# Warehouse Management System
# User Guide for Progression

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# Contents

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# Chapter 1: Conventions

This manual assumes that the user is already familiar with the operations of the Progression Series O/E, P/O, I/M and EDI modules. Please refer to the Progression user manuals and online Help for any questions regarding these modules.

The Progression menu system is very flexible. While the packing station and RF client portions of WMS are designed as stand-alone programs, the setup and maintenance functions are executed from the Progression menu. This manual assumes that the system administrator has placed these WMS functions in the recommended location within the Progression menu system. As this is completely user configurable within Progression, this may not be accurate on a given system. If a specific function does not appear to be available, contact the system administrator responsible for Progression menu security.

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# Chapter 2: WMS Overview

The Exact Software Warehouse Management System (WMS) provides a series of additional modules to Exact Software's Macola Progression Series. These modules are designed to greatly enhance a company's ability to track products through the entire warehouse.

## WMS Device Manager

The WMS Device Manager Module handles many one-time set up activities and is required for all Warehouse Management System applications. The Device Manager maintains security and control fields, and provides for the advanced utilities of the system.

The Device Manager Module also provides a system layer to WMS that enables communications with Radio Frequency handheld units. This module is used in conjunction with the other modules to allow workers the freedom of the entire warehouse. Although useful in almost any warehouse, this is particularly beneficial for warehouses that use multi-bin support.

## WMS Pick and Ship Verification Module

The WMS Pick and Ship Verification module provides an easy to use online method of identifying the individual items being packed in each carton. Incorrect shipments are virtually eliminated by having workers scan the bar codes that are on each item as it is packed into a box.

WMS allows the user to cross-reference multiple bar codes to the same item. For example, a single unit of an item might be represented by a UPC code, while a case of six units of the same item may be represented by a UCC-14 code.

WMS keeps track of the contents of each carton and validates that the item is on the order and is not being over or under shipped. Customer specific shipping labels are generated automatically.

This module includes building and tracking pallets; consolidating multiple orders into one shipment; creating multiple shipments from one order; automatically printing bills of lading; and additional Crystal Reports such as packing lists and manifests.

The WMS Pick and Ship Verification module also now incorporates the WMS reporting functions. It provides the ability to automatically print reports during the shipment completion process. When activated, WMS will execute up to five Crystal Reports or Visual Basic applications at the time the shipment is completed. The WMS Pick and Ship Verification module ships with three standard bill of lading reports: a Crystal Report designed to work with the standard Progression bill of lading form; a combination Visual Basic and Crystal Report that will print a VICS compliant bill of lading; and the Wal-Mart

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variation on the VICS standard. Users familiar with Crystal Reports can create their own custom Crystal Reports to generate packing slips, manifests, etc., or custom Crystal Reports may be purchased from an authorized WMS reseller.

### WMS EDI ASN Data Collection Module

The WMS EDI ASN Data Collection Module provides advanced processing options that are frequently required to generate EDI Advanced Shipping Notice (856) documents. Some of the features added include: pallet processing, advanced shipment handling to allow grouping of many orders into a single shipment; splitting an individual order into multiple shipments within a billing cycle; and the ability to feed information into the Progression EDI ASN submodule.

In addition, this module adds a powerful tool called AutoPack, which is used to generate UCC-128 compliant shipping labels in a batch mode and automatically associate the correct item and quantities with each unique UCC-128 license number. Companies that are concerned with becoming EDI compliant but do not wish to scan every item on each shipment use AutoPack. This functionality is very popular with companies that use public warehouses. AutoPack requires items to be shipped in standard quantities.

The WMS EDI ASN Data Collection Module requires the WMS Pick and Ship Verification module.

### WMS Receiving and Inventory Data Collection and Labeling Module

The WMS P/O Receiving module provides the ability to receive purchase orders immediately upon receipt at the warehouse dock. Users scan or type the purchase order and use bar codes either on the product or on an automatically printed receiving document to simplify the entry of receipt data. Support for many types of bar codes, including vendor specific, multi-segmented bar codes, is included. Product labels may be generated for products that do not have bar codes already.

This module also provides the ability to do basic inventory transactions immediately from within the warehouse. Support is included for inventory transfers, issues, receipts, physical and cycle counts, and an item bin stock inquiry.

### WMS Shop Floor Data Collection and Labeling Module

The WMS Shop Floor Data Collection and Labeling module allows you to use an R/F device to enter activity transactions for released shop orders. Support is provided for online picking, material issues and returns, and material scrap and rejections.

This module requires the Progression Bar Code for Manufacturing module in order to process transactions.

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**WMS Production Order Processing Data Collection and Labeling Module**

The WMS Production Order Processing Data Collection and Labeling module allows production to be entered against a POP order, recording the receipt of the finished good into stock. WMS will prompt for bin, serial, and lot information for back flushed components as necessary. Support is provided for both RF handheld devices and workstations.

This module requires the Progression Bar Code for Production Order Processing module in order to process transactions.

**WMS Conveyor Interface Module**

WMS Conveyor Support allows WMS to interface with a conveyor management system in a conveyor-based automated order picking environment. This interface allows WMS to send order item information to the conveyor management system during stage pick processing. The conveyor management system uses this information to control order packing, including determining when one pallet is full and a new one needs to be started.

The conveyor system can then send the pallet packing information back to WMS, which will automatically process and perform a stage pack operation based on that data, printing pallet labels as required.

Note that while WMS Conveyor Support allows WMS to interface with a conveyor management system, WMS is not a conveyor management system itself. Conveyor Support only allows WMS to send data to and receive data from a conveyor management program; a separate conveyor management system is still necessary.

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# Chapter 3: Setup and Process Flow

## WMS System Setup

You must complete the WMS system setup before you can use any WMS functions. In addition, you may occasionally need to change a setting or value to better suit how your company uses WMS.

1. Create WMS user accounts and assign security rights for shipping, purchase order, and inventory management. Define these settings in the System Manager module, on the WMS Maintenance Security File Maintenance screen. See Security File Maintenance for more information.

2. Define the WMS default settings in WMS Control File Maintenance. The WMS control file specifies the defaults for shipping, purchase order receiving, and inventory management, as well as the printers that can be used by WMS. See Control File Maintenance Function for more information.

3. Create ASN package code cross-references. WMS uses these entries to determine the package type for items and shipments. See ASN Package Code Cross-Reference Maintenance for more information.

4. Create ASN bulk weight cross-references. The bulk weight cross-references establish a relationship between a package code in the ASN Package Code Cross-Reference file and a case pack quantity for an item. See ASN Bulk Weight Cross-Reference Maintenance for more information.

## WMS System Setup Flow Chart

| Create WMS user accounts | → | Assign WMS user security rights | → | Define WMS default settings | → | Create ASN package code cross-references | → | Create ASN bulk weight cross-reference |
|---|---|---|---|---|---|---|---|---|
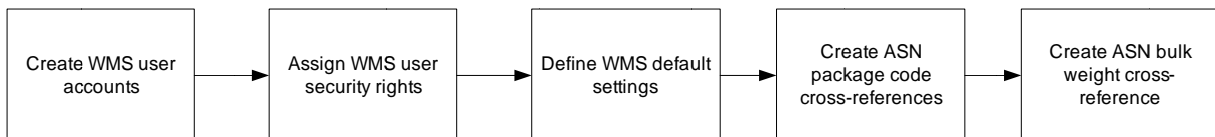
## WMS Shipping Setup and Process Flow

Complete the following setups and processing steps to pack and ship O/E orders in WMS.

### WMS Shipping Setup

You must complete the WMS shipping setup before you can use perform packing or shipping in WMS. In addition, you may occasionally need to change a setting or value to better suit how your company uses WMS.

1. Create customer override entries. WMS will use the defaults specified in the customer override file instead of the defaults specified in the WMS control file. See **Customer Override File Maintenance Function** for more information.

2. Complete external label file maintenance. External label file maintenance allows you to specify the label format to be used by WMS and to define the variable fields

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to be used when the label is printed. See **External Label File Maintenance** for more information.

3. Create BOL types. These entries are used by the WMS Pick and Ship Verification module to group items into specific freight classification. The BOL type setup also allows you to enter a specific description for a group, which can be printed in the commodity description section of the bill of lading. BOL types only need to be created if you are printing documents when completing shipments. See **BOL Type File Maintenance** for more information.

4. Create ship via reports entries for carriers. The WMS Pick and Ship Verification module uses these entries to determine which forms to print for each carrier. Ship via reports only need to be defined if you want to generate reports automatically when shipments are completed. See Ship Via Reports File Maintenance for more information.

5. Define items as externally serialized, if necessary, in Item Master. See Item Master File Maintenance for more information.

6. If printing bills of lading during shipping, specify a BOL Type for items in Item Master. See Item Master File Maintenance for more information.

7. Set a specific sort sequence for items in Item Inventory Location. WMS uses this when printing autopack labels. If not defined, order entry or pick sequence will be used instead. See Inventory Item Location File Maintenance for more information.

8. If necessary, set up and complete a field to override the order completion mode and autopack status for individual ship to address in the A/R Alternate Address. This setup only needs to be completed when these settings need to be specified uniquely for an individual ship to. Otherwise, skip this setup to use the defaults already defined. See Alternate Address File Maintenance for more information.

9. If necessary, set up a carton or pallet label override field on the order header. This setup only needs to be completed if you will need to specify a label other than the default for certain orders. Otherwise, the default label already defined will be used. See Order Entry Header File Entry for more information.

# WMS Shipping Setup Flow Chart

Complete the WMS system setup

Use settings different from WMS control file defaults? — Yes → Create customer override entries

No

Complete external label file maintenance

Any shipments need to automatically generate reports? — Yes → Create BOL types

No

Are items externally serialized?

Create BOL types → Define ship via reports for carriers → Specify a BOL type for items in I/M

No

Yes → Define items as externally serialized in I/M

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```
                                          ┌─────────────────────────────┐
                                          │  Do items use a sort        │
                          Yes             │  sequence other than        │──Yes──┐
  ◇ Are you using ◇ ──────────────────────│  order entry or pick        │       │
  │  AutoPack?                            │  sequence?                  │       ▼
  │                                        └──────────────┬──────────────┘   ┌──────────────────┐
  No                                                      No                 │ Set a sort       │
  │                                        ◄──────────────────────────────── │ sequence for     │
  ▼                                                                          │ items in I/M     │
  ◇ Any ship to locations                                                    └──────────────────┘
  │  using order completion ◇
  │  mode different from
  │  default?              ──Yes──┐
  │                               ▼
  No                     ┌─────────────────────┐
  │                      │ Create and populate │
  │                      │ an order completion │
  │   ◄──────────────────│ override field on   │
  ▼                      │ the A/R Alternate   │
  ◇ Any ship to locations│ Address screen      │
  │  use autopack status ◇└─────────────────────┘
  │  different from default?──Yes──┐
  │                                ▼
  No                     ┌─────────────────────┐
  │                      │ Create and populate │
  │                      │ a field for the     │
  │   ◄──────────────────│ autopack status     │
  ▼                      │ override on the A/R │
  ◇ Will any O/E orders  │ Alternate Address   │
  │  use a carton or pallet│ screen             │
  │  label different from ◇└─────────────────────┘
  │  default?            ──Yes──┐
  │                             ▼
  No                   ┌─────────────────────┐
  │                    │ Create label        │
  │                    │ override fields on  │
  │   ◄────────────────│ O/E order header    │
  │                    │ screen; populate    │
  │                    │ during order entry  │
  │                    └─────────────────────┘
  ▼
  ┌──────────────────┐
  │ Setup complete   │◄──────
  └──────────────────┘
```

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## WMS Shipment Processing using Paper Pick Tickets

Complete the following steps, in the order listed, to pack and ship an order in WMS. These steps must be performed for each O/E order that you need to process in WMS. Some steps, such as generating an EDI ASN, might not be necessary if your company does not use that feature.

1. Print the O/E Pick Ticket. See **Printing a Pick Ticket** for more information.

2. Release the O/E order to WMS using post pick ticket processing. This transfers the order information to WMS so the items can be packed and shipped. See **Releasing Orders to WMS using Post Pick Ticket Processing** for more information.

3. Log in to WMS. Packing and shipping are done in WMS, which is executed externally to Progression. See **Logging In to WMS** for more information.

4. Complete packing. There are four different levels of packing. Depending on your shipping environment, you might complete more than one packing step for each order.

5. Pack the order using pack verify. Items for a specific order are packed into cartons. Each order is treated as a unique shipment. See **Packing Orders in Pack Verify Mode** for more information.

6. Pack cartons. Items are manually packed into cartons for each order. Individual cartons or the entire order can then be packed onto pallets or shipments. Multiple orders can be packed onto the same shipment, or an individual order can be packed onto multiple shipments. See **Packing Cartons for a Pick and Pack Environment** for more information. Note that in a standard pack environment, the AutoPack function can be used to automatically pack items into cartons.

7. Pack pallets. If you palletize shipments, use the pack pallets function to pack cartons, items, or orders onto pallets. Pallets can then be packed onto shipments. See **Packing Pallets** for more information.

8. Pack shipments. After completing any other packing phases, pack cartons, pallets, or orders onto shipments that can then be completed. See **Packing a Shipment** for more information.

9. Process WMS order billing. This step creates a file that can be used by the Progression Barcode for Distribution module to select orders for billing. It's also necessary for the order to be properly closed in WMS. See **Using WMS Order Billing** for more information.

10. Import billing information into Progression. Quick ship polling in the Progression Barcode for Distribution module uses the billing information file created by WMS to select orders for billing in the items and quantities shipped. See **Importing Billing Selection Information using Bar Code for Distribution** for more information.

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11. Create the EDI Advanced Ship Notice (856). Use the Progression EDI module to create the ASN, if necessary for this customer. See **Generating an Advanced Ship Notice** for more information.

12. Complete O/E order processing and invoicing. See Progression Help for more information.

13. If the order was not completely shipped and the backordered quantities will not ship later, close the order in WMS. Any unshipped quantities for items will be reduced to zero, allowing backorders from O/E to be processed into WMS using post pick ticket processing. See **Closing Orders when the Progression Order Has Been Closed** for more information.

## WMS Shipment Processing using Pick Management

Complete the following steps, in the order listed, to pack and ship an order in WMS using pick management. The steps must be performed for each O/E order that you need to process in WMS. Some steps, such as generating an EDI ASN, may not be necessary if your company does not use that feature.

1. Create EPNs for the O/E orders.

2. Pick to pack: Cartons or pallets are immediately labeled for shipping and are ready to be combined with other cartons or pallets being shipped together. As the products are be placed on the pallet, they are scanned and associated with the shipping pallet. The pallet can later be associated with a shipment simply by scanning the pallets label. See **Processing a Pick-to-Pack EPN** for more information.

3. Pick to stage/stage pack: Pick to stage/stage pack: Indicates what products are to be picked and where to take them for staging. A pick-to-stage EPN is always associated with a stage pack EPN, which directs the packers about how to break out products that have been brought to a staging area as the result of a pick-to-stage EPN. This can be done on either an RF device or at a packing station and presents the pack out process in an order by order basis. See **Processing a Pick-to-Stage and Stage Pack EPN** for more information.

4. Pick the order based on the EPN.

5. Pack the shipment. After completing any other packing phases, pack cartons, pallets, or orders onto shipments that can then be completed. See **Packing a Shipment** for more information.

6. Process WMS order billing. This step creates a file that can be used by the Progression Barcode for Distribution module to select orders for billing. It's also necessary for the order to be properly closed in WMS. See **Using WMS Order Billing** for more information.

7. Import billing information into Progression. Quick ship polling in the Progression Barcode for Distribution module uses the billing information file created by WMS to

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select orders for billing in the items and quantities shipped. See **Importing Billing Selection Information using Bar Code for Distribution** for more information.

8. Create the EDI Advanced Ship Notice (856). Use the Progression EDI module to create the ASN, if necessary for this customer. **Generating an Advanced Ship Notice** for more information.

9. Complete O/E order processing and invoicing. See Progression Help for more information.

10. If the order was not completely shipped and the backordered quantities will not ship later, close the order in WMS. Any unshipped quantities for items will be reduced to zero, allowing backorders from O/E to be processed into WMS using post pick ticket processing. See **Closing Orders when the Progression Order Has Been Closed** for more information.

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# WMS Shipment Processing Flow Chart

```
                        ┌──────────────┐
          NO ───────────│ Are you using│─────────── YES
          │             │ pick         │           │
          │             │ management?  │           │
          │             └──────────────┘           │
          ▼                                         ▼
┌──────────────────┐                      ┌──────────────────┐
│                  │                      │                  │
│ Print the O/E    │                      │   Create EPN     │
│ pick ticket      │                      │                  │
│                  │                      │                  │
└──────────────────┘                      └──────────────────┘
          │                                         │
          ▼                                         │
┌──────────────────┐                                │
│ Run Post Pick    │                                │
│ Ticket           │        ┌──────────────┐        │
│ Processing to    │        │              │        │
│ release the      │───────▶│ Log in to WMS│◀───────┘
│ order to WMS     │        │              │
└──────────────────┘        └──────────────┘
                                    │
                                    ▼
        ┌──────────────┐     ┌──────────────┐     ┌──────────────┐
        │ Are you using│     │ Are you using│     │ Are you      │
        │ WMS EDI ASN  │ YES │ pack verify? │ NO  │ packing items│
        │ Data         │────▶│              │────▶│ into cartons?│
        │ Collection   │     │              │     │              │
        │ module?      │     └──────────────┘     └──────────────┘
        └──────────────┘            │                     │
              │ NO                  │ YES                 │ YES
              ▼                     │                     │
    ┌──────────────────┐           │                     │
    │ Pack orders using│◀──────────┘                     │
    │ pack verify mode │                                 │
    └──────────────────┘              NO                 │
              │                       │                  │
              ▼                       ▼                  ▼
            ╲ A ╱                   ╲ B ╱              ╲ C ╱
```

```
   A                    B                         C

                         │                         │
                         ▼                         ▼
                  ╱─────────────╲          ┌──────────────────┐
                 ╱  Are you packing╲        │                  │
                ╱  items onto pallets?╲     │ Pack items into  │
                ╲                     ╱      │    cartons       │
                 ╲                   ╱       │                  │
                  ╲─────────────────╱        └──────────────────┘
                  │                 │                  │
                  │                 │                  ▼
              NO  │            YES  │          ╱───────────────╲
                  │                 │         ╱  Are you packing ╲
                  │                 │    NO   ╱ cartons onto pallets?╲
                  ├─────────────────┼────────╲                      ╱
                  │                 │          ╲                   ╱
                  │                 │           ╲─────────────────╱
                  │                 │                  │
                  │                 │             YES  │
                  │                 ├──────────────────┘
                  ▼                 ▼
        ┌──────────────┐   ┌──────────────┐
        │              │   │              │
        │ Pack shipments│   │ Pack pallets │
        │              │   │              │
        └──────────────┘   └──────────────┘
                  │
                  │
 ┌──────────────┐ │    ┌──────────────────┐
 │              │◄┘    │                  │
 │ Process WMS   │─────►│ Import billing    │
 │ order billing │      │ information using │
 │              │      │ B/C quick ship    │
 └──────────────┘      │ polling           │
                       └──────────────────┘
                                │
                                ▼
                               ╱ D ╲
```

D

Are you sending EDI ASNs to the customer? —YES→ Generate ASN in Progression EDI

NO

Complete order processing and invoicing in Progression

Was the order shipped complete in WMS? —NO→ Will backordered quantities ship later?

YES

NO

Shipment processing complete ←YES— Close order in WMS

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## WMS P/O Receiving Setup and Process Flow

Complete the following setups and processing steps to receive against P/O purchase orders in WMS.

### WMS P/O Receiving Setup

Complete the following setups, as necessary, before using WMS to receive Progression purchase orders. In addition, you may occasionally need to change a setting or value to better suit how your company uses WMS.

1.  Create vendor override entries, if necessary. If a vendor has a vendor override set up, WMS will use the defaults specified in the vendor override file instead of the defaults specified in the WMS control file. See **Vendor Override Maintenance** for more information.

2.  Create vendor bar code definitions, if necessary. If a vendor specific bar code is being used, the vendor bar code file allows you to define the bar code, including how to break down the segments. See **Vendor Bar Code Maintenance** for more information.

3.  Create vendor item override entries, if necessary. If a vendor item has a vendor item override set up, WMS will use the defaults specified in the vendor item override file instead of the defaults specified in the WMS control file or in the vendor override file. See **Vendor Item Override Maintenance** for more information.

### WMS P/O Receiving Processing

Complete the following steps, in the order listed, to receive a P/O in WMS. These steps must be performed for each purchase order that you need to process in WMS.

1.  Release the purchase order to WMS using Post P/O Print Processing. This transfers the Progression purchase order information to WMS so receipts can be made using WMS RF devices. See **Releasing Purchase Orders to WMS using Post P/O Print Processing** for more information.

2.  Process receipts against the purchase order in WMS. Either use radio frequency devices to scan received items and quantities for a specific purchase order, or scan items with a Wedge Reader at a packing station. Product labels can also be generated at this time. See **Processing a Receipt Against a Purchase Order**.

## WMS I/M Transactions Setup and Processing Flow

Complete the following setups and processing steps to perform I/M transactions in WMS.

### WMS I/M Transactions Setup

No specific setups are necessary to process I/M transactions in WMS.

### WMS I/M Transactions Processing Flow

The following I/M transactions can be performed in WMS. Each transaction should be performed as necessary and is not dependent on any other WMS I/M transaction.

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1. Process an inventory issue. Allows you to issue an item quantity and remove it from I/M inventory. See **Processing an Inventory Issue** for more information.

2. Process an inventory receipt. Allows you to receive an item quantity and add it to I/M inventory. See **Processing an Inventory Receipt** for more information.

3. Process an inventory transfer. Allows you to transfer an item quantity to a different I/M warehouse. See **Processing an Inventory Transfer** for more information.

4. Process a physical or cycle count. Allows you to perform a physical or cycle count using a directed or a non-directed count method. See **Processing a Physical or Cycle Count** for more information.

## WMS SFC Transactions Setup and Processing Flow

Complete the following setups and processing steps to perform Shop Floor Control transactions in WMS.

### WMS SFC Transactions Setup

No specific setups are necessary to process SFC transactions in WMS.

### WMS SFC Transactions Processing Flow

The following SFC transactions can be performed in WMS. Each transaction should be performed as necessary and is not dependent on any other WMS SFC transaction.

1. Issue material. Allows you to issue material for a shop order. See **Issuing Material to a Shop Order** for more information.

2. Enter activity. Allows you to enter activity transactions for a shop order, including labor hours, machine hours, scrap quantities, and rejections. See **Entering Activity for a Shop Order** for more information.

## WMS POP Transactions Setup and Processing Flow

Complete the following setups and processing steps to perform Production Order Processing transactions in WMS.

### WMS POP Transactions Setup

No specific setups are necessary to process POP transactions in WMS.

### WMS POP Transactions Processing Flow

The following POP transactions can be performed in WMS. Each transaction should be performed as necessary and is not dependent on any other WMS POP transaction.

1. Enter production. Allows you to enter production for released production orders. See **Entering Production for a Production Order** for more information.

## WMS Conveyor Interface Setup and Processing Flow

Complete the following setups and processing steps to allow WMS to interface with a conveyor management system.

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## WMS Conveyor Interface Setup

Complete the following setups to allow WMS to interface with a conveyor management system. In addition, you may occasionally need to change a setting or value to better suit how your company uses WMS.

1. Activate conveyor support in the WMS control file maintenance.

2. Define conveyors, including logical sort lanes, physical sort lanes, and jackpot sort lanes.

3. Assign printers to be used by each conveyor.

4. Define FTP settings for each conveyor.

## WMS Conveyor Interface Processing Flow

Complete the following steps, in the order listed, to use a conveyor management system with WMS.

1. Create a stage pick EPN.

2. Click the **Send to Conveyor** button on the EPN Editor screen. WMS will validate that the number of orders does not exceed the number of logical lanes defined for the conveyor. Then, WMS will create a wave definition file for the stage pick. The wave definition file will contain a record for each carton that specifies the pick number, order number, sequence number, item UCC-14, cube, weight, and logical lane destination.

3. The wave pick definition file is sent to the conveyor management system. The prior wave is closed by the conveyor system when the new wave is received.

4. The conveyor system reads the UCC-14 bar codes on the cartons and directs the products to the lane specified in the wave definition file.

5. The conveyor system writes packing information back to the wave results file.

6. During the next WMS polling cycle, WMS receives the wave results file.

7. Records in the wave results file are processed as follows:

8. If the record has a UCC-14 ID and the physical sort lane listed in the record has not been previously encountered for this wave, WMS will add it to the list of physical sort lanes for the wave. WMS will generate a new pallet number and pack the UCC-14 in that pallet. The pallet label is then printed to the printer specified for the lane.

9. If the record has a UCC-14 ID and the physical sort lane listed in the record has already been created for this wave, WMS will compare the pallet count number in the file to the pallet count number for the previous transaction for this lane. If it is the same, the UCC-14 will be packed in that same pallet. If the pallet count number is different, WMS will generate a new pallet number and pack the UCC-14 in that pallet. The pallet label is then printed to the printer specified for the lane.

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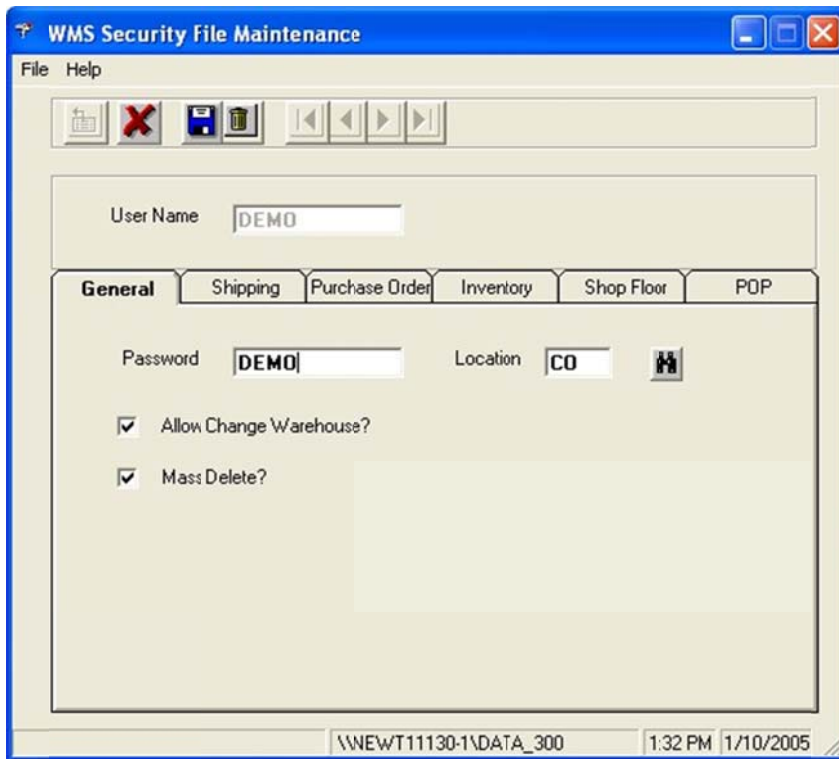
10. If the record has a NOREAD, UNTRACKED, or EMPTY message, it is not processed.

11. If the record has an ENDOFWAVE message, WMS will increment the number of lanes completed for the EPN. Once all lanes for the EPN have received the ENDOFWAVE message, WMS will mark the EPN as Conveyor Complete.

12. If any item quantities remain to be packed on the EPN, WMS leaves the EPN open and displays a Reconcile Conveyor message. Double-click the entry on the conveyor processing monitor to review any errors. If necessary, use the conveyor processing monitor to close the EPN and create a new one for any shortages.

13. If the ENDOFWAVE message is not received for a lane, click the **End of Wave** button to process the end of wave for the lane.

14. Once all items for the EPN have been packed, WMS marks the EPN completed.

# Chapter 4: WMS Setup – System

**Security File Maintenance**

The following function is used to create user accounts and to assign security rights for WMS. The Security File Maintenance menu is accessed from the Order Entry Maintain menu. This function should not be provided to all users. Progression's menu security should be used to limit access to this function to authorized personnel.

**General Tab**



**User Name** – Type the user name for each person who requires access to the shipping system.

**Password** – Type the user's password.

> In the Microsoft SQL version of WMS, the user name and password in WMS must be identical to a user name and password in Progression. Progression implements a double blind security system which WMS honors. For those warehouse users who should not have access to Progression, the user should still be created in Progression, but should be assigned to a Progression menu that does not have any functions enabled.

> If WMS is operating using Pervasive.SQL, the user name and password do not have to be the same as the Progression user name and password. There is no synchronization between the two systems under Pervasive.SQL.

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In fact, you do not have to be a user in Progression to have access to the shipping system under the Pervasive.SQL version of WMS.

**Location** – This is the default warehouse for the user. If the **Allow Change Warehouse** check box is cleared, the user will only have access to this warehouse.

**Mass Delete** – This option gives the user the ability to delete cartons, pallets, shipments and orders from within the WMS Inquiry. It is recommended that only key personnel have access to this option.

**Allow Change Warehouse** – This option gives the user the ability to change to a warehouse other than the warehouse specified in the **Location** field.

**Shipping Tab**
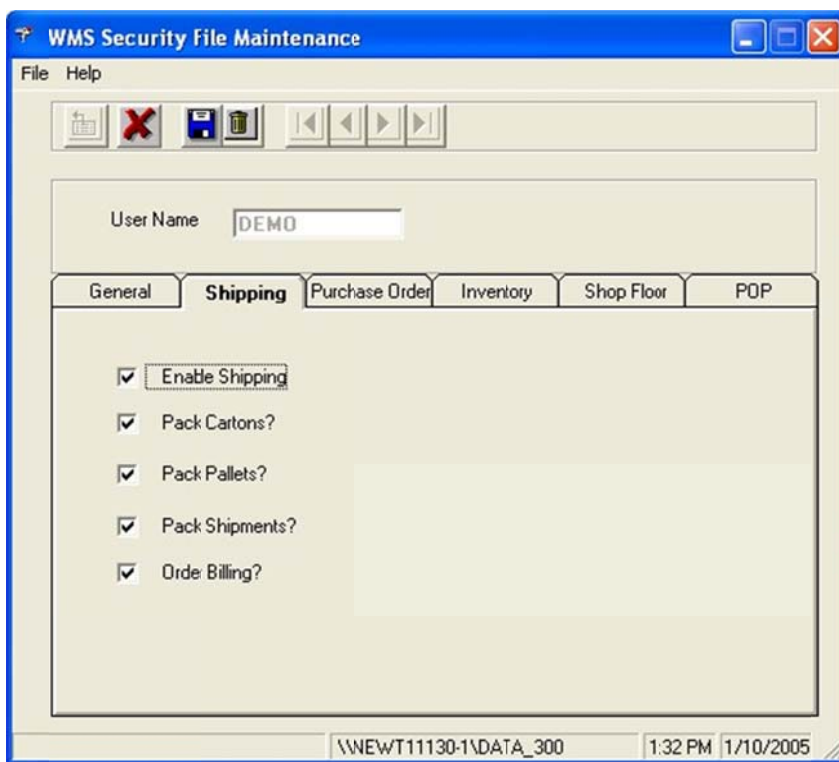


**Pack Cartons** – This option allows the user access to the pack cartons function. This function is used to pack items into cartons.

**Pack Pallets** – This option allows the user access to the pack pallets function. This function is used to attach cartons onto pallets.

**Pack Shipments** – This option allows the user access to the pack shipments function. This function is used to attach cartons and pallets onto shipments.

**Order Billing** – This option allows the user access to the order billing function. To use this function, you must have the Progression Barcode for Distribution module installed. In Pack Verify Only mode, this option allows the user to close the order and execute the update Progression function.

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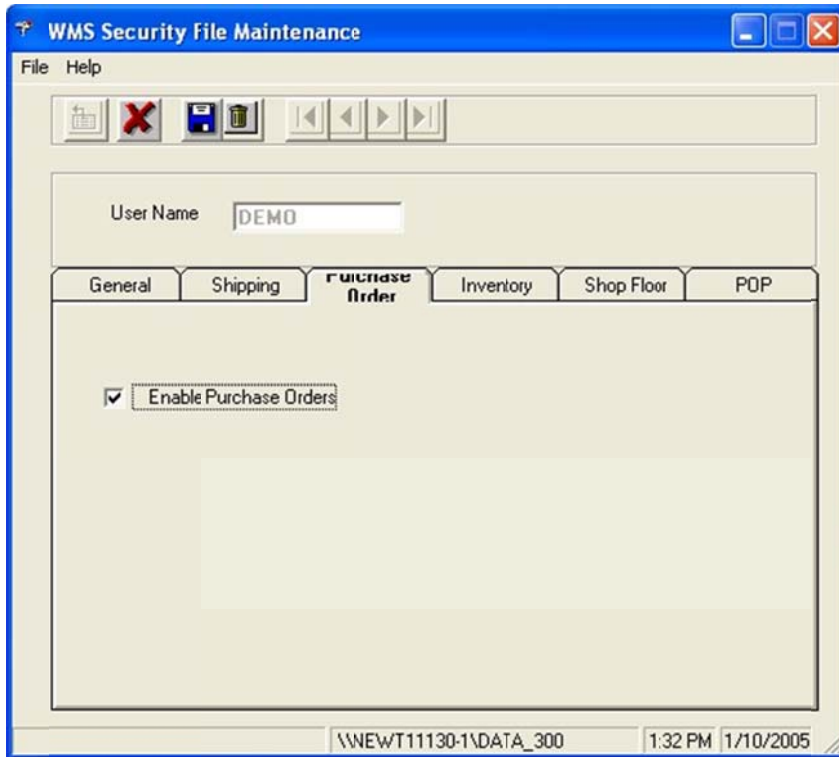
**Purchase Order Tab**



**Enable Purchase Order** – Select the Enable Purchase Orders check box to allow the user to have access to the Purchase Order Receipt function on R/F guns.

**Inventory Tab**

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**Enable Inventory Management** – Select the **Enable Inventory Management** check box to allow the user access to the inventory management function on R/F guns.

**Issues** – This option allows the user access to the inventory issues function.

**Receipts** – This option allows the user access to the inventory miscellaneous receipts function

**Transfer Inventory** – This option allows the user access to the inventory transfer function

**Count Tags** – This option allows the user access to the count tags functions.

**Stock Inventory** – This option allows the user access to the stock inquiry functions.

**Shop Floor Tab**
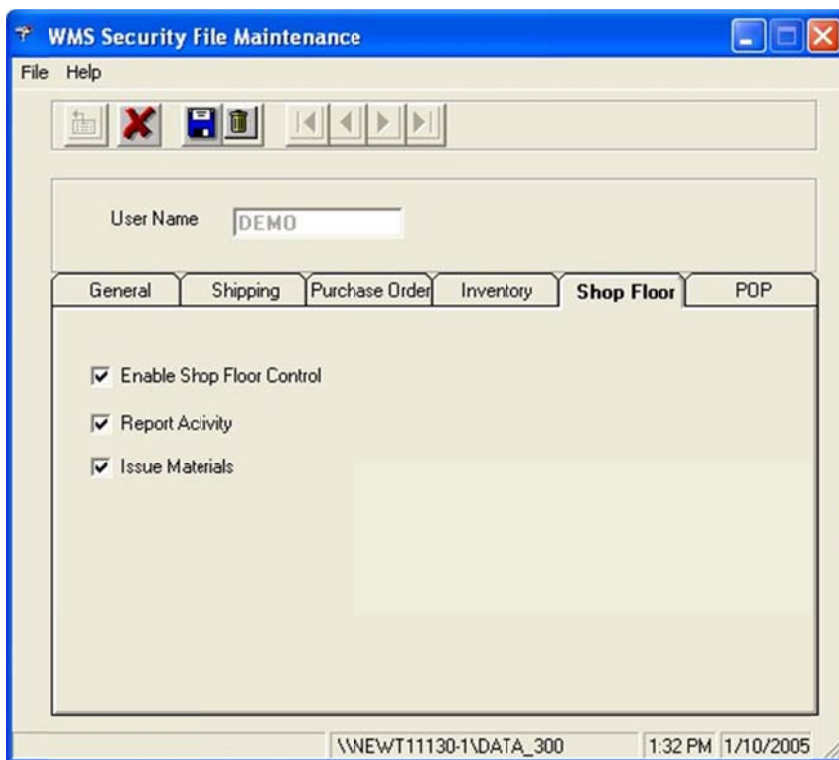


**Enable Shop Floor** – This option allows the user access to the Shop Floor functions.

**Report Activity** – This option allows the user to report activity.

**Issue Materials** – This option allows the user to issue materials.

**POP Tab**
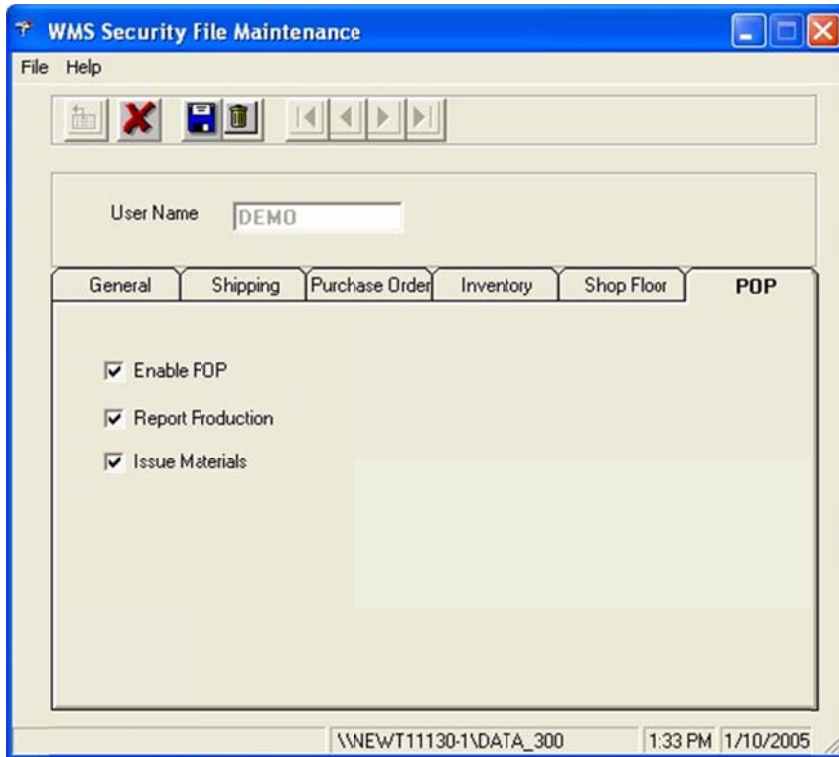


**Enable POP** – This option allows the user to access the Production Order Processing functions.

**Report Production** – This option allows the user to report production on production orders.

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## Control File Maintenance

Control File Maintenance specifies the default settings in WMS. The Control File Maintenance menu is accessed from the Order Entry Maintenance menu.

### Shipping Tab



### General Settings

**UPC Company Code** – Type the company's five digit UPC code as assigned by the Universal Code Council, with two leading zeros. This is used as a component of the serial number on the UCC-128 label.

**Department Qualifier** – This value specifies where the department number is located in the inbound 850 document. Typically, this value should be set to **DP**.

**Item Master Bill of Lading Type Field** – This field specifies the user defined field or user note field from the I/M Item Master file that is used to classify items into bill of lading types. If this field is set to **XX**, all items will be classified as bill of lading type **DFLT**.

**Allow Scanning Range** – Determines whether users are allowed to scan a range of carton labels onto a shipment or pallet.

**Default Scanning Range** – When activated, WMS defaults to scanning ranges if users are allowed to scan carton ranges. This option is disabled if **Allow Scanning Range** is set to **N**.

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**Force Entry of Multiplier?** – Select this check box if the user is typically required to specify a multiplier or quantity when processing shipping entries. WMS will then prompt for the multiplier before asking for the item number.

### *Billing Options*

**Default Order Completion Mode** – This field is used to determine when billing selection is done. This value may be overridden for a specific customer in the Customer Override file.

**SAS Billing** – Indicates that WMS will require the user to close each order individually. Use this method to allow easier control when a single order will often be split among multiple shipments within a billing cycle. The order is manually completed only after the last shipment for that order is processed for the day. Requiring the order to be closed manually prevents the accidental partial selection of an order when the user invokes the update Progression function.

**Pack Shipments** – Indicates that an order should be completed when a shipment that it is attached to it is completed. Use this method to simplify the processing of orders. Each order is flagged as complete when the shipment is completed, eliminating the need to process each order manually in the WMS billing function. The billing selection information is passed to Progression when the user runs the update Progression function.

**Pack Verify Cartons** – Indicates that an order should be treated as a unique shipment. When the order is completed, it is automatically attached to a shipment, which is then automatically completed. This mode is typically used for customers that send individual orders that are shipped to different locations or at different times.

**ODB Generations** – This field specifies the number of copies of Quick Ship ODB files to save for shipping transactions. Although rarely necessary, having a backup of these files can help track and resolve problems that occur when updating Progression from WMS. The maximum number of files that may be saved is 999.

**Confirm Ship and Confirm Bill** – This check box is used to specify that WMS should perform both a Confirm Ship and a Confirm Bill operation simultaneously. This is only valid if the Progression system is set to Confirm Ship. When set, the Quick Ship transaction will be specified for both steps simultaneously. With this option, WMS can be configured to relieve inventory prior to O/E to A/R Posting without the additional burden of doing both a confirm ship and a confirm bill operation manually in Progression.

**Immediate Auto Bill for Pack Verify** – This check box can be used to specify that the process to update Progression should occur immediately upon completing an order in Pack Verify mode. When this is selected, the user will not need to periodically click the **Update Macola** button. WMS will automatically generate the ODB file for Quick Ship Polling. If Quick Ship Polling is running, the order will be selected for billing (or confirmed shipped) immediately.

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**Note**: If this option is used, billing corrections cannot be made within WMS for pack verification orders. The order is immediately closed for this cycle and prepared for the next cycle.

**Do not post zero ship to Quantities** – This check box is used to suppress the selection of line items that are completely unpacked. WMS will leave those items unselected when invoicing or performing confirm ship transactions.

### *AutoPack Options*

**Automatic Pack Cartons** – This is a global setting that allows for the automatic generation of UCC-128 labels based on standard case quantities and the quantity ordered. This setting can be overridden for specific customers with an entry in the Customer Override file. When using autopack mode, the pack cartons function is unnecessary. See ASN Bulk Weight File Maintenance for instructions on setting up standard case quantities. This field is ignored if the WMS EDI ASN Data Collection Module is not installed.

**1 Carton Per Order**? – This option forces WMS to create a single carton for orders that are being packed using the autopack function. When activated, AutoPack will create a single carton and pack all of the items on an order into that single carton. This option is disabled if the **Automatic Pack Cartons** field is not activated.

**Alt Address AutoPack Override field** – Specify a user defined field in the A/R Alternate Address file that can be used to override the order completion mode and autopack settings for a specific alternate address. This is typically used when small store orders are handled through pack verification and large DC orders are handled using AutoPack. To use this option, the specified user defined field must be unhidden on the Progression screen using Screen Designer. The following values may then be specified in the field in the Alternate Address file:

> **VN** = Pack Verify Mode, AutoPack Off
>
> **SN** = Pack Shipments Mode, AutoPack Off
>
> **SY** = Pack Shipments Mode, AutoPack On
>
> **BN** = WMS Billing Mode, AutoPack Off
>
> **BY** = WMS Billing Mode, AutoPack On

**Note**: If any other value is typed into this UDF field, it will be ignored and the default values used.

**AutoPack Label Sequence UDF** – Specify a user defined field in the Item Location file to use to sequence labels printed via the autopack process. Normally, WMS will look at the Pick Ticket Order field in the Order Entry Setup file to determine the order to print the labels. The labels are then printed either in pick sequence or in order entry sequence. When a UDF is specified in this control setting, the labels will use the value of the Item Location file UDF specified here.

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### *Shipping Label Settings*

**Carton:**

**UCC 128 Number** - Type the label sequence number for the next carton label. This number will increment for each label printed.

**Carton Label** – Type the name of the default carton label format. The format will be used when printing carton level UCC-128 labels unless specifically overridden for the customer with an entry in the Customer Override file. The label format can be overridden for an individual order by specifying a label name in the order header user defined field designated in **Label Override Field**. **\*NONE** is a reserved form name which indicates to generate the records, but not to print the label.

**Label Override Field** – This field specifies the user defined field from the O/E order header file that is used to override the label format used to print carton (pack) labels. If set to **XX**, overriding the label format is not allowed.

**Note**: WMS versions prior to 7.5.11 used a setting in the WMS INI file to allow this. The INI entry is no longer supported.

**Defer Printing** – This check box instructs the pack cartons or pack verify function to defer printing a carton label until the carton is packed. If this field is cleared, WMS prints a label immediately when a new carton is created. However, some customers require the label to indicate the contents of the carton. If the label is printed before the items are packed, WMS cannot print the item number on the label. If the **Defer Printing** check box is selected, WMS will not print the label until the user clicks the **Reprint** button or leaves the carton.

**Pallet:**

**UCC 128 Number** – Type the label sequence number for the next pallet label. This number will increment with each label printed.

**Pallet Label** – Type the name of the default pallet label format. The format will be used when printing pallet level UCC-128 labels unless specifically overridden for the customer with an entry in the Customer Override file. The label format can be overridden for an individual order by specifying a label name in the order header user defined field designated in **Label Override Field**. **\*NONE** is a reserved form name which indicates to generate the records but not to print the label.

**Label Override Field** – This field specifies the user defined field from the O/E order header file that is used to override the label format used to print pallet (tare) labels. If set to **XX**, overriding the label format is not allowed.

**Note**: WMS versions prior to 7.5.11 used a setting in the WMS INI file to allow this. The INI entry is no longer supported.

**Defer Printing** – This check box instructs the pack pallets function to defer printing a pallet label until the pallet is packed. If this field is cleared, WMS prints a label immediately when a new pallet is created. However, some customers require the label to

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indicate the contents of the pallet. If the label is printed before the items are packed, WMS cannot print the item number on the label. If the **Defer Printing** check box is selected, WMS will not print the label until the user clicks the **Reprint** button or leaves the pallet.

**Label Qty Format** – The format of case packs when printed on labels. This is typically **####**, which indicates four digits with no leading zeros. This format follows standard VB numeric formatting rules and defaults to **####** if not specified.

### Shipping 2 Tab



*Bin / Serial / Lot / Catch Weight Settings*

**Capture Catch Weights?** – Select this check box if WMS should record the breakdown of each quantity packed into a carton. This is a common requirement when products are sold by weight.

**Ignore Multi-Bin, Serial and Lot Flags?** – This check box may be used to disable multi bin, serial, and lot support in the WMS. This check box instructs WMS not to ask for bin, serial, or lot numbers. This should be selected only for companies not using the WMS automatic billing functions. This field is for use with non-pick management orders only. It does not apply to pick management orders.

**Use Item Pick Seq as Default Bin?** – This check box may be selected to have WMS automatically default the bin number to the value specified in the items picking sequence field from the Item Location file. This is useful if multi bin is turned on but shipping is done from one primary bin location for each item. With this option selected, a bin number does not need to be typed or scanned unless the item is being shipped from a bin other

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than the standard location. This field is for use with non-pick management orders only. It does not apply to pick management orders.

**Allow Override of Default Bin?** – This check box may be selected to allow the user to override a default bin number. This check box is disabled if **Use Item Pick Seq as Default Bin** is cleared. If default bins are being used and **Allow Override of Default Bin** is cleared, WMS will not prompt for the bin number unless the default bin has not been specified or an invalid bin is specified as the default. If this check box is selected, WMS will default to the bin specified in the **Item Pick Sequence** field, but the user may override it. If the **Use Item Pick Seq as Default Bin** check box is cleared, WMS will always prompt for a bin. This field is for use with non-pick management orders only. It does not apply to pick management orders.

**I/M Ext Ser Num Field** – This field specifies the user defined field, user note field, or user code field to be used in the I/M Item Master to identify that an item is externally serialized. When this field is not **XX**, external serial numbers can be tracked. The Item Master file field specified must contain a **Y** for the item to be considered externally serialized. External serial numbers will be entered but not validated against the Progression Lot/Serial file. They will be written to the order line comment file and can be looked up using the Progression Where Used inquiry.

### *Over/Under Ship Handling*

**Overship Error** – If set to **Warning**, a warning message will be displayed during carton packing if the quantity packed is greater than the quantity ordered, but the user may accept the message and ship the extra quantity. If set to **Hard**, an error message will be displayed and the entry will not be allowed.

**Tolerance %** – Used to indicate that WMS should only generate a warning or error if the item is over shipped by a value greater than the percentage specified.

**Undership Error** – If set to **Warning**, a warning message will be displayed during order verification, shipment completion, and order billing if the quantity packed is less than the quantity ordered. The user may accept the message and ship without completely filling the order. If set to **Hard**, an error message will be displayed and these functions will not be allowed until the remaining quantity is packed and shipped.

**Tolerance %** – Used to indicate that WMS should only generate a warning or error if the item is under shipped by a value greater than the percentage specified.

### *Additional Bar Code Search Options*

The check boxes in this section allow the user to configure how WMS determines the item number being processed when a value is entered into any of the item ID fields in WMS. The normal hierarchy of this search is to see if the specified code can be found in the following fields:

> EDI ASN Bulk Weight File Alternate Item Identifier

> I/M Item Master UPC Code

I/M Item Master Item Number

If selected, the additional search options are added, in order, to the top of this hierarchy.

These additional searches are typically used when a company has assigned the same UPC or UCC-14 number to multiple item numbers. Such use violates Universal Code Council standards and is not recommended. However, it can be difficult to remove these technical violations from a company's catalog, so these options allow WMS to be configured to correctly handle this situation. However, it is strongly recommended to avoid creating duplicate situations in the future and to make reasonable efforts to remove such duplications going forward.

**EDI Cust Item X-Ref UPC Lookup?** – Add the EDI Item cross-reference **UPC No** field to the search hierarchy. This option is ignored if the Progression EDI module is not installed. Normally this check box should be left cleared.

**O/E Cust Item X-Ref Cust Item Lookup?** – Adds the O/E Customer Item cross-reference **Customer Item Number** field to the search hierarchy. Normally this check box should be left cleared.

**Bulk Weight Customer Prefix Lookup?** – Adds the customer number as a prefix in the ASN bulk weight file **Alternate Item Identifier** field. WMS will prefix the specified code to the customer number between the ^ symbols, and then attempt to find the concatenated value in the ASN bulk weight file **Alternate Item Identifier** field before continuing using the normal hierarchy. Normally this check box should be left cleared.

### *Ignore Item Prefix*

Specify a list of prefixes for specialty item numbers. Items that begin with this prefix will not be written into WMS and will be billed automatically when the order is selected for billing. Up to 10 different prefix codes may be specified. Note that the prefix **\*\*** is automatically considered a miscellaneous item because this is the standard used by the EDI module.

To add an item prefix to be ignored, type the prefix in the **Ignore Item Prefix** field, and then click **Add**.

To remove an item prefix, click the prefix in the list to select it, and then click **Delete**.

To change an existing item prefix, click the prefix in the list to select it. Type the new value in the field, and then click **Update**.

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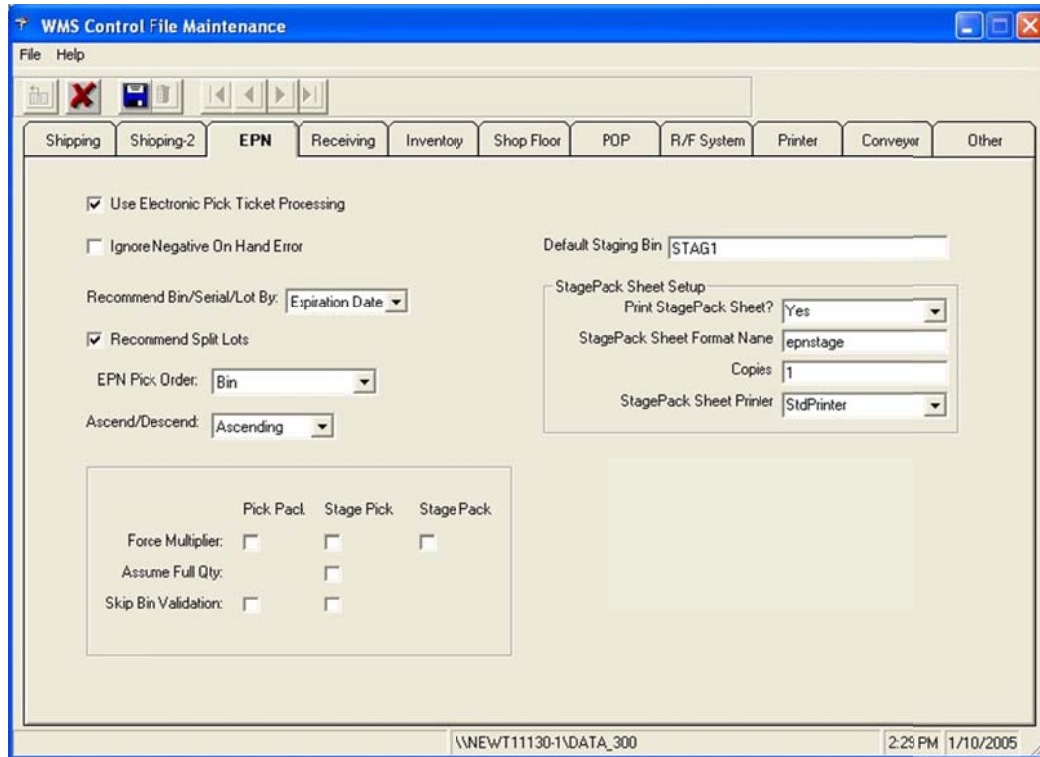
**EPN Tab**



The EPN tab may not be visible if the feature has not been enabled on your system. If you do not see this tab, please contact WMS support for further information. In addition, this feature requires the Microsoft SQL database; it is not supported under Pervasive.SQL.

**Use Electronic Pick Ticket Processing** – Select this check box to enable electronic pick tickets. This function is intended for use in an RF environment because it enables the use of handheld devices to walk a picker through the picking materials.

**Ignore Negative On Hand Error** – Select this check box to allow transactions which will generate a negative quantity on hand. Although WMS will not warn you during shipping, the polling process will produce an exception when billing selection is attempted.

**Recommend Bin/Serial/Lot By**: - Select **Expiration Date** or **Bin Priority** from the drop down as the primary criteria when making recommendations for bin, serial, and lot items. **Expiration Date** is only applicable to serial and lot items. When **Bin Priority** is selected, WMS will not recommend a specific lot or serial number in the bin.

**Recommend Split Lots** – This check box should be selected if WMS can use more than one lot to fulfill the order. If **Recommend Split Lots** is selected, WMS will use the remainder of the oldest, non-expired lot, and then fill the remaining open quantity from the next available lot. If this check box is cleared, WMS will use the oldest lot which has sufficient quantity to fulfill the order. This setting is ignored if the **Recommend Bin/Serial/Lot By** field is set to **Bin Priority**.

**EPN Pick Order** – Select the field that contains the sequencing value for the critical path through the warehouse. In a binned environment this typically is the bin number. In a

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non-binned environment, this is typically the pick sequence. However, the user may choose from the following values: **Bin**; **Pick Sequence**; and **Inventory Location User Defined 1 – 5**.

**Ascend/Descend** – Select whether the natural flow through the warehouse for the pick order specified in the **EPN Pick Order** field is **Ascending** or **Descending**.

**Default Staging Bin** – Type the value used when creating a stage pack as the default location for staging products. This can be overridden when the stage pack is created.

**Force Multiplier** – Select this check box if the user typically is required to specify a multiplier or quantity when processing picks. If this is selected, WMS will prompt for multiplier before asking for the item number. Set this option for **Pick Pack**, **Stage Pick**, and **Stage Pack**.

**Assume Full Qty** – Select this check box if WMS should pack the full open quantity without the user having to specify a multiplier. This option is available for **Stage Pick** only.

**Skip Bin Validation** – Select this check box to allow the user to pick from a bin without having to scan and validate that it is the correct bin. This option is available for **Pick Pack** and **Stage Pick** only.

### *Stage Pack Sheet Setup*

**Print Stage Pack Sheet?** – Indicates whether a printed report is necessary for processing stage packs.

**Stage Pack Sheet Format** – Type the name of the stage pack report.

**Copies** – Type the number of copies of the stage pack report to be printed.

**Stage Pack Sheet Printer** – Specify the printer to use when printing the stage pack report. The printer name must have been added previously using the Printer tab.

**Receiving Tab**



*P/O General Options*

**Force Entry of PO Multiplier** – Select this check box if the user is typically required to specify a multiplier or quantity when performing receiving entries. If this is selected, WMS will prompt for the multiplier before asking for the item number.

**Enter Cost** – Select this check box if the user should be prompted for the cost during the receiving process. (Note that this feature is not currently available.)

**ODB Generations** – This field specifies the number of copies of the quick receipt ODB files to save for receipt transactions. Although rarely necessary, having a backup of these files can help track and resolve problems that occur when updating Progression from WMS. The maximum number of files that can be saved is 999.

**Show PO Cost** – Select this check box if the cost should be displayed on the screen during the receiving process. (Note that this feature is not currently available.)

**Receiving Dock is Bin** – Select this check box if Progression's bin system is in use and goods are typically offloaded from the truck at a warehouse dock and then transferred to where they will be stored.

*Scan Sheet Setup*

**Print Scan Sheet?** – Use this setting to indicate if a scan sheet document is typically needed for your vendors. Select **Yes**, **No** or **Sometimes**. The scan sheet is useful when products are typically received without bar codes. The scan sheet will print with a bar code for each item on the PO, allowing the user to scan the item instead of having to type

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the item number. If set to **Sometimes**, the report will only print when the user requests it by pressing the **F8** key.

**Scan Sheet Format Name** – Type the name of the Crystal Report or VB program that will be used when a scan sheet is required. Leave blank if no scan sheet is required.

**Format Type** – Indicate whether the scan sheet program is written in Crystal Reports or Visual Basic.

**Copies** – Type the number of copies of the scan sheet that WMS should print.

**Scan Sheet Printer** – Select the printer to use when printing the default scan sheet. The printer name must have been added previously using the Printer tab.



*Sample Scan Sheet Report*

### Putaway Ticket Setup

Use this section to indicate whether a putaway ticket should be printed. The putaway ticket is a BarTender label format named **Putaway1.btw**. This format may be modified in conjunction with external label file maintenance.

**Generate Putaway Ticket** – Select this check box if a putaway ticket should be generated for each receipt.

**Putaway Ticket Printer Name** – Select the printer to use when printing putaway tickets. The printer name must have been added using the Printer tab.

**Putaway Ticket Copies** – Type the number of copies of each putaway ticket that should be printed.

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*Sample Putaway Ticket*

### Product Labels Setup

The receiving function can automatically generate product labels for up to four levels, defined as unit, inner, case and pallet. The Product Labels section of WMS Control File Maintenance determines the default calculations for each layer. These may be overridden in the vendor override file for a vendor or in the vendor item override file for a specific vendor item.

For each layer, the user specifies the label format, whether it is printed, how many copies, what printer to use, and a default package code to use in conjunction with the ASN bulk weight file to allow WMS to calculate the number of labels required.



*Sample Product Label*

**Label Type** – Shows which layer is being changed. WMS sets this field automatically when the user selects an entry to modify.

**Print (Y/N)** – Select **Yes**, **No**, or **Prompt** from the drop down list to indicate whether product labels should be printed when product is received.

> Yes: Print automatically without waiting for user confirmation.

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No: Do not allow product labels to be printed.

Prompt: Display the calculated quantity of labels and allow the user to override the number of labels printed, as well as the case pack used for this layer.

**Format** – Type the name of the form to be used to print the product labels for this layer.

**Copies** – Type the number of copies of each product label that should be printed for this layer.

**Printer Name** – Select the printer to use when printing the product labels for this layer. The printer name must have been added previously using the Printer tab.

**Pkg. Code** – Select the package code that should be used with the item number to find the quantity per from the ASN bulk weight file when calculating the number of labels required.

### Inventory Tab
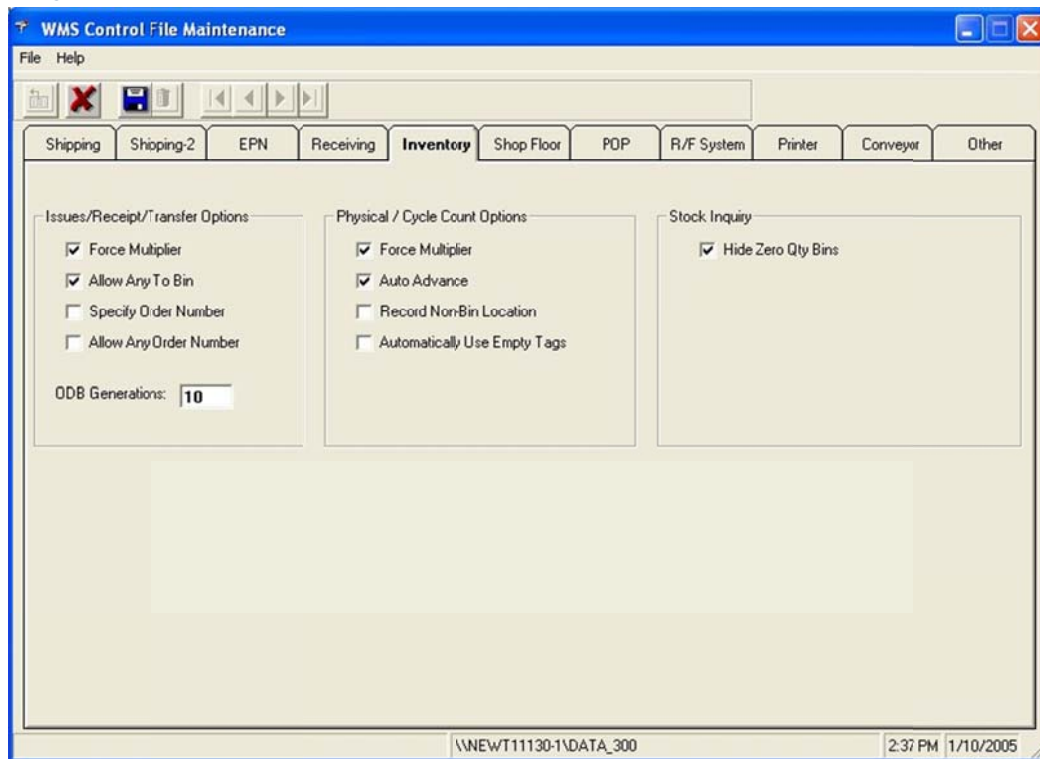


#### *Issues/Receipt/Transfer Options*

**Force Multiplier** – Select this check box if the user typically is required to specify a multiplier or quantity when processing inventory transactions. If this is selected, WMS will prompt for the multiplier before asking for the item number.

**Allow Any To Bin** – Select this check box if the bin number does not need to exist already when transferring or receiving product into the bin.

**Specify Order Number** – Select this check box if WMS should prompt for an order number while processing issues, receipts, and transfers.

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**Allow Any Order Number** – Select this check box if WMS should not validate the order against Progression Order Entry. If this check box is cleared, WMS will validate the order number and only allow issues, receipts, and transfers for items that appear on the order.

**ODB Generations** – This field specifies the number of copies of the inventory transaction ODB files to save for issue, receipt, and transfer transactions. Although rarely necessary, having a backup of these files can help track and resolve problems that occur when updating Progression from WMS. The maximum number of files that can be saved is 999.

### *Physical / Cycle Count Options*

**Force Multiplier** – Select this check box if the user typically is required to specify a multiplier or quantity when processing count tags. If this check box is selected, WMS will prompt for the multiplier before asking for the item number.

**Auto Advance** – Select this check box if the user typically will be making one entry per tag. WMS will automatically advance to the next tag once the current one is processed. This option is ignored for non-directed counting.

**Record Non-Bin Location** – Select this check box to require the user to enter a bin location, even for non-binned warehouses or items. This information will print on the reconciliation reports, which is useful in determining each item's location, but will not affect the posting.

**Automatically Use Empty Tags** – Select this check box for WMS to automatically use an empty tag when an item is scanned that was not included when the count was generated. If this check box is cleared, and empty tags are available, WMS will display a warning. The user will have to acknowledge the warning to use an empty tag.

### *Stock Inquiry*

**Hide Zero Quantity Bins** – Select this check box if the bin stock inquiry should default not to display zero quantity bins.

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**Shop Floor Tab**



**Receive to Staging Bin** – Select this check box to automatically receive orders to the staging bin by default.

**Prompt for Path** – Select this check box for WMS to prompt the user for the path number. If this check box is cleared, the system will force the path to **0000**.

**Display Department** – Select this check box for WMS to display the department number for the user.

**Override Department** – Select this check box to allow the user to enter a different department number.

**Display Work Center** – Select this check box to display the work center for the user.

**Override Work Center** – Select this check box to allow the user to enter a different work center.

**Display Labor Grade** – Select this check box for WMS to display the labor grade for the user.

**Override Labor Grade** – Select this check box to allow the user to enter a different labor grade.

**Over Production Message** – Choose a method for handling over production entries.

Hard – Prevents entering an amount that is over production.

Warn – Warns when entering an amount that is over production.

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**Check Preceding Operation Qty** – Checks the quantity of the previous operation to determine the quantity completed for its parent item.

> Hard – Prevents entering an amount that is over production.

> Soft – Warns when entering an amount that is over production.

> Ignore – Allows over production.

### *Issues*

**Force Multiplier** – Select this check box if users are typically required to enter a multiplier or quantity when entering issued quantities.

**Assume Remaining Qty** -- This is used in SFC when issuing binned, serial, or lotted components during a back flush. If selected, WMS defaults to issuing the full quantity remaining against the lot. If you clear this check box, the quantity defaults to **1** unless the user overrides it.

### *Receipts*

**Force Multiplier** – Select this check box if users are typically required to enter a multiplier or quantity when entering receipt quantity.

**Prompt for MFG Serial/Lot No** – Select this check box to have WMS prompt users for the manufacturer's serial or lot number.

**Prompt for Exp Date** – Select this check box to have WMS prompt users for an expiration date. The expiration date defaults to the current date plus the shelf life days from the item number. If the Item Master **Shelf Life Days** is zero, the default expiration is the current date plus fifteen years.

**Default Serial/Lot Mode** – Choose an option for the default serial/lot mode:

> Static/Numeric -- Displays the bin/serial/lot static number screen.

> Scan Full Number -- Displays the bin/serial/lot full scan mode screen.

WMS displays one of these screens if the operation is a Y count point and the parent item is a serial or lotted item, or if the parent item is binned and the **Receive to Staging Bin** check box is cleared.

**Auto Generate Serial Numbers** – Select this check box to keep the users in static numeric mode and prevent them from switching between scan numeric mode and full scan mode.

**Assume Remaining Qty** -- This is used in SFC when issuing binned, serial, or lotted components during a back flush. If selected, WMS defaults to issuing the full quantity remaining against the lot. If you clear this check box, the quantity defaults to **1** unless the user overrides it.

### *Material Issues and Returns*

**Over Issue Message** – Choose an option for handling over issues:

Warn -- Warns users when issuing an amount greater than what is required.

Hard -- Prevents users from issuing an amount greater than what is required.

**Force Multiplier** – Select this check box if users are typically required to enter a multiple or quantity when entering material issues and returns.

## POP Tab
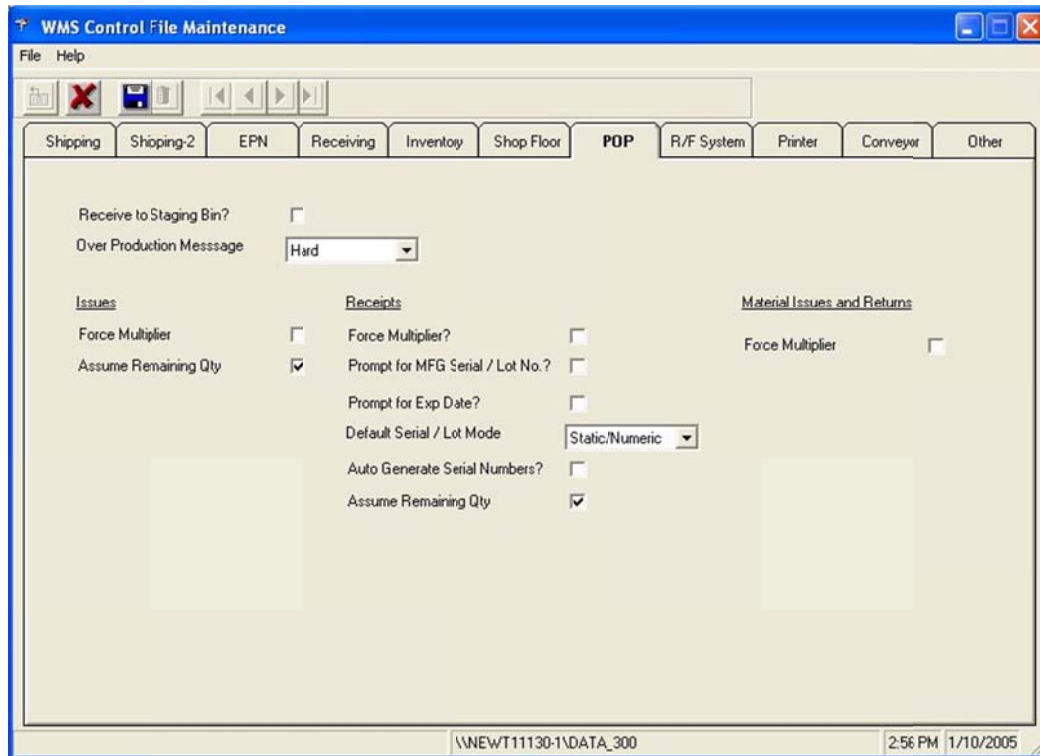


**Receive to Staging Bin** – Select this check box to automatically receive orders to the staging bin by default.

**Over Production Message** -- Choose an option for handling over production:

Warn -- Warns users when entering an amount over production.

Hard -- Prevents users from entering an amount over production.

### Issues

**Force Multiplier** – Select this check box if users are typically required to enter a multiplier or quantity when entering a receipt quantity.

**Assume Remaining Qty** -- This is used in POP when issuing binned, serial, or lotted components during a back flush. If selected, WMS defaults to issuing the full quantity remaining to issue against the lot, without a user needing to enter it. If you clear this check box, the quantity defaults to **1** unless the user overrides it.

### Receipts

**Force Multiplier** – Select this check box if users are typically required to enter a multiple or quantity when entering a receipt quantity.

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**Prompt for MFG Serial/Lot No** – Select this check box to have WMS prompt users to enter the manufacturer's serial or lot number.

**Prompt for Exp Date** – Select this check box to have WMS prompt users for an expiration date.

**Default Serial/Lot Mode** – Choose an option for the serial/lot mode:

Static/Numeric -- Displays the bin/serial/lot static number screen

Scan Full Number -- Displays the bin/serial/lot full scan mode screen

WMS displays one of these screens if the operation is a Y count point and the parent item is a serial or lotted item, or if the parent item is binned and the **Receive to Staging Bin** check box is cleared.

**Auto Generate Serial Numbers** – Select this check box to keep the users in static numeric mode and prevent them from switching between scan numeric mode and full scan mode.

**Assume Remaining Qty** – This is used in POP when issuing binned, serial, or lotted components during a back flush. If activated, WMS defaults to issuing the full quantity remaining to issue against the lot, without a user needing to enter it. If you clear this check box, the quantity defaults to **1** unless the user overrides it.

### *Material Issues and Returns*

**Force Multiplier** – Select this check box if users are typically required to enter a multiple or quantity when entering material issues and returns.

**R/F System Tab**
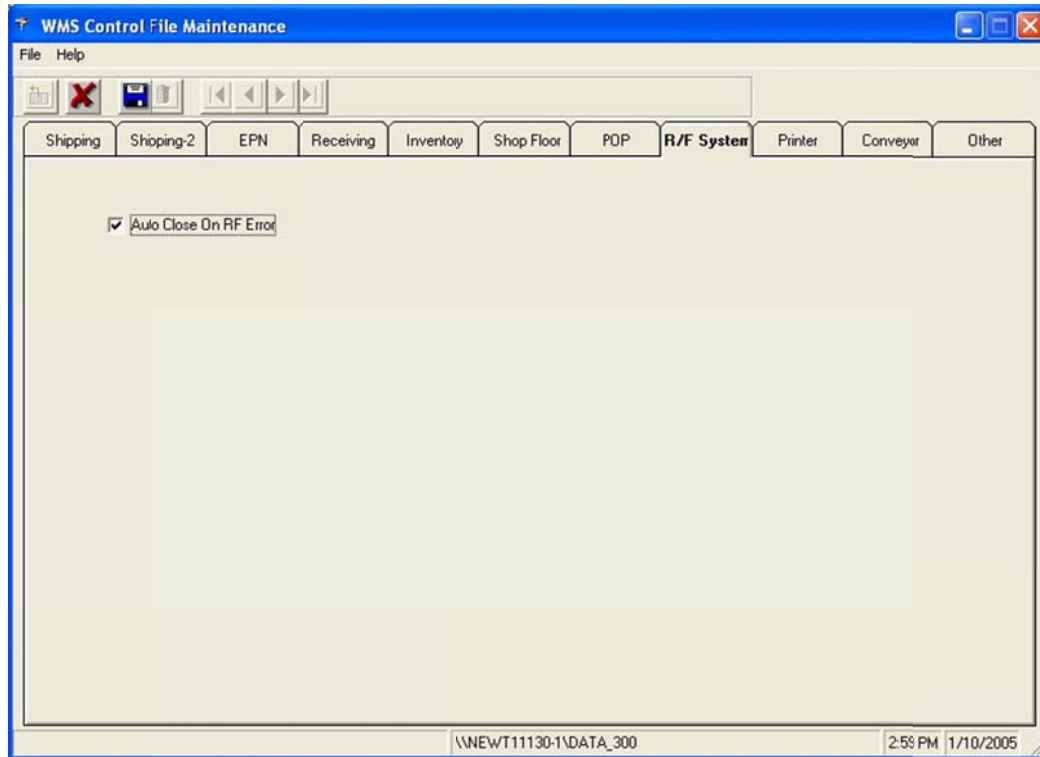


**Auto Close on RF Error** – Select this check box to allow the RF client to shut down automatically if an error occurs in the RF connection. If cleared, WMS will display an error on the RF server and the client will remain open until the message has been addressed.

The error occurs when an RF disconnect occurs between the RF server and the RF gun. The client, running as a session on the RF server, can no longer communicate with the RF gun, so the error cannot be displayed on the RF gun. The RF gun will reset and a new RF client created, regardless of the option specified here. Leaving old clients can slow down the RF server because they continue to use resources.

It is normally recommended that this check box be selected.

**Printer Tab**

The Printer tab defines logical printer names to be used throughout WMS. Each workstation can be configured for the actual printer to be used when this logical name is invoked.

**Note**: Currently this feature is supported for EPN stage pack reports, P/O scan sheets, P/O putaway tickets, and P/O product labels. The Shipping Reporting module does not use this feature at this time.

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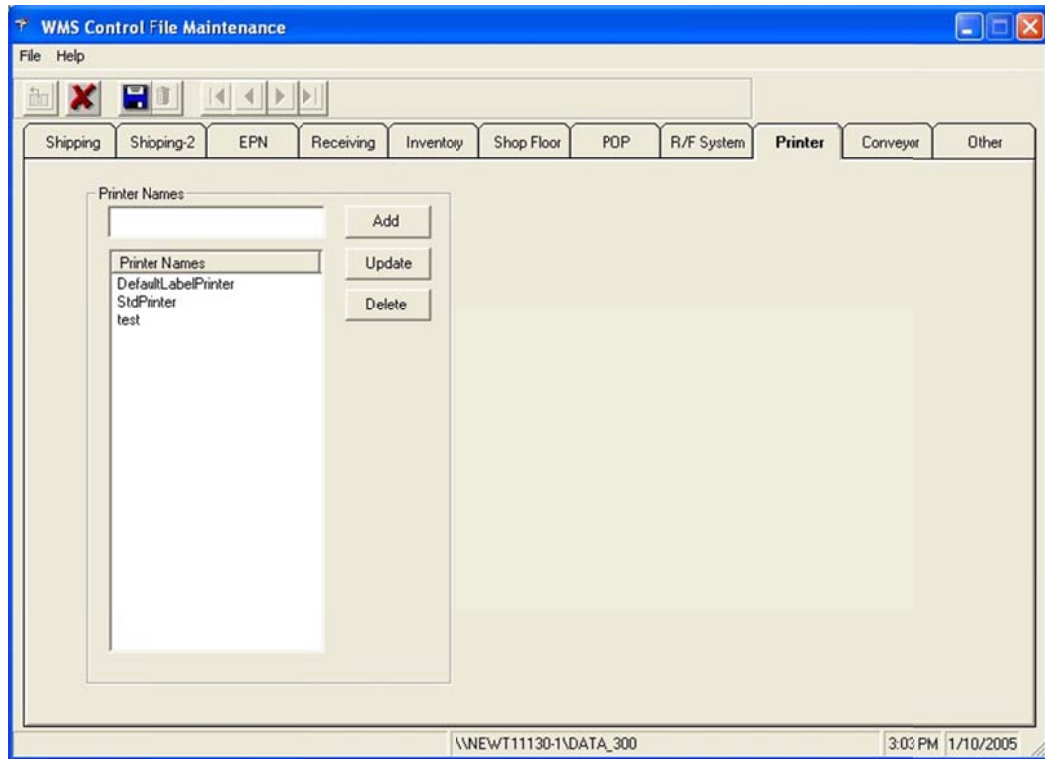
To add a logical printer name, type the name in the **Printer Names** field, and then click **Add**.

To delete a logical printer name, click the name in the **Printer Names** list to select it, and then click **Delete**.

To change an existing printer name, click the prefix in the list to select it. Type the new value in the field, and then click **Update**.

Use the Printer tab to establish different types of printers. For example, you could establish printers with the following names:

      4 x 6 Labels

      2 x 3 Labels

      8 x 11.5 White Stock

      Manifest Form 811

On each workstation, a workstation configuration entry would be made to direct each of these printers to the appropriate local or network printer. See **Workstation Configuration** for more information.

### Conveyor Tab

WMS Conveyor Support is designed for use when using stage pick and stage pack operations to pack standard cartons onto pallets. A separate conveyor management system must be used to control the automated conveyors.

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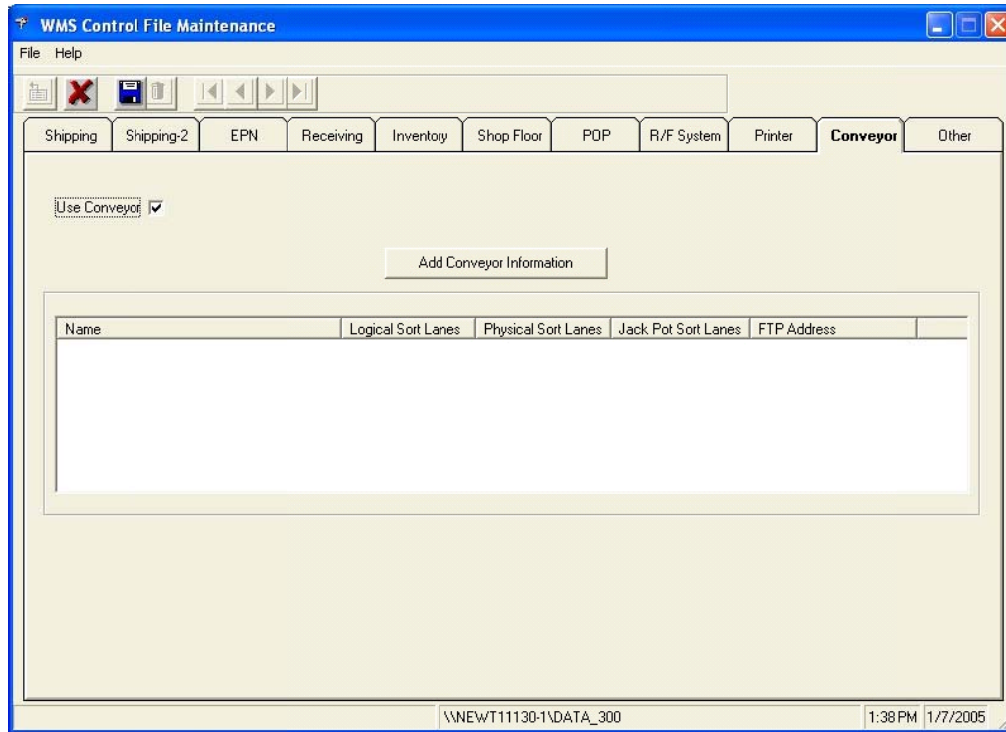
Select the **Use Conveyor** check box. The **Add Conveyor Information** button will then become active. Click the **Add Conveyor Information** button.

*General Tab*
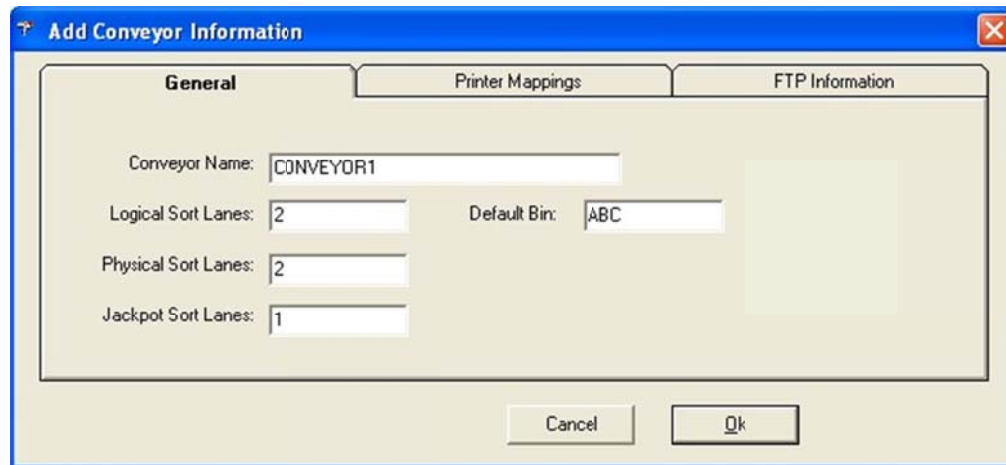


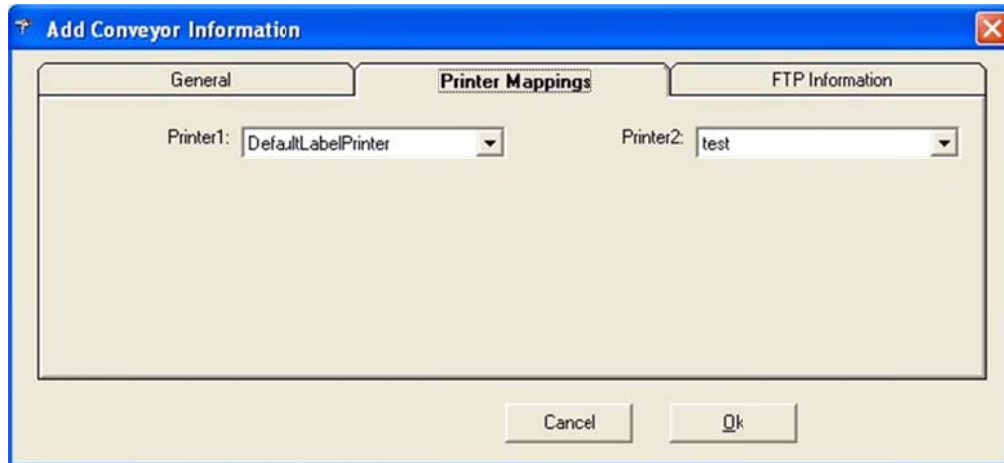**Conveyor Name** – Type the name of the conveyor.

**Logical Sort Lanes** – Type the number of logical sort lanes to be used by this conveyor. A logical lane is composed of two physical lanes. When the pallet being packed on the first physical lane is full, the conveyor management system will divert the order to the second one, and then continue alternating between the two as the order is packed.

**Default Bin** – Type the I/M bin to use as the default staging bin for this conveyor.

**Physical Sort Lanes** – Type the number of physical sort lanes to be used by this conveyor.

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**Jackpot Sort Lanes** – Type the number of jackpot sort lanes to be used for this conveyor. Packing exceptions due to errors, special processing, or weight and size exceptions are routed to a jackpot sort lane for packing.
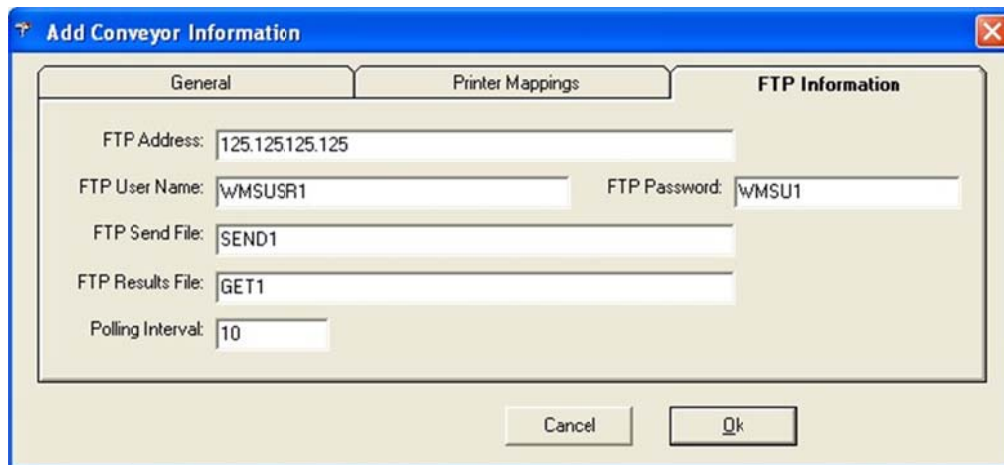
### *Printer Mappings*



A printer drop-down list box will be displayed for each physical sort lane defined in the General tab. Select a printer for each **Printer** field displayed.

### *FTP Information*



**FTP Address** – Type the IP address for the FTP server.

**FTP User Name** – Type a user name for FTP communications.

**FTP Password** – Type a password for FTP communications.

**FTP Send File** – Type the filename of the WMS conveyor wave definition file. This file is sent to the conveyor management program and contains the order packing information. The following special characters are supported for filenames:

> \* – Any value
>
> ? – Any one byte value
>
> %d – Date/time stamp in format yyyymmddhhmm

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**FTP Results File** – Type the filename of the wave results file sent from the conveyor management system to WMS. This information is used by WMS to create and pack pallets for the order. The following special characters are supported for filenames:
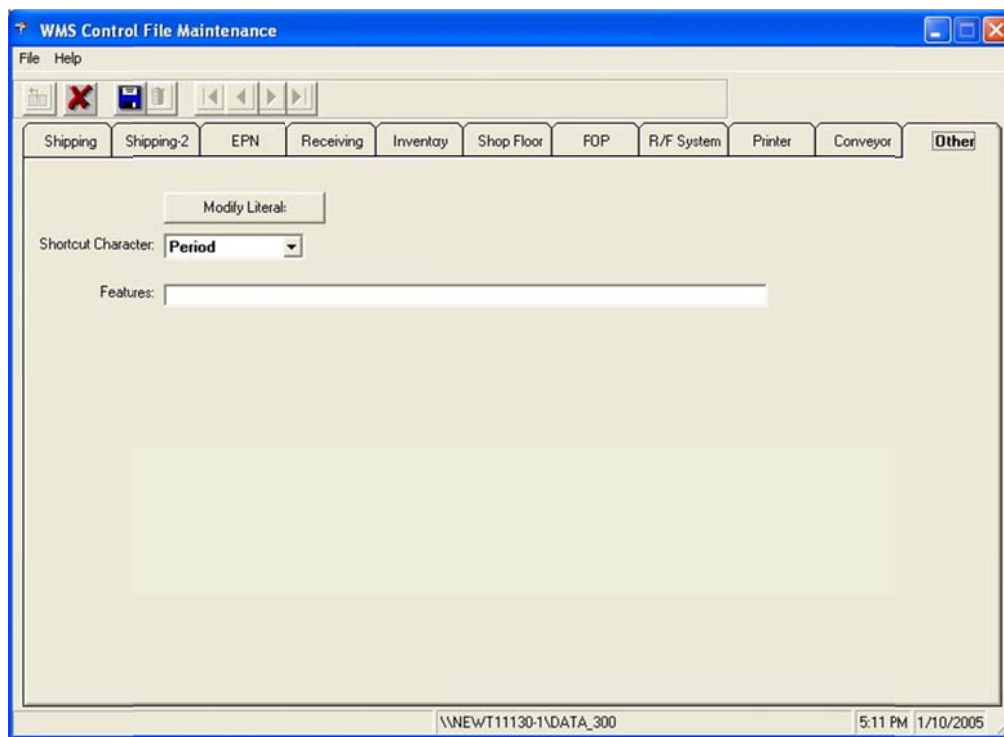
* – Any value

? – Any one byte value

%d – Date/time stamp in format yyyymmddhhmm

**Polling Interval** – Type a value, in seconds, for how frequently WMS should check for packing information from the conveyor system.

Click **OK** to save the conveyor information and return to the main Conveyor tab.
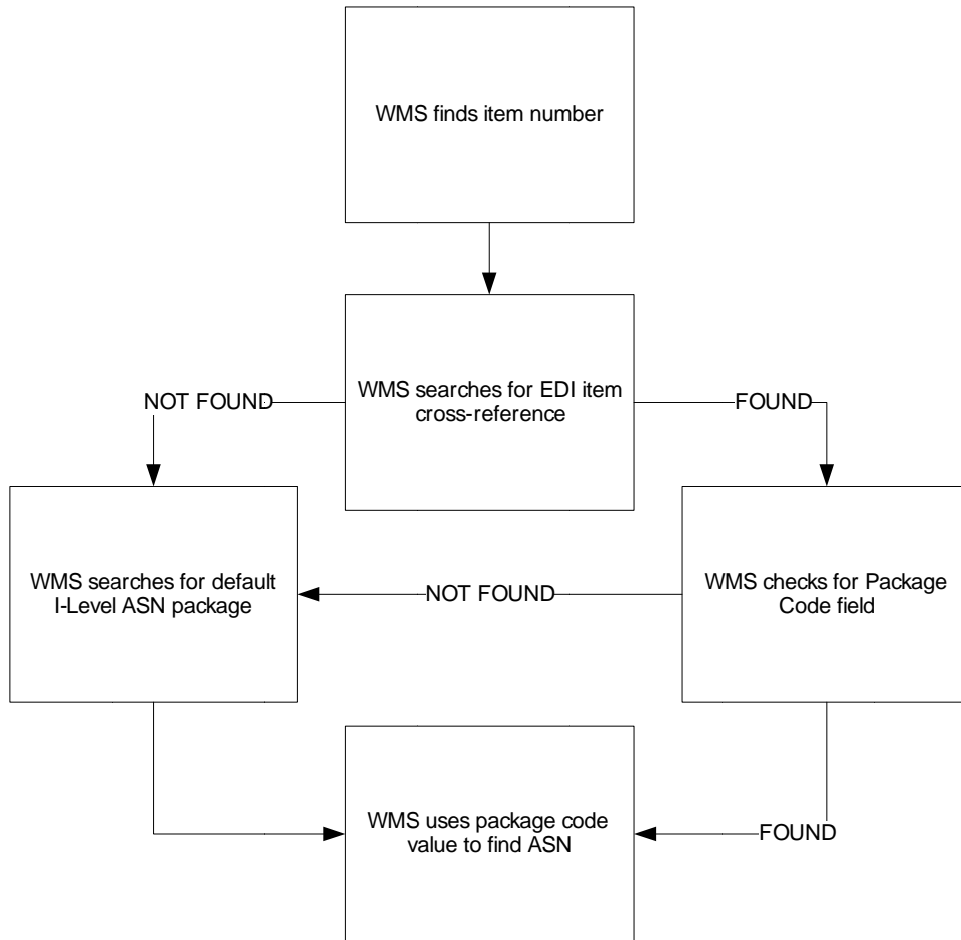
### Other Tab



**Modify Literals** – Click this button to change the labels for the fields on the Pack Shipments Page 5 and Page 6 tabs.

**Shortcut Character** – The shortcut character can be used when typing carton or pallet IDs to eliminate the need to type leading zeroes. For example, instead of typing 00000012, you can use the shortcut character and type only 0.12, which is translated into the full value. Select **Period**, **Comma**, or **Semicolon** from the **Shortcut Character** drop-down list box to change the shortcut character, or select **Disable** to disallow this feature.

**Features** – This field should be left blank unless instructed by support personnel to specify a value.

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## AutoPack Package Code and Bulk Weight Setup

If you are using AutoPack, WMS will automatically pack the items from the order into cartons based on definitions in the ASN Bulk Weight Cross-Reference file.

```
                    ┌─────────────────────┐
                    │  WMS finds item     │
                    │      number         │
                    └──────────┬──────────┘
                               │
                               ▼
                    ┌─────────────────────┐
     NOT FOUND──────│ WMS searches for    │──────FOUND
          │         │ EDI item            │         │
          │         │ cross-reference     │         │
          │         └─────────────────────┘         │
          ▼                                          ▼
┌─────────────────────┐              ┌─────────────────────┐
│ WMS searches for    │◄──NOT FOUND──│ WMS checks for      │
│ default I-Level ASN │              │ Package Code field  │
│ package             │              │                     │
└──────────┬──────────┘              └──────────┬──────────┘
           │         ┌─────────────────────┐    │
           │         │ WMS uses package    │    │
           └────────►│ code value to find  │◄───FOUND
                     │ ASN                 │
                     └─────────────────────┘
```

Using the item number from the O/E order, WMS searches for a Progression EDI Item Cross-Reference entry for this customer for this item. If a cross-reference exists, WMS checks for a value in the **Packaging Code** field. If a package code has been entered, WMS uses that value to find the ASN bulk weight cross-reference for the item.

If no EDI item cross-reference is found, or no package code has been specified in the cross-reference, WMS searches the ASN Package Code file for the default entry for the item. Using the package code specified in that default record, WMS finds the ASN bulk weight cross-reference for the item.

Once WMS has found the correct ASN bulk weight cross-reference for the item, it uses the quantity in the **Items Per Pack** field to pack the item into the correct number of cartons.

## ASN Package Code Cross-Reference Maintenance

The ASN Package Code file is used by the Warehouse Management System to establish carton types. If Progression's EDI ASN submodule is installed, Progression provides a function to maintain this table. However, the **Default Record** field is hidden on the

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Progression screen. If you have Progression's Screen Designer module, you can unhide the **Default Record** field and use the Progression provided maintenance. If you do not have Screen Designer, or you do not have the EDI ASN submodule, use the maintenance program supplied WMS.

The WMS version of this screen provides maintenance only for shipment and item level records (**Level Code** = **S** or **I**).

The ASN Package Code cross-reference maintenance menu is accessed from the Order Entry maintenance menu. The ASN Package Code file is used by WMS to establish carton types. The definition of the carton type depends on the level of the ASN for which it is used. At the shipment level, it is a generic definition of the class of packaging for the shipment. For instance, CTN25 is the EDI package code for a corrugated or solid carton. Similarly, PLT94 indicates a wooden pallet.



At the item level, this function is used to define the various box sizes for the products being shipped.

**Level Code** – This field has four selections: shipment, tare, pack, and item. Only shipment and item are currently used by WMS.

**Package Code** – This is a user-defined field. Its usage depends on the level code specified. For a shipment type, the package code is a generic definition of the class of packaging for the shipment. For instance, CTN25 is the EDI package code for a corrugated or solid carton. Similarly, PLT94 indicates a wooden pallet.

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At the item level, this field is used to define the various box sizes for the products being shipped. This code, in association with the ASN Bulk Weight cross-reference file, can indicate a variety of standard pack sizes for a specific item.

**Default Record** – Select this check box to indicate that this package code is the default package code for this level type. Activating this check box will not clear the check box any other record. If another record was previously selected as the default package code for this level type, that record must be edited and the **Default Record** check box cleared.

The default record is used by WMS in AutoPack mode to determine the standard case pack when calculating the number of labels to print for a specific item. Unless overridden for a customer-item combination by specifying a package code in an EDI item cross-reference, the default package code will be used to find the case pack in the ASN Bulk Weight file.

**EDI Package Code** – Type the EDI approved package code to be used by WMS when searching for an ASN Bulk Weight record for the item. This typically will be **CTN25** or **PLT94**.

**Item Volume UM** – This field is not used by WMS.

**Item Volume Length** – This field is not used by WMS.

**Item Volume Width** – This field is not used by WMS.

**Item Volume Height** – This field is not used by WMS.

**Item Volume** – This field is not used by WMS.

### ASN Bulk Weight Cross-Reference Maintenance

The ASN Bulk Weight file is used by the Warehouse Management System to establish a relationship between a package code and a case quantity for an item. How this is used depends on the WMS mode. In autopack mode, post pick ticket processing uses this file to determine the number of labels to generate. See **Appendix B EDI File Usage** for instructions on how to set up items for autopack. Otherwise, the Alternate Item Identifier is used when scanning to cross-reference various item identifiers to a Progression item number.

If Progression's EDI ASN submodule is installed, Progression provides a function to allow maintenance of this file. However, the Progression function does not allow maintenance of the **Alternate Item Qualifier** and **Alternate Item Number** fields. WMS supplies a new version of this screen which allows maintenance of the item level records only (**Level Code** = **I**) and allows entry in the alternate item fields.

The ASN Bulk Weight cross-reference maintenance menu is accessed from the Order Entry maintenance menu.

**Item Number** – Type a Progression item number. This must be a valid Progression item number.

**Package Code** – Type the carton type for this record. The package code must have been previously set up in the ASN Package Code file.

**Items Per Pack –** Type the quantity of stocking units associated with this item-carton combination.

**Pack Weight** – This field is not used by WMS.

**Packs Per Tare** – This field is not used by WMS.

**Tare Weight** – This field is not used by WMS.

**Alternate Item Number** – This field allows different codes to be cross-referenced to the Progression item number. Examples are UPC or UCC-14 codes.

The alternate item number may be preceded by **^CustomerNumber^** to assign a bar code to different items based on the customer number. While assigning the same bar code to multiple SKUs is not recommended, it is sometimes the most expedient way to handle special needs for a large customer. This should be done only if absolutely necessary.

**Note**: WMS will check for the customer number prefix only if the WMS control file Bulk Weight Customer Prefix Lookup check box is selected.

**Alternate Item Qualifier** – This field specifies the qualifier sent in the ASN for this carton-item combination. For example, when shipping pallets, an ASN would be created with a tare level and the trading partner would require a UCC-14, also known as the I 2 of 5, in the pack level. **UC** is the EDI standard definition for UCC-14. In addition, if the **Alternate ID Qualifier** field in the customer override file is populated, this field must

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match it. This allows WMS to force the user to enter a specific type of code when the bar code type is critical.

**Note**: If you are using phantom cartons, you must specify an alternate item qualifier if the WMS bulk weight cross-reference uses an alternate item number to define a value that represents a carton instead of an inner pack. Otherwise, WMS will not calculate the correct number of cartons for the bill of lading.

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# Chapter 5: WMS Setup – Shipping

## Customer Override File Maintenance

The customer override file overrides the WMS control file defaults for a specific customer. The Customer Override File Maintenance menu is accessed from the Order Entry Maintain menu. An entry in this file is only required if the default functions of the WMS need to be overridden for a customer. For example, a Customer Override File entry should be made to specify a unique label format for a customer.



**Customer Number** – Type the Progression customer number. This must be a valid customer number in Progression's A/R Customer file.

### Shipping Label Preferences

**Carton Label Format Name** – Type the name of the carton label format. The specified format will be used when printing carton level UCC-128 labels and specifically overrides, for this customer, the default UCC-128 carton format entry in the WMS control file. **\*NONE** is a reserved form name which indicates to generate the records, but not to print the label.

**Pallet Label Format Name** –

**UCC-128 Required?**

**Pack Pallets** – Select this check box to generate a UCC-128 label when attaching a product directly to a pallet in the pack pallets function. If selected, WMS will generate a

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new carton number and print the associated label for each item-multiplier entered. When cleared, WMS will generate a single phantom carton for each unique scan code, accumulating multiple quantities of the same code into the same phantom carton. Phantom cartons are typically used when shipping standard cartons on pallets. Standard cartons generally require UCC-14/I-205 bar codes, but do not require UCC-128 labels. The advantage is that the user will not have to label every carton, and the size of the ASN is also greatly reduced.

When **Autopack Cartons** is activated, this option controls whether the autopack function generates phantom cartons or regular cartons.

**Pack Shipments** – Select this check box to generate a UCC-128 Labels when attaching a product directly to a pallet in the pack shipments function. If selected, WMS will generate a new carton number and print the associated label for each item-multiplier entered. When cleared, WMS will generate a single phantom carton for each unique scan code, accumulating multiple quantities of the same code into the same phantom carton. Phantom cartons are rarely used when not using the pack pallets function, so this check box normally should be selected.

**Mixed Item Literal** – Type a value to be printed instead of the customer item number when a carton label is printed and more than one item exists in the carton.

**Pallet:**

**Label Format Name** – Type the name of the pallet label format. The format will be used when printing pallet level UCC-128 labels and specifically overrides, for this customer, the default UCC-128 pallet format entry in the WMS Control File. **\*NONE** is a reserved form name which indicates to generate the records, but not to print the label.

**UCC-128 Required?**

**Pack Pallets** – Select this check box if pallet processing is used for this customer.

**Mixed Item Literal** – Type a value to be printed instead of the customer item number when a pallet label is printed and more than one item exists on the pallet.

**Department –** Select **Use as Dept Qualifier** or **Use as Fixed Dept** from the drop-down list box. This controls how WMS processes the department value specified.

> Use as Dept Qualifier – The value specified will be used to search the EDI capture file to determine the department number from the inbound EDI purchase order.

> Use as Fixed Dept – The value specified is the department number. This can be used to speed up post pick ticket processing when the department number does not change.

**Distribution Center Qualifier** – This value specifies how to determine the distribution center for a given customer. Typically this value should be left blank. If blank, WMS uses the EDI Ship-To cross-reference and the A/R Alternate Address to find the distribution center. This is the recommended method. If a value is entered in the **Distribution**

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**Center Qualifier** field, WMS will attempt to find the distribution center in the EDI purchase order using the information provided in the **Start** and **Length** fields.

For detailed instructions on setting up distribution centers, see **Appendix A WMS & EDI Distribution Center Setup**. Distribution center processing requires the Progression EDI module.

**Distribution Center Start/Length** – These fields are only used if a distribution center qualifier is specified. The **Start** and **Length** fields then work together to extract the ship-to number from the fourth element of the N1 segment in the EDI purchase order. The N1 segment used is determined by the **Distribution Center Qualifier** field. The **Start** field indicates the position in the N104 data from which WMS will search for the ship-to number. WMS will then extract the information to the right of the starting position for the length of the value of the **Length** field. Distribution center processing requires the Progression EDI module.

### *Processing Preferences*

**Order Completion Mode** – This field determines when billing selection is done. This value overrides, for this customer, the WMS Control File default.

> **SAS Billing** – Indicates that WMS requires the user to close each order individually. Use this method to allow easier control when a single order is often split among multiple shipments within a billing cycle. The order is selected only after the last shipment for that order is processed for the day. This prevents accidentally selecting the order partially when the user selects the update Progression process.

> **Pack Shipments** – Indicates that an order should be completed when a shipment that it is attached to is completed. Use this method to simplify order processing. Each order is flagged for selection when the shipment is completed, eliminating the need to process each order again in the WMS billing function. The selection information will be passed to Progression when the user runs the Update Progression function.

> **Pack Verify Cartons** – Indicates that an order should be treated as a unique shipment. When the order is completed the order will automatically be attached to a shipment, and will automatically be completed. This mode is typically used for customers that send individual orders that are each shipped to different locations or at different times.

**Alt Identifier Code** – If provided, the alternate identifier code indicates that a specific type of bar code is required. For example, if you were shipping pallets, you would have to send an ASN with a tare level and the trading partner would require a UCC-14 in the pack level. By typing **UC** in the **Alternate Identifier Code** field, only those records in the ASN Bulk Weight file with the **Alternate ID Qualifier** field set to **UC** can be used within WMS.

**Auto Pack Cartons?** – This check box allows UCC-128 labels to be generated automatically based on standard case quantities and the quantity ordered. This setting

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overrides, for this customer, the WMS control file default. When using autopack, the pack cartons function is unnecessary. See **ASN Bulk Weight File Maintenance** for instructions on setting up standard case quantities. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

**One Carton per Order?** – This check box can be used to force WMS to create a single carton for orders that are being packed using the autopack function. When selected, AutoPack will create a single carton and then pack all items on an order into that single carton. This option is disabled if the **Auto Pack Cartons** check box is cleared.

### *ASN Preferences*

**Send 856 Ship Level** – This check box must be selected to create the ASN shipment level record. This check box normally should be selected. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

**Send 856 Order Level** – This check box must be selected to create the ASN order level record. This check box normally should be selected. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

**Send 856 Tare Level** – This check box must be selected to create the ASN tare (pallet) level record. This check box normally should be selected. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

**Send 856 Pack Level** – This check box must be selected to create the ASN pack (carton) level record. This check box normally should be selected. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

**Send 856 Item Level** – This check box must be selected to create the ASN item level record. This check box normally should be selected. This field is ignored if the WMS EDI ASN Data Collection module is not installed.

### Label Setup

### Configuring WMS to Use BarTender

BarTender creates formats that have a .btw extension. These formats are used by BarTender and must reside in a directory that is configured in the active WMS INI file.

Any workstation or RF server used to print shipping labels, product labels, or putaway labels must have BarTender version 6.20 or higher installed. BarTender should be installed before proceeding with the following steps.

These steps must be done for each workstation.

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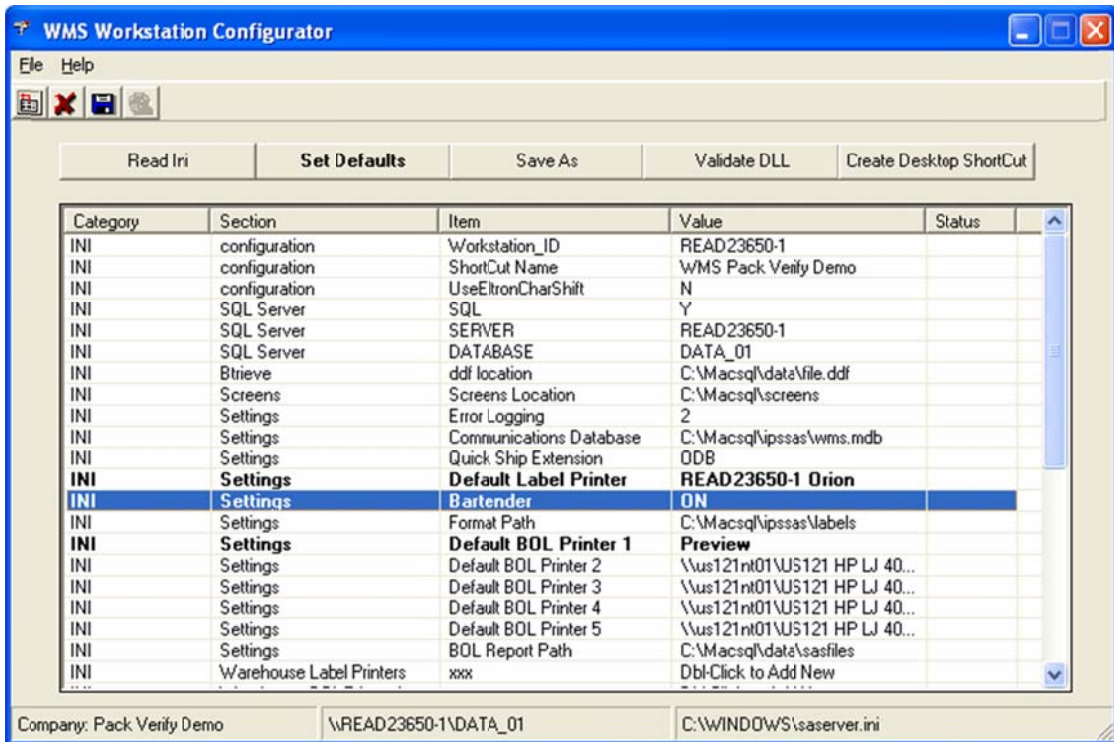
In the WMS Workstation Configurator, double-click the **BarTender** entry.
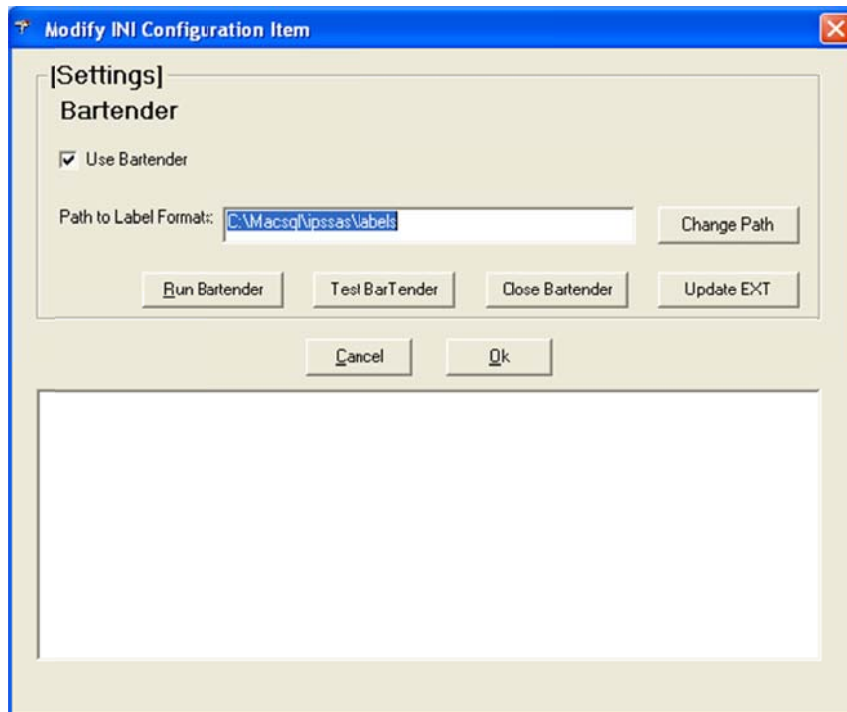


If not already done, select the **Use BarTender** check box. Verify that the path is the directory where the BarTender label formats are stored.

Confirm that BarTender is installed correctly by clicking the **Run BarTender** button, followed by the **Test BarTender** button, and then the **Close BarTender** button. If

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correctly installed, BarTender should load and print a label to the default label printer specified in the Workstation Configurator.

Click the **Update EXT** button, and then click **OK**. Click the **Save** button on the main WMS Workstation Configurator screen to save the settings.

The Workstation Configurator will have made the following entries into the INI file as well as the EXTs associated with post pick ticket processing.

SASERVER.INI settings:

[Settings]

Bartender=ON

Format Path=<Full path to label formats>


VB01602a.ext, VB01602b.ext  VB01602c.ext

/ON /PATH <Full path to label formats>

## Printing Shipping Labels without BarTender

WMS historically has been able to print shipping labels directly to Eltron EPL2 printers. Eltron was purchased by Zebra, and Zebra continues to manufacture a number of EPL2 printers from the Eltron product line. WMS can still print to these printers directly when printing shipping labels.

The direct Eltron or EPL2 printing capability has limitations, however. BarTender formats can have embedded VB scripting within the label format definition. This has proven necessary as customers have put more and more complex demands on their vendors. Some of the newer label formats are simply beyond the capabilities of the EPL2 language. Therefore, although WMS continues to support EPL2 printing to protect users with a large library of EPL2 label formats, all new users should use the BarTender format system.

EPL2 printing does not support content labels, product labels or putaway tags.

A standard customer label is 4 x 6 inches. The EPL2 printer must be configured with a minimum of 256k memory to print these labels properly.

The form definitions, which are stored on the printer, are created using the CALTOOLS software available from Zebra. CALTOOLS creates label formats that have a .ejf extension.

The WMS installation will create a directory named Labels under the IPSSAS directory in the Progression directory. The standard label formats will be installed; however, additional formats may have been supplied on a disk labeled Trading Partner Label Formats. These additional formats also need to be copied to the IPSSAS Labels directory. To initialize a Zebra EPL2 Printer with these formats, these files must be printed to the printer using the following command:

Copy A:\labels\*.ejf LPTx (where x is the port to which the printer is attached)

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A batch file has been supplied to simplify the process of initializing the printer. To run this batch file, type **X:\MACOLA70\IPSSAS\Labels\PRTSETUP** at a command prompt, where X is the Progression drive and MACOLA70 is the Progression root directory. Then press **Enter**.

Do not use the **Initialize Printer** button in External Label File Maintenance Utilities to initialize Eltron printers.

## External Label File Maintenance

The External Label File Maintenance program allows the user to define the shipping label formats to be used by WMS.

The labels themselves are formatted using BarTender from Seagull Scientific. BarTender supports most thermal printers, and new printers are added constantly. To determine which printers are supported, please visit Seagull Scientific's web site at www.seagullscientific.com, or contact an authorized WMS reseller.

External label file maintenance is used to define the label format names and to instruct WMS about the variable fields in the label that need to be updated during printing. For every label format, there will be a label format and an External Label File Maintenance entry.

The External Label File Maintenance function can be accessed from the Order Entry, Purchase Order Processing, and System Manager maintenance menus.

**Appendix E. External Label Field List** contains a complete list of fields available to print on customer labels.

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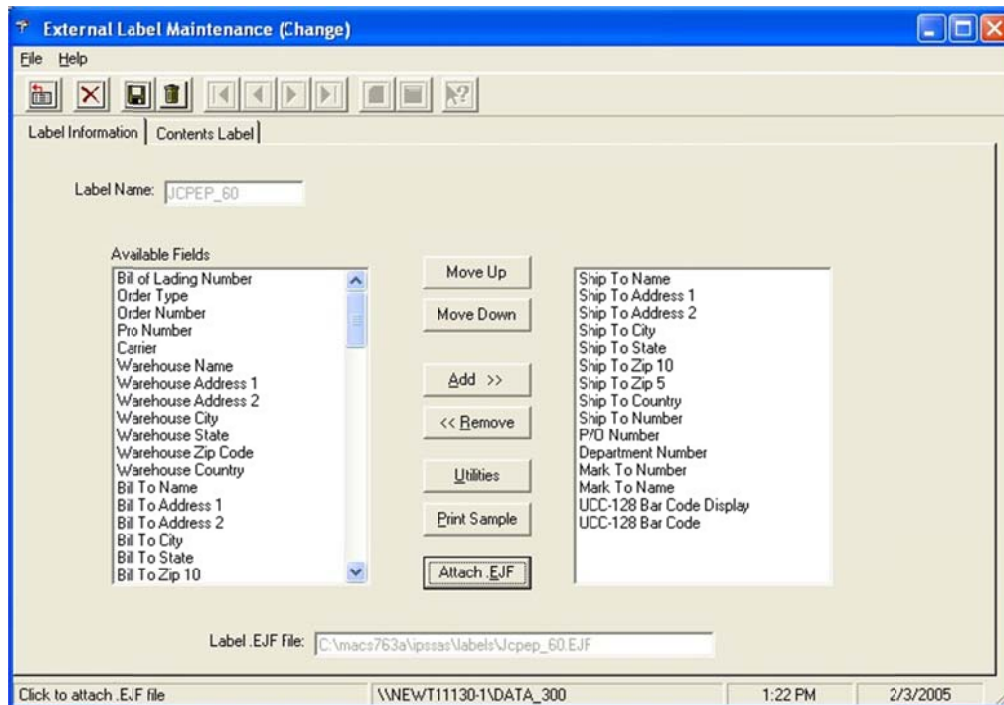
*Label Information*

**Move Up** – Click this button to move the selected field in the **Used Fields** list box up one line in the list.

**Move Down** – Click this button to move the selected field in the **Used Fields** list box down one line in the list.

**Add >>** – Click this button to move the selected field from the **Available Fields** list box to the bottom of the **Used Fields** list. Double-clicking an entry in the **Available Fields** list box will also move it to the **Used Fields** list box.

**<< Remove** – Click this button to move the selected field from the **Used Fields** list box to the bottom of the **Available Fields** list. Double-clicking an entry in the **Used Fields** list box will also move it to the bottom of the **Available Fields** list box.

**Utilities** – Click this button to access a utility screen for Eltron printers. This function applies only to Eltron printers. Development of this function is in progress at this time and will be documented later. This function will ultimately replace the PRTSETUP batch file currently used to initialize Eltron printers. This function should not be used at this time to initialize Eltron printers.

**Print Sample** – Click this button to print a sample of the current label. This function only applies to Eltron printers at this time. The Eltron label format must have been stored on the printer previously.

**Attach .EJF –** Click this button to store an Eltron format in WMS. This feature ultimately will be used within the utilities function to allow initialization of the Eltron printer from within External Label File Maintenance. At this time, most installations use the supplied batch file to initialize Eltron printers. It is not necessary to attach the Eltron format when initialization is handled via the batch file. This function does not apply to BarTender users.

**Note**: When the format is saved, if an .ejf file has not been attached, WMS will issue a warning message. This should be ignored by BarTender users, and may be ignored by sites using the PRTSETUP batch file to initialize Eltron printers.

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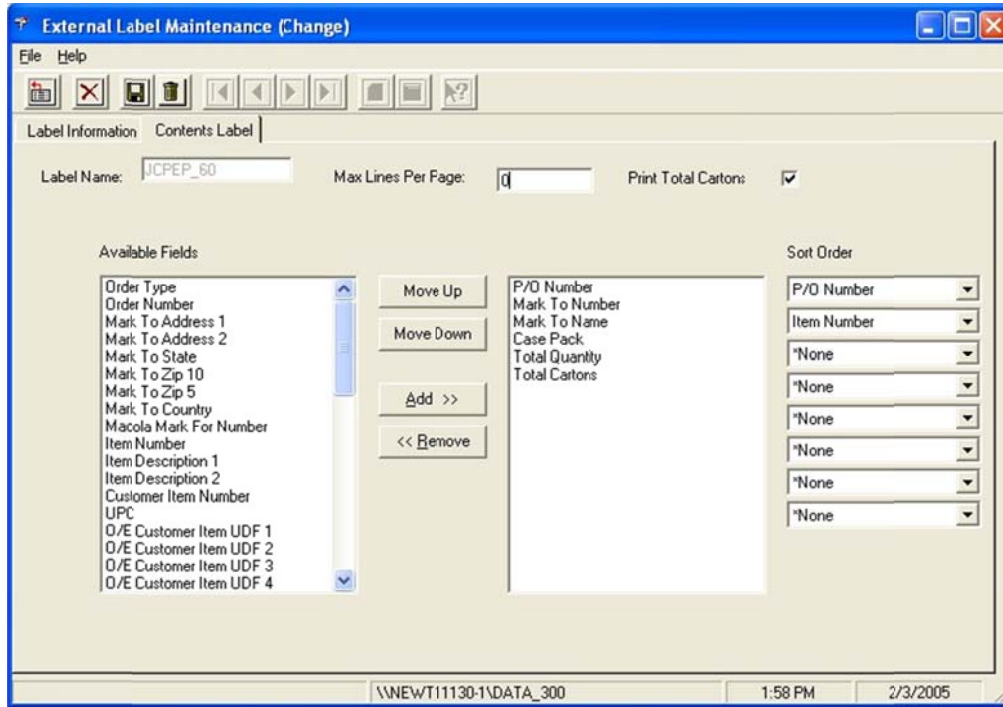
### Contents Label

Use the Contents Label tab to set up shipping labels that require information on the contents of a carton or pallet to be printed.

**Note**: This is supported only for BarTender label formats.

**Label —** The name of the label. This field is automatically set to the label name from the Label Information tab, and is a display only field on the Contents Label tab.

**Max Lines Per Page —** The maximum number of lines per page.

**Print Total Cartons —** Select this check box to have the total number of cartons listed on this label printed on the shipping label.

**Move Up** – Click this button to move the selected field in the **Used Fields** list box up one line in the list.

**Move Down** – Click this button to move the selected field in the **Used Fields** list box down one line in the list.

**Add >>** – Click this button to move the selected field from the **Available Fields** list box to the bottom of the **Used Fields** list. Double-clicking an entry in the **Available Fields** list box will also move it to the **Used Fields** list box.

**<< Remove** – Click this button to move the selected field from the **Used Fields** list box to the bottom of the **Available Fields** list. Double-clicking an entry in the **Used Fields** list box will also move it to the bottom of the **Available Fields** list box.

**Sort Order** – Use the drop-down list boxes to specify sort orders. This groups the information for the label. Summary totals are printed for the lowest grouping level only.

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## BOL Type File Maintenance

Bill of lading types group items into specific freight classifications and allow a specific description for the group which can be used in the commodity description section of the bill of lading. At least one entry for the default BOL type **DFLT** should be created. The special BOL type **DFLT** is used as the default when no other type is specified in Item Master.



**BOL Type** – This field is used in the Item Master to classify the item as well as group items together with a specific description that will print in the commodity description section of the bill of lading. More than one bill of lading type may be created for a specific freight classification, each with a unique description. BOL type **DFLT** is used when no other type is specified.

**Description** – The **Description** field appears on the bill of lading in the commodity description area. Generally, this should be a generic description of the articles or packages being shipped.

**Class Code** – The class code represents the freight class code used to determine the class of items being shipped.

**NMFC #** – National Motor Freight Classification Item Number. The NMFC number is assigned by commodity type and is used by LTL carriers to determine the level of rates for a shipment.

**User Defined 1 - 5** – Use these fields to store user defined values that need to be related to the bill of lading type.

**Hazardous Materials Flag** – Set this field based on the type of items being shipped. If the hazardous material flag is set to **Y**, an emergency response number can be specified.

**Emergency Response Group #** – Type the emergency response group number for hazardous materials.

### Ship Via Reports File Maintenance

The WMS uses the Ship Via Reports file to indicate which forms to print for a specific carrier. With this function, the user can specify up to five Crystal Reports or Visual Basic programs to be executed when a shipment is completed for this customer and carrier. In addition, a printer number is assigned to the report so a series of printers with the correct forms can be set up, eliminating the need for the user to select a printer for each report. The Ship Via Reports File Maintenance menu is accessed from the Order Entry Maintain menu.

Users familiar with Crystal Reports can create their own custom Crystal Reports to generate packing slips, manifests, etc. Users can also contact an authorized WMS reseller to purchase custom reports.

The following pre-defined reports are supplied with the WMS Reporting module:

> BOL_STND.rpt – A Crystal Report designed to work with the Progression standard bill of lading form (Form Number FP728, FC728 or FK728). This report calculates based on cartons.

> BOL_TARE.rpt – A Crystal Report designed to work with Progression's standard bill of lading form (Form Number FP728, FC728 or FK728 available from the Progression Forms Department). This report calculates based on pallets.

> VBI224P.EXE – A Visual Basic pre-process program used to print a VICS compliant bill of lading. Two versions of the VICS compliant report have been provided. BOL_VICS.rpt is the standard VICS bill of lading. BOL_WALM.rpt is the Wal-Mart variation of the VICS standard. These reports were designed to print on an HP Laserjet on plain paper. These reports support both pallets and cartons.

See **Appendix G – Bill of Lading Settings** for information about configuring each of these reports.

**Customer Number** – Type the customer number for the report. This field may be left blank to specify a default for this carrier. A default entry should be created for each carrier and only those customers that need to be handled differently should have an individual ship via reports file entry.

**Ship Via Code** – Type the ship via code that requires reports to print at shipment completion.

**SCAC Code** – Type the Standard Carrier Alpha Code (SCAC) for this carrier. Contact the carrier or the National Motor Freight Association at 2200 Mill Road, Alexandria, VA 22314-4654 for the code for the carrier.

**Report Name (1 – 5)** – Type the Crystal Report or Visual Basic report name for this ship via code.

**Type (1-5)** – Choose **V=Visual Basic** if the report is a VB program or **C=Crystal Rpt** if it is a Crystal Report.
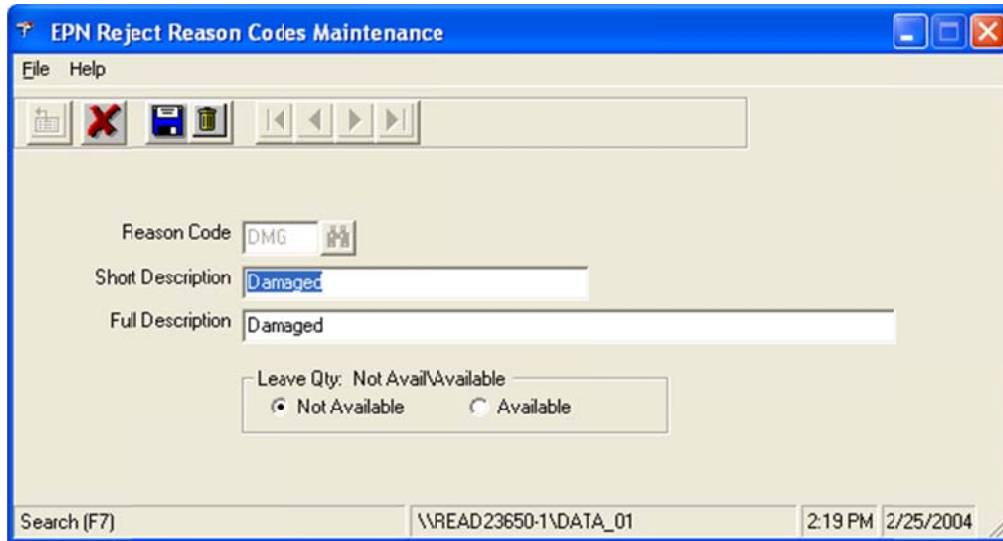
**Parameters – Visual Basic Only (1-5)** – Specify parameters to control a Visual Basic application launched by the Bill of Lading module. The field is disabled if the report type is **C=Crystal Rpt**.

**Printer (1 – 5)** – Specify the printer for the report. The actual printer and path for this code are specified in the WMS INI file. See **Appendix F WMS INI Settings** for information about configuring bill of lading printers.

**Copies (1 – 5)** – Type the number of copies (1 – 9) to print of the report.

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## EPN Reject Reason Code File Maintenance

Reject reasons are used by electronic pick management to specify the reason that a recommendation has been rejected by a user. Codes can be used to track the reasons for picking product other than what was recommended. This allows analysis to avoid such issues in the future.



**Reason Code** – Type a three character code to identify the reject reason.

**Short Description** – Type a short description, which can be displayed on an RF device.

**Full Description** – Type a longer description, which can be used in reports and standard workstation inquiries.

**Leave Qty: Not Avail\Available** – Select the appropriate selection for whether the quantity that has been rejected remains available for other orders or should be placed on hold so no other order can reserve this quantity until it has been reviewed by management.

## Item Master File Maintenance

WMS can use any of the five user defined fields or user notes fields in the Item Master File to identify an item's bill of lading type or that an item is to be tracked as externally serialized.

If Progression Screen Designer is installed, the UDFs can be placed on the screen and labeled accordingly. If Screen Designer is not installed so screen changes cannot be made, the user notes fields can be used instead. The literal associated with a user note can be changed on page four of the I/M setup.

### External Serial Number Field

The Item Master file can also be used to specify that an item is externally serialized. WMS can use any of the five user defined fields or five user notes fields to store this information. Type **Y** in the user defined field or user note specified in the WMS control

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file. Typing a value other than **Y** in the first position of the specified field will cause WMS to treat the item as not externally serialized.

### Bill of Lading Type Field

Use the Progression Item Master to classify items by freight classification code. The WMS control file **Item Master Bill of Lading Type** field specifies which field in the Item Master contains the bill of lading type code for the item. The bill of lading type defines a specific classification code, description, and hazardous material status.
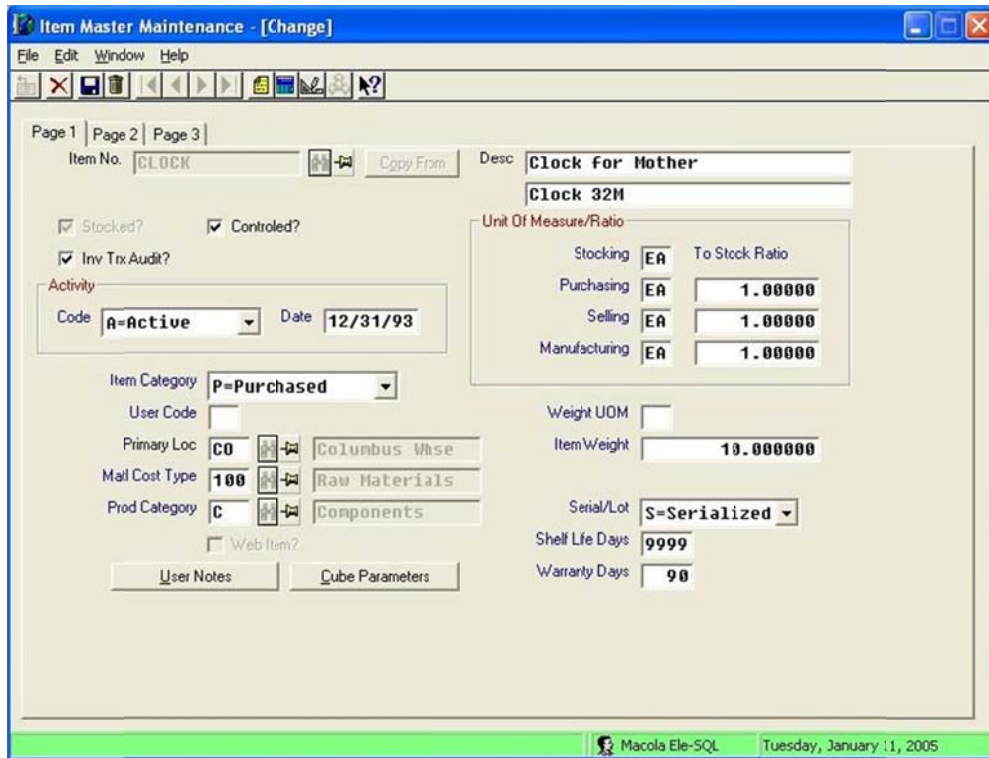


In Item Master Maintenance, click the **User Notes** button to access the five user notes fields.
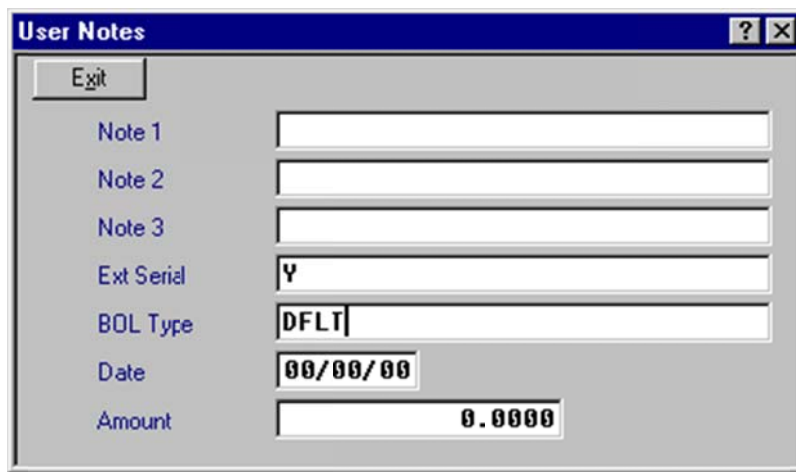


If the bill of lading type field is left blank, WMS will assume the code is **DFLT**. This eliminates the need to enter the BOL type in each Item Master record if most items have

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the same type. WMS will classify all items as **DFLT** if the WMS control file **Item Master Bill of Lading Type Field** is set to **XX = Not Defined**.

This field is not validated by Progression, so if the bill of lading type specified does not exist in the bill of lading type file, WMS will not properly classify the item on a bill of lading.

### Inventory Item Location File Maintenance

WMS can use any of the five user defined fields in the inventory item location file to specify a sort sequence other than order entry or pick sequence when printing autopack labels. The user defined field to be used must be specified in the WMS control file.

This feature requires Progression Screen Designer.

A field can be placed on the I/M Item Location screen and labeled accordingly. The labels generated by AutoPack will be sorted by the value specified in that field.

### Alternate Address File Maintenance

WMS can use any of the five user defined fields in the A/R Alternate Address file to override the order completion mode and the autopack status for a ship to address. The user defined field to be used must be specified in the WMS control file.

This feature requires Progression Screen Designer.

A field can be placed on the A/R Alternate Address screen and labeled accordingly. Acceptable values for the field are:

>       VN = Pack Verify Mode, AutoPack Off
>
>       SN = Pack Shipments Mode, AutoPack Off
>
>       SY = Pack Shipments Mode, AutoPack On
>
>       BN = WMS Billing Mode, AutoPack Off
>
>       BY = WMS Billing Mode, AutoPack On

**Note**: If any other value is used, it will be ignored and the default value used.

### Order Entry Header File Entry

WMS can use any of the five user defined fields in the O/E order header file to override the carton or pallet label used when printing. The user defined field must be specified in the WMS control file.

This feature requires Progression Screen Designer.

These fields can be unhidden on the O/E order header screen and labeled accordingly. WMS will use the form name specified in these fields instead of the values specified in the customer override file or the default label specified in the WMS control file. If the field is left blank, WMS will revert to the default name.

# Chapter 6: WMS Setup – P/O Receiving

## Vendor Override File Maintenance

The Vendor Override file overrides the system defaults for vendor specific information.



## Vendor Bar Code Setup

**Bar Code Format** – Select this check box if the vendor supplies a multi-segment, vendor specific bar code on products.

**Fixed Length?** – Select this check box if the vendor specific bar code is a fixed length. This is used to help validate that the bar code scanned is in fact the vendor specific bar code.

**Length** – Type the fixed length value for the length of the vendor specific bar code.

**Identifier** – Type the identifier code embedded in the bar code sent by the vendor, if one exists.

## Scan Sheet Setup

**Print** – Use this field to override the setting in the WMS control file to indicate whether a receiving document is typically needed for this vendor. Select **Yes**, **No**, or **Sometimes**. The receiving document is useful when products typically are not received with bar codes. The receiving document will print with a bar code for each item on the PO to allow the user to scan the item ID instead of having to type it.

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**Format** – Type the name of the Crystal Report or VB program which will be used to print the receiver when one is required.

**Type** – Indicate whether the receiver program is written in Crystal or Visual Basic.

**Copies** – Type the number of copies of the receiver that WMS should print.

**Printer Number** – Type the printer number that the report should print on. The printer number specifies a printer named in the local INI file as a BOL reports printer.



*Sample Scan Sheet Report*

### Product Label Setup

The receiving function can automatically generate product labels for up to four levels: unit, inner, case and pallet. The product label setup section of the WMS control file defines the default calculations for each layer. These can be overridden in the vendor override file for a vendor or in the vendor item override file for a specific vendor item.

For each layer, the user specifies the label format, whether it is printed, how many copies, which printer to use, and a default package code to use in conjunction with the bulk weight file when calculating the number of labels required. Click a layer to change its settings.



*Sample Product Label*

**Label Type** – Shows which layer is being changed. This field set by the system when the user selects an entry to modify.

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**Print (Y/N)** – Select **Yes**, **No**, or **Prompt** from the drop-down list box to indicate whether product labels should be printed when product is received.

> Yes: Print automatically without waiting for user confirmation.

> No: Do not allow product labels to be printed.

> Prompt: Display the calculated quantity of labels and allow the user to override the number of labels printed, as well as the case pack used for this layer.

**Format** – Type the form name to be used to print the product labels for this layer.

**Copies** – Type the number of copies of each product label that should be printed for this layer.

**Printer Name** – Select the printer to use when printing the product labels for this layer. The printer names must have been added using the Printer tab.

**Pkg. Code** – Select the package code to be used with the item number to find the quantity per from the ASN Bulk Weight file when calculating the number of labels required.

## Vendor Bar Code File Maintenance

The Vendor Bar Code file allows multi-segmented vendor specific bar codes to be defined. This file defines how to break down the vendor bar code segments. The Vendor Override file indicates when a vendor bar code is in use.

Click the **Add Barcode Segment** button to add a new bar code segment definition. Double-click an existing entry to edit its settings.

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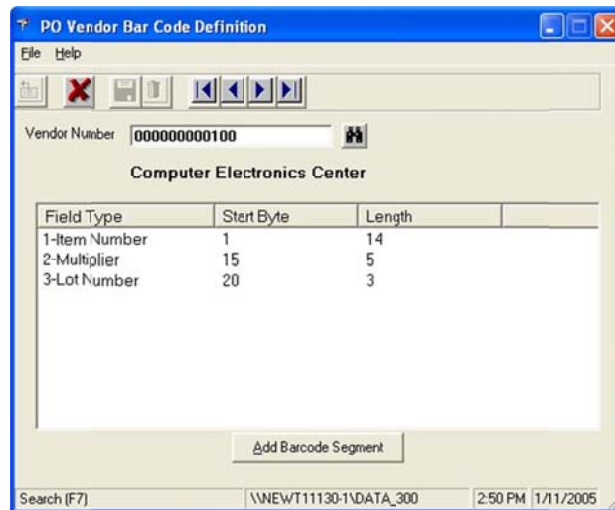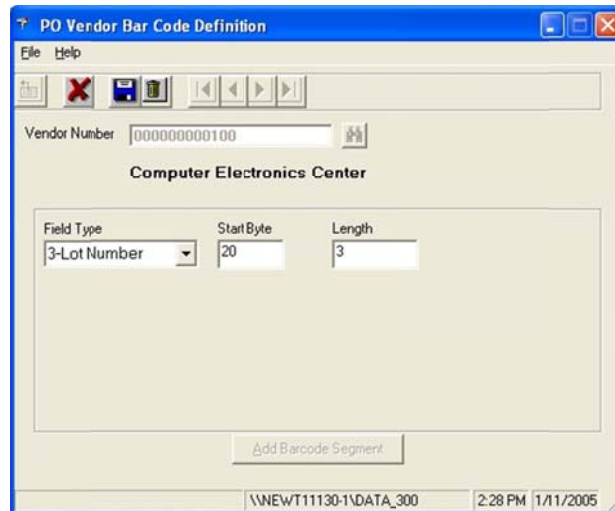
**Field Type** – Select the type of data found in this segment from the drop-down list box.

**Start Byte** – Type the starting position in the bar code for this segment. This is automatically set to the next byte position, based on the segment definitions already entered.

**Length** – Type the number of bytes that this segment contains.

## Vendor Item Override File Maintenance

The receiving function can automatically generate product labels for up to four levels: unit, inner, case and pallet. The product label setup section of the WMS control file defines the default calculations for each layer. These can be overridden in the vendor override file for a vendor or in the vendor item override file for a specific vendor item.

For each layer, the user specifies the label format, whether it is printed, how many copies, which printer to use, and a default package code to use in conjunction with the bulk weight file when calculating the number of labels required. Click a layer in the list to change its settings.



*Sample Product Label*

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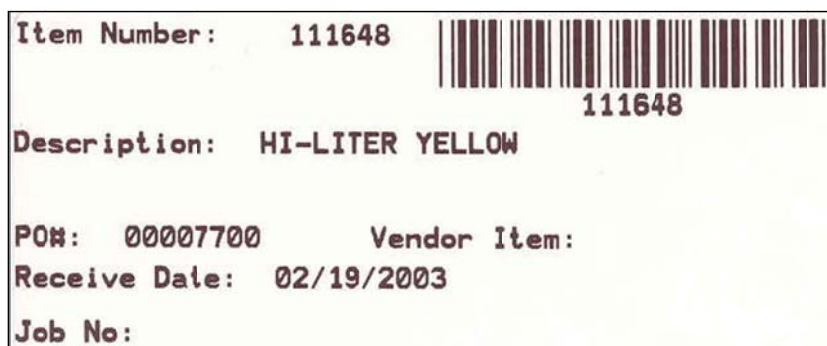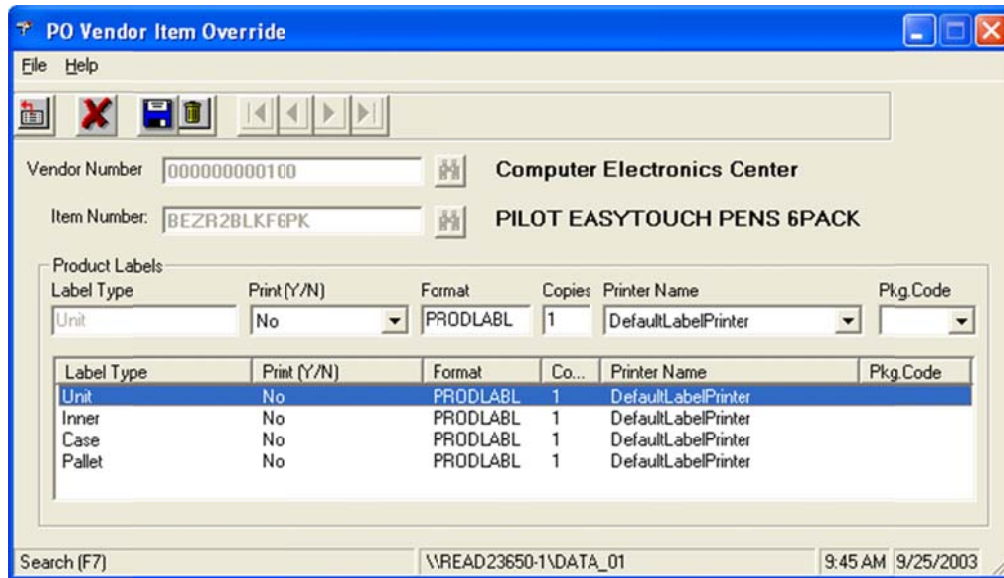
**Vendor Number** – Type the vendor number.

**Item Number** – Type the Progression item number requiring an override record. This is not the vendor's item number.

**Label Type** – Shows which layer is being changed. This field is set by the system when the user selects an entry to modify.

**Print (Y/N)** – Select **Yes**, **No**, or **Prompt** from the drop-down list box to indicate whether product labels should be printed when product is received.

> Yes: Print automatically without waiting for user confirmation.

> No: Do not allow product labels to be printed.

> Prompt: Display the calculated quantity of labels and allow the user to override the number of labels printed, as well as the case pack used for this layer.

**Format** – Type the form name used to print the product labels for this layer.

**Copies** – Type the number of copies of each product label to be printed for this layer.

**Printer Name** – Select the printer to use for this layer. The printer name must have been added using the Printer tab.

**Pkg. Code** – Select the package code to be used with the item number to find the quantity per from the ASN Bulk Weight file when calculating the number of labels required.

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# Chapter 7: WMS Processing – Shipping

## Pick Management (EPN Processing)

The WMS Pick Management function manages the picking and packing processes for the warehouse. Orders are released to the pickers as electronic documents called EPNs which are designed to be used in an RF environment and guide the picker through the warehouse to pick the necessary products.

**Note**: The electronic picking function requires the Microsoft SQL database. It is not supported for the Pervasive.SQL database.

An EPN is a pick work order comprised of one or more sales orders. An EPN can be created as a pick-to-pack or it can be created as a stage pick and a separate stage pack.

A pick-to-pack EPN is created when product can be easily picked and then immediately packed into a shipping container, either a carton or pallet. The cartons or pallets are immediately labeled for shipping and are ready to be combined with other cartons or pallets being shipped together. A typical scenario using a pick-to-pack EPN would be an order that is too large to be picked as part of a batch. As the products are placed on the pallet, they are scanned and associated with the shipping pallet. The pallet can later be associated with a shipment simply by scanning the pallets label.

A pick-to-stage EPN is created when it makes sense to pick the products, and then bring them to a staging area where they will ultimately be packed into cartons or pallets for shipping. The pick-to-stage EPN will indicate what products are to be picked and where to take them for staging. A pick-to-stage EPN will always be associated with a stage pack EPN.

A stage pack EPN is created to direct the packers about how to break out products that have been brought to a staging area as the result of a pick-to-stage EPN. This can be done on either an RF device or at a packing station and presents the pack out process in an order by order basis.

A pick-to-stage EPN and stage pack EPN could be used if a series of 20 similar orders require quantities of the same basic items. In a large warehouse, sending a team to pick those 20 orders individually is very inefficient because 20 passes through the warehouse would have to be made for the same items. Instead, a bulk pick-to-stage EPN can be created for the 20 orders. One pass through the warehouse can be made for the items, with the total quantity of each item bought to a staging area. The stage pack is then used to separate the items based on the quantity needed for each order.

A second example of a pick-to-stage/stage pack process is when an order is being picked for a large number of items, but cannot be easily packaged in the aisle. For example, products may require special packaging material that can only be applied at a packaging station. The products need to be picked and taken to the packaging station. Using pick-to-stage, the picker can be instructed about what to pick and where to bring the goods.

In addition, since the picker is scanning the products as they are being picked, any mistakes will be caught before items are carried to the packing station, minimizing return trips to get the correct item. The stage pack is then used as a double check process in addition to tracking which items are going into which cartons.

### Processing a Pick-to-Pack EPN

The EPN Controller creates and manages electronic picks or EPNs.
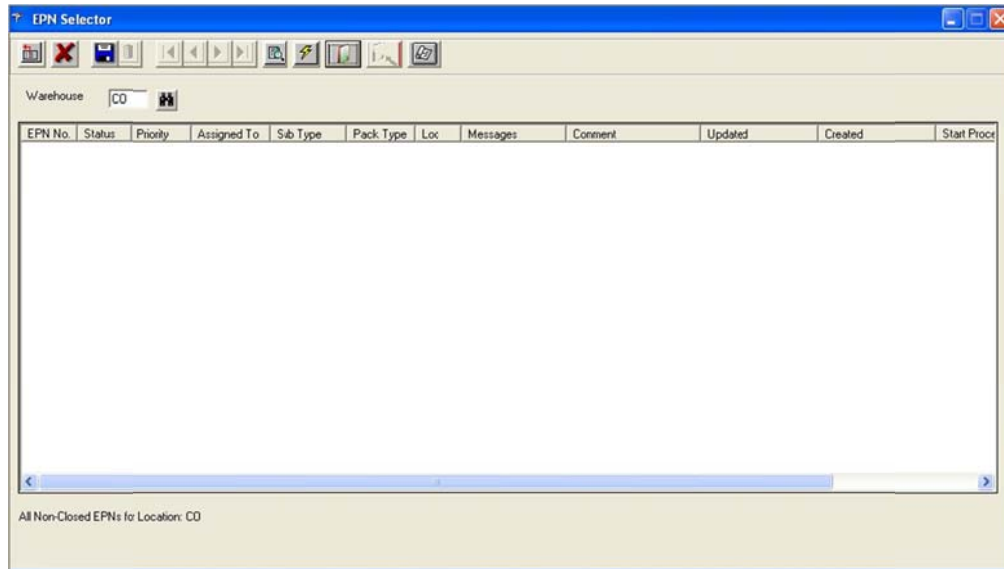


1. Log in to the EPN Controller.

2. Type the warehouse location in the **Warehouse** field.

3. Click the **Sales Order Filter** button on the toolbar.

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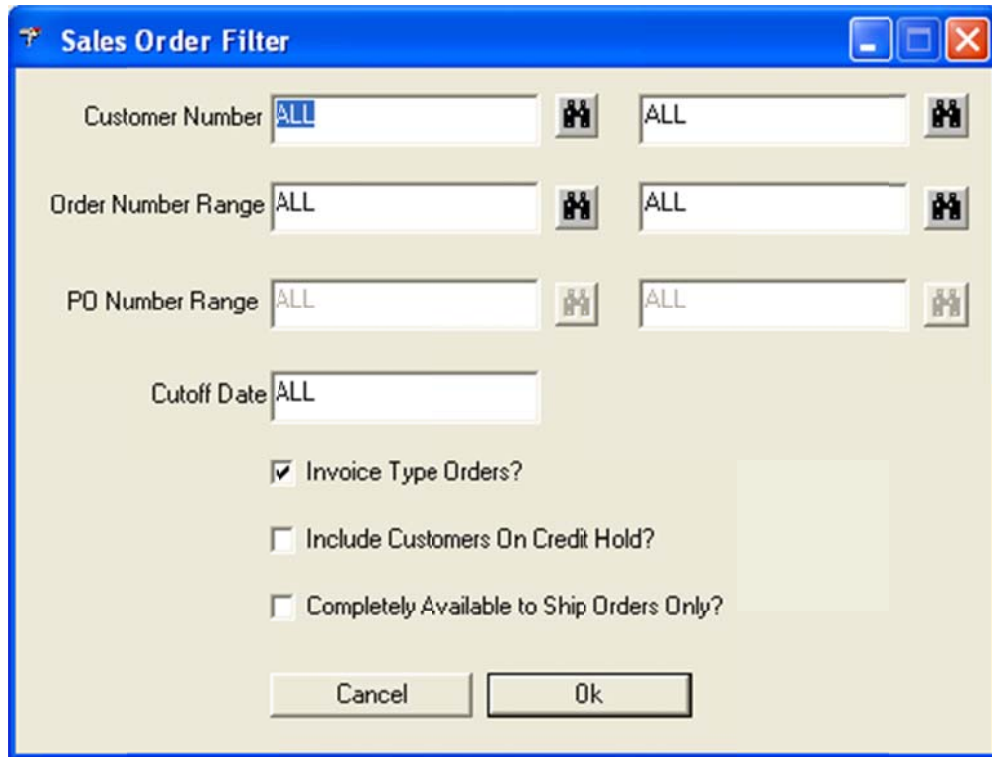
4. Specify any criteria to restrict the list of open orders to the group that you want to release.

5. Click **OK**.
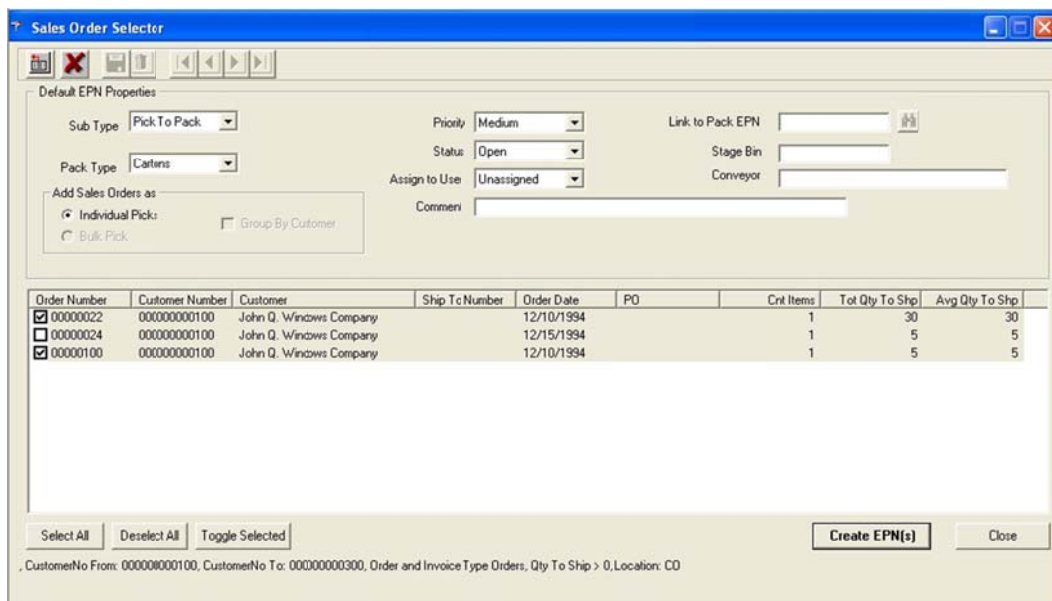


6. WMS will display a list of all orders that have items that have not yet been released and that meet the criteria specified in the previous step.

7. Click any column heading to sort the list by that column.

8. Select **Pick To Pack** from the **Sub Type** drop-down list box.

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9. Select **Cartons** or **Pallets** from the **Pack Type** drop-down list box.

10. Verify that the **Add Sales Order As** radio button is set correctly. If **Individual Picks** is activated and more than one order is selected, WMS will generate a unique EPN for each order. If **Bulk Pick** is activated, WMS will attempt to combine the orders into a single EPN. However, WMS will not combine orders that are shipping to different locations when processing a pick-to-pack EPN.

11. Choose a value from the drop-down list box for **Status**, **Priority**, and **Assign a Specific User**, or accept the defaults.

12. Type a comment for this EPN in the **Comment** field, if desired.

13. Select the orders to be released.

    **Select All** – Selects every order within the list

    **Deselect All** – Unselects every order in the list

    **Toggle Selected** – Changes the selection status for the highlighted range of orders

14. When the list is correct, click the **Create EPN(s)** button.

15. WMS will create EPNs for the orders selected. It will also attempt to make recommendations for products that are bin, serial, or lot controlled. If WMS is unable to make a recommendation for one or more items, you will receive a recommendation error. See **Resolving Recommendation Errors** for information about resolving these conflicts.

16. Click the **Close** button to close the sales order selector and return to the EPN selector screen.
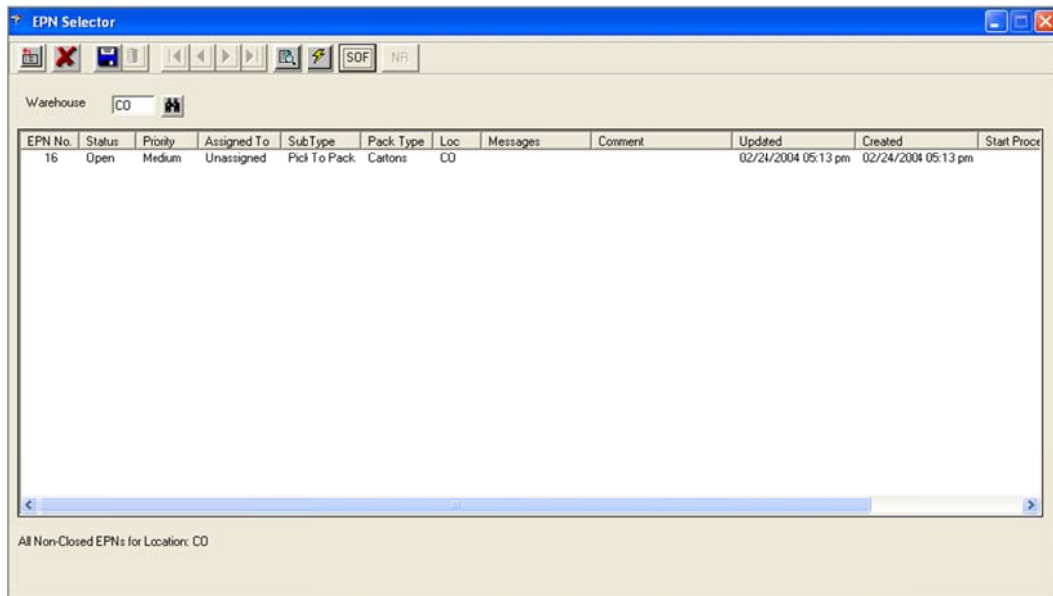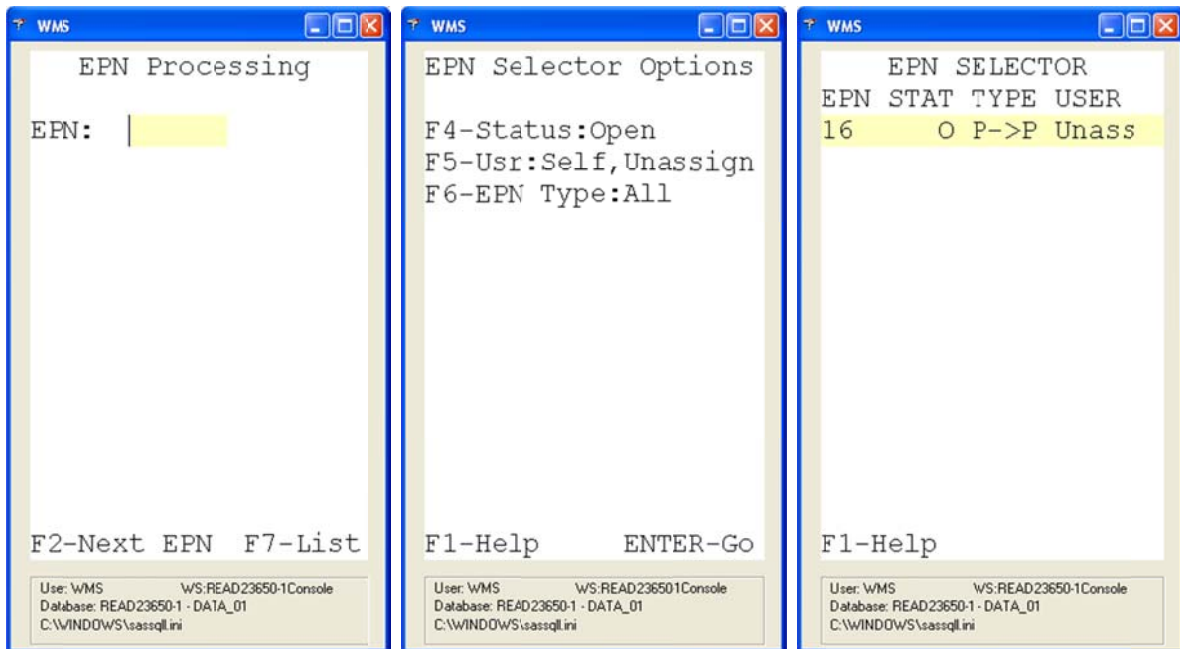


17. WMS will display the EPNs that have been created.

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| WMS System | WMS SYSTEM MENU | WMS SHIPPING MENU |
|---|---|---|

**WMS System**

Logon Username
WMSADMIN
Logon Password
* * *

F1=Help

User: WMSADMIN    WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini

**WMS SYSTEM MENU**
1-Shipping
2-Receiving
3-Inventory
4-Utility
5-Logout

User: WMSADMIN    WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini

**WMS SHIPPING MENU**
1-Pack Cartons
2-Pack Pallets
3-Pack Shipments
4-EPN
5-EPN Pack Inquiry
6-Verify Order
7-Previous Menu

User: WMSADMIN    WS:NEWT11130-1Consoe
Database: NEWT111301 - DATA_300
C:\WINDOWS\saserverini

18. Log in to WMS on an RF handheld device.

19. If the order is not in your default warehouse, select **Utility** to change to the correct warehouse. Type the correct warehouse location code in the **To** field, and then press **Enter**.

20. Select **Shipping**, and then select **EPN**.

**EPN Processing**

EPN: |

F2-Next EPN    F7-List

Use: WMS         WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini

**EPN Selector Options**

F4-Status:Open
F5-Usr:Self,Unassign
F6-EPN Type:All

F1-Help       ENTER-Go

User: WMS        WS:READ236501Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini

**EPN SELECTOR**

| EPN | STAT | TYPE | USER |
|---|---|---|---|
| 16 | O | P->P | Unass |

F1-Help

User: WMS        WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini

21. Press the **F2** key on the EPN Processing screen for the highest priority, open EPN assigned to you or unassigned. You can also press the **F7** key to access the EPN Selector Options screen and select from a list of EPNs.

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22. On the EPN Selector Options screen, you can change the status, the user, or the type of EPN. Pressing the **F4** key will toggle the **Status** field among: **Open**; **Hold**; and **Open, Hold**. Pressing the **F5** key will toggle the **User** field among: **Self, Unassigned**; **All**; **Self**; and **Unassigned**. Pressing the **F6** key will toggle the **EPN Type** field among **All**, **Stage Pick**, **Stage Pack**, and **Pick to Pack**.

23. Press **Enter** on the EPN Selector Options screens to see a list of EPNs that meet the criteria you specified. Select the EPN you want to process, and then press **Enter**.
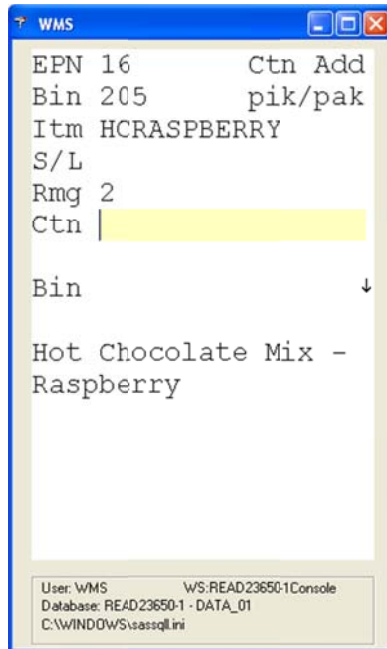


24. WMS will display the first item to be picked and packed.

25. The carton that items are to be packed in should be listed in the **CTN** field. Press the **F2** key to have WMS generate a new carton.

26. WMS will generate a carton number and print a bar coded customer specific shipping label to attach to the carton.

**Note**: If the label did not print correctly, press the **F8** key to reprint it.

Exact. And it all comes together.
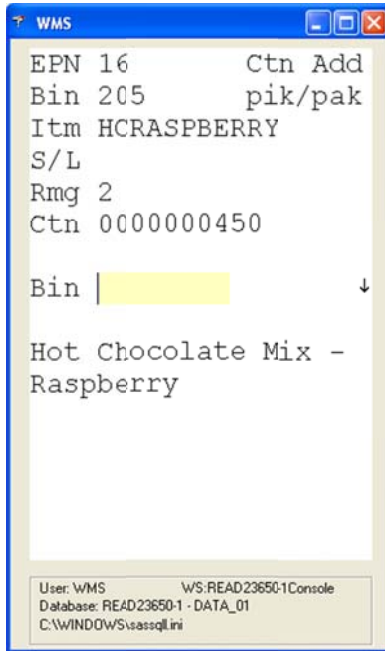
27. WMS will next prompt you to scan and validate that you are at the specified bin.

28. Scan the bin number.

**Note**: In a non-binned environment, the bin number displayed will be the pick sequence value from the inventory location file, and you will not be prompted to verify the bin number.
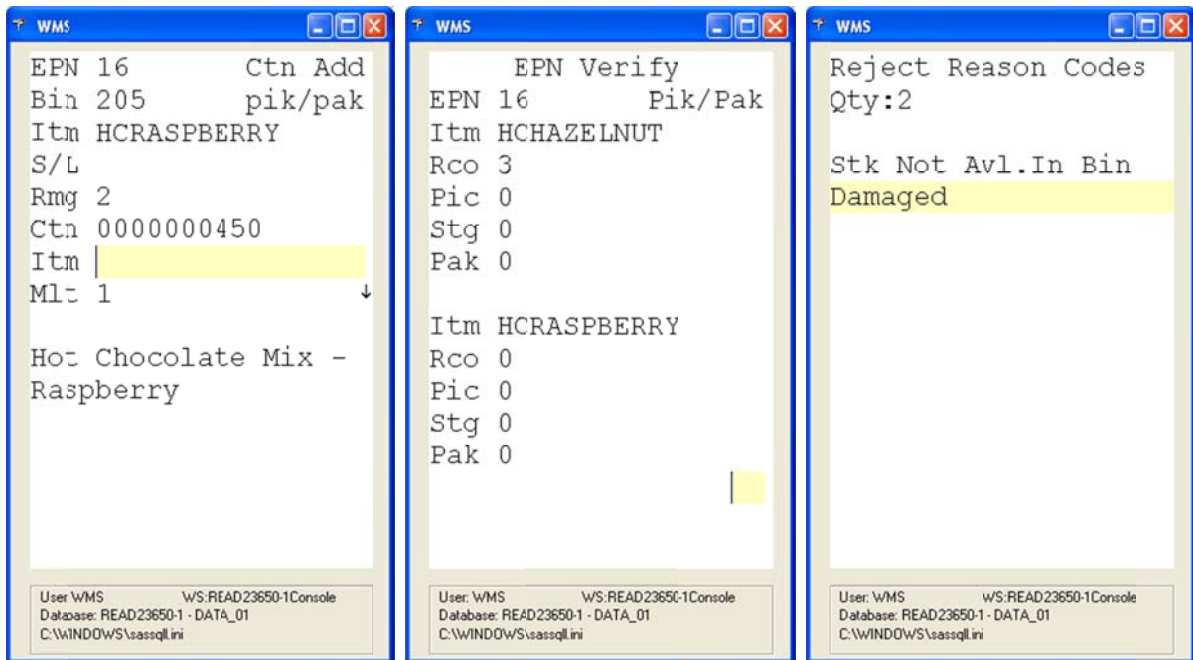


29. WMS will prompt you to scan and verify the item being picked and packed.

30. To enter a quantity for the item, press the **F4** key. Type the new quantity in the **Mlt** field, and then press **Enter**.

Exact. And it all comes together.

31. Scan the item. If the item is serialized or lotted, WMS will prompt for the serial/lot number to be scanned as well.

32. When the item has been completely picked, WMS will display the next item.

33. In the previous example, the down arrow indicates that there are additional records after the current one. An up arrow would indicate that there are additional records before the currently displayed record. You can skip forward or backward by pressing the up or down arrow keys.

34. If you go to the specified location and the product is not available, a new recommendation can be displayed by pressing the **F3** key. You will be given a list of reason codes to specify why you are rejecting the recommendation. Select the code that best describes the reason that the recommendation is being rejected.

35. Press the **F7** key to display the entire EPN.

36. Press the **F5** key to enter remove mode.

37. Press the **F2** key to start a new carton.

38. Press the **F6** key to toggle the mode among carton, pallet, and shipment packing.

39. When the EPN has been completely picked, WMS will display a message that the EPN is completed. Press **Enter** to accept the message.

40. Press **Escape** until you have exited to the EPN Processing screen.

41. Now that the cartons have been picked and packed, they need to be attached to a shipment. See **Packing a Shipment** for information about packing a shipment.

### Processing a Pick-to-Stage and Stage Pack EPN

The EPN Controller creates and manages electronic picks or EPNs.
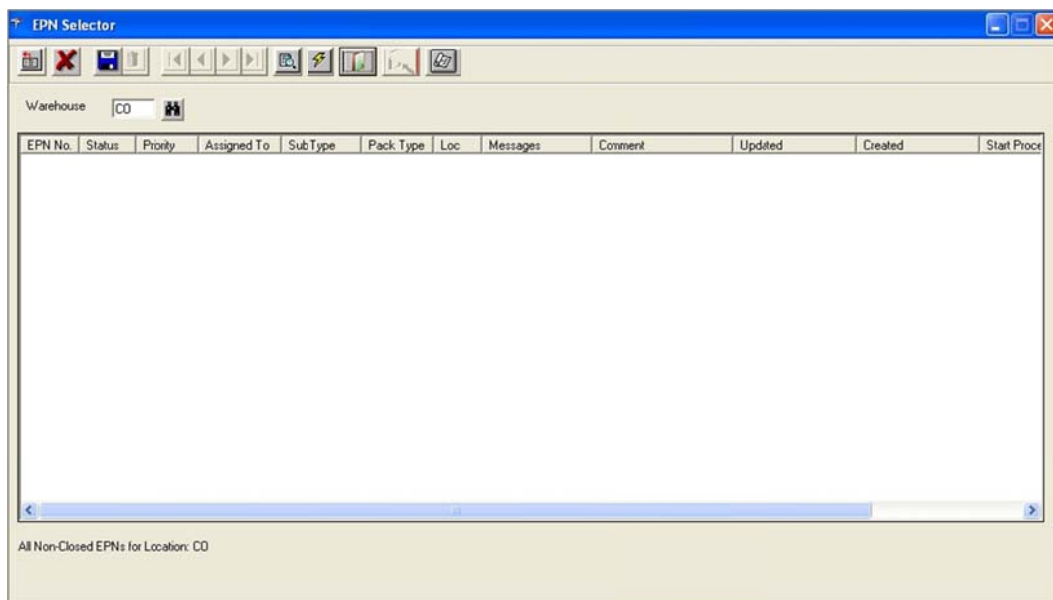


1. Log in to the EPN Controller.

Exact. And it all comes together.

2. Type the warehouse location in the **Warehouse** field.

3. Click the **Sales Order Filter** button  on the toolbar.



4. Specify any criteria to restrict the list of open orders to the group that you want to release.

5. Click **OK**.



6. WMS will display a list of all orders that have items that have not yet been released and that meet the criteria specified in the previous step.

7. Click any column heading to sort the list by that column.

8. Select **Stage Pick** from the **Sub Type** drop-down list box.

Exact. And it all comes together.

9. The **Pack Type** field is automatically determined based on the stage pack associated to the stage pick.

10. Verify that the **Add Sales Order As** radio button is set correctly. If **Individual Picks** is activated and more than one order is selected, WMS will generate a unique EPN for each order. If **Bulk Pick** is activated, WMS will attempt to combine the orders into a single EPN.

11. When **Bulk Pick** is activated, you can activate **Group by Customer** to create a unique bulk pick for each customer. If **Group by Customer** is not activated, the bulk pick will be for multiple customers.

12. Choose a value from the drop-down list box for **Status**, **Priority**, and **Assign a Specific User**, or accept the defaults.

13. If this stage pick will feed an existing stage pack, type the stage pack number in the **Link to Pack EPN** field. Press the **F2** key to create a new stage pack for this stage pick.



14. On the Create Stage Pack EPN screen, you can specify the user, priority, and pack type, as well as the stage bin for the product.

15. Type a comment for this stage pack in the **Comment** field, if desired.

16. If you are using the WMS Conveyor Interface module to interface with a conveyor management system, select the name of the conveyor to use for this stage pack from the **Conveyor** drop down list box.

17. Click **Create EPN** to create the stage pack and return to the Sales Order Selector screen.

18. Select the orders to be released.

    **Select All** – Selects every order within the list.

    **Deselect All** – Unselects every order in the list.

    **Toggle Selected** – Changes the selection status for the highlighted range of orders.

19. When the list is correct, click the **Create EPN(s)** button.

20. WMS will create one or more stage pick EPNs for the orders selected. It will also attempt to make recommendations for products that are bin, serial, or lot controlled. If WMS is unable to make a recommendation for one or more items,
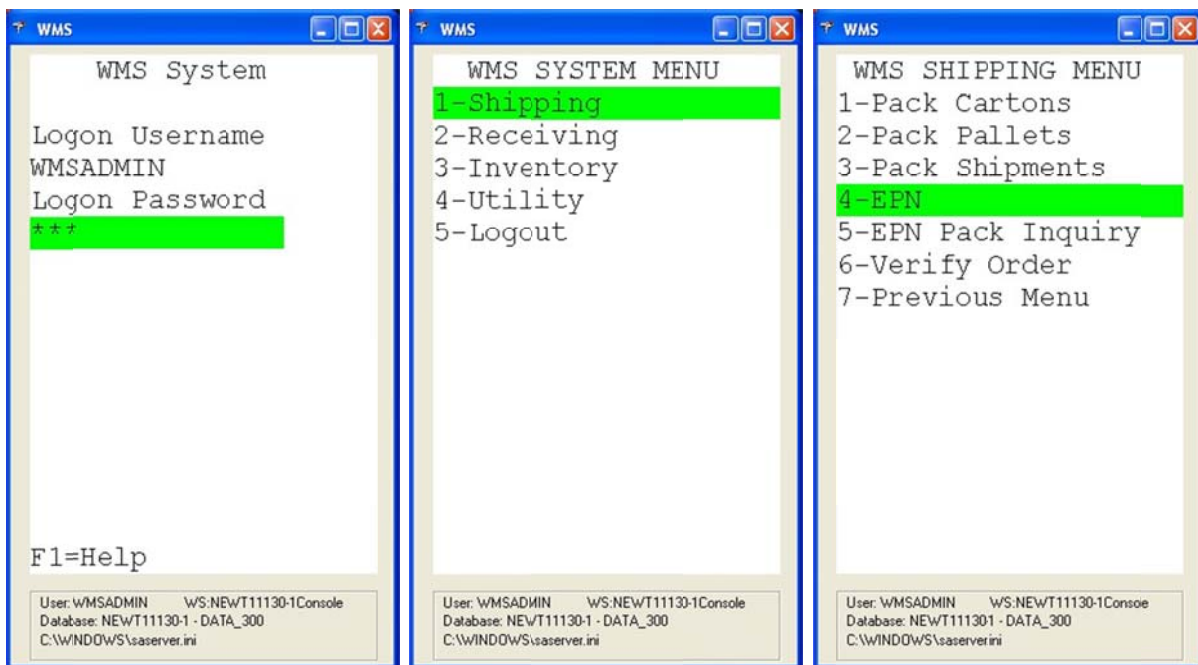
Exact. And it all comes together.

you will receive a recommendation error. See **Resolving Recommendation Errors** for information about resolving these conflicts.

21. Click **Close** to return to the EPN Selector screen and see a list of the EPNs that have been created.
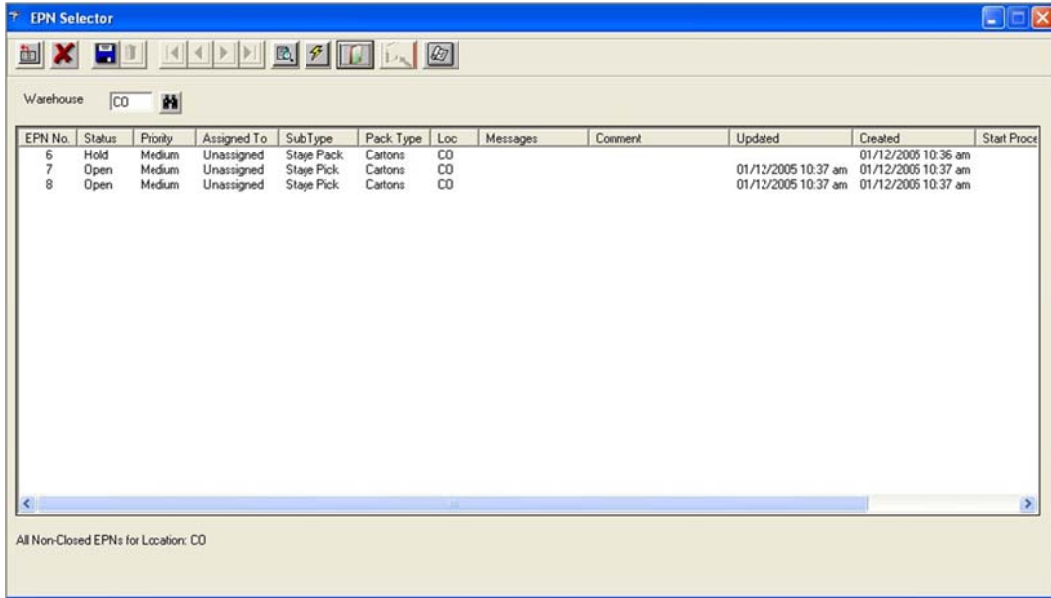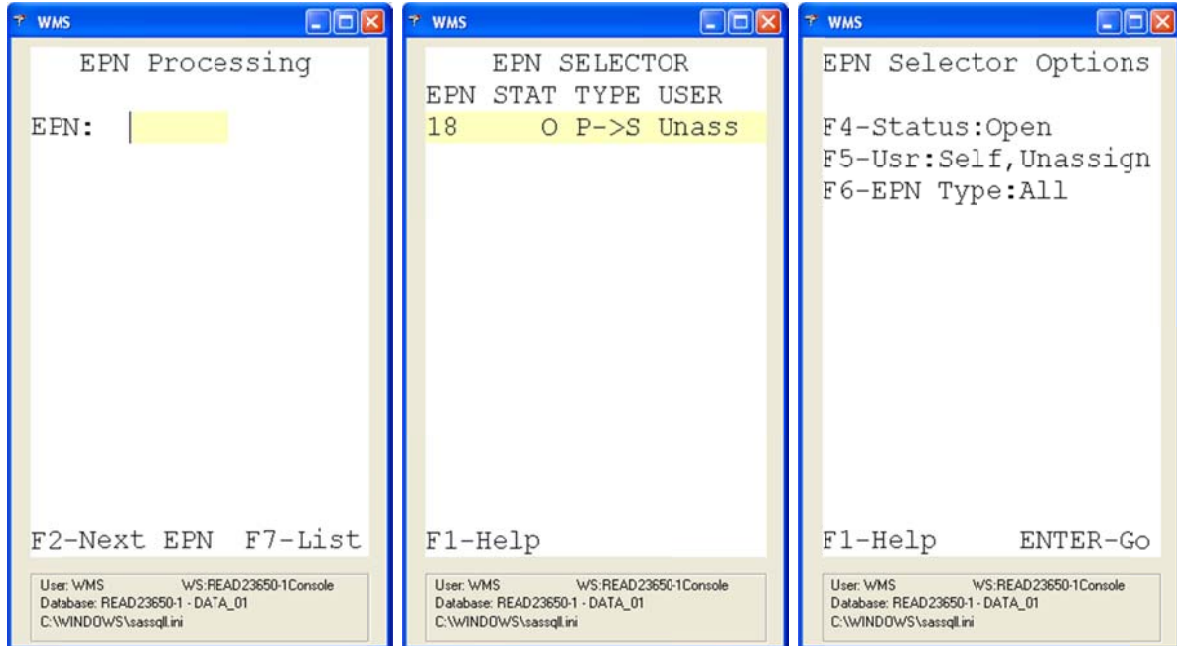


### Processing the Pick To Stage EPN

In a pick-to-stage, stage-to-pack process, the picking process and the packing process are two separate functions. Once the pick to stage has been completed, the stage to pack needs to be processed. This can be done as products are brought to the staging area during the pick-to-stage process, and can be done by the same or different users.



1. Log in to WMS on an RF handheld device.

Exact. And it all comes together.

2. If the order is not in your default warehouse, select **Utility** to change to the correct warehouse. Type the correct warehouse location code in the **To** field, and then press **Enter**.

3. Select **Shipping**, and then select **EPN**.

```
 WMS                            WMS                            WMS
     EPN Processing                 EPN SELECTOR            EPN Selector Options
                             EPN STAT TYPE USER
 EPN:   |                    18      O P->S Unass          F4-Status:Open
                                                           F5-Usr:Self,Unassign
                                                           F6-EPN Type:All




 F2-Next EPN  F7-List         F1-Help                       F1-Help      ENTER-Go
 User: WMS      WS:READ23650-1Console    User: WMS      WS:READ23650-1Console    User: WMS      WS:READ23650-1Console
 Database: READ23650-1 - DATA_01    Database: READ23650-1 - DATA_01    Database: READ23650-1 - DATA_01
 C:\WINDOWS\sassqll.ini    C:\WINDOWS\sassqll.ini    C:\WINDOWS\sassqll.ini
```

4. Press the **F2** key on the EPN Processing screen for the highest priority, open EPN assigned to you or unassigned. You can also press the **F7** key to access the EPN Selector Options screen and select from a list of EPNs.

5. On the EPN Selector Options screen, you can change the status, the user, or the type of EPN. Pressing the **F4** key will toggle the **Status** field among: **Open**; **Hold**; and **Open, Hold**. Pressing the **F5** key will toggle the **User** field among: **Self, Unassigned**; **All**; **Self**; and **Unassigned**. Pressing the **F6** key will toggle the **EPN Type** field among: **All**; **Stage Pick**; **Stage Pack**; and **Pick to Pack**.

6. Press **Enter** on the EPN Selector Options screens to see a list of EPNs that meet the criteria you specified. Select the EPN you want to process, and then press **Enter**.

Exact. And it all comes together.

```
 WMS                    _ □ X
EPN  18
Stg  STAG1       StgPick
Bin  205
Itm  HCRASPBERRY
S/L
Rmg  3

Bin |                    ↓

Hot Chocolate Mix -
Raspberry




User: WMS        WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```

7. WMS will display the first item to be picked.

8. WMS will prompt you to scan and validate that you are at the specified bin.

9. Scan the bin number.

**Note**: In a non-binned environment, the bin number displayed will be the pick sequence value from the inventory location file, and you will not be prompted to verify the bin number.



```
 WMS                 _ □ X
Reject Reason Codes
Qty:3

Stk Not Avl.In Bin
Damaged






User: WMS    WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```

```
 WMS                 _ □ X
EPN  18          Add
Stg  STAG1    StgPick
Bin  205
Itm  HCRASPBERRY
S/L
Rmg  3
Itm |
Mlt  1              ↓

Hot Chocolate Mix -
Raspberry




User: WMS    WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```

```
 WMS                 _ □ X
     EPN Verify
EPN  18        Pick
Itm  HCHAZELNUT
Rco  3
Pic  0
Stg  0
Pak  0

Itm  HCRASPBERRY
Rco  0
Pic  0
Stg  0
Pak  0



User: WMS    WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```
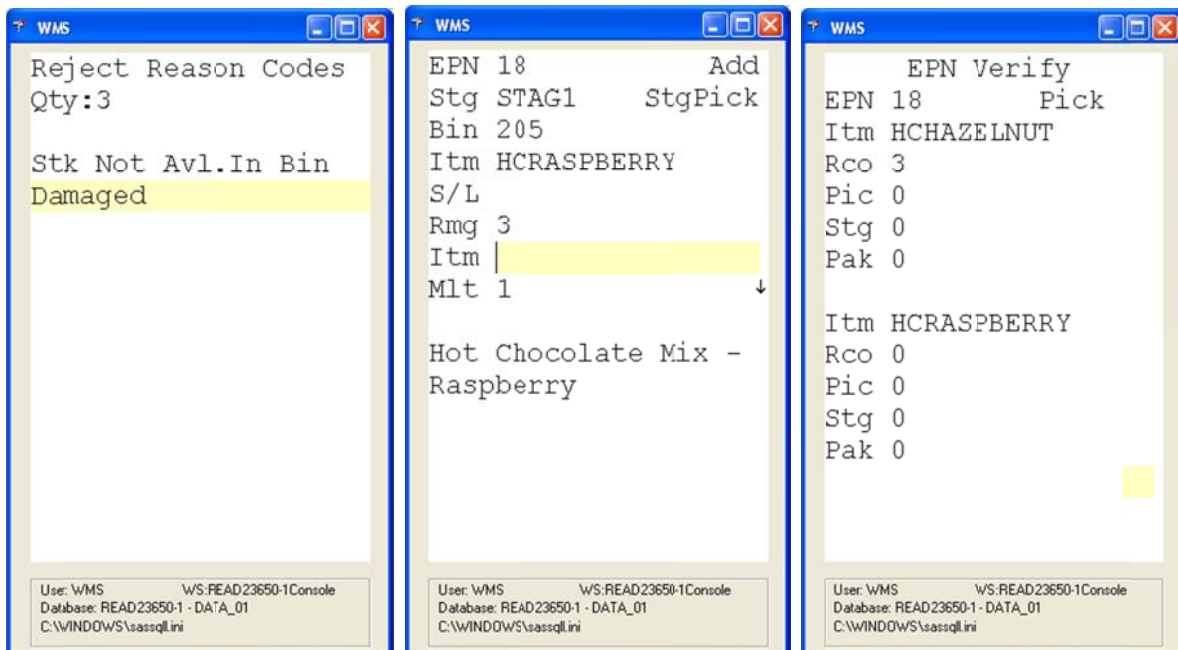
10. WMS will prompt you to scan and verify the item.

11. To enter a quantity for the item, press the **F4** key. Type the new quantity in the **Mlt** field, and then press **Enter**.

Exact. And it all comes together.

12. Scan the item. If the item is serialized or lotted, WMS will prompt for the serial/lot number to be scanned.

13. WMS will display the next item when the current item has been completely picked.

14. In the example, the down arrow indicates that additional records exist after the current one. An up arrow indicates that there are previous, additional records. You can move forward or backward by pressing the up and down arrow keys.
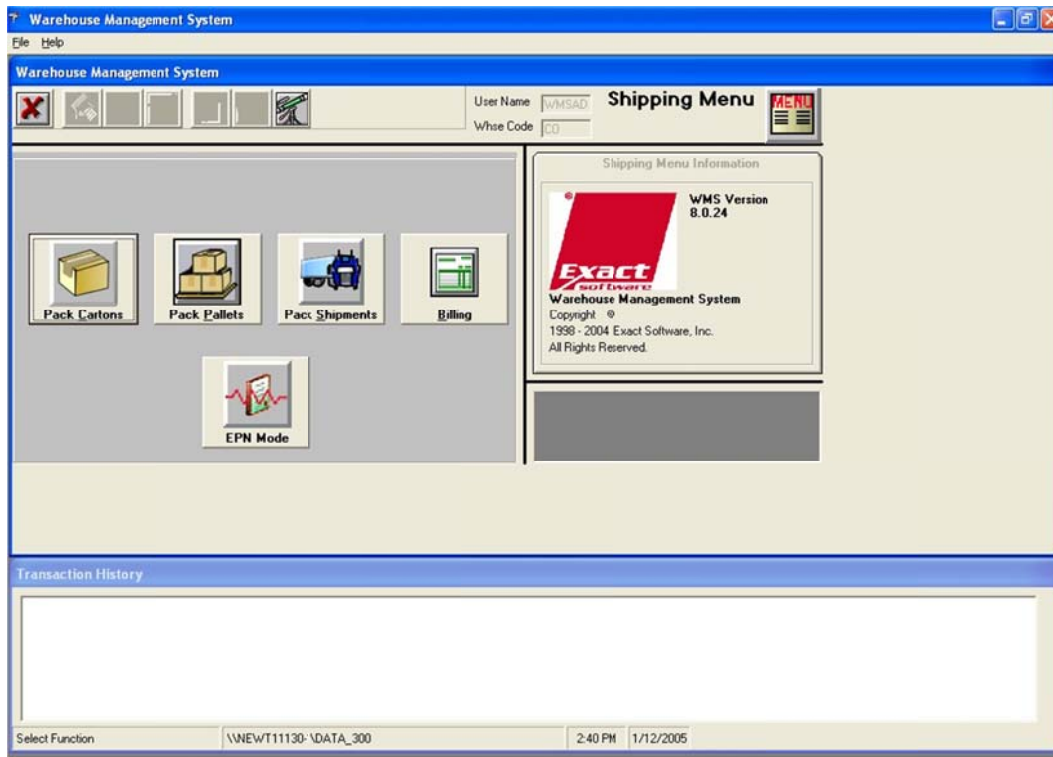
15. If you go to the specified bin and the product is not available, a new recommendation can be displayed by pressing the **F3** key. WMS will display a list of reason codes for rejecting the recommendation.

16. Select the code that best describes the reason that the recommendation is being rejected.

17. Press the **F7** key to display the entire EPN.

18. Press the **F5** key to enter remove mode.

19. When the EPN has been completely picked, WMS will display a message that the EPN is complete. Press **Enter** to accept the message.

20. Press **Escape** until you have exited to the EPN Processing screen.

---

**Note**: As the items are picked in a binned environment, an inventory transfer is processed from the item bin to the stage bin.

---

### *Processing the Stage To Pack EPN – RF Client*

In a pick-to-stage, stage pack process, the picking process and packing process are two separate functions. The stage pack process is used to pack the products that have been picked from one or more stage pick processes into cartons or pallets and label them accordingly. In the RF client version of this process, the RF device will walk the user through the orders.

Exact. And it all comes together.

| WMS | WMS | WMS |
|---|---|---|

```
      WMS System


Logon Username
WMSADMIN
Logon Password
***




F1=Help
```

```
   WMS SYSTEM MENU
1-Shipping
2-Receiving
3-Inventory
4-Utility
5-Logout
```

```
  WMS SHIPPING MENU
1-Pack Cartons
2-Pack Pallets
3-Pack Shipments
4-EPN
5-EPN Pack Inquiry
6-Verify Order
7-Previous Menu
```

User: WMSADMIN   WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini

User: WMSADMIN   WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini

User: WMSADMIN   WS:NEWT11130-1Console
Database: NEWT111301 - DATA_300
C:\WINDOWS\saserver.ini

1. Log in to WMS on an RF handheld device.

2. If the order is not in your default warehouse, select **Utility** to change to the correct warehouse. Type the correct warehouse location code in the **To** field, and then press **Enter**.

3. Select **Shipping**, and then select **EPN**.

| WMS | WMS | WMS |
|---|---|---|

```
     EPN SELECTOR
EPN STAT TYPE USER
17     O S->P Unass










F1-Help
```

```
EPN Selector Options

F4-Status:Open
F5-Usr:Self,Unassign
F6-EPN Type:All









F1-Help      ENTER-Go
```

```
    EPN Processing

EPN: |



 



F2-Next EPN  F7-List
```

User: WMS        WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini

User: WMS        WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini

User: WMS        WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
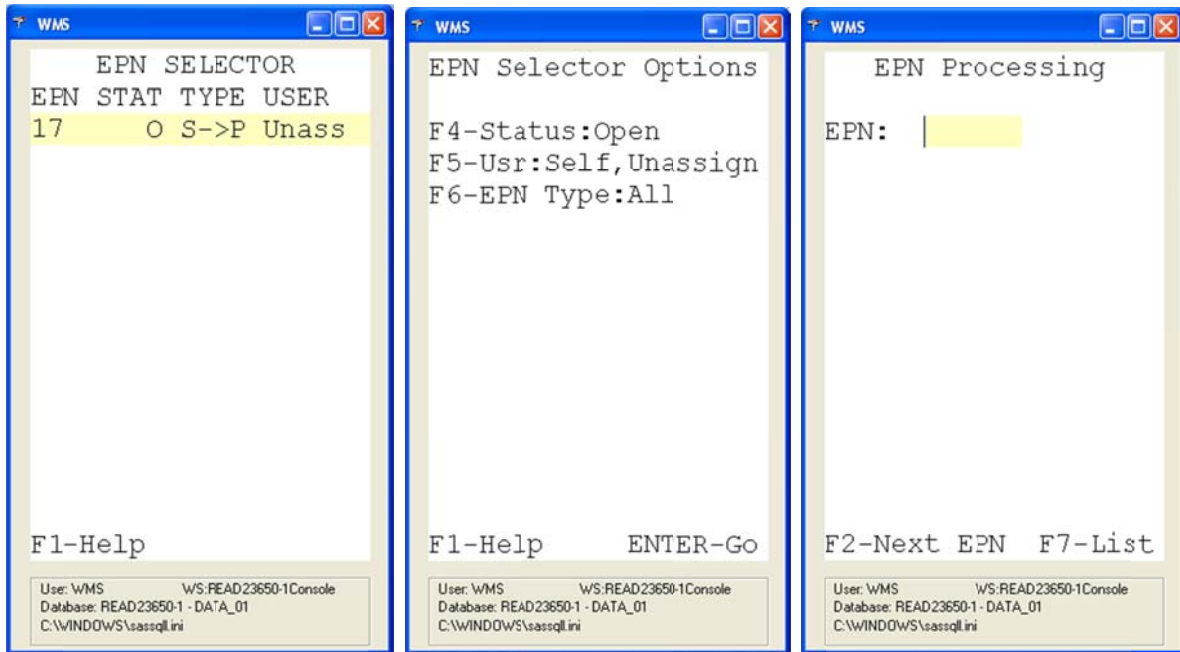
4. Press the **F2** key on the EPN Processing screen for the highest priority, open EPN assigned to you or unassigned. You can also press the **F7** key to access the EPN Selector Options screen and select from a list of EPNs.

5. On the EPN Selector Options screen, you can change the status, the user, or the type of EPN. Press the **F4** key to toggle the **Status** field among: **Open**; **Hold**; and **Open, Hold**. Press the **F5** key to toggle the **User** field among: **Self, Unassigned**; **All**; **Self**; and **Unassigned**. Press the **F6** key to toggle the **EPN Type** field among: **All**; **Stage Pick**; **Stage Pack**; and **Pick to Pack**.

6. Press **Enter** on the EPN Selector Options screens to see a list of EPNs that meet the criteria you specified. Select the EPN you want to process, and then press **Enter**.
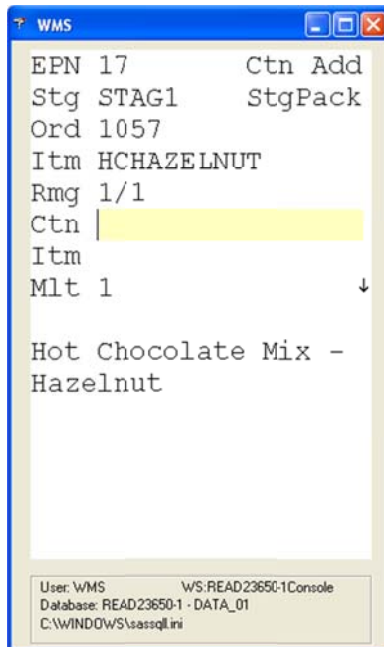


7. WMS will display the first item to be packed.

8. The carton that items are to be packed in should be listed in the **CTN** field. Press the **F2** key for WMS to generate a new carton.

9. WMS will generate a carton number and print a bar coded customer specific shipping label to attach to the carton.

**Note**: If the label did not print correctly, press the **F8** key to reprint it.

Exact. And it all comes together.

```
+ WMS                          + WMS
       EPN Verify           EPN 17        Ctn Add
EPN 17        Pack          Stg STAG1     StgPack
Itm HCHAZELNUT              Ord 1057
Rco 3                       Itm HCHAZELNUT
Pic 3                       Rmg 1/1
Stg 3                       Ctn 0000000451
Pak 0                       Itm
                            Mlt 1                    ↓
Itm HCRASPBERRY
Rco 3                       Hot Chocolate Mix -
Pic 3                       Hazelnut
Stg 3
Pak 0


User: WMS     WS:READ23650-1Console   User: WMS     WS:READ23650-1Console
Database: READ2365I-1 - DATA_01       Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqllini                 C:\WINDOWS\sassqllini
```
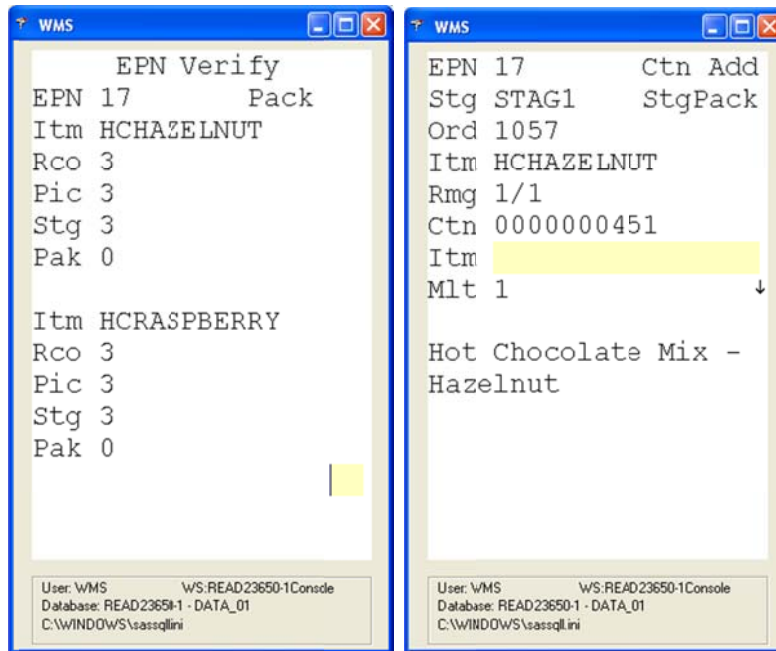
10. WMS will prompt you to scan and verify the item being packed.

11. To enter a quantity for the item, press the **F4** key. Type the new quantity in the **Mlt** field, and then press **Enter**.

12. Scan the item. If the item is serialized or lotted, WMS will prompt for the serial/lot number to be scanned.

13. WMS will display the next item when the current item has been completely picked.

14. In the example, the down arrow indicates that additional records exist after the current one. An up arrow indicates that there are previous, additional records. You can move forward or backward by pressing the up and down arrow keys.

15. Press the **F7** key to display the entire EPN.

16. Press the **F5** key to enter remove mode.

17. When the EPN has been completely packed, WMS will display a message that the EPN is complete. Press **Enter** to accept the message.

18. Press **Escape** until you have exited to the EPN Processing screen.

19. Now that the cartons have been picked and packed, they need to be attached to a shipment. See **Packing a Shipment** for information on packing shipments.

### *Processing the Stage Pack EPN — Packing Station*

In a pick-to-stage, stage pack process, the picking process and packing process are two separate functions. During the stage pack process, items that have been picked during one or more stage pick process are packed into cartons or pallets and labeled accordingly. When using a packing station, WMS prints a report to indicate what products are needed for each order.

Exact. And it all comes together.

*Sample EPN Stage Pack Sheet*



1. Log in to WMS at the packing station.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **EPN Mode** button on the WMS Shipping menu.

Exact. And it all comes together.
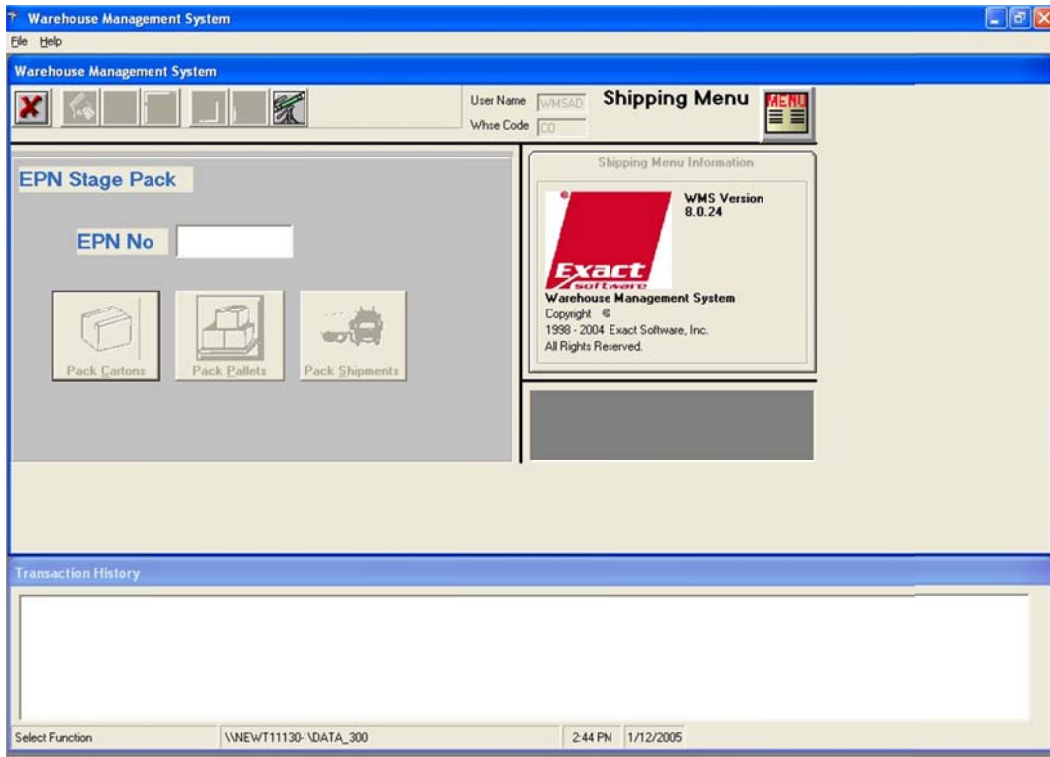
4.  Type the stage pack EPN number to be processed in the **EPN No** field, and then press **Enter**.
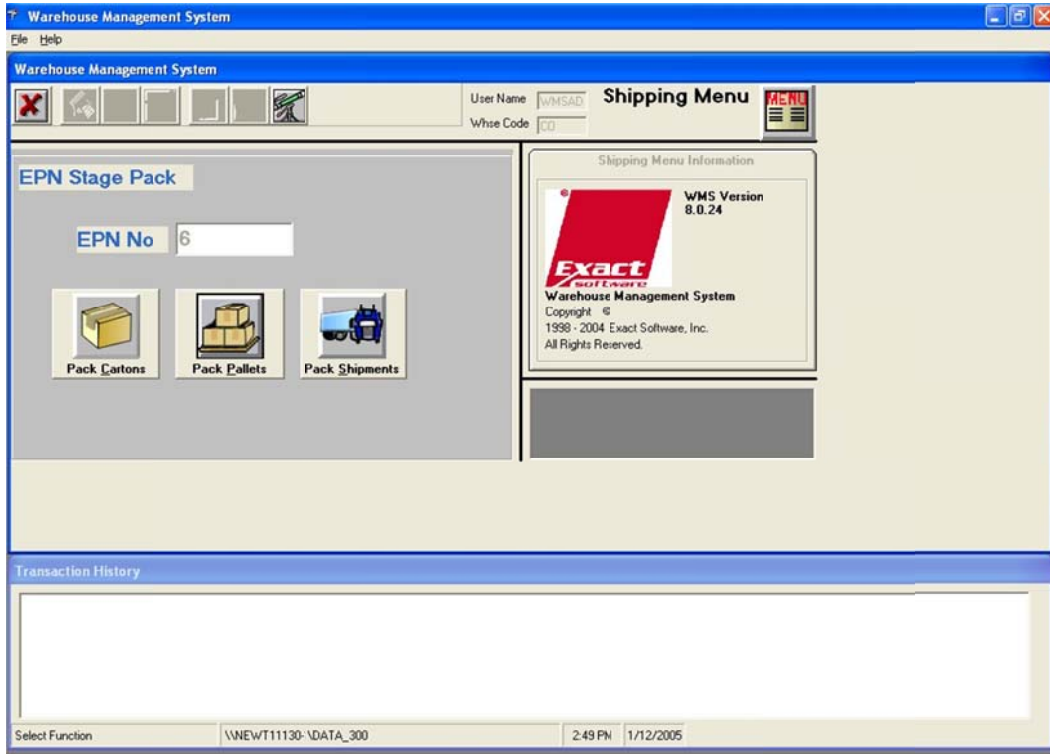


5.  Click the button for the correct packing mode: **Pack Cartons**; **Pack Pallets**; or **Pack Shipments**.

Exact. And it all comes together.
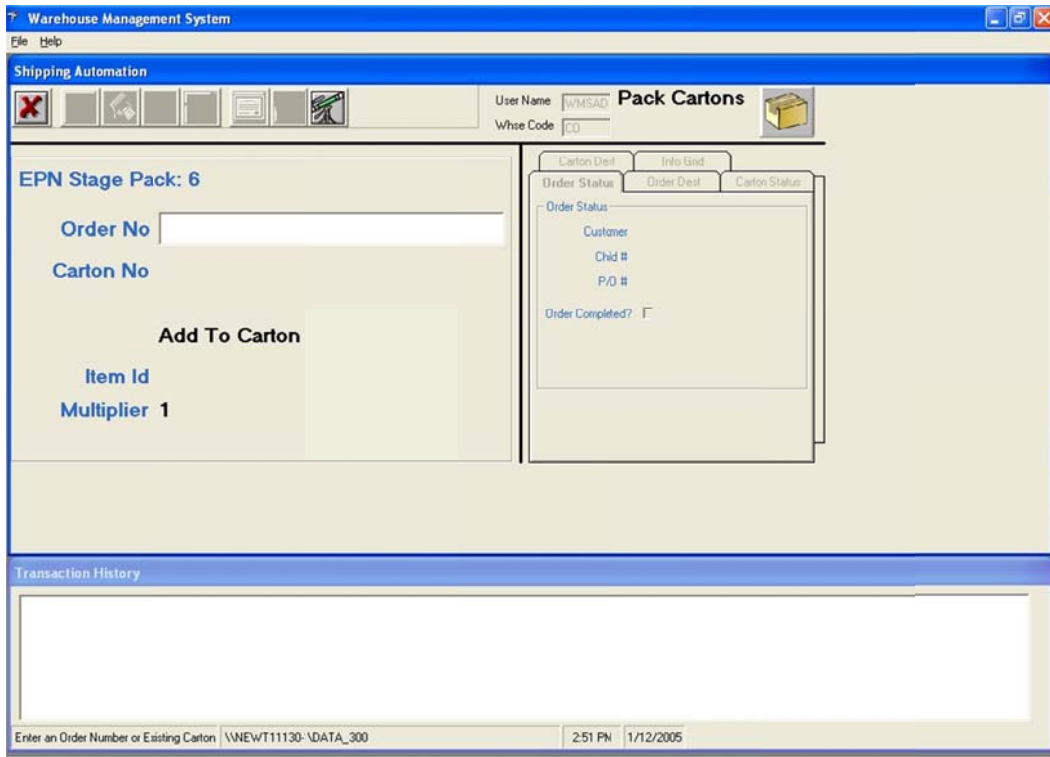
6. Scan the order number from the EPN scan sheet.
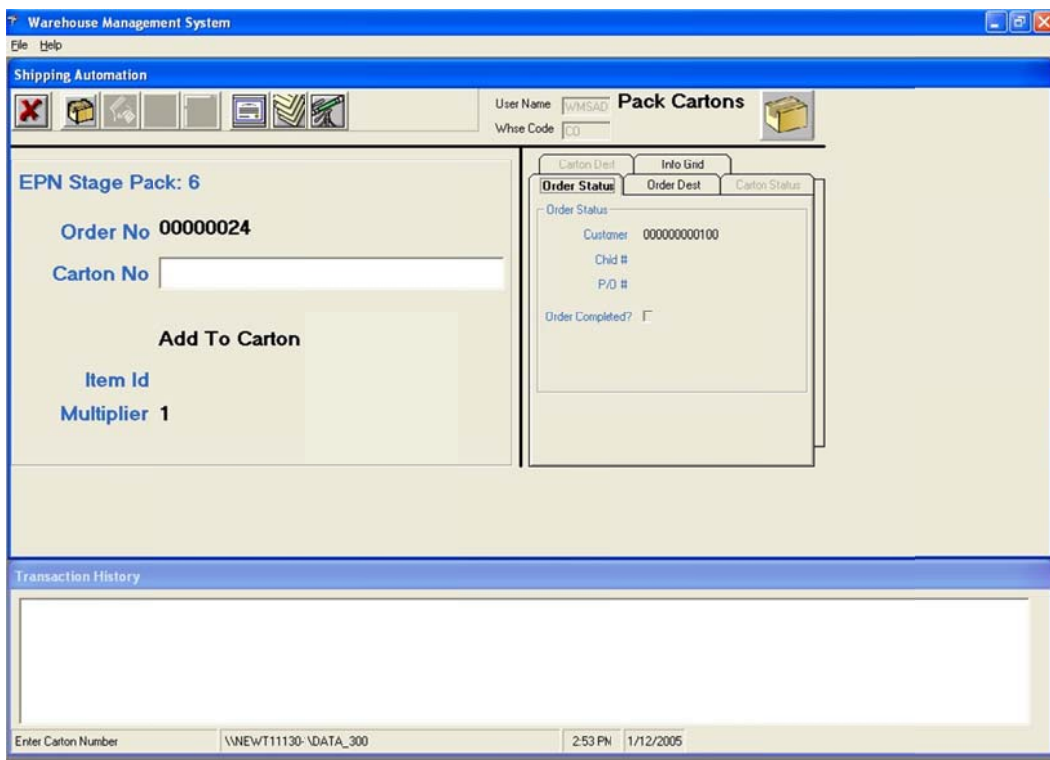


7. If the carton exists, you can scan the carton number. To create a new carton, press the **F2** key; WMS will generate a new carton number and print the appropriate customer specific shipping label.

Exact. And it all comes together.

**Note**: If the label did not print correctly, click the **Reprint Label** button  or press the **F8** key to reprint it.
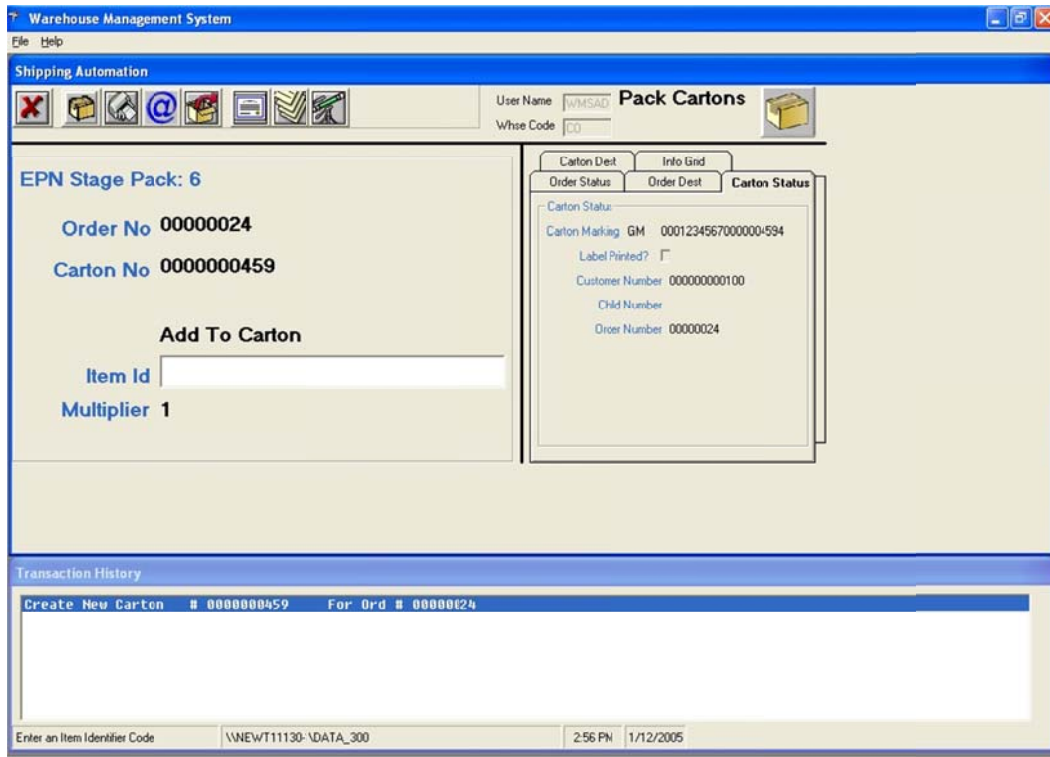


8. Scan or type the item being packed. If the item is serialized or lotted, WMS will prompt you to scan the serial/lot number as well.

9. To enter a quantity multiplier for the item, click the **Multiplier** toolbar button  or press the **F4** key. Type the item quantity to pack in this carton in the **Multiplier** field, and then press **Enter**.

10. To remove an item quantity from the carton, click the **Remove Mode** toolbar button  or press the **F5** key. Type the quantity in the **Multiplier** field, and then press **Enter**.

11. When the order is complete, click the **Verify Order** toolbar button  or press the **F11** key. If you press the **Escape** key to exit the order, WMS will automatically verify the order.

12. Proceed to the next order on the EPN, until all orders have been packed.

13. Once the cartons have been picked and packed, they need to be attached to a shipment. See **Packing a Shipment** for information about packing shipments.

## Resolving Recommendation Errors

The Pick Management functions recommend the bin, serial, and lot to fill an order based on settings in the WMS control file. However, an insufficient quantity on hand of a product being released will result in an EPN with a recommendation error.

Exact. And it all comes together.
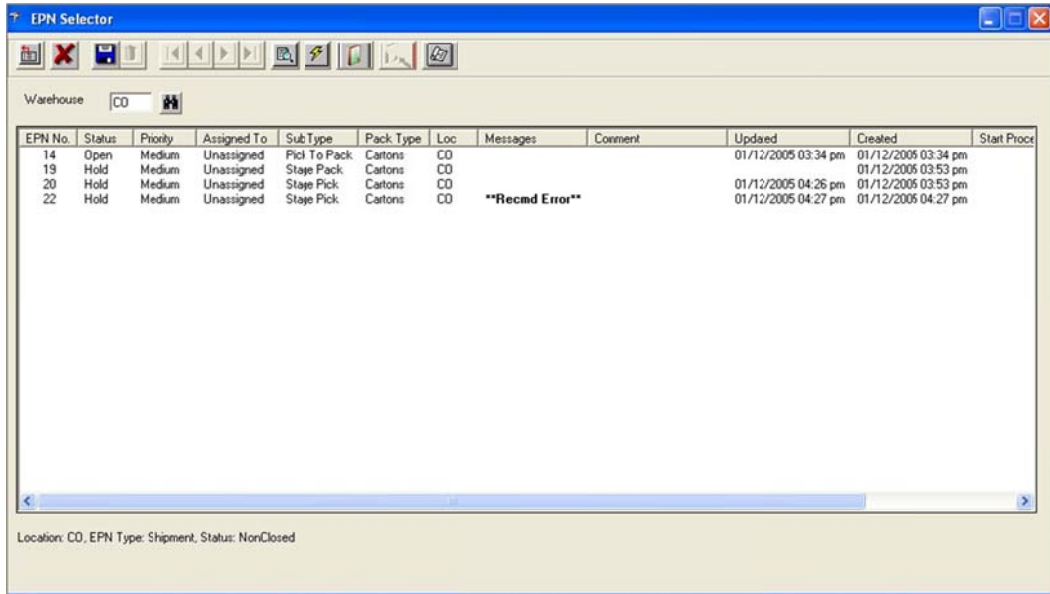
To maximize the efficiency of the picking/packing process, these errors should be resolved before the picker receives the EPN. Therefore, WMS automatically places any EPN with recommendation errors on hold.

1. To resolve the error, double-click the EPN with the recommendation error.
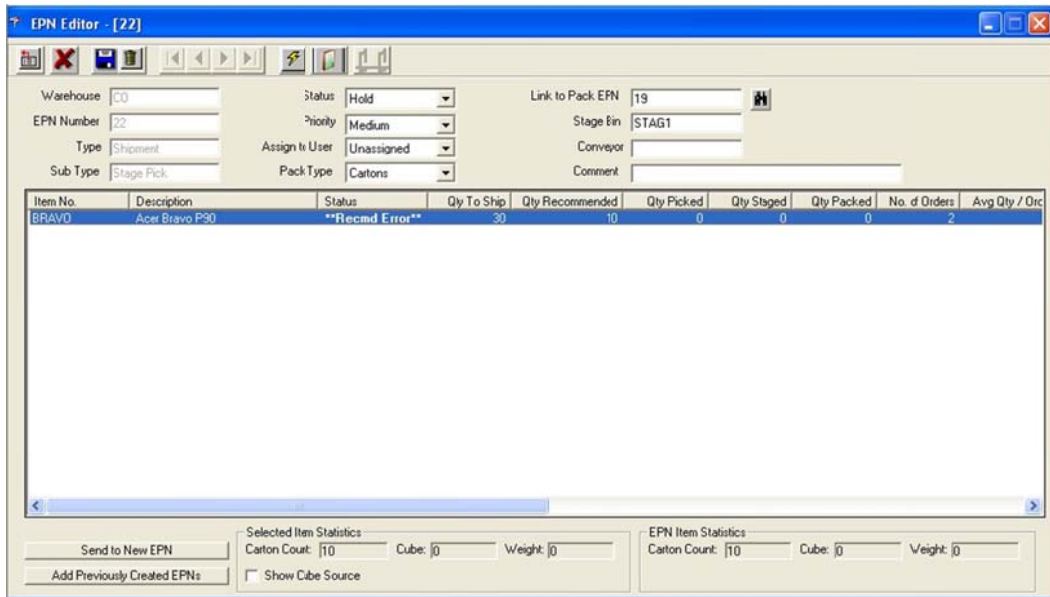


2. WMS will display all items required for the EPN. Items that have issues will have a status of **Recmd Error**. Click the status column heading to sort the list by status. Click it a second time to sort in descending order, which should bring all items with errors to the top of the list.

3. Double-click an item with a recommendation error to display the following screen:

4.  The EPN Item screen lists the orders for the selected EPN that require this item. Press the **F3** key to view the detail for an order. Double-click a line to edit the quantity. A new screen will be displayed where you can change the amount released.



5.  Type the revised quantity to ship, and then click **Ok**.

6.  Press the **F6** key on the EPN Item screen to review the recommendation for an order.

Exact. And it all comes together.
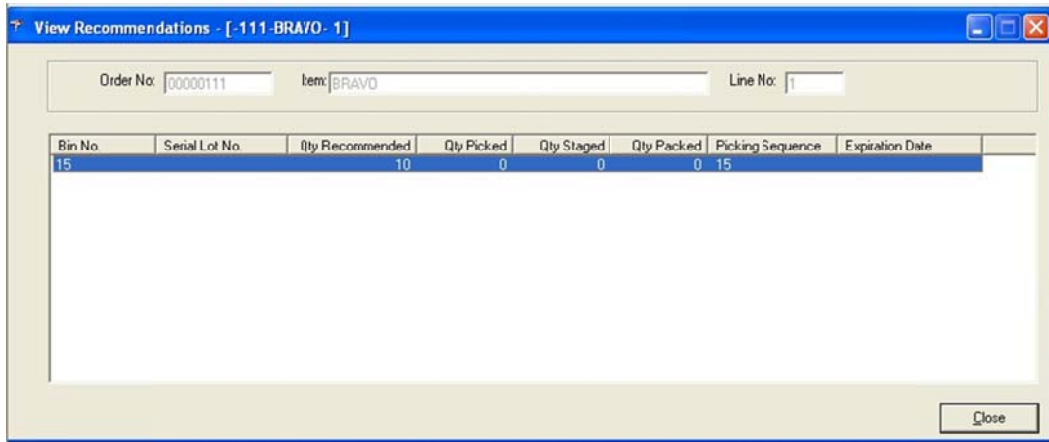
7. Press **Control+Enter** on a line on the EPN Item screen to toggle the quantity for an order between zero and the full released amount.

8. Press the **F5** key on the EPN Item screen to remove the entire order from the EPN. WMS will prompt you to verify that you want to remove the order.



9. Click **Yes** to remove the order from the EPN.

Use these tools to decide which orders should remain and which should be removed. Once the errors have been resolved, press **Escape** to return to the EPN editor screen, change the status on the EPN to **Open,** and click the **Save** button.

### Reviewing Rejected Recommendations

When an item is not available to be picked from a specific bin, serial or lot, the picker can reject the recommendation. WMS prompts for a reject reason, and the information is written to the rejected recommendations system. Based on the reason, that bin, serial, or lot for that item may be marked unavailable until the rejected recommendation has been reviewed and addressed.

To review the rejected recommendations, select File from the EPN Selector screen, and then select Review Rejected Recommendations.

Exact. And it all comes together.
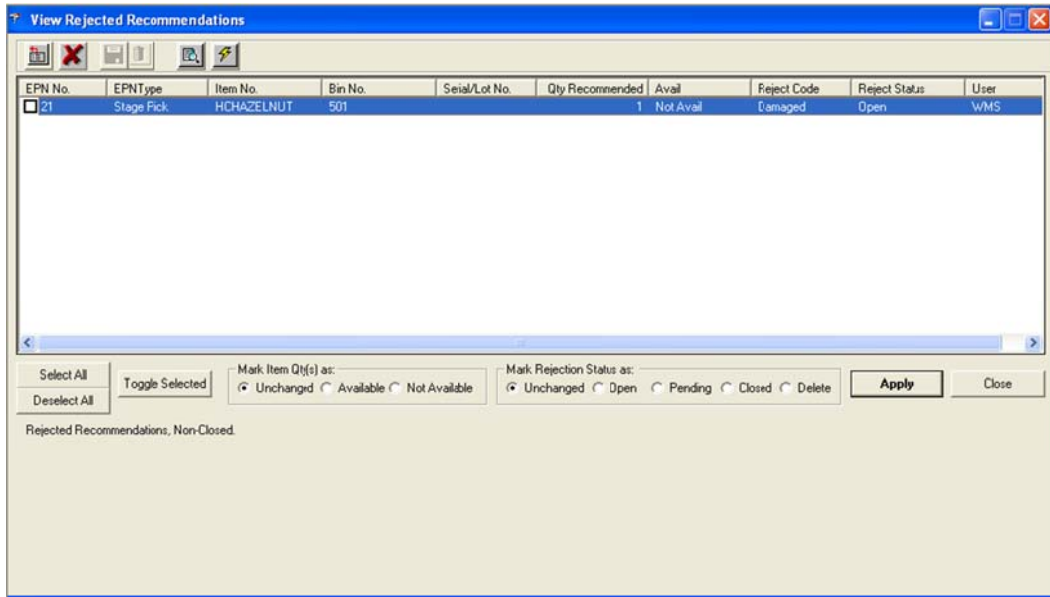
WMS will display all open rejected recommendations.

The quantity for the rejected recommendations can be made available or unavailable. The record can be left open or marked pending, closed, or deleted. The status codes control the recommendations displayed so new entries can be easily distinguished from ones awaiting disposition.

### Reviewing Negative Releases

A negative release occurs when a user reduces the quantity for a line item in Order Entry below the quantity that has been released to an EPN. When this occurs, the EPN needs to be reviewed to remove the quantity.

1. The **Negative Release** toolbar button  is active when negative releases exist. Click the **Negative Release** toolbar button. WMS displays any EPN items with a negative release state.

Exact. And it all comes together.

2. Double-click a line or press **Enter** to edit the quantity. The Edit Qty screen will be displayed where you can change the amount released.



3. Type the revised quantity to ship, and then click **Ok**. The line will be reprocessed through the recommendation system and the EPN updated.

### Traditional Paper Pick Tickets

Although the Pick Management functions provide many advantages, WMS supports a traditional paper environment for sites that are more comfortable with paper picking tickets or that do not have the RF infrastructure necessary to take full advantage of the Pick Management functions.

### Printing a Pick Ticket

Pick ticket processing is used to authorize WMS to ship a Progression order. Only those orders that have had pick tickets printed may be released to the Warehouse Management System.

Exact. And it all comes together.

Complete the pick ticket selection screen as specified in the Progression Order Entry manual.

### Releasing Orders to WMS using Post Pick Ticket Processing

Orders that have had pick tickets printed are released to WMS using post pick ticket processing. In addition, if the WMS EDI ASN Data Collection Module is installed, and an order for a customer configured for autopack is processed, WMS will automatically perform carton packing for the order, generating all of the compliant shipping labels required.

Users of previous versions of WMS please note that when an order for a customer configured for autopack is processed, WMS will generate labels for the remaining *unpacked* quantity for each line item that has had a pick ticket printed. This is different from previous versions of WMS. See **Reprinting Existing or Printing Additional Shipping Labels for an Order** for more details.

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1. In Progression Order Entry, select the **Trx** menu. Select **Picking**, and then click **Post Pick Ticket Process**.

2. Type the warehouse to be processed in the **Warehouse** field. This field can be left blank to process all warehouses.

3. Type an order number range, or leave the **Order From** and **Order To** fields blank to process all orders. Note that any order within the range that has had a pick ticket printed and has not been previously sent to WMS will be processed. In addition, any order within the range that has had a change to the line item quantity to ship and the pick ticket printed will be processed whether or not the order has been previously released.

4. To force the orders within the range to be re-released even if no quantity change has been made since the order was previously released, select the **Re-release Orders** check box. This is typically done when an order has been deleted from WMS for some reason.

5. Verify that the label printer and the exception report printer are set to the correct locations, or click the **Select** button to change to the correct printer.

6. Click **OK**.

**Closing WMS Orders when the Progression Order has been Closed**

WMS maintains its own order information. When an order is deleted from Progression, closed using the Progression close order function, or automatically closed by the Progression posting function, WMS must be informed that the order is no longer eligible for shipment. Normally the order would be updated in WMS using post pick ticket processing, but for these orders a pick ticket cannot be generated, so another tool is

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needed. The Close WMS Orders function searches all open WMS orders and closes any order that is not an open Progression order by reducing the quantity to ship to zero.

An exception report will be printed to alert the user of any order that contains packed cartons that have not been completed.

This function should be used after posting O/E invoices to A/R function or any time an order is manually closed. If an order is deleted from Progression, the order can be closed in WMS using this function, or deleted using the WMS Inquiry mass deletion function. See **Deleting an Order from WMS** for information about the mass deletion function.

In Progression Order Entry, select the **Trx** menu. Select **Invoices/Cash**, and then click **Close WMS Orders**.
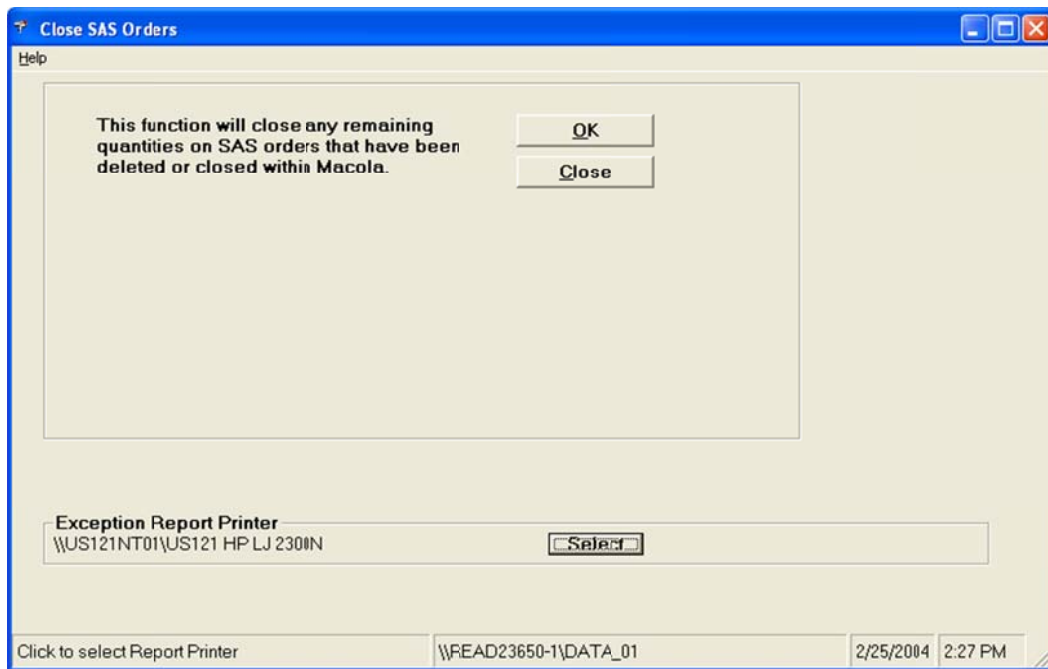


1. Verify the name of the exception report printer. Click the **Select** button to change the printer if necessary.

2. Click the **OK** button. WMS will read through all open WMS orders and reduce the quantity to ship to zero on all line items for deleted or closed Progression orders.

## Reprinting Existing or Printing Additional Shipping Labels for an Order
A user sometimes needs to reprint existing shipping labels for an order. Whether the label stock jammed while printing, someone tore one or more labels, or a cup of coffee was spilled on them making them unreadable, WMS has a number of ways to reprint labels.

Additional labels can also be printed if the customer increases the quantity ordered after the labels have been generated for the order. With WMS v7.5.17 and higher, however, the autopack function now prints labels for the unpacked quantity of each line item, so releasing a new higher quantity automatically generates the required labels during the normal release process. This eliminates the need to manually print additional labels.

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If printing additional labels is required for some reason, though, a function still exists to do that. Because this can generate an over ship situation, printing additional labels is only permitted when the WMS control file **Over Ship Message** field is set to **W** for warning. Additional labels should only be printed when more labels are actually required, rather than as a method for replacing damaged labels. If a series of existing labels are damaged, the labels should be reprinted instead. WMS allows you to reprint all labels for an order or all labels for an item on the order. Individual labels can also be reprinted from the pack cartons function in WMS. If a single shipping label needs to be reprinted, the pack cartons reprint is the recommended method.

The following sections describe the methods for printing additional or replacement labels.

### Re-printing a Series of Existing Shipping Labels

The Re-Print UCC-128 Labels function enables a user to reprint all labels for an order or all labels for a particular item on an order. In Progression Order Entry, select the **Trx** menu. Select **Picking**, and then click **Re-Print UCC-128 Labels**.



1.  Type the warehouse code in the **Warehouse** field for the order to be reprinted.

2.  Type the order number in the **Order No** field. Labels can be reprinted for only one order at a time.

3.  Type the item number in the **Item** field. If this field is left blank, the labels for all items on the order will be reprinted.

4.  Verify that the correct label printer is selected. Click the **Select** button to change printers if necessary.

5.  Click the **OK** button. WMS will reprint the requested labels.

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## Re-printing Individual Shipping Labels

Being able to reprint an individual label is convenient when you only need to reprint a few. WMS can reprint a specific label during carton packing. This is true even when the label was originally generated by the autopack function.

To reprint a single label, log in to WMS. If the WMS EDI ASN Data Collection Module is installed, select **Pack Cartons** from the WMS menu. In pack verify mode, WMS will automatically enter the pack verify function. The instructions are the same for both modes.



1. Type the carton number to be reprinted in the **Order No** field. Either the 10 digit or 20 digit carton number can be used.

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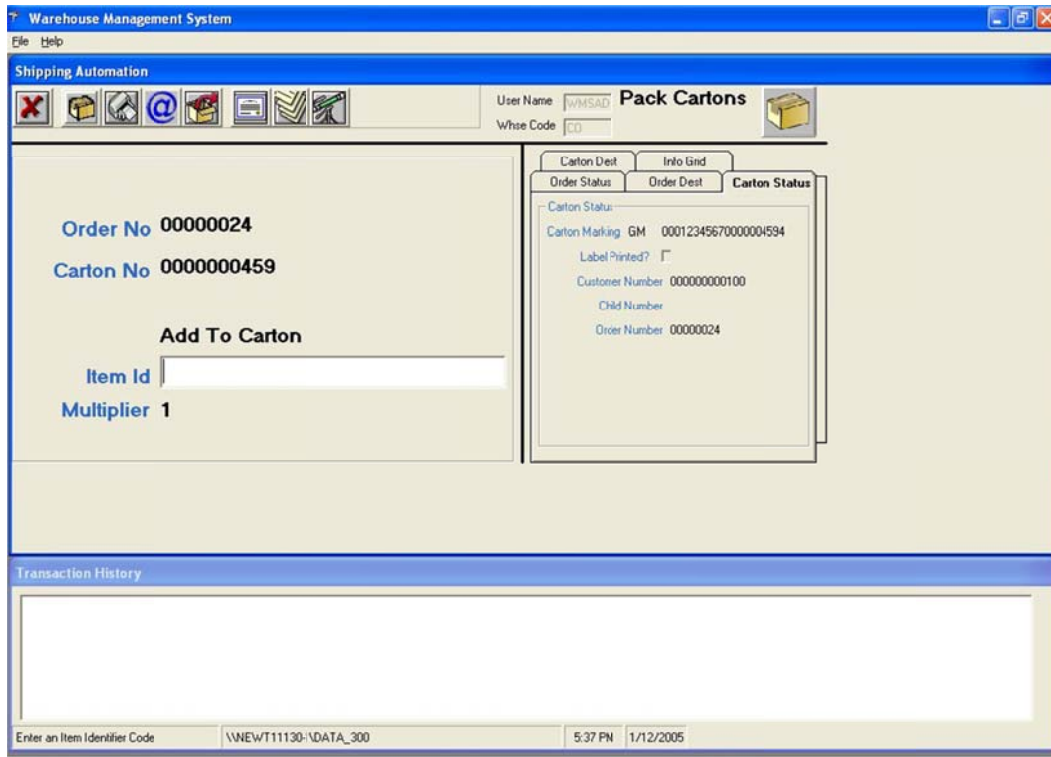
2. WMS will look up the carton and automatically enter the order number.

3. Click the **Reprint Label** toolbar button , or press the **F8** key.

4. Press the **Escape** key to exit the order.

### Printing Additional Shipping Labels

Printing additional shipping labels can cause an over ship situation. Therefore, this function is only permitted if the WMS control file **Over Ship Message** field is set to **W** for warning. In addition, printing additional shipping labels assumes that a standard quantity of an item will be packed into each carton. The rules determining the quantity placed in each carton are the same as those used by the autopack function. This feature is only available if the WMS EDI ASN Data Collection Module is installed.

In Progression Order Entry, select the **Trx** menu. Select **Picking**, and then click **Re-Print UCC-128 Labels** to print additional shipping labels.

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1. In the **Warehouse** field, type the warehouse location for the order that needs additional labels to be printed.

2. Type the order number in the **Order No** field. Additional labels can only be printed for one order at a time.

3. Type the item number to assign to the new labels in the **Item** field.

4. Select the **Print Additional** check box.

5. Type the number of additional labels to print in the **Qty** field. Note that this is not the quantity of the item that will be placed in each carton, but the actual number of cartons needed.

6. Click the **OK** button.

7. WMS will print the specified number of labels.

### Generating a Completely New Set of Labels for an Order

While not a normal practice, it is sometimes desirable to start over completely. The most common reason for this is when a setup problem causes labels to be generated with an incorrect case pack, which makes each of the labels incorrect. The quantity of labels would generally be incorrect as well. WMS allows a user with sufficient rights to delete an order from the shipping system so it can be reprocessed as though it had never been processed before.

The first step in this process is to delete the order from WMS. For detailed instructions about this, refer to **Deleting an Order from WMS**.

Once deleted, the order needs to be reprocessed into WMS. In Progression Order Entry, select the **Trx** menu. Select **Picking**, and then click **Post Pick Ticket Process**.

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1. In the **Warehouse** field, type the warehouse number for the orders to be re-released.

2. In the **Order From** and **Order To** fields, type the order number range of the orders to be re-released.

3. Select the **Re-release Orders** check box.

4. Verify that the correct label printer and exception report printer are specified. Click the **Select** button to change the printer if necessary.

5. Click **OK** to continue.

6. WMS will re-release the orders within the range. Labels will be generated for any order that contains unpacked quantities and that is for a customer configured for autopack. The quantity to pack for each line item on each picked order in the range specified will be updated to the current quantity to ship.

7. When processing is complete, click **Close** to exit.

**Logging In to WMS**

WMS is executed external to Progression. It is typically used at a packing station. Because Progression is not necessarily required on that workstation, the administrator can prevent access to Progression from it.

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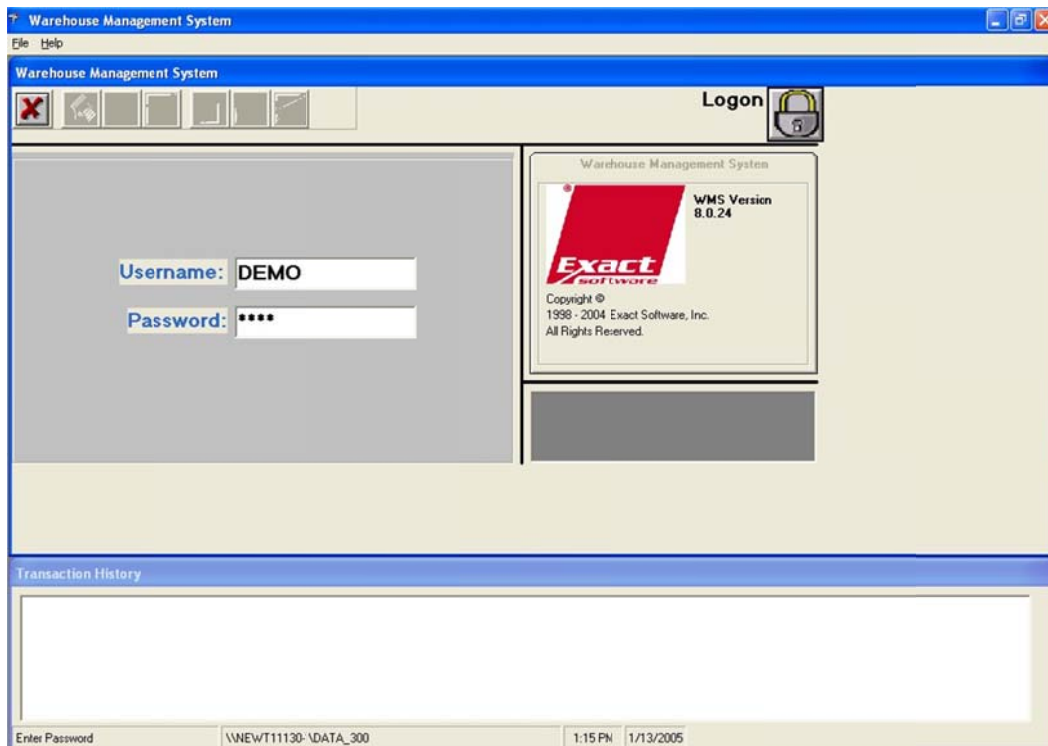
1. Type the user name in the **Username** field.

2. Type the password in the **Password** field.

3. Press **Enter**.

## Packing Orders in Pack Verify Mode

The Warehouse Management System has many advanced options for handling the large, multi-order shipments that are typical for EDI ASNs. However, WMS can also process individual orders efficiently. The WMS pack verification mode is designed to streamline the process of handling individual orders.

The mode is determined by settings in the WMS control file and the WMS customer override file. In pack verify mode, the user will have all of the advanced options available, but when an order is entered in Pack Cartons, WMS will determine that the customer is configured for pack verify mode, and Pack Cartons will operate in pack verify mode.

### Packing the Order

1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Select Pack Cartons.

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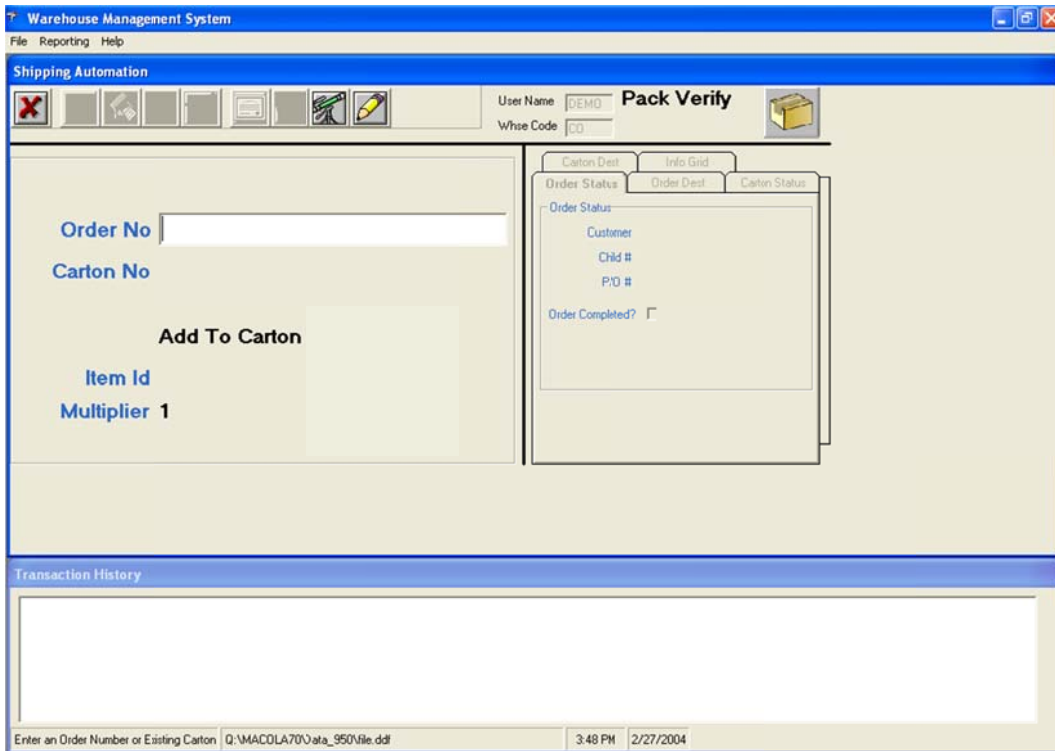
4. Type or scan the order number in the **Order No** field.

5. Click the **New Carton** toolbar button  or press the **F2** key to create a new carton.
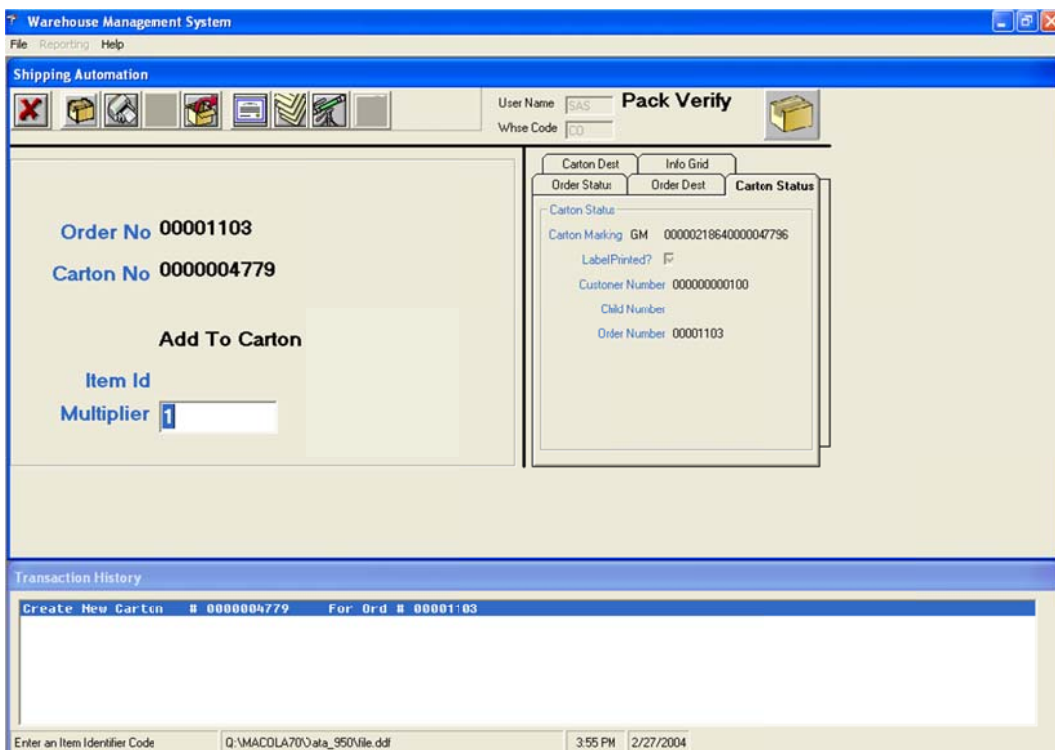


6. A shipping label will be generated and will print at this time.

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**Note**: If the label did not print correctly, click the **Reprint Label** button  or press the **F8** key to reprint it.
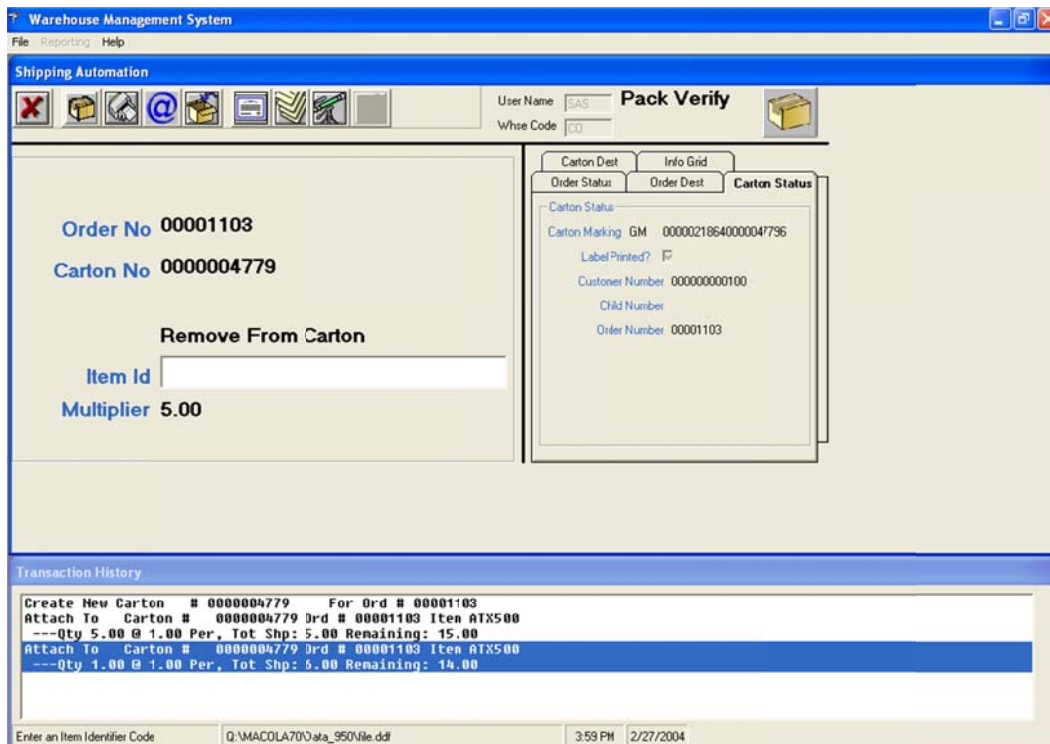
7. Click the **Multiplier** button  or press the **F4** key to specify a multiplier for the next item ID to be processed.

8. Type the quantity to multiply the next item entered by in the **Multiplier** field. In the example, the next item case pack, as defined in the ASN Bulk Weight cross-reference, will be multiplied by four. If the item's case pack is defined as 6, then 24 eaches will be packed into the carton.
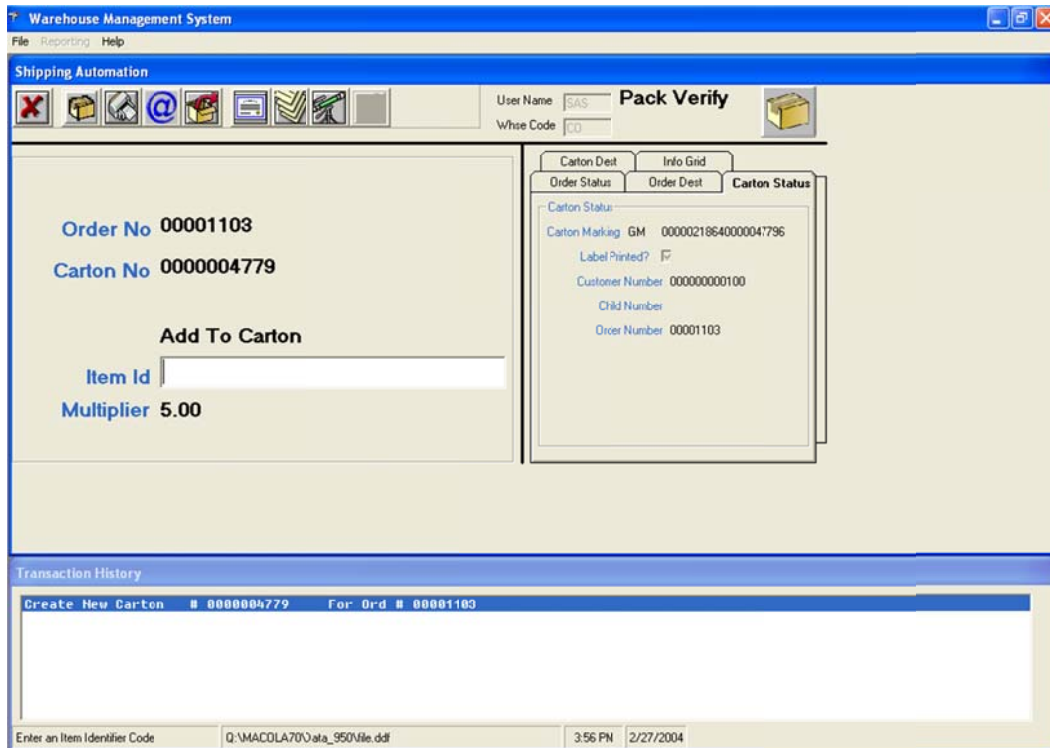


9. In the **Item Id** field, scan or type any of the following: item number, UCC-14 (I-205) number, UPC number, or any bar code that has been set up in the ASN Bulk Weight file.

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10. Continue to type or scan the item IDs being packed into this carton. A transaction history box at the bottom of the screen displays all transactions that have been processed during the session. The history box will be cleared once the session is completed and a new session begins, or it can be cleared manually. To manually clear the transaction history, highlight the transaction history bar by clicking the words **Transaction History**, and then select **File**, **Clear Transaction History** from the menu.

11. Once the carton is fully packed, click the **New Carton** button  to start a new carton for this order.

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12. To remove an item from a carton, click the **Remove** ![icon] toolbar button or press the **F5** key to enter Remove from Carton mode.

13. In the **Item Id** field, type or scan the item number, UCC-14 (I-205), or UPC number to be removed from the carton.

14. If necessary, use the multiplier function to multiply the quantity removed.

15. Press **Enter** to remove the item.

16. Click the **Add** ![icon] toolbar button to return to Add to Carton mode and pack more items.

### Exiting the Order

When all cartons are packed, the order can be completed, or the user can exit the order to work on another one. To complete the order, the user must have billing rights specified in the WMS security file. If the user does not have billing rights or the order is not ready to be completed and billed at this time, press **Escape** to exit the carton, and then press **Escape** again to exit the order.

WMS will verify that the order is completely packed. An information box will display any errors that are found.

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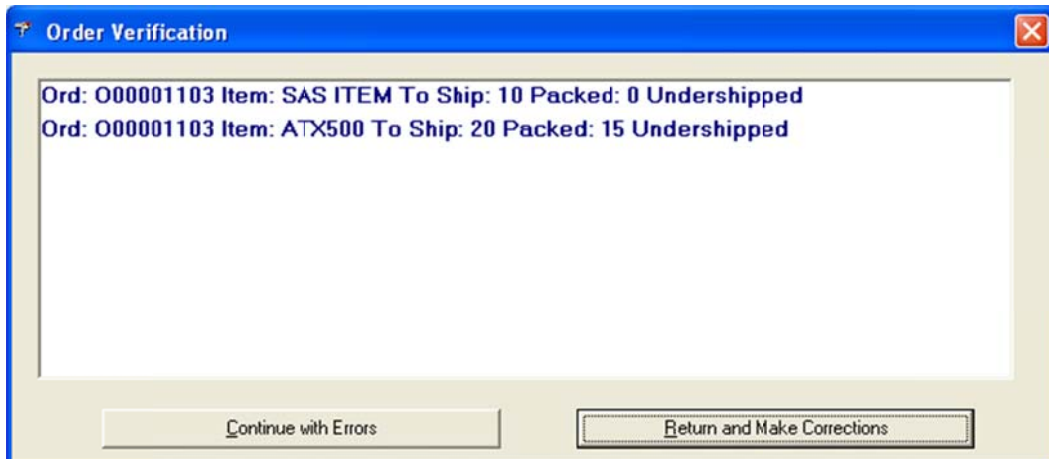
1. Click the **Return and Make Corrections** button if a correction needs to be made.

2. Click the **Continue with Errors** button if the errors are acceptable. In the example, click **Continue with Errors** as long as the two items are going to be back ordered.

3. WMS will either return the user to the order so corrections can be made, or return the user to the order number field to work on the next order.
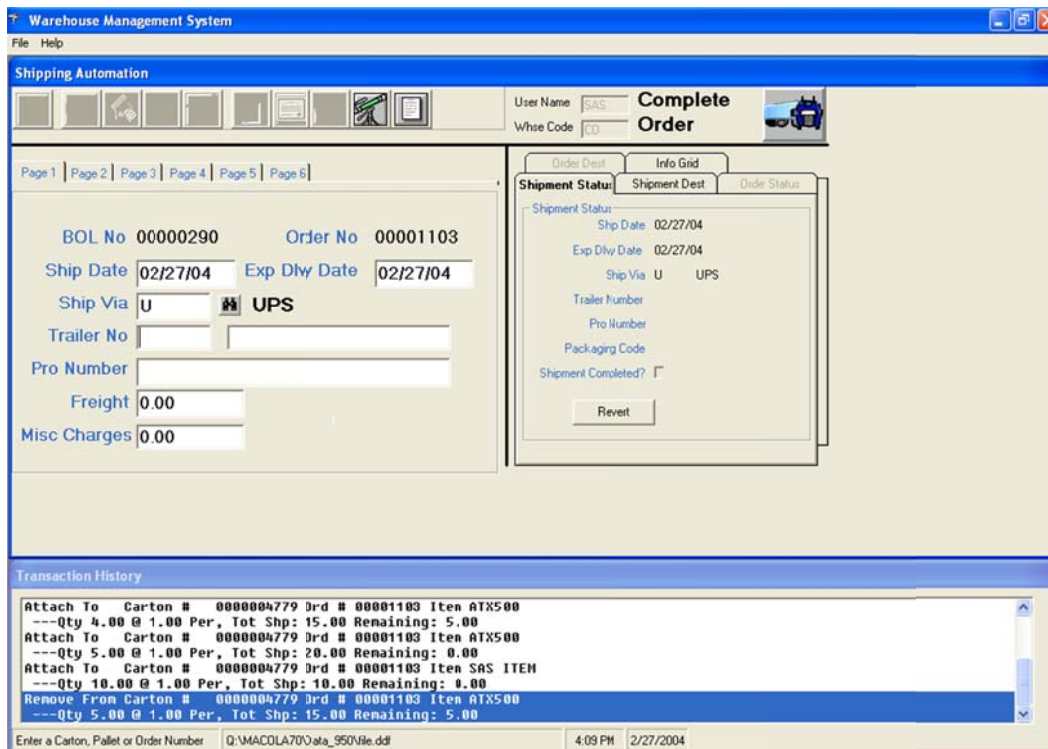
**Completing the Order**

A user with WMS billing rights will have the option to complete the order. If this user also has pack cartons rights, he will be able to make corrections to the packaging. If the user does not have pack cartons rights, he will only be able to complete the order or return it to a packer for corrections.

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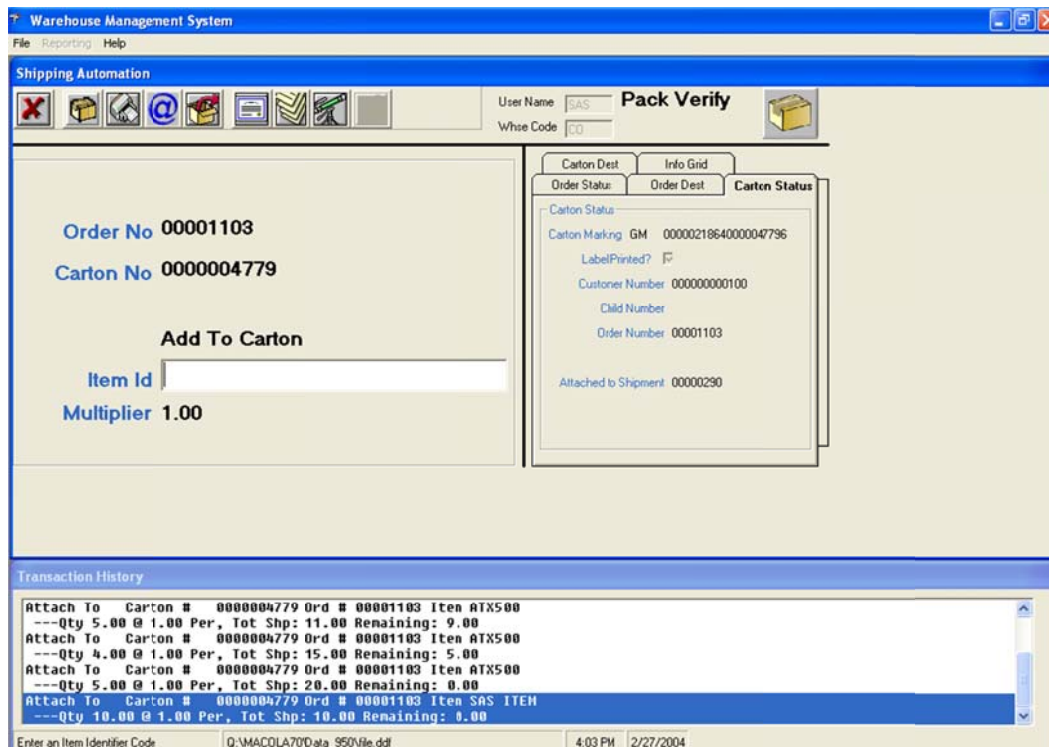
1. Type or scan the order number to be completed in the **Order No** field.

2. Click the **Complete Order** ⊟ toolbar button or press the **F11** key.

3. WMS will scan the order for errors, such as items that are under shipped or over shipped, and display a box with any messages.
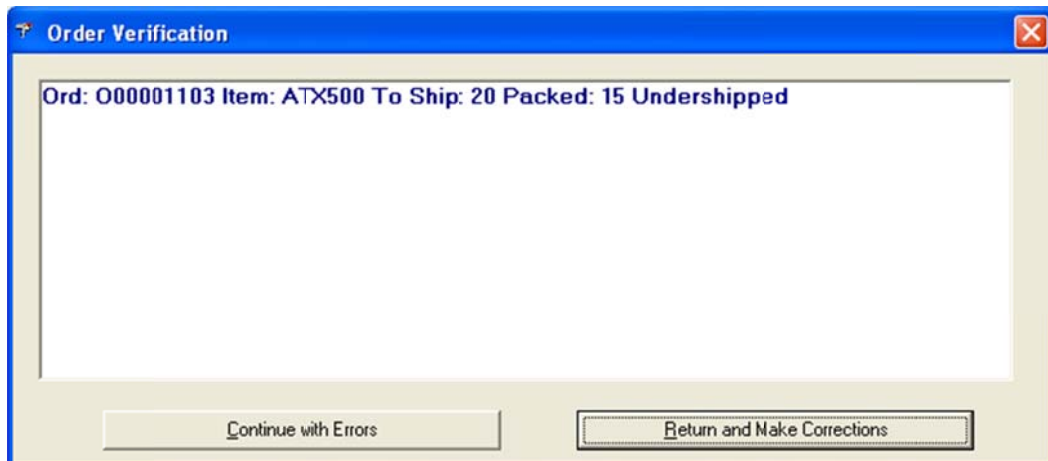


4. Click **Return and Make Corrections** to return to the carton packing/pack verify screen if you have pack carton rights, or to the order number field if you do not.

5. If you click **Continue with Errors**, the order completion process will continue, and then display the complete order screen.



6. The complete order screen allows shipment information to be entered, including the ship via code to be used for this order. Use **Page 2** through **Page 6** to enter information that might be needed on a bill of lading or other report.

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7. Press **Enter** when all the information is entered.

8. WMS will generate any bill of lading reports that have been specified.

9. WMS will return to the **Order No** field so the next order can be processed.

10. When all orders have been processed, click the **Update Macola** button ✏ to finalize the orders and pass the information to Progression. See **Importing Billing Selection Information using Bar Code for Distribution** for information about importing the selection information into Progression.

### Packing Cartons for a Pick and Pack Environment

The carton packing function is used in a pick and pack environment to pack multiple items into a carton. UCC-128 labels are generated at this time.
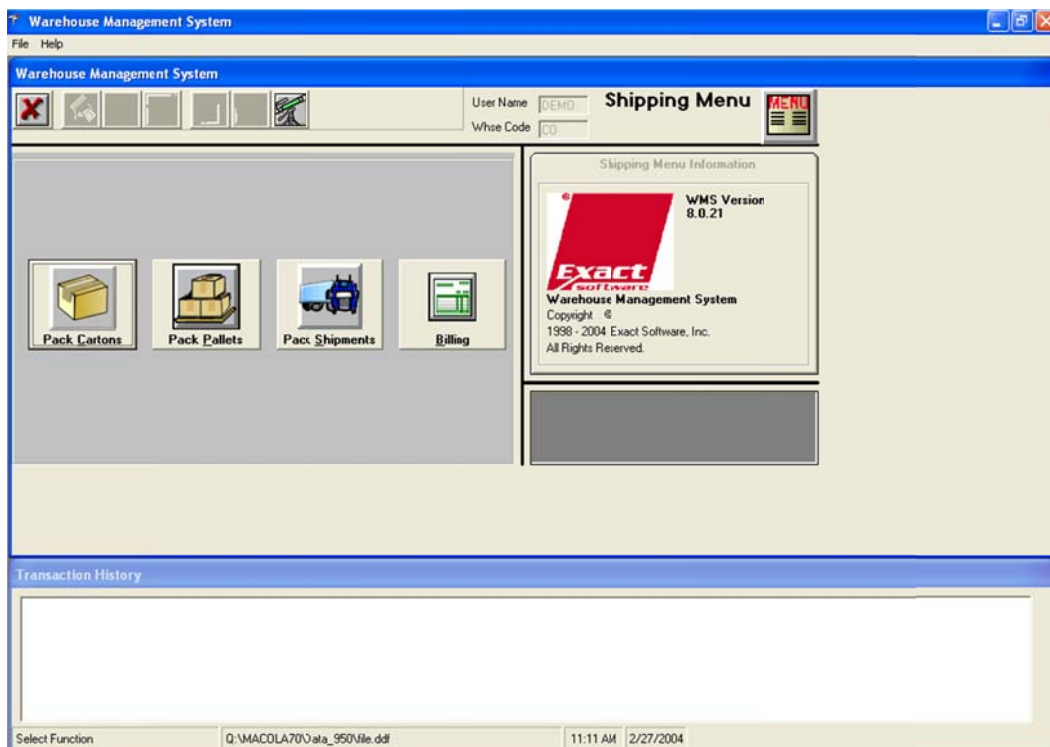


1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **Pack Cartons** button.
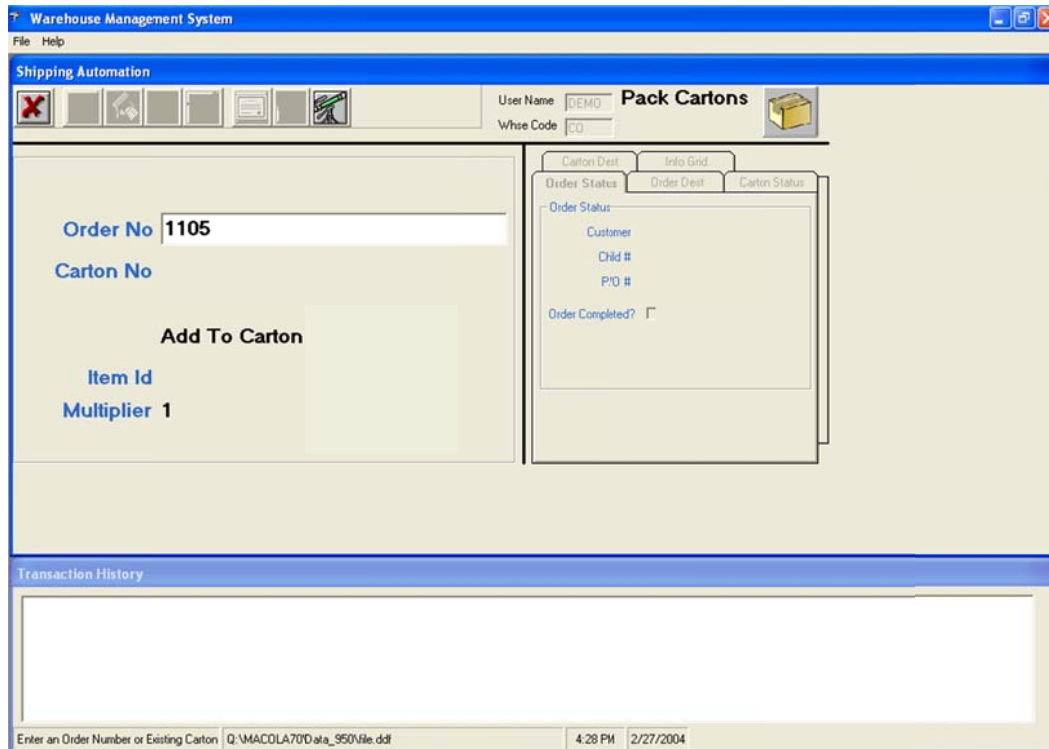
4.  Type or scan the Progression order number in the **Order No** field. To create a new carton and generate a UCC-128 label, you must first specify the order number. WMS will then link the carton number and the items placed into the carton to the order.
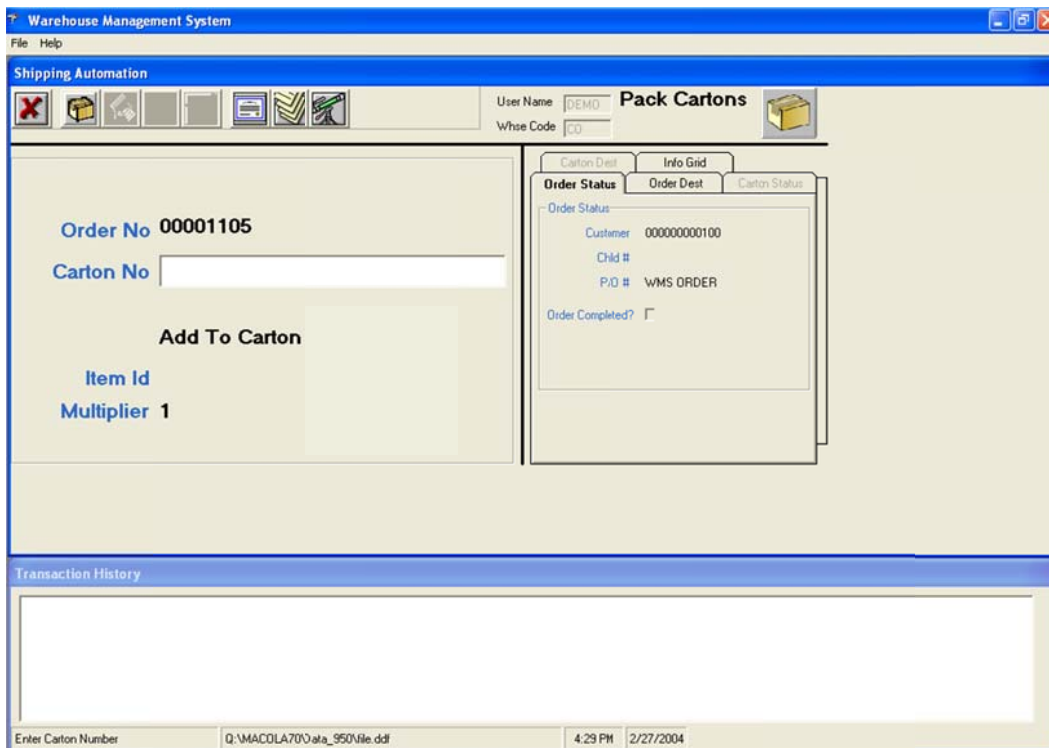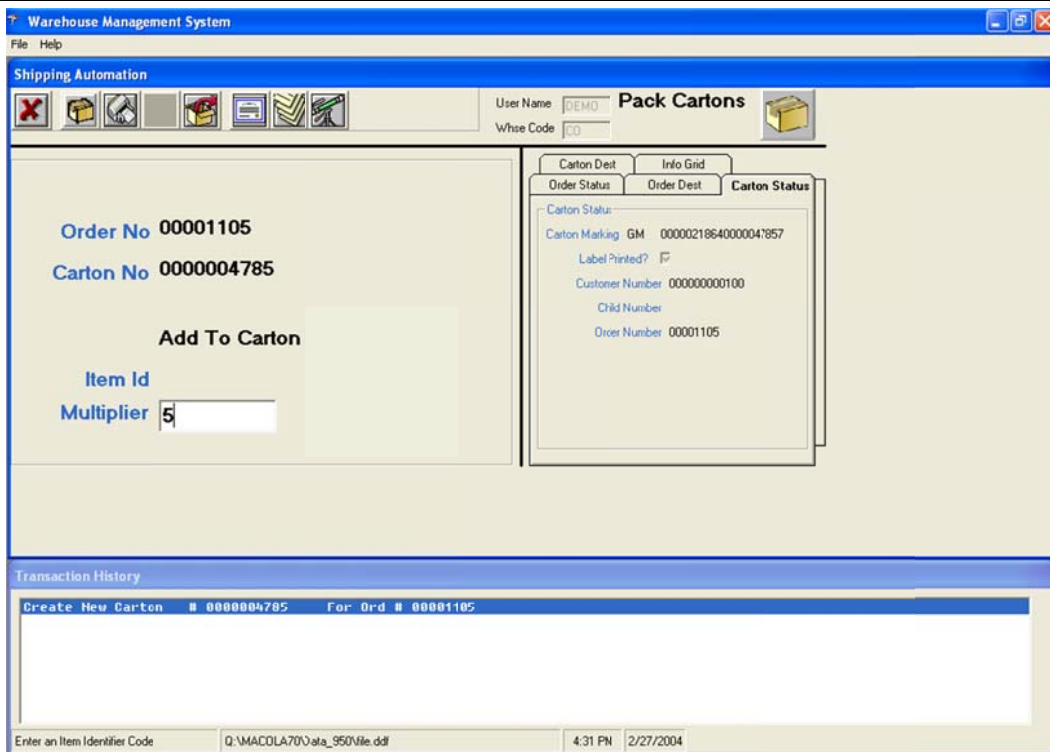


5.  Click the **New Carton** button 📦 or press the **F2** key to create a new carton.

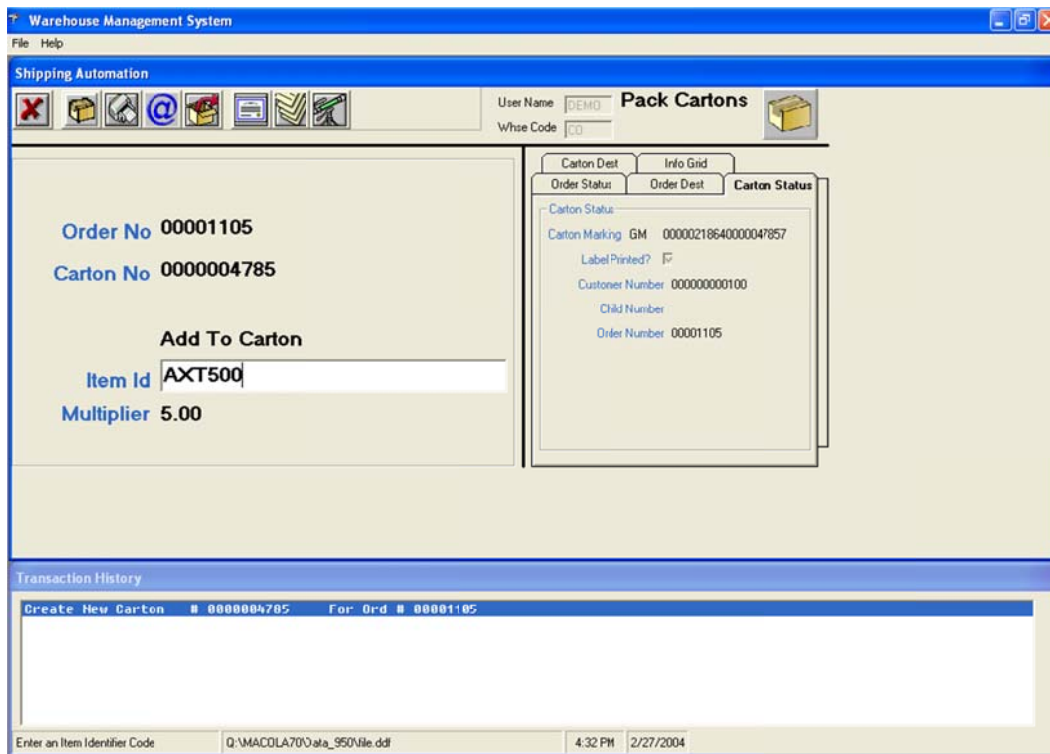Exact. And it all comes together.
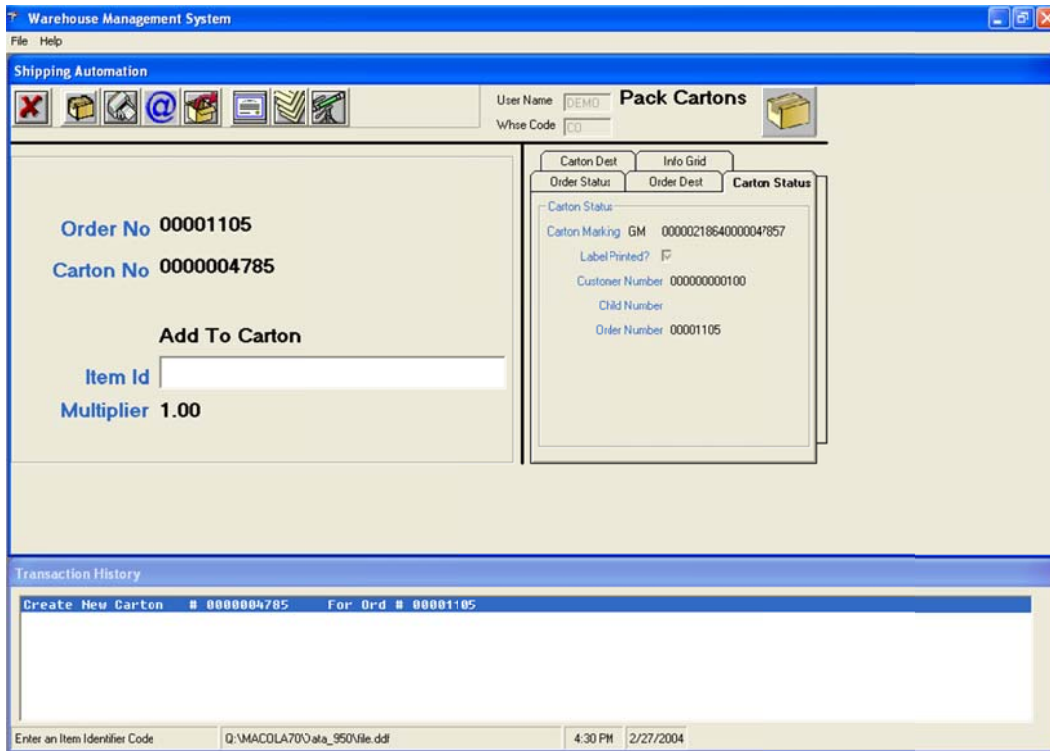
6.  A UCC-128 label will be generated and will print at this time.

---

**Note**: If the label did not print correctly, click the **Reprint Label** button 🖼 or press the **F8** key to reprint it.

---



7.  Click the **Multiplier** button 🔳 to specify a multiplier for the next item to be processed.

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8. In the **Multiplier** field, type the quantity to multiply the next item by. In the example, the next item case pack, as defined in the ASN Bulk Weight cross-reference, will be multiplied by four. If the item's case pack is defined as 6, then 24 eaches will be packed into the carton.

9. In **Item Id** field, scan or type one of the following: item number, UCC-14 (I-205) number, UPC number, or any bar code that has been set up in the ASN Bulk Weight file.



10. Continue to type or scan the item IDs being packed into this carton. A transaction history box at the bottom of the screen displays all transactions that have been processed during the session. The history box will be cleared once the session is completed and a new session begins, or it can be cleared manually. To manually clear the transaction history, highlight the transaction history bar by clicking the words **Transaction History**, and then select **File**, **Clear Transaction History** from the menu.

11. Once the carton is fully packed, click the **New Carton** button 🗔 to start a new carton for this order.

Exact. And it all comes together.
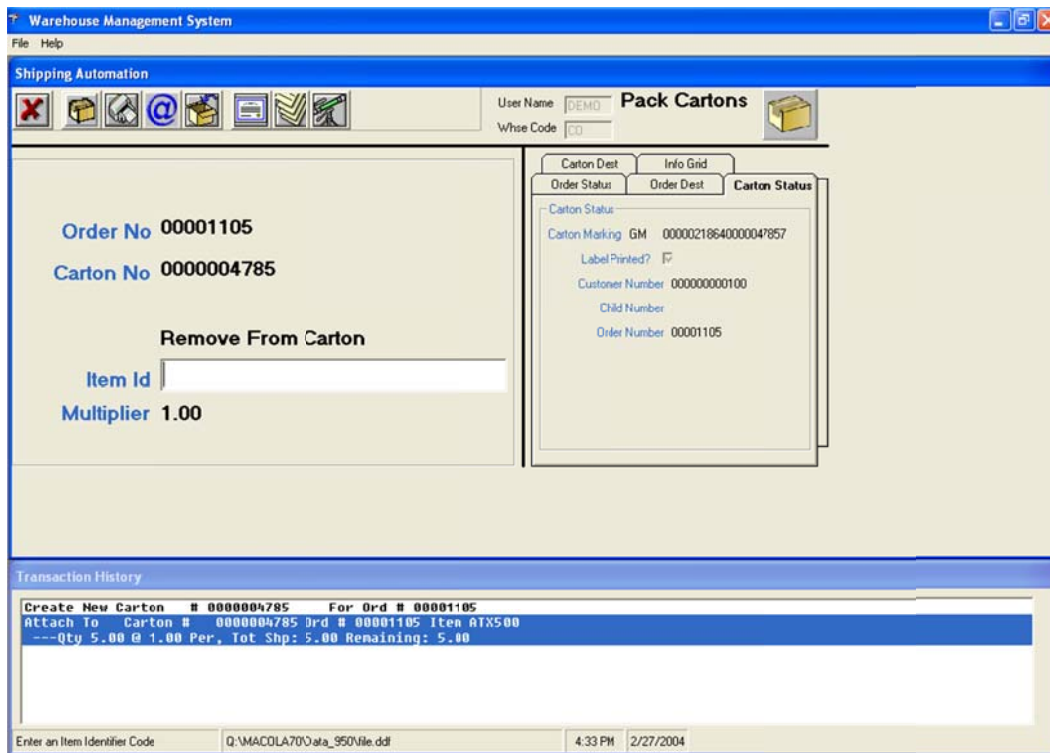
12. To remove an item from a carton, click the **Remove** 📦 toolbar button or press the **F5** key to enter Remove from Carton mode.

13. In the **Item ID** field, type or scan the item number, UCC-14 (I-205), or UPC number to be removed from the carton.

14. If necessary, use the multiplier function to multiply the quantity removed.

15. Press **Enter** to remove the item.

16. Click the **Add** 📦 toolbar button to return to Add to Carton mode and pack more items.

## Packing Pallets
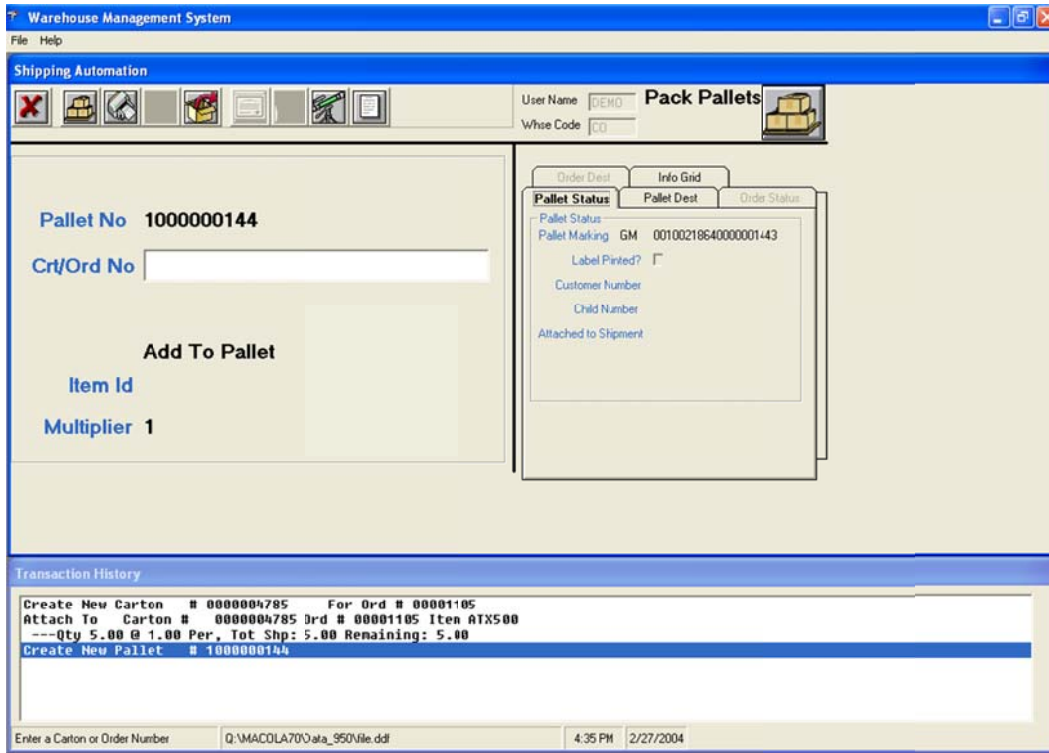
The pack pallets function is used to pack cartons onto pallets. The cartons can have been packed by carton packing or can have been automatically generated by the auto pack function as a result of printing pick tickets. WMS can also automatically create a carton around an item scanned directly onto a pallet.
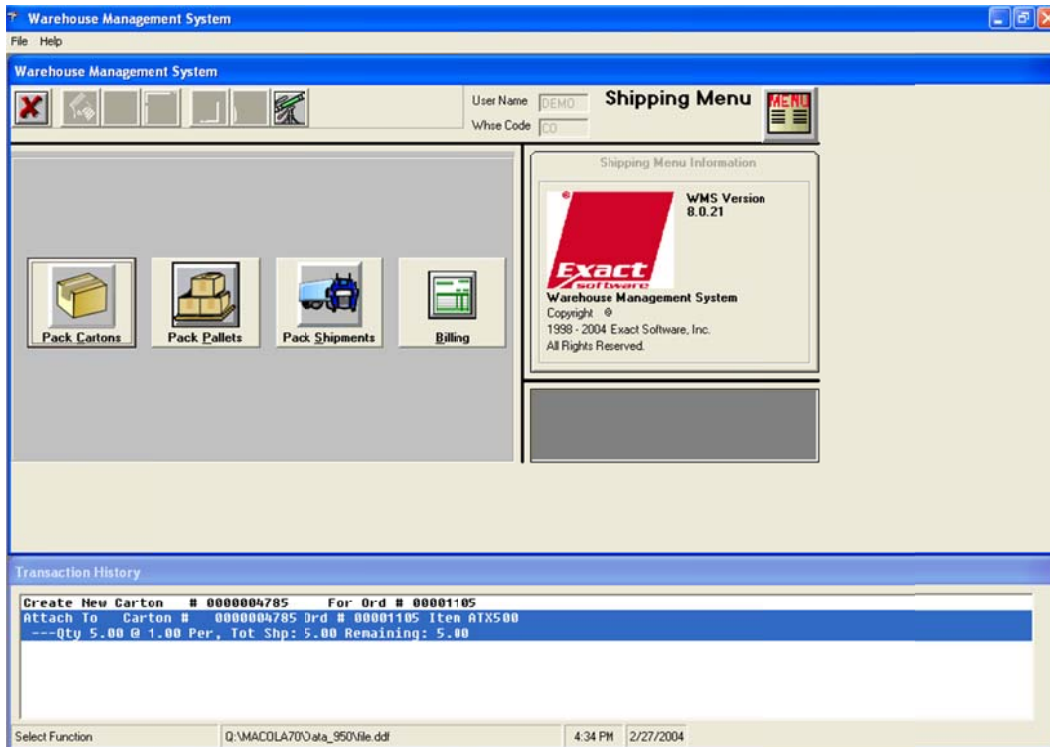
Exact. And it all comes together.

1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **Pack Pallets** button.

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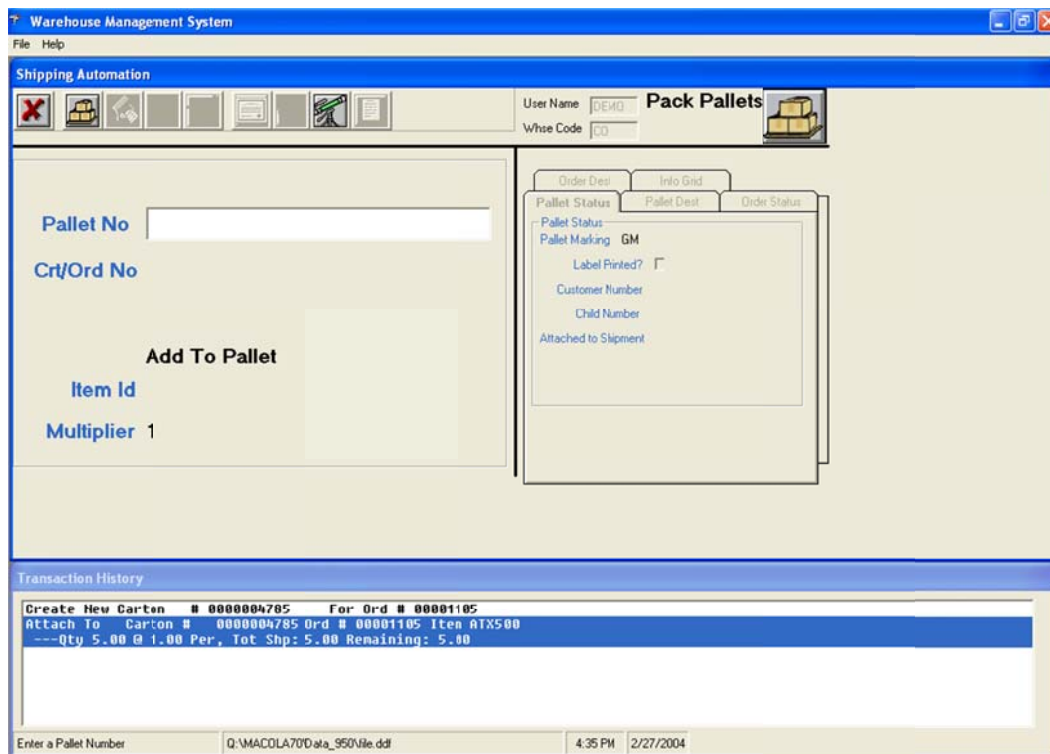
4. Click the **New Pallet** toolbar button ![icon] or press the **F2** key to create a new pallet.



5. To attach cartons that were created by either carton packing or the auto pack function, scan or type the UCC-128 number of the carton in the **Crt/Ord No** field.



6. To attach an item directly to the pallet, type the order number in the **Crt/Ord No** field.

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7. In the **Item Id** field, type or scan the item number, UCC-14 (I-205) number, UPC number, or any bar code that has been setup in the ASN Bulk Weight file.

8. If the customer is configured in the customer override maintenance to require carton UCC-128 labels, a UCC-128 label will print.

**Note**: If the label did not print correctly, click the **Reprint Label** button 🖼 or press the **F8** key to reprint it.
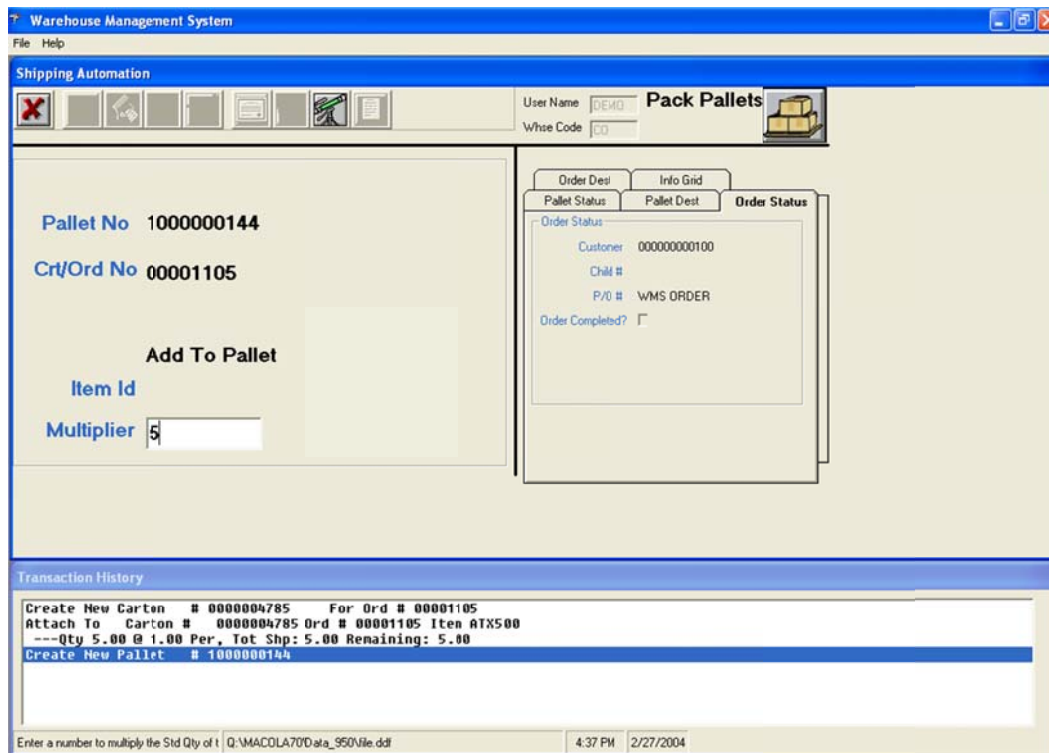


9. Click the **Multiplier** button 🔳 to specify a multiplier for the next item.

10. In the **Multiplier** field, type the number of units of the next item to add to the pallet.

11. Note that if the customer is configured to require carton UCC-128 labels, a single carton will be created to contain the multiplied quantity.

### Packing a Shipment

Pack Shipments tells WMS what cartons and pallets were combined onto a truck. With this function, a single Progression order can be split into multiple shipments, or multiple Progression orders can be combined into one shipment.

Example 1: During back-to-school season, Target sends a single order for 5000 cartons of notepads. These cartons will not fit in one truck. In fact, three trucks are lined up at the dock to handle the order. WMS defines a shipment as all pallets or cartons being shipped on one truck to the same customer destination. This destination might be a distribution center that will ultimately re-route the cartons to many stores, but initially they are all

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shipping to the same D/C. In this example, three shipments, and therefore three ASNs, should be created, one for each truck.

Example 2: Federated sends a purchase order for 150 stores. Progression creates 150 Progression orders. Of these orders, 50 are going to D/C 1, 60 to D/C 2 and 40 to D/C 3. Federated requires the orders going to D/C 1 to be treated as one shipment if they are all on one truck. This would indicate three shipments and therefore three ASNs.
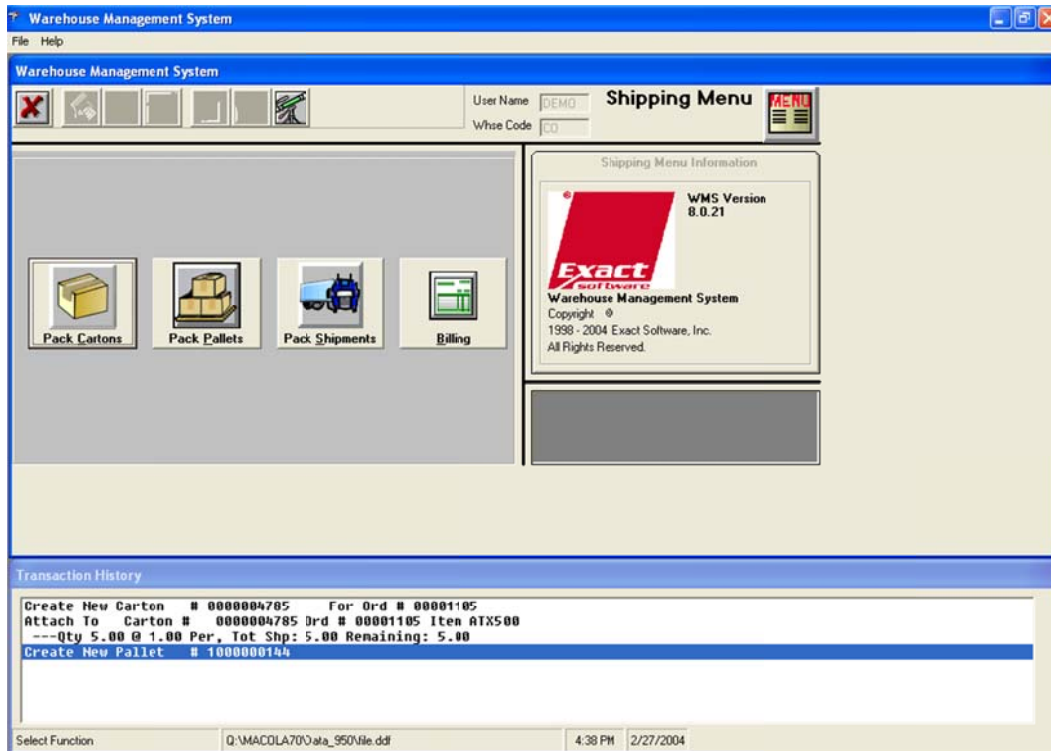


1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **Pack Shipments** button.

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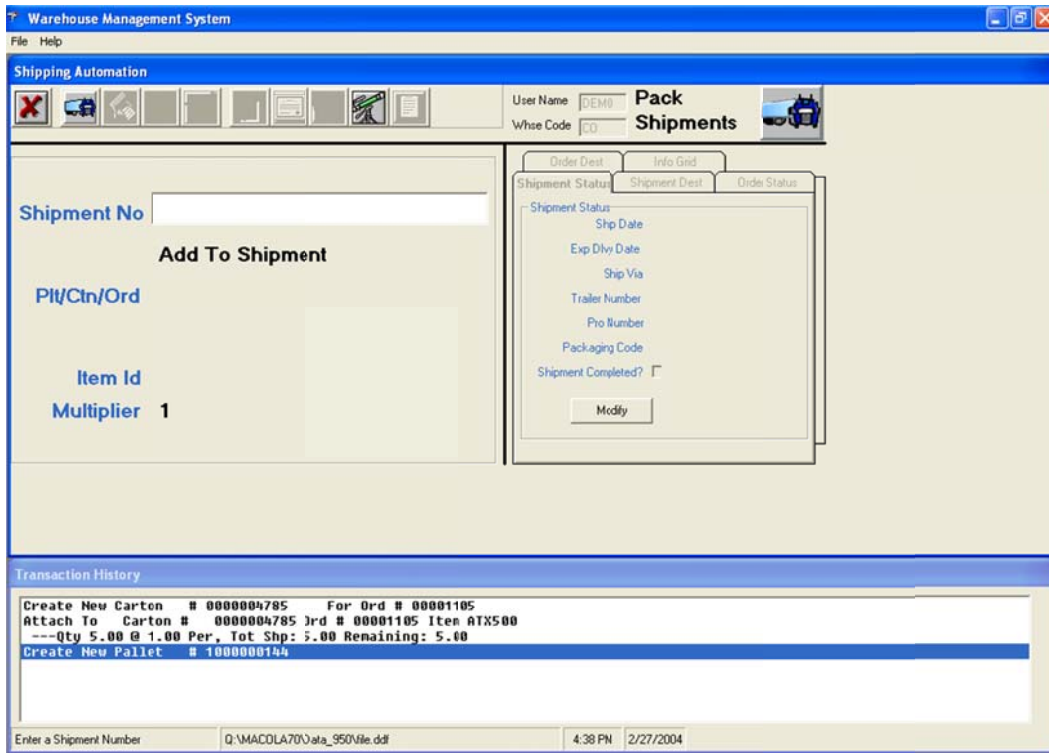
4. Click the **New Shipment** toolbar button  or press the **F2** key to open a new shipment.
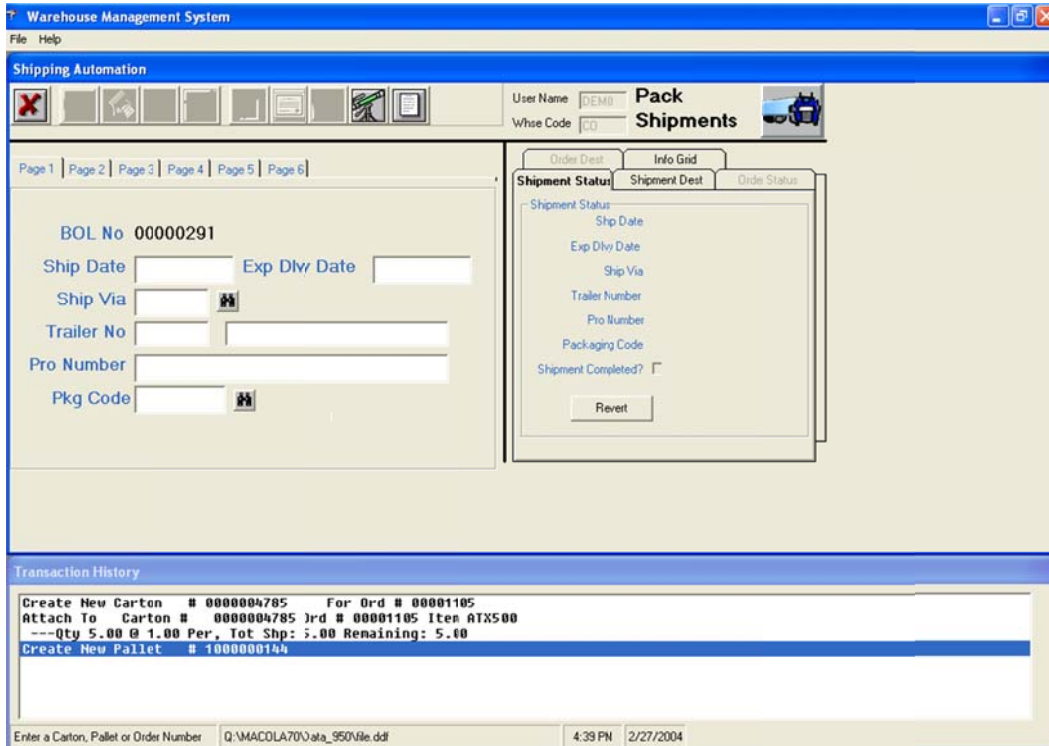


5. Type the shipment date in the **Ship Date** field. The shipment date will default to today's date if not specified.

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6. Type the expected delivery date in the **Exp Dlvy Date** field. The expected delivery date will default to today's date if not specified.

7. Type the ship via code in the **Ship Via** field.

8. If shipping by truckload, type the trailer number in the **Trailer No** field.

9. If using an LTL carrier, type the carrier's pro number in the **Pro Number** field.

10. Type the package code in the **Pkg Code** field. The code must be set up in the ASN Package Code cross-reference.

11. Enter any information needed on a bill of lading or other report on **Page 2** through **Page 6**.

12. Once the fields are completed, press **Enter** and WMS will print a shipment tag label. This label is for internal use only. The shipment tag represents a physical truck that will be loaded with orders going to a common destination.
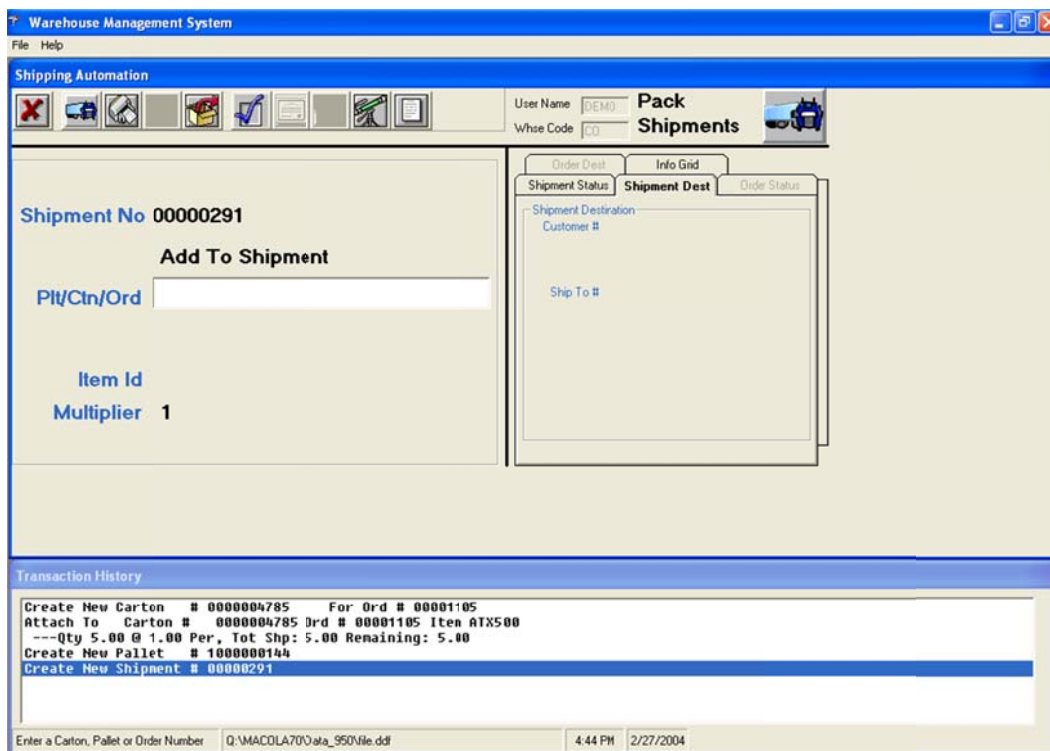


13. Scan or type a UCC-128 number in the **Plt/Ctn/Ord** field to attach a carton or a pallet to the shipment. Type the order number to attach the entire order to the shipment.
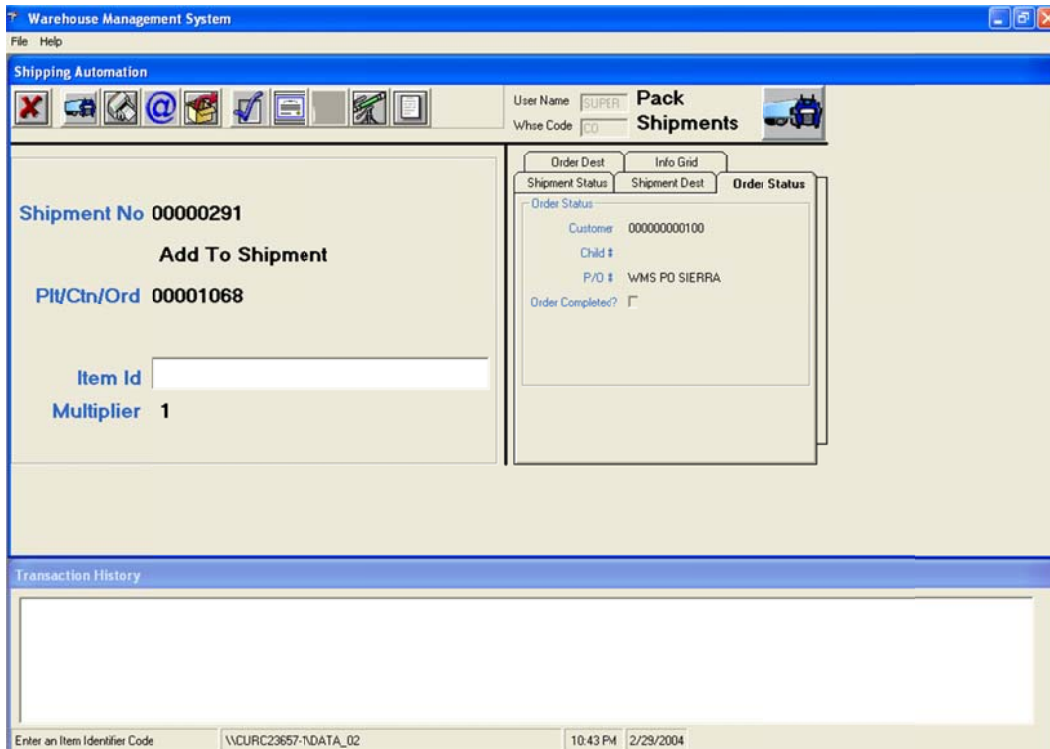
14. If attaching an order, the cursor will move to the **Item Id** field. Type or scan an item ID to pack the item directly onto the shipment. The item is validated against the order and UCC-128 labels are printed, if required.

15. To attach all existing cartons and pallets for an order to this shipment, click the **Verify** toolbar button.

Exact. And it all comes together.
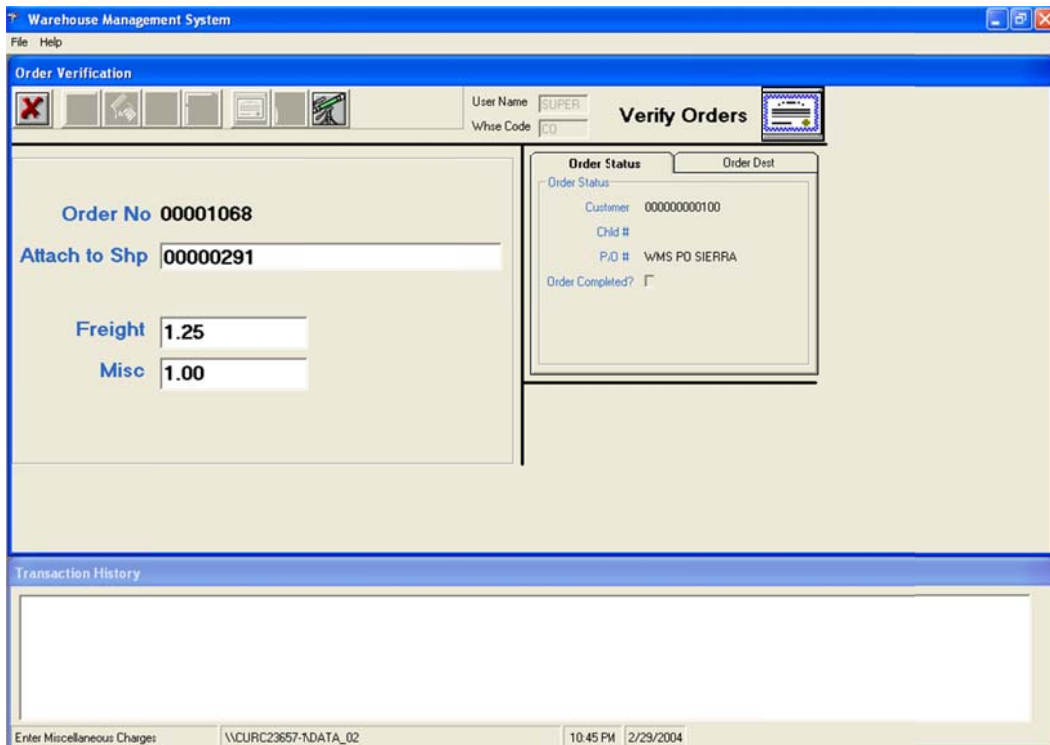
16. If the order completion mode for the customer is set to pack shipments, the order will be marked for completion when the shipment is completed; otherwise, the order must be closed manually. See **Using WMS Order Completion** for information about manually completing orders.

17. The **Freight** and **Misc** fields will only appear when the order completion mode for the customer is set to pack shipments; if they appear, type the appropriate values into the fields.

18. Press **Enter**.
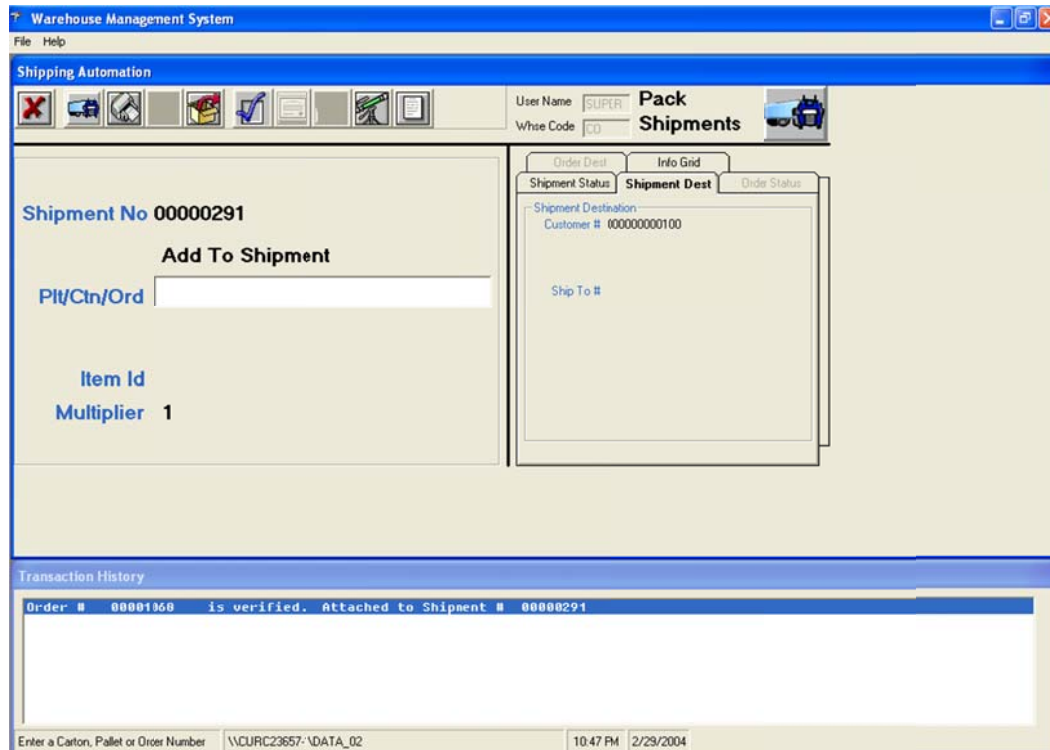


19. When all cartons, pallets and orders have been attached to the shipment, click the **Complete Shipment** toolbar button ☑.

20. Click the **Exit** button ✖ when finished.

### Using WMS Order Billing

The Warehouse Management System requires orders to be processed through the WMS billing system to close a billing cycle properly. This is required whether or not the selection information is passed to Progression. If not done properly, problems might occur when processing a backorder against the order.

It is important to note that WMS does not actually select orders for billing in Progression, but instead passes information to Progression via Progression's Bar Code for Distribution module. This Progression module allows systems like WMS to transfer billing selection information to Progression, and is therefore required to complete the automation process. See **Importing Billing Selection Information Using Bar Code for Distribution** for detailed instructions about importing the selection information.

Exact. And it all comes together.

WMS has three different modes for completing orders. The mode used is determined by the status of the **Default Order Completion Mode** field in the WMS control file, and can be overridden for a specific customer in the customer override file.

If the order completion mode is set to pack shipments, orders will be flagged as complete when a shipment that includes the order is completed. If the order completion mode flag is set to WMS billing, orders will be flagged as complete when a user specifically requests the order to be billed. Pack shipments mode is convenient for companies that rarely split an order into multiple shipments within a billing cycle, while WMS billing is best for companies that frequently split orders into multiple shipments within a billing cycle. The final option is pack cartons verify mode, which indicates that an order is to be treated as an individual shipment. Order completion is done immediately during carton packing, so manual billing is not necessary.

### Order Completion Mode is Upon WMS Billing
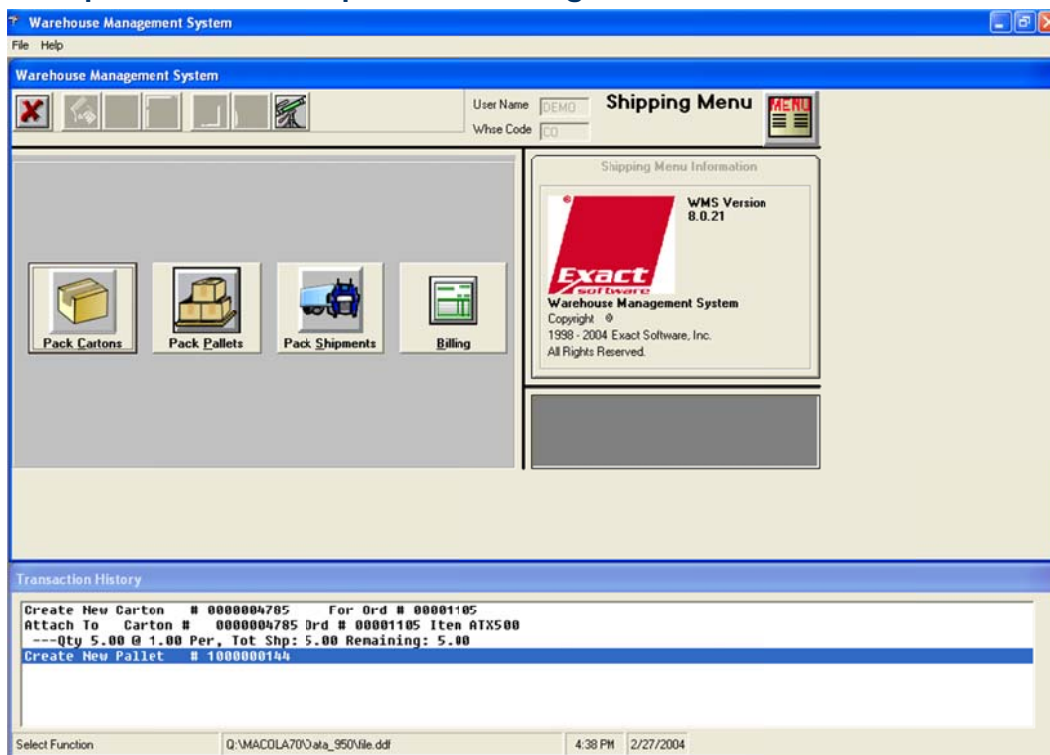


1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **Billing** button.

Exact. And it all comes together.
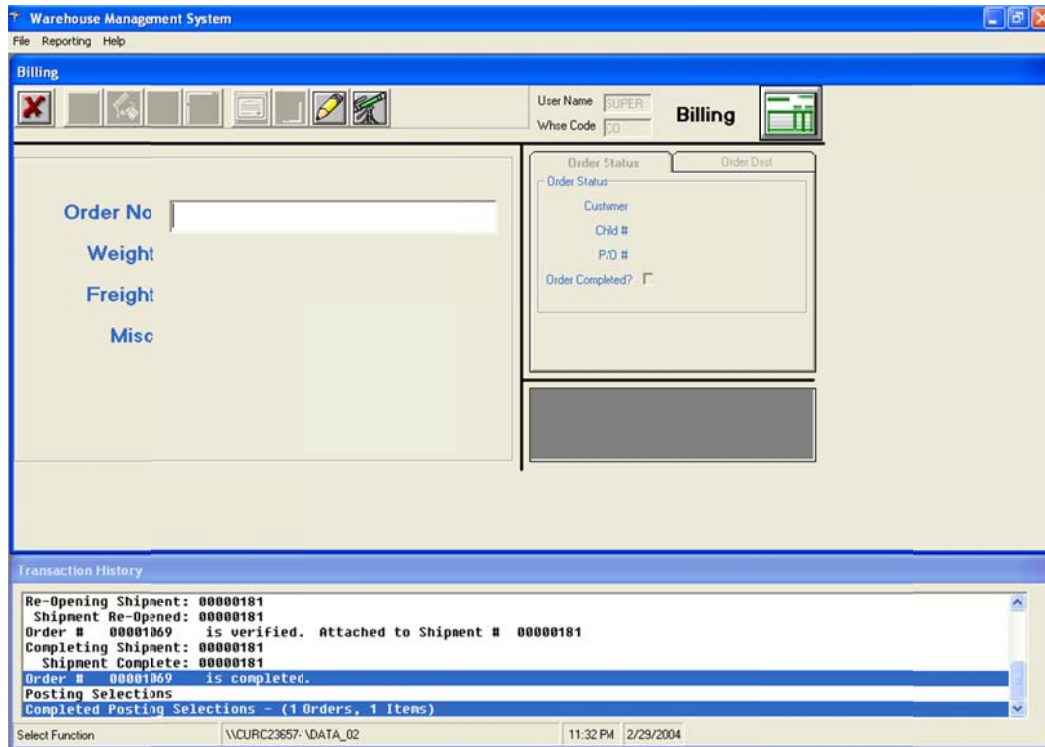
4. Type the order number in the **Order No** field.
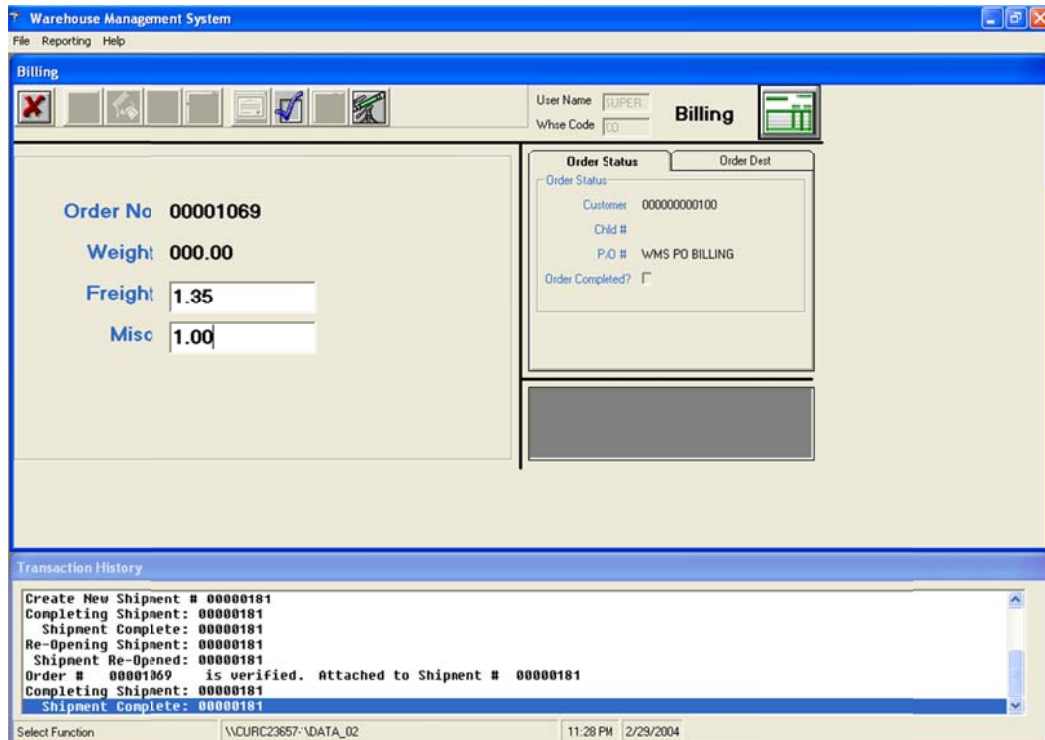


5. WMS will calculate the order weight based on the weight of the line items in the Progression Item Master.

6. Type the freight charges for the order, if any, in the **Freight** field.

7. Type any miscellaneous charges for the order in the **Misc** field.

Exact. And it all comes together.

8. Press **Enter**.



9. WMS will complete the order.

10. After all orders are completed, click the **Update Progression** toolbar button to process all completed orders to a file that the Progression Bar Code for Distribution module Quick Ship Polling function can process to select orders for billing in Progression.

11. WMS will display a warning message alerting the user that this process is permanent and cannot be undone.

12. Click **OK** to allow the process to continue, or **Cancel** to abort.

Exact. And it all comes together.
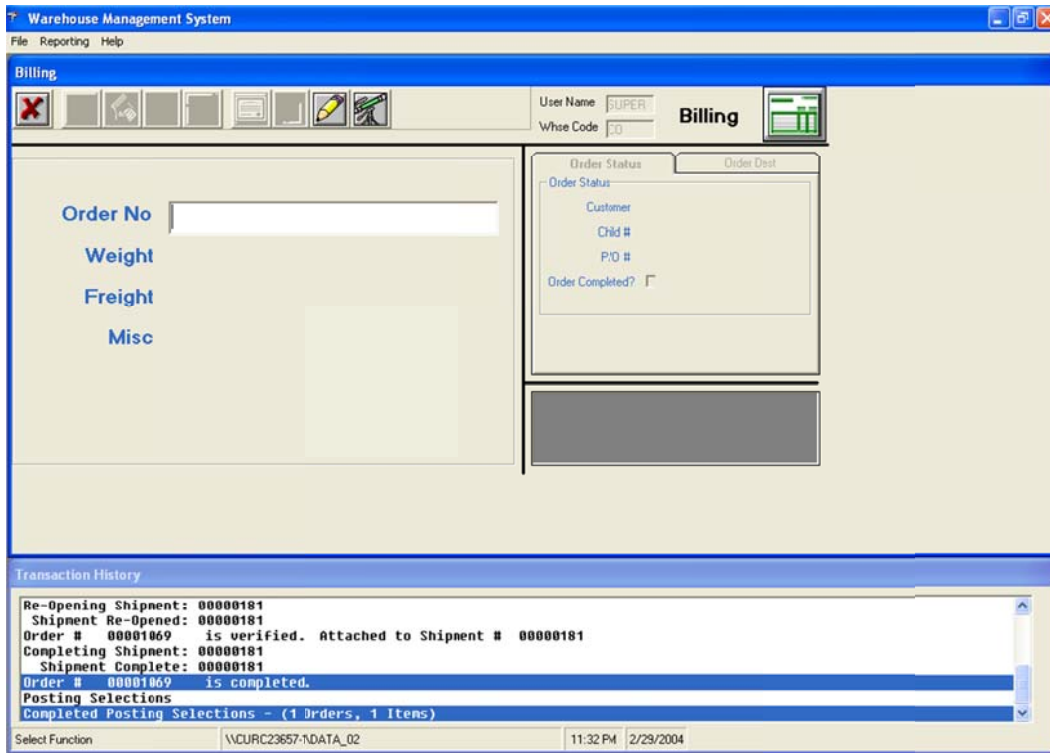
13. After the Update Progression function has finished, the transaction history will display a message that all completed orders were posted. Note that the orders will not be selected for billing in Progression until the Bar Code for Distribution Quick Ship function has been run. See **Importing Billing Selection Information Using Bar Code for Distribution** for information about running that process.

Exact. And it all comes together.

**Order Completion Mode is Upon Shipment Completion**
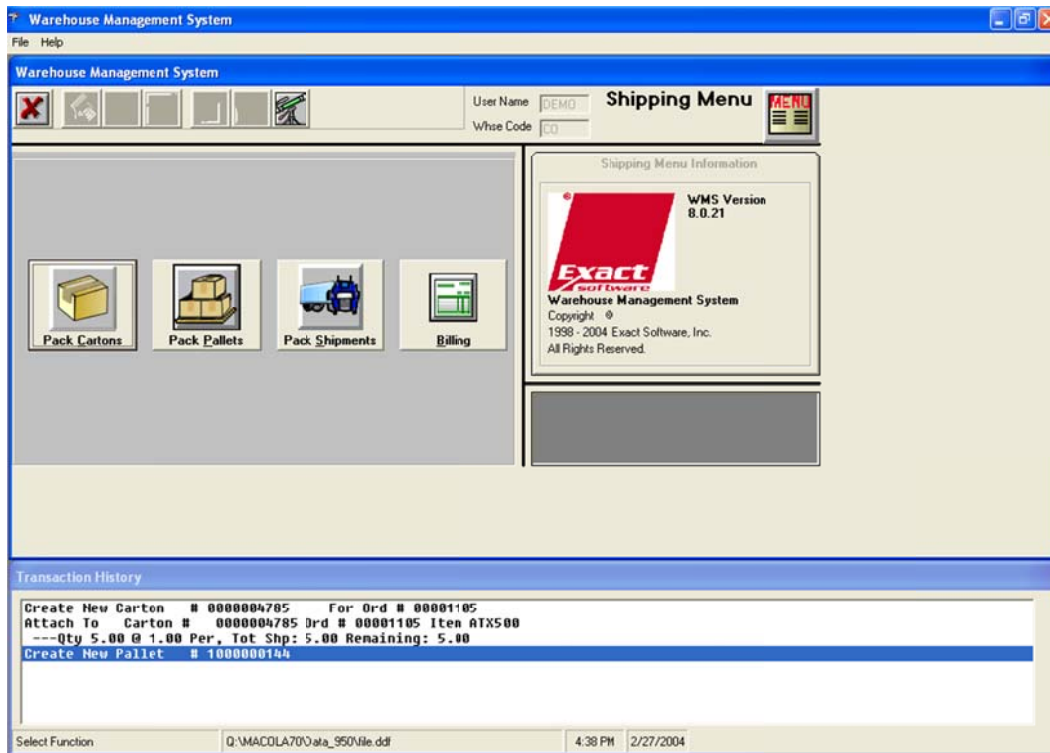


1. Log in to WMS.

2. If the order is not in your default warehouse, select **File** from the WMS menu, and then click **Change Warehouse**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

3. Click the **Billing** button.

Exact. And it all comes together.
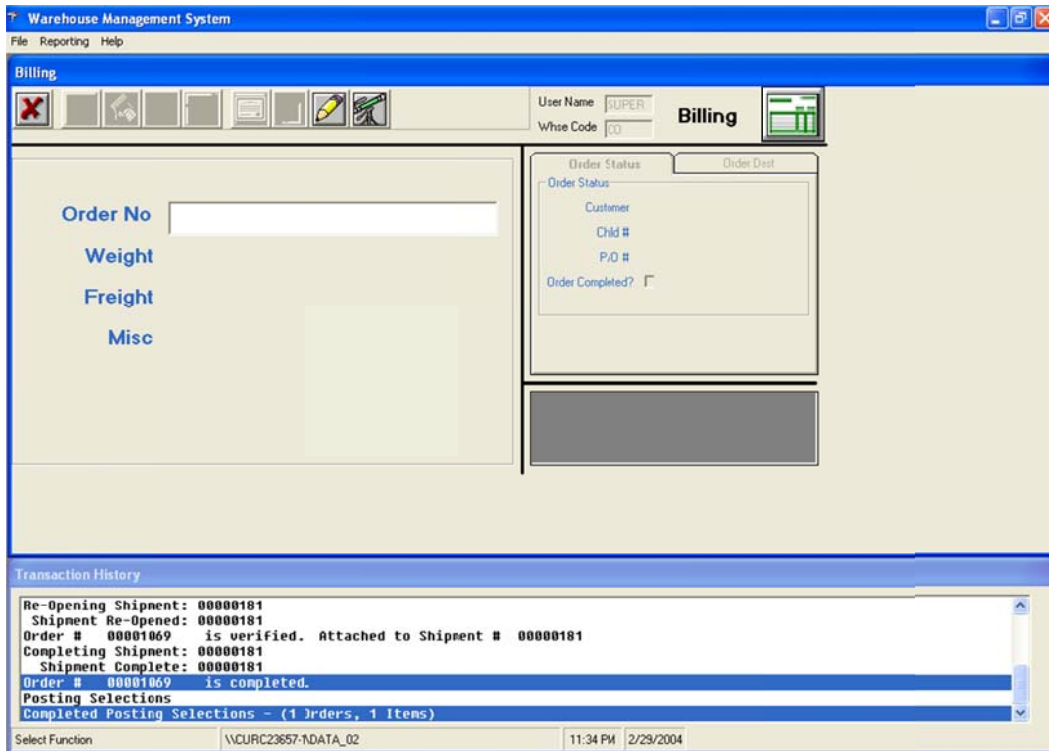
4. In this mode, all orders are flagged for completion when a shipment that they are attached to is completed.

5. Click the **Update Progression** toolbar button  to process all completed orders to a file that the Progression Bar Code for Distribution module Quick Ship Polling function can process to select orders for billing in Progression.

6. WMS will display a warning message alerting the user that this process is permanent and cannot be undone.

7. Click **OK** to allow the process to continue, or **Cancel** to abort.

Exact. And it all comes together.
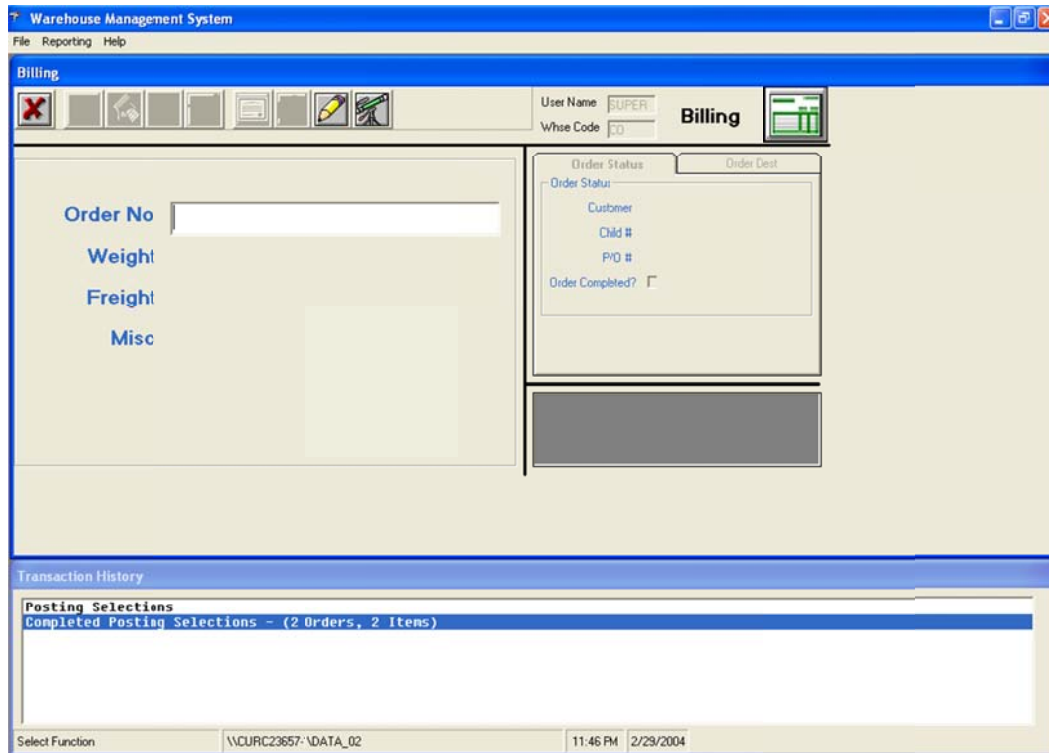
8. After the Update Progression function has completed, the transaction history will display a message that all completed orders were posted. Note that the orders will not be selected for billing in Progression until the Progression Bar Code for Distribution module Quick Ship function has been run. See **Importing Billing Selection Information Using Bar Code for Distribution** for information about that process.

**Importing Billing Selection Information using Bar Code for Distribution**

WMS does not actually select Progression orders for billing. Instead, it interfaces with Progression's Bar Code for Distribution module to pass order selection information into Progression.

Once the Update Progression function has been completed, the Progression Quick Ship function of the Bar Code for Distribution module can be used to import this information into Progression.

In Bar Coding, select the **Trx** menu. Select **Polling**, and then click **Quick Ship**.

Exact. And it all comes together.
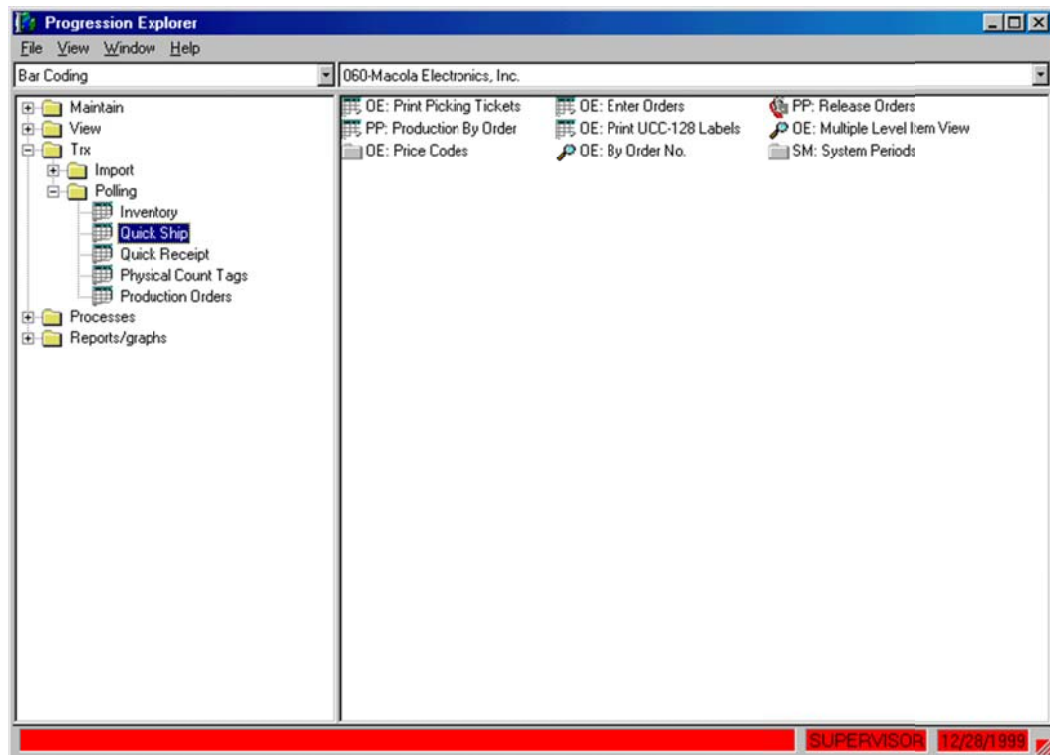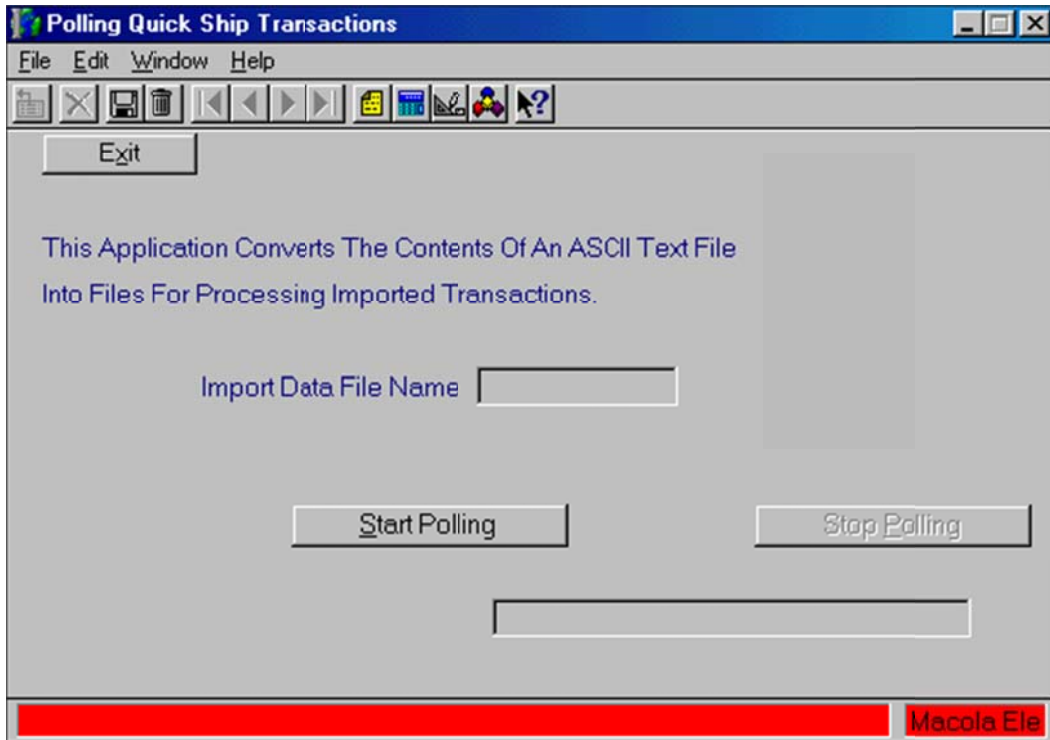
1. Click the **Start Polling** button to begin the polling process. This process will retrieve all orders that were processed by the Update Progression function and select the Progression orders based on the information that was passed from WMS.

Exact. And it all comes together.

2. Once complete, the order will be selected for billing. Please refer to your Progression O/E manual for instructions on completing the billing cycle.

**Note**: This program can be started on a dedicated machine and run continuously, which allows WMS to send billing information to Progression instantaneously. This is not usually necessary, but is available if desired.

## Deleting an Order from WMS

When necessary, the work done on an order in WMS can be removed. This process should not be taken lightly, and only certain users should be given access to this functionality.

1. Log in to WMS as a user with mass deletion rights.

2. Click the **WMS Inquiry** toolbar button  or press the **F3** key to launch the WMS Inquiry.
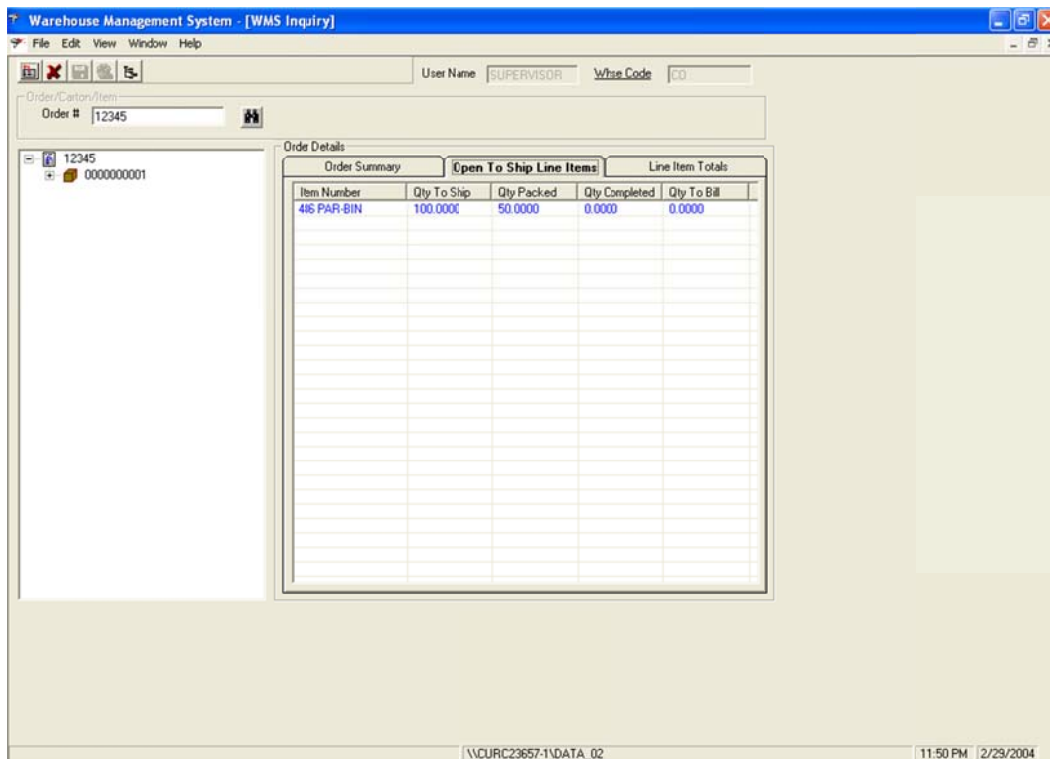


3. Make sure that the current view is By Order Number, Carton, Item. If not, select **View** from the menu, and then change the view to **By Order Number, Carton, Item**.

4. If the order is not in your default warehouse, click **Whse Code**. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

5. Type the order number to be deleted in the **Order #** field.

6. Right-click the order number in the list, and then click **Delete**.

Exact. And it all comes together.

**Warehouse Management System**

ℹ This action will delete Order No 12345 from shipment files!!!
Do you really want to delete 12345?

[ Yes ]   [ No ]
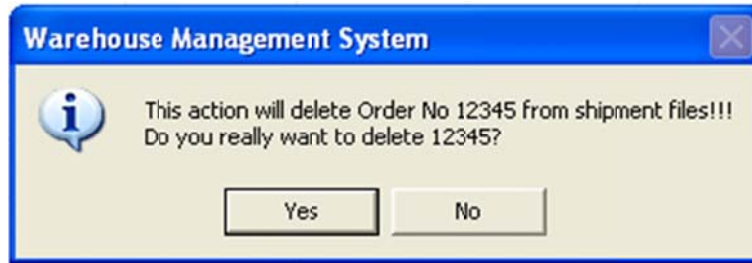
7.  WMS will display a message that the order will be deleted. Click **Yes** to continue.

8.  WMS will delete the order and all associated cartons from the shipping system.

**Note**: If this order is attached to a completed shipment, the order cannot be deleted without first re-opening the shipment.

9.  Exit the inquiry when done.

### Recalculating the Totals for an Order in WMS

Although rare, the system total values for an order line item can become out of synch with the transaction files. This is most likely to happen if a problem occurs during shipment completion. A utility has been provided to recalculate the totals for the order when necessary.

1.  Log in to WMS as a user with mass deletion rights.

2.  Click the **WMS Inquiry** toolbar button [icon] or press the **F3** key to launch the WMS Inquiry.

Exact. And it all comes together.
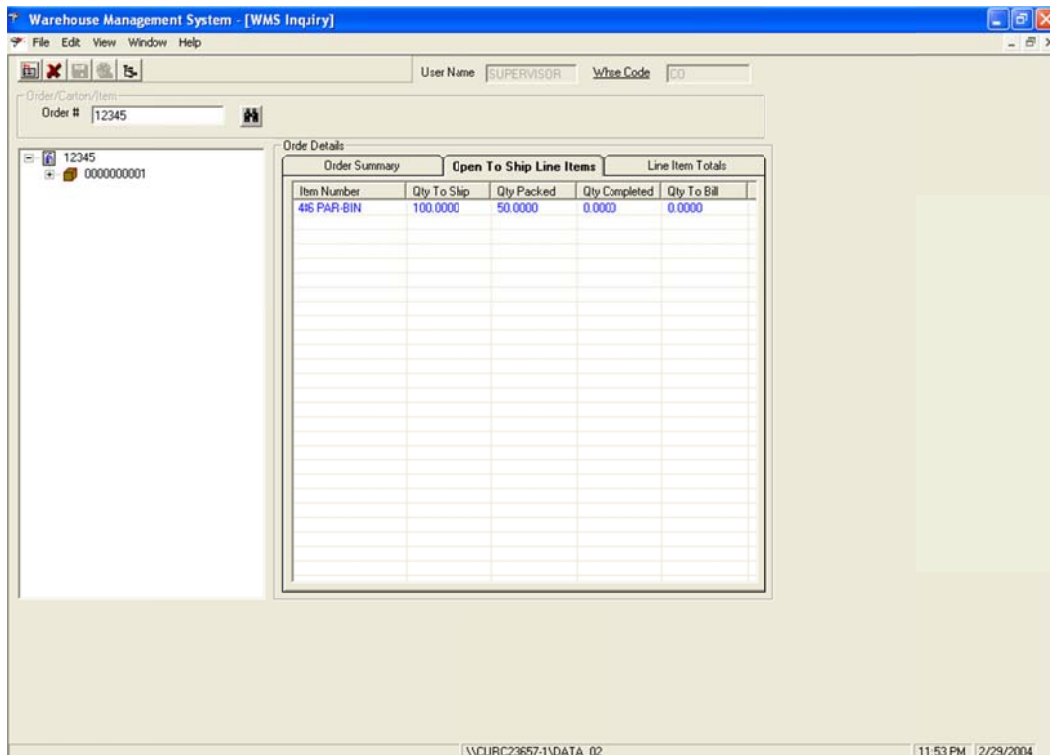
3. Make sure that the current view is By Order Number, Carton, Item. If not, select **View** from the menu, and then change the view to **By Order Number, Carton, Item**.

4. If the order is not in your default warehouse, click <u>Whse Code</u>. Type the correct warehouse location code in the **Warehouse** field, and then click **OK**.

5. Type the order number requiring re-calculation in the **Order #** field.

6. Right-click the order number in the list, and then click **Re-calculate Order Totals**.
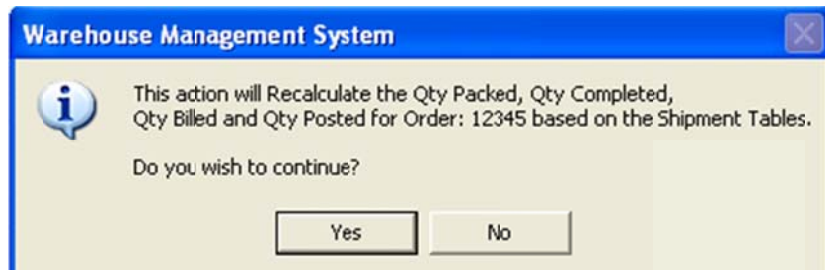


7. WMS will display a message that the order totals will be recalculated. Click **Yes** to continue.

8. WMS will recalculate the quantity packed, quantity completed, quantity billed, and quantity posted for the order based on values in the shipment transaction table.

9. Exit the Inquiry when done.

### Generating an Advanced Ship Notice Using WMS Shipment Information

If the Progression EDI Bar Code Holding File sub-module and the WMS EDI ASN Data Collection Module are not both installed, ASN creation cannot use WMS shipment information. Refer to the EDI manual for instructions about generating an ASN without using WMS shipment information.

The Progression EDI ASN sub-module is used to generate an advanced ship notice. Before an ASN can be created, the order must have been at least selected for billing if O/E is set to Confirm Bill. If O/E is set to Confirm Ship, the order must have been at least shipped, and if set to Confirm Pick the order must have been at least picked. The order can have had the invoice printed, and it is possible to generate the ASN after the order has been posted. However, since data on the order cannot be changed after the invoice is posted, it is generally recommended to create the ASN before the invoice is posted. This allows incorrect or missing information on the order, such as the ship date or ship via code, to be corrected so it can be included on the ASN.

If the WMS EDI ASN Data Collection module and the Progression EDI Bar Code Interface File sub-module are installed, WMS can greatly simplify ASN creation in Progression by eliminating the need to manually enter all the carton and pallet information for a shipment. The information collected by WMS will be used during the ASN creation instead.

1. Click **Trx** on the Progression EDI menu. Click **Outbound**, and then click **Create**.

Exact. And it all comes together.
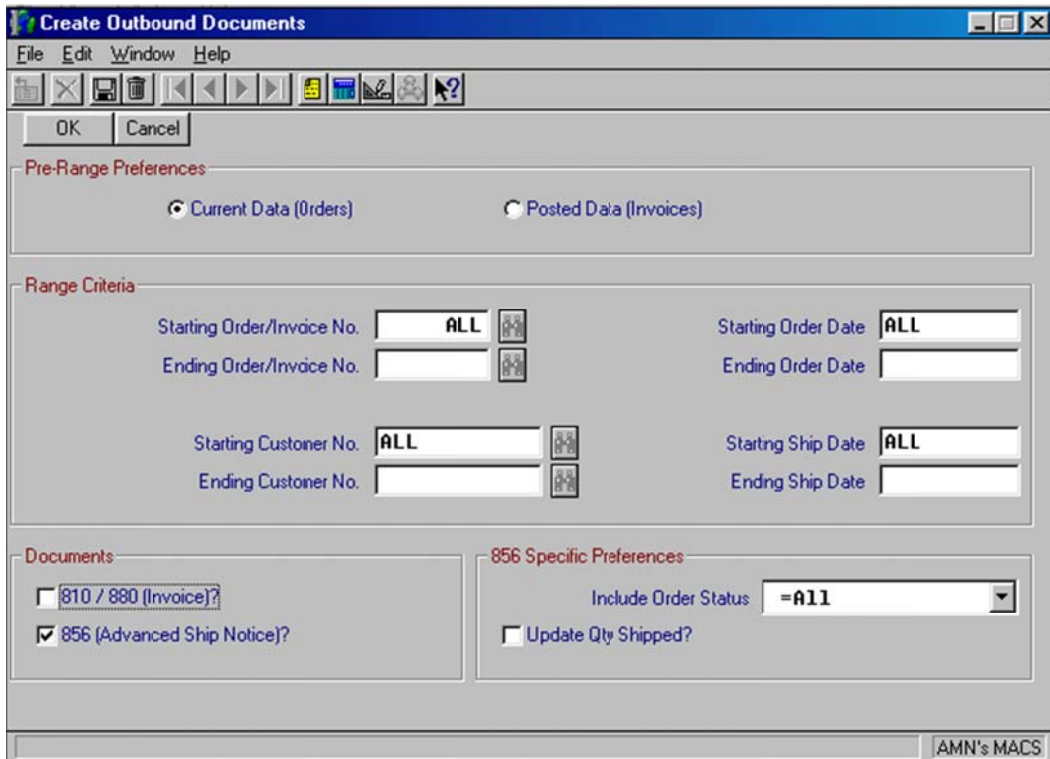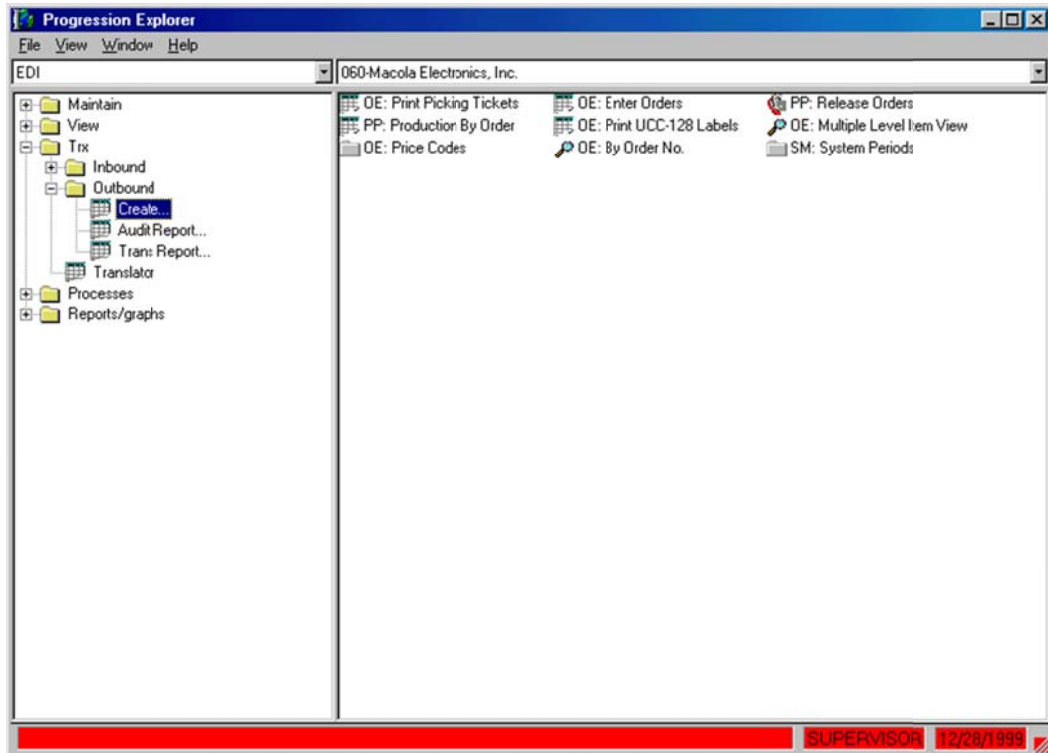
a) If you are creating the ASN from an open order, click the **Current Data(Orders)** button.

2. Tab to the Starting Order/Invoice No field.

Exact. And it all comes together.

3. Type the first order number, if you are filtering by order number. To create based on all orders, leave this set to **All**.

---

**Note**: Even if the invoice has been printed for the order, if the invoice has not been posted yet, you must enter the order number here, not the invoice number.

---

4. Type the last order number in the **Ending Order/Invoice No** field, if you are filtering by order number. To create based on all orders, leave this set to **All**.

5. b) If you are creating the ASN from a posted invoice, click the **Posted Data(Invoices)** button.

6. Tab to the **Starting Order/Invoice No** field. Type the first invoice number, if you are filtering by invoice number. To create based on all invoices, leave this set to **All**.

7. Type the last invoice number in the **Ending Order/Invoice No** field, if you are filtering by invoice number. To create based on all invoices, leave this set to **All**.

8. If you are filtering by customer number, type the starting customer number in the **Starting Customer No** field. To create based on all customers, leave this set to **All**.

9. If you are filtering by customer number, type the ending customer number in the **Ending Customer No** field. To create based on all customers, leave this set to **All**.

10. If you are filtering by order date, type the starting order date in the **Starting Order Date** field. To create based on all order dates, leave this set to **All**.

11. If you are filtering by order date, type the ending order date in the **Ending Order Date** field. To create based on all order dates, leave this set to **All**.

12. If you are filtering by O/E ship date, type the starting ship date in the **Starting Ship Date** field. To create based on all ship dates, leave this set to **All**.

13. If you are filtering by O/E ship date, type the ending ship date in the **Ending Ship Date** field. To create based on all ship dates, leave this set to **All**.

14. Select the 856 (Advanced Ship Notice) check box.

15. You can further refine which orders are included using the **Include Order Status** drop-down list box. To include all orders regardless of status, leave this set to **All**.

16. Click the **OK** button. Progression EDI will begin the ASN creation process.

17. If a flatfile still exists from the last outbound creation, Progression will display a messaging prompting you to append, erase, or cancel.

18. **Append** -- Saves the data already in the flatfile and places the new data at the end of it.

19. **Erase** -- Deletes the data already in the flatfile and replaces it with the new data.

Exact. And it all comes together.

20. **Cancel** -- Saves the data already in the flatfile and does not create any new data. Stops the ASN creation process.

21. Progression will sort the orders based on the filter criteria specified, and then display the ASN Shipment Level Maintenance screen. Note that the ASN Shipment Level Maintenance screen will be displayed once for each ASN that is created.



22. The ASN Shipment Level Maintenance screen allows you to enter or override certain shipment details for this ASN. Although most or all of these fields will come up with default information in them, you can only enter data in a field and have that override appear on the ASN if the format that you are using pulls data from that field. If the EDFORMAT.TXT lists that a shipment value is pulled from a shipment level (S record) field in the EDBBCIFL, then you can generally override it on this screen. The information on this screen is only for the shipment level of the ASN. It will not affect the order, tare, pack, or item levels of the ASN.

Exact. And it all comes together.
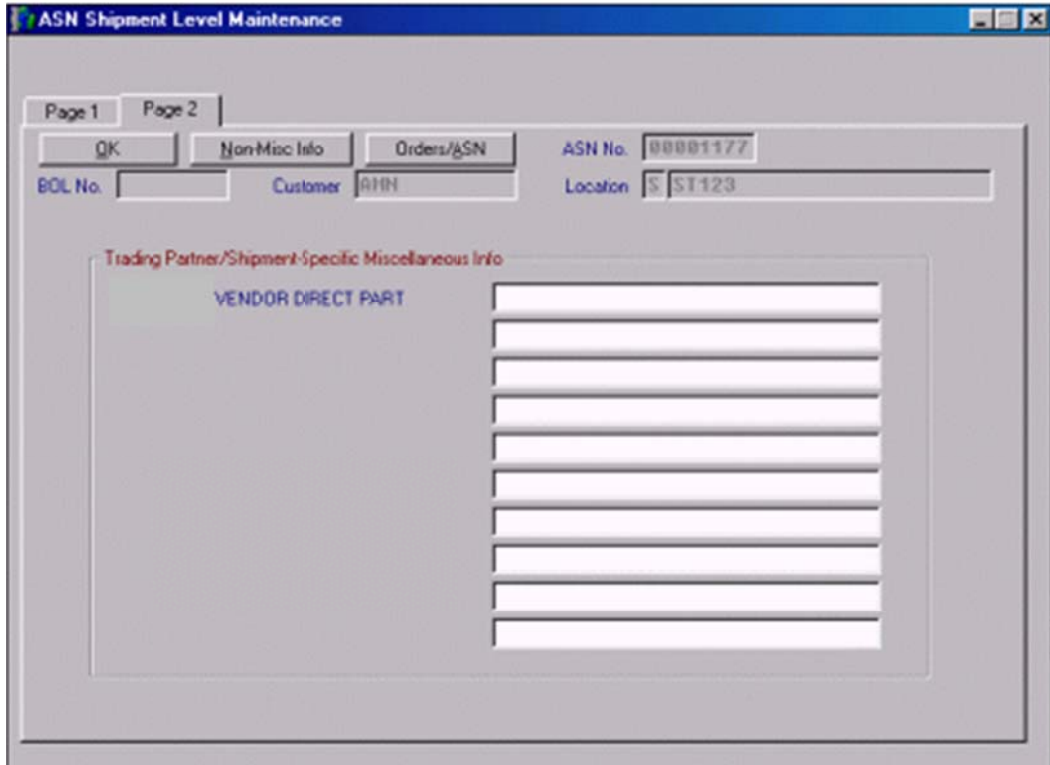
23. If the **Misc Info** button is active on the ASN Shipment Level Maintenance screen, click it to enter information in the ASN misc fields. The data expected in a misc field and the label displayed for the misc field are determined by the ASN format.

24. To continue with the ASN creation, click **OK** or press the **Enter** key.

25. When the ASN creation is complete, Progression will display a message asking if you want to print the transmission report. Click **Yes** to print the report, or **No** to continue without printing the report.

26. The outbound creation will close automatically.

Exact. And it all comes together.

# Chapter 8: WMS Processing – P/O Receiving

**Releasing Purchase Orders to WMS using Post P/O Print Processing**

Post Purchase Order Print Processing releases purchase orders that have been released and printed in Progression to WMS. Receipts against the purchase order can then be entered from WMS RF devices.

In the Progression P/O module, select **Trx**, **Print Purchase Orders**, **Post PO Print Processing**.



1. Type the warehouse to be processed in the **Warehouse** field. Leave this field blank to process all warehouses.

2. Type a purchase order number range, or leave the **PO Number From** and **PO Number To** fields blank to process all orders. Note that any printed purchase order within the range that has not been previously sent to WMS will be processed. In addition, any printed purchase order within the range that has had a change to the quantity ordered will be processed, even if the purchase order has been previously released.

3. Select the **Re-Release** check box to force purchase orders to be re-released even if no quantity change has been made since the purchase order was previously released. This is typically used when a purchase order has been deleted from WMS.

4. Click the **OK** button.

5. Click the **Audit Report** button to print a report of the POs released by this process.

Exact. And it all comes together.

**Processing a Receipt Against a Purchase Order**

The WMS Receiving function processes receipts against a purchase order that was entered into the Progression Purchase Order module. Additionally, product labels can be generated during this process.
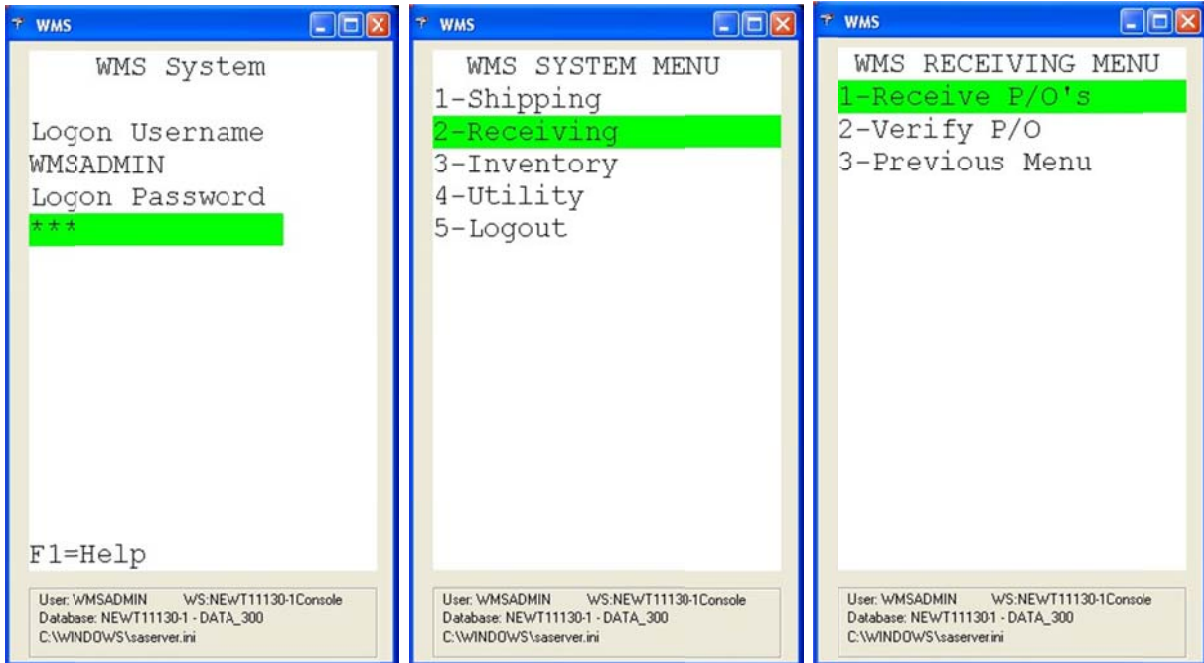


1. Log in to WMS on an RF handheld device.

2. Select **Receiving**, and then select **Receive P/O's**.
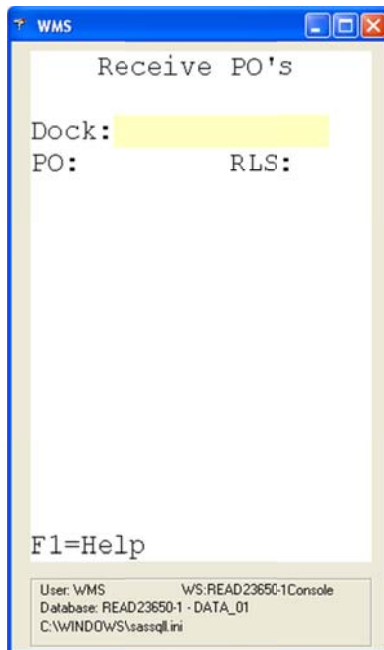


3. If you are using bins in Progression, you can use the dock as bin mode in WMS. If this option is turned on, WMS will prompt for a dock; otherwise, it will skip this field.

Exact. And it all comes together.

4. In the **Dock** field, type the Progression bin number that represents the dock to which you are receiving product. All subsequent receipts will be processed against this bin until you change the dock.

```
WMS                    [_][□][X]
            Receive PO's

Dock:DOCK1
PO:000077    RLS: 00




F1=Help

User: WMS           WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```
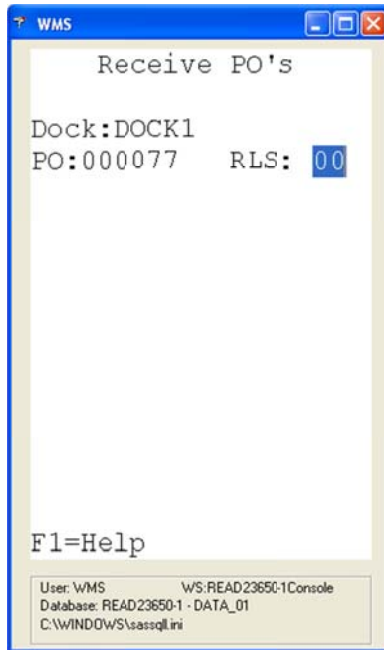
5. Type the purchase order number for the purchase order that you are receiving in the **PO** field.

6. If this is a release against a blanket PO, type the release number in the **RLS** field.

7. If the vendor has been configured to print a warehouse P/O scan sheet, WMS will print it at this time.

```
WMS                    [_][□][X]
PO#:00007700 Add Acc
Itm:
Mlt:4
Prv:
    :
    @
Rmg:
    :




F1=Help

User: WMS           WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
```
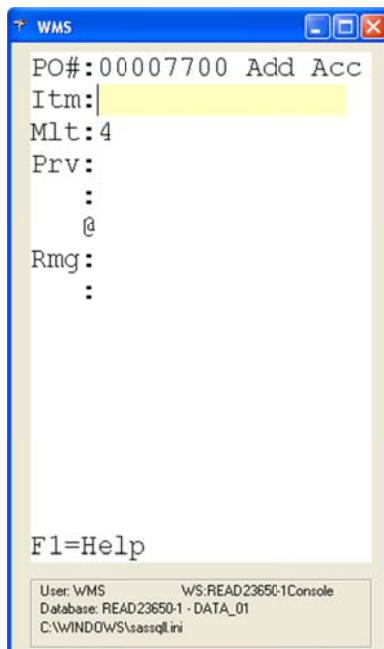
8. Press the **F4** key to specify a multiplier for the next item, if necessary.

Exact. And it all comes together.

9. Type the value to multiply the next item quantity by in the **Mlt** field. In the example, the next item quantity will be multiplied by four.

10. Scan or type one of the following in the **Itm** field: item number, UCC-14 (I-205) number, UPC number, or any bar code that has been set up in the ASN Bulk Weight file.

11. WMS will determine if putaway tags are in use and print one if required.

12. WMS will validate the item against the purchase order and determine if product labels are required. If so, it will either automatically print them or prompt the user. See **Overriding Product Labels When Prompting** for details about prompted product labels.

13. When all receipts have been entered, press the **Escape** or **CLR** key on the RF device.

```
⊕ WMS                              _ ☐ ✕

    PO Verification
PO#:00007700
Itm:111648
Rls:3
Rcv:0
 St:Under Received
Itm:20-250W
Rls:6
Rcv:0
 St:Under Received
Itm:791123
Rls:6
Rcv:0
 St:Under Received

F1=Help                        ↓

 User: WMS            WS:READ23650-1Console
 Database: READ23650-1 - DATA_01
 C:\WINDOWS\sassqI.ini
```
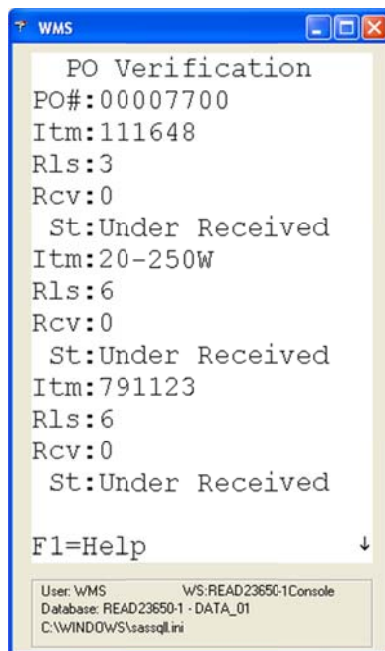
14. WMS will verify if the purchase order has been fully received; if not, a list of items that have not been fully received will be displayed.

15. Use the up and down arrow keys to scroll through the list.

16. After reviewing, press the **Escape** or **CLR** key on the RF device.

Exact. And it all comes together.
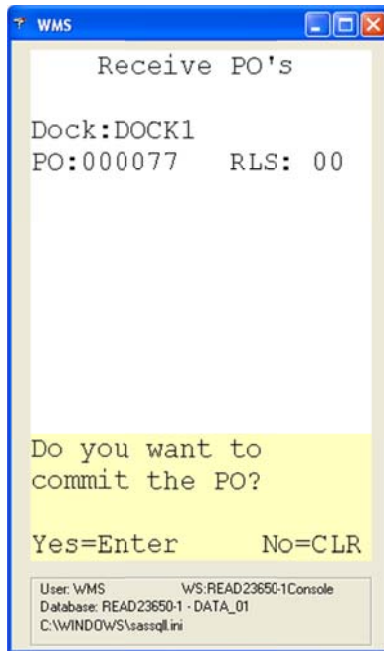
17. WMS will prompt the user to commit the receipts.

18. Press **Enter** to commit the receipts. Once committed, WMS will update the Progression inventory. Any changes or corrections other than additional receipts must then be made from a workstation.

19. Press **Escape** or **CLR** to place the receipts on hold instead of committing them. This will not delete the receipts.

### Overriding Product Labels When Prompting

The WMS Receiving function can produce product labels as receipts are entered. During setup, labels are configured to print automatically, not to print at all, or to prompt the user before printing. This can be set as a global default, overridden by vendor, and overridden by vendor item; it can also be set differently for each PO layer. See **Control File Maintenance Function, Purchase Order Tab** for information about the global settings. See **Vendor Override File Maintenance** for information about overriding by vendor. See **Vendor Item Override File Maintenance** for information about overriding by vendor item.

Exact. And it all comes together.

```
⊕ WMS                     _ □ ✕

PO#:00007700 Add Acc
Itm:BEZR2blkf6pk

Mlt:12
Prv:
     :
        @
Rmg:
     :




F1=Help

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqlini
```
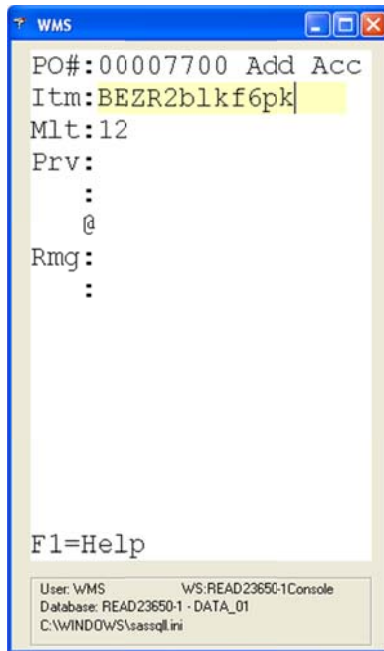
1.  While entering receipts, type or scan the item code in the **Itm** field.

```
⊕ WMS                     _ □ ✕

PO#:00007700   Labels
Itm:BEZR2BLKF6PK
Qty:12

Unit          12
Cd:072838322500
@ 1           Y/N/C

Inner          4
Cd:10072838322507
@ 3

Case           2
Cd:20072838322504
@ 6
F1=Help                    ↓

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqlini
```

2.  WMS will display the PO number, the item number, and the quantity being received.

3.  For each layer set to prompt for product label printing, WMS will display the number of labels to be printed, the item ID, and the quantity per label. If a layer is set not to print or always to print, that layer will not be displayed.

4.  Use the up and down arrow keys to scroll through the entries.

5.  Type **Y** or **1** to set the entry to print.

6.  Type **N** or **0** to set the entry not to print.

Exact. And it all comes together.

7. Type **C** or **2** to change the entry.

```
WMS                           _ □ ✕

Pallet              1
30072838322501
BOX3

BOX3   @ 12
CTN25  @ 6
LOOSE  @ 1
*NONE  @ 1




F1=Help

User: WMS            WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
```
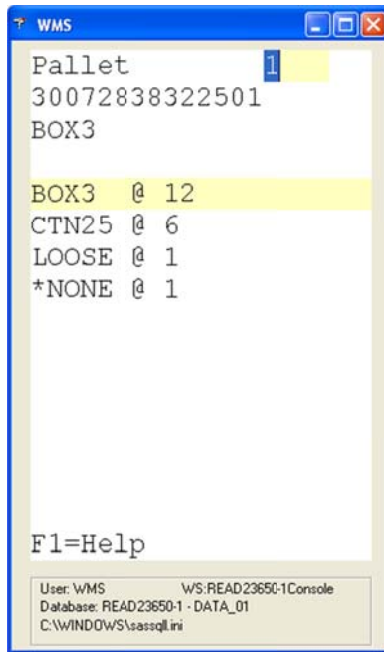
8. If you choose to change an entry, WMS will display a screen showing the layer being changed, the number of labels to be printed, and the item ID that will be associated with those labels.

9. You can type a new number of labels to print. This will only change the number of labels for the layer, not the quantity received.

10. Use the arrow keys to select a different package code to use for the layer, which will change the number of labels calculated and the item ID associated with the label.

11. Press **Enter** to save the change.

Exact. And it all comes together.

```
PO#:00007700   Labels
Itm:BEZR2BLKF6FK
Qty:12


Pallet       1
Cd:30072838322501
@ 12           Y/N/C


F1=Help                 ↑

User: WMS            WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
```
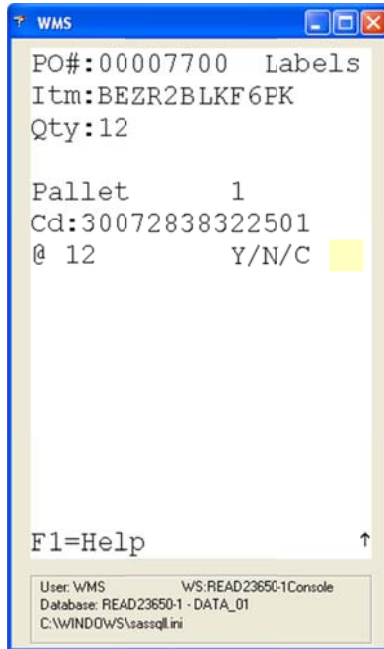
12. When all changes have been made, press **Escape** or **CLR** on the RF device.

13. WMS will print the labels.

## Verifying What Is Open on a Purchase Order

There are several ways to have WMS display a verification screen for a purchase order. WMS will automatically display a verification screen when a user finishes processing receipts and escapes out of the purchase order. See **Processing a Receipt Against a Purchase Order** for more information.

During receiving, a user can also request a PO verification screen by pressing the **F7** key in either the **Mlt** or **Itm** field.

```
PO#:00007700 Add Acc
Itm:
Mlt:1
Prv:BEZR2BLKF6FK
Add: 12
Acc@ 1
Rmg:0
   :0


F1=Help                 ↑

User: WMS            WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
```

Exact. And it all comes together.
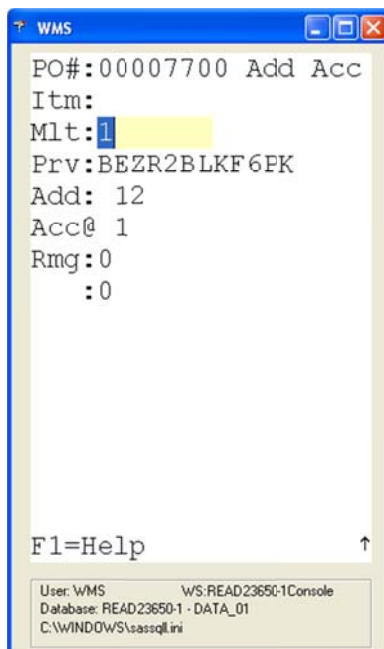
A user can also verify a PO without having to enter receipts.
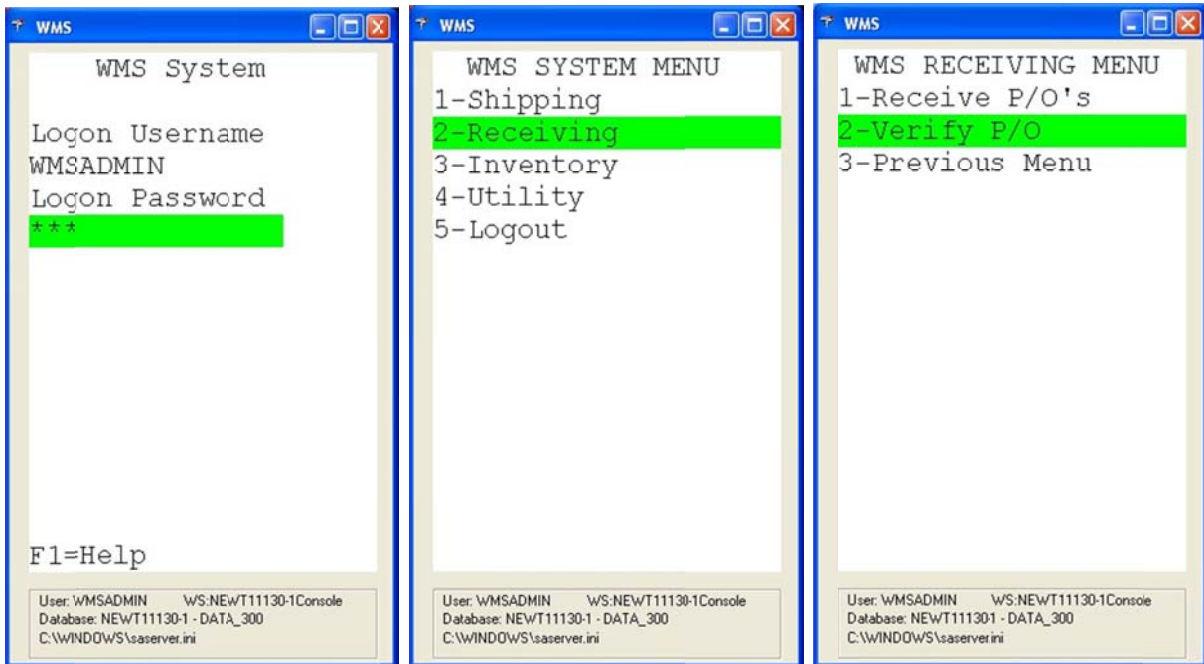


1.  To check the status of a purchase order without entering receipts, log in to WMS on an RF handheld device.

2.  Select **Receiving**, and then select **Verify P/O**.
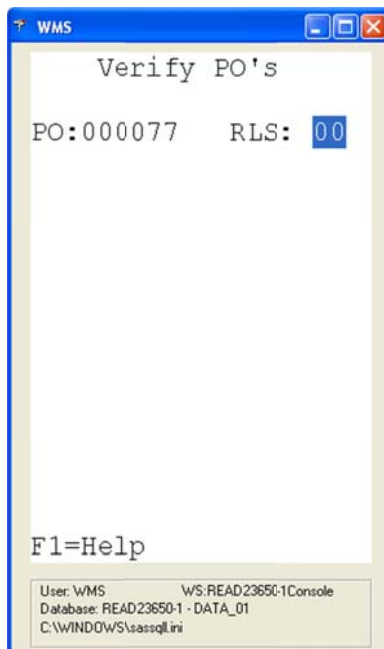


3.  Type the purchase order number to verify in the **PO** field. If this is a release against a blanket PO, type the release number in the **RLS** field.

Exact. And it all comes together.

```
 WMS                          [_][□][X]
     PO Verification
PO#:00007700
Itm:111648
Rls:3
Rcv:0
 St:Under Received
Itm:20-250W
Rls:6
Rcv:0
 St:Under Received
Itm:791123
Rls:6
Rcv:0
 St:Under Received

F1=Help                              ↓

User: WMS            WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
```
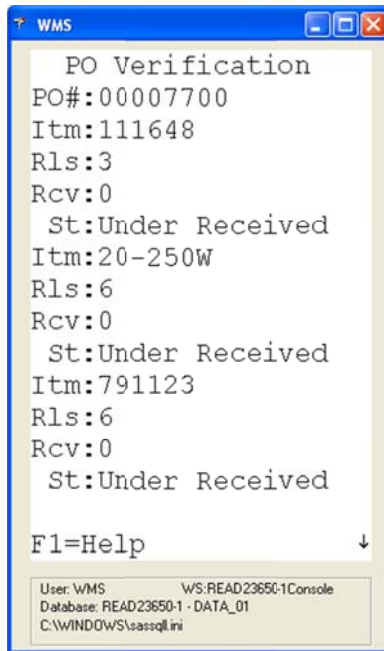
4.  WMS will display a list of items for the PO which are currently not fully received.

5.  Press the up and down arrow keys to scroll through the list.

6.  After reviewing the list, press the **Escape** or **CLR** key on the RF device to exit.

Exact. And it all comes together.

# Chapter 9: WMS Processing – I/M Transactions

**Processing an Inventory Issue**

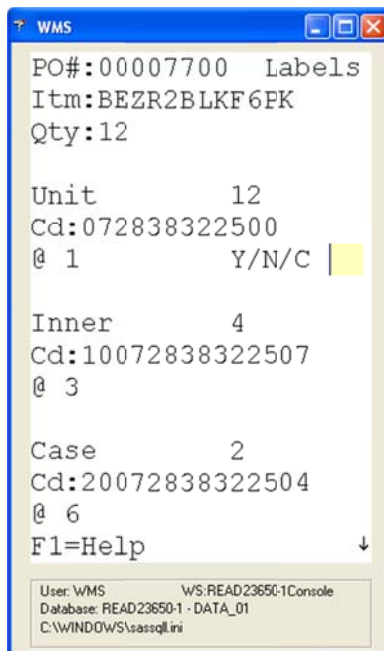| WMS System | WMS SYSTEM MENU | WMS INVENTORY MENU |
|---|---|---|
| Logon Username<br>WMSADMIN<br>Logon Password<br>\*\*\* | 1-Shipping<br>2-Receiving<br>3-Inventory<br>4-Utility<br>5-Logout | 1-Issues<br>2-Receipts<br>3-Transfers<br>4-Count Tags<br>5-Stock Inquiry<br>6-Previous Menu |
| F1=Help | | |
| User: WMSADMIN   WS:NEWT11130-1Console<br>Database: NEWT11130-1 - DATA_300<br>C:\WINDOWS\saserver.ini | User: WMSADMIN   WS:NEWT11130-1Console<br>Database: NEWT11130-1 - DATA_300<br>C:\WINDOWS\saserver.ini | User: WMSADMIN   WS:NEWT11130-1Consde<br>Database: NEWT111301 - DATA_300<br>C:\WINDOWS\saserver.ini |

1. Log in to WMS on an RF handheld device.

2. Select **Inventory**, and then select **Issues**.

```
      ISSUE Inventory

Itm:
Mlt:4
Prv:HCHAZELNUT
Frm:CO  500
     1
    @1




F1=Help
```
User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassql.ini
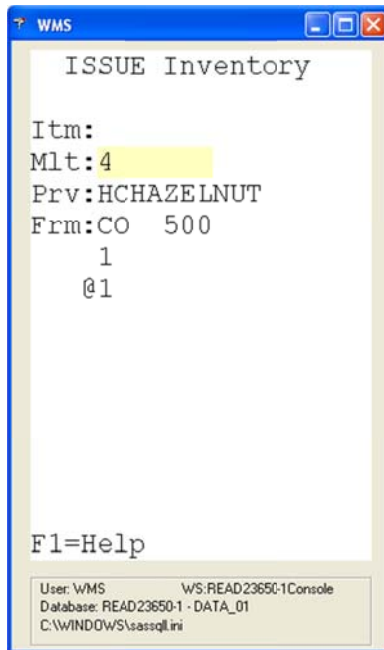
3. Type the quantity to issue in the **Mlt** field.

4. Type or scan an item number, UPC code, UCC-14, or any other bar code that has been configured to represent the item in the **Itm** field.

Exact. And it all comes together.

5.  If the item is binned/lotted, you will be prompted for the bin/lot number.

6.  WMS will automatically process the issue and remove the quantity from inventory.

**Processing an Inventory Receipt**
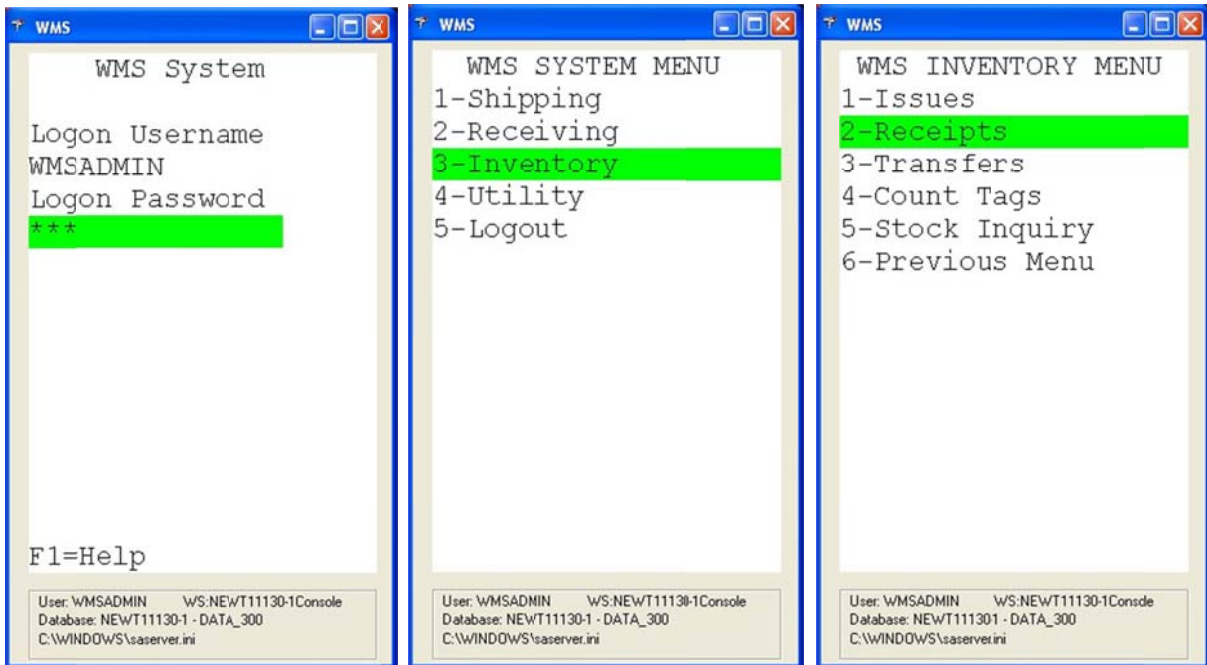


1.  Log in to WMS on an RF handheld device.

2.  Select **Inventory**, and then select **Receipts**.
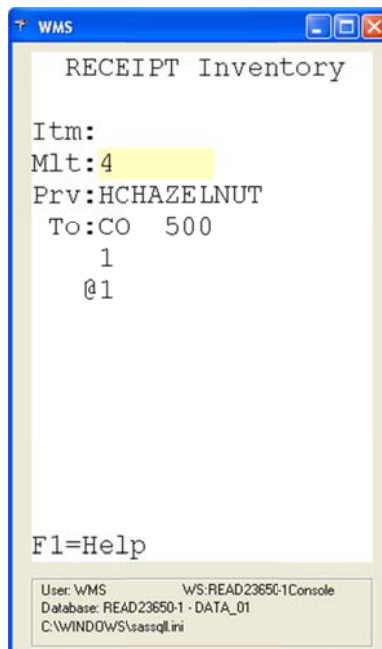


3.  Type the quantity to receive in the **Mlt** field.

4.  Type or scan an item number, UPC Code, UCC-14, or any other bar code that has been configured to represent the item in the **Itm** field.

Exact. And it all comes together.

5. If the item is binned/lotted, you will be prompted for the bin/lot number.

6. WMS will automatically process the receipt and add the quantity to inventory.

**Processing an Inventory Transfer**
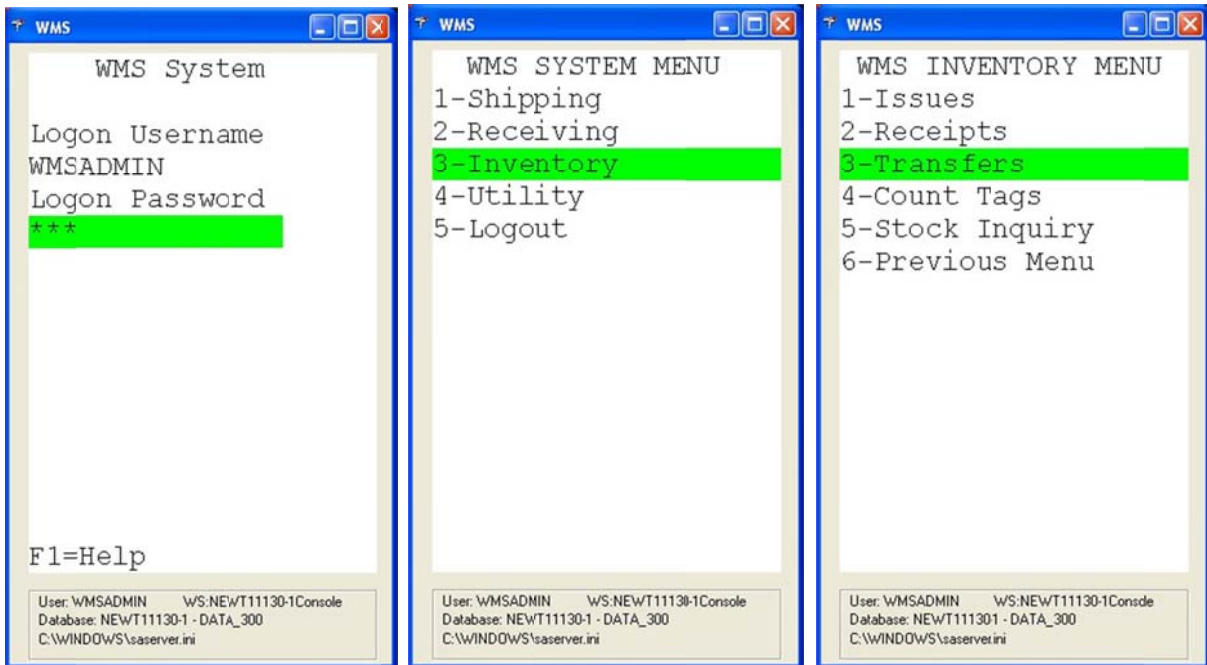


1. Log in to WMS on an RF handheld device.

2. Select **Inventory**, and then select **Transfers**.
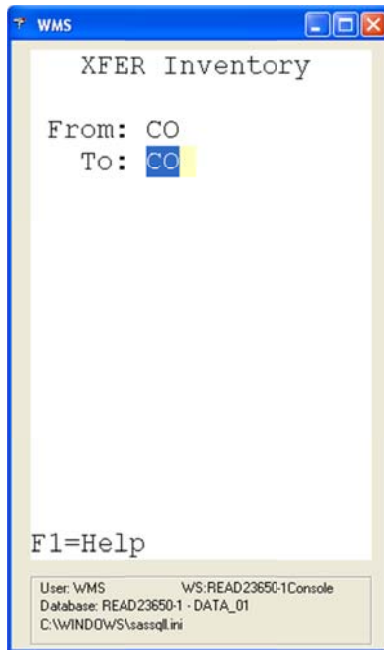


3. Type the warehouse to transfer product to in the **To** field. The **From** field is automatically set to the user's current warehouse.

Exact. And it all comes together.

```
WMS
CO   TO CO
Itm:
Mlt:1
Prv:
Frm:
 To:

       @



F1=Help
```

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
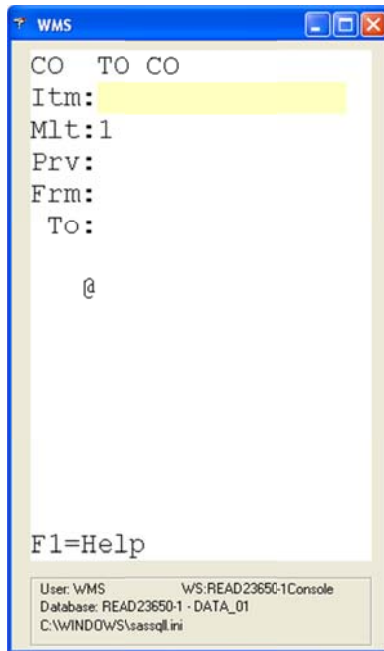
4. Type the quantity to receive in the **Mlt** field.

5. In the **Itm** field, type or scan an item number, UPC code, UCC-14, or any other bar code that has been configured to represent the item.



```
WMS
Enter From Bin

Warehouse:CO
Itm:HCHAZELNUT

Bin:



F1=Help
```

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqllini

```
WMS
To Warehouse Bin

Warehouse:CO
Itm:HCHAZELNUT

Bin:|



F1=Help
```

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
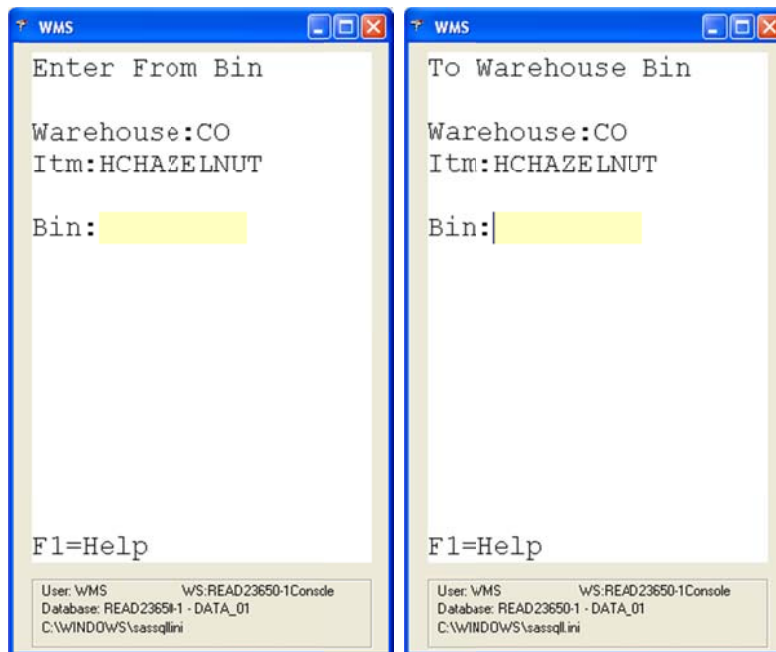
6. If the transfer is for a binned item, WMS will prompt for the bin to transfer product from.

7. If the item being transferred is a binned item, the program will prompt for a bin to transfer product to.

Exact. And it all comes together.

```
WMS
CO  TO CO
Itm:
Mlt:1
Prv:HCHAZELNUT
Frm:CO  500
 To:CO  501
      1
    @1




F1=Help
```

User: WMS          WS:READ23650-1Console
Database: READ23650-1 - DATA_01
C:\WINDOWS\sassqll.ini
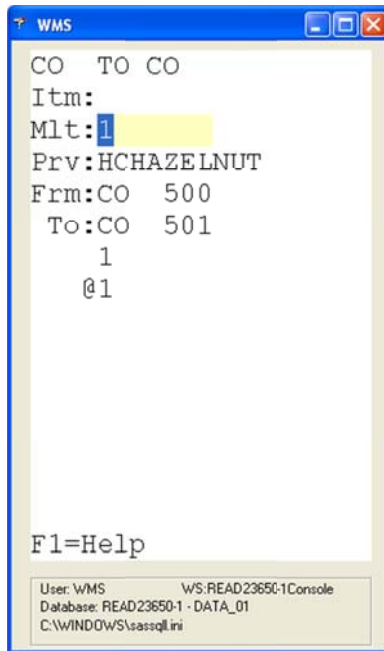
8. WMS will automatically process the transfer and move the quantity in inventory.

### Processing a Physical or Cycle Count

WMS allows you to enter count information with an RF device during a physical or cycle count. See the Progression I/M user manual for information about creating a physical or cycle count.

Once created, WMS can process the count as either a directed or a non-directed count.

### Directed Count Processing

The directed count process is particularly useful in binned environments. The count should be created with the sort by bin option activated. Each RF user is given a batch code and range of tags to count.
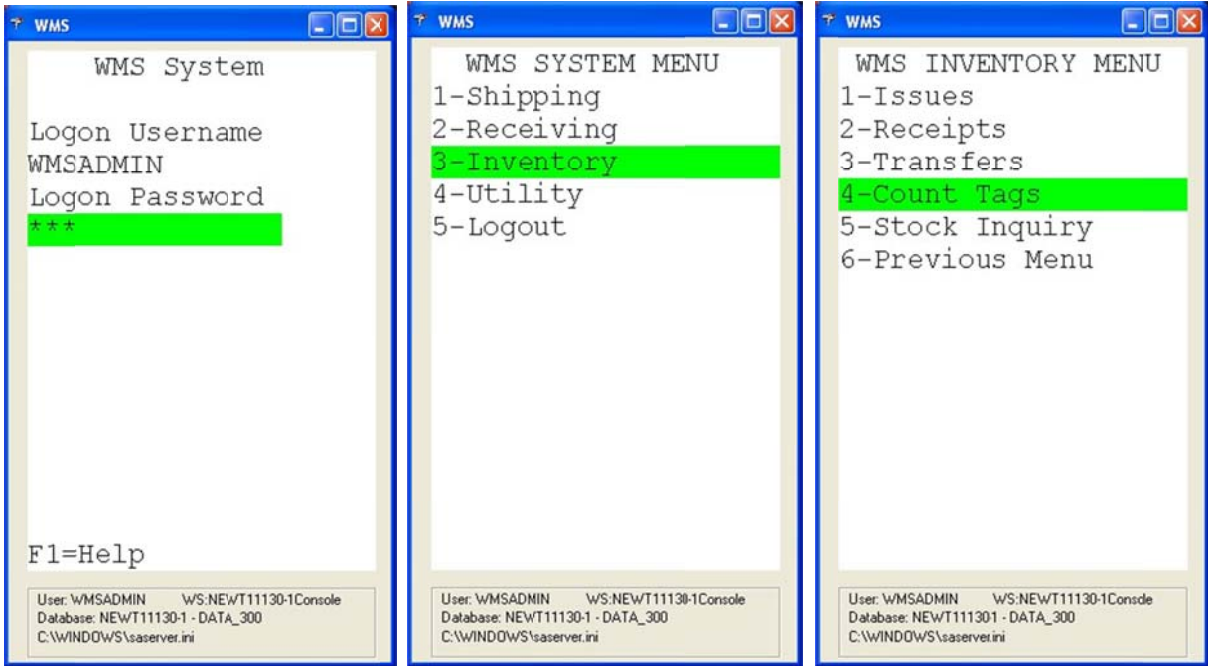
Exact. And it all comes together.

1. Log in to WMS on an RF handheld device.

2. Select **Inventory**, and then select **Count Tags**.
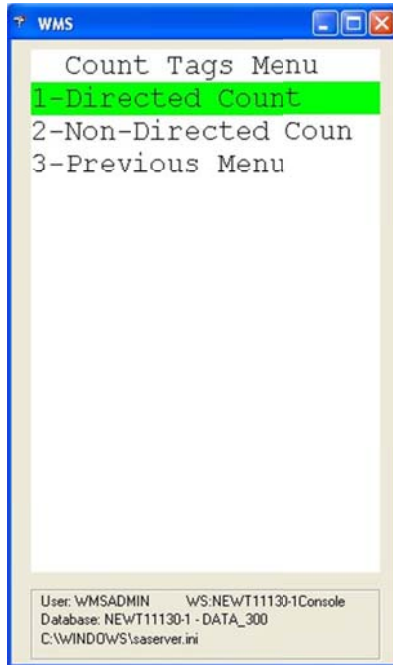


3. Select **Directed Count** from the Count Tags menu.

Exact. And it all comes together.

```
  WMS

  Enter Count Tags
  Batch#  _____
  Tag#




















  F1 = Help

  User: WMS            WS:READ23650-1Console
  Database: READ23650-1 - DATA_01
  C:\WINDOWS\sassql.ini
```
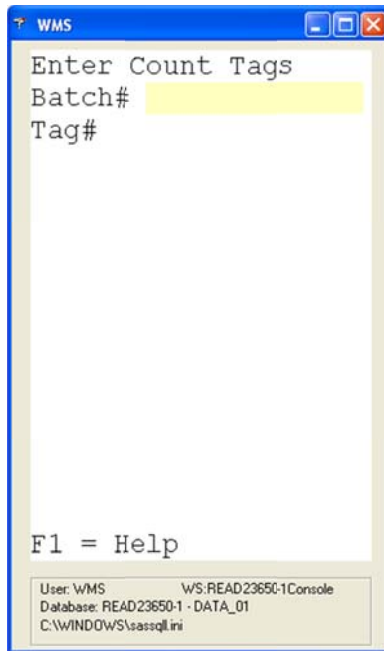
4.  Type the batch number in the **Batch #** field.

5.  Type the starting tag number in the **Tag #** field.

```
  WMS

  Tag: 1990            Add
  Itm: HCHAZELNUT
  Bin: 500
  S/L:
  Qty: 0
  Bin:
  Itm:
  Mlt: 1                  ↓
  Prev
  Tag:
  Itm:
  Bin:
  S/L:
  Mlt:
       @



  User: WMS            WS:READ23650-1Console
  Database: READ23650-1 - DATA_01
  C:\WINDOWS\sassql.ini
```
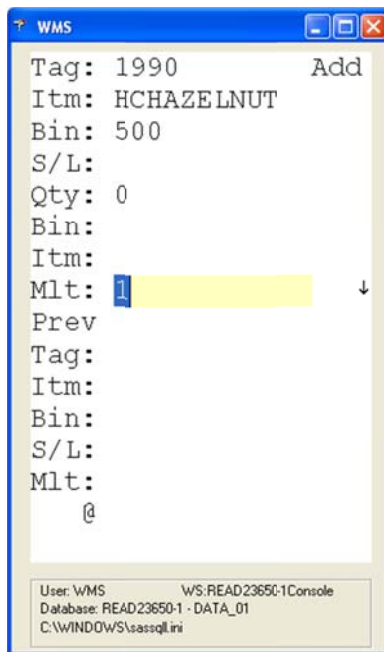
6.  WMS will display the bin and item to count.

7.  Type the count in the **Mlt** field.

Exact. And it all comes together.
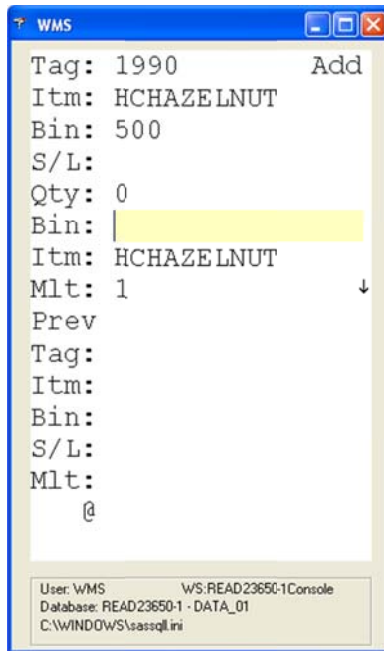
8. In the **Itm** field, type the item number, UPC number, UCC-14 number, or any other bar code that represents this item. Note that if you type the UCC-14 case code, the quantity in the **Mlt** field should be the number of cases.

9. WMS will validate that you are counting the correct item.

10. Scan the bin number to confirm that you are at the correct bin. If the wrong bin is scanned, WMS will generate an error message.

11. After the current count is entered, WMS will direct you to the next item.

12. When finished with your range, press **Escape** or **CLR** to exit.

### Non-Directed Count Processing

The non-directed count process is particularly useful for non-binned or full physical situations. Each RF user is given a batch to count and directed to a specific area or aisle of the warehouse.
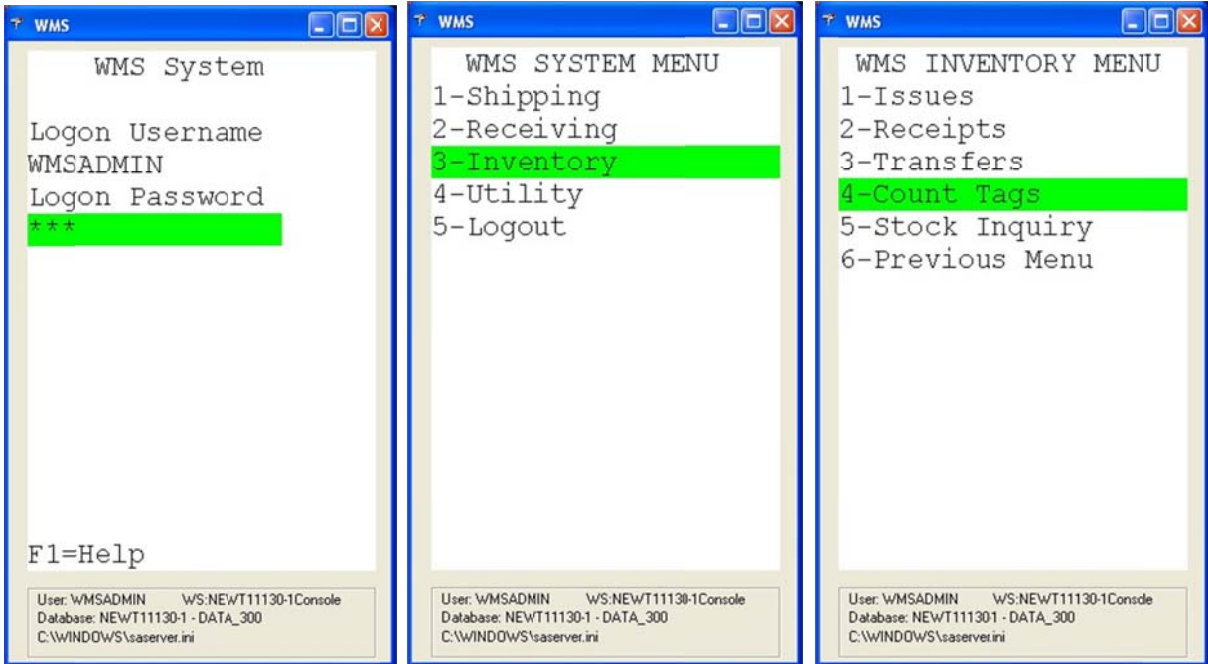
Exact. And it all comes together.

1. Log in to WMS on an RF handheld device.

2. Select **Inventory**, and then select **Count Tags**.
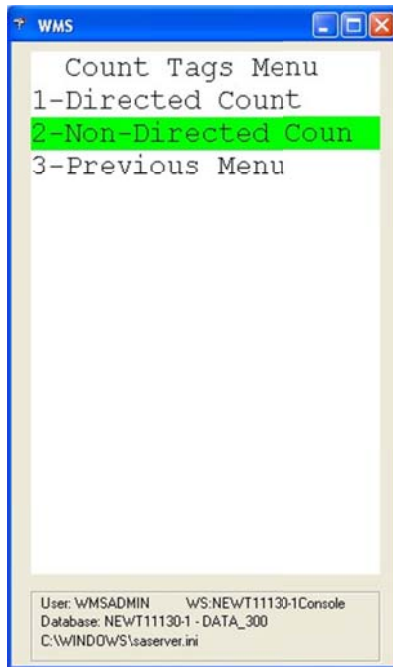


3. Select **Non-Directed Count** from the Count Tags menu.

Exact. And it all comes together.
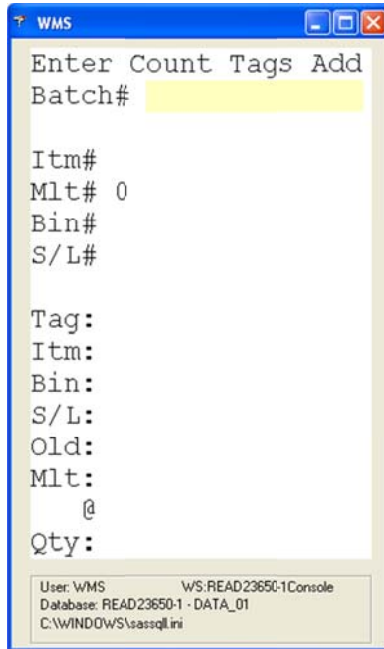
4. Type the batch code in the **Batch #** field.
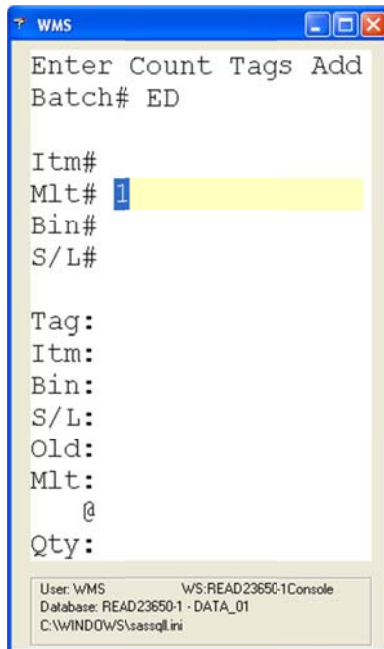


5. Type the counted quantity in the **Mlt#** field.

Exact. And it all comes together.
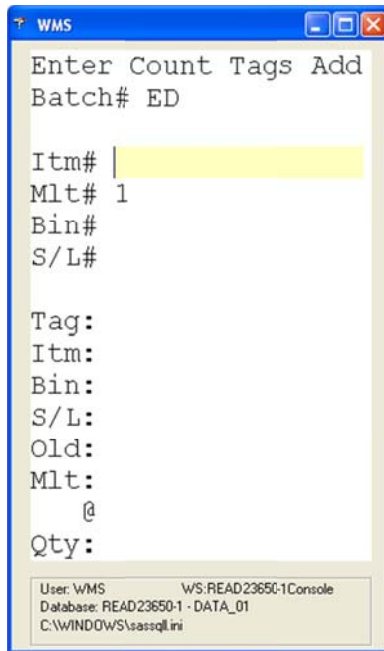
6. In the **Itm#** field, type or scan the item number, UPC number, UCC-14 number, or any other bar code representing the item being counted. Note that if you type a UCC-14 case code, the quantity in the **Mlt#** field should be the case quantity.
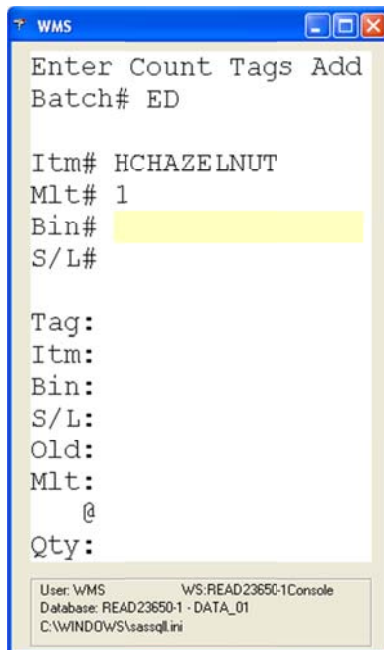


7. If the item is binned, WMS will prompt for a bin number. Type or scan the bin number.

8. WMS will update the tag for that item-bin combination.

Exact. And it all comes together.
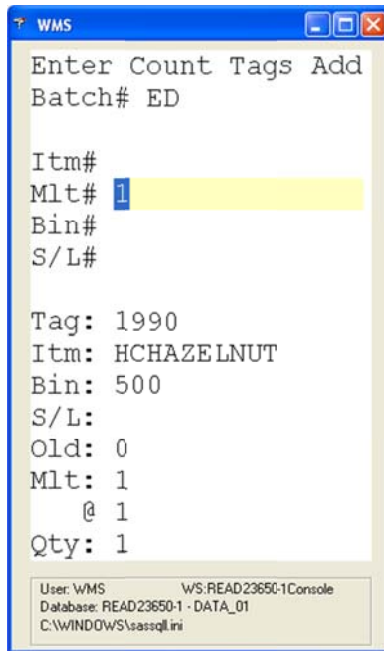
9. When complete, press **Escape** or **CLR** to exit.

### Viewing a Bin Stock Inquiry on RF Devices

Using a WMS RF device, an item can be located in a warehouse without going to a workstation.
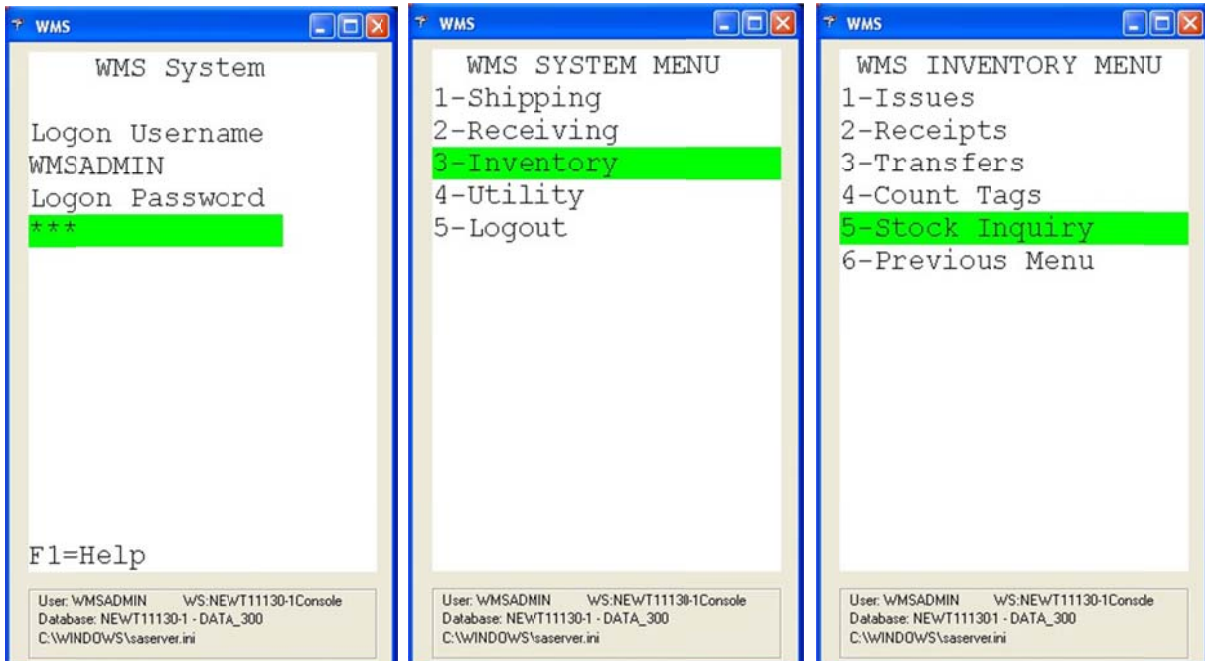


1. Log in to WMS on an RF handheld device.

2. Select **Inventory**, and then select **Stock Inquiry**.

Exact. And it all comes together.
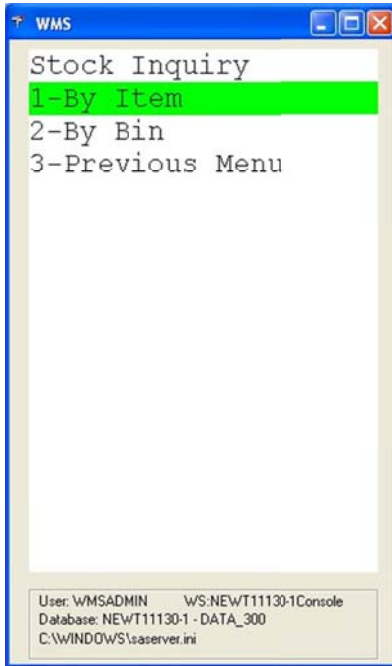
3. Select either **By Item** or **By Bin** from the Stock Inquiry menu.
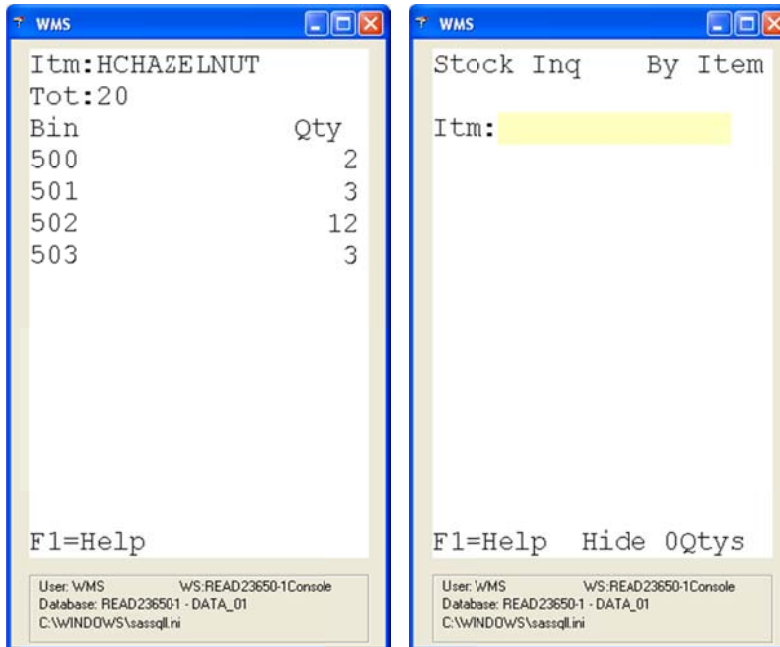


4. **By Item** mode – In the **Itm** field, type or scan the item number, UPC number, UCC-14 number, or any other bar code representing the item to be located.

5. WMS will display the item number, the total for the current warehouse, and the location of the items, if bins are in use.

Exact. And it all comes together.
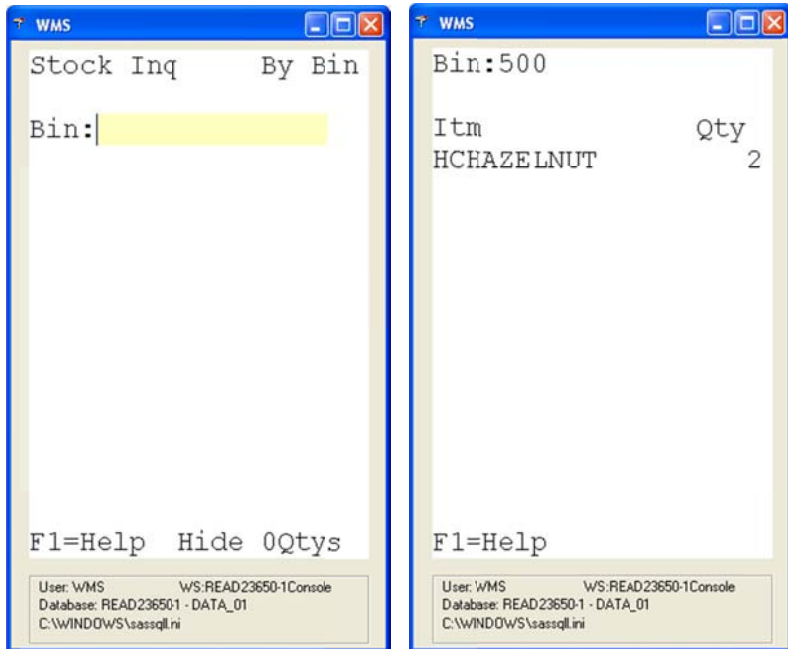
6. **By Bin** mode – In the **Bin** field, type or scan the bin number.

7. WMS will display the items and quantity on hand in the bin.

8. Press the **F6** key to toggle between By Item and By Bin modes.

9. Press the **F8** key to toggle between showing zero quantities and hiding zero quantities.

10. Use the up and down arrows to scroll through pages.

11. After reviewing the list, press the **Escape** or **CLR** key to exit.

Exact. And it all comes together.

# Chapter 10: WMS Processing – Production Orders

**Entering Production for a Production Order**

The Production function allows you to enter production for released production orders on an RF device.
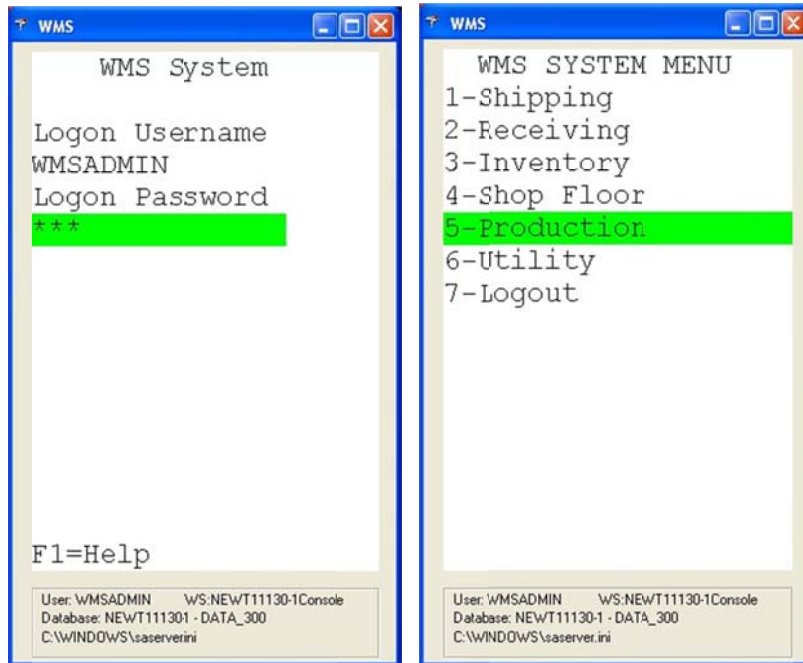


1. Log in to WMS on an RF handheld device.

2. Select Production.

3. If **Receive to Staging Bin** is activated in the WMS Control File, WMS will prompt for a bin. Type the bin for the production in the **Bin** field.

Exact. And it all comes together.
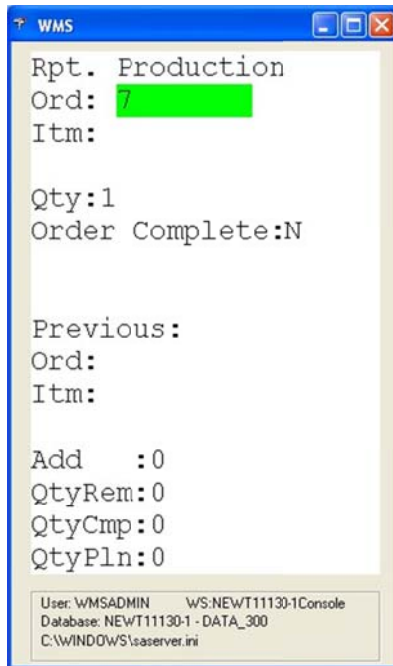
4. Type the production order number in the **Ord** field.

5. WMS will display the item number for this order in the **Itm** field.
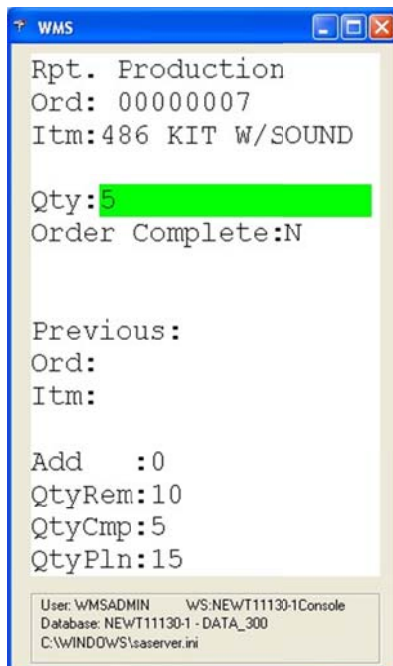


6. Type the quantity produced in the **Qty** field.

7. Type **Y** in the **Order Complete** field if the order is complete; type **N** if the order is not complete.

Exact. And it all comes together.
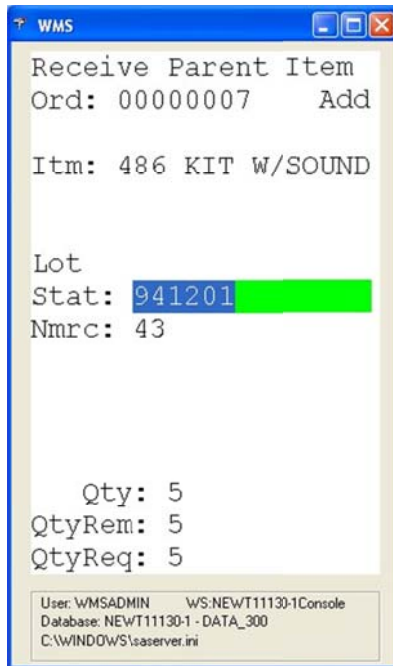
8. If there is a lotted or serialized component in the parent item, WMS will prompt for the lot or serial information.

9. If the item is a binned item, WMS will prompt for the bin information.

10. WMS returns to the **Ord** field for the next production transaction. Enter the next transaction, or press **Escape** or **CLR** to return to the WMS System Menu.

Exact. And it all comes together.

# Chapter 11: WMS Processing – Shop Floor Transactions

**Issuing Material to a Shop Order**
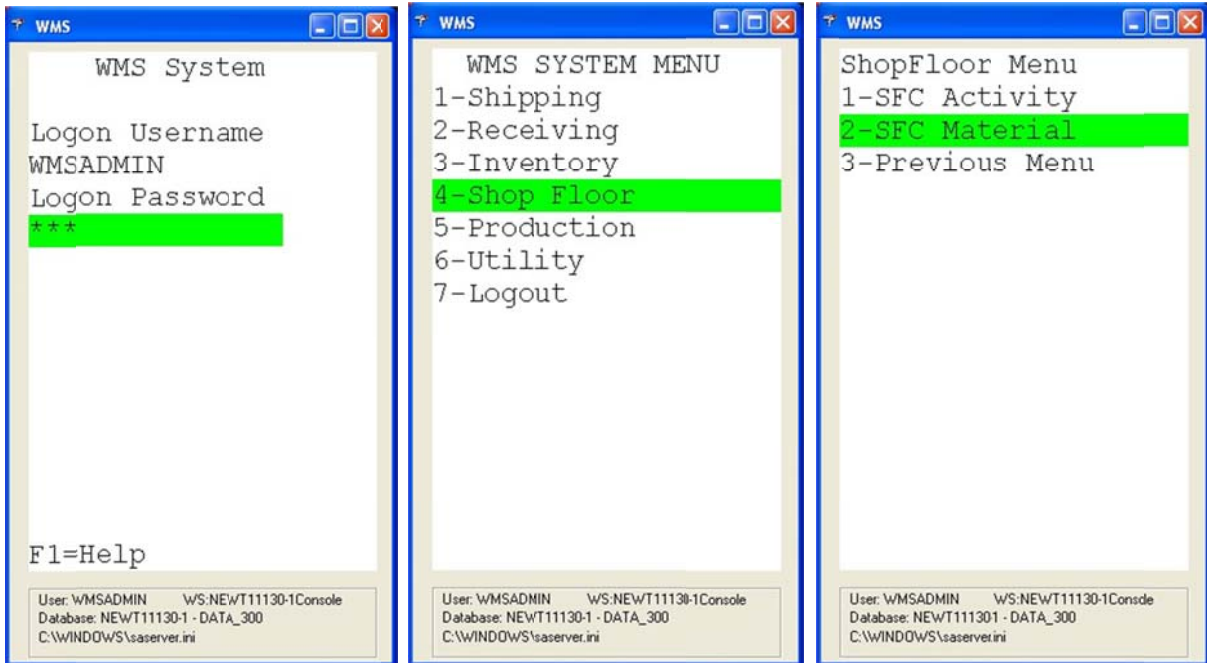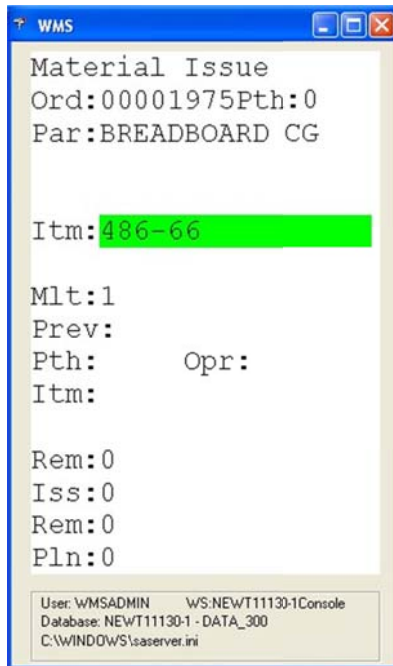


1. Log in to WMS on an RF handheld device.

2. Select **Shop Floor**, and then select **SFC Material**.
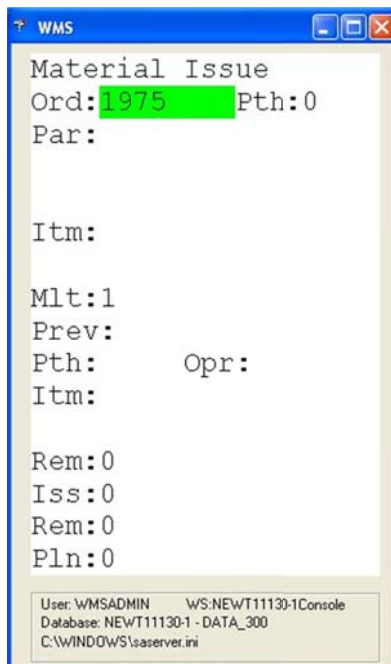


3. Type the SFC order number in the **Ord** field.

4. If prompted, type the path in the **Pth** field.

Exact. And it all comes together.

5.  To enter a quantity for the item, press the **F4** key. Type the quantity in the **Mlt** field.



6.  Type the item number in the **Itm** field.



7.  If the item is lotted or serialized, WMS will prompt for the lot or serial number. If you typed a quantity in the **Mlt** field, you will need to enter serial numbers for the entire quantity.

8.  WMS returns to the **Ord** field for the next material issue. Continue issuing material for the shop order, or press **Escape** or **CLR** to return to the WMS System Menu.

Exact. And it all comes together.

**Entering Activity for a Shop Order**
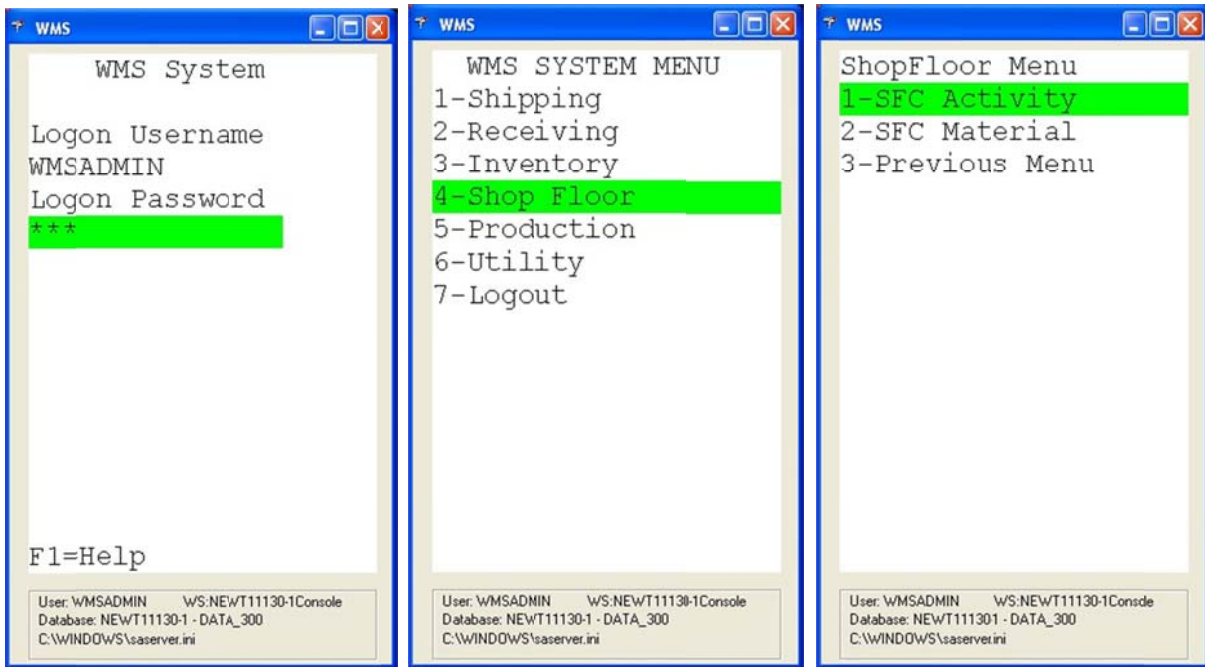


9. Log in to WMS on an RF handheld device.

10. Select **Shop Floor**, and then select **SFC Activity**.

11. If prompted for a bin number, type it in the **Bin** field. This bin number is the default for subsequent activity transactions until you close the SFC Activity screen.
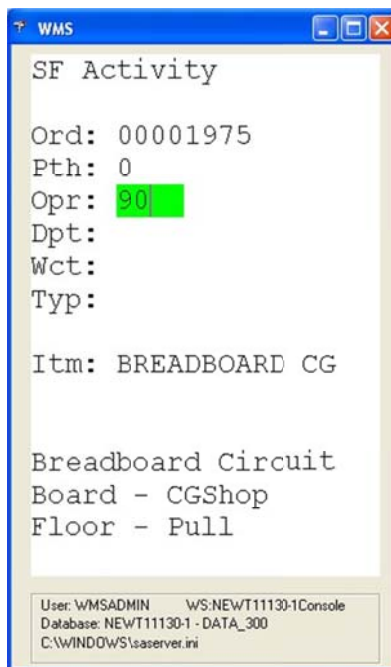


12. Type the order number in the **Ord** field.

13. If prompted, type the path number in the **Pth** field.

14. Type the operation number in the **Opr** field.

Exact. And it all comes together.

15. If prompted, type the department number in the **Dpt** field. Press the **F7** key to search for a department number.

16. If prompted, type the work center number in the **Wct** field. Press the **F7** key to search for a work center number.

```
WMS                               _ □ X
Ord: 00001975
Pth: 0        Opr: 90

Labor
Hrs: 5
Emp: 000000100
Grd:

Machine
Hrs: 0
No:

Quantities
Cmp: 3
Opr Complete?(Y/N)N

User: WMSADMIN      WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini
```

17. In the Labor section, type the number of labor hours in the **Hrs** field. You cannot enter hours exceeding 23.5. If you need to enter more than 23.5 hours, enter multiple transactions to split the hours.

18. Type the employee number in the **Emp** field. This must be an employee set up as a manufacturing employee. Press the **F7** key to search for the employee.

19. If prompted, enter the labor grade in the **Grd** field. Press the **F7** key to search for the labor grade.

20. If the operation has a machine, type the number of machine hours in the **Hrs** field in the Machine section.

21. If the operation has a machine, type the machine number in the **No** field.

22. In the Quantities section type the quantity complete in the **Cmp** field.

23. If the operation is complete, type **Y** in the **Opr Complete** field; if not type **N**.

Exact. And it all comes together.

Window title: WMS

```
Ord: 00001975
Pth: 0        Opr: 90

Scrap
Qty:1
Cde:DI

Rejected
Qty:1
Rsn:OT
NCM: CO
Itm:486-66

User: WMSADMIN      WS:NEWT11130-1Console
Database: NEWT11130-1 - DATA_300
C:\WINDOWS\saserver.ini
```
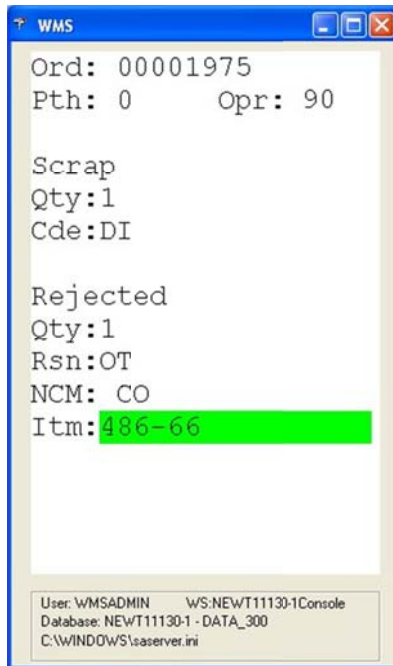
24. Type the scrap quantity in the **Qty** field in the Scrap section.

25. If you entered a scrap quantity, type the scrap code in the **Cde** field. Press **F7** to search for the scrap code.

26. If the operation is a Y count point operation, type any rejected quantity in the **Qty** field in the Rejected section.

27. If you entered a rejected quantity, type a reject reason code in the **Rsn** field. Press the **F7** key to search for the scrap reason code.

28. Type a non-conforming material location in the **NCM** field. Press the **F7** key to search for the NCM location.

29. Type the reject item number in the **Itm** field.

30. WMS returns to the **Ord** field to process the next activity transaction. Continue processing transactions. Press **Escape** or **CLR** to return to the WMS System Menu when done.

Exact. And it all comes together.

# Chapter 12: WMS Inquiry

One of the most powerful features of the Warehouse Management System is the WMS Inquiry. This program is invaluable to shipping managers and personnel who need to review the status of a shipment.

The WMS Inquiry provides five views into the shipping system data. All views have a similar format with an expandable tree view on the left and detailed information on the right. Navigate among the available views by clicking **View** on the WMS Inquiry menu.

The PO/Order/Carton/Item view groups orders with the same customer and purchase order number. This is commonly used when customers send EDI orders with the same PO number for many stores. This view gives the shipping manager an overview of the entire PO.

The Order/Carton/Item view is used to see the cartons that have been packed for a specific order.

The Label/Pallet/Carton/Item view is used to determine what a specific UCC-128 label was used for. This can be handy if a box is found in the warehouse with a label, but no one knows why it was packed.

The Shipment/Pallet/Carton view is used to see all pallets and cartons that have been packed.

The Order/Shipment/Pallet/Carton/Item view is used to see all shipments for an order, including the pallets and cartons on each shipment.

The WMS Inquiry can be accessed from anywhere within WMS by clicking the telescope icon  on the toolbar.
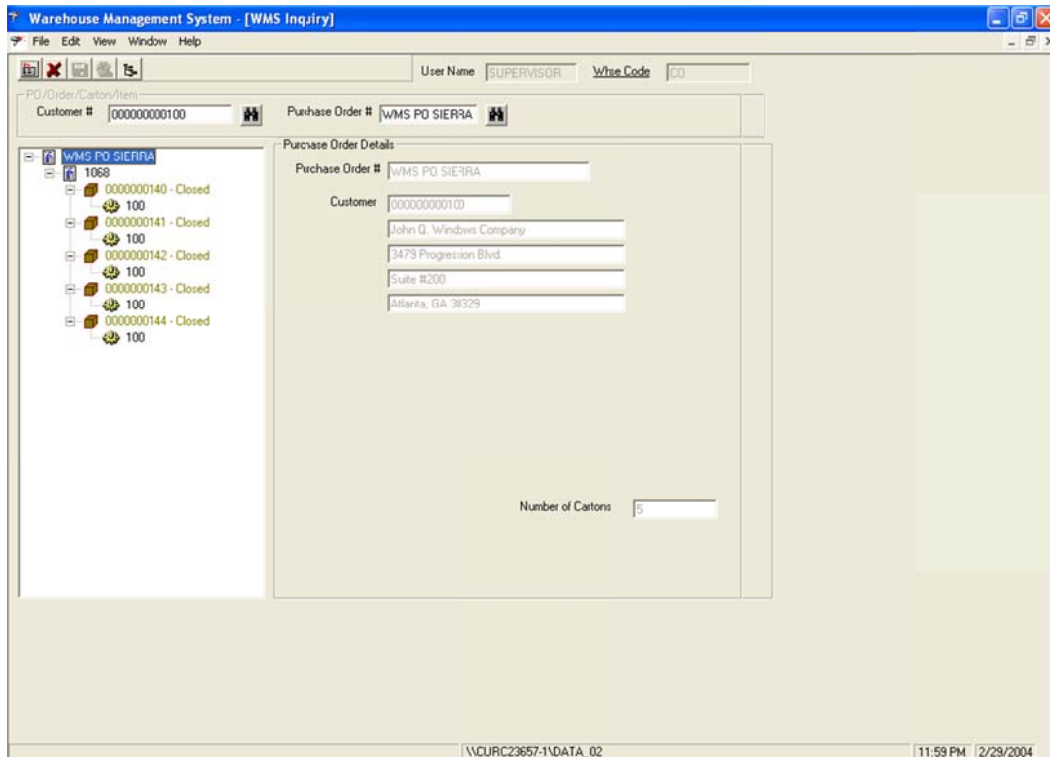
*Inquiry by PO/Order/Carton/Item*

Click the order number in the tree to display summary line item information in the Purchase Order Details section of the screen. Click an item to display detailed information about that item.

The inquiry uses color to provide easy visual identification of an item's status. If an item number is displayed in blue, that item is under shipped or not fully packed. An item number displayed in red is currently over shipped. If an item number is displayed in black, it has been completely packed as ordered.

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# Chapter 13: WMS File Maintenance

As orders and shipments are processed in WMS, data is written to various files. Over time, these files can become large, degrading performance. Setting up a regular maintenance schedule to purge WMS related files will help prevent performance issues.

As with any system maintenance, these steps should only be performed after completing and verifying a full system backup.

## WMS Purge Utility

The WMS File Utility Purge function will purge the following files:

> WMS Pack Header (OEPCKHDR)
>
> Pack Line (OEPCKLIN)
>
> Shipment Transaction Shipment (OESHPTSL)
>
> Pallet (OESHPTTL)
>
> Carton (OESHPTCL)
>
> Item (OESHPTIL)
>
> Bin Serial Lot (OESHPTBS)
>
> Catch Weight (OESHPTCW)

In the System Manager Processes menu, click **WMS File Utilities**, and then select **Purge**. Type a date in the **Purge Activity On and Before** field, and then click **Purge**.

The data is then purged based on the date entered in the **Purge Activity On and Before** field. If the date specified is less than one year old, a warning message will be displayed asking you to verify that you want to purge the data. Once you purge, that historical data is lost and can only be retrieved by restoring it from a backup. You should never enter a **Purge Activity On and Before** date that would purge active shipments.

## Manually Purging WMS Files

In addition to running the WMS purge utility, the OEBOLWRK file and VICS BOL files need to be purged periodically. These files are not cleared by the WMS purge utility and must be manually initialized.

1. In the System Manager Processes menu, click **WMS File Utilities**, and then select **File Initialize**.

2. Select the check boxes for the following files:

   OEBOLWRK – Bill of Lading Processing File

   EDVICSHD – VICs BOL Header

   EDVICSL1 – VICs BOL Sub 1

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EDVICSL2 – VICs BOL Sub 2

3. Click the **Save** toolbar button to initialize the files.

4. WMS will display a message to confirm that you want to re-initialize the file. This message is displayed once for each file. Click **Yes** to initialize the file.

5. Once complete, WMS automatically clears the check boxes for the files.

### Purging the EDI Barcode Holding Interface File

If you are using the Progression EDI ASN submodule and EDI Barcode Holding Interface submodule, WMS will write shipment information to a file called EDBBCIFL. The ASN creation process can then access the data in this file to return shipment related information to the customer on the ASN.

Over time, this file can become very large, degrading ASN creation performance. Although no purge function exists in Progression EDI or WMS for maintenance of the EDBBCIFL EDI Barcode Interface file, it can be purged by initializing the file in System Manager.

Note that you should have a verified system backup before completing these steps. All users must be out of ASN creation and WMS shipment completion during the file initialization. Therefore, it is recommended to perform this procedure after completing all shipments and sending all ASNs for the day.

1. In the System Manager Processes menu, click **Initialize Distribution**, and then select **EDI Files**.

2. Select only the ASN Barcode Interface File (EDBBCIFL) check box.

3. Click the **Save** toolbar icon.

4. A message will be displayed asking you to confirm that you want to initialize the ASN Barcode Interface (EDBBCIFL) file. Click **Yes** to initialize the file.

5. Once the file is initialized, Progression will return to the Initialize EDI Files screen. Exit the screen.

If you are using Pervasive.SQL, you will also need to run the WMS key creation. Microsoft SQL users do not have to perform the WMS key creation step after initializing the ASN Barcode Interface file.

1. In the WMS Utilities menu, click **File Initialize**.

2. Click the **Key Creation** tab.

3. Select the **ASN Bar Code Interface (EDBBCIFL)** check box, and then click the **Save** toolbar button to add the additional indexes used by WMS.

You will now have an empty EDBBCIFL file to be used to generate new ASNs. If you need to recreate an ASN from prior to the purge, reopen the shipment in WMS, and then complete it again. The EDBBCIFL records for that shipment will be recreated.

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# Appendix A: WMS & EDI Distribution Center Setup

This appendix describes the file settings that must be in place for WMS to correctly process distribution centers for Progression store orders. When using parent/child relationships, all entries use the parent customer number.

## Customer Override File

If a customer override file record exists for the customer, the **Distribution Center Qualifier** field typically should be blank. If a value is entered in this field, WMS will assume that it can determine the distribution center from the EDI purchase order. Otherwise, WMS will use the Progression A/R Alternate Address and EDI Ship-To Cross-References entries for the stores and distribution center to find the addresses and IDs to use when printing labels.



## A/R Alternate Address File

An A/R alternate address must exist for each store and each distribution center. For example, if customer KMAR001 has three stores and one distribution center, it must have four A/R alternate addresses, one for the DC and one for each store.

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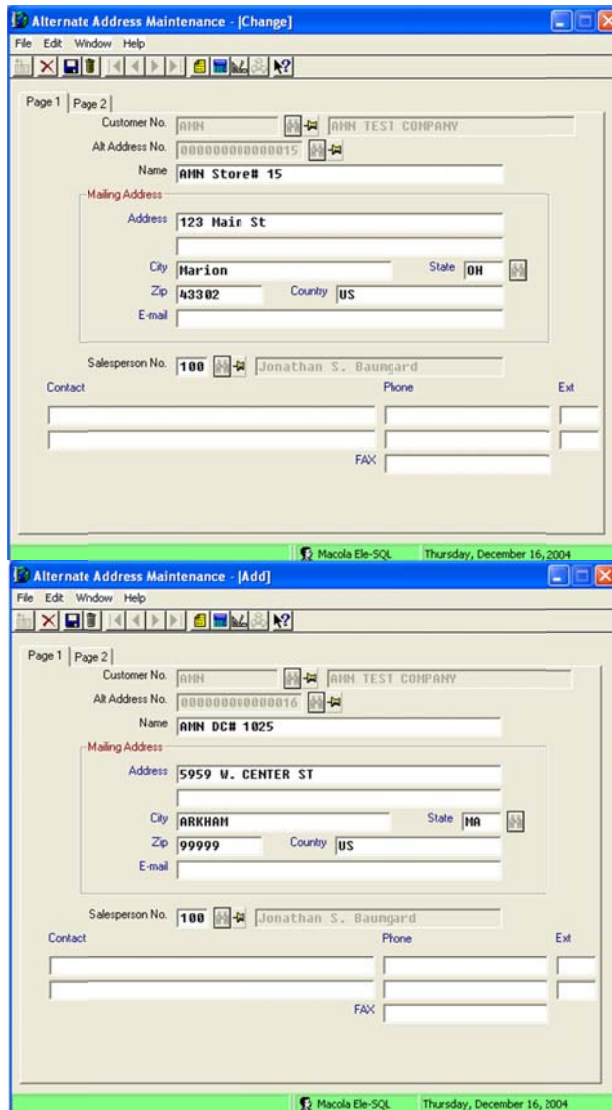
*A/R Alternate Address Entry for a Store and A/R Alternate Address Entry for a Distribution Center*

1. On the Progression A/R Maintain menu, select **Alternate Address**.

2. Type the customer number in the **Cust No** field.

3. Type the location number in the **Alt Address No** field. This can be the same ID that the customer uses for the location, or a different ID that you choose.

4. Type the address for this location in the mailing address fields. For a store, this would be the store's address. For a distribution center, it would be the DC address.

5. Populate any other fields necessary for Progression A/R processing. See the Progression A/R user manual for information about the other fields in the A/R Alternate Address.

### EDI Ship-To Cross Reference File

The EDI Ship-To cross reference defines the relationship between the ID that a customer uses for a store or distribution center and the Progression A/R Alternate Address ID for

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that location. It also defines the distribution center that services a store. An EDI Ship-To cross reference is required for each store and distribution center.
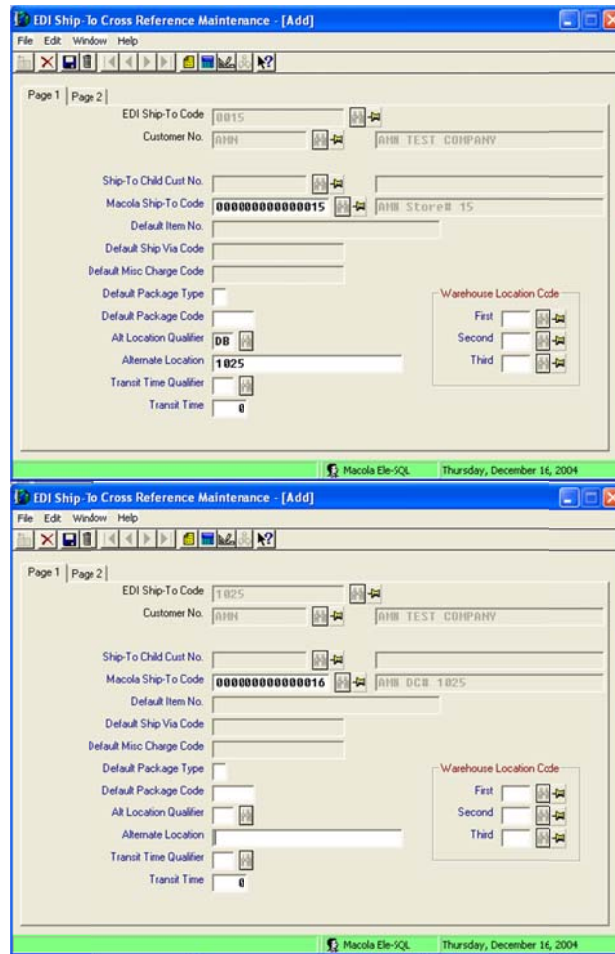


*EDI Ship-To Cross-Reference for a Store and EDI Ship-To Cross-Reference for a Distribution Center*

1. On the Progression EDI Maintain menu, select **Cross References**, and then select **Ship-To**.

2. In the **EDI Ship-To Code** field, type the customer's ID for this location. This information is found in either the fourth element of the N1 segment or in the SDQ segment of the EDI purchase order.

3. Type the Progression A/R customer number in the **Customer No** field. This must match the customer number specified in the EDI Trading Partner cross reference.

4. If you have selected **Each Store Mode=C** in the EDI Trading Partner cross-reference, enter the Progression A/R child customer number for this location in the **Ship-To Child Cust No** field. If you have selected **Each Store Mode=N** in the EDI Trading Partner cross-reference, this field is disabled.

5. In the **Macola Ship-To Code** field, type the Progression A/R Alternate Address ID for this location.

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6. In the **Alt Location Qualifier** field, type **DB** if this cross-reference is for a store. If this cross-reference is for a distribution center, leave this field blank.

7. In the **Alternate Location** field, type the distribution center number for this store. If this cross-reference is for a DC, leave this field blank.

When a label is printed for the store, WMS uses the alternate location listed in the store's EDI Ship-To cross reference to find the EDI Ship-To cross-reference for the DC. WMS will then use the DC's EDI Ship-To cross reference to find the A/R Alternate Address entry for the DC so it can print the distribution center address in the ship to section of the label. WMS will use the individual store's address in the mark for section of the label, if required.

# Appendix B: EDI File Usage

This appendix indicates the file and field usage of the Progression EDI module when used with WMS. Any field not mentioned below is not used by WMS and should be set according to the Progression EDI user manual.

### EDI Setup File

**1 ASN / Order?** should not be activated

**1 ASN / BOL** should be activated

**ASN?** must be activated (This is controlled by a Progression EDI registration file)

**Bar Code?** must be activated (This is controlled by a Progression EDI registration file)

### EDI Trading Partner Cross Reference

WMS uses the **856** check box to determine if it needs to write to the EDI Bar Code Holding interface file for ASN creation.

On the **Page 4** tab, **Ship To Distribution Center** should be activated.

For all other fields, refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

### EDI Item Cross Reference

If a packaging code is specified on the **Page 2** tab, the post pick ticket processing program will use it in autopack mode to find the bulk weight file record to use in determining the quantity per.

For all other fields, refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

### EDI Ship To Cross Reference

See **Appendix A WMS & EDI Distribution Center Setup** for detailed information about distribution center settings.

To associate a distribution center with a store:

1. Create an EDI Ship-To Cross-Reference record for the store.

2. Type the trading partner's code for the store in the **EDI Ship-To Code** field.

3. Type the Progression A/R customer number in the **Cust No** field.

4. Type the Progression A/R alternate address number for the store in the **Macola Ship-To Code** field.

5. Type DB in the Alt Location Qualifier field.

6. Type the trading partner's code for the distribution center in the **Alternate Location** field.

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7. For all other fields, refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

8. Create an EDI Ship-To Cross-Reference record for the D/C.

9. Type the trading partner's code for the distribution center in the **EDI Ship-To Code** field.

10. Type the Progression A/R customer number in the **Cust No** field.

11. Type the Progression A/R alternate address number for the D/C in the **Macola Ship-To Code** field.

12. For all other fields, refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

## EDI Ship Via Cross Reference
Refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

## EDI Misc Charge Code
Refer to the EDFORMAT.TXT file included on the Progression EDI Trading Partner CD.

## ASN Bulk Weight File
The WMS uses this file to determine the items per pack in autopack mode, as follows:

1. Pick ticket is printed for the item.

2. If an EDI item cross reference record exists for the customer and item being processed, and the **Package Code** field is populated, the item level record for this item-package code combination is used to determine the items per pack.

3. Otherwise, the default package code is used to determine the items per pack.

The WMS uses this file to allow scanning and cross-referencing of any type of code to a Progression item number.

4. Populate the **Alternate Item Number** field with the code to be cross-referenced.

    UPC

    UCC-14 (I-205)

5. Populate the **Alternate Item Qualifier** field to indicate what type of code is being used.

    UP = UPC

    UC = UCC-14 (I-205)

## ASN Package Code File
At least one **S** package code type record must be specified.

    CTN25 = cardboard box

    PLT94 = wooden pallet

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The most common **S** record should be set as default.

At least one **I** package code type record must be specified to use the ASN Bulk Weight file.

If using AutoPack, one **I** package code type record must be set as default.

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# Appendix C: WMS Program and Command Line Options

This appendix documents the programs that comprise the Warehouse Management System. A number of these programs have command line switches that can be used to change the operation of the program.

## WMS Attached Workstation and RF Server Program

Program Details

>Name: VB016.EXE

>Standard Installation Location: \Progression75\ISPSAS

Command Line Options

>/SERVER: Start program in server mode

>/INI= <path>: Uses specified .INI file in place of SASERVER.INI

>/NOSPLASH: Don't display the startup splash screen.

>/LITE: Force execution of the Pack Verify Only mode

>/USER= <UserName> Ignored unless /SERVER is specified.

>/PASSWORD= <Password> Ignored unless /SERVER is specified.

>/BTVISIBLE: If BarTender interface is active, load BarTender as a visible application instead of as a hidden process.

## WMS Inquiry

Program Details

>Name: VB022P1.EXE

>Standard Installation Location: \Progression75\ISPSAS

Command Line Options

>/Wxxx: Warehouse location

>/U<UserName>: Force a user name

>/INI<Explicit Path>: Uses specified .INI file in place of SASERVER.INI

## WMS Post Pick Ticket Processing Program

Program Details

>Name: VB01602.EXE

>Standard Installation Location: \Progression75\

Command Line Options

>/REPRINT: Start program in reprint mode

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/ON: Print labels via BarTender from Seagull Scientific

/PATH <path>: Location of BarTender formats

/INI= <path>: Location of .INI containing format of case packs and default label printer

/CLOSE: Start program in Close WMS Orders mode

/TRACE: Forces WMS into Trace mode without requiring the user to select from the Help menu

## WMS External Label Tools

Program Details

Name: VB01604.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

## WMS Control File Maintenance

Program Details

Name: VBI161P.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

## WMS Security File Maintenance

Program Details

Name: VBI168P.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

## WMS Customer Override File Maintenance

Program Details

Name: VBI163P.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

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### WMS Bill of Lading Type File Maintenance

Program Details

Name: VBI162P.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

### WMS Ship Via Reports File Maintenance

Program Details

Name: VBI167P.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

### WMS Package Code File Maintenance

Program Details

Name: VBI150X.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

### WMS Bulk Weight File Maintenance

Program Details

Name: VBI151X.EXE

Standard Installation Location: \Progression75\

Command Line Options

Not Applicable

### VICS Preprocess Program

Program Details

Name: VBI224P.EXE

Standard Installation Location - \Progression75\ISPSAS

Command Line Options

/BOL= <Bol Number> - Bill of lading (shipment) number to print

/COPIES= <Number of Copies>: The number of copies to print

/PRINTER= <Printer Name>: The printer to print the report to

/DATAPATH= <Path to Data>: The path to the Progression database (no DDF attached)

/SQL: Connect to Progression SQL database

/DATABASE= <SQL Database Name> - The name of the Progression SQL database

/SERVER= <SQL Server Name> - The name of the Progression SQL database server

/USER= <SQL UserName> - The user name to log in to the Progression SQL database

/PASS= <SQL Password> - The password to log in to the Progression SQL database

/R= <ReportName> - Name of the Crystal Report to run (Optional; if blank assumes BOL_VICS)

/B= <W,X,Y,Z> - Line count for sections; W = Customer order first page, X = Customer order other pages, Y = Class order first page, Z = Class order other pages.

/S: Save the data in the VICS work files when completed (used for assisting in modifying the reports)

### File Utilities (Initialize, Import, Export)
Program Details

Name: VB016P05.EXE

Standard Installation Location - \Progression75

Command Line Options

/MOD= <Mode> - Set program mode to INITIALIZE, IMPORT, EXPORT

### PO Vendor Override
Program Details

Name: VBI372P.EXE

Standard Installation Location - \Progression75

Command Line Options

Not Applicable

### PO Vendor Bar Code Definition
Program Details

Name: VBI373P.EXE

Standard Installation Location - \Progression75

Command Line Options

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Not Applicable

### Post Purchase Order Print Processing

Program Details

      Name: VBI375P.EXE

      Standard Installation Location - \Progression75

Command Line Options

      Not Applicable

### PO Vendor Item Override File Maintenance

Program Details

      Name: VBI377P.EXE

      Standard Installation Location - \Progression75

Command Line Options

      Not Applicable

### WMS Purge Utility

Program Details

      Name: VBI426P.EXE

      Standard Installation Location - \Progression75

Command Line Options

      Not Applicable

### WMS Workstation Configuration Utility

Program Details

      Name: WMSCFG.EXE

      Standard Installation Location - \Progression75

Command Line Options

      Not Applicable

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# Appendix D: Troubleshooting Guide

This appendix describes how to resolve the most common problems that occur in WMS. If this section does not provide the solution to your problem, please contact your WMS support provider. Please note that the diagnostic tool described below will often help your support technician assist you more effectively.

## System Diagnostic Tool

The Warehouse Management System diagnostic utility can help your technical support provider troubleshoot problems on your system. Before contacting your WMS support provider, please select Help, then About from the main WMS program. On the About screen, click the **Diagnostics** button. WMS will then prompt you for a directory to save the diagnostic report. Note the directory location and press **Enter**. Be prepared to email or print and fax this information to your WMS support provider.

## WMS EDI / ASN Diagnostic Report

WMS provides a diagnostic report designed to assist technical support in troubleshooting problems during ASN generation. The report will generate a listing of the information being passed into Progression from WMS. Providing this information allows your technical support provider to determine where the problem is occurring and provides information helpful in isolating the cause of the problem.

To print this report, select the File menu from the Pack Shipments or Pack Cartons function. Select WMS EDI/ASN Diagnostic Report. Type the bill of lading number for the shipment that is not processing correctly. A report containing all of the interface records will be printed to the screen. Either print the report or export it to a Microsoft Word file by clicking the **Export** toolbar button, and then selecting **Word** as the file type.

## Post Pick Ticket Process Trace Tool

The Post Pick Ticket Process program can generate a trace file designed to assist technical support with troubleshooting problems with releasing orders, as well as tracking problems with distribution center processing. To generate a trace file, select the Help, Trace Mode option from post pick ticket processing prior to processing the order. Then process the order normally. A file called WMSTrace.Log will be created in the Progression root directory.

## Troubleshooting FAQ

The following section discusses a number of common setup problems and the resolutions for them.

**When I launch the Main WMS program, I receive an Error 20 message.**

WMS must be able to find Pervasive.SQL in the path. Most systems have this directory in the path, but if yours does not, edit the environment variables on the workstation to include C:\PVSW\Bin in the search path.

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**When I launch a WMS program from the Progression Menu, I receive an Error 20 message.**

WMS programs must be able to find the Pervasive.SQL components. Some Progression systems have trouble executing Visual Basic programs from a directory other than the Progression root. While WMS executables typically exist in the ISPSAS sub-directory, this is not working on your system. To resolve this problem, copy all executables except for VB016.EXE and VB0022P1.EXE from the ISPSAS directory into your Progression Root directory. Then, using Notepad or some other text editor, edit the corresponding .EXT files in the Progression root to call the executables from the Progression root instead of the ISPSAS directory. Note that these executables are installed in the Progression root for WMS version 7.5.11 or higher.

**On some workstations, I am receiving an error 429 or 339 when I execute a WMS program from the Progression menu.**

The WMS programs are external to Progression and require a number of Windows controls that are not used by Progression to be registered. The workstation setup program must be run on any workstation that is going to run WMS. Running the workstation install should update your Windows controls and allow the workstation to execute the WMS programs. See your installation or upgrade manual for information about the workstation setup program.

**When I run the main WMS program, the splash screen is displayed and the program appears to hang.**

WMS may have displayed an error message that is being completely hidden by the splash screen. To determine if this is the case, modify the properties of the WMS desktop shortcut. At the end of the current command in the **Target** field, add **/NOSPLASH**. This will instruct WMS not to display the splash screen at startup. If an error is being displayed, you will now be able to see it. Once the error is corrected, the program should begin to launch correctly.

Another possibility is that WMS may not actually be hung. If the workstation has any mismatched Pervasive.SQL components, Pervasive.SQL may actually function, but opening files may take as long as 20 minutes. Let the program continue to run for at least 45 minutes. If WMS eventually starts, then you probably have a problem with your Pervasive.SQL installation. Please contact the person responsible for Pervasive.SQL at your location.

**I am printing directly to an Eltron printer, but I do not get a label, or I get a blank label.**

A number of things can cause this. First, the printer must have been initialized. When the printer is initialized, it should print two labels. The first label should be a printer configuration page. Verify that the image buffer size listed on this page is at least 157k. The second label should contain a list of your label formats. If the format you are trying to print is not on the list, please confirm that this format is in your labels subdirectory.

If the labels did not print, check the connections to the printer. Turn the printer off and then back on, and then try to re-initialize it.

If the labels did print, check the settings in External Label File Maintenance. The label might require a field that was not selected, or a field that is not used by the label might have been selected. Check the label setup document for the label and verify that all of the required fields listed have been selected. If this does not correct the problem, contact your WMS support provider.

**I am using the BarTender interface and when I print a carton label for a specific format, I get multiple copies.**

When the BarTender label format is created the number of copies can be specified in print options. Use the full version of BarTender to open the format and change the number of copies. Then save the format. This should correct this problem.

**When I print the label, the department number is missing.**

WMS uses the EDI capture file (EDCCAPFL) to determine if the department number was sent in a REF segment. By selecting **Use as Dept Qualifier** in the **Customer Override File Department** field and specifying a qualifier value of **DP**, WMS will search the EDI capture file for a matching REF segment and return the associated department number on the label.

The PO number on the O/E order must match the PO number in the EDI capture file. If the PO number on the order was changed, WMS will not be able to find the corresponding entry in the EDI capture file. If the EDI capture file was purged or initialized after the O/E order was created, WMS will also not be able to find the department number.

**Note**: If the department number is a constant value for the customer, Use as Fixed Dept can be activated in the Customer Override File. The value specified in the department number field will then be used when printing the label.

If the setups above have been verified and the department number still does not print, check the External Label File Maintenance to confirm that the **Department Number** field is shared with BarTender. The share name in the label configuration is **DEPT_NUMBER**.

**ERROR #3021 EITHER BOF OR EOF IS TRUE, OR THE CURRENT RECORD HAS BEEN DELETED. REQUESTED OPERATION REQUIRES A CURRENT OEWMSCTLW_C_PV_IMMED_AB SOURCELINE#20075**

The WMS File Update needs to be run. In System Manager, select the WMS File Utility menu, and then click **WMS File Export**. Click the **Update** tab, and then click the **Start Update** button.

If you are using Pervasive.SQL, the DDFs may also need to be updated. Browse to the Macola\ipssas\ddf directory, and then click **OK** to run the update.

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**Error # 53 file not found**

This error is returned if the WMS ODB Generation files set up in the WMS Control File is lower than the number of the ODB file the system is trying to create. To correct this problem, increase the WMS Control File ODB Generation number of file to be saved. The maximum value for this field is 9999. Specifying a number higher than 9999 in the WMS Control file will result in an Error 6 Overflow.

**I get an error 88 Incompatible mode after clicking Start Update Process in WMS File Utility.**

WMS has encountered a lock by a workstation or by a gun. Make sure everyone is logged out, including RF guns and workstations. This is not a registration error.

**When I try to log in to WMS, I get a Cannot Connect to Macola Database error.**

Verify that your user name and password are set up in the WMS Security File and that your user has been granted access to the WMS functions.

**I am running the WMS Device Registration, and I now get an error that we have exceeded our allowable licenses. We cannot determine what devices are consuming the registration. How can I tell what devices are running?**

Click **Help** on the WMS menu, and then click **About**. Click the **Modules** button. On the Registered Modules window, click the **Devices Currently In Use** tab to view the number of devices in use in addition to a list of the devices.

To clear the devices, click **File** on the WMS Control File menu bar, and then click **Clear Device Licenses**. All devices will be reset, and they will reconnect when they next log in to WMS. If devices are logged in when you clear the devices licenses, they will automatically reconnect with the next transaction that they perform.

**I get an Invalid File Name 20507 error when printing the BOL.**

This message indicates a problem with the setup of the Ship Via Reports file record for this shipment. WMS is trying to print a Crystal Report or VB program and cannot find it. Verify the report name, parameters path, and that the report is located in the Data\SASFiles directory. Check these for both the customer specific report and the default report for the carrier listed on shipment in WMS.

If the customer is Wal-Mart, the parameters path must be set as Parameters = /R= BOL_WALM /B= 5,5,19,19.

**I just upgraded WMS. When I try to start WMS now, I get a runtime error 374 Failed to activate control 'VB.Usercontrol'.**

The SQLBTR.OCX file is missing from the IPSSAS directory on the workstation. Search the workstation for SQLBTR.OCX. More than one copy of the file may exist on the computer. Copy the SQLBTR.OCX to the IPSSAS directory, and then register it. Depending on the version of Windows installed on the workstation, it may also be necessary to reboot after registering the OCX file.

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**The weight calculation in WMS does not seem to match the weight on the O/E order.**

The weight in Order Entry is calculated using the item weight that was in Item Master at the time that the order was created. This is true for both manually entered orders and orders integrated by the EDI module.

The weight in WMS is calculated using the item weight listed in Item Master at the time that the shipment is completed. If the item weight is changed in I/M after the order is created but before the shipment is completed, WMS will use the new item weight.

ASNs created by the EDI module can return either the O/E order weight or the weight calculated by WMS, depending on whether the ASN format is designed to pull the weight from the O/E header file or from the EDI Barcode Holding file. The WMS EDI ASN Bulk Weight cross reference **Pack Weight** and **Tare Weight** fields are not used by ASN formats. If the correct weight is calculated in WMS but not returned on the ASN, please contact EDI support for assistance.

**I get an error that the action cannot be completed because other application is busy.**

WMS returns this error because BarTender has generated an error; however, the BarTender error message window is not visible on the screen. To make the BarTender error visible, edit the properties of the WMS startup icon and add /btvisible to the command line for vb016.exe. This will allow you to toggle and see the BarTender message so you can troubleshoot the problem with that application. Contact Seagull support at 425-641-1408 for assistance with correcting the BarTender error.

**WMS BOL# not found OEBOLWRK message during a WMS Inquiry**

This error is returned if the pallet does not show as attached to the shipment under the shipment/pallet/carton inquiry option on the WMS inquiry. To correct this error, initialize the OEBOLWRK file. This is a work file and no loss of data will occur.

**WMS Error 11_0012- 01**

When a given order and carton number are entered by the user, WMS validates that the order and carton number exist. Error 11_0012-01 "Order Number is not Authorized to Ship" is returned when there is no carton that exists for that order, or no such order exists in that carton.

You can also get this error if you fail to run the WMS Post Pick Ticket process.

**WMS Error No DDF Location Specified**

The saserver.ini file is in a directory with a name longer than eight characters. The WMS Inquiry does not support long file names. Place the saserver.ini file in a directory with a name that has eight or fewer characters, with no spaces. Right-click the WMS desktop icon and select **Properties**. Change the command line path to the new location of the saserver.ini file by adding /ini=<file path>.

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**I ran the WMS Purge Utility, but my EDBBCIFL file is still large.**

The EDBBCIFL EDI Barcode Interface file is not purged by this process. Use the steps in **WMS File Maintenance** to purge the EDBBCIFL file.

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# Appendix E: External Label Field List

This appendix lists the fields that are available to print on shipping labels. The BarTender field name must be used as the share name in BarTender for WMS to correctly print the label.

| Field Name | BarTender Field Name |
|---|---|
| Bill of Lading Number | BILL_OF_LADING |
| Order Type | ORDER_TYPE |
| Order Number | ORDER_NUMBER |
| P/O Number | PO_NUMBER |
| Pro Number | PRO_NUMBER |
| Department Number | DEPT_NUMBER |
| Carrier | CARRIER |
| UCC-128 Bar Code | UCC128_BAR_CODE |
| UCC-128 Bar Code Display | UCC128_DISPLAY |
| Warehouse Name | WAREHOUSE_NAME |
| Warehouse Address 1 | WAREHOUSE_ADDRESS_1 |
| Warehouse Address 2 | WAREHOUSE_ADDRESS_2 |
| Warehouse City | WAREHOUSE_CITY |
| Warehouse State | WAREHOUSE_STATE |
| Warehouse Zip Code | WAREHOUSE_ZIP_CODE |
| Warehouse Country | WAREHOUSE_COUNTRY |
| Bill To Name | BILL_TO_NAME |
| Bill To Address 1 | BILL_TO_ADDRESS_1 |
| Bill To Address 2 | BILL_TO_ADDRESS_2 |
| Bill To City | BILL_TO_CITY |
| Bill To State | BILL_TO_STATE |
| Bill To Zip 10 | BILL_TO_ZIP |
| Bill To Zip 5 | BILL_TO_ZIP_5 |
| Bill To Country | BILL_TO_COUNTRY |

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| Field Name | BarTender Field Name |
|------------|----------------------|
| Ship To Name | SHIP_TO_NAME |
| Ship To Address 1 | SHIP_TO_ADDRESS_1 |
| Ship To Address 2 | SHIP_TO_ADDRESS_2 |
| Ship To City | SHIP_TO_CITY |
| Ship To State | SHIP_TO_STATE |
| Ship To Zip 10 | SHIP_TO_ZIP |
| Ship To Zip 5 | SHIP_TO_ZIP_5 |
| Ship To Country | SHIP_TO_COUNTRY |
| Ship To Number | SHIP_TO_NUMBER |
| Mark For Name | MARK_FOR_NAME |
| Mark For Address 1 | MARK_FOR_ADDRESS_1 |
| Mark For Address 2 | MARK_FOR_ADDRESS_2 |
| Mark For City | MARK_FOR_CITY |
| Mark For State | MARK_FOR_STATE |
| Mark For Zip 10 | MARK_FOR_ZIP |
| Mark For Zip 5 | MARK_FOR_ZIP_5 |
| Mark For Country | MARK_FOR_COUNTRY |
| Mark For Number | MARK_FOR_NUMBER |
| Case Pack | CASE_PACK |
| Item Number | ITEM_NUMBER |
| Item Description 1 | ITEM_DESC_1 |
| Item Description 2 | ITEM_DESC_2 |
| Customer Item Number | CUST_ITEM_NUMBER |
| UPC | UPC |
| Order Carton Number | ORDER_CART_NUMBER |
| O/E Customer Item UDF 1 | CUST_ITEM_UDF_1 |
| O/E Customer Item UDF 2 | CUST_ITEM_UDF_2 |
| O/E Customer Item UDF 3 | CUST_ITEM_UDF_3 |
| O/E Customer Item UDF 4 | CUST_ITEM_UDF_4 |

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| Field Name | BarTender Field Name |
|---|---|
| O/E Customer Item UDF 5 | CUST_ITEM_UDF_5 |
| Parent Customer Number | PARENT_CUSTOMER |
| Parent Customer File UDF 1 | PARENT_CUST_UDF_1 |
| Parent Customer File UDF 2 | PARENT_CUST_UDF_2 |
| Parent Customer File UDF 3 | PARENT_CUST_UDF_3 |
| Parent Customer File UDF 4 | PARENT_CUST_UDF_4 |
| Parent Customer File UDF 5 | PARENT_CUST_UDF_5 |
| Parent Customer File Note 1 | PARENT_CUST_NOTE_1 |
| Parent Customer File Note 2 | PARENT_CUST_NOTE_2 |
| Parent Customer File Note 3 | PARENT_CUST_NOTE_3 |
| Parent Customer File Note 4 | PARENT_CUST_NOTE_4 |
| Parent Customer File Note 5 | PARENT_CUST_NOTE_5 |
| Child Customer Number | CHILD_CUSTOMER |
| Child Customer File UDF 1 | CHILD_CUST_UDF_1 |
| Child Customer File UDF 2 | CHILD_CUST_UDF_2 |
| Child Customer File UDF 3 | CHILD_CUST_UDF_3 |
| Child Customer File UDF 4 | CHILD_CUST_UDF_4 |
| Child Customer File UDF 5 | CHILD_CUST_UDF_5 |
| Child Customer File Note 1 | CHILD_CUST_NOTE_1 |
| Child Customer File Note 2 | CHILD_CUST_NOTE_2 |
| Child Customer File Note 3 | CHILD_CUST_NOTE_3 |
| Child Customer File Note 4 | CHILD_CUST_NOTE_4 |
| Child Customer File Note 5 | CHILD_CUST_NOTE_5 |
| Ship To A/R Alt Address UDF 1 | S2_ALT_ADR_UDF_1 |
| Ship To A/R Alt Address UDF 2 | S2_ALT_ADR_UDF_2 |
| Ship To A/R Alt Address UDF 3 | S2_ALT_ADR_UDF_3 |
| Ship To A/R Alt Address UDF 4 | S2_ALT_ADR_UDF_4 |
| Ship To A/R Alt Address UDF 5 | S2_ALT_ADR_UDF_5 |
| Mark For A/R Alt Address UDF 1 | M4_ALT_ADR_UDF_1 |

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| Field Name | BarTender Field Name |
| --- | --- |
| Mark For A/R Alt Address UDF 2 | M4_ALT_ADR_UDF_2 |
| Mark For A/R Alt Address UDF 3 | M4_ALT_ADR_UDF_3 |
| Mark For A/R Alt Address UDF 4 | M4_ALT_ADR_UDF_4 |
| Mark For A/R Alt Address UDF 5 | M4_ALT_ADR_UDF_5 |
| Order Header UDF 1 | ORDER_HDR_UDF_1 |
| Order Header UDF 2 | ORDER_HDR_UDF_2 |
| Order Header UDF 3 | ORDER_HDR_UDF_3 |
| Order Header UDF 4 | ORDER_HDR_UDF_4 |
| Order Header UDF 5 | ORDER_HDR_UDF_5 |
| Line Item UDF 1 | ORDER_LINE_UDF_1 |
| Line Item UDF 2 | ORDER_LINE_UDF_2 |
| Line Item UDF 3 | ORDER_LINE_UDF_3 |
| Line Item UDF 4 | ORDER_LINE_UDF_4 |
| Line Item UDF 5 | ORDER_LINE_UDF_5 |
| Progression Ship To Number | MAC_SHIP_TO_NUM |
| Progression Mark For Number | MAC_MARK_FOR_NUM |
| Order Carton Total | Order_Carton_Total |
| Serial / Lot Number | SERIAL_LOT_NUMBER |

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# Appendix F: WMS INI Settings

The Warehouse Management System relies on an INI file for much of its configuration. The .INI file allows WMS to be configured differently for different workstations or even different data companies. The default name for the INI file is SASERVER.INI and it is stored in the Windows directory of each machine using WMS.

The name and location of the file can be overridden with a command line option for the WMS programs. See **Appendix C. WMS Program and Command Line Options** for information about WMS program command line options.

| | |
|---|---|
| [Configuration] | This section can be used to assign a workstation ID to WMS, which can help in identifying which machines are having difficulties by analyzing the error log. (Optional) |
| Workstation_ID | This can be set to a unique code to allow analysis of the error log by workstation ID. (Optional) |
| [Btrieve] | This section instructs WMS how to find the Pervasive.SQL data files. (Required) |
| DDF location = | Specifies the path to the Progression data directory. The files that are unique to WMS will reside in a sub-directory called WMSFiles. (Required) |
| [SQL Server] | This section instructs WMS how to connect to Microsoft SQL Server for the SQL compliant version. (Optional) |
| SQL= | Y = Yes SQL Compliance, N = Not SQL Compliant. Note that if the WMS SQL Compliance module is not installed, this value must be set to N. (Optional) |
| Server= | The name of the Microsoft SQL Server that the Progression database resides on. Ignored if SQL=N. (Required if SQL=Y) |
| Database= | The name of the Microsoft SQL database for the Progression company to be processed. (Required if SQL=Y) |
| [Screens] | This section defines the location of the Progression Screens directory. This allows access to Progression's search engine. (Required) |
| Screens Location = | Specify the path to the Progression Screens directory. (Required) |
| [Settings] | This section configures a number of options and default |

| | settings within WMS. (Required) |
|---|---|
| Format= | The format of case packs when printed on labels. This is typically ####, which indicates four digits with no leading zeros. Format follows standard VB numeric formatting rules. Defaults to #### if not specified. (Optional) |
| Pack UDF= | This entry is obsolete. This setting has been moved to the WMS Control File. (Ignored) |
| Tare UDF= | This entry is obsolete. This setting has been moved to the WMS Control File. (Ignored) |
| Error Logging = | Indicates what level of error logging is performed.<br><br>0 = No Logging<br><br>1 = Log to Screen – R/F server only otherwise no logging<br><br>2 = Log to Screen (in R/F server mode only) and Log to ERR.LOG in application directory.<br><br>This should typically be set to 2. (Required) |
| Quick Ship Extension = | Specify the extension to use when creating the export file during the Update Progression function. This can be used to allow another program to intercept the file prior to quick ship polling. This value defaults to .ODB if not specified. (Optional) |
| Communications Database = | Specify the location of the file WMS.MDB. This Microsoft Access database contains the text of all the error messages for the Warehouse Management System. In addition, this file contains some temporary tables that are used during WMS processing. Typically this should be the directory WMS is installed in. (Required) |
| Default Label Printer= | Specify the name of the printer labels should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Required) |
| BarTender= | Activates the WMS BarTender interface.<br><br>On = Print labels via BarTender interface<br><br>Off = Print labels directly to Eltron printer<br><br>This setting defaults to Off if not specified. (Optional) |
| Format Path= | Specifies the path to the BarTender label formats. (Required, if BarTender=On) |

| | |
|---|---|
| Default BOL Printer 1= | Specify the name of the printer BOL reports code for Printer 1 should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| Default BOL Printer 2= | Specify the name of the printer that BOL reports coded for Printer 2 should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. Default BOL Printer 1 must be specified. (Optional) |
| Default BOL Printer 3= | Specify the name of the printer that BOL reports coded for Printer 3 should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. Default BOL Printer 2 must be specified. (Optional) |
| Default BOL Printer 4= | Specify the name of the printer that BOL reports coded for Printer 4 should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. Default BOL Printer 3 must be specified. (Optional) |
| Default BOL Printer 5= | Specify the name of the printer that BOL reports coded for Printer 5 should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. Default BOL Printer 4 must be specified. (Optional) |
| BOL Report Path= | Specifies the location of the Crystal Reports to be executed for the Bill of Lading module. Usually this is the data directory. (Required) |
| [Warehouse Label Printers] | This section allows the default label printer to be overridden for a specific warehouse. This is usually used in an R/F environment. (Optional) |
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer labels printed for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Warehouse BOL Printer 1] | This section allows the name of the printer that BOL reports coded for Printer 1 to be overridden for a specific warehouse. This is usually used in an R/F |

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| | environment. (Optional) |
|---|---|
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer that BOL reports coded for Printer 1 for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Warehouse BOL Printer 2] | This section allows the name of the printer that BOL reports coded for Printer 2 to be overridden for a specific warehouse. This is usually used in an R/F environment. (Optional) |
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer that BOL reports coded for Printer 2 for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Warehouse BOL Printer 3] | This section allows the name of the printer that BOL reports coded for Printer 3 to be overridden for a specific warehouse. This is usually used in an R/F environment. (Optional) |
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer that BOL reports coded for Printer 3 for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Warehouse BOL Printer 4] | This section allows the name of the printer that BOL reports coded for Printer 4 to be overridden for a specific warehouse. This is usually used in an R/F environment. (Optional) |
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer that BOL reports coded for Printer 4 for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Warehouse BOL Printer 5] | This section allows the name of the printer that BOL reports coded for Printer 5 to be overridden for a specific warehouse. This is usually used in an R/F |

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| | environment. (Optional) |
|---|---|
| XXX= | XXX = Progression warehouse location code to be overridden. Warehouse code must occupy three bytes. The name of the printer that BOL reports coded for Printer 5 for warehouse XXX should be printed on. Note the name is case sensitive and must exactly match the printer name specified on the computer. (Optional) |
| [Misc Item Prefix] | |
| 1="" | 1= Specify a prefix for specialty item numbers. Items that begin with this prefix will not be written into WMS and will be billed automatically when the order is selected for billing. Up to 10 different prefix codes may be specified. Note that the prefix ** is automatically considered to be a miscellaneous item per standards used by the EDI module. (Optional) |

# Appendix G: Bill of Lading Settings

## Supplied Reports

The following reports come as standard components to the WMS Reporting module.

**BOL_STND.rpt** is a Crystal Report designed to work with Progression's standard bill of lading form. (Form Number FP728, FC728 or FK728) This report calculates based on cartons.

**BOL_TARE.rpt** is a Crystal Report designed to work with Progression's standard bill of lading form. (Form Number FP728, FC728 or FK728) This report calculates based on pallets.

**BOL_VICS.rpt** is a Crystal Report that prints the standard VICS compliant bill of lading. The VICS preprocess program **VBI224p.exe** must be executed before printing. The ship via reports file entry should be made with the **Report** field set as **VBI224P**, the **Type** field as **Visual Basic**, and the **Parameters** field left blank. **Printer** and **Copies** should be specified as needed.

**BOL_WALM.rpt** is a Crystal Report that prints the Wal-Mart variation on the VICS compliant bill of lading. The VICS preprocess program **VBI224p.exe** must be executed before printing. The ship via reports file entry should be made with the **Report** field set as **VBI224P**, the **Type** field as **Visual Basic**, and the **Parameters** as **/R= BOL_WALM /B= 5,5,19,19**. **Printer** and **Copies** should be specified as needed. This report expects the Must Deliver By Date to be stored in O/E order header user defined field 3. Use an EDI user defined map to populate that value.

## Interface to user created reports

Users can create their own reports for the Bill of Lading module. The interface can process reports that are written using either Crystal Reports or Visual Basic.

## Crystal Reports

Crystal Reports must be created to accept the bill of lading number as Parameter 0. The parameter field must be created with the name **Bill_Of_Lading**.

The program will set the printer device, driver and port, and the number of copies to print based on the Ship Via Reports file entries and the currently active INI file. Note that if the printer name is **Preview** the system will automatically force Crystal to display the report to the screen.

## Visual Basic

When launching Visual Basic programs, the system uses command line options to pass information to the called program. The following details the information provided in the command line that must be parsed in the Visual Basic application.

>   /BOL= <Bol Number> - Bill of lading (shipment) number to print

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/COPIES= <Number of Copies> – The number of copies desired

/PRINTER= <Printer Name> – The printer to print the report to

/DATAPATH= <Path to Data> – The path to the Progression database (no DDF attached)

Any options specified in the **Parameters** field of the Ship Via Reports file will follow the data path. If operating under Microsoft SQL, the following command line information is also sent:

/SQL – Connect to Progression SQL database

/DATABASE= <SQL Database Name> – The name of the Progression SQL database

/SERVER= <SQL Server Name> – The name of the Progression SQL database Server.

/USER= <SQL UserName> – The user name to log in to the Progression SQL database.

/PASS= <SQL Password> – The password to log in to the Progression SQL database.

Note that the password is encrypted and ready to use to connect to the Progression SQL database.

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# Appendix H: Function Key Usage

WMS uses function keys consistently throughout the warehouse transaction entry functions. The following defines each function key.

F1 – Help

F2 – New

F3 – Launch Inquiry

F4 – Enter Multiplier

F5 – Add/Remove Mode Toggle

F6 – Secondary Mode Toggle (Receipt Entry, toggles Accept / Reject Mode)

F7 – RF Verify

F8 – Reprint Label

F9 – Exit

F10 – Next Unprocessed Item (RF devices only)

F11 – Verify / Complete Order (attached workstations only)

F12 – Verify / Complete Shipment (attached workstations only)

**Note**: RF guns do not support function keys beyond **F10**.

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