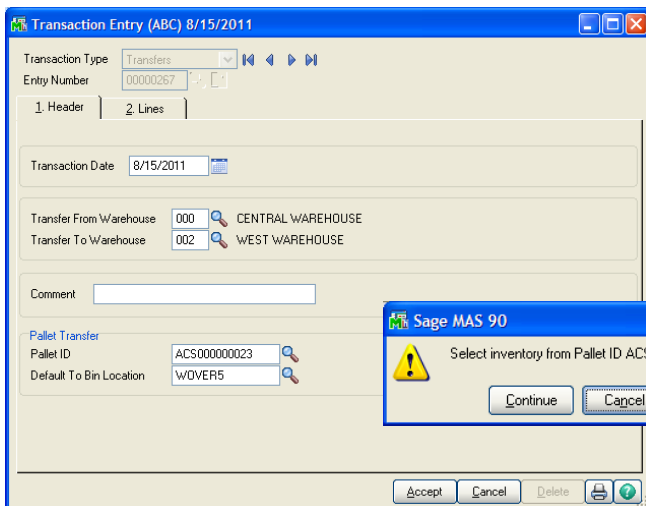
## INVENTORY TRANSACTION ENTRY

INVENTORY MANAGEMENT > MAIN MENU

Multi-Bin WMS requires distribution in Transaction Entry from locations for warehouses and product lines enabled for Multi-bin.



(\*P) **Transfer Pallet Inventory to Another Warehouse** For Pallet Management, inventory items in a pallet will be transferred to a pallet. By selecting the pallet ID on the Transaction Header panel, the Inventory Lines panel will automatically filled in with all inventory items from the Pallet.



**Pallet ID**- Select the Pallet ID to be transferred. The system ensures there are no allocations existing from Palletted Inventory.

**Default to Bin Location** - Select the location in the destination warehouse where inventory will be transferred to.

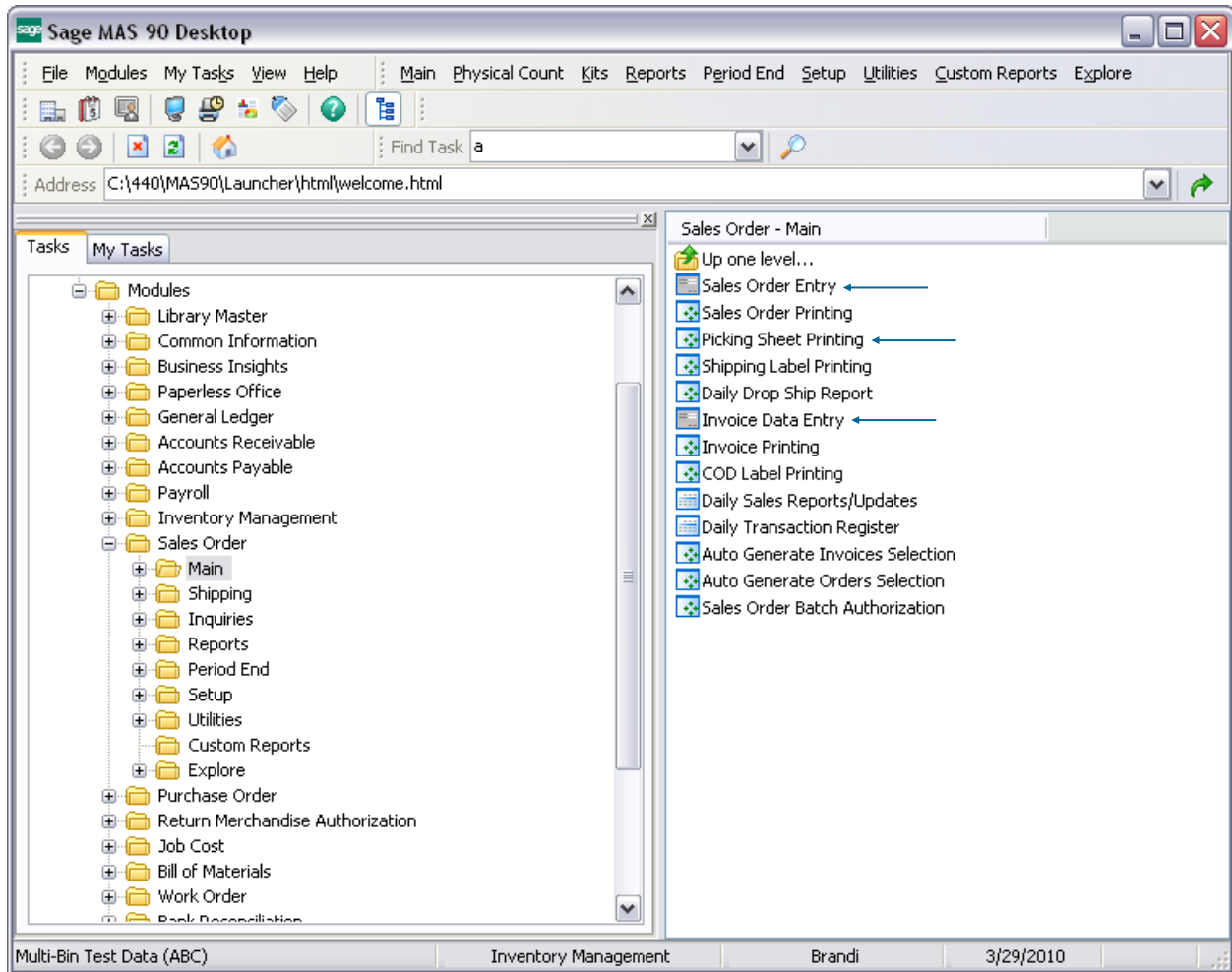
After selecting the default bin location the system will prompt to auto fill inventory in the transfer.

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 (\*W) Feature for Add-on for Wave Batch Picking

**MULTI-BIN FOR SALES ORDER**

SALES ORDER > MAIN MENU

The Sales Order Process as a whole (from Sales Order Entry to Picking Sheet Printing to Invoice Data Entry) will vary greatly depending on the settings selected for use in Multi-Bin WMS.



1. Allocations can be processed manually from Sales Order Entry, printed on the picking sheet and carried forward to invoicing.
2. Picking Sheet Printing prints Multi-bin Inventory and prints inventory allocated to each sales order.
3. Allocations can be processed automatically when the picking sheets are printed and carried forward to invoicing. Also Multi-bin inventory can be selected to printed on the pick sheets.
4. (\*P) For Case Pack and Pallet Management, Sales Order Allocation Management (not shown) automates allocation of sales orders to Pallets. Discussion in the appendix.
5. Invoices and Shipping entries checks for allocations and passes allocations through to the Invoice/ Shipment. Orders with out allocations, the system provides on the fly allocation or you can manually select inventory shipped.

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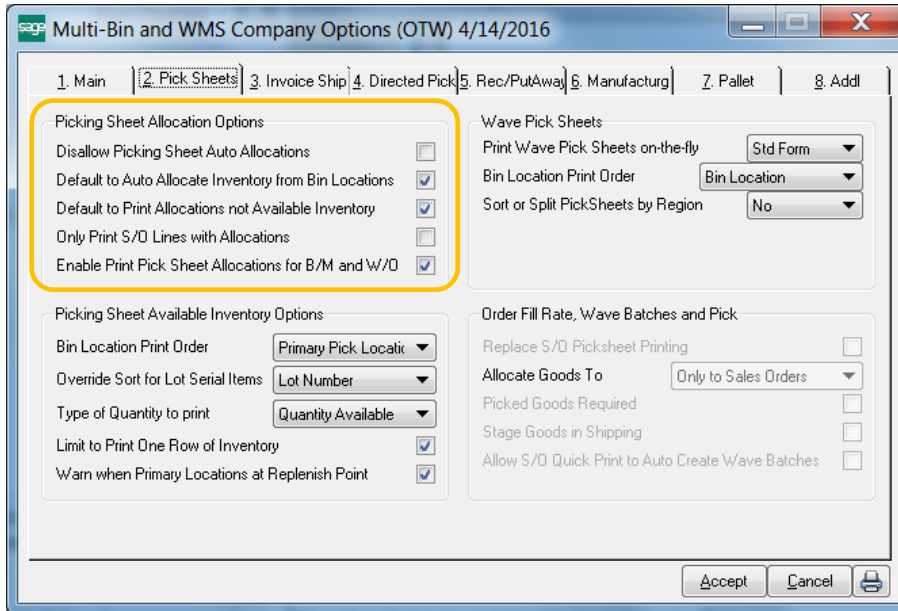
# Sales Orders and Picking Sheets

## INTRODUCTION TO SALES ORDERS AND PICKING SHEET OPTIONS

INVENTORY MANAGEMENT > SETUP MENU > MULTI-BIN OPTIONS > PICK SHEETS TAB

Picking sheet options sets if directed picking auto allocations are in effect, has options for output of multi-bin inventory and for allocations on sales orders.

The system starts up with directed picking turned OFF. Before turning ON directed picking it is best to prepare by using a test company so to get the preferred directed picking options, make changes to pick sheet forms and to changes to operations. Retrieving pick sheets from the warehouse before reproducing them with hard allocations should be considered.



**Disallow Picking Sheet Auto Allocations** - Supersedes Picking Sheet printing to not auto allocate. Useful for environments where not directed picking. RF Scanning users must check with your RF Vendor to see if it can be used. Before turning ON directed picking it is best to prepare by using a test company so to get the preferred directed picking options, make changes to pick sheet forms and to changes to operations. Retrieving pick sheets from the warehouse before reproducing them with hard allocations should be considered.

**Default to Auto Allocate Inventory from Bin Locations** - Defaults the Auto-Allocation Option in picking sheet printing on. This is disabled if the option above disallows picking sheet allocations.

**Default to Print Only Allocated Inventory** - Defaults the Print Only Allocated Inventory Option in picking sheet printing on. This means that the pick sheets will print only items allocated. If unchecked multi-bin inventory will print along with allocations, if any.

**Only Print S/O Lines with Allocations** - Will only print S/O Lines with an allocation. Items will still be accounted for when you invoice. The invoice will reflect the unallocated line as unshipped and, if backordering, the unallocated line will appear on the backorder order.

**Enable Print Pick Sheet Allocations for B/M and W/O** - When this option is turned ON B/M picking sheet printing will provide the ability to select Production No's and will print the raw material allocations on the pick sheet. W/O future feature.

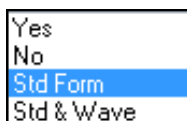
**Wave Pick Sheets** will print allocated inventory in bin location order (or sort code) the pick sheet for each order and a pick sheet for multiple orders. Also see [printing allocations and inventory](#) and [wave picking sheet forms](#). System defaults No to not print a wave pick sheet.

Yes provides a prompt at the end of picking sheet printing to print a wave pick sheet for multiple orders. Std Form prints a wave pick sheet in the regular Sage 100 pick sheet and Std & Wave prints both pick sheets.

Select the **Std Form** option in Multi-bin Options Wave Pick Sheet **Print Wave Pick Sheets on-the-fly**. This will enable and provide the option in Picking Sheet printing for the **Sort Allocations Std Form**. This check box needs to be clicked ON to print and sort by allocations.

**Print Wave Pick Sheets on-the-fly** - the Wave Picking Sheet for Multiple Orders is selected to print with **Yes** and **Std & Wave**. After printing a range of sales order picking sheets you will receive the prompt to print the Wave Picking sheet.

**Bin Location Print Order** - This helps the wave picking sheet know how you've entered your bin locations and how best to present the wave pathing. Selecting by **Bin Location** will sort the report in alpha-numeric order by Bin Location Code. Selecting by **Sort Code** will sort the report by the Sort Code entered on the bin in Bin Location Maintenance. This option give users the most control over Wave printing.



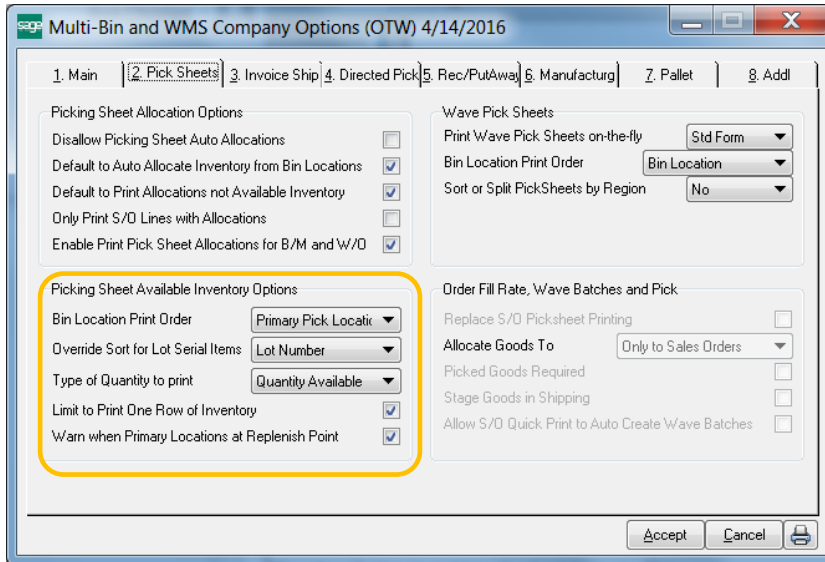
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# Sales Orders and Picking Sheets

## INTRODUCTION TO SALES ORDERS AND PICKING SHEET OPTIONS

INVENTORY MANAGEMENT > SETUP MENU > MULTI-BIN OPTIONS > PICK SHEETS TAB

Picking sheet options to print available inventory is helpful when not printing allocations only. These options for picking sheets prints inventory left to right.



### Picking Sheet Options for Sales Order, Bill of Materials and Work Order

Multi-bin pick sheet templates always print inventory allocated to sales orders. Those allocation precede (lead each row) the following print options.

**Bin Location Print Order** - Allows users to manage the order in which inventory appears on the pick Sheet.

- Select **Bin Location** for listing alphabetically by Bin Location Code.
- Select **Sort Code** to print locations in Wave order using the Sort Code in Bin Location Maintenance.
- Select **Primary Pick Location** to print only the item's primary pick bin.

**Override Sort for Lot Serial Items** - Allows users to manage the order in which lotted and serialized inventory appears on the pick Sheet.

- Select **Lot Number** to sort by Lot Number
- Select **Expiration Date** to sort by the item's expire date. Only available when using Multi-Bin Expiration Date Control add-on.
- **Not Applicable** will not override the print order for Lot Serial inventory.

**Type of Quantity to Print** - Allows users to decide how quantity is displayed, as **Quantity on Hand** or **Quantity Available**.

**Limit to One Row of Inventory** - Because the pick sheet is able to print all bins for a given item, users have the ability to limit the output of bin locations to a single row across. Not applicable to allocations.

**Warn when Primary Location at Replenish Point** - Click ON to track when items in the Primary bin locations satisfy the minimum replenish points. With Directed Putaway and the putaway dashboard, the system will track all replenishments for the day with a batch number using the Day Code. History is retained as for all advised replenishments for the day. The user is prompted after picking sheet printing to print.

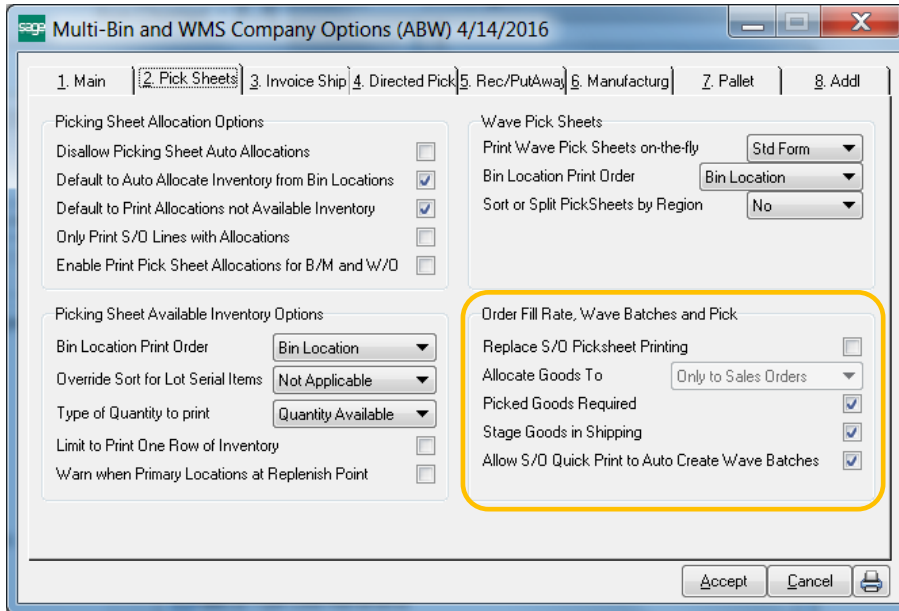
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# Sales Orders and Picking Sheets

## INTRODUCTION TO SALES ORDER AND PICKING SHEET OPTIONS

INVENTORY MANAGEMENT > SETUP MENU > MULTI-BIN OPTIONS > PICK SHEETS TAB

(\*W) Wave Pick Batch Options provide defaults for Wave Batch Shipping Control. See Wave Batch Sheet usage.



### (\*W) Wave Pick Batch Options

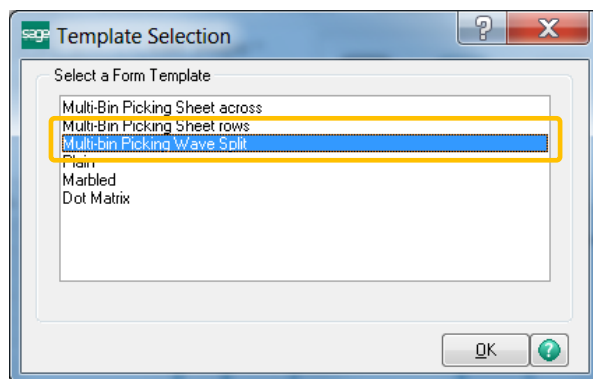
**Replace S/O Picking Sheet Printing** - Wave Batch selection screen will come up instead of S/O picking sheet printing.

**Allocate Goods To** - Provides the default to allocate the wave batch allocations to the sales order or to the Wave Batch number or the Choose option will allow the choice on in Wave Batch selection. The allocations to the sales order is usual selection when creating batches. Allocations to the Wave Batch number is used when printing a wave pick sheets for the estimated needs for the sales orders. The hard allocation to the sales order will occur in Shipping staging location.

**Picked Goods Required** - Designates that the Wave Pick needs to be performed before invoicing.

**Stage Goods Required** - Designates that goods needs to be transferred to the staging location before invoicing.

**Allow S/O Quick Print to Auto Create Wave Batches** - Defaults the **Create Wave Batch** in S/O Quick Print for Picking Sheet Printing to automatically create a wave batch. Uses defaults options in Wave Batch for Splits. If splitting the pick sheet use the S/O Pick Sheet Template for Splits to print split pick sheets and the pick sheet header will reference the split pick sheet Wave Batch number.



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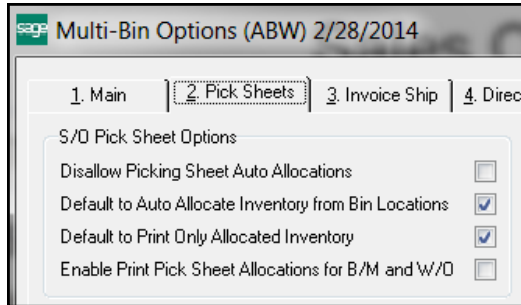
# Sales Orders and Picking Sheets

## SALES ORDER DIRECTED PICKING OPTIONS

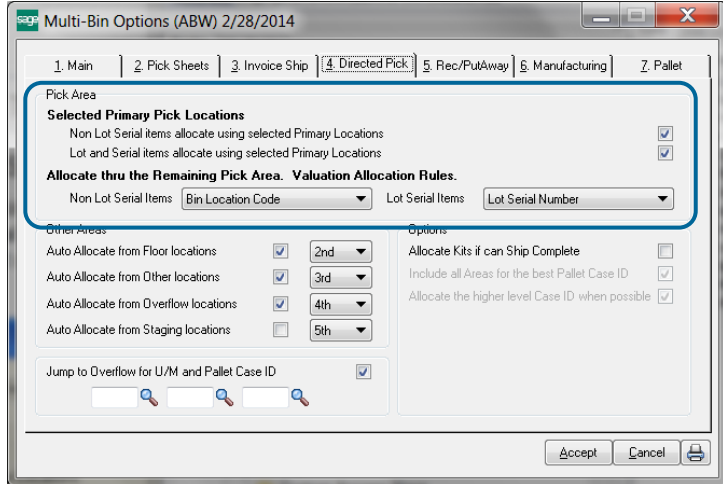
INVENTORY MANAGEMENT > SETUP MENU

ACS Multi-bin WMS Directed Picking allocates inventory to sales order so you can sell the optimal goods from the optimal bin locations. Product Line Maintenance provides overrides of these options and Item Code Maintenance will override settings to the individual item.

Directed picking first allocates from reserved bin locations specified for the Customer and Sales Order. Directed Picking allocates inventory from the Multi-bin Directed Picking Options starting from the pick area. However, if designated, it will allocate from the Primary Bin Locations in the Pick area before seeking other inventory in the Pick area. The other areas can be chosen to allocate and their relative priority.



System defaults to **Disallow Picking Sheet Auto Allocations**. Enable Directed Picking by uncheck Dissallow. Set the **Default to Auto Allocate Inventory** to default the option to allocate in picking sheet printing. If the option to **Default to Print Only Allocated Inventory** is ON, picking sheet printing will default the option. It will print only the inventory allocated to the sales order and not print other available inventory.



**Customer and Sales Order Priority Bin Locations** - directed picking checks for locations created for the customer and sales order and will allocate from those locations. Bin location maintenance has options to restrict inventory to certain customer numbers and customer types. Inventory can be transferred to those locations at will and Directed Putaway can recommend transfers to the restricted bin locations when the sales order number is specified in P/O Receipt of Goods and Work Order Completions.

**Selected Primary Pick Locations** - click to select **Non-Lot Serial items** and click to select **Lot Serial items** to allocate from their primary bin locations. The primary bin locations were selected in Inventory maintenance or auto assigned to the item if the Multi-bin Option is ON to **Auto Assign Primary Bin Locations** and inventory lands in a bin location designated as a primary bin location. Inventory is allocated in the order designated in the Valuation Allocation Rules.

**Valuation Allocation Rules for Non Lot Serial items** - algorithms for items valued at standard cost, average cost, FIFO and LIFO.

- Bin Location Code
- Least Quantity in Bin Location
- Received in Location FIFO
- Sort Code -- Wave
- None
- None -- Exceed Qty Avail

**Bin Location Code** allocates in bin location order.  
**Least Quantity in Bin Location** allocates by the least quantity on hand in the bin location.  
**Received in Location FIFO** allocates by the oldest/latest receipt date inventory was received in the bin location. For this option it select the Multi-bin Option for Inventory Activity Dates Received Date is set from Rec and FG Staging.  
**Sort Code - Wave** allocates by the Sort Code designated in bin location maintenance for user defined allocations.

**None** indicates to only allocate from the primary bin location to the extent of quantity available and to not go any further.  
**None** indicates to only allocate from the primary bin and exceed quantity available. The first primary bin location is the only location used.

**Valuation Allocation Rules for Lot Serial items**

- Receipt Date Fifo
- Lot Serial Number
- Expiration Date Fifo
- Receipt Date Lifo
- None

**Receipt Date Fifo** allocates by the Lot Serial oldest receipt date.  
**Lot Serial Number** allocates by the lowest Lot Serial Number.  
**Expiration Date (\*E)** allocates by the oldest Expiration Date. If the goods are expired it will not allocate. The system will evaluate to include and exclude inventory based on the user defined the minimum and maximum expire days set in for Customers and Sales. [Click for expire user fields](#). Null expire dates allocates first and by the Lot Serial Receipt Date.

**Receipt Date Lifo** allocates by the Lot Serial youngest receipt date.  
**None** indicates to only allocate from the primary bin location to the extent of quantity available and to not go any further.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Sales Orders and Picking Sheets

## SALES ORDER DIRECTED PICKING OPTIONS

### INVENTORY MANAGEMENT > SETUP MENU

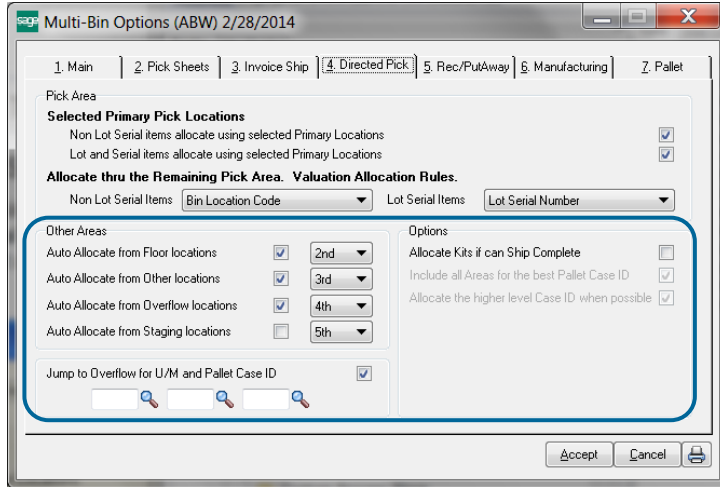
After the Pick area, you can designate the areas to be included in Directed Picking and their relative priority. Clicking them all ON is a good safety net. Others may decide to exclude Staging locations to not allocate goods from Receiving and Shipping docks. You may decide to skip Overflow or set with a low priority. Customer and

Sales Order Priority Bin Locations take precedence so those locations are not excluded even if their location type is excluded or has a low priority.

Jump to Overflow can be used to allocate large orders when Overflow has large case packs and pallets. This would save stock of smaller inventory in the pick area.

(\*P) For License Plate IDs options are available to allocate scan all inventory to automatically select the largest packs and pallets where possible.

The ship complete option for kits insures no partials are shipped.



**Auto Allocate from Other Areas** - click to select **Floor, Other, Overflow and Staging** and designate their relative priority. Floor and Other areas may contain less inventory than the Pick area or the quality of goods is less. Overflow may want to pick last because it is the newest inventory or can have the large case packs and palletted goods. Staging goods for goods that are still getting checked in or the goods are selected for goods going out.

Jump to Overflow evaluates the Minimum quantity on an order designated in Item Maintenance and matches the selected Unit of Measure codes to the ones in the sale order.

(\*P) **License Plate Include all Areas for the Best Case ID** - click to include all selected areas along with the Pick area to allocate the Best Case ID. This option saves the trouble to have all IDs in the Pick area.

(\*P) **License Plate Allocate the higher level Case ID when possible** - click ON for the system to allocate the largest amount of inventory in an ID. This option skip the Sale ID types selected in the directed picking options in Inventory maintenance and Product Line maintenance which to correlate the sales unit of measure in the sales order.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

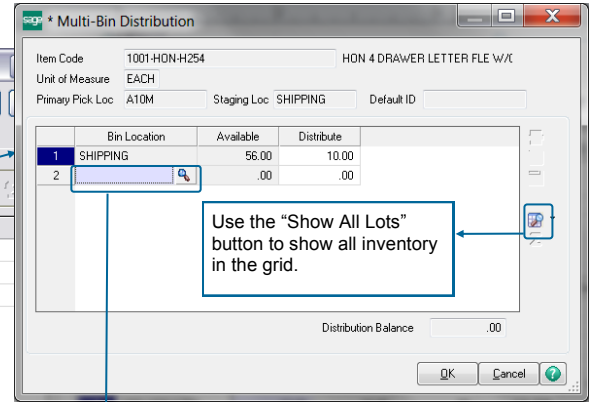
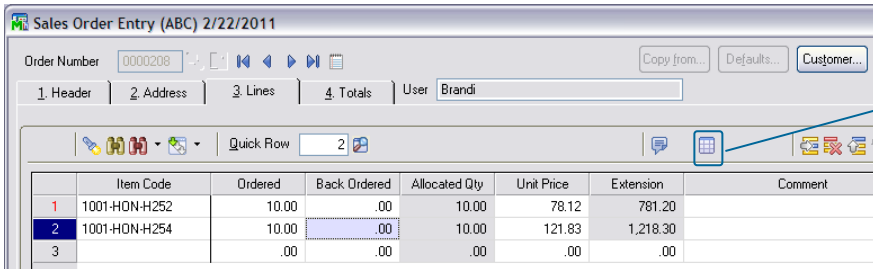


# Sales Orders and Picking Sheets

## SALES ORDER ENTRY - MANUAL ALLOCATIONS

SALES ORDER > MAIN MENU

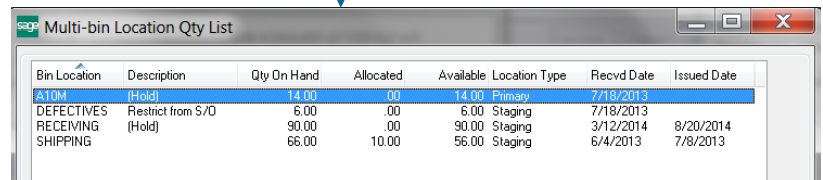
In Sales Order entry inventory can be allocated from bin locations. Allocations in this case is reserving inventory to the sales order. Choose to reserve inventory manually and automatically. Set your Sales Order entry allocation preferences in Multi-bin and WMS options.



Multi-bin distribution for a non-lot serial item code in Sales Order entry.

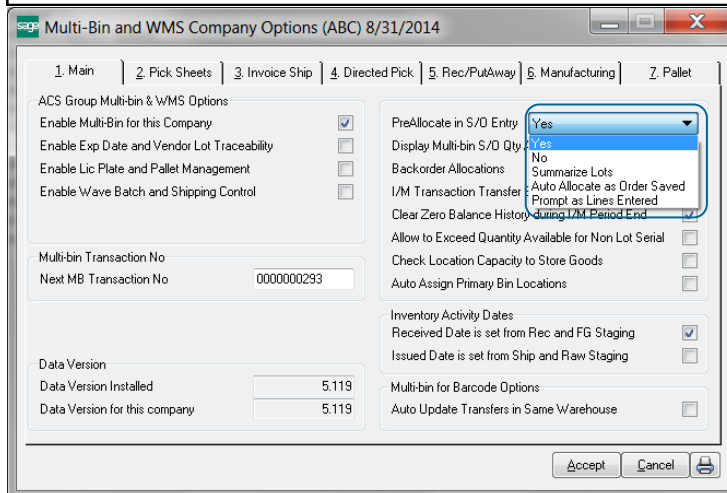
Can choose to reserve inventory as the needs arise. For example— inventory is in short supply and you desire to reserve the inventory for an order so you can ship complete after more inventory is received. Can choose to reserve specific inventory because its your business practice and certain lot serial numbers.

Whether inventory specially selected or automatically the allocated inventory can be printed on pick sheets and it will automatically flow to invoice and shipping entry.



QOH inventory lookup reflects restrictions on inventory (Description column) from the bin location options, location types and last date inventory received and issued out of locations.

## SALES ORDER ENTRY - MANUAL ALLOCATIONS MULTI-BIN AND WMS OPTIONS - PREALLOCATE IN S/O ENTRY



PreAllocate options in S/O Entry designates how you want to allocate inventory in S/O entry and the use of the automatic allocation options.

**Yes** - Grants rights to manually allocate inventory in sales order entry. This allows you to reserve inventory as desired and even adjust allocations that were automatically allocated.

**No** - Turns OFF access to the distribution screen in sales order entry.

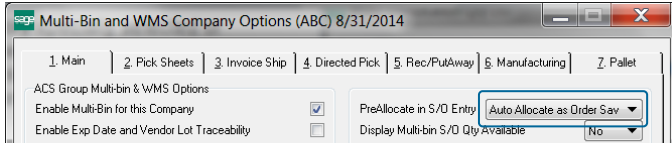
**Summarize Lots** - Provides a summarized list of lot inventory without regard of bin location. If the business has lot valued inventory spread out in the warehouse in many locations, this option gives narrows the spread of lots to an order.

**Prompt as Lines Entered** - the distribution screen to select inventory is prompted immediately after entering the quantity ordered.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

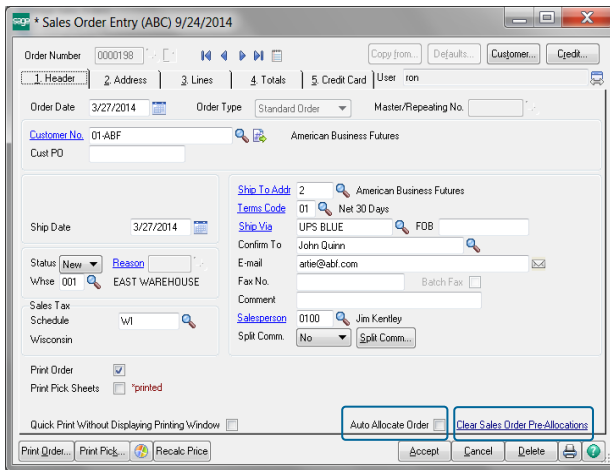
# Sales Orders and Picking Sheets

## SALES ORDER ENTRY - MANUAL ALLOCATIONS MULTI-BIN AND WMS OPTIONS - PREALLOCATE IN S/O ENTRY - CONTINUED



**Auto Allocate as Order Saved** - auto allocates inventory in sales orders as the order is saved. Inventory is allocated according to the rules setup in the Directed Pick tab in Multi-bin and WMS options and overridden by the directed pick options in Product Line Maintenance and Item Code Maintenance.

## SALES ORDER ENTRY - MANUAL ALLOCATIONS SALES ORDER HEADER PANEL



**Auto Allocate Order** - this field can only be seen if the option to auto allocate as the order is save is ON. When this check box is ON the order will auto allocate the sales order lines when saving the order. The rules for directed picking will be utilized, first the company wide options in Multi-bin and WMS options and then overridden for the directed picking options set in product line maintenance and item code maintenance.

The check box is defaulted ON when creating a new sales order or if adding lines to an existing sales order. Unchecking the check box will turn OFF the auto allocate feature when saving the order.

Refer to [Visual Integrator import instructions](#) when importing orders and to auto allocate. BOI Allocate Sales Order Lines Automatically according to directed picking algorithms and the D404\_AllocateOrder field.

**Clear Sales Order Pre-Allocations** - this field is enabled if pre allocations exist in the sales order otherwise it will be disabled. Click to clear all sales order pre allocations in the sales order. Use the **Clear Allocations** link in Sales Order Picking Sheet Printing to clear allocations for a range or all of sales orders at one time.

The system retains an audit trail who clears sales order pre-allocations.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Sales Orders and Picking Sheets

## SALES ORDER PICKING SHEET PRINTING ALLOCATIONS

SALES ORDER > MAIN MENU

Inventory can be hard allocated selectively in Sales Order entry and automatically with Directed Picking during Picking sheet printing. Both are referred to “allocations”. The S/O Picking sheet can print the allocations alone and other available inventory can print too. Options start company wide in Inventory > Setup > Multi-bin Options > Picking Sheet tab and then the options can be overridden on the fly as you print.

**Print only Allocations not Invt** - Restricts output to only the bin locations that inventory has been allocated from. Unchecking will print available inventory. The status row helps differentiate allocations from just printing available inventory.

Item Code	Unit	Allocated	Ordered	Shipped	Backordered
2481-5-50	EACH	100.00	100.00		
DESK FILE 5 1/4" CAP 50					
PalletID:					
Bin Location: A30L					
Lot Serial No: LOT234					
Status: *Alloc					
Quantity: 100.00					

Printing allocations only option is ON.

Item Code	Unit	Allocated	Ordered	Shipped	Backordered
2481-5-50	EACH	100.00	100.00		
DESK FILE 5 1/4" CAP 50					
PalletID:					
Bin Location: A30L RECEIVING A40M B40L					
Lot Serial No: LOT234 LOT123 LOT234 MAR10					
Status: *Alloc					
Quantity: 100.00 100.00 4,900.00 350.00					

Printing allocations and available inventory. \*Alloc status indicates allocated inventory for the order to be picked.

**Auto Allocate** - Turns ON directed picking (i.e., automatic allocations) for picking sheet printing. While printing, the system auto allocate inventory according to the settings for Directed Picking. Uncheck this option to disallow automatic allocations. This will not overwrite any manual allocations made in Sales Order Entry or any other allocations previously made.

**Clear Allocations** - Allocations will be cleared according to the range of Sales Order Numbers selected in the grid. Be cautious to not clear all Sales Order allocations if no Sales Order Numbers are selected. If no Sales Orders are selected, all allocations will be cleared. This is will have no affect on the orders with an invoice in progress.

**Sort Allocations Std Form** - will print and sort pick lines by the allocated inventory on the pick sheet. This option is best used to print [wave pick sheets for an order](#).

## SETTING PICKING SHEET OPTIONS

INVENTORY > SETUP > MULTI-BIN OPTIONS > PICKING SHEET TAB

Options start company wide in Multi-bin Options, picking sheet tab and then the options can be overridden on the fly as you print.

**Disallow Picking Sheet Auto Allocations** - Overrides all options and disallows directed picking during picking sheet printing. Can use this option to designate the printing of multi-bin inventory on the picking sheet and no directed picking allocations.

Directed picking will only apply if Auto Allocations are turned ON.

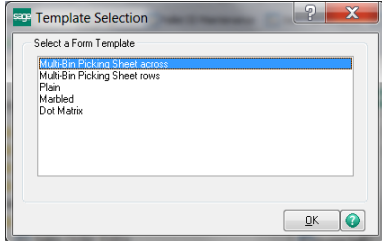
**Default to Auto Allocate Inventory from Bin Locations and Default to Print Only Allocated Inventory** - sets the defaults to allocate and to only print allocations and no inventory. These options can be overridden as you print.

# Sales Orders and Picking Sheets

## SALES ORDER PICKING SHEET FORMS

SALES ORDER > MAIN > PICKING SHEET PRINTING (AND SALES ORDER ENTRY PICKING SHEET PRINTING ON THE FLY)

Two templates are provided for sales order printing. Access the templates when creating a new Form Code in picking sheet printing.



**Multi-Bin Picking Sheet across**, example more below, provides 9 columns of allocations and available inventory (if chosen). An infinite number of rows of the 9 column will print if necessary. Multi-bin picking sheet options gives options to sort the out put left to right and can limit the number of rows to print to one. Allocations always print first and inventory if chose to print will print thereafter.

**Multi-Bin Picking Sheet rows**, example more the next page, prints an allocation for each row on the pick sheet. This form is best used when print pre-allocations and use the wave option.

## PICKING SHEET FORM OPTIONS PRINTING ALLOCATIONS AND INVENTORY

Form Code: **Multi-Bin Picking Sheet across**

The crystal form code is SO404\_PickingSheet\_Bin1.rpt. There is a subreport under the Item Code/description to handle allocation and inventory printing. Select the subreport to change its content.

Item Code	Unit	Allocated	Ordered	Shipped	Backordered	
1001-HCN-H252	EACH	600.00	600.000			
HCN 2 DRAWER LETTER FILE W/O LK						
Bin Location:	A10L	A10M	A20L	A20M	A50L	A70L
Lot Serial No:						
Status:	*Alloc*Prim	*Allocated	*Alloc*Prim	*Allocated	*Allocated	*Allocated
Quantity:	415.00	95.00	5.00	5.00	78.00	2.00
Expire Date:						
Vendor L/S No:						
2480-8-50	EACH	100.00	100.000			
DESK FILE 5 1/4" CAP 50						
Bin Location:	A-200-20	A10M	A70L			
Lot Serial No:	101	101	101SD			
Status:	*Allocated	*Alloc*Prim	*Allocated			
Quantity:	5.00	35.00	60.00			
Expire Date:	12/31/2011	12/31/2011	11/30/2010			
Vendor L/S No:	VL1	VL1	VENDLOT1			

Item Code	Unit	Allocated	Ordered	Shipped	Backordered
2481-5-50	CASE	3.00	3.00		
DESK FILE 5 1/4" CAP 50					
PalletID:	CAS0000000000020	CAS0000000000021	CAS0000000000022		
Bin Location:	B30M	B30M	B30M		
Lot Serial No:	LOT102	LOT102	LOT103		
Status:	*Alloc*FullP	*Alloc*FullP	*Alloc*FullP		
Quantity:	1.00	1.00	1.00		

**Status** field is a crystal modifiable formula. \*Alloc and \*Allocated indicate the inventory is allocated to the order. \*Prim and \*Primary indicate the location is a primary bin location. (\*P) \*FullP or \*Pick Full ID indicates pick full pallet case license plate ID. No Status indicates printing available inventory.

**Quantity** field can be the quantity available or quantity on hand depending option selected

**Expire Date** and **Vendor L/S No** are fields associated to Lot Serial goods with Add-on (\*E) Expiration Date control and Vendor lot Traceability.

**Last Received in Location** field (not shown) is the date inventory was last received in the bin location.

**Bin Location Description** field (not shown) is also selectable.

**Bin Location Print Order** Bin Location option will designate inventory to print left to right. Sort Code option will sort by the bin location Sort Field. Primary Bin Location option will set designate to print the primary bin locations first. Allocations take precedence and will print first from the left.

**Override for Lot Serial Items** - The Lot Number option will print in Lot Number order left to right. The (\*E) Expiration Date option will print by the oldest Lot Expire Date left to right.

**Limit to One Row of Inventory** - One row of inventory will print. Allocations will always print from the left and then inventory thereafter.

# Sales Orders and Picking Sheets

## PICKING SHEET FORM OPTIONS PRINTING ALLOCATIONS

Form Code: **Multi-Bin Picking Sheet rows**

The crystal form code is SO404\_PickingSheet\_Bin2.rpt. These fields were added to the S/O Picking Sheet Work file. The BinLocSort formula is a Group sort to added to sort by bin location and by the bin location sort code. {SO\_PickingSheetWrk.D404\_BinSortCode} +{SO\_PickingSheetWrk.BinLocation}. Using the fields and this formula to sort or your own formula to sort is what is necessary to create your own picking sheet for the pre-allocations.

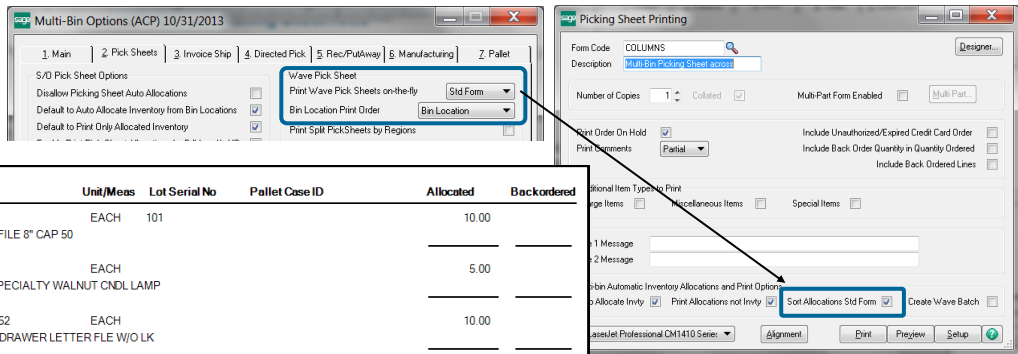
- ↳ D404\_Disabled
- ↳ D404\_UnitOfMeasureConvFactor
- ↳ D404\_PalletID
- ↳ D404\_PalletIDTop
- ↳ D404\_PalletIDSelected
- ↳ D404\_AllocatedFlag
- ↳ D404\_QuantityAllocated
- ↳ D404\_PrimaryLocation
- ↳ D404\_ExpirationDate
- ↳ D404\_VendorLotSerialNo
- ↳ D404\_BinDesc
- ↳ D404\_BinRegion
- ↳ D404\_BinAisle
- ↳ D404\_BinLastReceiptDate
- ↳ D404\_BinSortCode
- ↳ D404\_PickFullPallet

Fields added to S/O Picking Sheet form.

## STD FORM WAVE PICKING SHEET SETUP

INVENTORY > SETUP > MULTI-BIN OPTIONS > PICKING SHEET TAB

Select the **Std Form** option in Multi-bin Options Wave Pick Sheet **Print Wave Pick Sheets on-the-fly**. This will enable and provide the option in Picking Sheet printing for the **Sort Allocations Std Form**. This check box needs to be clicked ON to print and sort by allocations.



Bin Location	Region-Aisle	Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
A20L	A-A	*Primary 2480-8-50	EACH	101		10.00	
		DESK FILE 8" CAP 50					
A20M	A-A	*Primary ARS-9101	EACH			5.00	
		ART SPECIALTY WALNUT CNDL LAMP					
B10M	BC-B	1001-HON-H252	EACH			10.00	
		HON 2 DRAWER LETTER FILE W/O LK					

Wave picking sheet standard form. Printing allocations sorted by bin location.

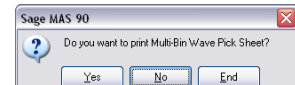
## WAVE PICKING SHEET FOR MULTIPLE ORDERS

INVENTORY > SETUP > MULTI-BIN OPTIONS > PICKING SHEET TAB

**Print Wave Pick Sheets on-the-fly** - the Wave Picking Sheet for Multiple Orders is selected to print with **Yes** and **Std & Wave**. After printing a range of sales order picking sheets you will receive the prompt to print the Wave Picking sheet.

- Yes
- No
- Std Form**
- Std & Wave**

The Wave pick sheet prints in Bin Location Order for all selected Sales Orders. This allows the warehouse staff to pull in the most efficient manner possible for all Sales Order ready to ship. Use the regular detailed pick sheet by sales order to pack each order.



MultiBin Wave Pick Sheet					
Warehouse: 000					
Region:					
Bin Location	Item Code	Lot Serial No	Sales Order No	Ship	Quantity
A-200-20	1001-HON-H252			SHIP	3.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
A-200-20	1001-HON-H252		0000208		10.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
A-200-20	1001-HON-H252		0000204		5.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
B-100-30	09-MD750	14-483	RON		1.00
	Status: *Alloc*Prr	MODEM 9600 (SYNCHRON			
C-100-10	2480-8-50	101		SHIP	3.00
	Status: *Alloc*Prr	DESK FILE 8" CAP 50			
C-100-10	2480-8-50	101	RON2		10.00
	Status: *Alloc*Prr	DESK FILE 8" CAP 50			
C-100-10	2480-8-50	101	0000204		5.00
	Status: *Alloc*Prr	DESK FILE 8" CAP 50			
C-100-30	1001-HON-H252		RON2		97.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
C-100-40	2481-5-50	JAN10		SHIP	3.00
	Status: *Alloc*Prr	DESK FILE 5 1/4" CAP 50			
E-200-20	1001-HON-H252		RON3		5.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
E-300-20	1001-HON-H252LK		RON3		3.00
	Status: *Alloc*Prr	HON 2 DRAWER LETTER I			
E-300-30	1001-HON-H254		0000208		10.00
	Status: *Alloc*Prr	HON 4 DRAWER LETTER I			

Wave picking sheet form for multiple orders sorted by bin location.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Sales Order Invoicing

## SALES ORDER INVOICE DATA ENTRY

SALES ORDER > MAIN MENU

INVOICE SHIPPING ALLOCATIONS ON THE FLY CONTINUED:

The process of Sales Order invoicing will be different based on whether items were pre-allocated in Sales Order Entry or Picking Sheet printing or not.

**Allocated** - If items were allocated, those allocations will carry forward, as the system assumes that the pickers will have honored those allocations. If changes were made during the picking process, the bin **MUST** be changed here in invoicing to ensure proper counts.

**Unallocated** - If items were not allocated, bins will have to be designated during invoicing. There are some auto-assign options available (see Sales Order Shipping Setup on the previous pages).

S/O Invoice Data Entry (ABC) 3/21/2010

Invoice No. 0100320

1. Header | 2. Address | 3. Lines | 4. Totals

	Item Code	Ordered	Shipped	Unit Price	Extension	Co
1	1001-HON-H252	10.00	10.00	78.12	781.20	
2	1001-HON-H254	10.00	10.00	121.83	1,218.30	
3	2480-8-50	5.00	5.00	31.95	159.75	
4		.00	.00	.00	.00	

STOP Note that when a line is shipped, but no bin distribution information has been entered, like the Lot item above, a warning appears on the line to prompt distribution.

Description: DESK FILE 8" CAP 50  
 Warehouse: 000  
 Unit Of Measure: EACH  
 Back Ordered: .00

Total Amount: 2,159.25

Quick Print | Accept | Cancel | Delete

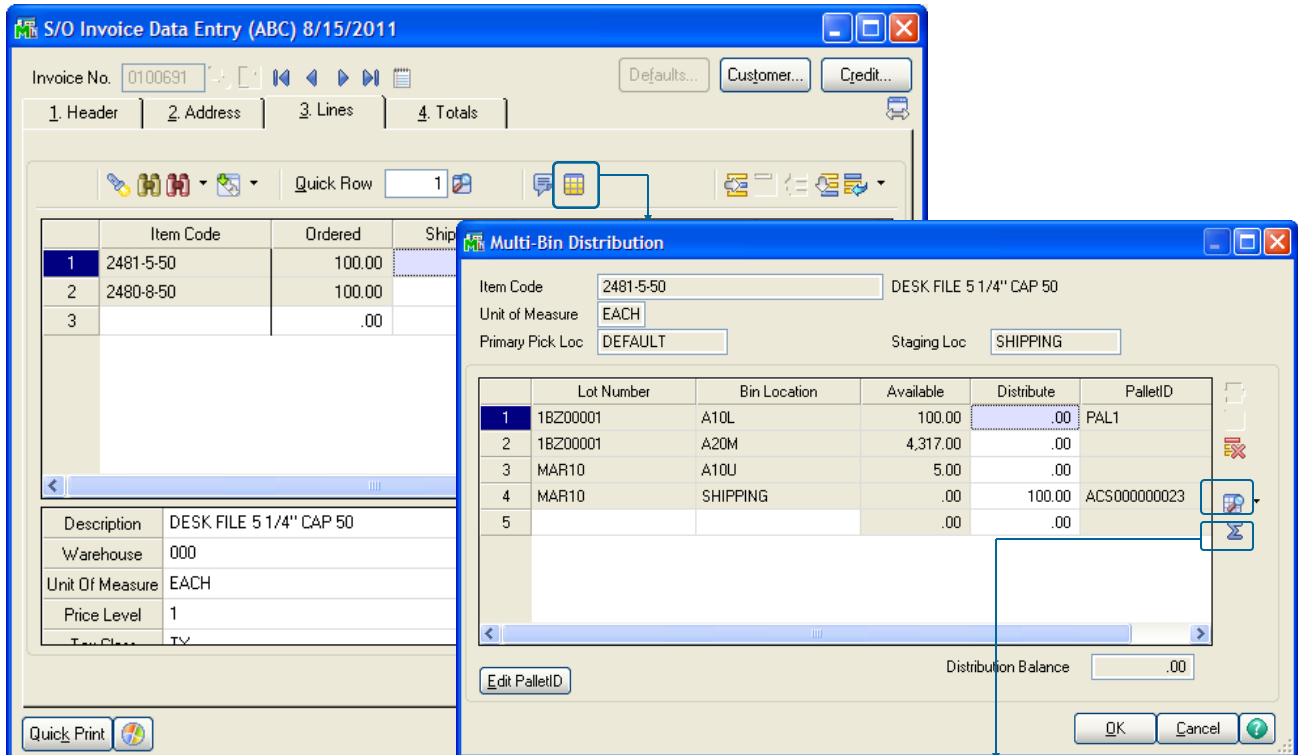
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Sales Order Invoicing

## SALES ORDER INVOICE DATA ENTRY

SALES ORDER > MAIN MENU

When distributing Lot/Serial Items, the system can help with bin locations that contain that item. Simply select to “Show Lots” (highlighted below) to have the system list all bin locations with lots of this item. Then select the bin it shipped from.



The Show Lots button displays all inventory

The Distribute button will auto distribute quantities down until the line is fully shipped.

**Expiration Date (\*E)** - (not shown) If enabled, the Expiration Date associated with the lot. If enabled information can be superseded.

**Vendor Lot No (\*E)** - (not shown) If enabled, the Vendor Lot No associated with the lot. If enabled information can be superseded.

**Pallet ID (\*E)**- If Pallet Management is enabled, reflects the pallet ID inventory is located. Pallet ID and Bin Location is automatically selected from the Bin Location field.

**Next Pallet ID button (\*E)** - If Pallet Management is enabled, creates a new Pallet ID on the fly. Next Number default is selected in Multi-bin Options.

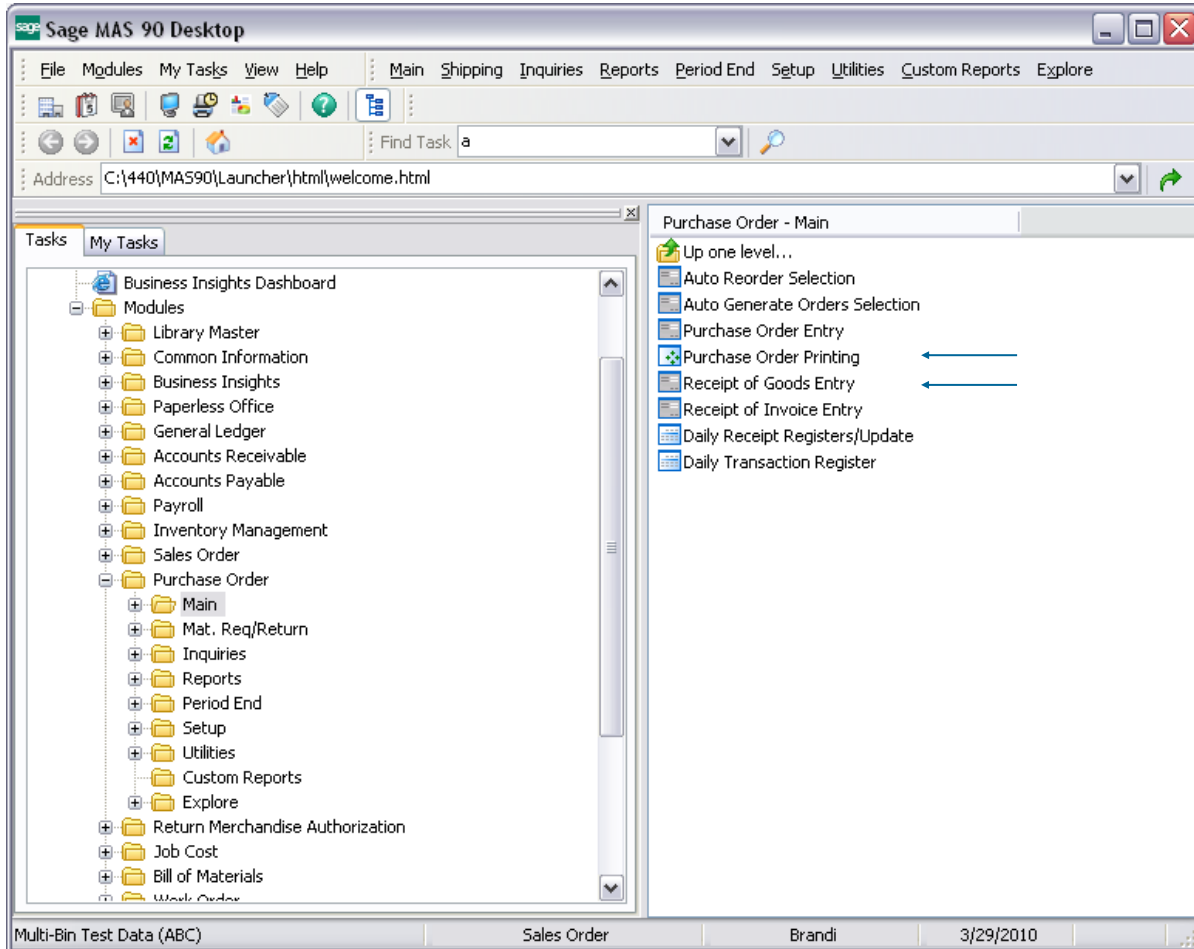
**Edit Pallet ID button (\*E)** - If Pallet Management is enabled, creates a edits Pallet information on the fly.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**MULTI-BIN FOR PURCHASE ORDER**

PURCHASE ORDER &gt; MAIN MENU

Just as sales must be distributed from Bins, receipts must be distributed to bins at some point as well. Once again, users have the ability to choose how much automation the system can provide.



Multi-Bin WMS provides manual selection where to store goods and automatic methods.

Purchase Order Printing can print Directed Put Away report by purchase order - which uses the Directed Put Away rules set in options to make stocking suggestions for incoming items.

The Inventory—PutAway Report advises where to store goods from receiving staging locations. Goods on Hold will be skipped.

In addition, Multi-Bin WMS provides automation for receiving items to specific bins in Receipt of Goods Entry if desired. Whether using the automated bin assignments (Item Bins, Warehouse Staging Locations etc) or manual selections from the Directed Put Away report, items must be distributed to bins in Receipt of Goods.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



# Purchase Order Put Away Options

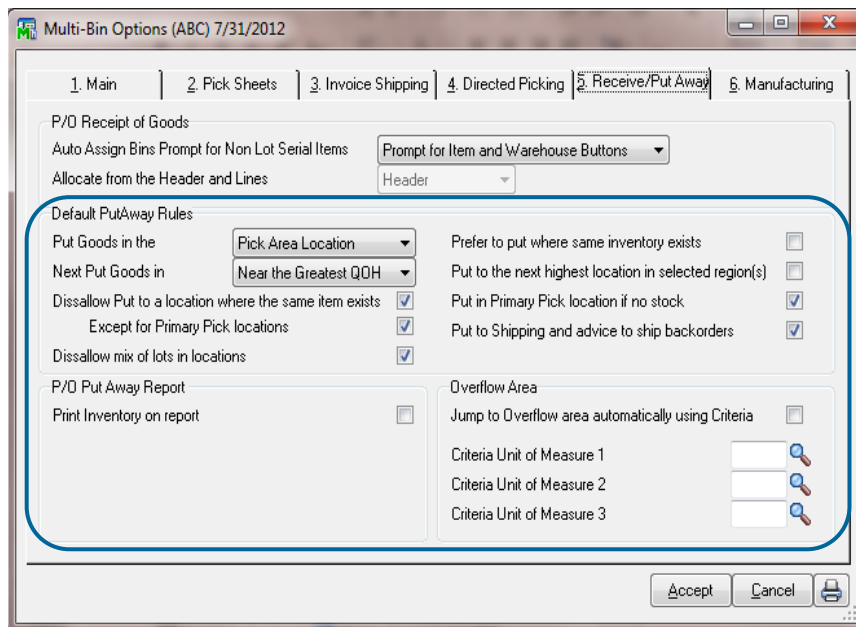
## DIRECTED PUT AWAY OPTIONS

INVENTORY MANAGEMENT > SETUP MENU

**ACS Multi-bin WMS Directed PutAway** options directs the system where goods are stored. The system calculates destination information from the capacity of the locations and the desired settings. Print the Multi-Bin PutAway Report to print put aways from staging locations or after goods are produced. Put Away report can be generated based on purchase orders by using the Put Away template in purchase order printing.

Choose to store goods nearby or in the same location of the same item. Also it can give favor to store goods or product lines in certain warehouse zones (called regions) or aisles. Perhaps you want to store goods in overflow locations first or to the pick area. Goods can go directly to primary pick locations too and if you have a number of the them it will put them to the lowest primary code first. There are also overriding factors such as when there is no existing inventory and the system can direct goods to Primary Bin locations or to the Shipping dock if there are backorders.

The sequential put away will put goods in the next highest numbered location so that the lowered locations have the next older goods. It will start from the beginning – lowest number location - when goods are stored in the highest number location next to the last put away.



### DEFAULT PUT AWAY RULES

**Put Goods in the** - Can choose to first put goods in the **Pick Area** or **Overflow Area**. Pick area is the normal choice unless Overflow locations is chosen.

**Next Put Goods in** - Select to store at or near the **Greatest QOH** or **Least QOH**. Still evaluating Regions and Aisles that maybe setup in options, storing goods where the Greatest QOH could be best if you are not storing goods where the same inventory item exists. The Least QOH can be best when storing in the same location.

**Sort by Bin Location and Sort code** is provided in Product Line and Inventory maintenance.

**Dissallow Put to location where the same item exists** - skips puts where the same item exists. **Except for Primary Pick Locations** designated in inventory maintenance. Skipping the primary location is normal.

**Dissallow mix of lots in locations** - skips puts to locations with the same item and different lot numbers.

**Prefer to put where the same inventory exists** - will allow put of the same item in a location if running out of available locations to store goods.

**Put to the next highest location in selected region(s)** - discussed on the next page and example.

**Put in Primary Pick location if not stock** - if there is no inventory and availability in the Primary Pick locations. If multiple primary pick locations are setup then goods are assigned to the lowest priority location first (i.e., 5th, 4th, 3rd, 2nd and 1st).

**Put in Shipping and advice to ship backorders** - if there is no stock and has backorders the system will skip other advice to advice to transfer goods to the Shipping Staging location. It advises up to the quantity on backorder and the Shipping Staging location must be setup in Warehouse Code Maintenance.

**Print Inventory on Put Report** - This option will print existing inventory on the report (used for the "Where Same Item" option above. If this option is disabled, the "Where Same Item" option will be skipped.

**Jump to Overflow area automatically using Criteria** - Using the Overflow criteria set in Inventory maintenance, the system can assess the number of an item being received and can make suggested for stocking overflow if desired.

# Purchase Order Put Away Options and Put Away Report

## PURCHASE ORDER PUT AWAY AND DIRECTED PUT AWAY REPORT

Directed Put Away information can be printed by purchase order and by receiving staging locations. Printing the put away report by purchase order provides advice before updating purchase orders.

### Purchase Order Form Put Away Report

- Multi-bin WMS options provides the option to print inventory information in addition to the directed put away
- To create a purchase order form to print the P/O put away, create a new form code and select the put away template.
- Prior to P/O receipt of goods update, can select a group of purchase orders to accumulate suggestions based on the unposted information for more accurate put away information.

### Directed Put Away Report by Staging locations

Directed Put Away advice can be provided from postings to receiving staging locations and locations designated as Receiving Region.

Can designate a quality control bin location where the location automatically Holds inventory until inspected and Released. The quality control can be designated in warehouse code maintenance as the receiving location and automatically assigned during receipt of goods. The location can be associated to a Receiving Region. Held goods will be automatically skipped from Put Away advice.

XYZ Manufacturing Company (XYZ)						
Item Code and Description	Unit of Measure	From Bin Location	Lot Number	To Bin Location	Transfer Quantity	
<b>Warehouse: 000 MAIN WAREHOUSE</b>						
A LOT	A lot Work Order FG	EACH	RECEIVING	1001A1	1000BIN	1.00
BTTRY-98422	CLOCK BATTERY	EACH	QUALITY		LAB	465.00
DOUGH	Dough	EACH	RECEIVING	DGH1211	100A	99.00
DSKTP-00200	TURBO DESKTOP COMPUTER S*	EACH	RECEIVING		100A	5.00
FLOUR	Flour	POUN	QUALITY	RON1234	WIP_RAW	805.00
FLOUR	Flour	POUN	RECEIVING	MYLOTNO	103E	1,000.00
SAUCE	Sauce	EACH	QUALITY	VL-1234	1000BIN	7,397.00

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

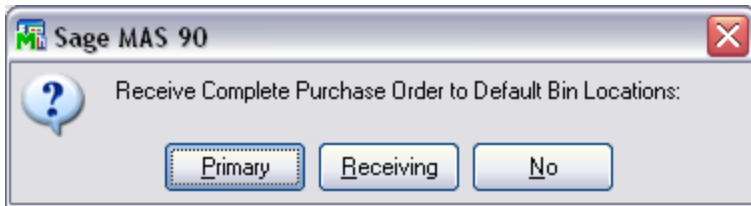
# Purchase Order Receiving

## PURCHASE ORDER RECEIPT OF GOODS

PURCHASE ORDER > MAIN MENU

Receipt of Goods is where users must make the final bin selections for incoming items. This can either be done manually (with the suggestions of the Directed Put Away Report) or with the auto-assign selections available for setup in Options.

If Auto Assign Options are in use, the system will automatically make the appropriate Bin Location distributions. If the prompt option is selected, a prompt will appear when receiving options (shown below.) If no prompt and no assignment options are selected, the user will need to manually distribute all items being received.



Remember, **Primary** refers to each individual item's Primary Bin location. **Receiving** refers to the Warehouse's Receiving Staging Location. **No** refuses all auto distributions and will require each line to be distributed manually.

Receipt of Goods Entry (ABC) 3/21/2010

Receipt Number: 001123

1. Header | 2. Address | 3. Lines | 4. Totals

	Item Code	Ordered	Received	Unit Cost	Extension
1	1001-HON-H252	25.00	25.00	31.113	777.83
2	1001-HON-H254	10.00	10.00	83.500	835.00
3	2480-8-50	50.00	50.00	15.453	772.65
4		.00	.00	.000	.00

**STOP** Note that when a line is received, but no bin distribution information has been entered, like the Lot item above, a warning appears on the line to prompt distribution.

Description: DESK FILE 8" CAP 50  
 Warehouse: 000  
 Unit of Measure: EACH  
 Back Ordered: .00

Total Amount: 2,385.48

Buttons: Accept, Cancel, Delete, Print, Help

As always, use the grid button above to access the Multi-Bin Distribution screen to make changes to auto-allocations or complete manual allocations.

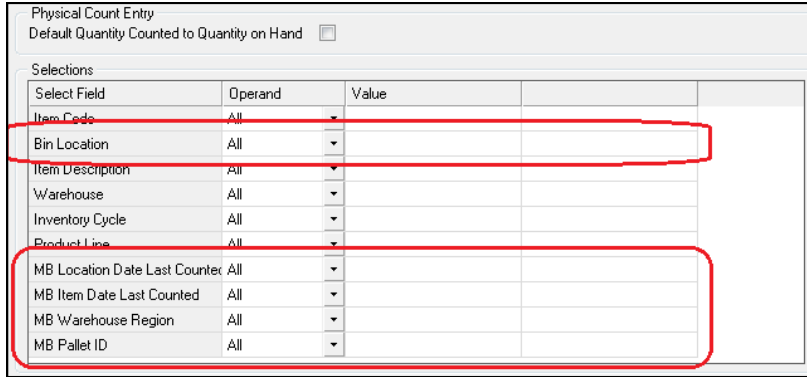
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

PHYSICAL COUNTS

INVENTORY MANAGEMENT > PHYSICAL COUNT WORKSHEET

**Physical Count Worksheet Print and Freeze**

The Physical count work sheet provides detail with bin locations and pallet ID (\*P). Selection is provided by bin location range, Pallet ID range and last counted dates. In addition to Sorting by Item Code, the worksheet can be Sorted by the Bin Location and Pallet ID.



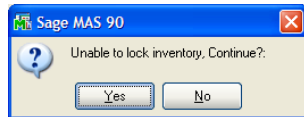
**Bin Location Code** select range

**Region Code** select range

**MB Pallet ID (\*P)** select Pallet ID range

**MB Location Date Last Counted** select the last date the inventory was counted in the location.

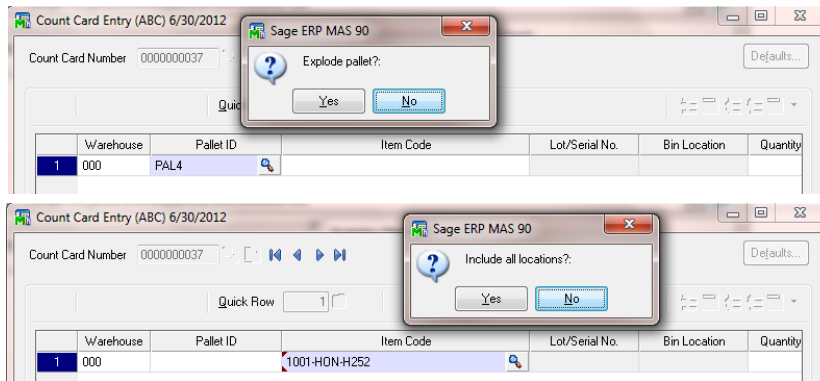
**MB Item Date Last Counted** select the last date the inventory was counted regardless of the location.



**Freeze lock inventory override.** The stock system attempts to lock inventory. The following prompt to allow freeze to continue.

**Physical Count Card Entry**

Multi-bin and WMS provides selection of bin locations and pallet ID (\*P). Pallet ID provides option to explode pallets contents and the selection of inventory items provides the option to explode counts for all locations.

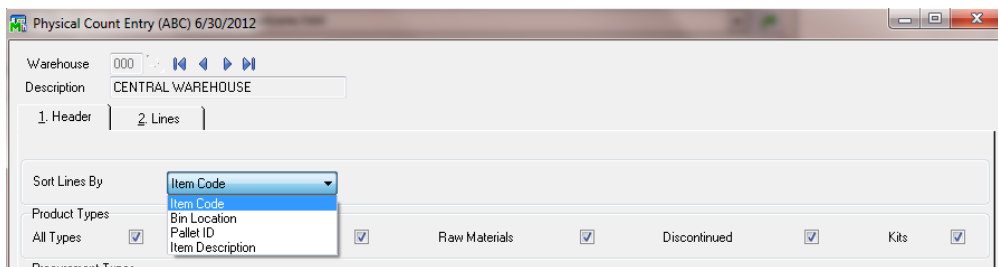


**Explode Pallet ID (\*P).** After the selection of the pallet ID can choose to explode contents of pallet to the card entry.

**Explode Item Code** After the selection of the item code can explode all locations to the card entry.

**Physical Count Data Entry**

Multi-bin and WMS provides the ability to freeze, enter and import physical counts. Data entry provides the data entry sort options for Bin Location and Pallet ID (\*P).

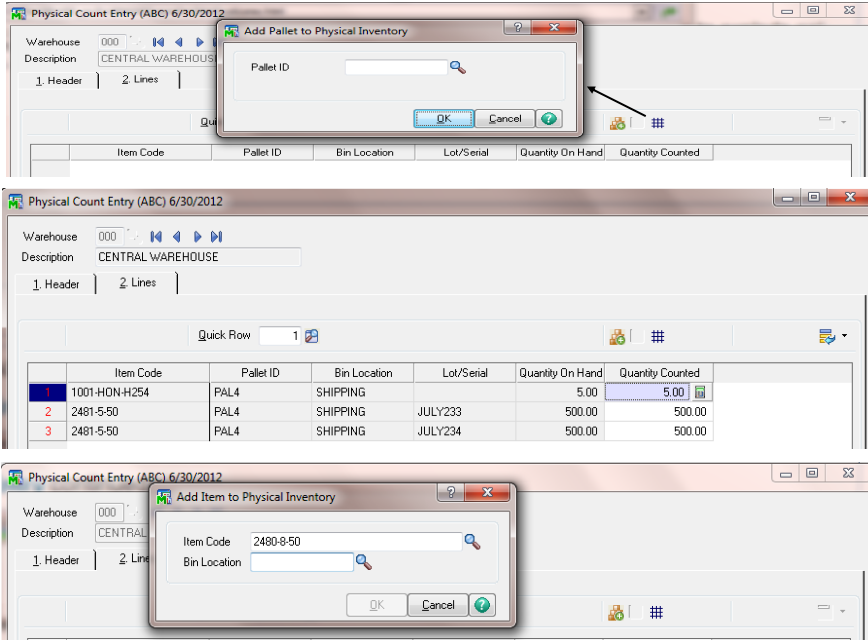


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

ENTERING PHYSICAL COUNTS

INVENTORY MANAGEMENT > PHYSICAL COUNT MENU > PHYSICAL COUNT ENTRY

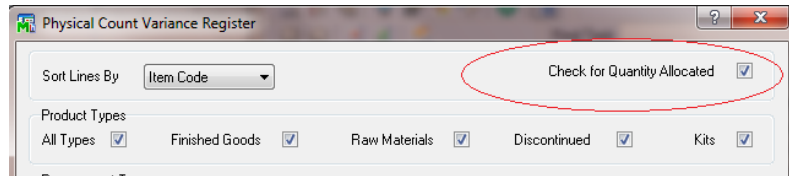
Physical Count Entry continued



# Pallet ID (\*P). After the selection of the pallet ID can choose to explode contents of pallet to the physical count card entry. Quantity counted is defaulted. For business object access there is an option to default quantity counted for a pallet ID.

Bin Location Add item to physical inventory requires selection of bin location.

Physical Count Variance Register



- **Sort by Inventory or Bin Location** - sort option to print variance register by inventory or bin locations.
- **Check for Quantity Allocated check box** - Checks that the net quantity available will not go negative because of the physical count entries and pre-allocations in sales order entry. Discussed more on the next page.

Check for Quantity Allocated -

Checks potential postings for negative net quantity available before updating the physical register. It calculates the total Sales Order Entry pre allocations for each item in the physical count. It provides an opportunity change information prior to updating.

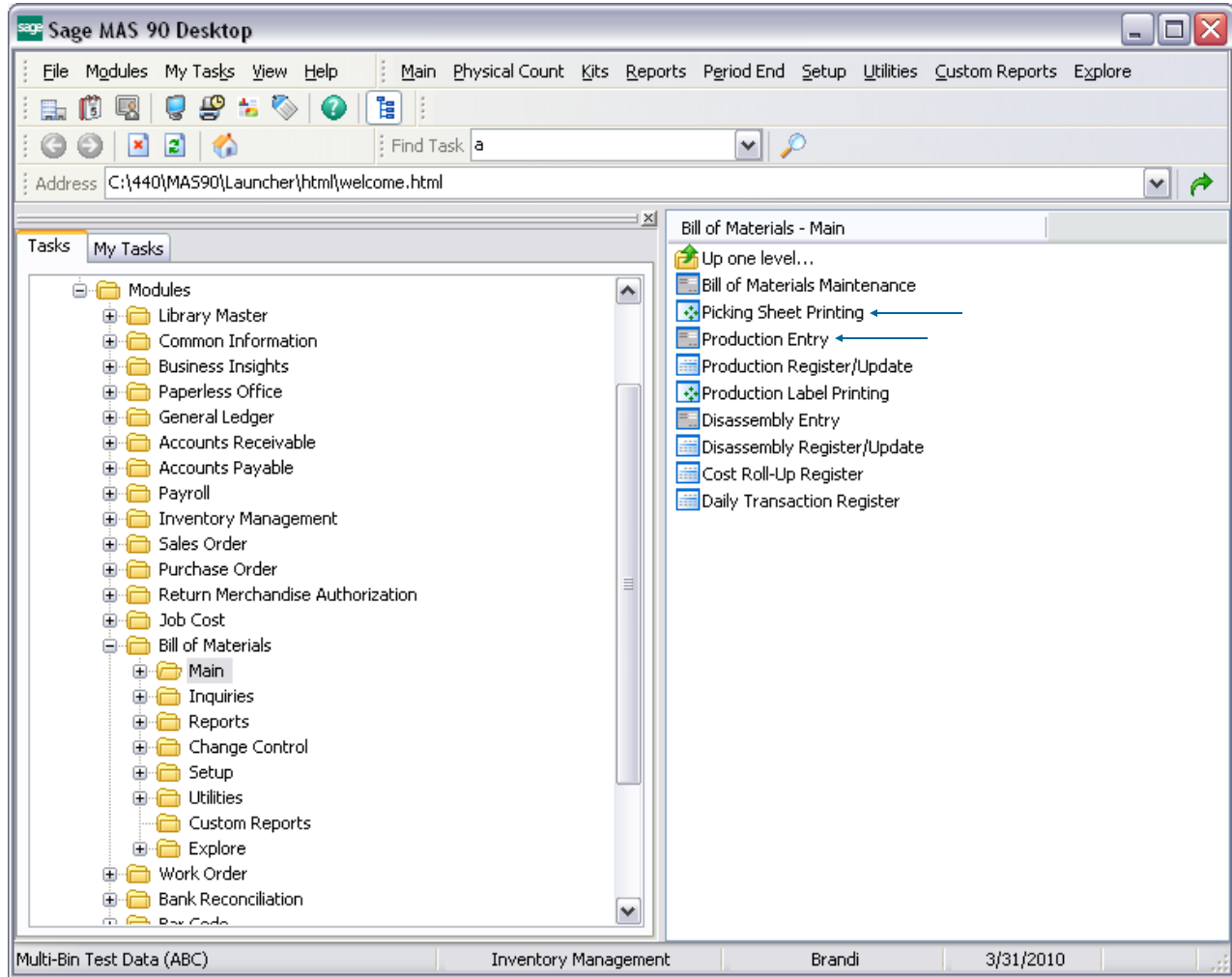
- Error Log - When the condition is detected an error log is provided reflecting all of the items potentially going negative. This provides an opportunity to correct physical count entry or allocations.
- Unselect the Check for Quantity Allocated check box to skip this check/validation and allow update.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

MULTI-BIN FOR BILL OF MATERIALS

BILL OF MATERIALS > MAIN MENU

When creating builds for Bill of Materials, bins can be designated in several places to ensure that components and finished goods are pulled and placed properly.

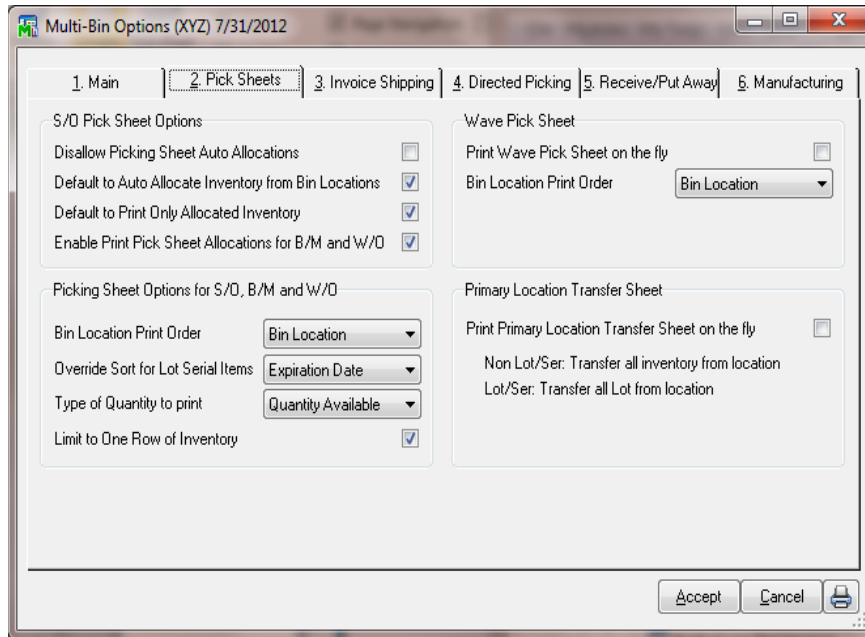


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

**BILL OF MATERIALS PICKING SHEET OPTIONS**

INVENTORY MANAGEMET > SETUP MENU

All of the Picking Sheets in the system are governed by the same options set in the Pick Sheets tab of Multi-Bin Options.



**Enable Print Pick Sheet Allocations for B/M and W/O** - When this option is turned ON B/M picking sheet printing will provide the ability to select Production No's and will print the raw material allocations on the pick sheet. W/O future feature.

**Picking Sheet Options for Sales Order, Bill of Materials and Work Order**

**Bin Location Print Order** - Allows users to manage the order in which inventory appears on the pick Sheet.

- Select **Bin Location** for listing alphabetically by Bin Location Code.
- Select **Sort Code** to print locations in Wave order using the Sort Code in Bin Location Maintenance.
- Select **Primary Pick Location** to print only the item's primary pick bin.

**Override Sort for Lot Serial Items** - Allows users to manage the order in which lotted and serialized inventory appears on the pick Sheet.

- Select **Lot Number** to sort by Lot Number
- Select **Expiration Date** to sort by the item's expire date. Only available when using Multi-Bin Expiration Date Control add-on.

**Type of Quantity to Print** - Allows users to decide how quantity is displayed, as **Quantity on Hand** or **Quantity Available**.

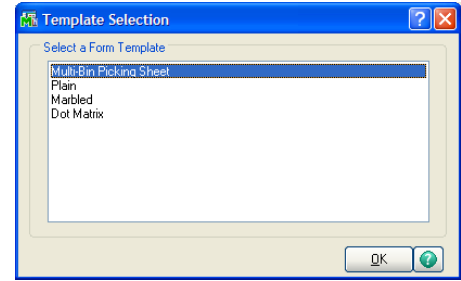
**Limit to One Row of Inventory** - Because the pick sheet is able to print all bins for a given item, users have the ability to limit the output of bin locations to a single row across.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**BILL OF MATERIALS PICKING SHEET PRINTING**

BILL OF MATERIALS > MAIN MENU

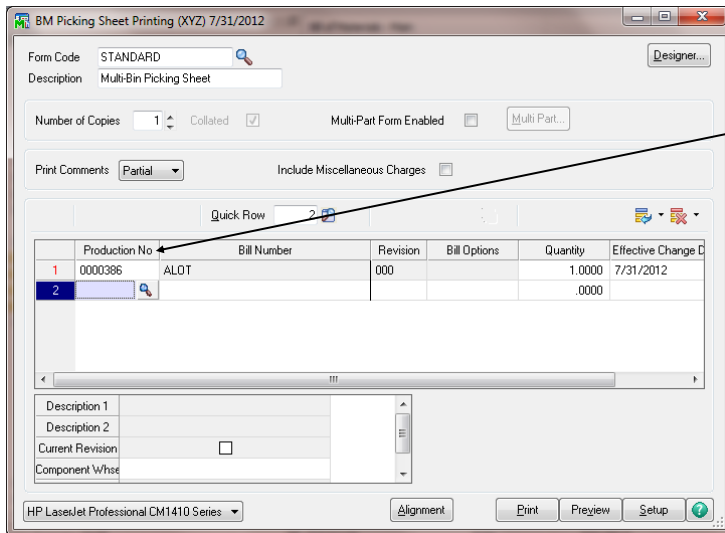
Multi-Bin WMS installs a new picking sheet template to help manufacturers pick for their builds with bin location and added Lot Serial information. To utilize it, create a new form code in picking sheet printing and select the Multi-Bin Picking Sheet.



**B/M Picking Sheet: Printing Multi-bin and Printing Allocations selected in Production Entry**

B/M Picking sheets can be printed before entering the production entry to print the locations of the components and perform picking. By printing the picking sheet after the production entry the pick sheet can reflect the which inventory that was selected in production entry. Perhaps because certain goods, lots and locations were selected or because our auto allocation feature was selected.

**Multi-bin Options — Manufacturing Tab: Enable Print Pick Sheet Allocations for B/M and W/O** - When this option is turned ON B/M picking sheet printing will provide the ability to select Production No's and will print the raw material allocations on the pick sheet. W/O future feature.



If the Enable Print Pick Sheet Allocations is ON then the Picking Sheet Printing selection screen provides the ability to selection the Production No. When the Production No is selected the system will only print the lines and the allocations in that production entry.

If Batch entry is turned ON the picking sheet entry screen will ask for the Batch number when going in.

**Samples printing allocations and printing available inventory.**

Component Item Code/Description	Unit of Measure	Quantity Per Bill	Total Quantity	Quantity Picked	Short
BTTRY-98422	EACH	2.0000	20.0000		
Bin Location: 200B					
Lot Serial No:					
Status: *Allocated					
Quantity: 20.00					
Expire Date:					
Vendor L/S:					
Revision:	CLOCK BATTERY				
DOUGH	EACH	2.0000			
Bin Location: 1000BIN					
Lot Serial No: DGH1211					
Status: *Allocated					
Quantity: 20.00					
Expire Date: 12/31/2010					
Vendor L/S: DGH1121					
Revision:	Dough				

Component Item Code/Description	Unit of Measure	Quantity Per Bill	Total Quantity	Quantity Picked	Short
BTTRY-98422	EACH	2.0000	0.0000		
Bin Location: 200B					
Lot Serial No:					
Status: *Primary					
Quantity:	430.00	450.00	340.00		
Expire Date:					
Vendor L/S:					
Revision: *	CLOCK BATTERY				
DOUGH	EACH	2.0000	0.0000		
Bin Location: 1000BIN					
Lot Serial No: DGH1211					
Status:					
Quantity:	208.00	9.00	99.00	1.00	849.00
Expire Date:	12/31/2010	12/31/2010	12/31/2010	12/31/2010	12/31/2010
Vendor L/S:	DGH1121	DGH1211	DGH1121		
Revision: *	Dough				

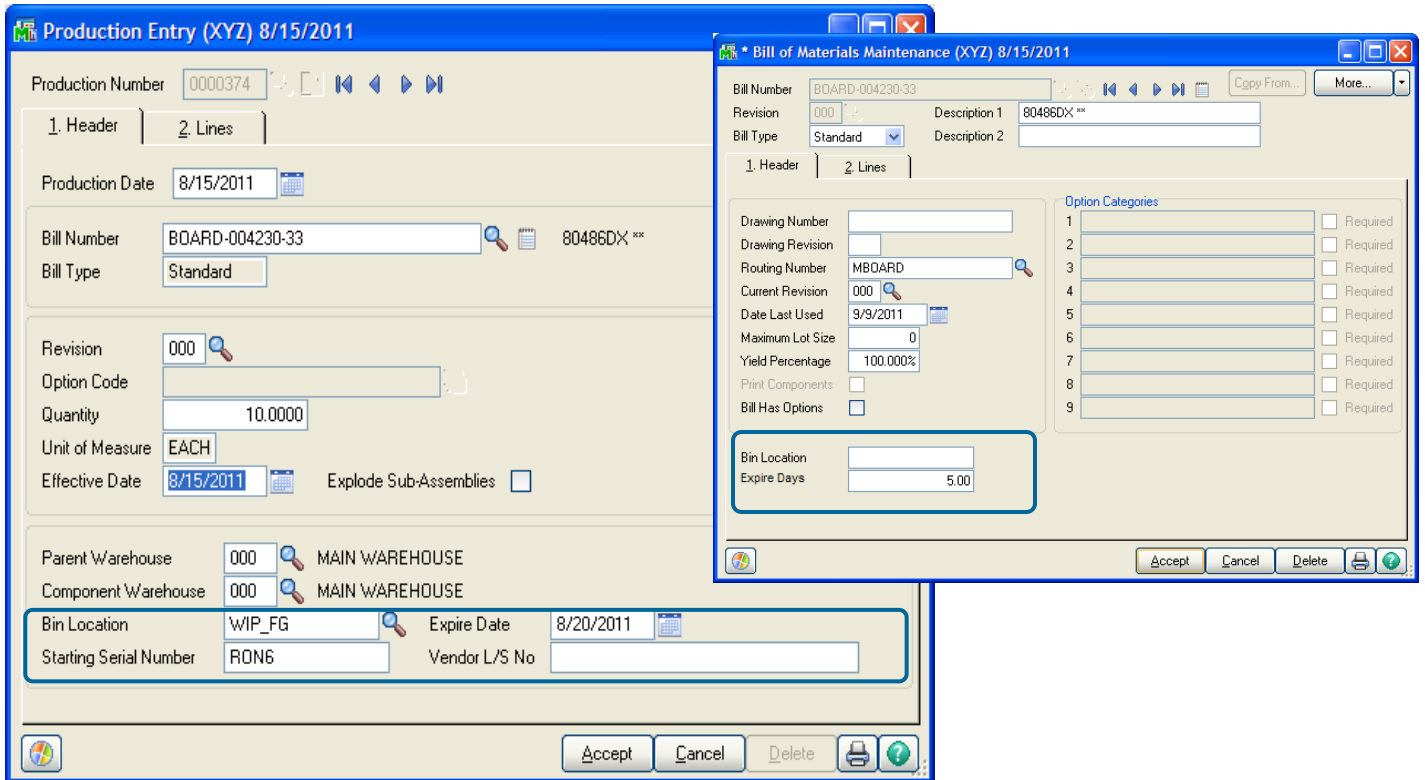
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



**BILL OF MATERIALS PRODUCTION ENTRY**

BILL OF MATERIALS > MAIN MENU

There are two changes to Bill of Materials Production Entry for the bin assignments of Finished Goods as well as Component Items.



**Bin Location Finished Goods Automatic assignment options** -- auto assignment is optional.

**Multi-bin Options** - Select to auto assign the primary pick or the warehouse staging location for finish goods.

**Bill of Materials Maintenance Custom Office UDF** - an entry in this field will supersede options. It will also add the bin location on the fly if it does not exist.

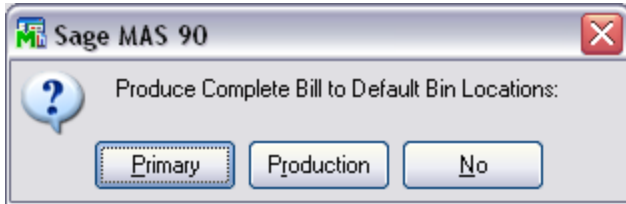
**(\*E) Expire Date** -- If activated, complete the expiration date to track the finished good expire date. The date can be defaulted by using the Custom Office UDF field for Expire Date. Vendor Lot field can be input if useful.


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

BILL OF MATERIAL PRODUCTION ENTRY

BILL OF MATERIALS > MAIN

On the lines tab, the settings entered in Multi-Bin Options for manufacturing will determine how goods are allocated.



 Remember, **Primary** refers to each individual item's Primary Bin location. **Production** refers to the Warehouse's Component Staging Location. **No** refuses all auto distributions and will require each line to be distributed manually.


**Production Entry (XYZ) 3/31/2010**

Production Number: 0000279

1. Header | 2. Lines

Quick Row: 2

	Component Item Code	Quantity/Bill	Extended Quantity	Comment
1	BTTRY-98422	1.00	25.00	
2	MEMRY-00080	1.00	25.00	
3		.00	.00	

 Note that when a line is received, but no bin distribution information has been entered, like the Lot item above, a warning appears on the line to prompt distribution.

Description	MEMORY CHIP SET - 4 MEG
Revision	000
Warehouse	000
Unit Of Measure	EACH

As always, use the grid button above to access the Multi-Bin Distribution screen to make changes to auto-allocations or complete manual allocations.

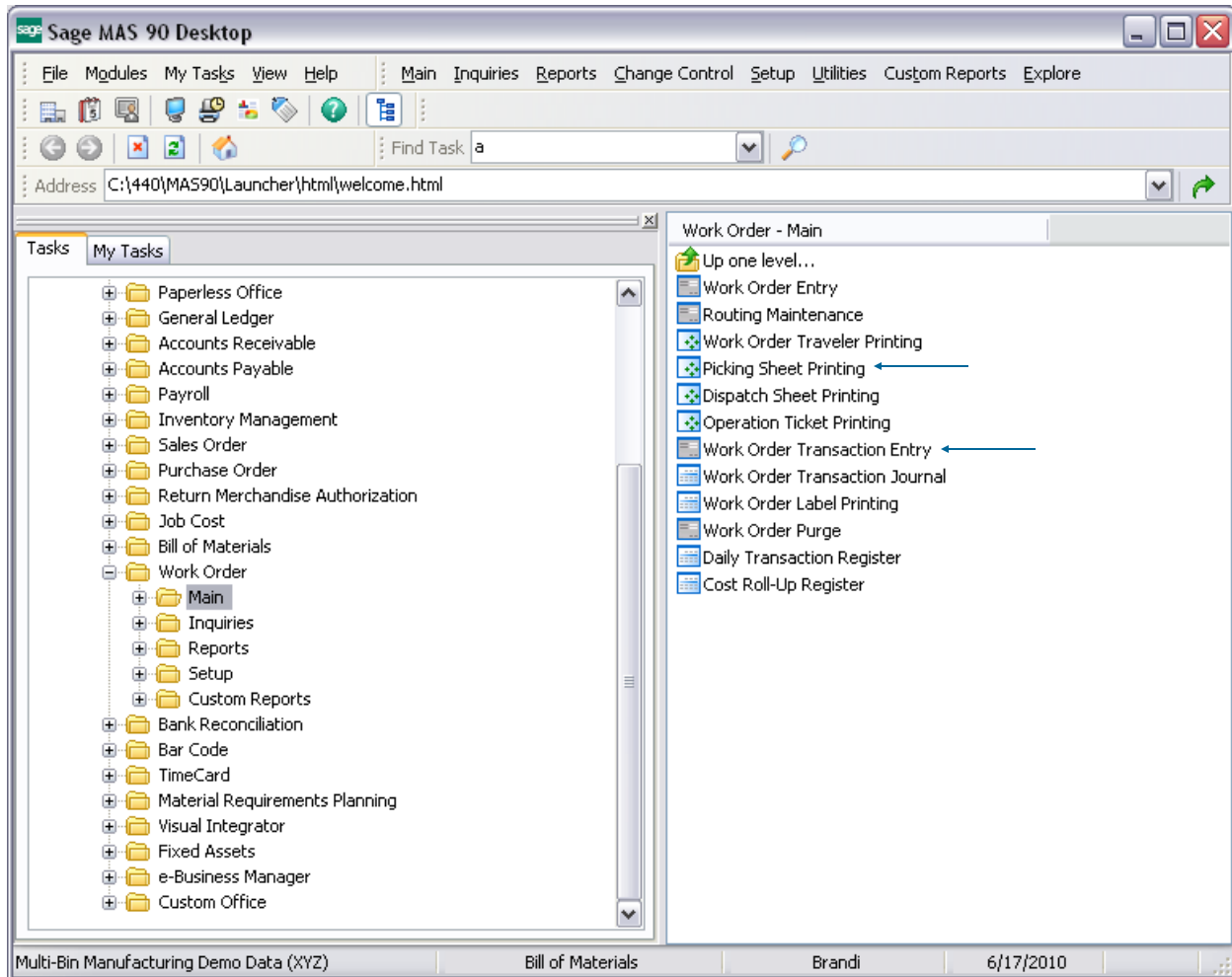
Buttons: Accept, Cancel, Delete, Print, Help

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**MULTI-BIN FOR WORK ORDER**

WORK ORDER &gt; MAIN MENU

When creating Work Order Transactions, bins can be designated in several places to ensure that raw materials and finished goods are pulled and placed properly.

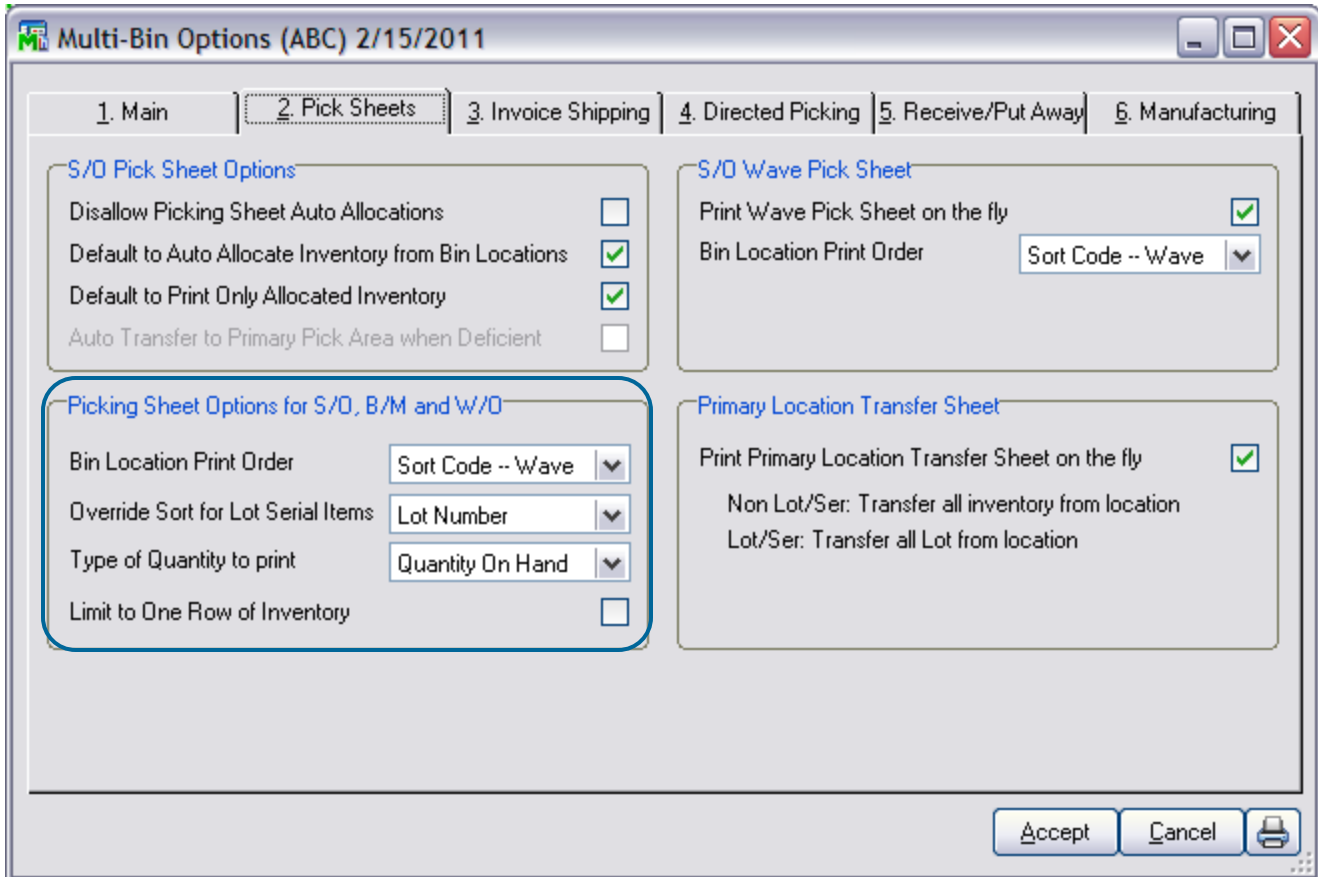


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

**WORK ORDER PICKING SHEET OPTIONS**

INVENTORY MANAGEMET > SETUP MENU

All of the Picking Sheets in the system are governed by the same options set in the Pick Sheets tab of Multi-Bin Options.



**Picking Sheet Options for Sales Order, Bill of Materials and Work Order**

**Bin Location Print Order** - Allows users to manage the order in which inventory appears on the pick Sheet.

- Select **Bin Location** for listing alphabetically by Bin Location Code.
- Select **Sort Code** to print locations in Wave order using the Sort Code in Bin Location Maintenance.
- Select **Primary Pick Location** to print only the item's primary pick bin.

**Override Sort for Lot Serial Items** - Allows users to manage the order in which lotted and serialized inventory appears on the pick Sheet.

- Select **Lot Number** to sort by Lot Number
- **(\*E)** Select **Expiration Date** to sort by the item's expire date. Only available when using Multi-Bin Expiration Date Control add-on.

**Type of Quantity to Print** - Allows users to decide how quantity is displayed, as **Quantity on Hand** or **Quantity Available**.

**Limit to One Row of Inventory** - Because the pick sheet is able to print all bins for a given item, users have the ability to limit the output of bin locations to a single row across.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

WORK ORDER PICKING SHEET PRINTING

WORK ORDER > MAIN MENU

Multi-Bin installs a new picking sheet to help manufacturers pick for their work orders more effectively. To utilize it, create a new form code in picking sheet printing and select the Multi-Bin Picking Sheet.

<b>PICKING SHEET</b>					Page: 1
WAREHOUSE: 000 MAIN WAREHOUSE					
WORK ORDER NUMBER: 0095023					
WORK CENTER: CAB CABINET & CHASSIS CENTER					
SCHED START: 06/15/03					
ITEM CODE	U/M	QTY REQUIRED	PICKED	SHORT	
CABIN-01000-IH CABINET MODEL 1000	EACH	1.00	_____	_____	
<b>Bin Location:</b> 236C <b>Lot Ser No:</b> <b>Quantity:</b> 128.00					
MEMRY-00080 MEMORY CHIP SET - 4 MEG	EACH	2.00	_____	_____	
<b>Bin Location:</b> 870D <b>Lot Ser No:</b> 050105 <b>Quantity:</b> 393.00	<b>DEFAULT</b> 050105 465.00				
DCNTR-01000 FIXED DISK CONTROLLER	EACH	-1.00	_____	_____	
<b>Bin Location:</b> DEFAULT <b>Lot Ser No:</b> 00010101 <b>Quantity:</b> 79.00					
DCNTR-20015 SINGLE 3 1/2" DRIVE CONTROLLER	EACH	-1.00	_____	_____	
<b>Bin Location:</b> DEFAULT <b>Lot Ser No:</b> A14102 <b>Quantity:</b> 10.00	<b>DEFAULT</b> A14103 15.00				

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**WORK ORDER TRANSACTION ENTRY**

WORK ORDER > MAIN MENU

Work Order Material Issues must designate bins for raw materials. The system can help automate that distribution based on the options set in the Manufacturing Tab of Multi-Bin Options.

As steps are entered - users can manually distribute using the Lot/Serial distribution box.

Alternatively, clicking the Auto-Allocation button will produce the allocate on the fly prompts setup on the Manufacturing Tab of Multi-Bin Options.

Remember, **Primary** refers to each individual item's Primary Bin location. **Production** refers to the Warehouse's Work Order Staging Location. **No** refuses all auto distributions and will require each line to be distributed manually.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

WORK ORDER TRANSACTION ENTRY

WORK ORDER > MAIN MENU

Work Order Completions must designate bins for finished goods to be received to.

Work Order Transaction Entry

Transaction No. 0000216 Type Completion

1. Header | 2. Lines

Original Item Number	Description	Rev	Options	Effective Date
DSKTP-00200	TURBO DESKTOP COMPUTE	000	03.02.02,	04/20/2003

Work Order No. 0095015 Complete to Inventory

Complete Item Number DSKTP-00200 Quantity 1.00 U/M EACH Warehouse 000 Costing Average

Complete Item Description TURBO DESKTOP COMPU Bin Location

Line	Work Order	Complete to	Item Number	Whse	Quantity	U/M
------	------------	-------------	-------------	------	----------	-----

Accept Cancel Delete

Enter the completion quantity (Planned: 20, To be Completed: 10) BF XYZ 6/17/2010

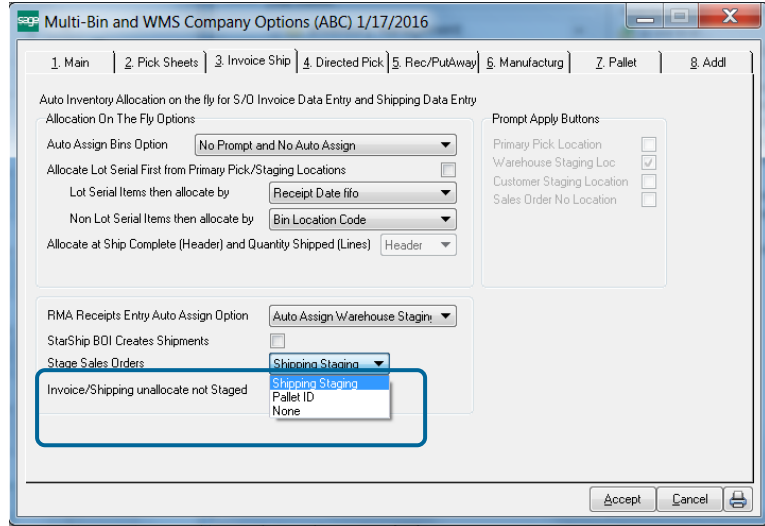
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

**STAGE SALES ORDERS**

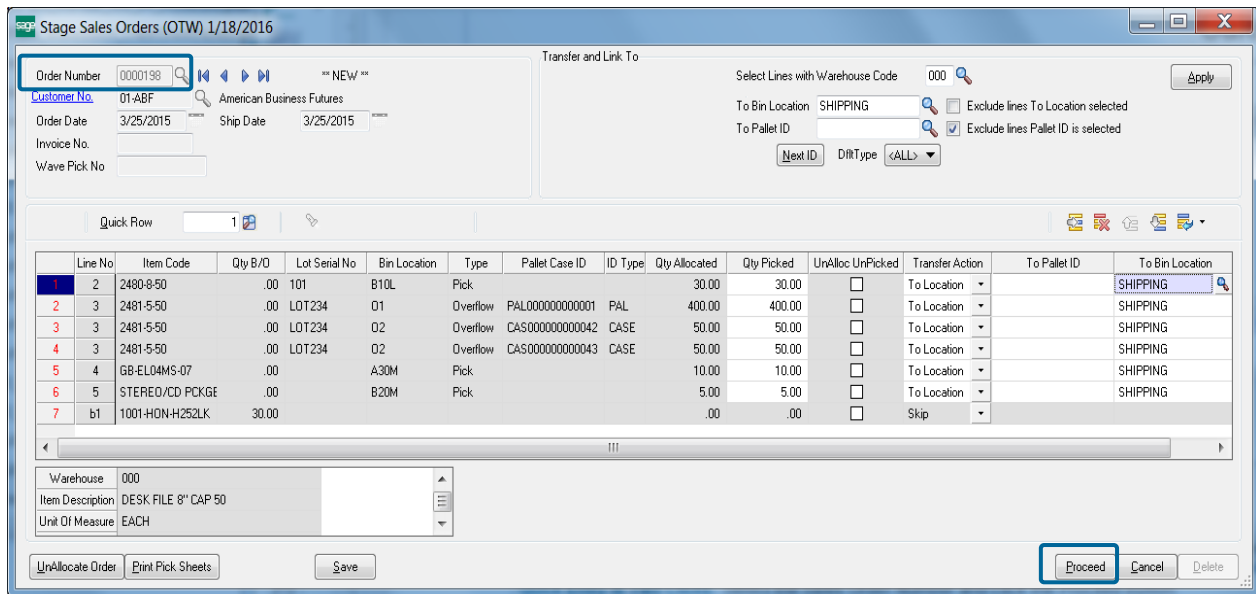
The Stage Sales Orders program will quickly transfer inventory to a staging location and, in addition for license plate users, will auto pack an order to a pallet. It will allow orders to be moved to any location in addition to a staging location. Locations and license plate ID's can be overridden.

**Quick Entry** Stage Sales Orders is designed to provide a quick entry to move inventory after the selecting the sales order number. Select the Stage Sales Orders drop box option in the Invoice/Ship tab in ACS Warehouse Management Options to automatically assign the S/O Shipping Staging Location or a Pallet ID.

Warehouse Staging Location for Shipping is designated in Inventory Management > Setup > Warehouse Code Maintenance > Multi-bin Button. Select the Sales Order Invoice Shipping Location.



**QUICK ENTRY TO STAGE SALES ORDER PICKS**



**Quick Entry is Two Clicks.** Select the Sales Order Number and click the Proceed button.

**Order Number** - Select the Sales Order Number. The system will retrieve pre--allocations lines and default the Transfer Action column based on the Company Option set. Orders not pre-allocated will prompted to Auto Allocate Now. Clicking Allocate will auto allocate inventory based on the rules in Company Options for Directed Picking.

**Proceed Button** - Will process all of the Transfer Action column.

Quick transfer of the inventory and allocations will move to the destination location designated. For License Plate Transfer Actions where selected To Pallet will move inventory to the Destination Pallet ID selected.

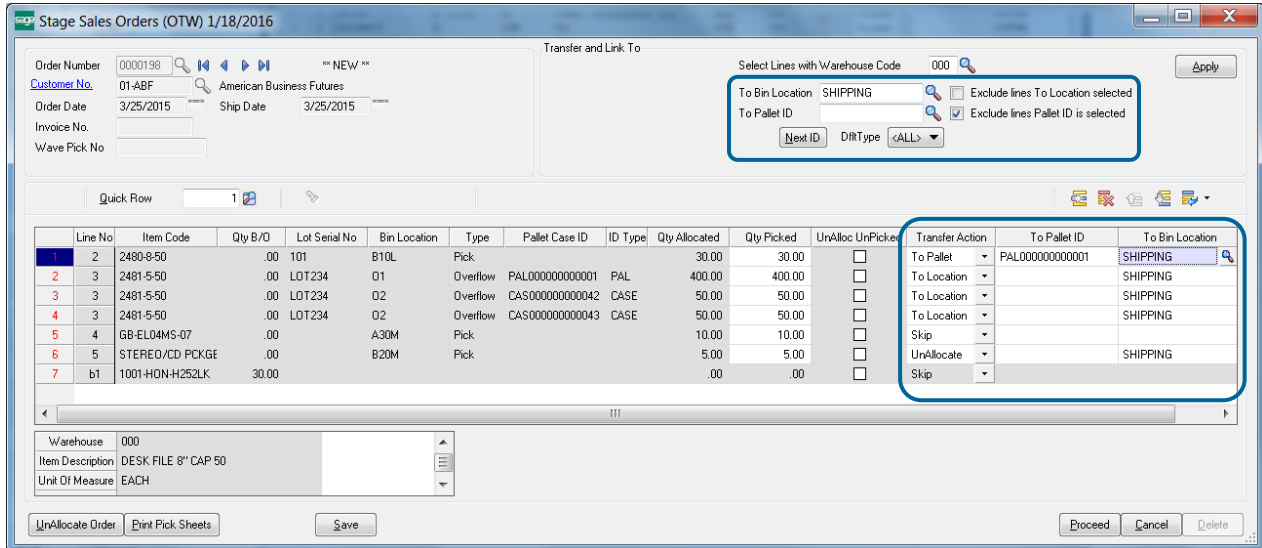
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 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



**VERRIDE TRANSFER ACTIONS IN EACH LINE**

The system will retrieve pre--allocations lines and default the Transfer Action column based on the Company Option set. As discussed previously—clicking Proceed immediately after selecting the sales order number—will update the actions automatically set on the panel.

You can make changes to the lines by changing the drop down field in the Transfer Action Column and you can make changes to many lines by using the options in the right corner. When the panel appears correct click the Proceed button update the selections.



**Transfer Action Column.** After picking goods you can do the following options to individual lines.



- **Skip:** will skip from making any changes to the allocation.
- **To Location:** will move the inventory and allocation to the To Bin Location. The To Bin Location field will auto fill a location selected in the upper corner or select the destination location.
- **To Pallet:** will move the allocation to the selected ID in the To Pallet ID Column. It will default the ID selected in the upper right hand corner.
- **UnAllocate:** will unallocated the allocation.

**Qty Picked Column.** The Quantity Picked will be the Quantity acted upon using the Transfer Action field.

**UnAlloc UnPicked.** The Quantity Picked is less than the Qty Allocated checking this field will relieve the allocation for the balance not picked.

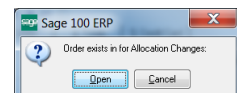
**APPLY BIN LOCATIONS AND ID'S**

The Apply section provides the ability to automate selections of bin locations and ID's. The Exclude lines check box will check the field values before applying the change.



**UnAllocate Order Button.** Will immediately unallocate the entire sales order. The equivalent option to unallocate an entire order is provided in the Sales Order Header panel— hyperlink Clear Sales Order Pre-Allocations.

**Save Button.** Gives you the ability to save your work in Stage Sales Orders entry. Invoice Data Entry and Shipping Entry will prompt you to Open the Stage Sales Order for the sales order if an entry had been saved.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

## Expiration Date Control and Vendor Lot Traceability

### ACS MULTI-BIN WMS FOR EXPIRATION DATE CONTROL AND VENDOR LOT

Instead of having a dedicated module, Expiration Date Control and Vendor Lot Traceability works throughout all of your Multi-Bin enabled modules to ensure efficient distribution of goods, accurate tracking of expiring or expired inventory, appropriate use of date sensitive manufacturing components, and the ability to track vendor lots through the manufacturing and distribution channels to the customers who purchased finished goods that contain them.

#### Expiration Date Control by Module

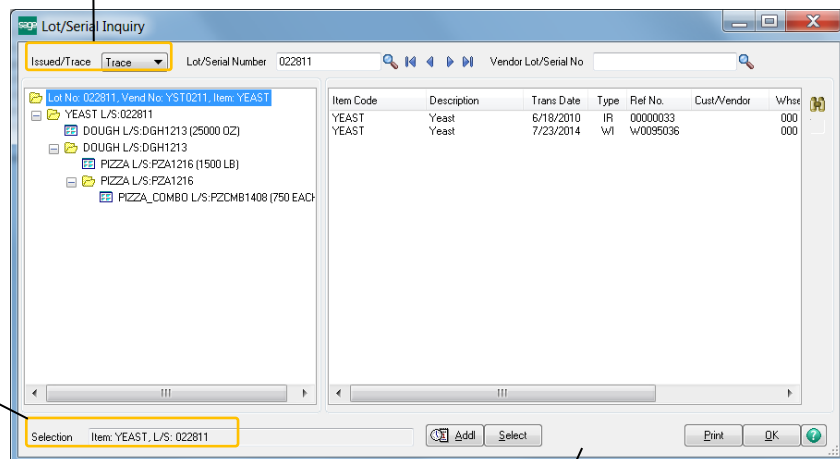
- Purchase Order > Receipt of Goods prompts for Manufacturer Lot Number and Expiration Date. Can choose to require expire dates.
- Inventory Management > Inventory Maintenance, Item Maintenance and many Bin Location Lookups provide expiration information
- Inventory Management > Physical Count provides expiration information for reference, and allows entry of information for new lines.
- Sales Order > Auto Allocation Options can take use expiration date sensitivity when allocating goods for Sales Orders
- Sales Order > Set Customer Shipability Rules use pre-setup Customizer UDFs
- Sales Order > Picking Sheets display expiration information for goods in bins.
- Manufacturing > Bill of Materials Productions and Work Order Completions allow the entry of Lot Numbers and Expiration dates.
- Reports > Track Expiration Dates of Inventory Items

#### Vendor Lot Traceability through all modules

Raw material Lot and Serial numbers are tracked internally and automatically as they are issued to sub assemblies and finished goods. System traces lot and serial numbers issued from raw materials to sub assemblies and to finished goods. It provides what lot serial numbers have been issued to finished goods. Use Inventory—Lot Serial Inquiry to search and print report cards on lot serial numbers.

**Trace/Issued:** Trace from raw materials to subassemblies and finished goods. Issued for Finished Goods what lot and serial numbers were issued.

**Selection:** Select lot and serial items from the tree to affect Addl, Select and Print buttons.



**Addl, Select, Print:** Addl drills down history and UDF data for lot and serial number. Select button changes display for the designated selection. Print will print Trace and what Issued reports on the fly.

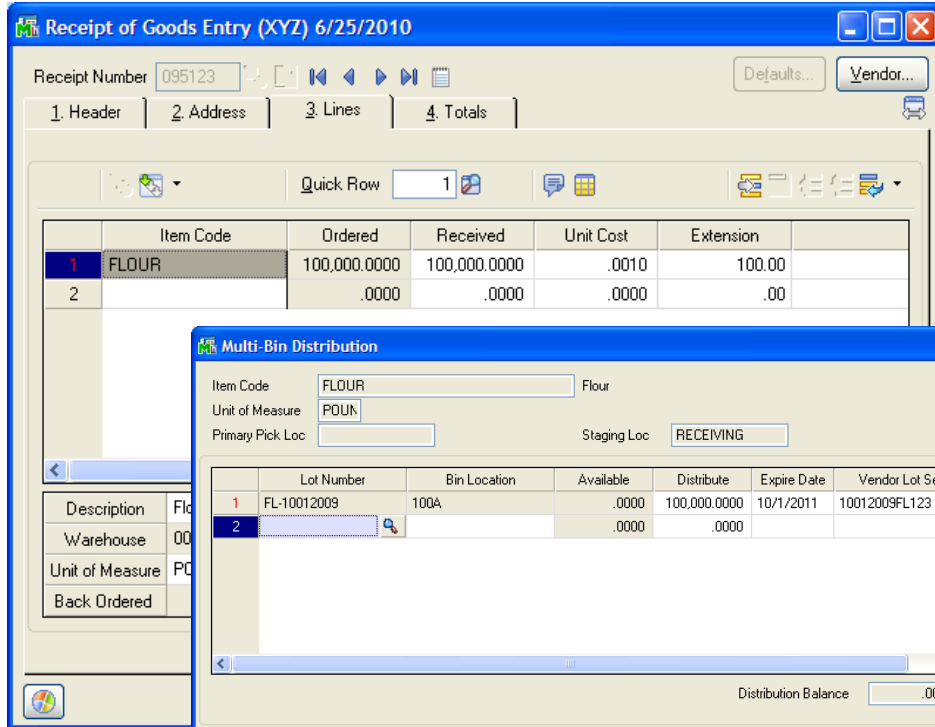
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Expiration Date Control and Vendor Lot Traceability

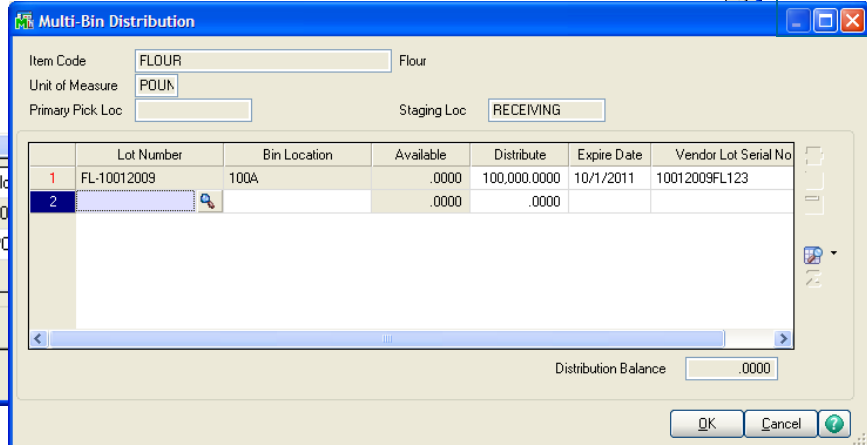
## RECEIPT OF GOODS ENTRY

PURCHASE ORDER > MAIN MENU

When completing a Receipt of Goods with Expiration Date Control and Vendor Lot Traceability, the item's Manufacturer Lot Number and its expiration date can be input. These fields can be entered at anytime from Inventory Maintenance - Lot button.

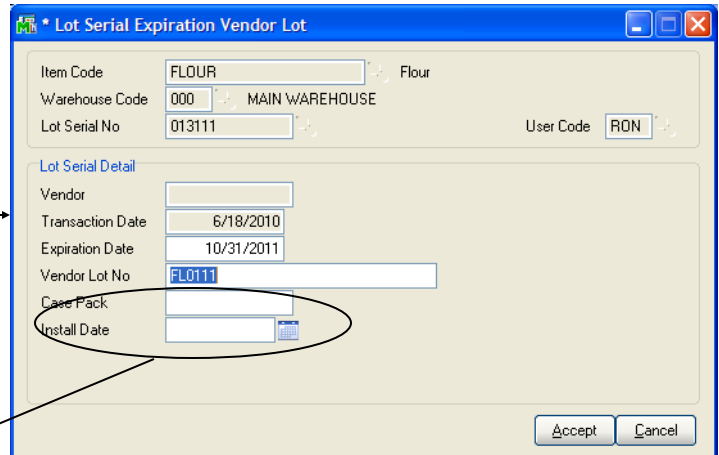
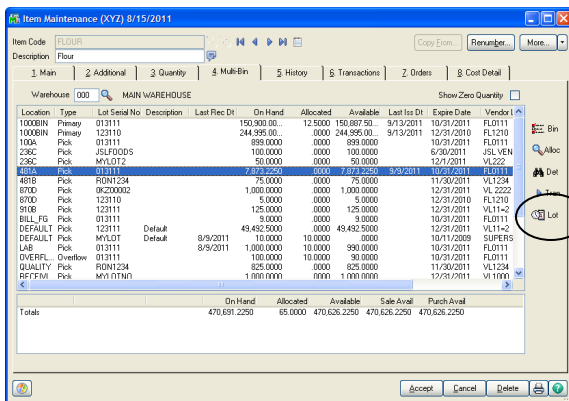


**(\*E) Vendor Lot Traceability:**  
 The Vendor Lot/Serial Number and Expiration date will be tied to the items received here throughout the Inventory module and will continue to be tracked through to the finished good if this is a component or raw material.



### Inventory Maintenance/Inquiry Expire Date, Vendor Lot No:

Select the Lot button to enter or override the Lot Serial additional fields. Changes to the Expiration date and Vendor Lot No fields will retain an audit trail of the change.



UDF fields for the Lot Serial No's can be entered and add to the ACS Multi-bin grids. See appendix further.

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# Expiration Date Control and Vendor Lot Traceability

## CUSTOM OFFICE - USER DEFINABLE FIELDS

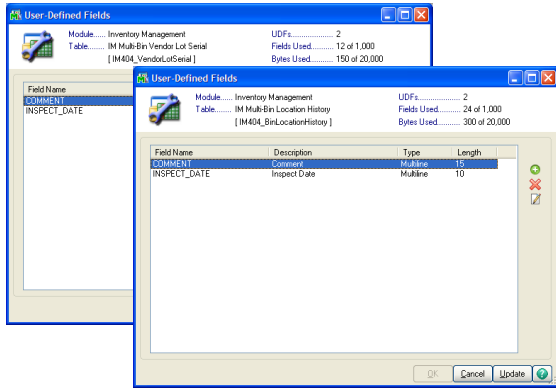
UDF data will be retained along with the Expiration Dates and Vendor lot data. That file is the IM404\_VendorLotSerial and retains data by the Item + Lot Number and no concern about the warehouse code. You can display and enter to your UDF fields in a maintenance screen in Inventory Maintenance/Inquiry and/or our Multi-bin Grid Distribution screens.

UDF entries in IM404\_VendorLotSerial will supersede UDF fields for Multi-bin Lot Serial items.

### Create UDF Fields in Files

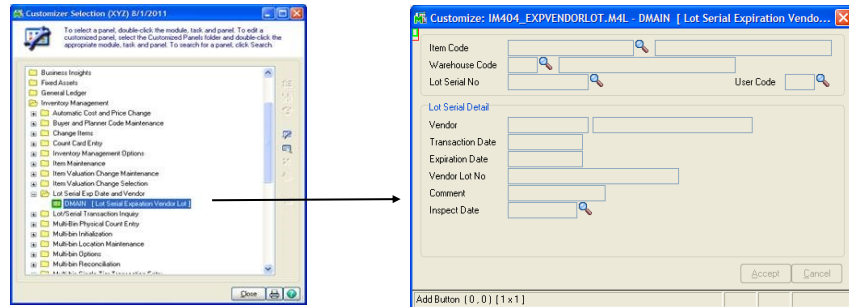
Create your UDF fields in the IM Multi-bin Vendor Lot Serial, IM Multi-Bin Location History File and all distribution files where you need the data in our grids.

**UDF fields to these files to auto store and display.**  
 Purchase Order: PO404\_ReceiptTierDistribution, PO404\_MaterialReqTierDist, PO404\_ReturnTierDist  
 Sales Order: SO404\_OrderTierDist, SO404\_InvoiceTierDist  
 Inventory: IM404\_VendorLotSerial, IM404\_BinLocationHistory, IM404\_ItemLocationUDF, IM404\_TransactionTierDist, IM404\_Physical, IM\_ItemCost  
 Bill of Materials: BM404\_ProductionTierDist, BM404\_DisassemblyTierDist



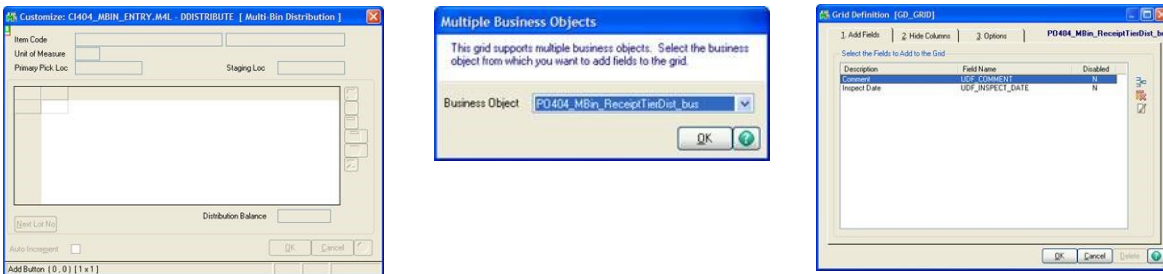
### Add UDF Fields to selected Lot Serial Expiration Vendor Maintenance Panel

The IM404\_ExpVendorLot.M4L is the dialog in Inventory maintenance and inquiry.



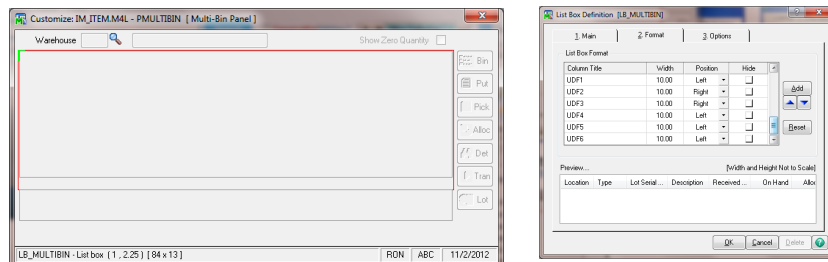
### Add UDF Fields to selected Distribution screens

Select the CI404\_MBin\_Entry.M4L and add your fields to each selectable business object you want them on.



### Add UDF Fields to Multi-bin Inventory in Inventory Maintenance/Inquiry

Select the PMultiBin Panel in the IM\_Item.M4L. UDF fields are automatically shown in the list-box named UDF1, UDF2 to 6. Numerics and date fields appear best right justified. Column headings and numeric mask settings are obtained from the field setup in custom office.



# Expiration Date Control and Vendor Lot Traceability

## MANUFACTURING PICK SHEETS

BILL OF MATERIALS > MAIN MENU

WORK ORDER > MAIN MENU

To aid in accurate picking, the Multi-Bin version of the Bill of Materials and Work Order Picking Sheets will list the Vendor/Lot Serial Numbers and Expiration dates assigned to components and raw materials.

PICKING SHEET					Page: 1
WAREHOUSE: 000 MAIN WAREHOUSE					
WORK ORDER NUMBER: 0095033					
WORK CENTER: ACC ACCESSORIES					
SCHED START: 10/09/10					
ITEM CODE	U/M	QTY REQUIRED	PICKED	SHORT	
YEAST		5.555.5000	_____	_____	
Yeast					
<b>Bin Location:</b>	1000BIN	100A	1000BIN		
<b>Lot Ser No:</b>	123110	YST123110	022811		
<b>Quantity:</b>	38,444.46	9,000.00	10,000.00		
<b>Expire Date:</b>	12/31/2010	12/31/2010	2/28/2011		
<b>Vendor L/S:</b>	YST1210	Y1210	YST0211		

Picking Sheet					Page: 1
Warehouse: 000 MAIN WAREHOUSE					
Bill Number: BOARD-004230-33		Revision: 000			
Description: 80486DX *** this one					
Effective Date: 12/2/2010		Picked By: _____			
Option Codes: . . . . .		Date Picked: _____			
Quantity:	1.0000				
Yield Percent:	100.000				
Extended Quantity:	1.0000				
Component Item Code/Description	Unit of Measure	Quantity Per Bill	Total Quantity	Quantity Picked	Short
BTTY-98422	EACH	1.0000	1.0000		
<b>Bin Location:</b>	200B	DEFAULT			
<b>Lot Serial No:</b>					
<b>Status:</b>		*Primary			
<b>Quantity:</b>	468.00	468.00			
<b>Expire Date:</b>					
<b>Vendor L/S:</b>					
<b>Revision: *</b>		CLOCK BATTERY			
MEMRY-00080	EACH	1.0000	1.0000		
<b>Bin Location:</b>	WIP_FG	WIP_FG	BILL_FG	870D	
<b>Lot Serial No:</b>	1000318	987046	050105		
<b>Status:</b>			*Primary		
<b>Quantity:</b>	499.00	1.00	1.00	436.00	
<b>Expire Date:</b>	12/31/2010	12/31/2010	12/31/2011		
<b>Vendor L/S:</b>	VL1	VL1	VL2		

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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 (\*W) Feature for Add-on for Wave Batch Picking

# Expiration Date Control and Vendor Lot Traceability

## PRODUCTION ENTRY

BILL OF MATERIALS > MAIN MENU

When creating finished products, users will be prompted to assign expiration dates if necessary.

Production Entry (XYZ) 6/30/2010

Production Number: 0000328

1. Header | 2. Lines

Production Date: 6/30/2010

Bill Number: DOUGH | Dough

Bill Type: Standard

Revision: 000

Option Code:

Quantity: .0000

Unit of Measure: EACH

Effective Date: 6/30/2010 | Explode Sub-Assemblies:

Parent Warehouse: 000 MAIN WAREHOUSE

Component Warehouse: 000 MAIN WAREHOUSE

Bin Location: WIP\_FG | Expire Date: 6/29/2012

Lot Number: DGH1212 | Vendor L/S No:

Accept | Cancel | Delete | [Printer Icon]

When using the special customizer screens provided, users can set the days to expiration in Bill of Materials maintenance and bin location so that they default into this screen. See the appendix for more information about importing the customizer changes.

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# Expiration Date Control and Vendor Lot Traceability

## PHYSICAL COUNT

INVENTORY MANAGEMENT > PHYSICAL MENU

When conducting a Physical Count, the system will reference the expiration date and vendor/lot of items being entered. This information is locked in (based on the receipt or the production) and cannot be altered.

Physical Count Entry (ABC) 2/15/2011

Warehouse: 000  
Description: CENTRAL WAREHOUSE

1. Header | 2. Lines

Quick Row: 1

	Item Code	Bin Location	Lot/Serial	Quantity On Hand	Quantity Counted
1	1001-HON-H252	A10L		430.00	.00
2	1001-HON-H252	A10M		95.00	.00
3	1001-HON-H252	A10U		1,595.00	.00
4	1001-HON-H252	A20L		5.00	.00
5	1001-HON-H252	A20M		10.00	.00
6	1001-HON-H252	A20U		5.00	.00
7	1001-HON-H252	A30L		350.00	.00
8	1001-HON-H252	A30U		3.00	.00
9	1001-HON-H252	A50L		100.00	.00

Description: HON 2 DRAWER LETTER FLE W/O LK  
 Unit of Measure: EACH  
 Inventory Cycle: B  
 Product Line: WF&A  
 Product Type: Finished Goods  
 Procurement: Buy  
 Multi-bin:   
 Expire Date:   
 Vendor Lot No:

Accept Cancel [Printer Icon] [Refresh Icon]

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## Multi-Bin Reports

### MULTI-BIN VENDOR LOT TRACEABILITY REPORT

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Vendor Lot Traceability report will track a specific vendor lot throughout the inventory system.

Vendor Lot Serial Summary Report					
XYZ Manufacturing Company (XYZ)					
Vendor Lot Serial No: FL0111, Item Code: FLOUR					
<b>Vendor Lot Production History</b>					
Date	From Item Code - Lot/Ser	Produced to Item - Lot/Ser	Expiration Date	Work Order No	
6/18/2010	FLOUR-013111	FLOUR-013111			
6/18/2010	FLOUR-013111	DOUGH-DGH1210	1/31/2011	0095030	
6/18/2010	FLOUR-013111	DOUGH-DGH1211	12/31/2010	0095030	
6/18/2010	DOUGH-DGH1211	PIZZAA&BEER-PZZBR1211	12/31/2010	0095031	
6/18/2010	DOUGH-DGH1210	PIZZA-PZA1210	12/31/2010	0095029	
<b>Vendor Lot Sales History</b>					
Date	Invoice No	Customer No	Item Code	Lot Serial No	Quantity
6/22/2010	0000031-IN	00-ABC	PIZZA	PZA1210	5.00
6/22/2010	0000033-IN	00-HILLSB	PIZZA	PZA1210	3.00
<b>Vendor Lot Inventory</b>					
Item Code	Lot Serial No	Bin Location	Qty On Hand		
FLOUR	013111	1000BIN	239,000.00		
DOUGH	DGH1211	1000BIN	400.00		
PIZZA	PZA1210	1000BIN	92.00		
PIZZAA&BEER	PZZBR1211	1000BIN	200.00		
DOUGH	DGH1210	480C	0.00		

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**MULTI-BIN & WMS FOR PALLETS AND CASE PACKS - INTRODUCTION AND USES**

Nesting License Plate ID Numbers provides real, multi-level case pack, container and pallet inventory throughout the Sage 100 ERP system. Create user-defined packages, including case packs, master packs, and pallets of inventory. IDs can contain a group of any items or just a single item. All inventory in packs and pallets is viewable in tree-form throughout the system.

IDs can be received, transferred, produced to and sold from. Explode them in transactions, attach (link) to other IDs and splice off specific cases as needed. The Break feature allows an entire ID to be broken out to its standard unit of measure or a entire level can be broken off. "Entire Level" refers to, for example where all master packs or case packs at a certain level are broken off from a pallet.

Directed Picking is enhanced by License Plate IDs. Case pack, Master pack and Palleted goods can be selected for sales orders and shipments. Selection of the unit of measure will direct the system to select that packaging. The ACS Multi-Bin & WMS directed picking provides options to automatically select the best container packs and to select higher level master packs and pallets when possible. Case Packs and broken out inventory can be located in pick and other location types to optimize picking.

Directed Putaway is enhanced by giving the system the options for the number of pallets and the number other container units that can fit in a location and unique volume settings help when a mix of goods have to fit. Purchasing is also enhanced to automatically create packaging based on unit of measure and other tools.

*Throughout the system, in the transaction screens and in the maintenance screens, quick on-the-fly settings, views, build up IDs, move them locations and to break IDs down.*

**Default ID Type setting improves searches and creations.**

**Default Master Pallet Case IDs Only -** The check box limits the lookup to show only top level IDs. It is appropriate to select from top level in most transactions.

**Tree View expand and collapse to view nested IDs and item contents. Sensitive to Break and Link choices.**

**Transfer ID to a location**

**Transfer Inventory in and out**

**Link ID to another for nested IDs**

**Breaks to get case packs and std unit of measures**

**Print Pallet Tag**

**Pallet Case ID Maintenance provides view of inventory tree showing all linked IDs. Quick print of pallet tag report. IDs can be transferred to other locations, moving inventory and allocations. Break options help separate smaller packages.**

Item	Description	Pallet Case ID	Lot Serial No	Received Dt	On Hand	Allocated	Available Ex
1001-HON-H252LK	HON 2 DRAWE...	PAK0000000000337			10.00	.00	10.00
1001-HON-H252LK	HON 2 DRAWE...	PAL0000000000006			50.00	.00	50.00
2481-550	DESK FILE 5 1/4...	PAL0000000000006	LOT131031	10/31/2013	50.00	.00	50.00
1001-HON-H252	HON 2 DRAWE...	PAK0000000000344			10.00	.00	10.00
1001-HON-H252	HON 2 DRAWE...	PAK0000000000345			10.00	.00	10.00
1001-HON-H252	HON 2 DRAWE...	PAK0000000000345			10.00	.00	10.00
1001-HON-H252	HON 2 DRAWE...	PAK0000000000345			10.00	.00	10.00
1001-HON-H252	HON 2 DRAWE...	PAK0000000000347			10.00	.00	10.00

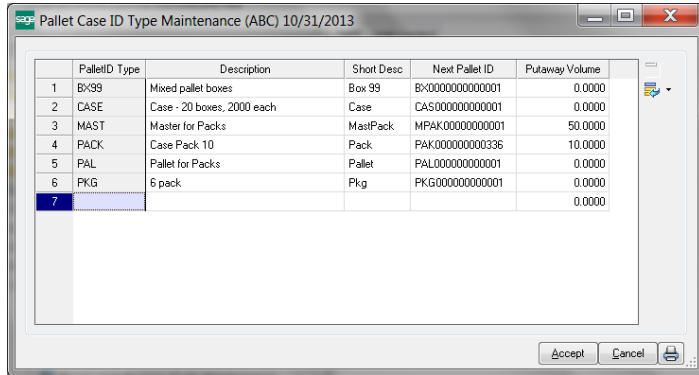
(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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**SETUP FOR NEXT LICENSE PLATE ID NUMBERS**

**INVENTORY MANAGEMENT > SETUP > PALLET CASE ID TYPE MAINTENANCE**

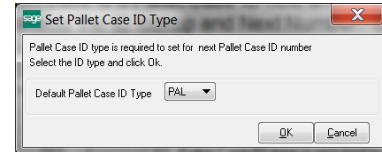
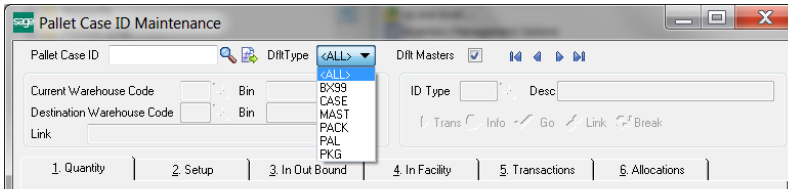
ID type embedded in the License Plate ID numbers can be used to distinguish the containers, pallets, case packs, master packs, inner packs or any grouping of goods. For pallet handling consider codes for mixed pallets versus same good pallets. If the License Plate ID's are to track case packs and master packs there is an advantage to the same codes as Unit to Measure codes in the Sage 100 ERP.

This could be used for a pallet or container type the system selectable. If different ID types consider designating a type code in the number. In the example below PAL short for mixed pallets.



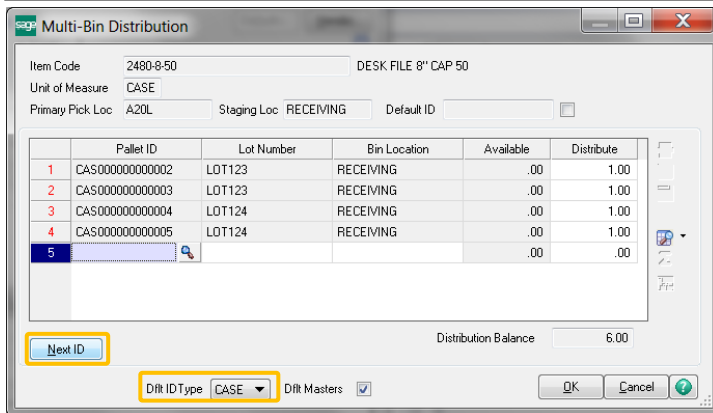
**HOW TO SELECT NEXT LICENSE PLATE ID NUMBERS**

Through out the system, when there is a Pallet Case ID field and Next Number symbol there is a selection of Dflt Type. The Dflt Type is affects the ID lookup and Next Number. Selecting Number with setting the Dflt Type the system will ask for the Dflt Type Code.



On-the-fly selection of an ID Type Code for Next Number ID.

Select Dflt Type code in maintenance screens and transactions will filter lookups and designate the ID Type Code for the next ID Number.



Dflt ID Type is defaulted from the setup from Unit of Measure Code. Can quickly select the Next ID button in P/O Receipt of Goods.

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**PALLETS AND CASE PACKS - SETUP TO LINK IDS TO UNIT OF MEASURE CODES**

Linking Unit of Measure Codes (i.e., U/M Codes) to the License Plate ID Type code will automate IDs for case pack, master pack and other packages. In purchasing, the linkage will select right ID Type and can automatically create License Plate ID's and associate to case pack inventory. In sales order, directed picking can auto select ID's based on the Type and can select larger master case pack and palletted goods too.

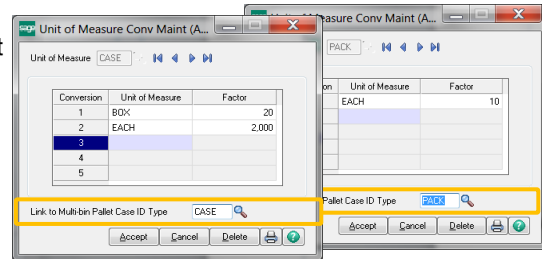
It is best to name the License Plate ID Type codes to the Unit of Measure Codes. The system searches for that similarity in many cases.

The following setup to Link ID Types to U/M Codes is only needed if automatic selection by the Type Code is desired. If there is multiple setups for these links, the following priorities take precedence.

- 1) Item Code Maintenance link to ID Type.
- 2) Unit of Measure Conversion Maintenance link to ID Type.
- 3) Product Line Maintenance link to ID Type.

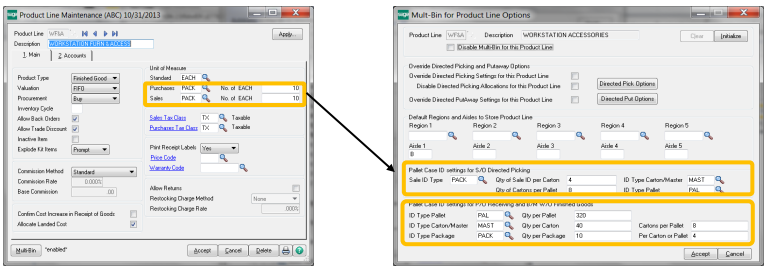
**COMMON INFORMATION > SETUP > UNIT OF MEASURE CONVERSION MAINTENANCE**

Linking Unit of Measure Codes to License Plate ID Type codes will auto create the ID codes with the right ID type in P/O receipt of goods and will auto allocate inventory in S/O Picking Sheet Directed Picking. This linkage can be done in Unit of Measure Conversion Maintenance and/or directly associated to the items in Inventory Maintenance or Product Line Maintenance.



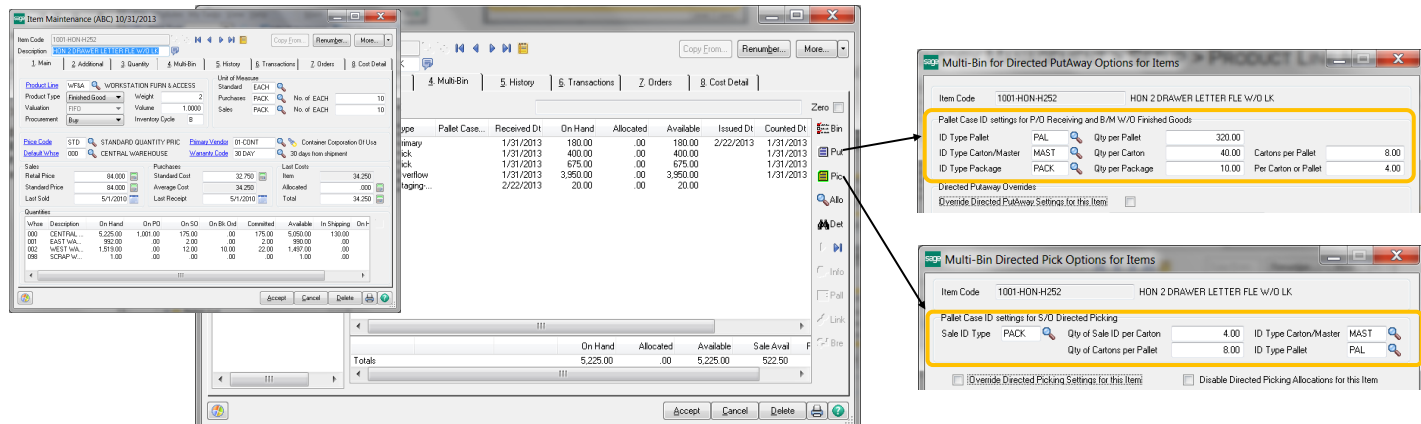
In Product Line Maintenance and/or Item Maintenance, designate the U/M conversion code and the conversion quantity to the standard U/M.  
 For Purchases, select the ID Type Package to match Purchases Master U/M Code. For Sales, select the ID Type in the Sale ID Type field.

**INVENTORY MANAGEMENT > SETUP > PRODUCT LINE MAINTENANCE**



**INVENTORY MANAGEMENT > MAIN > ITEM MAINTENANCE**

Select the Put and Pick buttons in the Multi-bin tab. Entries in Item Maintenance supersede other setups.



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**PALLETS AND CASE PACKS - PURCHASES**

Assigning a plate ID during P/O receipt of goods provides the ability to move and process pallet of goods and case packs. Inventory associated to an ID can be staged in a receiving dock, transferred to another location and can be attached to other IDs. Pallet ID tag reports/labels can be printed individually and as a group.

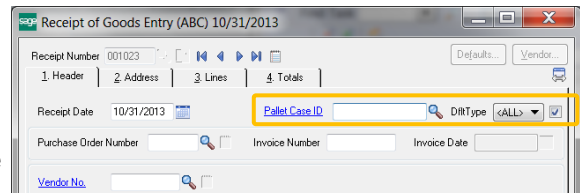
Easy data entry features enable receipt of goods to be associated to one or a few License Plate IDs.

License plate IDs can be automatically created for purchased Case Packs and Pallets. The system can use the [setup in the Unit of Measure conversion](#) designated for items in inventory maintenance and product line maintenance. Also the correlation can be done in Unit of Measure Conversion Maintenance.

**ASSIGN LICENSE PLATE ID NUMBER TO RECEIPT HEADER**

PURCHASE ORDER > MAIN > RECEIPT OF GOODS ENTRY

A License Plate ID can be created at the time or in advance of receipt of goods and assigned to the header of the Receipt. All goods received will default the ID and the same ID can be associated to a number of Receipts. A advantage is to assign inventory to a container received for one or a number of purchase orders or to segregate inventory received by a purchase order or assign to a pallet.



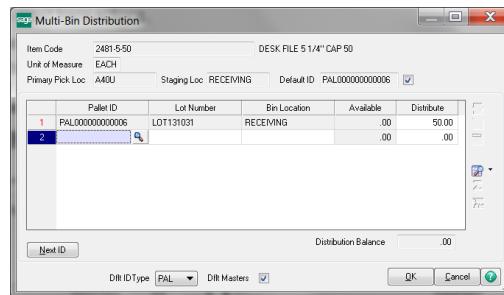
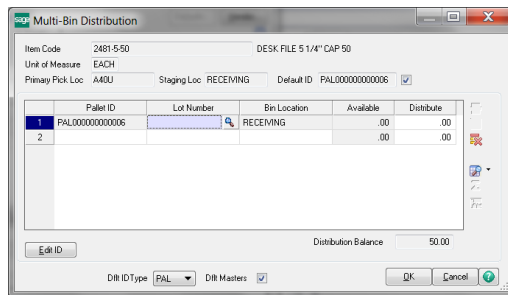
There is an override option in the distribution screen when entering lot serial numbers and locations.

**Dflt Type** - The Dflt Type affects the ID lookup. <ALL> will list all open License Plate IDs

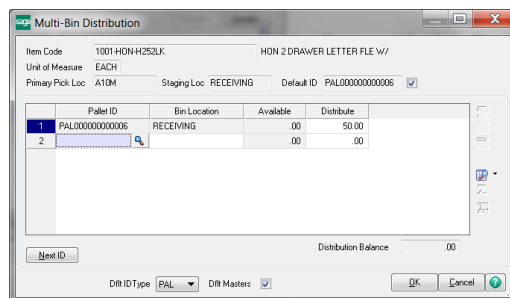
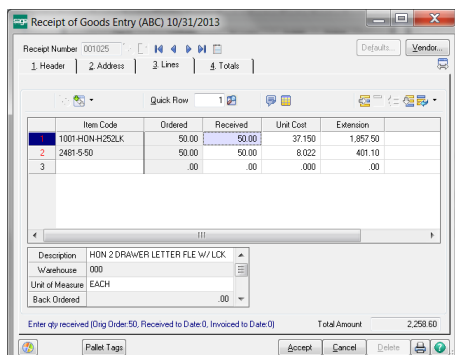
**Default Master Pallet Case IDs Only** - The check box limits the lookup to show only top level IDs. It is appropriate to select from top level in most transactions.

**Pallet Case ID** - Select an ID to default the ID in the distribution screens.

Data entry in the distribution screen for **Lotted** inventory will proceed like this. The ID Number is defaulted. The bin location can be defaulted if one of the Auto Assign options for P/O Receiving is in effect. The distribution is completed by entering the lot number.



Data entry in the distribution screen for **Non-Lot Serial** inventory will proceed like this. The ID Number is defaulted. The bin location can be defaulted if one of the Auto Assign options for P/O Receiving is in effect. The distribution is completed in lines panel so the distribution did not need to pop up. Clicking the grid button.

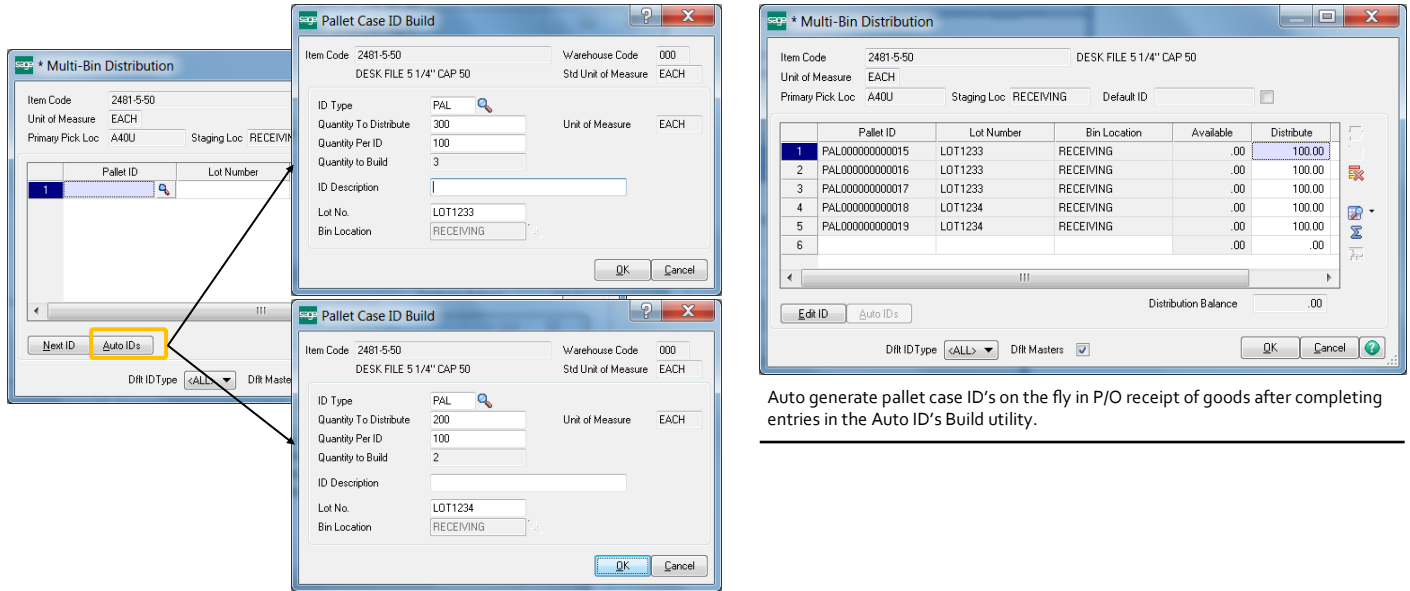


(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PALLETS AND CASE PACKS - PURCHASES**  
**LICENSE PLATE ID NUMBER AUTO ASSIGNMENT—PALLET CASE ID BUILD**

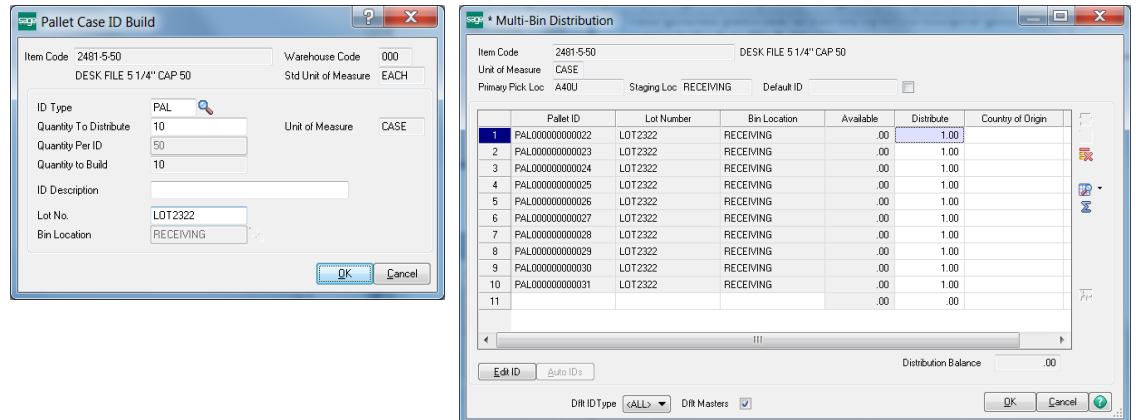
PURCHASE ORDER > MAIN > RECEIPT OF GOODS ENTRY > MULTI-BIN DISTRIBUTION

Select Auto ID's button in P/O Receipt of good multi-bin distribution screen to auto create ID's and default the quantity per ID. The following example shows how for the receipt at the Standard U/M you can change the Quantity To Distribute field and the Quantity Per ID to control the auto distribution: 3 pallets for LOT1233 and 2 pallets for LOT1234.



Auto generate pallet case ID's on the fly in P/O receipt of goods after completing entries in the Auto ID's Build utility.

The following example shows how for the receipt at the Case Pack U/M conversion you can change the Quantity To Distribute field to control the auto distribution: 10 pallets for LOT2322.

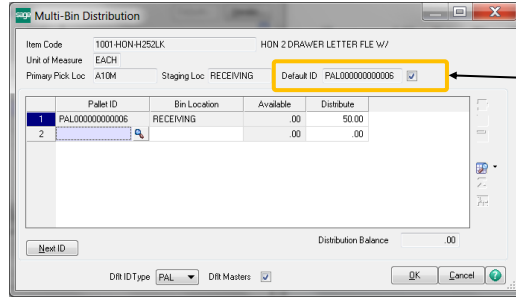


Auto generate pallet case ID's on the fly in P/O receipt of goods after completing entries in the Auto ID's Build utility.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PALLETS AND CASE PACKS - PURCHASES  
DEFAULT ID NUMBER IN THE DISTRIBUTION**

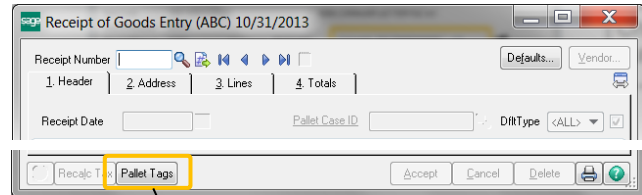
**Default ID** Select to default the ID in the distribution screen. Uncheck to turn off. To change the ID in a distribution line, uncheck the check box before deleting the line. Since the default option is off the system will not put in an ID and another ID can be selected.



Check to default the current ID.

**PALLETS AND CASE PACKS - PURCHASES  
PRINT PALLET TAGS**

**Print Tags** Print Pallet Tags reports for Pallet Case IDs selected in P/O Receipt of Goods. Pallet IDs includes inventory not yet posted in receipt of goods as well any inventory that has been posted.



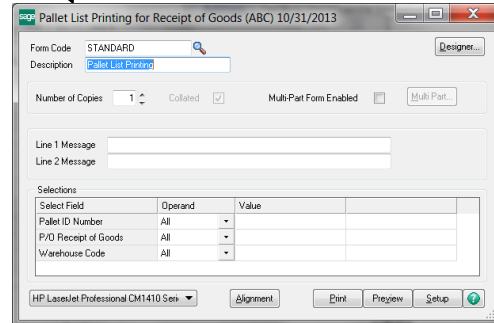
ABC Distribution and Service Corp. (ABC) Page: 11  
Pallet Case List ID: PAL 000000000006

Desc: STEV 0010019  
Total Weight: 100.00 No of Cartons: 0.00 Total Quantity: 100.00 Total Volume: 50.00

Inbound		Outbound	
Stevens Supply	10/31/2013		
Santa Clara CA 95052			
PO No's: 0010019		PO No:	
		Invoice No's:	
		Cust No:	

Current Warehouse and Bin Location		Destination Warehouse and Bin Location	
Warehouse Code: 000	Bin Location: RECEIVING	Warehouse Code:	Bin Location:

Item Number	Item Description	Lot Number	Production - Expiry Date	Weight	Quantity
Pallet Case ID PAL 000000000006					
1001-HON-H252LK	HON 2 DRAWER LETTER FILE W/LCK			Level: 1	50.00
2481-5-50	DESK FILE 5 1/4" CAP 50	LOT131031	10/31/2013	100.00	50.00



Pallet Tag report printing only prints Pallet Tags for IDs entered in Receipt of Goods

Sample Pallet Tag report with IDs entered in Receipt of Goods.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

### PALLETS AND CASE PACKS - QUICK TRANSFERS, LINKS AND BREAKS

Pallet Case ID Transfers, Links and Breaks are provided in inventory lookup screens. Following shows the use of the quick to use buttons to do these features.

**Transfers** provide the ability to move goods in and out of IDs. ID transfer will transfer an ID with all nested IDs to another bin location. Group Transfer can transfer a group of IDs to another location.

**Links** will link an ID to another ID. The nested level can be selected.

**Breaks** will break apart an ID based to your chosen level. In a click the entire contents of an ID can be broken to the standard unit of measure, or a level of case packs can be extracted to inventory or a single ID can be spliced away.

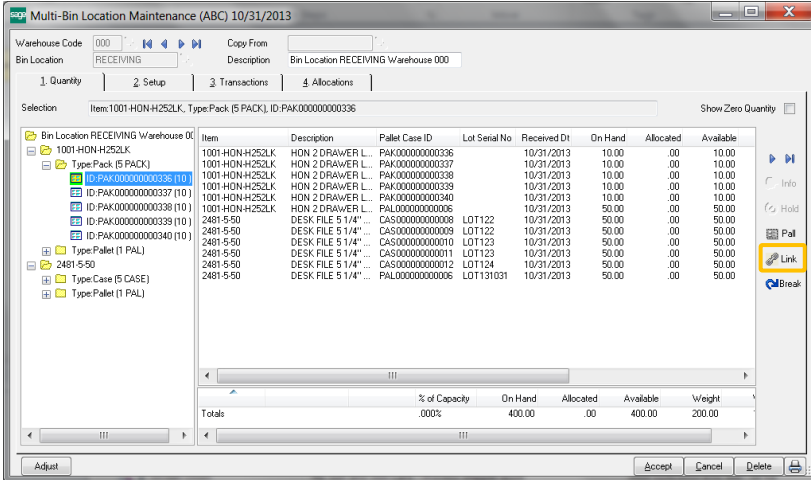
**Quick Transfer** transfers inventory to and out of an ID.

**Group Transfer** transfers IDs and inventory to another location.

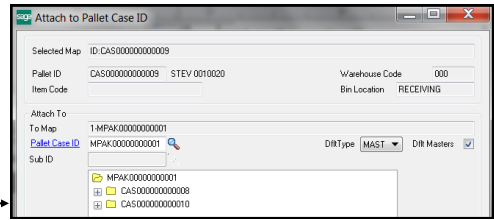
**ID** drill down and ID print.

**Link** an ID to another ID.

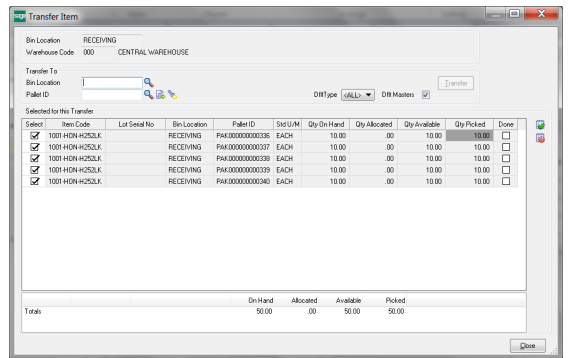
**Break** off inventory and IDs from an ID.



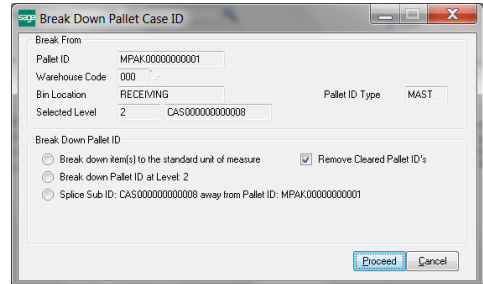
**Link** an ID to another ID. Select level to connect to.



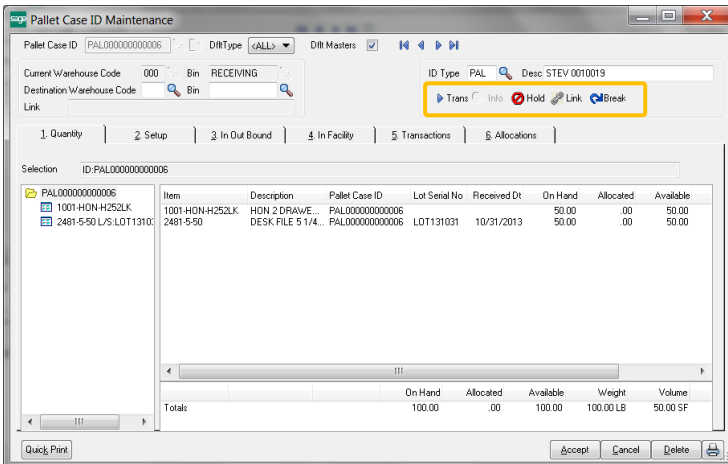
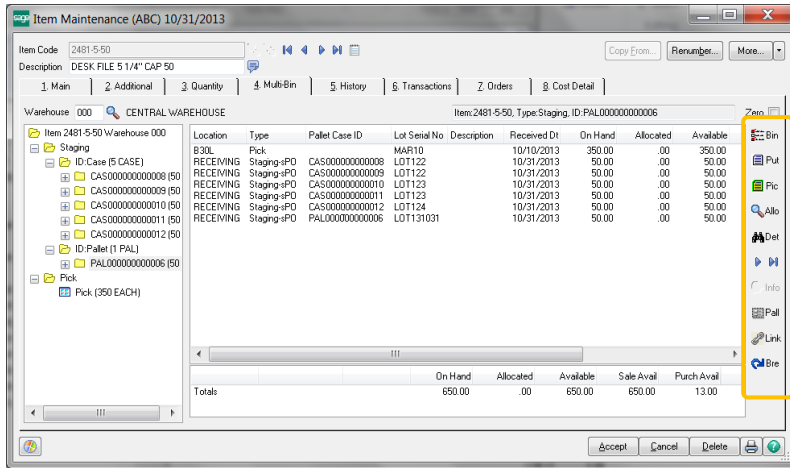
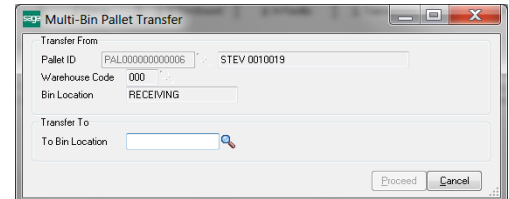
**Group Transfer** transfers IDs and inventory to another location.



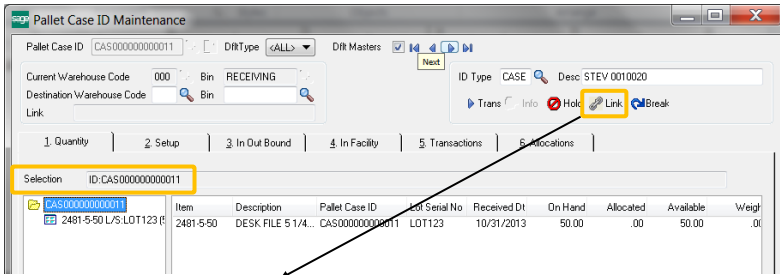
**Break off** inventory and IDs from an ID.



**ID Transfer** transfers IDs to another location.



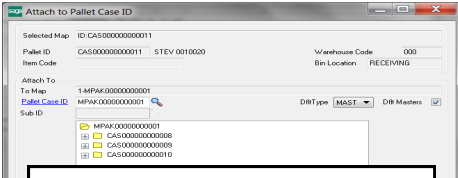
**PALLETS AND CASE PACKS — LINKS AND BREAKS**



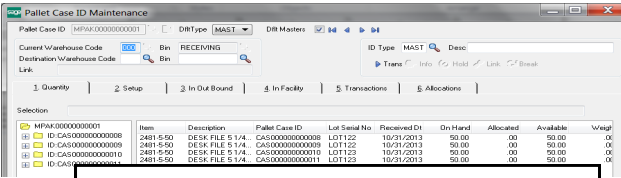
**Link from Pallet Maintenance** will link an ID to another ID. Links can be attached at any level in the destination ID: top, middle, bottom. In this example, ID: CAS00000000011 has 50 of lotted item, lot number LOT123. The Selection Field in the yellow box confirms the selection. Selecting the Link button will provide the Link possibilities to a destination ID. In this example the top level MPAK0000000001. The Link screen in Item Maint and Bin Location Maint provides the fast feature to select multiple IDs to link at one time.

**Link from Item and Bin Location Maintenance** provides grid selection of IDs for that item or bin location, respectively. Click check box for each ID desired and then select the Top Level ID to Link to. A sub level ID can be selected if you want to select to the lower level.

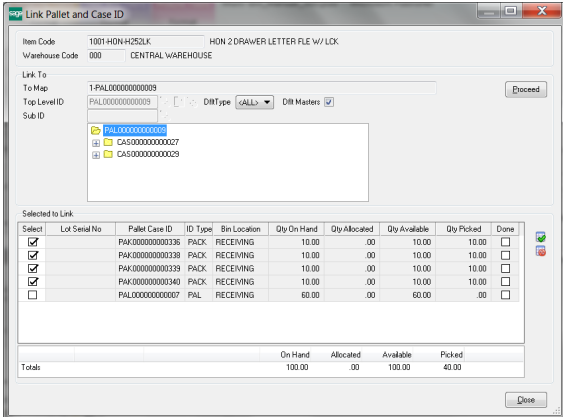
Like other grid based transfers if a selection is made from the tree inventory summarizing by Location Type or Region those Types and Regions will load and be selected in the Link grid.



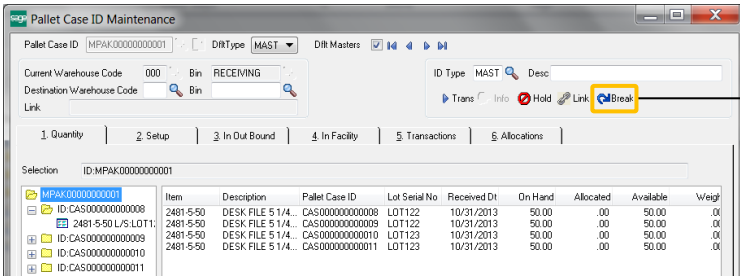
Select the ID to link to and to the desired

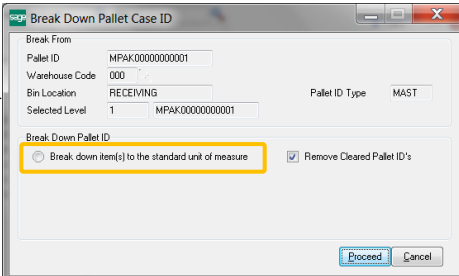


The resulting master pack ID (MPAK...) with linked IDs

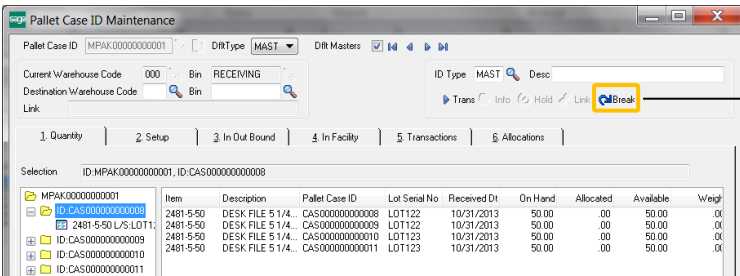


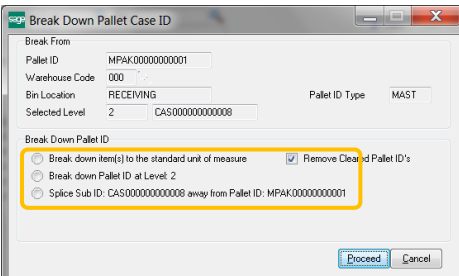
**Breaks** will break apart an ID based to your chosen level. In a click the entire contents of an ID can be broken to the standard unit of measure, or a level of case packs can be extracted to inventory or a single ID can be spliced away. In the first example below, selection of the Top Level ID: MPAK0000000001 gives a choice to break the entire ID since it is the highest level.





Selection of the Top Level ID: MPAK0000000001 gives a choice to break the entire ID since it is the highest level.





Selection of the Mid Level ID: CAS00000000008 gives a choice to break the entire ID, the ability break down the entire 2nd Level and to splice it off the sub ID away from the top level ID: MPAK0000000001.



**PALLETS AND CASE PACKS - SALES AND COMMITTING ID INVENTORY**

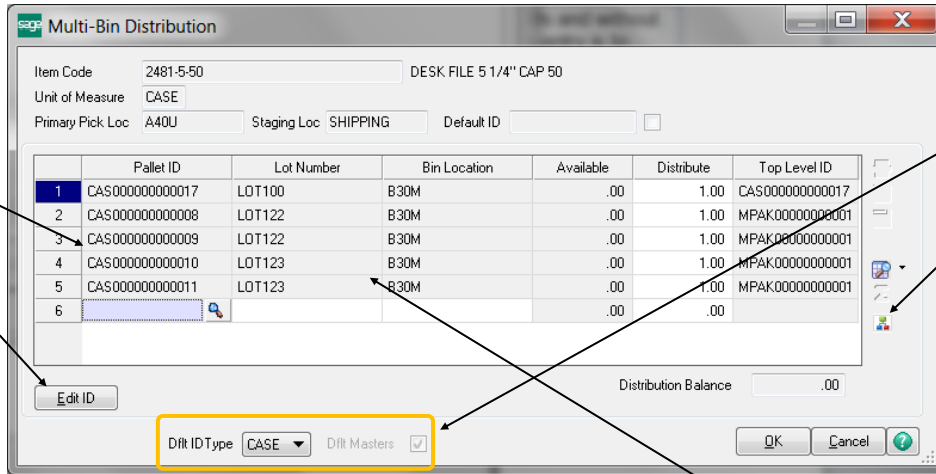
Pallet and Case IDs compliment the features in the Multi-bin and WMS for sales order. IDs can be manually selected in Sales Order entry and automatically allocated with the directed picking settings in Picking Sheet Printing. Pallets and Case IDs are printed on picking sheets to direct the picker to pick this inventory. Allocations are passed thru automatically to Shipping and Invoicing and can be overridden. Approved RF handheld partners will identify pre-allocations to direct picking and validate accuracy. Available inventory with IDs can be printed on pick sheets.

Since IDs can have a mix of goods or can contain more quantities than sold there are extra options on the picking sheet to instruct if the full ID can be picked.

**DISTRIBUTION SCREEN**

The Distribution screen in Sales Order entry can be used to pre-allocate inventory with IDs and without. All inventory valuations can be selected. In S/O invoice entry and all other entry screens entry is to allocate inventory to the transaction. Following are features unique for Pallet and Case IDs.

This example shows the selection of 5 case packs. 4 cases packs are in the master pack with ID starting with MPAK.



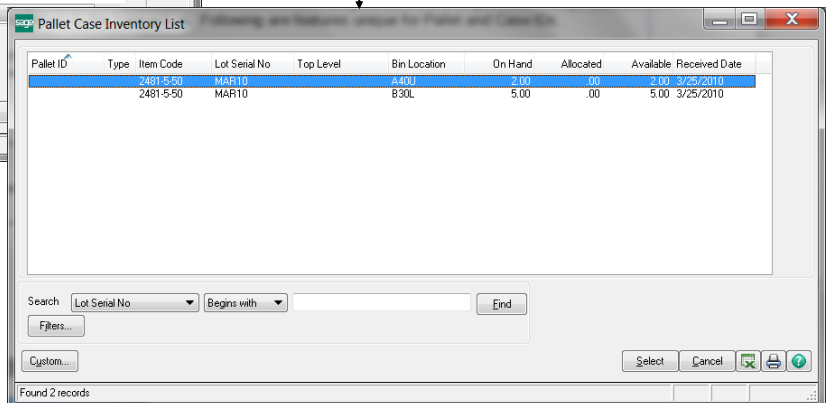
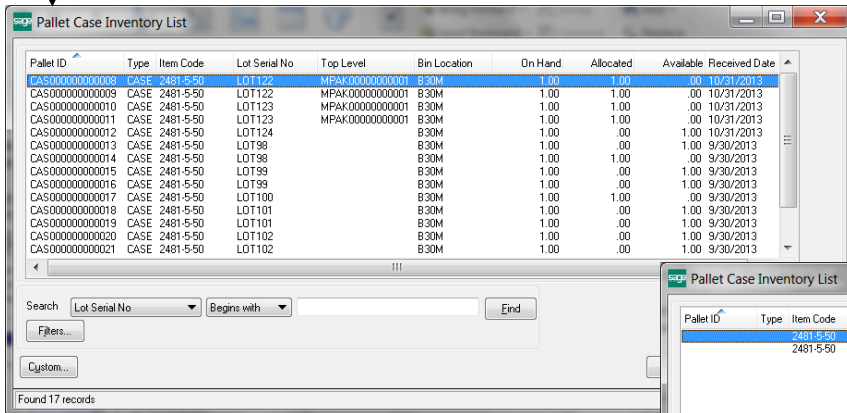
Pallet ID Column Lookup reveals inventory contained in an ID.

Dflt ID Type filters ID type in the lookup. Will default from Unit of Measure if setup.

Pallet Case ID distribution screen.

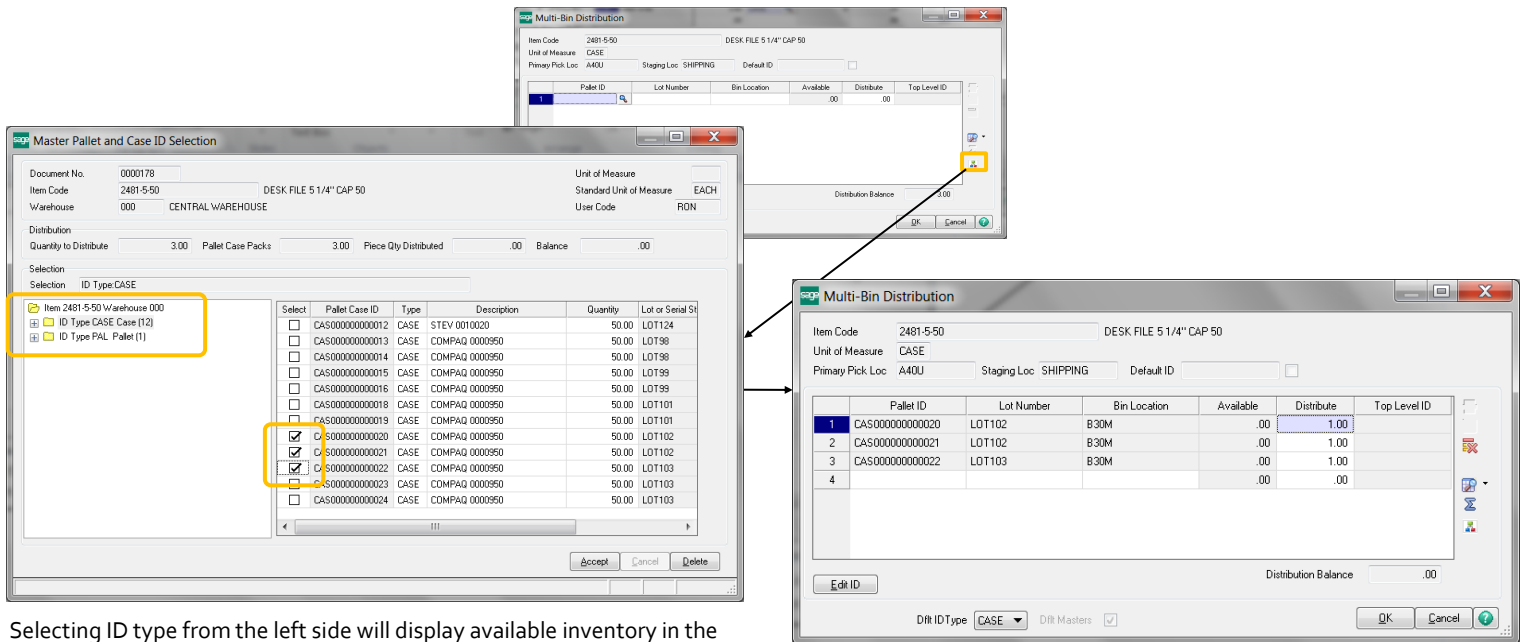
Edit/Next ID Edit drills down to the selected ID. Next ID for non-committing inventory.

Lot Serial and Bin Location Columns Lookup reveals inventory not in an ID. Provides quick selection singular (std U/M) inventory.



**PALLETS AND CASE PACKS - ID TYPE DISTRIBUTION**

ID type distribution provides selection of packaged inventory by the ID type. Select the ID type button in the distribution screens where committing inventory. The left grid provides a summary of the quantity available for each ID type in inventory for the item. Select the desired ID type like the CASE is selected in the example below. The right grid provides all ID inventory available. Click the check boxes for the desired inventory.

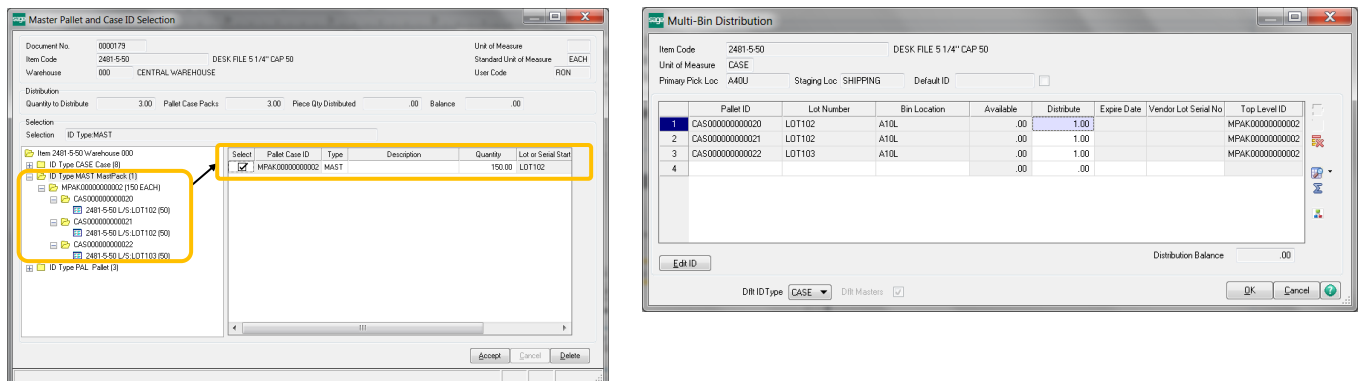


Selecting ID type from the left side will display available inventory in the right. Click check boxes to be allocated in the transaction.

Selected CASE packs allocated to the transaction.

**PALLETS AND CASE PACKS - ID TYPE DISTRIBUTION  
SELECTING TOP LEVEL IDS AND ID TYPES**

Continuing with the 2481-5-50 CASE pack inventory with 50 each and lot numbers 102 and 103. The Link feature links the 3 case packs to a MPAK type. In the following ID Type Distribution example, the tree shows One (1) available MPAK and it reflects the relationship of this link and the detail of the inventory now contained in MPAK0000000002. Select the Top Level ID MPAK. When clicking Accept the tier distribution in the right picture explodes with the three case packs previously nested IDs.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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 (\*W) Feature for Add-on for Wave Batch Picking

**PALLETS AND CASE PACKS - SALES ORDER DIRECTED PICKING**

Options are provided to automatically select the optimal (or largest) ID for an order. Review settings to [link Unit of Measure codes to License Plate ID Types](#). When selling case packs the **Allocate the higher level Case ID when possible** will look to select larger IDs (e.g., master packs and pallets) based on the quantity ordered. The **Include all Areas for the best Pallet Case ID** will expand the warehouse areas to get find available case packs and larger inventory. If desired, then, the primary pick location(s) and regular pick locations (if desired) can store broken piece inventory (at the std u/m) and small case packs and the larger pallets can be stored in overflow or other areas.

**DIRECTED PICKING EXAMPLE**

For the Sale of 5 Case packs directed picking selected one master pack of 4 case packs and it selected one individual case pack. On the next page on the discussion of quantity available shows how the case packs were allocated from the Pick area and skipping the Primary bin locations which has only inventory at the standard U/M.

Bin Location	Region-Aisle	Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
B30M	BC-B	2481-5-50	CASE	LOT100	CAS0000000000017 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50	CASE	LOT122	MPAK00000000000 *Pick Full ID	4.00	

For the Sale of 250 EACH (std U/M) directed picking selected the one master pack of 4 case packs and it selected one individual case pack. The Tree pictures below reveals how quantity available for the CASE ID went down from 13 to 12. There is no more MAST IDs available and the 25 EACH was allocated from the primary bin location.

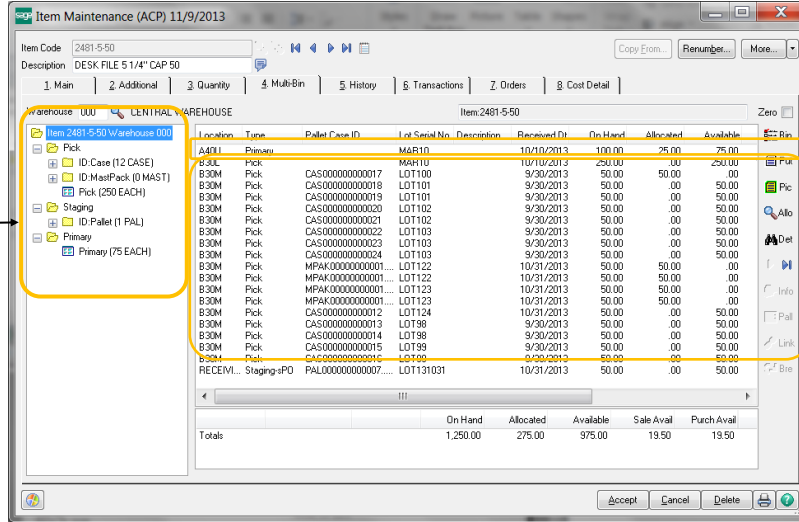
Bin Location	Region-Aisle	Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
A40U	A-A	*Primary	2481-5-50	EACH	MAR10	25.00	
B30M	BC-B	2481-5-50	EACH	LOT100	CAS0000000000017 *Pick Full ID	50.00	
B30M	BC-B	2481-5-50	EACH	LOT122	MPAK00000000000 *Pick Full ID	200.00	

**PALLETS AND CASE PACKS - INVENTORY MAINTENANCE QUANTITY AVAILABLE**

Quantity Available in Inventory Maintenance provides a tree summary for available IDs by ID type and in the different areas in the warehouse and provides detail of all available inventory. As discussed previously, Inventory Maintenance (along with other screens) gives a launching pad to drill down information and utilities to manage and quickly move and link inventory.

The following example continues from the previous page for the sale of 250 EACH (std U/M). The picking sheet outputs below demonstrates the allocations for the sale of the 250 EACH and the two examples for the sale of 5 case packs.

Tree inventory breaks down inventory for areas in the warehouse. Shows availability for ID types and inventory at standard U/M. Inventory selected in the tree is automatically selected for the Group Transfer feature to move the group of items to a location or an ID.



The primary bin location A40U has 75 available at the Std U/M. 25 was allocated in the example because the options were set to allocate best and the largest CASE packs. Bin location B30L would allocate EACHs after the primary A40U is depleted.

**PALLETS AND CASE PACKS - PICKING SHEETS**

Bin Location		Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT100	CAS000000000017 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT122	MPAK000000000000 *Pick Full ID	4.00	

Sale of 5 Case Packs: For the option **largest case is ON**, directed picking allocated the largest case pack MPAK... and then one CASE.

Bin Location		Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT100	CAS000000000017 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT101	CAS000000000018 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT101	CAS000000000019 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT102	CAS000000000020 *Pick Full ID	1.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	CASE	LOT102	CAS000000000021 *Pick Full ID	1.00	

Sale of 5 Case Packs: For the option **largest case is OFF**, directed picking allocated the 5 CASE packs.

Bin Location		Item Code	Unit/Meas	Lot Serial No	Pallet Case ID	Allocated	Backordered
A40U	A-A	*Primary 2481-5-50 DESK FILE 5 1/4" CAP 50	EACH	MAR10		25.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	EACH	LOT100	CAS000000000017 *Pick Full ID	50.00	
B30M	BC-B	2481-5-50 DESK FILE 5 1/4" CAP 50	EACH	LOT122	MPAK000000000000 *Pick Full ID	200.00	

Sale of 275 EACH: For the option **largest case is ON**, directed picking allocated the largest MAST case pack, 1 CASE packs and 25 EACH from the primary bin location.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PALLETS AND CASE PACKS - INVOICING AND SHIPPING**

**Directed Picking and Pre-allocations for License Plate inventory** is automatically shipped and the allocated inventory is passed through to invoicing just as inventory allocated that is not license plated. Pre-allocated to sales orders occurs by directed picking automatic allocations in picking sheet printing and manually selected inventory individually in sales order entry. (\*W) Wave batch shipping control also allocates inventory to the sales orders. After selecting the sales order in shipping entry and invoice entry, the inventory allocated on the sales order is passed thru to the invoice.

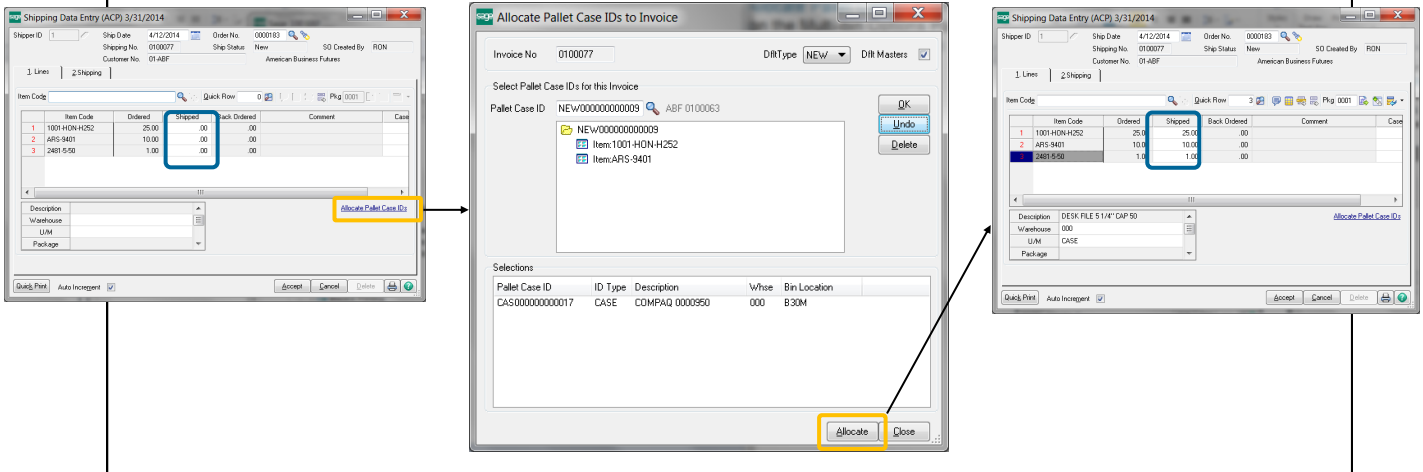
Radio Frequency (RF) Handhelds pick inventory allocate inventory the same as directed picking allocations so these allocations auto ship invoices.

Stage inventory and allocations as inventory is picked is features of (\*W) Wave Batch and picking with the RF Handhelds from approved integrators.

**Build Case Packs and Pallets for Sales Orders** with inventory transfers to IDs and linking IDs to another.

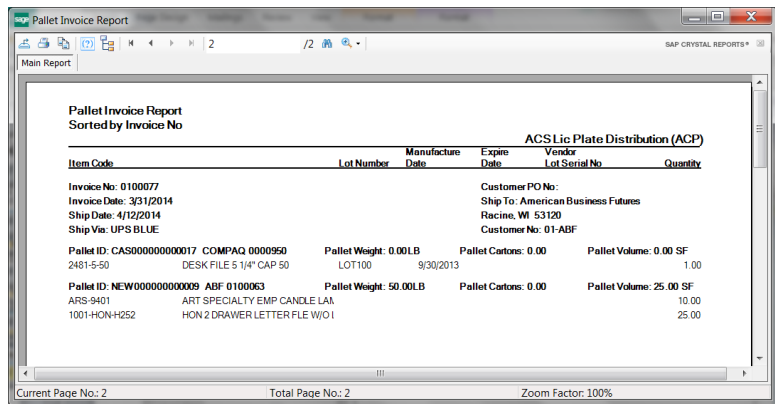
Cases and Pallets can be selected in invoice and shipping data entry on each line using [distribution entry](#) and the [ID Type distribution entry](#).

The entire invoice can be allocated quickly from Cases and Pallets by selecting the [Allocate Pallet Case IDs](#) on the shipping and invoice lines panel. Click ON the [Enable Invoice/Ship Allocate Pallets](#) on the Multi-bin Options Pallets panel to enable this feature. The following example starts by selecting the sales order in Shipping Entry in this case. Click the [Allocate Pallet Case IDs](#) link to select the Pallets and Cases to auto allocate to the shipment. As each ID is selected the inventory in the ID is shown in the window. Click [Allocate](#) to auto allocate.



**Print the Pallet Tag Reports** located under the Sales Order Shipping menu to print tag reports for pallets and cases selected in S/O Invoice and S/O Shipping.

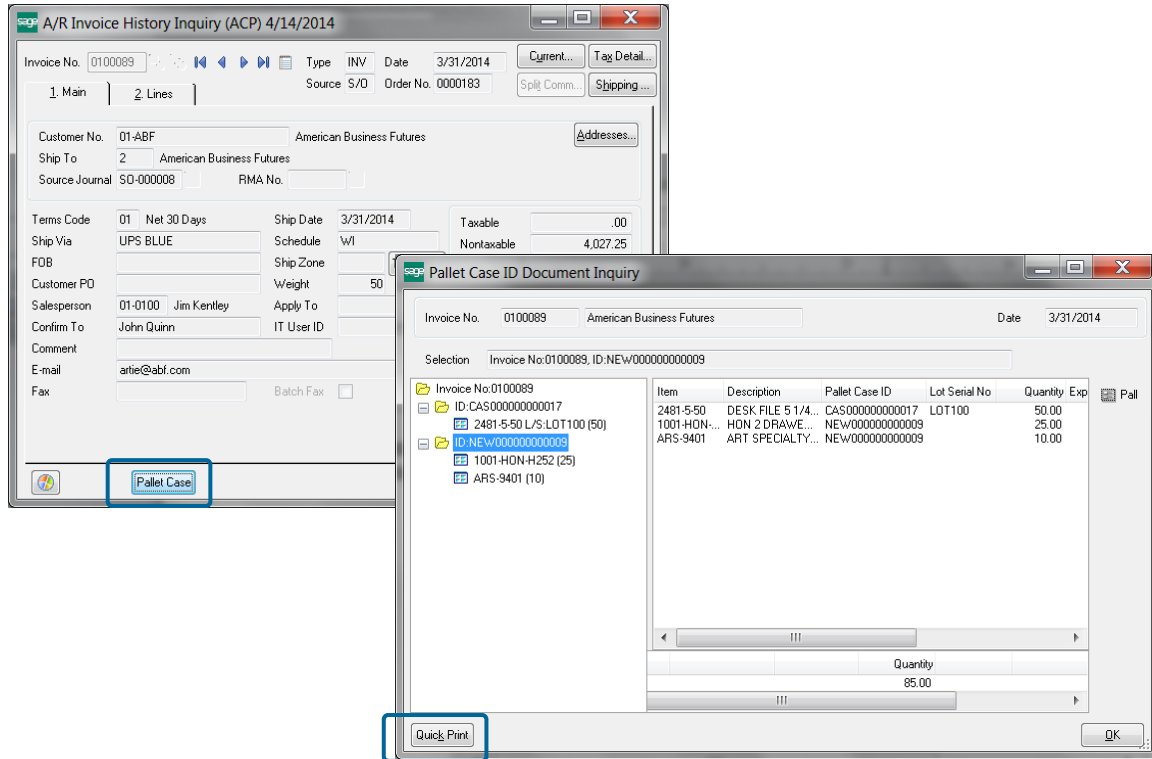
**Print the Pallet Invoice Report** for a report of the contents of the Invoices and Pallets/Case packs. The report can be printed by Invoice as the example below reflecting the pallets and cases in the invoice. Printing the report by Pallet ID reflects the invoices in each ID for multiple invoices are packed to a pallet.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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 (\*W) Feature for Add-on for Wave Batch Picking

**PALLETS AND CASE PACKS - INVOICE HISTORY**

**License Plate Invoice History** is accessible from A/R Invoice History. Click the Pallet Case button to drill down to the license plates shipped for the invoice. Click Quick Print to print the pallet tag label printing.

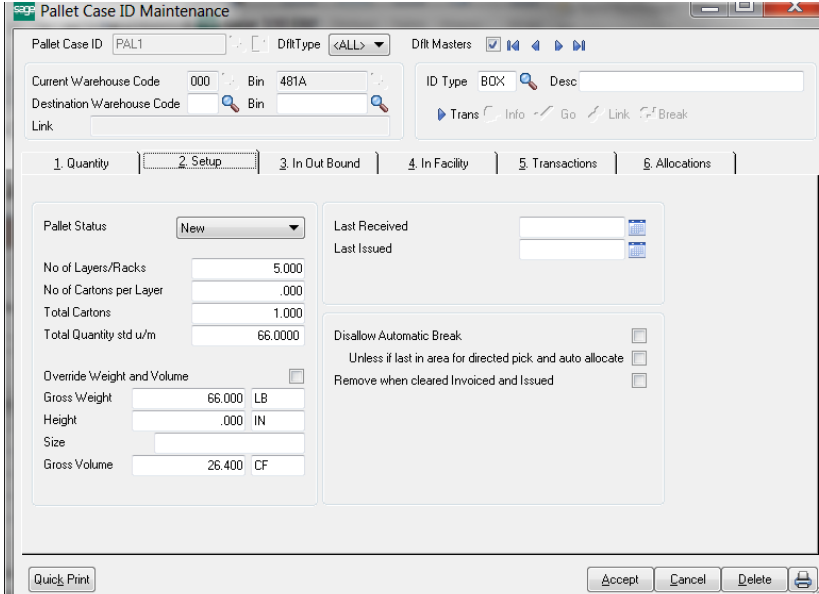


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 (\*W) Feature for Add-on for Wave Batch Picking

**PALLET MAINTENANCE - SETUP**

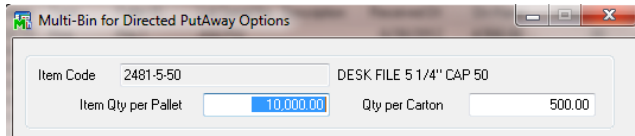
INVENTORY MANAGEMENT > SETUP > PALLET MAINTENANCE

Use the Setup Tab and defaulted In and Out Bound pallet information.



**ID Type** required. ID Type codes segregate IDs and counted for inventory.  
**Pallet Status** is auto maintained as processed: New, Received Goods, Shipped Goods, Transferred Goods  
**Disallow Break of Pallet** - Click to auto allocate the full pallet  
**Unless if last in area for directed pick** - only breaks pallet during auto allocation if it's necessary to allocate in the Area.  
**Remove Invoiced Pallet during Period End** - Click to remove the pallet master file information when invoiced. System retains history of invoiced pallets.

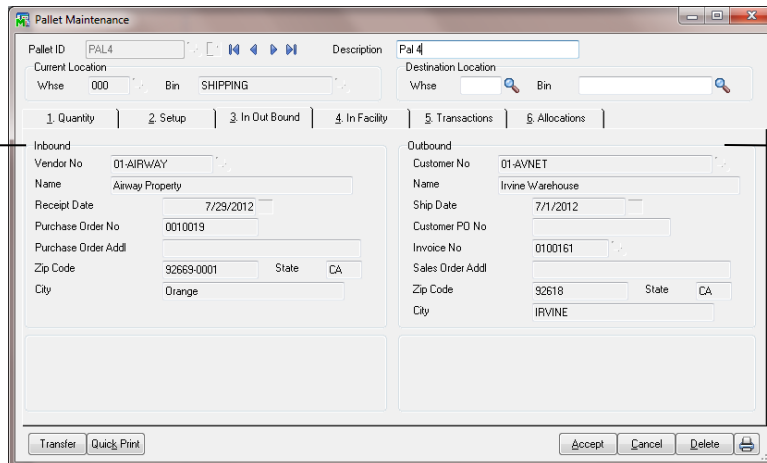
**Total Cartons, Total Quantity std u/m, Gross Weight and Gross Volume** are automatically calculated from fields in the Item for Weight and Volume. Total Cartons is calculated from the Qty per Carton quantity in the Inventory Maintenance -Multi-bin Tab - Directed Putaway button.



**Override Weight Volume** Override calculated fields for Total Cartons, Weight and Volume.

**Unit of Measure for Pallet Weight, Height and Volume** Defaults from Multi-bin Options - Pallet Tab

**In Bound**  
Data is auto assigned when the Pallet ID is selected to a PO Receipt of Goods.



**Out Bound**  
Data is auto assigned when the Pallet ID is selected to a SO Invoice Shipping entry.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PALLET MAINTENANCE - IN FACILITY**

INVENTORY MANAGEMENT > SETUP > PALLET MAINTENANCE

IN FACILITY - Custom Office UDF fields should be placed on this page. The UDF fields can be placed on the Pallet Printing work file and selected to print on the Pallet Form.

**ABC Distribution and Service Corp. (ABC)**  
**Pallet List ID PAL4: Pal 4**

Pallet Weight: 10,506.50      Pallet Cartons: 3.02      Total Quantity: 6,005.00      Pallet Volume: 60,026.05

Inbound		Outbound	
Airway Property	Orange	Irvine Warehouse	IRVINE
CA 92669-0001		CA 92618	7/1/2012
PO No's: 0010019		PO No:	
		Invoice No's:	0100161
		Cust No:	01-AVNET

Current Warehouse and Bin Location		Destination Warehouse and Bin Location	
Warehouse Code: 000	Bin Location: SHIPPING	Warehouse Code:	Bin Location:

Item Number/Description	Lot Serial N Manufacturer Lot Serial No	Production Date Expiration Date	Weight	Quantity
1001-HON-H254 HON 4 DRAWER LETTER FILE W/O LK			6.50	5.00
2481-5-50 DESK FILE 5 1/4" CAP 50	JULY234	6/30/2012	650.00	500.00
2481-5-50 DESK FILE 5 1/4" CAP 50	AUG121	7/29/2012	6,500.00	5,000.00
2481-5-50 DESK FILE 5 1/4" CAP 50	JULY233	6/30/2012	650.00	500.00

**Create UDF Fields in Files**

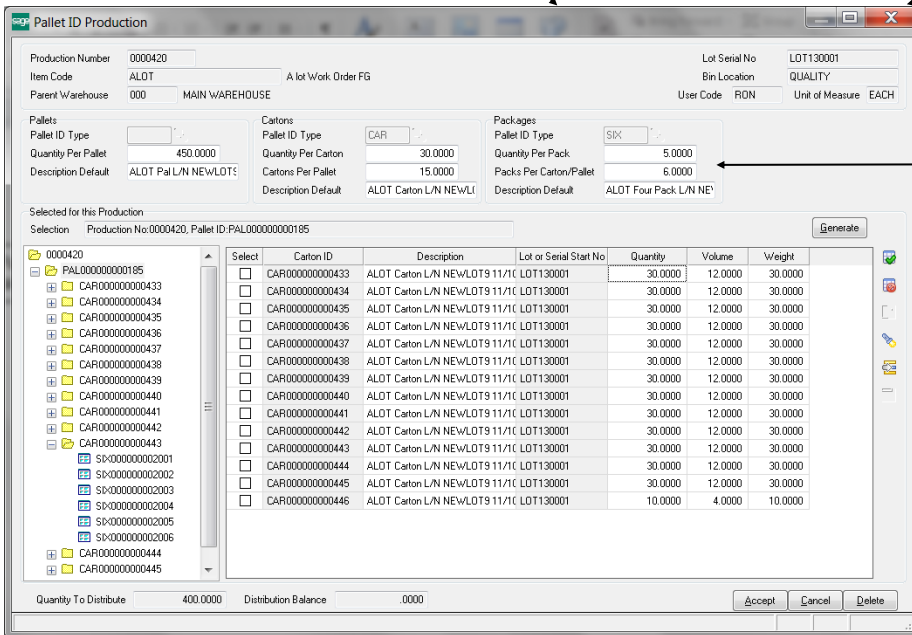
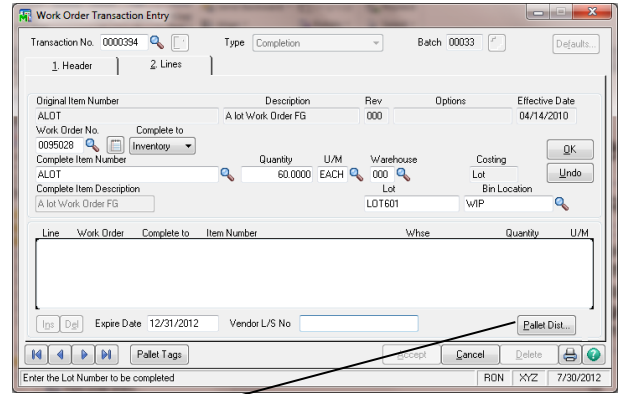
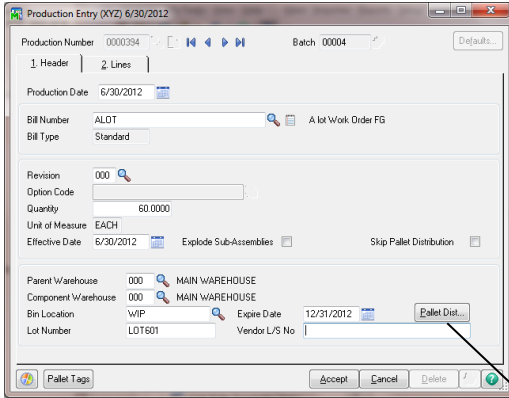
Create your UDF fields in the IM Multi-bin Vendor Pallet Master and the SO Multi-bin SO Pallet List Work File. When linking to the work file select the IM404\_Pallet business object. Custom office screen to add fields to is Inventory Management -- Pallet Maintenance.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking



**PALLETS AND CASES FOR BILL OF MATERIALS AND WORK ORDER**

**B/M Production Entry and W/O Completions** can be assigned to multiple Pallet ID's and they both provide the ability to print Pallet Tags before updating the transactions. Multi-bin Options — Pallet Tab has options if Pallets are required in B/M and W/O. The Pallet Distribution screen provides the ability to auto generate Pallet ID's using a standard quantity per Pallet ID. As with the transaction screens, Pallet ID's Next Number and Edit buttons are provided.



Generate pallet and Case IDs. Settings for Pallets, Cartons and Packages are defaulted from Put Away settings in item maint and product line maint.

The **Print Pallet Tags** on the fly for B/M and W/O finished goods prints pallet tags for those Pallet IDs produced/completed.

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 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

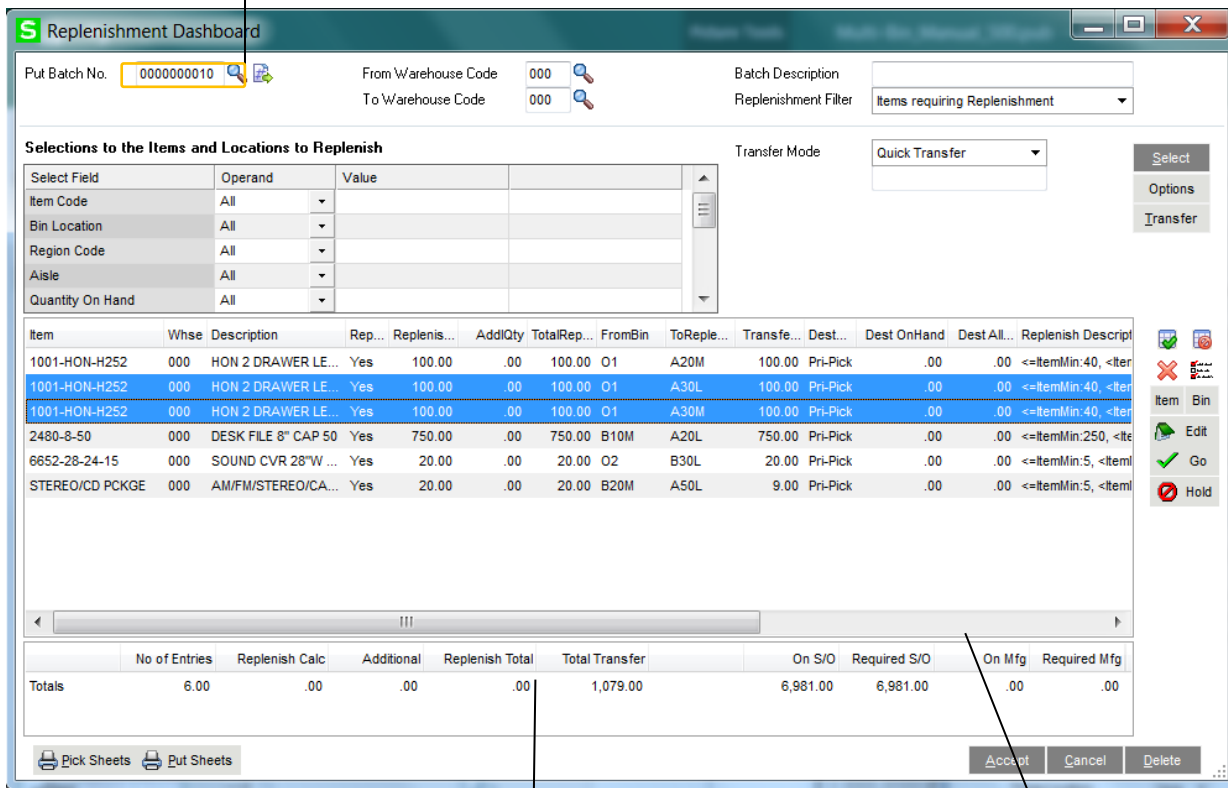
# Location Replenishment Dashboard

## DASHBOARD OVERVIEW

INVENTORY MANAGEMENT > MAIN MENU

The Dashboard provides a single screen to automatically and manually select inventory to transfer. On screen options gives options to filter selections to check quantity available to select and check the capacity of the destination of locations. Print picking sheets and putaway sheets and transfer inventory.

**Wave Putaway No:** Assigns a batch number to the transfer.



**Edit Selections:** Change destination locations, the quantity to transfer and add and delete your own inventory to transfer.

**Destination Summary**  
quantity on hand in a l  
fill the location will be

## CREATING A TRANSFER

**Wave Putaway Number:** Select next number to start a new batch.

**Calculate:** A transfer consists of creating a new Wave Put Number, designating the Replenish Type, select the source warehouse if not all warehouses should be selected and the destination warehouse. Click the Calculate button to process.

**Add, Edit, Delete entries in grid:** Click the Select column to delete existing entries and override To Location and Qty to Transfer.

**Print Pick and Put Sheets:** Wave pick sheets helps pick items in the pick flow. Wave putaway sheets helps put goods away in the warehouse flow.

**Transfer Mode:** Select for Quick (immediate) transfer, a Transaction Entry or No transfer. A transaction entry transfer is required when transferring between different warehouses. If using RF handhelds select No transfer.

**Transfer:** If transferred, each line transferred is checked Done.

— post transfer steps —

**Create Standard:** Creates a new wave putaway with Replenish Type Standard Type. Choose to copy the quantity transferred to the new standard wave putaway batch.  
(P) Feature for Add-on for Wave Batch Picking  
 (W) Feature for Add-on for Wave Batch Picking

# Location Replenishment Dashboard

## DASHBOARD OVERVIEW

INVENTORY MANAGEMENT > MAIN MENU

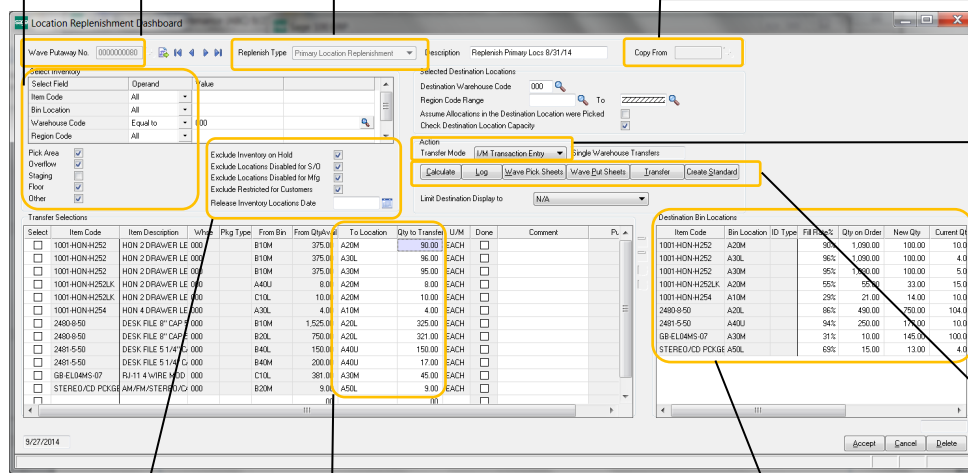
The Dashboard provides a single screen to automatically and manually select inventory to transfer. On screen options gives options to filter selections to check quantity available to select and check the capacity of the destination of locations. Print picking sheets and putaway sheets and transfer inventory.

**Wave Putaway No:** Assigns a batch number to the transfer.

**Replenish Type:** Sets the source for inventory and locations and the algorithms to auto fill locations. Primary Location Replenishment, P/O Receiving Staged, B/M Production Staged, W/O Completions Staged, To Region Codes, My Transfer, Saved Standard Transfer.

**Select:** Filter selection of items, warehouses, locations, regions (whse zones) and location types

**Copy From:** To start a new replenish type My Transfer and copy the items, quantities and settings from another transfer.



**Transfer Mode:** Choose to Quick Transfer (transfers immediately) or to create a Transaction Entry transfer for multi-warehouse transfers.

**Action Buttons:** Calculate to select inventory, from locations and quantity to transfer. Log to view exceptions. Print pick and putaway sheets. Transfer goods. Create a standard transfer to setup a standard repetitive transfer.

**Exclude Restricted Inventory:** Choose to include or exclude inventory held and restricted.

**Edit Selections:** Change destination locations, the quantity to transfer and add and delete your own inventory to transfer.

**Destination Summary:** Reflects the current quantity on hand in a location for an item and how fill the location will be after the transfer.

## CREATING A TRANSFER

**Wave Putaway Number:** Select next number to start a new batch.

**Calculate:** A transfer consists of creating a new Wave Put Number, designating the Replenish Type, select the source warehouse if not all warehouses should be selected and the destination warehouse. Click the Calculate button to process.

**Add, Edit, Delete entries in grid:** Click the Select column to delete existing entries and override To Location and Qty to Transfer.

**Print Pick and Put Sheets:** Wave pick sheets helps pick items in the pick flow. Wave putaway sheets helps put goods away in the warehouse flow.

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**Transfer:** If transferred, each line transferred is checked Done.

— post transfer steps —

**Create Standard:** Creates a new wave putaway with Replenish Type Standard Type. Choose to copy the quantity transferred to the new standard wave putaway batch.

**Delete or Save:** Save the wave putaway batch for future reference and to copy to another transfer. Choose to delete the wave putaway batch.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Location Replenishment Dashboard

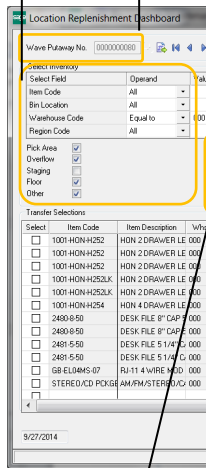
## DASHBOARD OVERVIEW

INVENTORY MANAGEMENT > MAIN MENU

The Dashboard provides a single screen to automatically and manually select inventory to transfer. On screen options gives options to filter selections to check quantity available to select and check the capacity of the destination of locations. Print picking sheets and putaway sheets and transfer inventory.

**Wave Putaway No:** Assigns a batch number to the transfer.

**Select:** Filter selection of items, warehouses, locations, regions (whse zones) and location types



**Exclude Restricted Inventory:** Choose to include or exclude inventory held and restricted.

S
Replenishment Options
? X

**Selections and Quantity**

Increase putaway qty for the destination qty allocated:

Check Destination Location Capacity

Zero Minimum means to always select item to replenish

Zero Max means no maximum quantity select to transfer

Use Quantity on Order and Manufacturing when greater

Percent Increase from Quantity Required

**Replenishment Inventory Allocation Rules**

Valuation Allocation Rules:

Non Lot Serial Items

Lot Serial Items

Primary Locations  Other Area Locations

Pick Area Locations  Floor Area Locations

Overflow Area Locations  Staging Area Locations

**Include Held and Pick Restricted Goods**

For replenishment inventory allocations.

Include Inventory on Hold  Include Restricted Customer Locations

Include Disabled for S/O Locations  Include Restricted by Date

Include Disabled for Mfg Locations  Include Restricted Trans with Bin Locations

**Save Options**

Save changes to Company

Save changes to Batch

Next Put Batch No.

**Wave Putaway Number:** Select next number to start a new batch.

**Calculate:** A transfer consists of creating a new Wave Put Number, designating the Replenish Type, select the source warehouse if not all warehouses should be selected and the destination warehouse. Click the Calculate button to process.

**Add, Edit, Delete entries in grid:** Click the Select column to delete existing entries and override To Location and Qty to Transfer.

**Print Pick and Put Sheets:** Wave pick sheets helps pick items in the pick flow. Wave putaway sheets helps put goods away in the warehouse flow.

**Transfer Mode:** Select for Quick (immediate) transfer, a Transaction Entry or No transfer. A transaction entry transfer is required when transferring between different warehouses. If using RF handhelds select No transfer.

**Transfer:** If transferred, each line transferred is checked Done.

— post transfer steps —

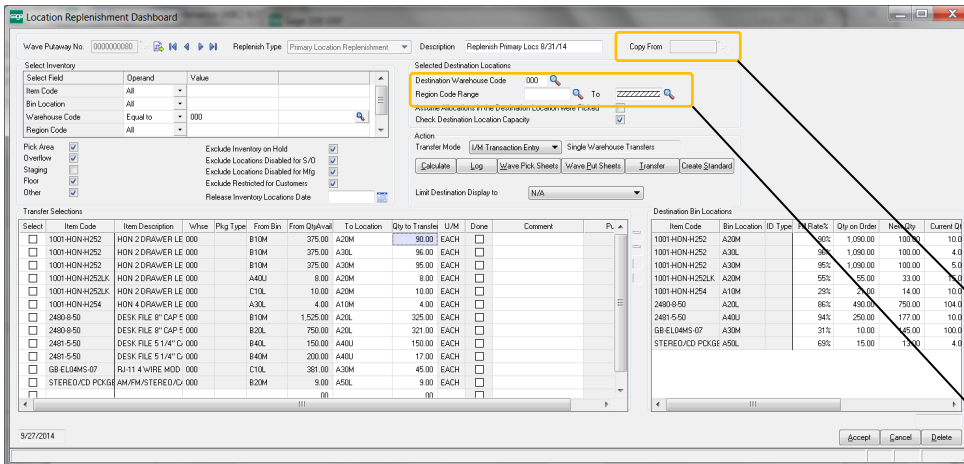
**Create Standard:** Creates a new wave putaway with Replenish Type Standard Type. Choose to copy the quantity transferred to the new standard wave putaway batch.

**Delete or Save:** Save the wave putaway batch for future reference and to copy to another transfer. Choose to delete the wave putaway batch.

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## Location Replenishment Dashboard

### DASHBOARD REFERENCE



**Wave Putaway Number** - Select the # next number to create a new transfer and use the magnifier to lookup for existing entries.

**Copy From:** Copy from another wave putaway batch for Replenish type My Transfer

**Destination Region Code Range:** Region selection for Replenish type To Region Codes.

### REPLENISH TYPE

Sets the source for inventory and locations and the algorithms to auto fill locations.

**Primary Location Replenishment:** Selects items with assigned primary bin locations. Selection looks for items in the destination warehouse code which is below the minimum replenish quantity (either in the item or warehouse) or below the maximum for a location. The maximum to fill a location can be setup in the item primary setup or by the capacity setup in the location.

**P/O Receiving Staged:** Selects items in the receiving staging location and locations in the receiving staging region. The destination locations are determined from the putaway options and directed pick algorithms. Staging locations are designated in warehouse code maintenance.

**B/M Production Staged:** Selects items in the Bill of Materials FG's staging location and locations in the stage region. The destination locations are determined from the putaway options and directed pick algorithms. Staging locations are designated in warehouse code maintenance.

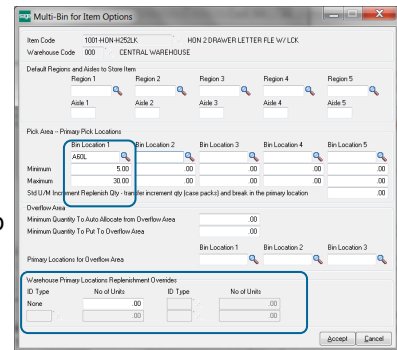
**W/O Completions Staged:** Selects items in the Work Order FG's staging location and locations in the stage region. The destination locations are determined from the putaway options and directed pick algorithms. Staging locations are designated in warehouse code maintenance.

**To Region Codes:** Determines inventory to select for from items with and without quantity on hand in the destination region codes.

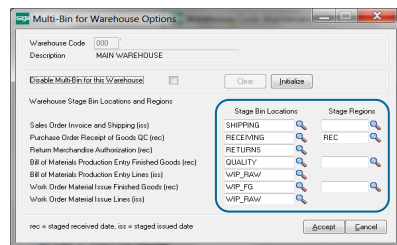
**My Transfer:** Unlocks the Copy From field to copy the items transferred to a new Wave Putaway batch. Can select a Save Standard Transfer or any other transfers. Click Calculate when ready to process. It will validate the quantity available to transfer and the capacity of the destination locations and will reduce the quantity to transfer if necessary. Check the exceptions log for the automatic changes to quantity to transfer due to the validations.

**Saved Standard Transfer:** Create a Saved Standard Transfer by clicking the Create Standard button in a transfer. Designated the item codes, the from and to bin locations and the desired stock level in the destination locations in the Quantity to Transfer field.

Standard transfers do not Calculate nor Transfer but a pick and putaway sheet can be printed. The quantity available is not validated for the standard type and the Check Destination Location Capacity can be unchecked to skip its validation.



Primary bin location setup in Item Maintenance. Example Min/max in location or Min in warehouse.

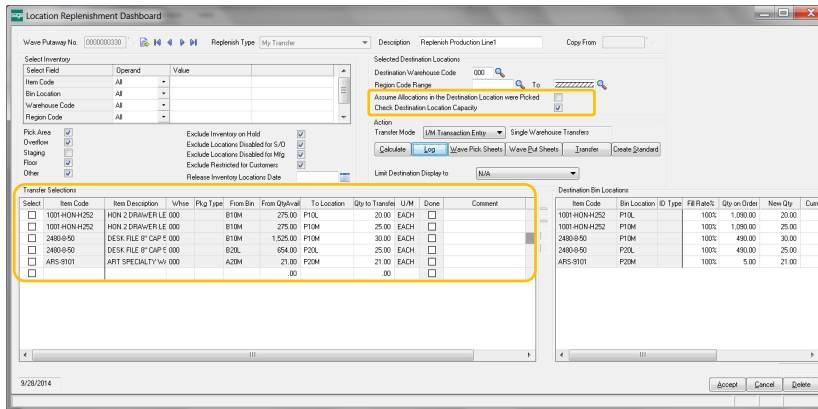


Designate warehouse staging locations and stage regions in Warehouse Code maintenance.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

# Location Replenishment Dashboard

## DASHBOARD REFERENCE



**Assume Allocations in the Destination Location were Picked** - This will increase transfer quantity to the destination location.

Reduces the quantity on hand the system in the destination bin location for the inventory allocated. It is assumed then the inventory is picked or about to be picked.

**Check Destination Location Quantity** - Turns OFF validation to check how full the destination bin location is.

**Select** - Click check box to delete entries.

**Item Code, Whse, From Bin** - Enter fields for inventory desired to add to a transfer.

**Pkg Type (\*P)** - Select the ID Type Code (i.e., the package type) desired to transfer.

**Qty to Transfer** - Enter the quantity to transfer. System will check the quantity available in the source location that can transfer and the capacity of the destination location. Checks for the quantity available is not performed for Standard Transfer replenish types. Check of the location capacity can be turned OFF and ON from the Check Destination Location Quantity check box.

**Comment** - prints instruction on the wave putaway pick and put sheets.

**Put Description** - reflects the algorithm used in directed putaway calculations for staging locations.

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 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
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# Select by Order Fill Rate and Wave Batch

## SELECT AND WAVE OVERVIEW

SALES ORDER > MAIN MENU > WAVE BATCH ORDER SELECTION

- System selects the orders that are shippable for you. The system will produce the utmost results to ship orders based on available inventory.
- Use to automatically prioritize inventory to A, B, C customers, automate groups and individual pick sheets, allocate inventory and fill backorders.
- Create batches of orders to pick for your best customers.
- Produce pick sheets for orders that are quick to pick or 100% fillable
- Select orders to ship by fill percent rate and ship/promise dates
- Prioritize inventory to customers with priority codes to customers and orders
- Designate orders as ship complete and to be sure to ship today
- Prepare batches of orders to pick days or weeks in advance
- Pick sheets for batches of orders, Pick to Package, Pick by Zone, Individual Order pick sheets
- Produce Split Pick Sheets to use multiple pickers on the same order or a batch of orders.
- Automatically create Split Pick Sheets for Zones, Location Types and Number of Lines on orders.
- Unattended mode automatically creates batches and prints pick sheets.
- Pick and move picked goods to staging locations.

Wave Batch Picking provides an easy-to-use grid for the selection of orders to pick and ship. The system intelligently tracks which orders have been selected and printed already to determine which orders are still available to ship, taking the worry away from the user. Expedite orders through the process by auto-selecting by the Fill Rate or using the Ship Complete option, lowering the additional freight cost of multiple shipments.

Utilize Customer Ship Priority codes to give those orders shipping priority and override as needed. Additional order and customer specific options are available, allowing for automatic shipment selection, including Inventory Priority Code, Ship Today, Ship Complete, Ship Lines Complete. The Ship Complete option ensures that the entire order is shippable before selection and all backorders can be set to Ship Complete automatically to save shipping fees on backorder fill.

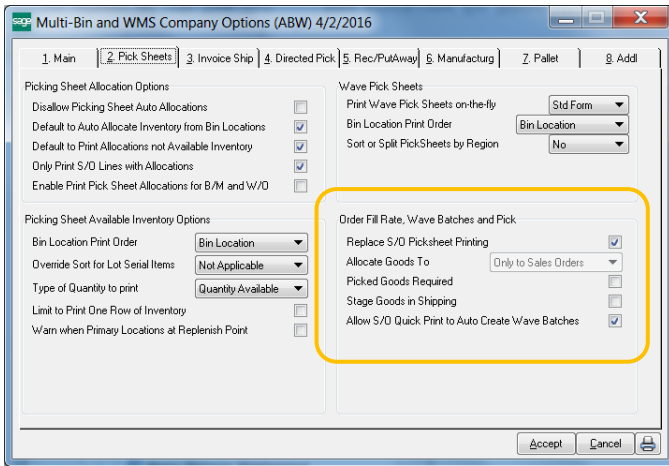
Wave Batch pick sheets can be printed by bin location or your optimum pick flow. In addition to printing regular individual pick sheets, you can print in time saving for the batch of orders. Choose to summarizing by items that need to be picked in a location or separated by the order so you can pick right into shipment boxes.

Wave batches can be split into individual pick sheets so that multiple pickers can pick the same orders or wave batch. Split by Warehouse zones (Regions), Location Types and Number of lines to pick.

# Select by Order Fill Rate and Wave Batch

## SELECT AND WAVE SETUP

INVENTORY MANAGEMENT > SETUP MENU > ACS WAREHOUSE MGMT SYSTEM OPTIONS > PICK SHEETS TAB



**Replace S/O Picksheet Printing** - The Wave Batch Selection screen replaces the Picking Sheet Printing on the Sales Order Main menu.

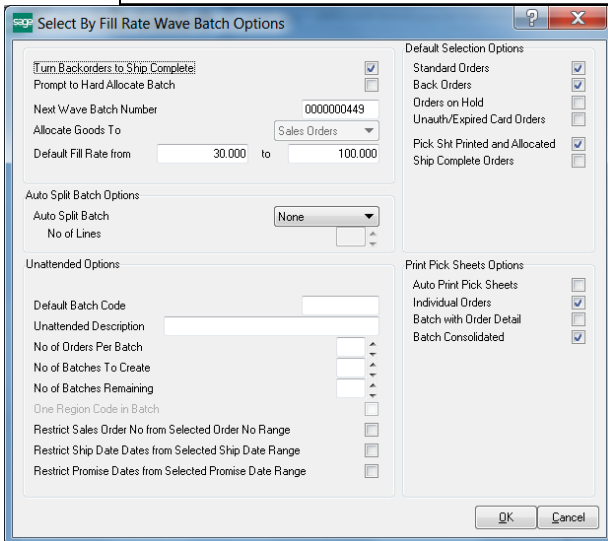
**Picked Goods Required** - Invoice and Shipping entry checks the sales order has been picked before proceeding.

**Stage Goods in Shipping** - Invoice and Shipping entry checks that the Location Type is Staging for the bin locations allocated for the sales order before proceeding.

**Allow S/O Quick Print to Auto Create Wave Batches** - Allows Sales Order Quick Print Pick Sheets to create a wave batch for that sales order. If the Split option to split the batch by the number of lines per split, orders less than the number of lines will not create a Wave batch.

## SELECT AND WAVE SETUP

SALES ORDER > MAIN MENU > WAVE BATCH ORDER SELECTION > OPTIONS



**Turn Backorders to Ship Complete** - The Ship Complete option in the sales order will be set for backorders created after shipments.

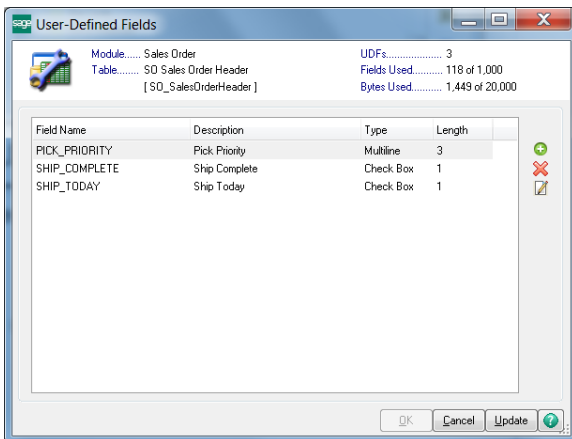
**Prompt to Hard Allocate Batch** - provides option to hard allocate inventory to the wave batch prior to printing picksheets or exiting from the batch. Hard allocations are performed automatically otherwise.

**Next Wave Batch Number** - Designate the next batch number.

**Default Fill Rate range** - Designate the default fill rate required to fill sales orders when creating a new batch.

**Default Selection Options** - Default order types and statuses to search for when creating a new batch.

## WAVE BATCH UDF FIELD OPTIONS



**Pick\_Priority** - A maximum of 3 character code is selected for order priority. Can be defaulted from the customer master file to auto fill sales orders as they are created.

**Ship\_Today** - Supersedes the Pick Priority for the highest priority

**Ship\_Complete** - The ship complete order looks for 100% fill rate. Options can set backorders to ship complete as they are created from invoice update.



## Select by Order Fill Rate and Wave Batch

### AUTO SPLIT BATCH OPTIONS

Auto Split will automatically divide a wave batch into smaller batches with an associated wave batch number. **Auto Split Batch** selections are by Region, Location Type and No of Lines. When selecting **No of Lines** option then you can select the number of lines per split batch.

### MASTER AND WAVE SPLIT PICK NUMBERS

Wave Pick No	Type	Description	Picked	Transferred	Date Created
0000004290	Master		No	No	1/25/2016
000000429A	Split	Pick Region: A	Yes	Yes	1/25/2016
000000429B	Split	Pick Region: BC	No		1/25/2016
000000429C	Split	Pick Region: OVER	No		1/25/2016
0000004330	Master	Order No: 0000187	Yes	No	3/8/2016
0000004480	Master		Yes	No	4/3/2016

**Master Pick No** represents the main wave pick number. If the wave batch splits the master wave number retains all lines to the batch. The Split Wave batches have the lines to its own batch. The last number of the Master number is used for splits so masters increment by 10 and zero is always the last number.

**Split Wave Batch Numbers (“Split No”)** add letters at the end of the Master Wave Pick Number. From this example the letters replace the 0 zero in 4290—resulting in splits 429A, 429B and 429C.

When Split numbers exist, picks and transfers can be done by the Split Number. In fact when selecting the Split number, the Pick Transfer screen launches. When printing pick sheets continue to use the Master number.

### UNATTENDED OPTIONS

Unattended auto creates Wave Batches as the number of unpicked batches goes down. The steps to turn ON unattended is as follows:

- 1) **Default Batch Code** Designate a code to enable Unattended button.
- 2) Set Unattended Options
- 3) Create a new Wave batch and designate all of the desired selection criteria.
- 4) Click the Unattended button located on the bottom of the selection screen.

**No of Orders Per Batch, No of Batches to create, No of Batches Remaining.** From this example— the system will create 5 batches with 3 sales orders in them when there is 2 batches remaining to pick.

**Restrict Sales Order No, Ship Dates and Promise Dates.** Click ON to use these selection fields to filter the order numbers and dates when the system auto creates batches.

**Print Pick Sheet Options.** Click ON Auto Print Pick Sheets to auto print pick sheets as batches are automatically created.

# Select by Order Fill Rate and Wave Batch

## BATCH CREATION OVERVIEW

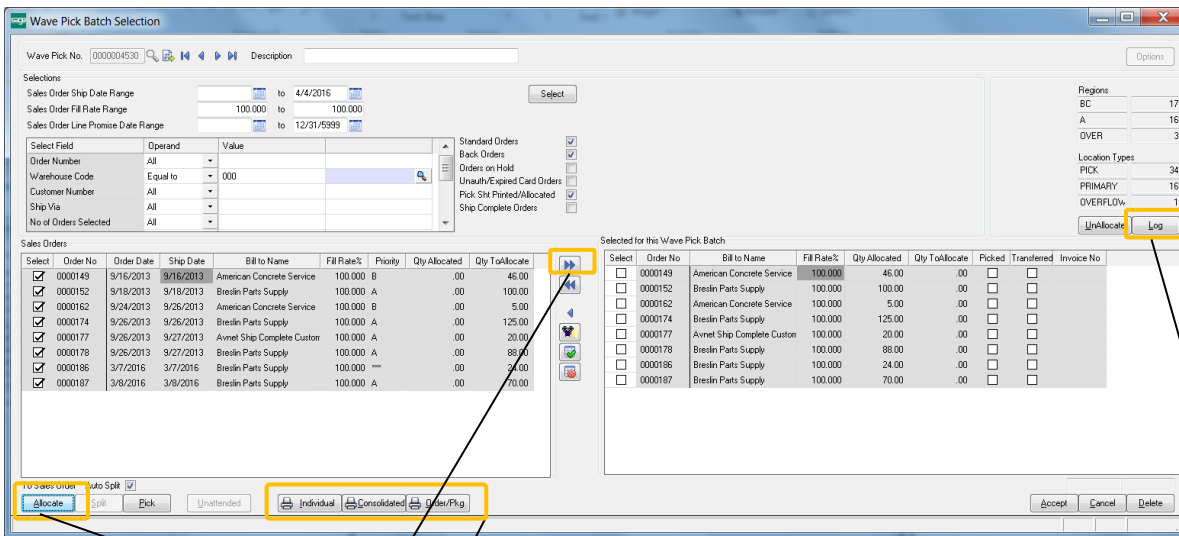
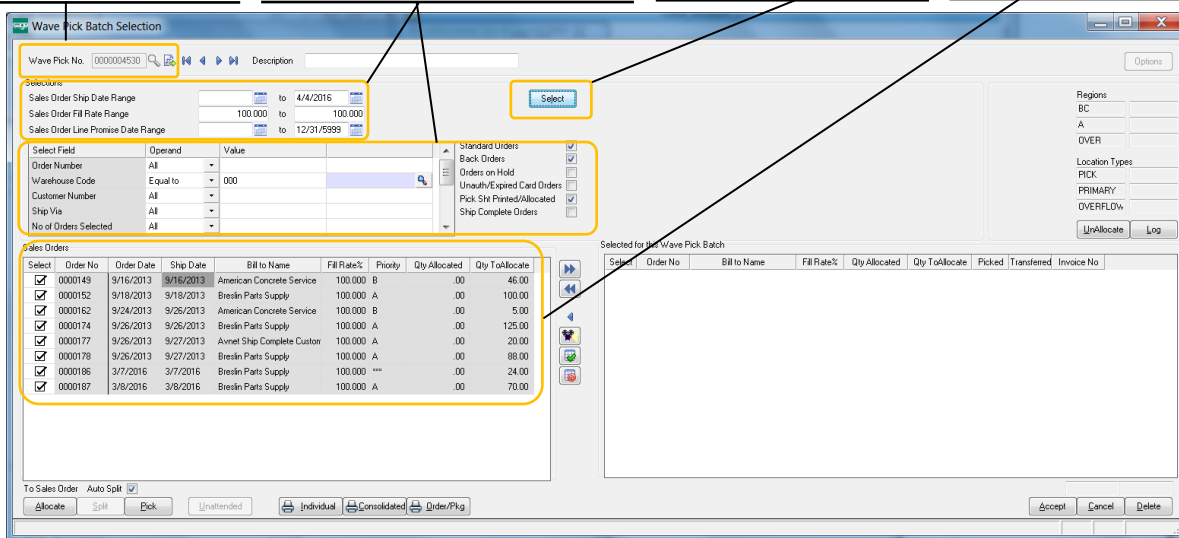
**SALES ORDER > MAIN > WAVE BATCH ORDER SELECTION** The selection screen provides the ability to intelligently select orders, designate them to a batch, allocate firmly allocate multi-bin inventory and print. The Pre-Select Grid (on the left) are all of the orders selected from the selection criteria and priority codes. The system will schedule inventory to allocate to the orders in the QtyToAllocate column. Individual or All orders can be added to the Batch (on the right).

**Wave Pick No:** Click next number to use the next auto assigned number.

**Selection Criteria:** Select the desired ship dates, order fill rates and order header filters.

**Select:** Process selections and display results in the left grid.

**Left Grid:** Pre-select of sales orders based on select criteria. All orders are check marked.



**Add Selections:** selected orders from the left grid are assigned to the Wave Batch.

**Print or just Allocate:** Choose to print one of three pick sheet templates or just Allocate.

**Log:** Review exceptions. Lot reflects orders not meeting filter options and inventory availability.

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 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
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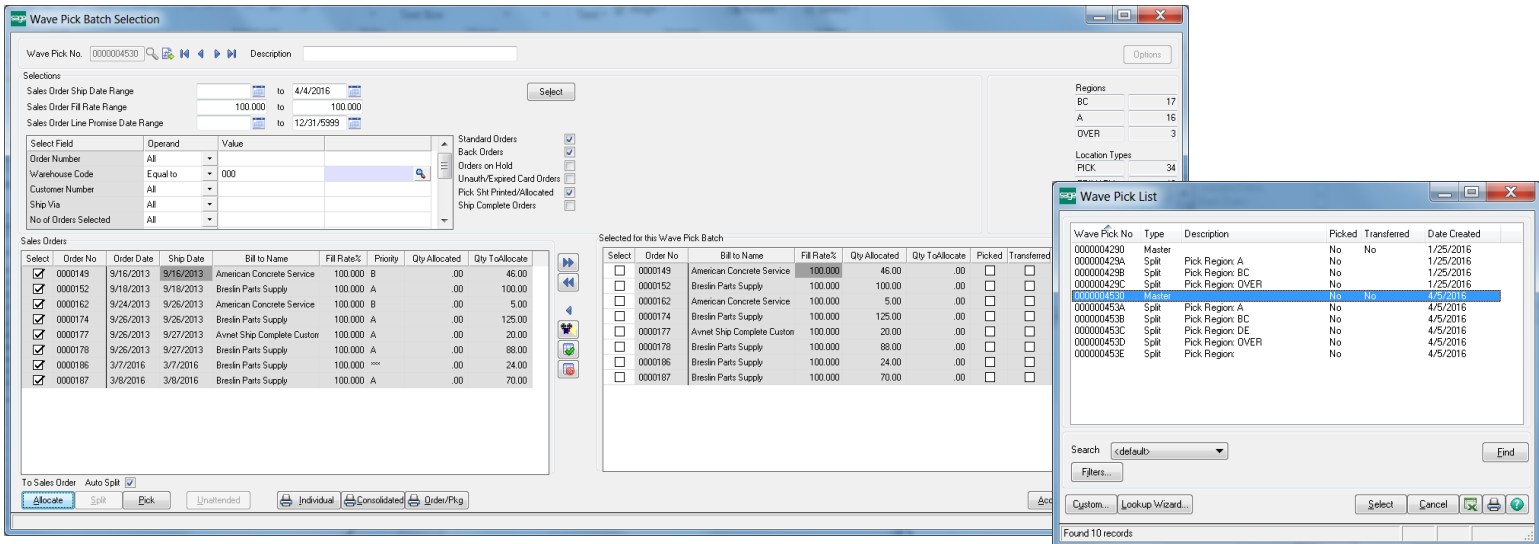
# Select by Order Fill Rate and Wave Batch

## SELECTION FIELDS

### SALES ORDER > MAIN > WAVE BATCH ORDER SELECTION

You can choose to process all orders or to process certain orders. The selection fields gives you the ability to easily segregate batches as it makes sense for your order processing. Some selection choices for batch creation could be as follows:

- Select orders shippable for today or for next week
- Select all orders that haven't been selected yet. A complete back order fill.
- Select all orders 100% fillable now and then another batch for less than 100% fillable
- Select orders for a certain Route or Ship Via code
- Select all orders give large customers where the customer has multiple orders in the system
- Select all orders that haven't been quick printed by customer service/order entry.
- Select all orders for a certain item.



**Wave Pick No** - Click the # next wave pick number. The Wave Pick No is also referred as the Master Pick No. The system increments the master number by 10 to allow for splits.

**Sales Order Ship Date Range** - Select the desired order ship dates. Select today's date to ship orders due today. Clear the From Ship Date to select all orders e.g., blank to today's date. Select a date range in the future to select orders shippable next desired period. The Sales Order Header option to Ship Today will ignore the date range selection.

**Sales Order Fill Rate Range** - Select the order fill rates to process. 100% to 100% selects only orders fully shippable. Select a lesser fill rate range to get orders with nonshippable lines. Fill rate ranges can be selected for .01% to 100% will select all orders that have something to ship. You can review the Log to identify the items the system determine is not shippable.

**Sales Order Line Promise Date Range** - If your business utilizes the Sales Order Detail Promise Date - you can select sales order lines based on the line promise date. The Sales Order Header option to Ship Today will ignore the date range selection.

**Standard Orders and Back Orders** - Check to match the Sales Order type—Standard and Back Order

**Orders on Hold** - Check to include sales orders where the Order Status field is on hold. The Sales Order Header option to Ship Today will ignore this if unchecked.

**Unauth/Expired Card Orders** - Check to include unauthorized credit card status.

**Pick Sheet Printed/Allocated** - Check to include orders which have allocated inventory and the pick sheet has been printed.

**Ship Complete** - Check to include orders designated as Ship Complete. It will ignore the fill rate range. This option allows you to select and diagnose Ship Complete orders.

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 (\*W) Feature for Add-on for Wave Batch Picking

## Select by Order Fill Rate and Wave Batch

### SELECTION FIELDS AND GRID

The screenshot shows two windows from the ACS Multi-Bin and WMS software. The main window is 'Wave Pick Batch Selection' and the smaller window on the right is 'Wave Pick List'.

**Wave Pick Batch Selection Window:**

- Wave Pick No:** 000004530
- Region:** BC
- Location Types:** PICK, PRIMARY, OVERFLOW
- Filters:** Sales Order Ship Date Range, Sales Order Fill Rate Range, Sales Order Line Promise Date Range, Select Field, Warehouse Code, Customer Number, Ship Via, No of Orders Selected.
- Buttons:** Unallocate, Log, Accept, Cancel, Delete.

**Wave Pick List Window:**

Wave Pick No	Type	Description	Picked	Transferred	Date Created
000004290	Master		No	No	1/29/2016
000004294	Split	Pick Region: A	No	No	1/29/2016
000004298	Split	Pick Region: BC	No	No	1/29/2016
00000429C	Split	Pick Region: OVER	No	No	1/29/2016
000004530	Split	Pick Region: A	No	No	4/5/2016
00000453B	Split	Pick Region: BC	No	No	4/5/2016
00000453C	Split	Pick Region: DE	No	No	4/5/2016
00000453D	Split	Pick Region: OVER	No	No	4/5/2016
00000453E	Split	Pick Region:	No	No	4/5/2016

**Log Button** - Prints all orders that are not selectable, orders and inventory that didn't meet the fill rate and orders that didn't meet the on hold order statuses.


- Could not meet fill rate selections w/25.00% - when the order doesn't meet Fill Rate Range
- Item GB-MD791 Qty to alloc 4 Qty avail 1 - items not fully shippable when not meeting the Fill Rate Range. Also prints item when it does meet the Fill Rate and the order was selected.
- Order on Hold - If the Sales Order Header Status is set to Hold.
- Exists in Wave Batch No 0000004270 - Sales Order is in another batch so its not selectable in this batch.
- Invoice in Progress - Sales Order is in invoice or shipping entry.
- Could not Ship Complete w/fill rate of 25.00% - Order is designated as Ship Complete and it could not meet the Fill Rate Range.
- Option Allowed Ship Complete w/fill rate of 25.00% - The Order is designated as Ship Complete and the order was selected because the option to select orders with Ship Complete
- Sales order no. 0000123 locked. A user is probably in the sales order
- No lines met selection criteria - could not meet Line Select filters like the wrong warehouse code
- Skip Order Pick Sheet Printed/Alloc 25.00% - Didn't select the order because the order was printed and has allocations and the option to select those is unchecked.


**UnAllocate Button** - Unallocates inventory from the selected orders and removes the orders from the batch.

**Qty Allocated** - Quantity of Multi-bin Inventory allocated to the order. This could have been selected in sales order entry or by automatically selected with Multi-bin Automatic Allocations. Automatic allocations use the setup from Multi-bin Directed Picking options.

**Qty ToAllocate** - is the scheduled allocations calculated as you select the orders and priority codes. These are temporary allocations by reserving from the Allocable Multi-bin inventory, discussed below.

**Fill Rate%** - is computed by  $Qty\ Allocated + Qty\ ToAllocate / Total\ Quantity\ on\ the\ Order$ . The Fill Rate% will match the selection screen and 100% for Ship Complete orders.

 **Add to Batch Grid from the Selection Grid** - all selected orders are assigned to the Wave Batch. Scheduled inventory allocations are retained.

 **Remove from Batch Grid** - Orders are removed from the Batch. You are provided an option to unallocate the inventory.

## Select by Order Fill Rate and Wave Batch

### GRID ACTION BUTTONS

The screenshot shows two windows from the ACS Multi-Bin and WMS software. The main window is 'Wave Pick Batch Selection' and the smaller window on the right is 'Wave Pick List'.

**Wave Pick Batch Selection Window:**

- Wave Pick No:** 000004530
- Region:** BC
- Location Types:** PICK, OVER, PRIMARY, OVERFLOW
- Sales Order Ship Date Range:** 4/4/2016
- Sales Order Fill Rate Range:** 100.000 to 100.000
- Sales Order Line Promise Date Range:** 12/31/9999
- Sales Orders Grid:**

Select	Order No	Order Date	Ship Date	Bill to Name	Fill Rate%	Priority	Qty Allocated	Qty ToAllocate
<input checked="" type="checkbox"/>	0000143	5/15/2013	8/16/2013	American Concrete Service	100.000	B	.00	45.00
<input checked="" type="checkbox"/>	0000152	9/19/2013	9/19/2013	Breslin Parts Supply	100.000	A	.00	100.00
<input checked="" type="checkbox"/>	0000162	9/24/2013	9/26/2013	American Concrete Service	100.000	B	.00	5.00
<input checked="" type="checkbox"/>	0000174	9/26/2013	9/26/2013	Breslin Parts Supply	100.000	A	.00	125.00
<input checked="" type="checkbox"/>	0000177	9/26/2013	9/27/2013	Armet Ship Complete Custom	100.000	A	.00	20.00
<input checked="" type="checkbox"/>	0000178	9/26/2013	9/27/2013	Breslin Parts Supply	100.000	A	.00	80.00
<input checked="" type="checkbox"/>	0000186	3/7/2016	3/7/2016	Breslin Parts Supply	100.000	A	.00	24.00
<input checked="" type="checkbox"/>	0000187	3/9/2016	3/9/2016	Breslin Parts Supply	100.000	A	.00	70.00
- Selected for this Wave Pick Batch Grid:**

Select	Order No	Bill to Name	Fill Rate%	Qty Allocated	Qty ToAllocate	Picked	Transferred	Invoice No
<input type="checkbox"/>	0000148	American Concrete Service	100.000	45.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000152	Breslin Parts Supply	100.000	100.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000162	American Concrete Service	100.000	5.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000174	Breslin Parts Supply	100.000	125.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000177	Armet Ship Complete Custom	100.000	20.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000178	Breslin Parts Supply	100.000	80.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000186	Breslin Parts Supply	100.000	24.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000187	Breslin Parts Supply	100.000	70.00	.00	<input type="checkbox"/>	<input type="checkbox"/>	

**Wave Pick List Window:**

Wave Pick No	Type	Description	Picked	Transferred	Date Created
000004290	Master		No	No	1/29/2016
000004294	Split	Pick Region: A	No	No	1/29/2016
000004298	Split	Pick Region: BC	No	No	1/29/2016
00000429C	Split	Pick Region: OVER	No	No	1/29/2016
00000433A	Split	Pick Region: A	No	No	4/5/2016
00000433B	Split	Pick Region: BC	No	No	4/5/2016
00000433C	Split	Pick Region: DE	No	No	4/5/2016
00000433D	Split	Pick Region: OVER	No	No	4/5/2016
00000433E	Split	Pick Region:	No	No	4/5/2016

**Picked** - Inventory for lines on the order have been picked

**Transferred** - Allocated inventory on the sales order has been transferred.

**Allocate button** - allocates multi-bin inventory according to the Multi-bin Directed Picking Options. Allocation options overrides by product line and item still applies. If the option to prompt when allocating, the Batch will be prompted to do this allocation before exiting or printing it. The system immediately reflects the movement from the scheduled Qty ToAllocate to Qty Allocated. If allocating only to orders, you can allocate an order, not print them and delete the wave batch.

#### Messages when allocating batches:

**Fully Allocated** orders indicates all of the scheduled Qty ToAllocate inventory was allocated to the orders.

**No new allocations to bin locations** indicates no changes to the allocations. The system still recalculates the Wave Summary by Bin Location.

**Could not allocate some inventory to bin locations** indicates some of the scheduled inventory could not be firmly allocated to the order. Inventory may be allocated ahead of the Wave Batch was in process. Review the Qty ToAllocate column in the Batch grid to review the items selected in the order. If inventory is released you may re-Allocate the Multi-bin inventory any time.

**Individual Print Pick Sheets button** - Prints the standard MAS90 picksheets for all orders selected in the Wave Batch. The Multi-bin option to print Wave Pick sheet still applies and will be prompted if on.

**Consolidated Wave Pick Sheets button** - Prints Wave Pick sheet for the batch with the summarized quantities in the Batch by the locations and item.

**Order/Pkg Wave Pick Sheets button** - Prints Wave Pick sheet for the batch with detailing the associated sales order number. Sorted by the location or pick sheet sort option.

# Select by Order Fill Rate and Wave Batch

## PICK SCREEN

SALES ORDER > MAIN > WAVE BATCH ORDER SELECTION > PICK BUTTON

SALES ORDER > SHIPPING > WAVE BATCH PICK ENTRY

You can choose to Pick and Transfer inventory in the batch. When using the Scanco handheld, Picking and Transfers can be done on the handhelds and the Pick screen is for reference only. Pick entry can be selected from the Pick Button in Wave Batch Order Selection or it can be selected directly from the Sales Order Shipping Menu. Split Pick Numbers will auto run the Pick screen. Master Picks you can choose the Pick button to run the Pick screen.

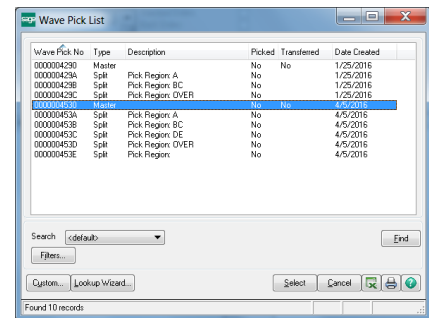
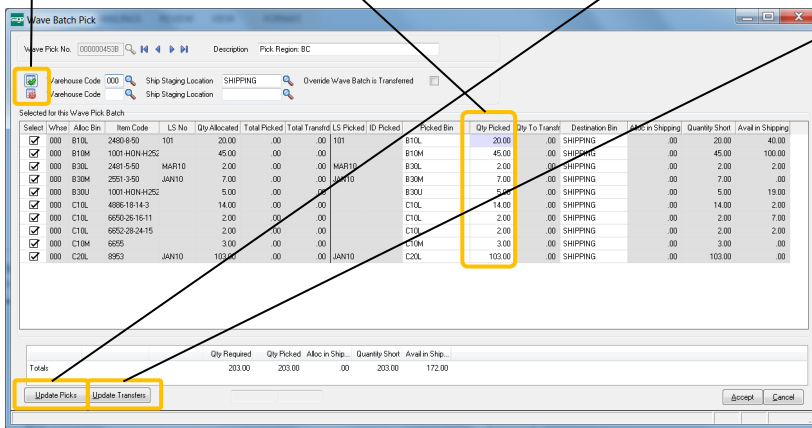
The Pick screen provides the ability to pick inventory from other locations. The destination location to transfer inventory is defaulted from the Shipping staging location in the warehouse and can be overridden.

**Select All:** Click the green button to select all lines.

**Qty Picked:** Override the quantity picked to the actual.

**Update Picks:** Click to update entered picks.

**Update Transfers:** Click to update Quantity to Transfer.



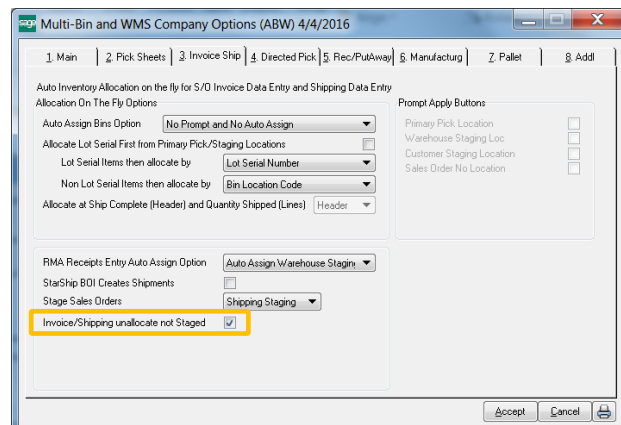
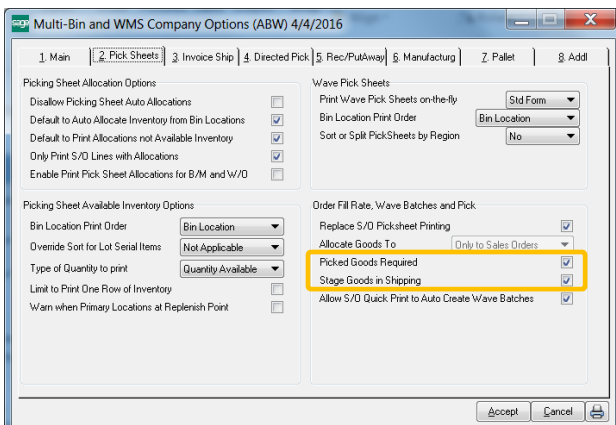
## SHIP/INVOICE PICKED AND STAGED INVENTORY

Picked inventory can be validated as you invoice/ship sales orders. There can be a concern is to validate that all Split Pick sheets have been picked and/or staged before invoicing the order. There is also another option to only invoice lines that have been Staged. This way unpicked and unstaged allocated inventory is not inadvertently invoiced.

**Picked Goods Required:** Checked will validate Invoice and Shipping Entry to insure inventory on the sales order has been picked.

**Stage Goods in Shipping:** Checked will validate Invoice and Shipping Entry inventory allocated on the sales order has been staged. The checkbox **Override Wave Batch is Transferred** overrides the Pick Entry screen to reflect it has been completed. This is useful if no inventory was picked on a Split Pick but yet the order can be invoiced.

**Invoice/Shipping Unallocate Not Staged:** Checked will clear all allocated inventory that is not in a staging location. Inventory not staged with this option says the items were originally allocated from a pick location but was not.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

## Select by Order Fill Rate and Wave Batch

### PICKING SHEET PRINTING

Wave Pick No: 000004530 Description

Regions: BC 17, A 16, OVER 3

Location Types: PICK 34, PRIMARY 16, OVERFLOW 1

Selected for this Wave Pick Batch:

Select	Order No	Bill to Name	Fill Rate%	Qty Allocated	Qty To Allocate	Picked	Transferred	Invoice No
<input type="checkbox"/>	0000148	American Concrete Service	100.000	46.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000152	Breslin Parts Supply	100.000	100.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000162	American Concrete Service	100.000	5.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000174	Breslin Parts Supply	100.000	125.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000177	Arnet Ship Complete Custor	100.000	20.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000178	Breslin Parts Supply	100.000	88.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000186	Breslin Parts Supply	100.000	24.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	0000187	Breslin Parts Supply	100.000	70.00	0.00	<input type="checkbox"/>	<input type="checkbox"/>	

Buttons: Individual, Consolidated, Order/Pkg

**Individual:** Prints a pick sheet for each sales order in the Wave Batch. Same as regular Sage Pick Sheets.

**Consolidated:** Prints a summarized pick sheet combining all lines in the Wave Batch. Quantities to pick reflect the total to pick from each bin location.

**Order/Pkg:** Prints a pick sheet for all lines of the Wave Batch. Quantities to pick reflect the total to pick for each sales order in a bin location. This is the same pick sheet as the Consolidated but includes sales order detail.

MultiBin Wave Pick Sheet  
Warehouse: 000  
Wave Pick No: 000000453A

Bin Location	Pallet Case ID	ID Type	Item Code	Lot Serial No	Sales Order No	Ship Quantity
A10U			1001-HON-H254			22.00
Status: Alloc			HON-4 DRAWER LETTER FILE W/			
A20L			2480-8-50	101		102.00
Status: Alloc			DESK FILE 8" CAP 50			
A20M			ARS-9401			12.00
Status: Alloc			ART SPECIALTY EMP CANDLE L			
A20M			ARS-9301			18.00
Status: Alloc			ART SPECIALTY BRONZE LAMP			
A20M			ARS-9101			12.00
Status: Alloc			ART SPECIALTY WALNUT CNDL I			
A20M			ARS-9201			53.00
Status: Alloc			ART SPECIALTY GINGER JAR/LA			
A40M			PFS-004-CABLE			5.00
Status: Alloc			FIA RS232 CABLE 4 CONDUCTOR			

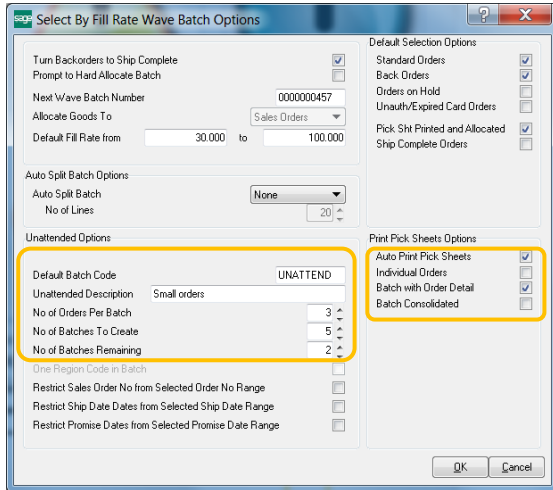
MultiBin Wave Pick Sheet  
Warehouse: 000  
Wave Pick No: 0000004530

Bin Location	Pallet Case ID	ID Type	Item Code	Lot Serial No	Sales Order No	Ship Quantity
A10U			1001-HON-H254		0000186	15.00
Status: Alloc			HON-4 DRAWER LETTER FILE W/			
A10U			1001-HON-H254		0000149	2.00
Status: Alloc			HON-4 DRAWER LETTER FILE W/			
A10U			1001-HON-H254		0000178	5.00
Status: Alloc			HON-4 DRAWER LETTER FILE W/			
A20L			2480-8-50	101	0000174	82.00
Status: Alloc			DESK FILE 8" CAP 50			
A20L			2480-8-50	101	0000149	20.00
Status: Alloc			DESK FILE 8" CAP 50			
A20M			ARS-9301		0000187	10.00
Status: Alloc			ART SPECIALTY BRONZE LAMP			
A20M			ARS-9401		0000178	2.00
Status: Alloc			ART SPECIALTY EMP CANDLE L			

# Select by Order Fill Rate and Wave Batch

## AUTO CREATE BATCHES WITH UNATTENDED MODE

Unattended auto creates Wave Batches as the number of unpicked batches goes down. The steps to turn ON unattended is as follows:

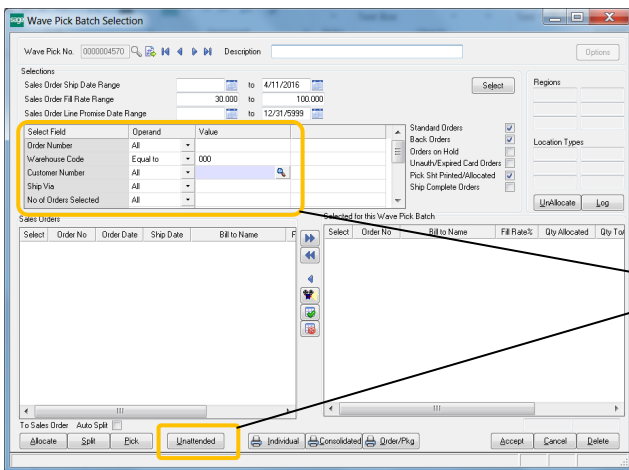


- 1) **Default Batch Code** Designate a code to enable Unattended button.
- 2) Set Unattended Options
- 3) Create a new Wave batch and designate all of the desired selection criteria.
- 4) Click the Unattended button located on the bottom of the selection screen.

**No of Orders Per Batch, No of Batches to create, No of Batches Remaining.** From this example— the system will create 5 batches with 3 sales orders in them when there is 2 batches remaining to pick.

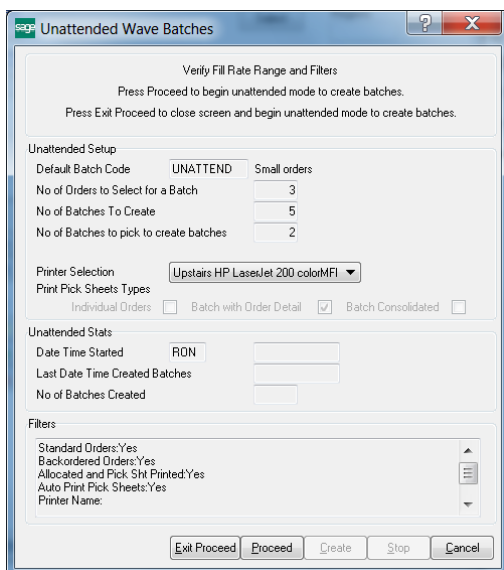
**Restrict Sales Order No, Ship Dates and Promise Dates.** Click ON to use these selection fields to filter the order numbers and dates when the system auto creates batches.

**Print Pick Sheet Options.** Click ON Auto Print Pick Sheets to auto print pick sheets as batches are automatically created.



Create a new Wave batch and designate all of the desired selection criteria.

**Unattended Button:** Before clicking make your selections so the system will select the orders you want to auto create. For example designate the warehouse code and a SHIP VIA code to represent to non LTL orders or UDF fields for the small orders.



**Exit Proceed:** Most of the time click this button. This will start the process and close out of this screen. To stop the process re-click the Unattended button and click the Stop button.

**Proceed:** This will start the process and keep this screen up.

**Create:** Creates a single batch on the fly.

**Stop:** Turns OFF the Unattended mode.



## Select by Order Fill Rate and Wave Batch

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**ON THE WATER OVERVIEW**

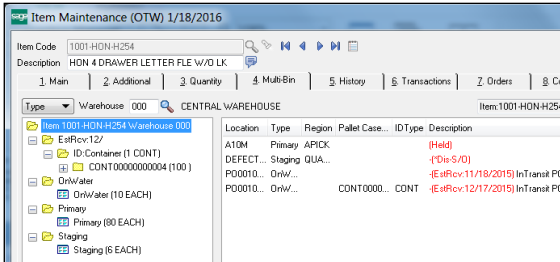
PURCHASE ORDER > MAIN MENU > PURCHASE ORDER ENTRY AND RECEIPT OF GOODS ENTRY

- Receive Inventory the Water and Receive in the Warehouse the same Sage 100 receiving screen or can use automatic receiving.
- Segregate Balance Sheet Inventory G/L account for goods on the water
- Segregate Quantity On Hand and Quantity Received for On the Water in Item Maintenance in for the warehouse and purchase orders.
- Track multiple purchase orders in Containers.
- Track Pallets in Containers with License Plate.
- Actual landed costs are recorded to inventory when received in the warehouse. Estimates while on the water are reversed.
- Pre-book Sales Order Allocations reserving on the water inventory transfers to Received to Warehouse
- Provide good visibility when inventory will be received for customer service in Sales Order entry.
- Easy to use because there are no new screens. The standard Sage Receipt of Goods and Purchase Order entry.
- Inventory valuation and stock status reports segregating goods on the water versus in the warehouse.

Know where your inventory is and if its on the water - everyone from Customer Service, Purchasing to the G/L Accountant knows. The regular Purchase Order Entry and Receipt of Goods screens handle when goods are received On The Water and In The Warehouse. There is no extra input most times in Receipt of Goods Entry because the system has the intelligence to when goods where the inventory is. Purchase Order Entry and Receipt of Goods have a few new fields so there are not a lot of changes to the existing procedures. Best of all, inventory valuations are right and quantities are tracked.

When looking up available inventory, the system presents estimated and actual dates when the goods hit the water and arrive in the warehouse. Inventory quantity on hand views and open purchase orders information reflects quantities on the water from in the warehouse. Customer service can pre-book to sales orders for inventory that has not been received in the warehouse yet. The system moves the allocations automatically as inventory arrives. The system takes care of the recording actual landed costs to inventory values; previously recorded estimated landed costs are backed out.

License plate <sup>(P)</sup> users can track inventory on containers and even if goods are palletted in containers. Users can choose to automatically separate palletted inventory from the containers as goods are received. Scanco scanners further improve receiving in the warehouse. The warehouse can validate anticipated inventory coming in containers and multiple purchase orders in containers is scanned in as simple other receipts.



Bin Location	Description	Qty On Hand	Allocated	Available	Location Type	Recvd Date	Issued Date
A10M	Restrict from S/O	80.00	.00	80.00	Primary	6/4/2013	
DEFECTIVES	Restrict from S/O	6.00	.00	6.00	Staging	7/18/2015	
PD0010038	EstRev:11/18/2015	10.00	.00	10.00	OnWater	10/1/2015	
PD0010040	EstRev:12/17/2015	100.00	.00	100.00	OnWater	11/24/2015	1/18/2016

Inventory lookup in sales order entry and in other screens provides an easy to view inventory that is on the water and know when goods will arrive. As estimates are updated with actual dates are provided. These pick restrictions are highlighted in easy to read in red. Options grant rights if inventory is allocable to transactions while they are on the water.

Inventory maintenance/inquiry provides an easy to view inventory that is on the water, purchase order information and know when goods will arrive.

Account Number	Account Description/Posting Comment	Debit	Credit
119-00-00	Inventory OTW	7,013.10	
	China Plate Company REC:G001133		
200-03-00	Purchases clearing account		6,013.10
	China Plate Company REC:G001133		
570-00-04	Freight Cost of Goods		1,000.00
	FRGHT Freight REC: REC:G001133		
Account Number	Account Description/Posting Comment	Debit	Credit
115-00-03	Inventory - Central Warehouse	6,768.29	
	China Plate Company REC:G001142		
119-00-00	Inventory OTW		7,013.10
	China Plate Company REC:G001143		
200-03-00	Purchases clearing account		6,013.10
	China Plate Company REC:G001142		
200-03-00	Purchases clearing account	6,013.10	
	China Plate Company REC:G001143		
570-00-04	Freight Cost of Goods	1,000.00	
	FRGHT Freight REC: REC:G001142		
570-00-04	Freight Cost of Goods		755.19
	FRGHT Freight REC: REC:G001143		

**Receipt of Goods Update Inventory On The Water:** \$6013.10 of inventory and \$1000.00 of estimated landed cost recorded to inventory. No extra input versus any other ROG was necessary.

**Receipt of Goods Update Inventory in the Warehouse:** Receipt in the Warehouse records inventory with actual landed cost of \$755.19 freight. The original ROG is reversed along with the previously recorded estimated landed cost. No extra input versus any other ROG was necessary.

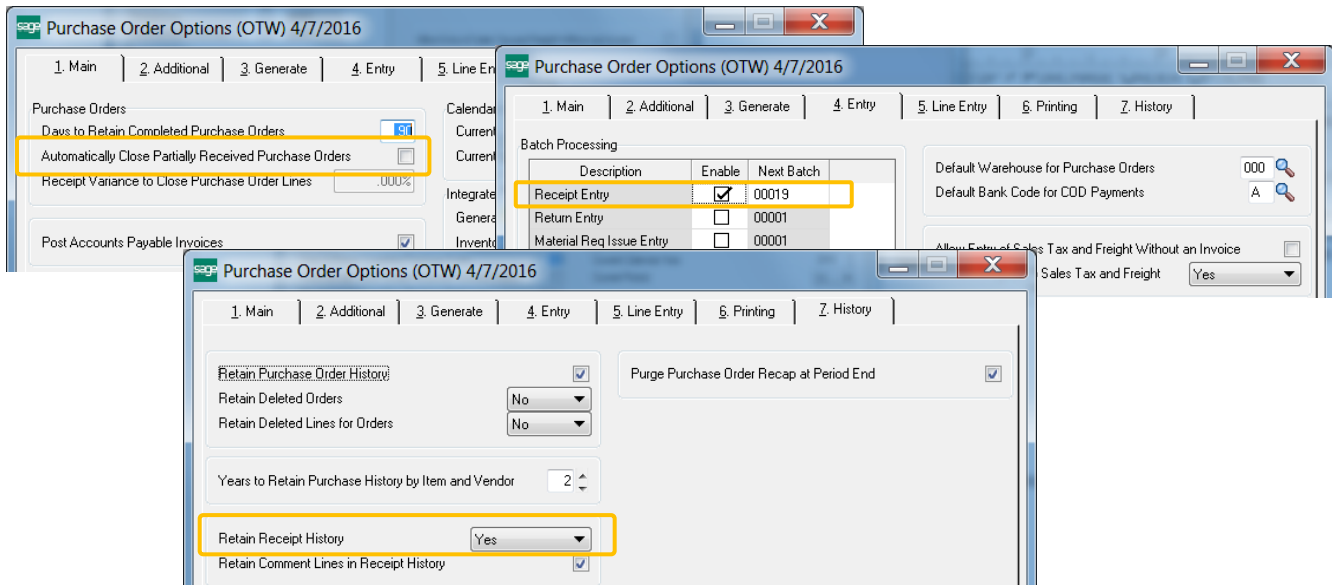
**ON THE WATER SETUP**

**PURCHASE ORDER > SETUP > PURCHASE ORDER OPTIONS**

On The Water utilizes the history files in Sage. The following options in Sage need to be set so Sage stores information to its history files. The system checks some of these options are set when you enable On The Water.

In Purchase Order Options set these options:

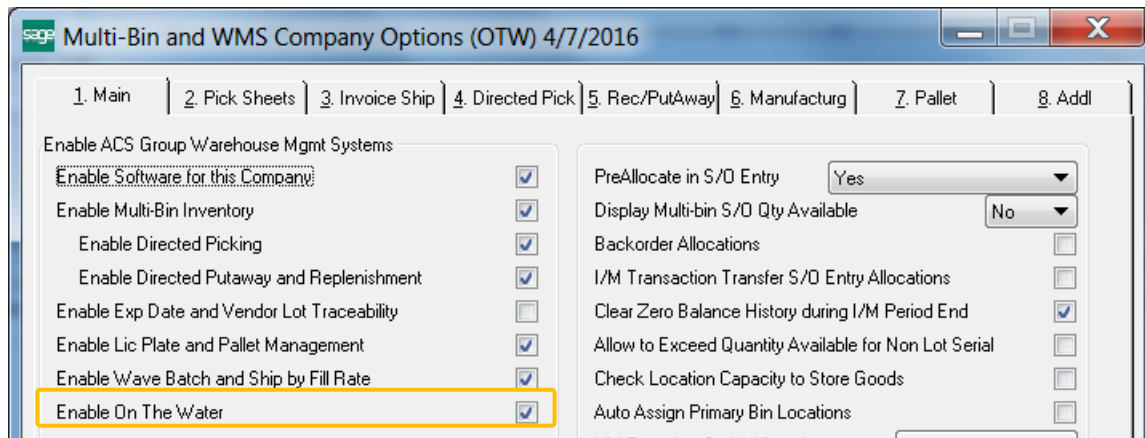
- Disable **Automatically Close Partially Received Purchase Orders** – Click OFF – PO Options – 1. Main Tab – Automatically Close Partially Received Purchase Orders.
- Enable **Batching for PO Receipt Entry** – Click ON – PO Options – 4. Entry Tab – Receipt Entry for Batch Processing
- If you desire landed costs Enable Allow Entry of Landed Cost – Click ON -- PO Options – 5. Line Entry Tab – Allow Entry of Landed Cost
- Enable **Retain Receipt History** – Select Yes -- PO Options – 7. History tab - Retain Receipt History



**ON THE WATER SETUP**

**INVENTORY MANAGEMENT > SETUP > ACS WAREHOUSE MGMT SYSTEM OPTIONS > MAIN TAB**

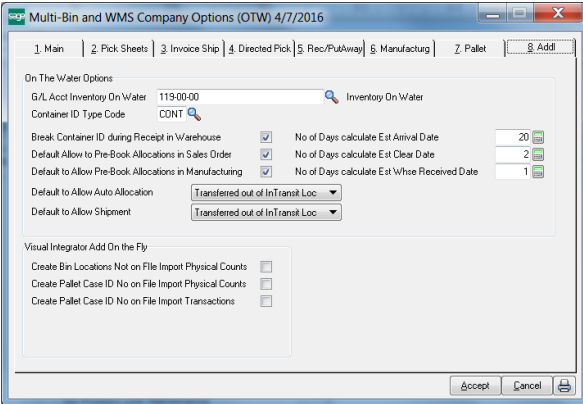
Click ON **Enable On The Water** in company options.



**ON THE WATER SETUP**

INVENTORY MANAGEMENT > SETUP > ACS WAREHOUSE MGMT SYSTEM OPTIONS > ADDL TAB

**G/L Acct Inventory On Water** If you desire the balance sheet to separate Inventory On The Water from Inventory, designate a G/L Account. The account is maintained for increases and decreases for the inventory on the water.



**Container ID Type Code** If License Plate is enabled, an ID for containers can be selected in PO Receipt of Goods entry. Especially used for goods on the water vs not often used as goods received in the warehouse. The ID Type will save time because it will auto set the container ID type when in the ID column. Allows easy selection of ID's and the next ID number.

**Break Container ID during Receipt in Warehouse** Enabled if License Plate is enabled. If you do not retain inventory in the Container when the goods arrive in the warehouse, this option will automatically remove the Container ID number from the received inventory.

**Default Allow to Pre-Book Allocations in Sales Order** Sets the default as purchase orders are created if in Sales Order Entry users be allocate inventory while in transit on the water.

ers be allocate inventory while in transit on the water.

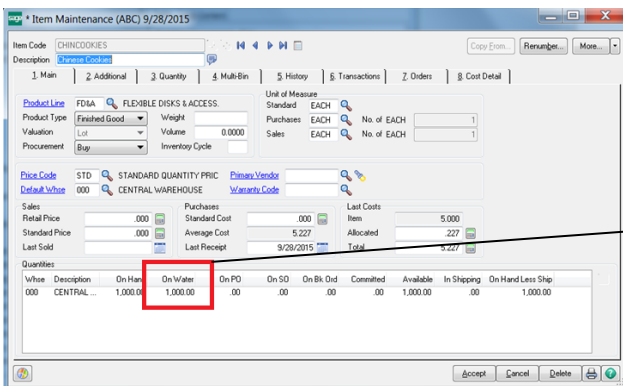
**Default Allow to Pre-Book Allocations in Sales Order** Sets the default as purchase orders are created if in Bill of Materials and Work users be allocate inventory while in transit on the water. A future feature.

**No of Days calculate Est Arrival Date, Clear Date and Received in the Warehouse Date** sets the estimated date when goods will arrive in port. The estimated and actual dates can be entered from the hyperlink in the purchase order's totals tab. Receipts in the Warehouse will set the actual Received in Whse Date.

**Default to Allow Auto Allocation** Sets the default as purchase orders are created when goods can be automatically allocated with Directed Picking. The default is when goods have been received in the warehouse and moved into a pickable location.

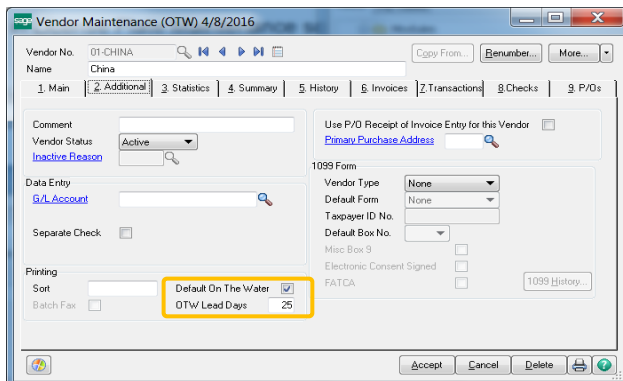
**Default to Allow Auto Allocation** Sets the default as purchase orders are created when goods can be shipped. The default is when goods have been received in the warehouse and moved into a pickable location.

**Visual Integrator Add On The Fly - Create Pallet Case ID No on File Import Transactions (\*P)** If License Plate is enabled you can assign IDs for imports to Receipt of Goods.



**ITEM MAINTENANCE - CUSTOM OFFICE CHANGE FOR QOH ON THE WATER BY WAREHOUSE**

Add Custom Office field to QOH Grids: Item maintenance and grids using the IM\_ItemWarehouse file - you can add the field D404\_QuantityOTW to the grid.



**A/P VENDOR DEFAULTS ON THE WATER**

Vendors can default purchase orders for an On The Water transaction and the default the number of days goods are shipped after the purchase order date.

**Default On The Water (In Vendor Maintenance)** Sets the default for purchase orders created with this vendor will be an On The Water transaction.

**OTW Lead Days** the default the number of days goods are shipped after the purchase order date.

### OVERVIEW OF THE ON THE WATER PROCESS

PURCHASE ORDER > MAIN MENU > PURCHASE ORDER ENTRY AND RECEIPT OF GOODS ENTRY

#### DESIGNATE PURCHASE ORDER ON THE WATER

**On The Water:** Designate the P/O its an On The Water. Can override the Ship Date if known. Info is defaulted from the vendor.

**Override Estimate Dates:** If desired, override the estimate dates to be shipped to receive in warehouse date. Estimated date lead days and OTW are set in Company Options.

Purchase Order Entry (OTW) 4/1/2016

Order Number: 0010057

Order Date: 4/1/2016

Vendor No: 01-CHINA

Warehouse: 000 CENTRAL WAREHOUSE

On The Water:  4/26/2016

InTransit - On The Water Location

Receive Dates	Estimated	Actual
Departure Date	4/26/2016	
Arrival Date	5/16/2016	
Clear Date	5/18/2016	
Whse Rec Date	5/19/2016	
Last Whse Rec Date		

#### RECEIVE GOODS ON THE WATER

**Rec On Water:** Receive On The Water is defaulted because it knows the P/O has not been received.

**Estimated Landed Costs :** Enter all estimated costs as desired when initially receiving on the water.

Receipt of Goods Entry (OTW) 4/1/2016

Receipt Date: 4/1/2016

Purchase Order Number: 0010057

Rec on Water:

Receipt of Goods Entry (OTW) 4/1/2016

Landed Cost

Taxable Receipts	.00
Non-taxable Receipts	1,730.80
Receipt Total	1,730.80

#### RECEIVE GOODS IN THE WAREHOUSE

**Rec in Whse:** Receive In the Warehouse is defaulted because of the initial receipt. You can change for another Receive on the Water if the order was partially shipped.

**Actual Landed Costs:** Enter all actual costs so the inventory values are re-costed to actual.

Receipt of Goods Entry (OTW) 4/1/2016

Receipt Date: 4/1/2016

Purchase Order Number: 0010057

Rec in Whse:

Receipt of Goods Entry (OTW) 4/1/2016

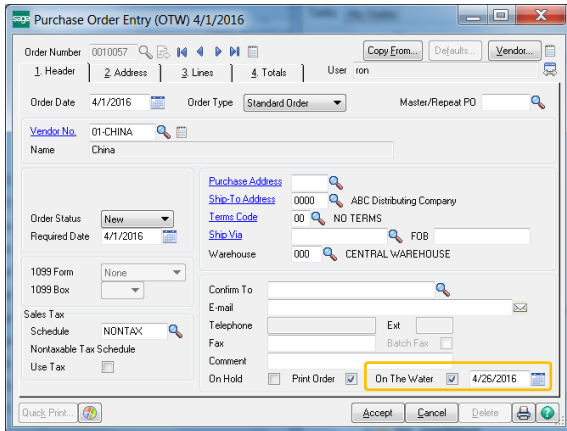
Landed Cost

Taxable Receipts	.00
Non-taxable Receipts	1,730.80
Receipt Total	1,730.80

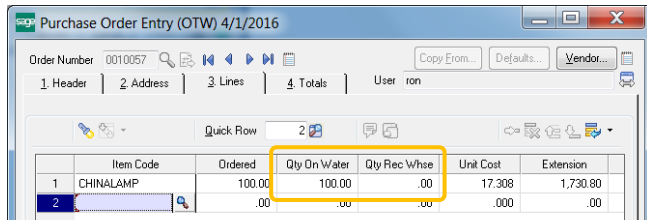
**PURCHASE ORDERS**

**PURCHASE ORDER > MAIN MENU > PURCHASE ORDER ENTRY**

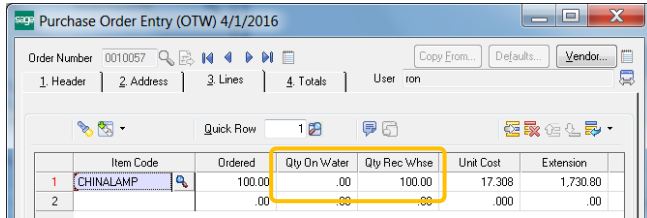
Purchase Orders can be entered the same way as usual. The new fields for On The Water and the Ship Date can be defaulted from the Vendor setup ease entry for On The Water vendors. The purchase order can be revisited to set actual ship dates and other actual dates if desired. New columns in the Lines panel provides balance information for the goods received on the water and in the warehouse.



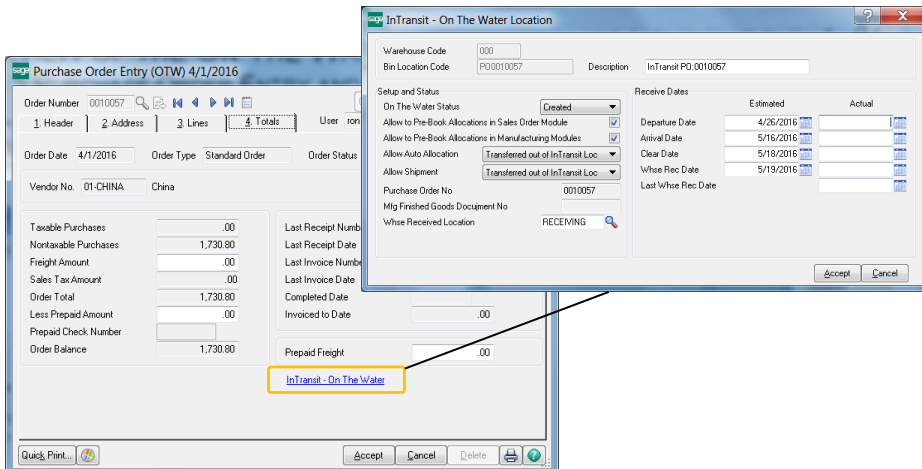
**On The Water** Check to designate the P/O its an On The Water. Can override the Ship Date if known. Data is defaulted from the vendor.



**Qty On The Water Column** Reflects the balance received on the water for the purchase order line item. It is increased as inventory is received on the water and reduced for the inventory received in the warehouse. The system uses the field to know how much inventory has yet to be received in the warehouse.



**Qty Rec Whse** reflects the quantity received in the warehouse. It is increased as inventory is received in the warehouse.



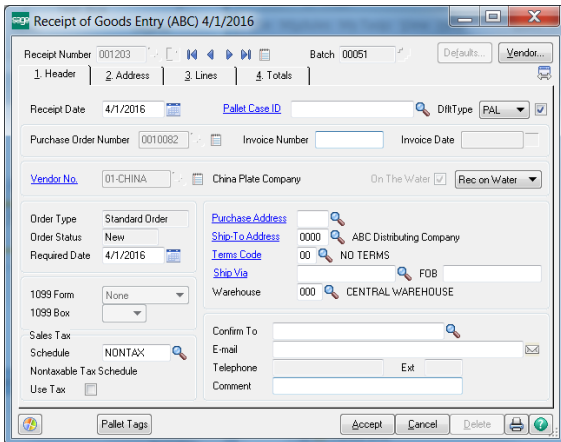
**InTransit—On The Water** if you desire to track actual dates inventory hits the water and received into the dock, click to open the dialog screen. The actual date received in the warehouse is set automatically when goods are received in the warehouse.

Date fields are shown along side with looking up inventory.

**RECEIVE ON THE WATER**

PURCHASE ORDER > MAIN MENU > RECEIPT OF GOODS ENTRY

P/O receipt of goods On The Water means the goods are in-transit to you and you have taken ownership of the goods. The On The Water option to Receipt of Goods will record inventory in your business. Cost of these goods are usually reasonably accurate except for the landed cost which usually can be estimated at this point. Later when you receive the goods in the warehouse the costs can be trued up and the net item cost can also be trued up.

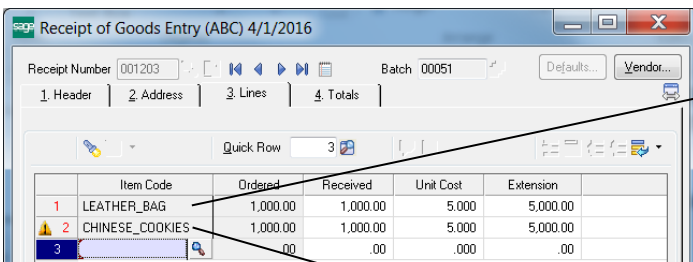


Receipt of goods for On The Water can be entered in the entry screen and can be imported with VI. Inventory received On The Water will be stored in the system with restrictions. Goods can be selected and allocated to orders. Inventory can be restricted from shipment but you can account for this inventory in look ups, stock status and valuation reports. With the License Plate (\*P), you can record inventory to Pallets, Containers, Cartons and Case Packs.

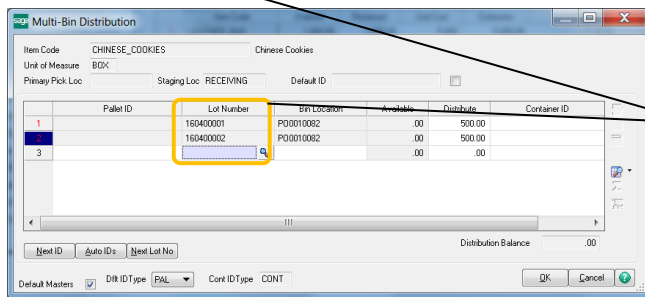
**On The Water** designates the receipt of goods as an On The Water type. P/O Entry defaults this option.

**Rec on Water (Receipt Option)** is defaulted to Rec On Water when no receipts have been do the purchase order. If this field is defaulted to Rec In Whse there was a previous receipt on this purchase order. You can change the option to Rec on Water when you are receiving more inventory on the water for the purchase order.

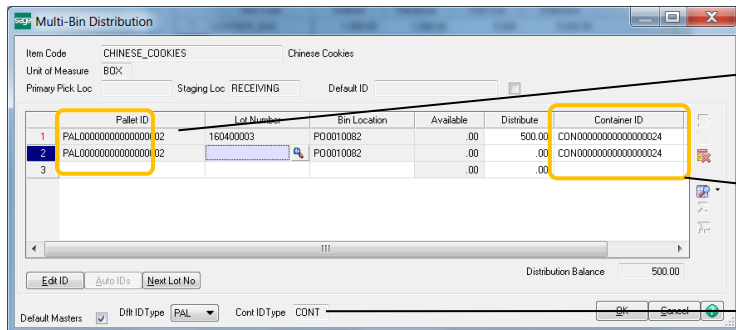
**DISTRIBUTIONS FOR ON THE WATER RECEIPTS**



**Non-Lot Serial Inventory no distribution changes.** The system auto assigns inventory to the right restricted location.



**Lot Serial Inventory distribution for Lot Serial No's** is required. The system exclamation mark indicates a distribution for the lot serial numbers. Lot Serial numbers are designated as usual in the distribution dialog and the restricted bin location is auto selected for you.



**Pallet IDs** can be entered for license plate (\*P) users.

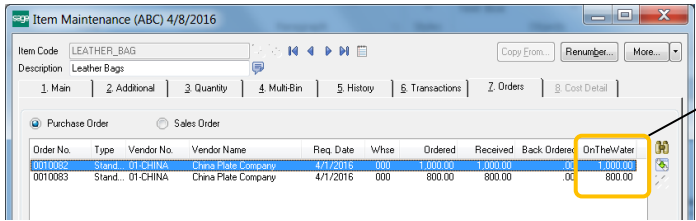
**Container IDs** can also be selected. Enter "N" for the next container ID or select an existing ID. The last Container ID is defaulted on each line.

**Cont ID Type** is designated in Company Options on the Addl Tab. The Cont ID Type field eases the Container ID type and saves time entering the distribution.

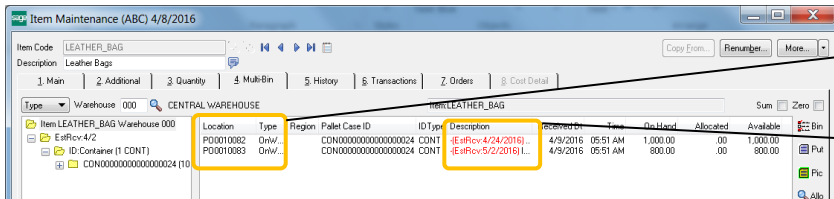
### VIEW INVENTORY ON THE WATER

INVENTORY MANAGEMENT > MAIN MENU > ITEM MAINTENANCE/INQUIRY

INVENTORY MANAGEMENT > MAIN & SETUP MENU > PALLET ID MAINTENANCE/INQUIRY

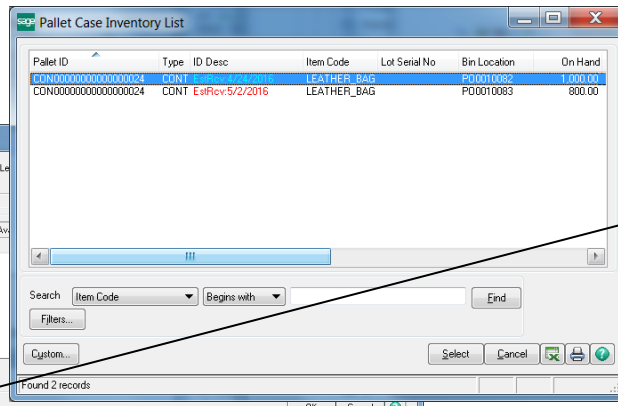


Open POs On The Water



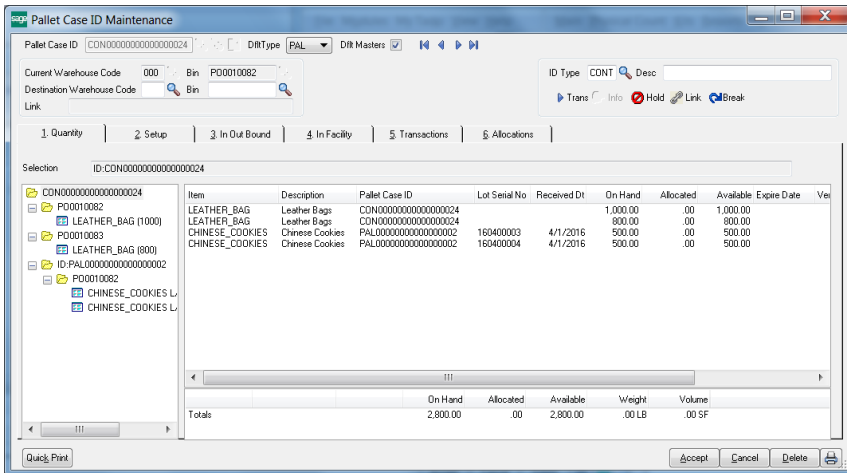
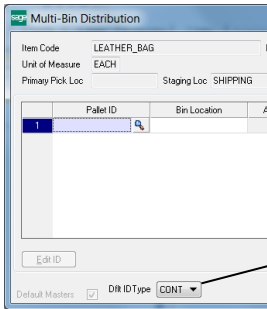
Inventory PO numbers On The Water

Inventory Estimated Receive date



Inventory Lookup in Transaction Screens. Click lookups from the Pallet ID column when looking up inventory that is in a container or pallet.

Dflt ID Type select the appropriate ID type for Containers and Pallets or select <All>

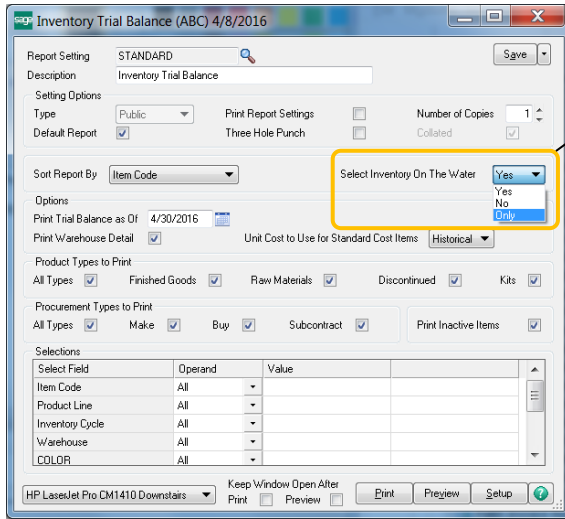


Container ID reflects the PO number and detail for all items On The Water.

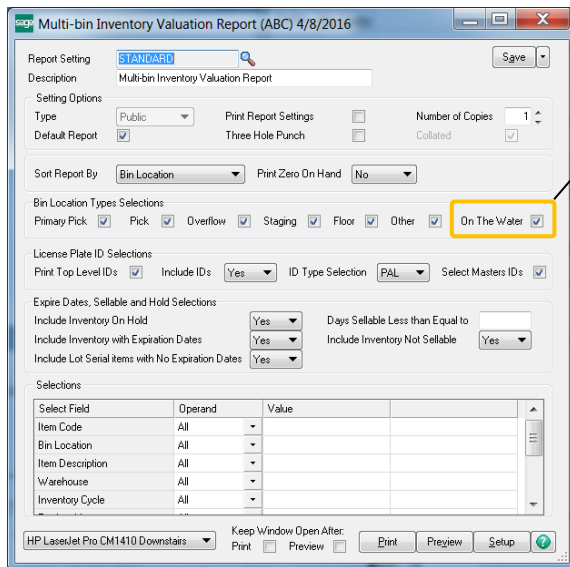


**REPORTS INVENTORY ON THE WATER**

INVENTORY MANAGEMENT > REPORTS



**Inventory Trial Balance Report** Select the inventory trial balance report to report on inventory On The Water and/or In The Warehouse that ties to the Balance Sheet As Of Date.



**Multi-bin Reports On The Water Selection** Select or unselect the On The Water option to report on inventory On The Water and not.

ABC Distribution and Service Corp. (ABC) Page: 1  
 Pallet Case List ID: CON00000000000000024

Desc:

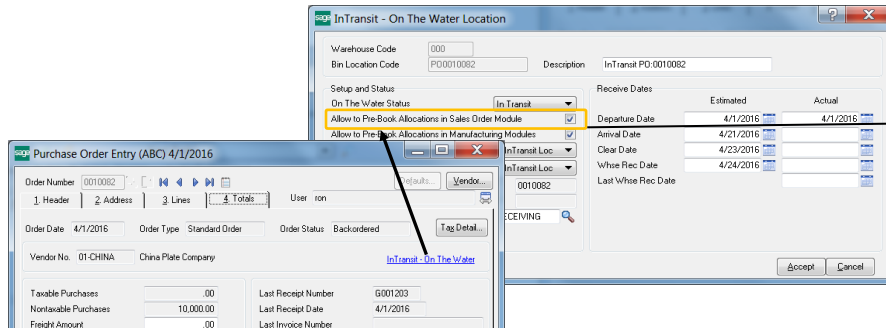
Total Weight: 0.00      No of Cartons: 1.00      Total Quantity: 2,200.00      Total Volume: 0.00

Inbound		Outbound			
PO No's:		PO No: Invoice No's: Cust No: -			
Current Warehouse and Bin Location		Destination Warehouse and Bin Location			
Warehouse Code: 000	Bin Location: PO0010082	Warehouse Code:	Bin Location:		
Item Number	Item Description	Lot Number	Production-Expire Date	Weight	Quantity
Pallet Case ID: CON00000000000000024 <span style="float: right;">map: -</span>					
LEATHER_BAG	Leather Bags			Level: 1	Type: CONT
				0.00	800.00
LEATHER_BAG	Leather Bags			0.00	400.00
Pallet Case ID: PAL00000000000000002 <span style="float: right;">map: *PAL00000000000000002</span>					
CHINESE_COOKIE	Chinese Cookies	160400003	4/1/2016	0.00	500.00
CHINESE_COOKIE	Chinese Cookies	160400004	4/1/2016	0.00	400.00
CHINESE_COOKIE	Chinese Cookies	160400004	4/1/2016	0.00	100.00

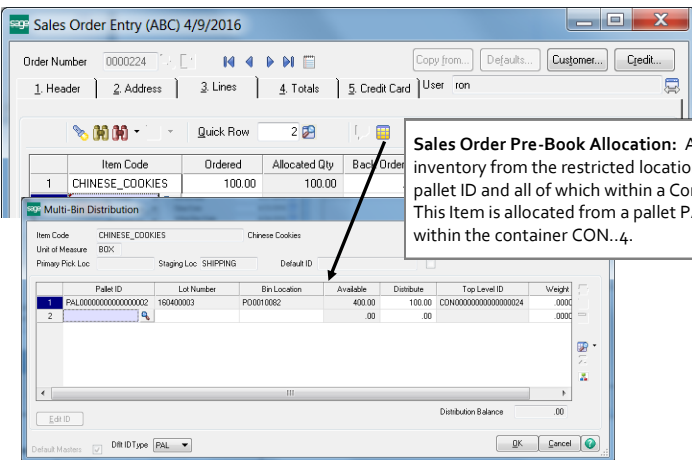
**Use Pallet Tag Reports for Container Reports** Pallet Tag reports can be printed by drilling down to the Pallet ID Maintenance or use the Pallet tag reporting under Inventory > Reports and in the tag reports provided in each Sage module.

### PRE-BOOK/PRE-ALLOCATE INVENTORY ON THE WATER

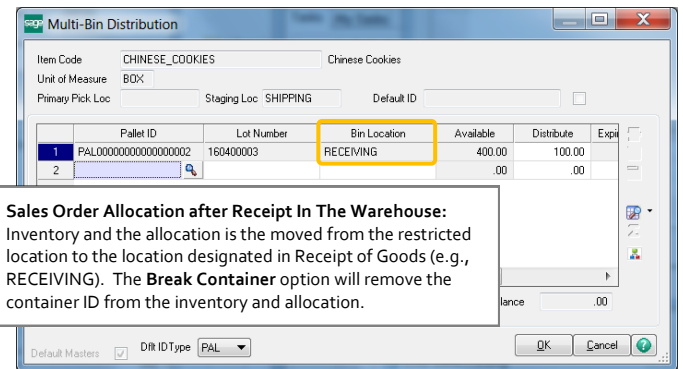
SALES ORDER > MAIN MENU > SALES ORDER ENTRY



**Allow to Pre-Book:** The Purchase Order OTW options are defaulted from Company options. The P/O option to pre-book option can be changed at any time.



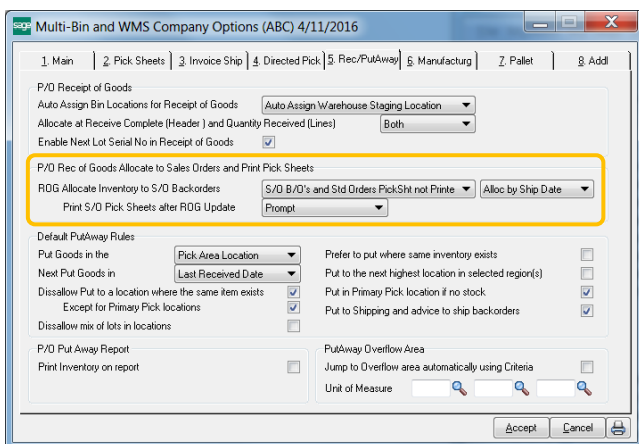
**Sales Order Pre-Book Allocation:** Allocate inventory from the restricted location, from a pallet ID and all of which within a Container ID. This item is allocated from a pallet PAL..2 within the container CON..4.



**Sales Order Allocation after Receipt In The Warehouse:** Inventory and the allocation is moved from the restricted location to the location designated in Receipt of Goods (e.g., RECEIVING). The **Break Container** option will remove the container ID from the inventory and allocation.

### RECEIPT OF GOODS AUTO ALLOCATE RECEIVED IN THE WAREHOUSE AND PRINT SALES ORDER PICK SHEETS

PURCHASE ORDER > MAIN MENU > RECEIPT OF GOODS ENTRY



**Receipt of Goods Allocate Inventory to S/O Backorders:** As goods are received in The Warehouse, this option will auto allocate inventory to orders not pre-allocated.

**RECEIPT OF GOODS IN THE WAREHOUSE**

PURCHASE ORDER > MAIN MENU > PURCHASE ORDER ENTRY

Receipt of Goods Entry (ABC) 4/11/2016

Receipt Number: 001207 | Batch: 00052

Receipt Date: 4/1/2016 | DIRT Type: <ALL>

Purchase Order Number: 0010082 | Invoice Number: | Invoice Date: |

Vendor No: 01-CHINA | China Plate Company

Order Type: Standard Order | Order Status: Back Order | Required Date: 4/1/2016

Warehouse: 000 | CENTRAL WAREHOUSE

1099 Form: None | 1099 Box: | Sales Tax: NONTAX | Schedule: NONTAX

Buttons: Pallet Tags, Accept, Cancel, Delete

**Rec in Whse:** Receive In the Warehouse is defaulted because of the initial receipt. You can change for another Receive on the Water if the order was partially shipped.

Receipt of Goods Entry (ABC) 4/11/2016

Item Code	Ordered	Received	Unit Cost	Extension
1 LEATHER_BAG	1,000.00	1,000.00	5,000	5,000.00
2 CHINESE_COOKIES	1,000.00	1,000.00	5,000	5,000.00
3				

Buttons: Pallet Tags

**Receipt of Goods Bin Location - Receive In The Warehouse:** The receipt will receive according to the regular receive options in the system. Those options were determined and tracked in the restricted bin location - On the Water Tab. That location can be overridden and the receipt will use that location.

Multi-Bin Distribution

Item Code: CHINESE\_COOKIES | Chinese Cookies

Unit of Measure: BOX

Primary Pick Loc: | Staging Loc: RECEIVING | Default ID: |

Pallet ID	Lot Number	Bin Location	Available	Distribute
1 PAL00000000000000000002	160400003	RECEIVING	400.00	500.00
2 PAL00000000000000000002	160400004	RECEIVING	500.00	500.00
3			.00	.00

Distribution Balance: .00

Buttons: Next ID, Auto IDs, Next Lot No, OK, Cancel

Landed Cost Entry

Cost Type	Description	Method	Amount
1 FRGHT	Freight	Cost	500.00
2			.00

Total Landed Cost: 500.00

Buttons: OK, Cancel

**Actual Landed Costs:** Enter all actual costs so the inventory values are re-costed to actual.

**Change the items Unit Cost:** Inventory will be re-costed for changes to the item's unit cost.

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**MULTI-BIN QOH AND VALUATION REPORT**

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Inventory Valuation Report provides Inventory Valuation Reporting and a Stock Status Report sorted by Bin Location, Item Code and Lot Expiration date. Choose to print locations with no quantity on hand. Expire date reporting provides the ability to select inventory based on when inventory expires.

Multi-bin Inventory Valuation Report (ABC) 4/11/2016

Report Setting: STANDARD

Description: Multi-bin Inventory Valuation Report

Setting Options:

- Type: Public
- Print Report Settings:
- Number of Copies: 1
- Default Report:
- Three Hole Punch:
- Collated:

Sort Report By: Bin Location

Print Zero On Hand: No

Bin Location Types Selections:

- Primary Pick:
- Pick:
- Overflow:
- Staging:
- Floor:
- Other:
- On The Water:

License Plate ID Selections:

- Print Top Level IDs:
- Include IDs: Yes
- ID Type Selection: PAL
- Select Masters IDs:

Expire Dates, Sellable and Hold Selections:

- Include Inventory On Hold: Yes
- Days Sellable Less than Equal to: [ ]
- Include Inventory with Expiration Dates: Yes
- Include Inventory Not Sellable: Yes
- Include Lot Serial Items with No Expiration Dates: Yes

Selections:

Select Field	Operand	Value
Item Code	All	
Bin Location	All	
Item Description	All	
Warehouse	All	
Inventory Cycle	All	
Product Line	All	
Warehouse Region	All	
Aisle	All	
Bay Level	All	
Pallet Case ID	All	

HP LaserJet Pro CM1410 Downstairs

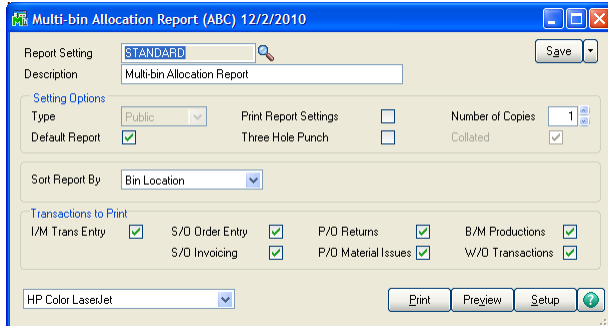
Keep Window Open After: Print  Preview

Print Preview Setup

**MULTI-BIN ALLOCATION REPORT**

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Inventory Allocation Report details multi-bin allocated inventory by the Transaction type (source), Location and Item Code. Great to evaluate pending transactions and preallocations in sales order and work order.



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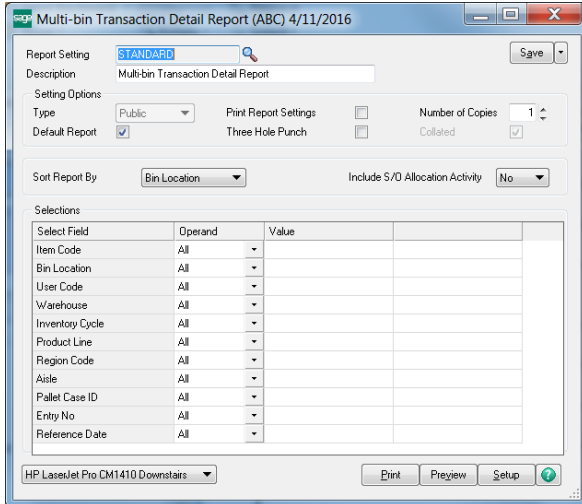
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# Multi-Bin Reports

## MULTI-BIN DETAIL REPORT

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Detail Report provides a detailed listing of transactions by bin location for a given time period. Sort by Item Code and Bin Location.



Multi-Bin Test Data (ABC)								
Reference Date	Lot Number	User Code	Entry No	Cust/Vend No	Transaction Quantity	Unit Cost	Extended Cost	
<b>GENERAL WAREHOUSE</b>								
1/5/2010		JIM	PHYS COU#		400.00	31.11	12,445.20	
							12,445.20	
1/5/2010		JIM	PHYS COU#		1,000.00	31.11	31,113.00	
							31,113.00	
1/5/2010		JIM	PHYS COU#		350.00	31.11	10,889.55	
							10,889.55	
1/1/2010		JIM	Init		1,203.00	0.00	0.00	
1/5/2010		JIM	PHYS COU#		-1,203.00	31.11	-37,428.94	
							-37,428.94	
1/5/2010	101	JIM	PHYS COU#		6,000.00	15.45	92,718.00	
							92,718.00	
A20M	2480-8-50	1/5/2010	10210	JIM	PHYS COU#	75.00	15.45	1,158.98
							1,158.98	
A30L	2480-8-50	1/5/2010	10210	JIM	PHYS COU#	500.00	15.45	7,726.50
							7,726.50	
A50M	2480-8-50	1/5/2010	101	JIM	PHYS COU#	2,000.00	15.45	30,906.00
							30,906.00	
DEFAULT	2480-8-50	1/1/2010	PLUS+	JIM	Init	500.00	0.00	0.00
DEFAULT	2480-8-50	1/5/2010	101	JIM	PHYS COU#	-9,898.00	15.45	-149,863.19
							-149,863.19	

## MULTI-BIN REPLENISHMENT REPORT

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Replenishment Report provides suggestions to stock primary bin locations. Capacity information must be setup in Bin Location Maintenance. Report evaluates demand based on Maximum Capacity setting and Quantities on Sales Order. Suggested transfers are provided in the order of primary locations setup in Item Primary Location Maintenance.

Multi-Bin Replenishment Report		ABC Distribution and Service Corp. (ABC)					
Sorted by Item Code		Qty on Sales Orders	Allocated to Sales Orders	Primary Pick Locations	Qty in Primary Area	Qty Elsewhere	Qty to Transfer
<b>Warehouse: 000 CENTRAL WAREHOUSE</b>							
1001-HON-H252	HON 2 DRAWER LETTER FLI	2,066.00	15.00	430.00	2,302.00	1,748.00	2,051.00
<b>Primary Location</b>		<b>QOH</b>	<b>Allocated</b>	<b>Available</b>	<b>Capacity</b>		
A10L		430.00	5.00	425.00	1,910.00	Capable	
	<b>From Bin Location</b>			<b>To Bin Location</b>	<b>Transfer Quantity</b>		
	A30L			A10L	225.00		
	A20M			A10L	5.00		
	A10M			A10L	95.00		
	A10U			A10L	1,585.00		
<b>Primary Location</b>		<b>QOH</b>	<b>Allocated</b>	<b>Available</b>	<b>Capacity</b>		
A20L		5.00	0.00	5.00	340.00	Capable	
	<b>From Bin Location</b>			<b>To Bin Location</b>	<b>Transfer Quantity</b>		
	A50L			A20L	16.00		
	A30L			A20L	125.00		



**MULTI-BIN LOCATION CAPACITY REPORT**

INVENTORY MANAGEMENT > REPORTS MENU

The Multi-Bin Location Capacity Report provides a detailed listing of each bin and its capacity. Report provides maximum quantity to fill the location for items designated as primary for the location. Select range of locations to report based on the percentage full. No capacity information is reported if not setup in bin location maintenance.

**Multi-Bin Location Capacity Report (ABC) 12/7/2010**

Report Setting: STANDARD  
 Description: MultiBin Location Capacity Report

Setting Options:  
 Type: Public  
 Default Report:   
 Sort Report By: Bin Location  
 Capacity Range: % To 9999%

Location Type to Print:  
 Primary Pick:  Overflow:  Staging:  Floor:  Other:

Selections:  
 Bin Location: All  
 Warehouse: All

HP Color LaserJet [Print] [Preview] [Setup]

Multi-Bin Location Analysis Report									
Sorted by Bin Location									
ABC Distribution and Service Corp. (ABC)									
Bin Location	Location Description	Location Type	Sort Code	Last Date Received	Last Date Issued	Capacity Setup	Quantity in Location	% Capacity	
<b>Warehouse: 000 CENTRAL WAREHOUSE</b>									
A10M	A-10 Mid Primary	Primary	A10	5/26/2010	6/9/2010	Vol: 550,000.00	176.00	3.20%	
Primary Items and Quantity: 2480-8-50 Qty: 5,324.00									
A-200-20	IMPORT TEST	Primary		6/11/2010	7/2/2010	No setup	55.00	0.00%	
Primary Items and Quantity: No Primary Items Selected									
A30M	A-30 Mid Primary	Primary	A30	3/31/2010		Vol: 50,000.00	10.00	2.00%	
Primary Items and Quantity: ALOT Qty: 0.00; ALOT Qty: 0.00									

**MULTI-BIN PUT-AWAY FROM STAGING REPORT**

**Put Away Report from Staging (XYZ) 7/30/2012**

Report Setting: STANDARD  
 Description: Put Away Report from Receiving and QC

Setting Options:  
 Type: Public  
 Default Report:   
 Sort Report By: Bin Location  
 Report from Stage Area: Receiving

From Warehouse: 000 MAIN WAREHOUSE  
 Stage Bin Location: RECEIVING  
 Stage Region: REC

To Warehouse: 000 MAIN WAREHOUSE

HP LaserJet Professional CM1410 Serie [Print] [Preview] [Setup]

PutAway Report					
XYZ Manufacturing Company (XYZ)					
Item Code and Description	Unit of Measure	From Bin Location	Lot Number	To Bin Location	Transfer Quantity
<b>Warehouse: 000 MAIN WAREHOUSE</b>					
ALOT	A lot Work Order FG	EACH	RECEIVING 1001A1	1000BIN	1.00
DOUGH	Dough	EACH	RECEIVING DGH1211	100A	99.00
DSKTP-00200	TURBO DESKTOP COMPUTER S	EACH	RECEIVING	100A	5.00
FLOUR	Flour	POUN	QUALITY RON1234	LAB	805.00
FLOUR	Flour	POUN	RECEIVING MYLOTNO	480C	1,000.00
SAUCE	Sauce	EACH	QUALITY VL-1234	WIP_RAW	7,397.00
<b>Pallet ID: PAL 1</b>					
BTTRY-98422	CLOCK BATTERY	EACH		200NEW	Entire Pallet 457.00
FLOUR	Flour	POUN	0KZ00002		994.00
FLOUR	Flour	POUN	123111		125.00

**COMMON VISUAL INTEGRATOR AND REPORTING FILES**

Multi-Bin and WMS uses the same ODBC and other connectivity as standard MAS files. This makes it easy for you and your reseller to import information, create custom reports using crystal reports and connect with the data and objects the standard Sage 100 ERP tools and BOI. Below, you will find a listing of the most common files and functions to work with. Also review the appendix for BOI and custom office files and fields.

**VISUAL INTEGRATOR IMPORTS**

**Bin Locations**

Select Table: IM404\_BinLocation  
 Required fields are: Warehouse Code and Bin Location

Note: Bin location type is defaulted to P for Pick.  
 Other bin location types are V=Overflow, S=Staging, F=Floor, O=Other  
 PrimaryBinLocation is Y/N. Select primary bin locations if the location is in a primary location area and the Auto Assign Primary bin location is ON. This field does not need to be set if only the items selected as primary will make the location primary.

**Physical Counts**

Select Table: IM404\_Physical  
 Required fields are: Item Code, Warehouse Code and Quantity Counted.  
 LotSerialNo is required if the item is Lot Serial valuation.  
 Bin Location is required if enabled for Multi-bin and WMS.  
 Bin Location should be blank (null) if disabled from Multi-Bin and WMS.  
 PalletID field is required to assign to License Plate ID's>(\*P)  
 - PalletType field is required when creating new Pallet ID's during import. Also turn ON Multi-bin and WMS Option Create Pallet ID Not On File Import Physical Counts.

**Primary Pick Locations for Items**

Select Table: IM404\_ItemLocation  
 Required fields are: Item Code and Warehouse Code.

Note: Selected bin locations will validate the location types. Import Primary pick locations and Primary Overflow bin locations.

**Quantity On Hand**

Select Table: IM404\_ItemLocationQuantity  
 Note: It is preferred to import to the physical count file (IM404\_Physical) or inventory transfers rather than this file.

**Inventory Transfers**

Select Table: IM\_TransactionHeader

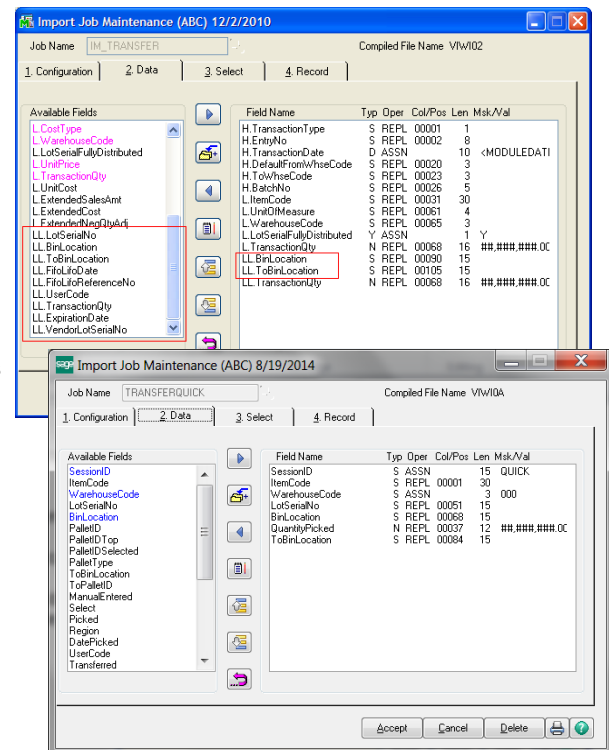
V/I to the IM\_TransactionHeader will do transfers between different warehouses and the same warehouses and to move inventory between locations.

Notes: Multi-Bin and WMS fields are the LL fields. Select bin locations from and to locations as they are validated.

**Inventory Transfers**

Select Table: IM404\_TransferItemDetail

V/I to the IM404\_TransferItemDetail will transfer inventory between locations in the same warehouse.  
 Select any value for SessionID. Required fields are ItemCode, WarehouseCode, LotSerialNo for those valuations, BinLocation, QuantityPicked is the quantity to transfer and the ToBinLocation.  
 For License Plate transfers Pallet ID(\*P) select the PalletID and the ToBinLocation fields. Leave ToPalletID, ItemCode, BinLocation and LotSerialNo null.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

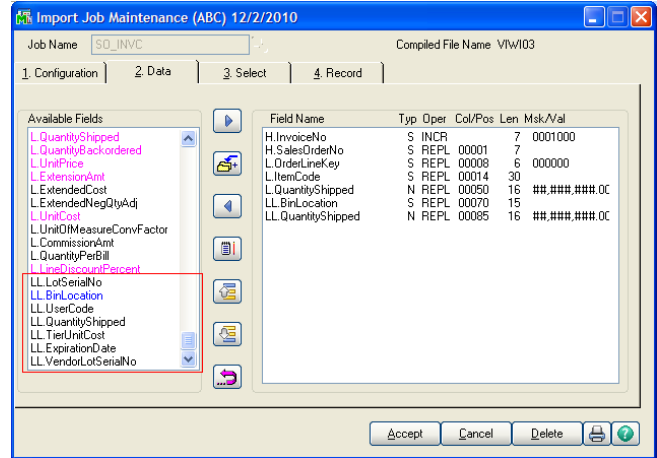
COMMON VISUAL INTEGRATOR AND REPORTING FILES

**VISUAL INTEGRATOR IMPORTS CONTINUED**

**S/O Invoices**

Select Table: SO\_InvoiceHeader

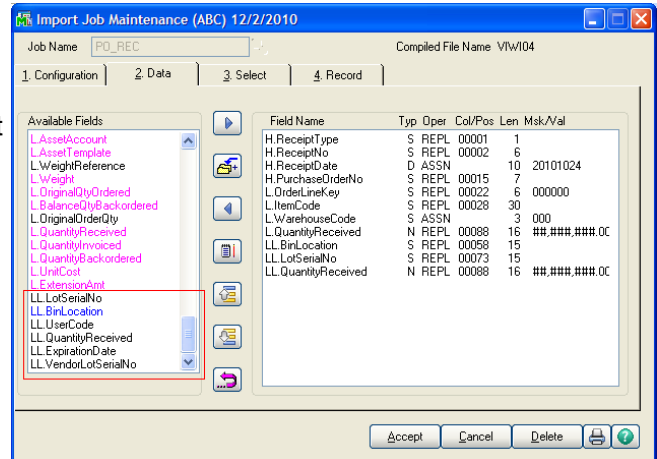
Notes: Multi-Bin and WMS fields are the LL fields. Select multi-bin location field which is validated.



**P/O Receipts**

Select Table: PO\_ReceiptHeader

Notes: Multi-Bin and WMS are the LL fields. Select multi-bin location field which is validated.



**Vendor Lot Serial Numbers and Lot Expiration Dates**

Select Table: IM404\_VendorLotSerial  
Required fields are: Item Code and Lot Serial Number

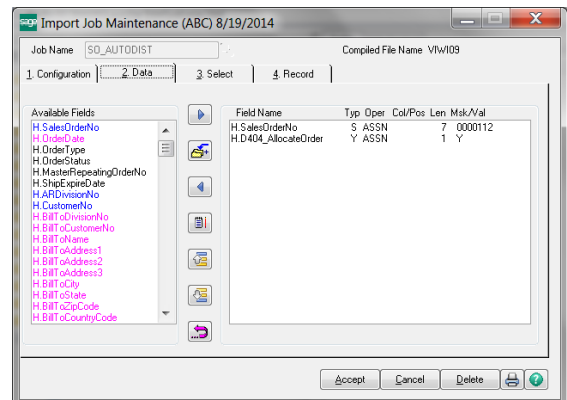
Note: Import Vendor Lot Numbers and Expiration Dates. No warehouse code is required.

**Auto Allocate Inventory to Sales Orders**

Select Table: SO\_SalesOrderHeader  
Required fields are: SalesOrderNo and D404\_AllocateOrder = "Y"

Note: V/I will auto allocate inventory according to the full directed picking options designated in Inventory - setup - Multi-bin Options - Directed Picking and any overrides designated in product line and item code maintenances.

The system will never actually save the D404\_AllocateOrder value of "Y". It will always remain "N" or null.



(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

**COMMON VISUAL INTEGRATOR AND REPORTING FILES**

**VISUAL INTEGRATOR IMPORTS CONTINUED**

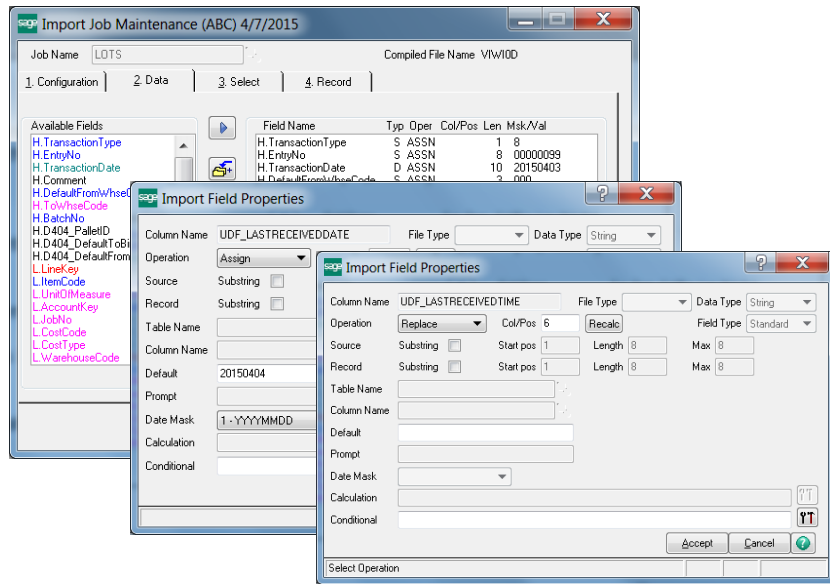
**Designate Last Received Date and Time**

To override the last received date and time add UDF fields LastReceivedDate and LastReceivedTime to the Multi-bin Tier files.

Tables:

- P/O: PO404\_ReceiptTierDistribution,
- PO404\_MaterialReqTierDist
- S/O: SO404\_OrderTierDist,
- SO404\_InvoiceTierDist
- I/M: IM404\_TransactionTierDist
- B/M: BM404\_ProductionTierDist,
- BM404\_DisassemblyTierDist
- R/A: RA404\_ReceiptsTierDist

Time Rec'd
15.0001
15.0002
15.0003
15.0004
15.0005
15.0006
15.0007
15.0008
15.0009
15.0010
15.0011
15.0012
15.0013
15.0014
15.0015
15.0016
15.0017



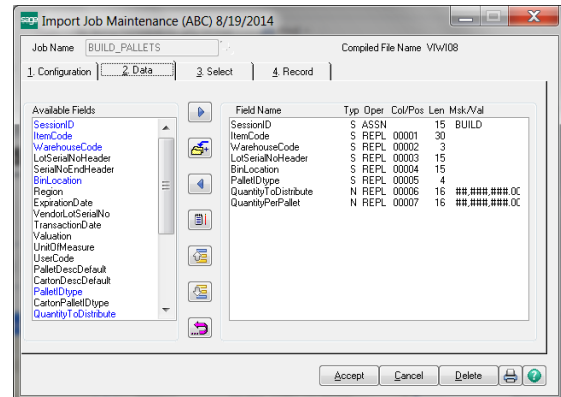
**Build License Plate Pallet ID's from Inventory**

Select Table: IM404\_PalBld

This utility builds license plate inventory from multi-bin inventory.

Required fields are ItemCode, WarehouseCode, LotSerialNoHeader for those valuations, BinLocation, PalletIDtype, QuantityToDistribute and QuantityPerPallet

Note: Quantity available is validated.



**Item Overrides for Picking and Putaway**

Select Table: IM404\_ItemPickPut  
Required field is: Item Code.

Note: Item settings for directed picking and directed putaway supersede multi-bin options and product line maintenance overrides.

**CRYSTAL CUSTOM REPORTS**

**To Report Multi-Bin Quantity On Hand Information**

Select Table: IM404\_ItemLocationQuantity  
Notes: Use the Multi-bin QOH and Valuation Report where possible.

**To Report Multi-Bin Detailed History**

Select Table: IM404\_BinLocationHistory  
Notes: Use the Multi-bin Detail Report where possible.

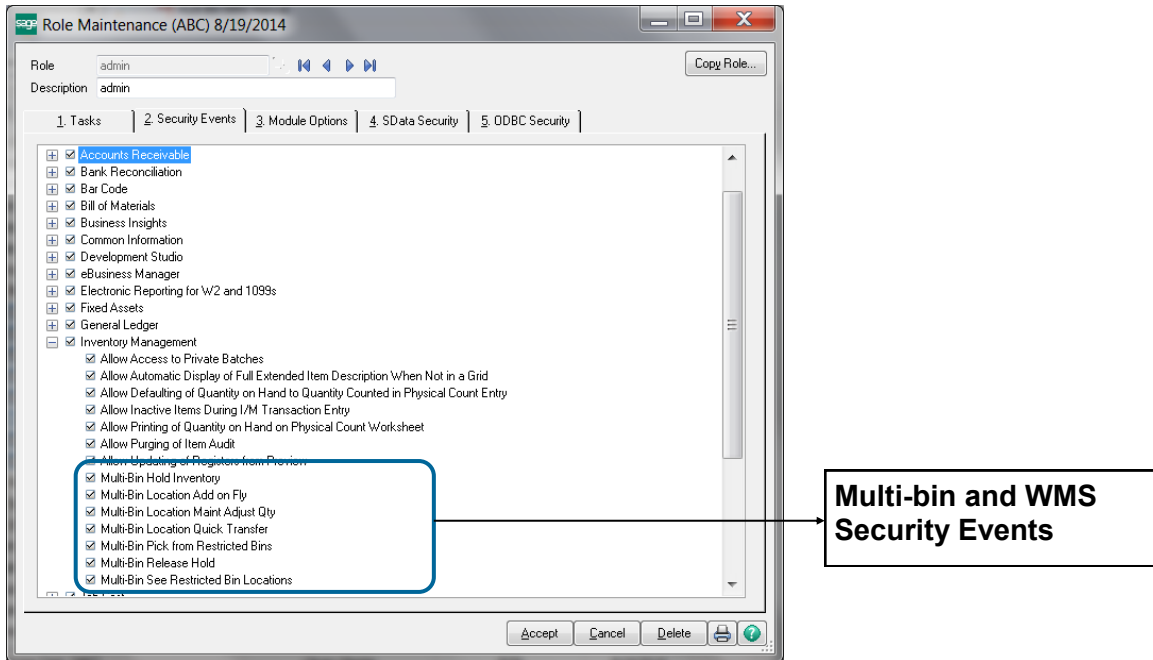
**To Report Multi-Bin from Distribution Files**

Purchase Order: Receipts PO404\_ReceiptTierDistribution, PO404\_MaterialReqTierDist  
Sales Order: SO404\_OrderTierDist, SO404\_InvoiceTierDist  
Inventory: IM404\_TransactionTierDist  
Bill of Materials: BM404\_ProductionTierDist, BM404\_DisassemblyTierDist  
Work Order: WOU and WO\_AU

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

**MULTI-BIN AND WMS SECURITY OPTIONS**

LIBRARY MASTER > ROLE MAINTENANCE > SECURITY EVENTS > INVENTORY MANAGEMENT



**Security Events**

**Multi-Bin Hold Inventory** - Allows users to put multi-bin inventory on Hold. Hold buttons are provided in Inventory maintenance, Bin Location maintenance, Lot Serial UDF and Multi-bin Inventory UDF. This security event does not apply to the bin location maintenance option to Auto Put Hold Goods Received. With this option ON, goods are placed on Hold automatically when goods are received into the location.

**Multi-Bin Location Add on Fly** - Allows users to create locations on the fly for transactions that do not commit inventory.

**Multi-Bin Location Maint Adjust Quantity** - Gives supervisor control to the Adjust button in Bin Location maintenance to change QOH and Quantity Allocated in a location. Other Supervisor Rights is given to allow change to the Disable Multi-bin option for warehouses and product lines.

**Multi-Bin Location Quick Transfer** - Allows users in this role access to the Quick Transfer Button in Item Maintenance, Item Inquiry and Bin Location Maintenance, allowing intra-warehouse transfers of goods between bins and the reallocation of Sales Orders.

**Multi-Bin Release Hold** - Allows users to Release Hold of inventory. Release buttons are provided in Inventory maintenance, Bin Location maintenance, Lot Serial UDF and Multi-bin Inventory UDF.

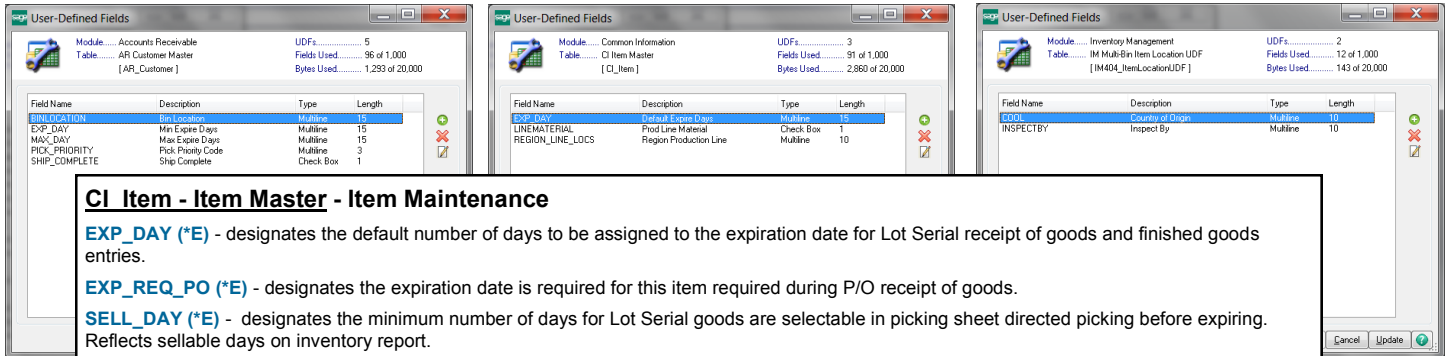
**Multi-Bin Pick from Restricted Locations** - Allows users to select inventory in transactions when the location or the inventory is subject to a pick restriction. Pick restrictions are designated in bin location maintenance to restrict access to inventory based on date available, customer number and from sales and manufacturing. Pick restrictions used here are also inventory that is on HOLD and that is expired or about to be expired because shelf life designations.

**Multi-Bin See Restricted Bin Locations** - Allows users to see restricted inventory in transactions and inventory list modes. This does not mean the user can select. The **Multi-Bin Pick from Restricted Locations** security event is required to select this restricted inventory.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PRE-SETUP CUSTOM OFFICE UDFs**

UDF fields can be added to designate alternate primary locations, allocation refinements, set shelf life days (\*E) and other options. Following describes each field. Expiration Date fields are included below. UDF fields for Order Fill Wave Batch is discussed in the Order Fill Wave Batch chapter in this manual. See the manual for UDF fields for QOH inventory is discussed [page 31](#) and UDF fields for lot serial goods and Vendor Lot Numbers (\*E) is discussed [page 74](#).



**CI Item - Item Master - Item Maintenance**

**EXP\_DAY (\*E)** - designates the default number of days to be assigned to the expiration date for Lot Serial receipt of goods and finished goods entries.

**EXP\_REQ\_PO (\*E)** - designates the expiration date is required for this item required during P/O receipt of goods.

**SELL\_DAY (\*E)** - designates the minimum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring. Reflects sellable days on inventory report.

**LINEMATERIAL** - check box, "Y" designates the item as a component and will auto allocate from the locations in the Region Code **REGION\_LINE\_LOCS** that is set to the finished good in CI\_Item. See Example next page.

**REGION\_LINE\_LOCS** - create 10 character, upper case field. This Region Code in the Finished goods, you create in B/M Production Entry and Work Order, will dictate the locations raw materials will allocate from. Great use is which production line of Raw Materials will be relieved for the finished good. See Example next page.

**IM PriceCode - Price Code**

**EXP\_DAY (\*E)** - designates the minimum number of days for check the Customer Number + the Item Code for Lot Serial goods to be selectable in directed picking and everywhere else.

**IM ProductLine - Product Line Maintenance**

**EXP\_DAY (\*E)** - designates the default number of days to be assigned to the expiration date for Lot Serial receipt of goods and finished goods entries.

**EXP\_REQ\_PO (\*E)** - designates the expiration date is required for all lot serial items in this product line is required during P/O receipt of goods.

**SELL\_DAY (\*E)** - designates the minimum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring. Reflects sellable days on inventory report.

**AR Customer Customer Master - Customer Maintenance**

**BINLOCATION** - designates the Customer Priority Bin location to allocate first in directed picking. Direct putaway will advice if a sales order is selected in a purchase order receipt of goods and work order completion.

**REGION** - designates Customer Priority Bin locations with the locations with the Region to allocate first in directed picking.

**EXP\_DAY (\*E)** - designates the minimum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring.

**MAX\_DAY (\*E)** - designates the maximum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring.

**SO SalesOrderHeader - Sales Order Header**

**BINLOCATION** - designates the Sales Order Priority Bin location to allocate first in directed picking. Direct putaway will advice if a sales order is selected in a purchase order receipt of goods and work order completion.

**REGION** - designates Sales Order Priority Bin locations with the locations with the Region to allocate first in directed picking.

**EXP\_DAY (\*E)** - designates the minimum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring.

**MAX\_DAY (\*E)** - designates the maximum number of days for Lot Serial goods are selectable in picking sheet directed picking before expiring.

**Sales Order Detail - Sales Order Detail**

**MultiBinEnabled** - Used for BOI link to StarShip Shipping software. Create check box field (Yes/No) and the system will auto complete the field so StarShip will recognize sales order entry pre-allocations and auto ship those lines and auto fill Lot Serial Numbers.

**NoAllocateLine** - "Y" designates the Sales Order to skip automatic directed picking allocations.

**Inventory, Sales Order, Purchase Order, RMA and Bill of Materials**

**LastReceivedDate and LastReceivedTime** - - Supersedes the internal calculation for the Last Received Date and Time recorded to the Quantity On Hand file and History file.

P/O: PO404\_ReceiptTierDistribution, PO404\_MaterialReqTierDist

S/O: SO404\_OrderTierDist, SO404\_InvoiceTierDist

I/M: IM404\_TransactionTierDist

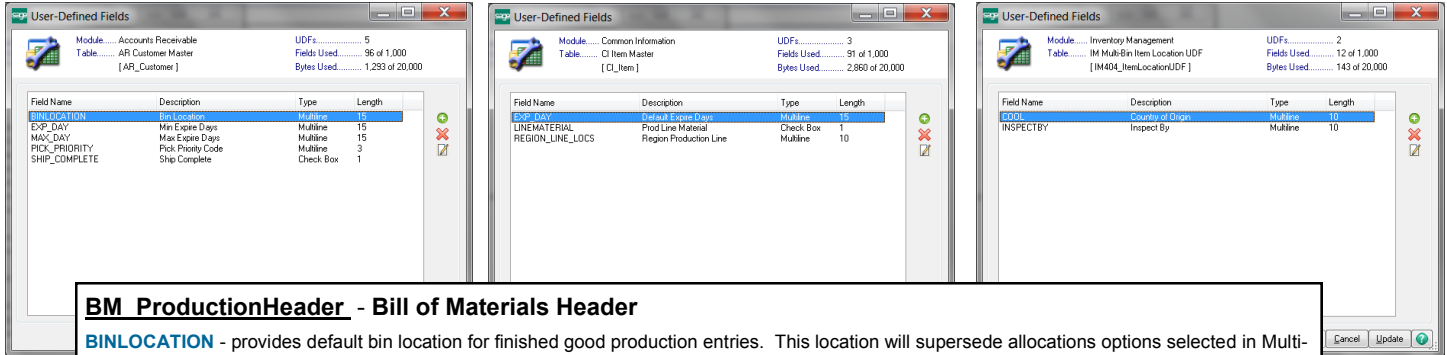
B/M: BM404\_ProductionTierDist, BM404\_DisassemblyTierDist

R/A: RA404\_ReceiptsTierDist

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**PRE-SETUP CUSTOM OFFICE UDFs**

continued



**BM ProductionHeader - Bill of Materials Header**

**BINLOCATION** - provides default bin location for finished good production entries. This location will supersede allocations options selected in Multi-bin options - manufacturing finish goods allocation settings.

**RAWBINLOCATION** - provides default bin location to allocate raw materials for the bill in production entry. This location will supersede allocations options selected in Multi-bin options. The location is defaulted in production entry and can be changed.

**EXP\_DAY (\*E)** - designates the default number of days to be assigned to the expiration date for Lot Serial good production entries.

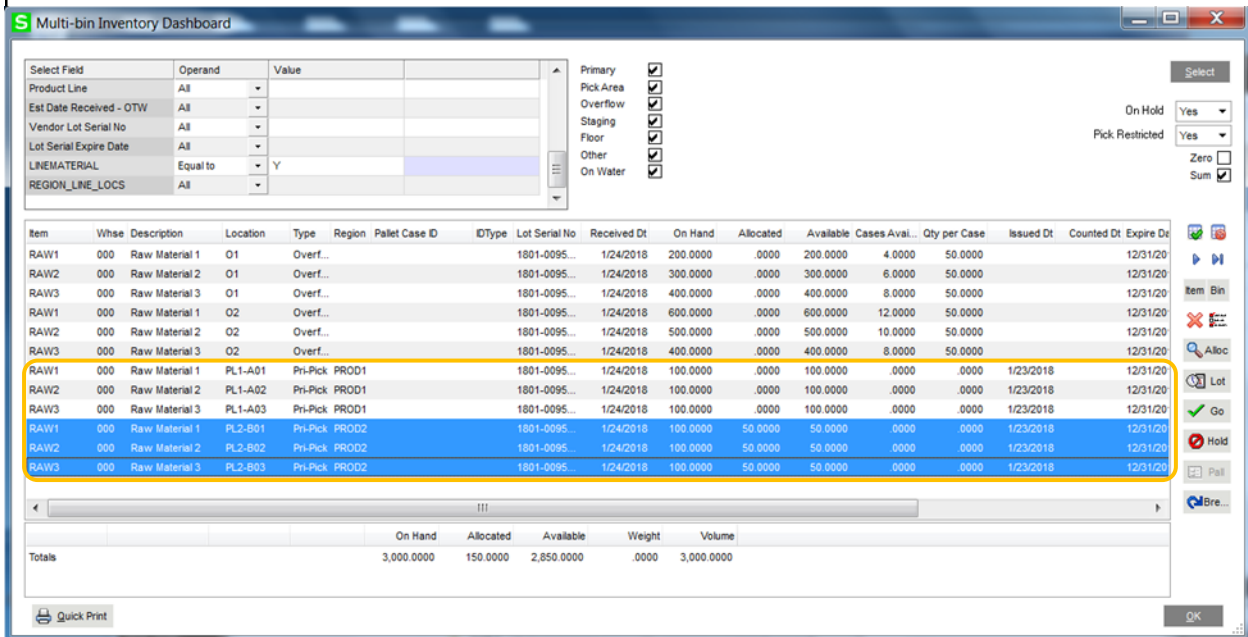
**WO WorkOrder - Work Order Header**

**BINLOCATION** - provides default bin location for finished good completions. This location will supersede allocations options selected in Multi-bin options - manufacturing finish goods allocation settings.

**RAWBINLOCATION** - provides default bin location to automatically allocate raw materials in the Work Order back flush and auto issue. This location will supersede allocations options selected in Multi-bin options.

**EXP\_DAY (\*E)** - designates the default number of days to be assigned to the expiration date for Lot Serial good completions.

**Example how to allocate a Region Code of Locations based on the finished good selected in Work Order.**



**Allocate Region of Locations based on the finished good.** In this example, the UDF **LINEMATERIAL** check box ("Y") is added to **CI\_Item** to flag those raw materials (example: RAW1,RAW2, RAW3) to translate the allocation based on the finished good selected. In this example Region Code **PROD2** was designated in the UDF **REGION\_LINE\_LOCS** in **CI\_Item** for the finished good and those locations in **PROD2** were allocated to the raw materials.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

**BUSINESS OBJECT INTERFACE**

**The Multi-bin and WMS Distribution Object**

The Multi-Bin Object name from the transaction line objects is **ACS\_Multibin\_OBJ**. This includes when instantiating IM\_Transaction\_bus, SO\_invoice\_bus, PO\_receipt\_bus and RA\_Receipts\_bus, BM\_Production\_bus. In providex use **coHeader.Lines.ACS\_Multibin\_OBJ**. In VBscripts use **oHeader.oLines.oACS\_MultiBin\_OBJ**.

The object is in Sage 100 ERP like the Sage 100 Distribution object for Lot Serial distributions for transactions. The difference is that it knows when a bin location is required in the transaction and will check for proper distribution of the bin location. It also carries license plate data for license plate pallets and case pack ID's. UDF's associated to Multi-bin distributions are also passed thru the object. Disabling multi-bin validation for a bin location is possible by Company, Warehouse and by Product Line. The multi-bin object also utilizes the rules in the system setup to do automatic distribution of bin locations and next numbering of license plate ID's.

**Automatic Assignment of a Bin Location in the Multi-bin Distribution Object**

The Multi-Bin Options for automatic distributions of bin locations in transactions apply to the user while in the screen and to BOI usage in the transactions. Following are helpful hints to setup to automatically assign staging and primary bin locations with BOI in the transactions.



If there is inventory is pre-allocated to a Sales Order that will take supersede automatic bin location assignment/allocation and the pre-allocations always assign the Invoice/Shipment and supersede the quantity shipped.

**Multi-bin Options for P/O, S/O and B/M:**

- **P/O Receipt of Goods Quantity Received Option - Select Lines or Both Option**  
**Header** Provides automatic allocation to bin locations during the receive complete option. When switching to the Lines panel from the Header.  
**Lines** Provides automatic allocation to bin location during when the Quantity Received is entered.  
**Both** will do both
  
- **S/O Invoice Data Entry Quantity Shipped Option - Select Lines or Both Option**  
**Header** Provides automatic allocation to bin locations during the shipping complete option. When switching to the Lines panel from the Header.  
**Lines** Provides automatic allocation to bin location during when the Quantity Shipped is entered.  
**Both** will do both



To do automatic bin location assignment/allocation, select the **Lines or Both** option for P/O Receipts and S/O Invoice. This will auto-allocate based on the Quantity Received and Quantity Shipped values.

- **B/M Production and Disassembly Entry Auto Assigned Bins Option - Select Auto Assigned Primary or Staged Option.** Provides automatic allocation of raw materials lines.

**BOI Allocate Sales Order Lines Automatically according to directed picking algorithms**

Example to automatically allocate inventory in a sales order. Sales order detail lines with UDF\_NoAllocateLine\$="Y" will be skipped from automatic allocations. Inventory will auto allocate inventory according to all of the Directed Picking rules in the system. You can use V/I, Providex and VB scripts.

```
soHeadObj=new("so_SalesOrder_bus",cosession)
setKeyVal=soHeadObj.setKey("0000175")
soHeadObj.setValue("D404_AllocateOrder$", "Y")
soHeadObj.write()
```

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
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BUSINESS OBJECT INTERFACE—PAGE 2

**Sample BOI Allocate Sales Order Lines Individually**

Example to manually allocate inventory to a sales order using business object interface commands. The following commands are in providex. Distributes inventory from two bin locations in the first sales order line with a non lot serial valuation and distributes one lot number from a location to the second line.

```
soHeadObj=new("so_SalesOrder_bus",cosection)
setKeyVal=soHeadObj.setKey("0000175")
LET fullKey$=soHeadObj.Lines.GetEditKey$("000001")
LET lineRetVal=soHeadObj.Lines.setkey(fullKey$)
soHeadObj.Lines.SetMultiBinObject()

DistObj=soHeadObj.lines.ACS_MultiBin_Obj
adVal=DistObj.AddDistributionLine(LotSerialNo$,"E-300-40",ToBinLoc$,"",PalID$)
DistObj.setValue("QuantityOrdered",6)
DistObj.write()

adVal=DistObj.AddDistributionLine(LotSerialNo$,"C-200-40",ToBinLoc$,"",PalID$)
DistObj.setValue("QuantityOrdered",4)
DistObj.write()
DistObj.CommitDistributionRows()
soHeadObj.lines.write()

LET fullKey$=soHeadObj.Lines.GetEditKey$("000002")
LET lineRetVal=soHeadObj.Lines.setkey(fullKey$)
soHeadObj.Lines.SetMultiBinObject()
adVal=DistObj.AddDistributionLine("MAR10","C-100-10",ToBinLoc$,"",PalID$)
DistObj.setValue("QuantityOrdered",10)
DistObj.write()
DistObj.CommitDistributionRows()
soHeadObj.lines.write()
soHeadObj.write()
```

**Sample VB script for I/M Transaction Entry—Receipts Transaction**

```
I/M Transaction Receipt VB script:
Dim o, oOrder, PathHome, oScript, oSS, oZip, retval, nACS_MultiBin_OBJ
Dim zip, city, state, country
Set oScript = CreateObject("ProvideX.Script")
'Get the ODBC path for the last accessed installation of MAS 90/200
'PathHome = PathRoot & "\Home"
PathHome = "F:\TEST\Bin515\MAS90\Home"
'Set oReg = Nothing
oScript.Init(PathHome)
Set oSS = oScript.NewObject("SY_Session")

'r = oSS.nLogon()
r = oSS.nsetuser("RON","")
r = oSS.nsetcompany("ABC")
r = oSS.nSetDate("I/M", "20141203")
r = oSS.nSetModule("I/M")
oSEC = oSS.nSetProgram(oSS.nLookupTask("IM_Transaction_ui"))
Set o = oScript.NewObject("IM_Transaction_bus", oSS)
r = o.nSetKeyValue("TransactionType$", "8")
'r = o.nGetNextEntryNo(EntryNo$)
r = o.nSetKeyValue("EntryNo$", "00000020")
r = o.nSetKey()

r = o.nSetValue("TransactionDate$", "20141203")
r = o.nSetValue("DefaultFromWhseCode$", "000")
r = o.nSetValue("BatchNo$", "00001")
r = o.oLines.nAddLine()
r = o.oLines.nSetValue("ItemCode$", "2480-8-50")
r = o.oLines.nSetValue("WarehouseCode$", "000")
r = o.oLines.nSetValue("TransactionQty", 1)
retVal = o.oLines.oACS_MultiBin_OBJ.nAddDistributionLine("LOT123","A10M","","")
' --- addDistributionLine (lotSerialNo$,BinLocation$,ToBinLocation$,line$,PalletID$)
r = o.oLines.oACS_MultiBin_OBJ.nSetValue("TransactionQty", 1)
r = o.oLines.oACS_MultiBin_OBJ.nWrite()
r = o.oLines.nWrite()
r = o.nWrite()
```

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
 (\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
 (\*W) Feature for Add-on for Wave Batch Picking

## INSTRUCTIONS TO UPGRADE FROM VERSIONS 4.30 AND BEFORE

**Please Review the before Installing:**

- Any other modifications present? See the installed product listing report. Most extended solutions and other enhancements will work fine but some require unique installation or programming. Please contact us or your reseller before proceeding.
- For Upgrades - Create a back-up copy of your live Sage 100 ERP system so that you can run the Sage pre-migration utilities without affecting live Quantity on Hand numbers.
- Verify the proper Version and that Product Update is current. If you need to update your Product Update -- install that before this software.
- Ensure that all transactions are updated including: Inventory Transactions, Sales Order Invoicing, Purchase Order Receipt of Goods, Bill of Materials Productions, Work Order Transactions

Working Copy

Due to the fact that the standard Sage migration utilities change quantity on hand information, we highly recommend that the following steps be taken to create and setup a Working Area to proceed with a clean upgrade.

1. Ensure that all transactions are updated, including: Inventory Transactions, Sales Order Invoices, Purchase Order Receipts, Bill of Materials Productions and Work Order Transactions.
2. All users should exit the system. Copy the current SAGE 100 ERP Live system to another directory. We will refer to this as the "Working Copy."
3. Install the Multi-Bin WMS Uninstall program to the Working Copy. [Click to Download](#). To run, select Multi-Bin Uninstall from the Library Master > Utilities Menu. This will NOT uninstall Multi-Bin data.

Version 5.00

1. Install Sage 100 ERP Version 5.00 to a new area as Sage requires. Download and Install the appropriate Sage Product Update.
2. Run the SAGE 100 ERP Pre-migration and data migration utilities. Be sure to select the data from your Working copy area (from step 2) and NOT your live system.
3. Install Multi-Bin version 5.00 from the link provided. Select the path ABOVE the MAS90 directory. Disable any modules that you do not currently own (RA, BM, WO, etc.)
4. Copy the license text file to the mas90\ACS\_Group directory. If upgrading, you may ftp download license information.
5. Software Activation. Select Library Master > Setup > ACS Group Product Registration. Click the Activation button. It will activate license files copied to the MAS90\ACS\_Group directory and offer a ftp download of the license file.
6. Run the conversion for Company Maintenance.
7. Re-enable Multi-Bin for the appropriate companies. I/M Setup > Multi-Bin Options > Click Enable Multi-Bin for this company.

Additional Items

1. If the pre-migration utilities changed the Quantity on Hand information, be sure to use the Multi-Bin utilities to recalculate allocations and reconcile Multi-Bin quantities on hand. IM Utilities > Multi-Bin Recalculate Quantity Allocated and Multi-Bin Inventory Reconciliations.
2. If there are customizer screen changes, run Custom Office > Utilities > Update Forms to Current Level. If there are User Field changes in IM, PO, BM or WO - Update the ODBC fields in Custom Office > User Defined Fields Maintenance.
3. Create new Pick Sheet Forms for Sales Order, Bill of Materials, and Work Order by creating a new form code and selecting the Multi-Bin Pick Sheet Form.
4. Review the new Multi-Bin options for printing, data entry, and auto-allocations.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking

## STARSHIP BUSINESS OBJECT INTERFACE

**StarShip BOI** creates shipments and invoices. StarShip and ACS provides the integration to pull directed picking allocations and sales order pre-allocations. StarShip retrieves the Lot and Serial numbers allocated, the quantity shipped and retrieves the allocations by bin location to the invoice.

### Turn ON Integration

**Enable StarShip BOI**— Select Inventory – Setup – Multi-bin Options, Invoice Ship Tab. Click to enable the StarShip BOI Creates Shipment.

**Custom Office UDF** In Custom Office create the UDF Checkbox **MultibinEnabled** for the SO\_SalesOrderDetail file.

(\*E) Feature for Add-on for Expiration Date and Vendor Lot Traceability  
(\*P) Feature for Add-on for License Plating - Case Packs, Pallets and Containers  
(\*W) Feature for Add-on for Wave Batch Picking